The Economics of the Disability Poverty Trap

Madison Jennings

ABSTRACT

This paper examines how the structure of existing public assistance, such as Supplemental Security Income (SSI) in the United States, created the current disability poverty trap. SSI creates barriers to saving with the implementation of low asset tests while at the same time establishing disincentives for work. As a result, the program fails to improve the quality of life for disabled people who need the benefits and prevents them from ever transitioning off the program. The inability to achieve a critical mass of income with limited benefits and low asset tests results in a poverty trap. Analyzing this dilemma utilizing behavioral economics, leisure demand and labor supply curves, income and substitution effects, and savings vs. consumption models reveals how public assistance programs systemically reinforce the disability poverty trap. Such reinforcement is done through limits on financial agency and failures to account for the socioeconomic role of disability in someone's life. This analysis concludes that low monthly benefits and limitations on savings in public assistance programs fail to account for the extra costs of living with a disability and barriers to employment. Future policy solutions should increase the monthly benefits recipients receive on SSI, increase asset test limits, create more robust transitional periods off the program, and expand work opportunities.

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MADISON JENNINGS is a second-year Master of Public Policy student at the Trachtenberg School of Public Policy, concentrating on disability policy. She graduated from The George Washington University with a BA in Political Science, Public Policy Focus in 2022. Currently, Madison is president of the Disabled Students Collective at the university and has acted in that position for the past two years and this year joined the Student Association as the Executive Secretary of Accessibility. In her free time, she enjoys playing The Legend of Zelda: Tears of the Kingdom and caring for her chinchilla, Lulu.

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Note:
Within this paper, "people with disabilities" and "disabled people" will be used interchangeably to capture the changing landscape of language within the disability community.

INTRODUCTION

The Americans with Disabilities Act (ADA) is a piece of legislation that established people with disabilities as a protected class under employment non-discrimination laws. Following its passage in 1990, disabled people were theoretically granted financial inclusivity and a level of economic self-sufficiency. The passage of the act signified the United States' transition away from the dominance of a medical model of disability towards a social model of disability instead. This transition has garnered support from disability rights organizations and activists since the onset of the civil rights movement in the 1960s. Additionally, disability activists advocated for equal access, integration into society, and self-determination (Anti-Defamation League 2017).

In his response to "Disability in 1986 and Beyond: A Report of the Royal College of Physicians," Simon Brisenden emphasized it is not advantageous for the disability community to see "disability become even more completely medicalized…" nor is it required for people with disabilities "…to be treated as 'patients' throughout [their] lives" (Brisenden 1987, 180). He and fellow disability rights activists argue the way forward is to view disability beyond a medical issue waiting to be "cured." In contrast to the medical model of disability, they propose embracing disability as a complex, multifaceted identity with diverse conditions and experiences. An inclusive model of disability necessitates the direct involvement of people with disabilities in policy development. This social model takes a civil rights-based approach to disability, highlighting the social and systemic issues that make someone disabled, not just their medical condition. The social model frames the disability identity as a societal failure to appropriately accommodate the disability community within their environment and to deconstruct systems that perpetuate inaccessibility and exclusion. The social model recognizes the disconnect between environments and disabled individuals because of a lack of accessibility and accommodation in all physical locations, online, and in the processes of an organization, community, or institution. Therefore, the social model promotes tools for economic self-sufficiency, universal access, and independent living. This paper will analyze current policies using the social model of disability.

Despite the historic passage of the ADA in 1990, the structure of social welfare for disabled people in the United States has failed to sufficiently expand employment opportunities for disabled people, improve labor force participation rates, and dismantle negative perceptions surrounding disability. The failure to restructure public assistance programs with transitional periods inhibits the capacity of people with disabilities to accumulate enough financial resources to rise above the poverty threshold. Within the disability community, there exists a fear of abruptly losing benefits once the assets of an individual or household rise even slightly above their asset test limit. The inability to achieve a critical mass of income or assets results in a poverty trap. The "poverty trap" is a mechanism that makes it very difficult for people to escape poverty" (Chen 2023). Due to compounding socioeconomic factors, individuals are unable to accumulate enough wealth or income to provide for their essential living standards with enough disposable income to rise above the poverty threshold. To build wealth, disabled people must have the opportunity to save a portion of their earnings and/or sustain employment. However, certain public assistance programs prevent disabled people from saving and accumulating assets, which limits their ability to achieve long-term financial security. Furthermore, limitations within public assistance programs fail to account for the additional costs associated with living with a disability, along with the current barriers to employment.

As a result of the current structure, people with disabilities are living in poverty at more than twice the rate of people without disabilities (National Council on Disability 2017). Programs like Supplemental Security Income (SSI) create barriers to saving with the implementation of low asset tests while at the same time establishing disincentives for work. SSI is a Social Security program "that provides monthly payments to people with disabilities and older adults who have little or no income or resources" (Social Security Administration, n.d. b). Unlike Social Security Disability Insurance (SSDI), there is no trial work period for SSI. During a nine-month period, SSDI recipients can “test [their] ability to work” and still receive full benefits, but this program requires the individual to have earned sufficient work credits prior to the onset of disability to qualify (Social Security Administration, n.d. c). The number of work credits required varies based on the age at which disability begins. An important contrast between these two programs is that SSDI eligibility requires the recipient to have paid into the system through participation in the labor force. As a result, SSDI benefits are more substantial and offer recipients greater flexibility. The requirement of previous work history unfairly implied that these individuals are more deserving or "entitled" to benefits than others in the disability community. Contrastingly, SSI is a social welfare program based on annual appropriations from general revenues rather than a social insurance program that is universally funded through payroll deductions or taxes.

Despite periods of strong economic growth in the United States, the economic conditions for disabled people have been steadily declining for decades before the Great Recession and continuing thereafter. As observed by Livermore and Honeycutt (2015), the upward trend in unemployment continued as more and more disabled people exited the labor force or faced unemployment (Livermore and Honeycutt 2015, 70-71). People with disabilities and their families were unable to fully benefit from periods of economic prosperity due to employment barriers and the structure of disability-related public assistance programs. Disabled people, as the Great Recession showed, are more susceptible to the effects of economic turmoil as they are “disproportionately affected by the loss of blue-collar and goods-producing jobs” (Livermore and Honeycutt 2015, 76). When affected by a period of economic turmoil, people with disabilities may seek the support of public assistance programs. If they do turn to public assistance programs, then they risk “long-term reliance on them and subsequent decreased economic self-sufficiency" that keeps them trapped in a cycle of poverty and contributes to the downward trend in employment for people with disabilities (Livermore and Honeycutt 2015, 77). The stigmatization of disability and of the public assistance programs that support disabled people prevents the prioritization of these issues on the national policy agenda.

Irrespective of economic conditions, people with disabilities have historically been underrepresented in the workforce. The COVID-19 pandemic further exacerbated this long-standing disparity (National Council on Disability 2021). The labor market experienced an unemployment rate increase from 3.6 percent in April 2019 to 14.7 percent in April 2020 (Hernandez 2022). Employers were disincentivized to hire and maintain a large staff during this public health crisis as businesses were affected by lockdowns and reduced profits. As a result, many individuals were laid off, and the jobs that remained were public-facing. Many people with disabilities could not continue to work nor join the ranks of essential workers during the COVID-19 pandemic because of their high-risk status or employment being terminated. In 2020, the CDC designated the following conditions as high-risk: "cancer, chronic kidney disease (stages 1-5), COPD (Chronic Obstructive Pulmonary Disease), obesity (BMI of 30 or higher), immunocompromised state due to a solid organ transplant, type II diabetes (only, not type I, prediabetes, or gestational, cardiomyopathies (heart muscle disease- dilated, hypertrophic, restrictive, etc.), heart failure, coronary artery disease, pulmonary hypertension, sickle cell disease," or for an unlisted diagnosis with medical documentation from a healthcare provider (Library of Congress 2020, 2). Many disabled people and their families were forced to rely upon the savings they had or fall back on public assistance programs. Dipping into savings presents a significant risk for people with disabilities, as many lack emergency savings funds. Moreover, a considerable number of households with a disability are still unbanked, meaning that no one in the household has a savings or checking account in comparison to their non-disabled peers.

A report from the National Disability Institute identified that 18 percent of households with a disability were unbanked, whereas 6 percent of households without a disability were unbanked (Goodman and Morris 2020, 20-21). This disparity illustrates that households with a disability are three times more likely to be unbanked (Goodman and Morris 2020, 20-21). If a disabled household does have a bank account, then the amount is likely not substantial, as 25 percent of households with a disability are underbanked (Goodman and Morris 2020, 20). The National Disability Institute defines underbanked as "household[s] [that] had a checking or savings account and also used at least one product or service from an alternative financial services (AFS) provider in the past 12 months for transactions (e.g., money orders, check cashing, international remittances) or credit (e.g., payday loans, tax refund anticipation loans, rent-to-own services, pawn shop loans or auto-title loans)" (Goodman and Morris 2020, 20). An underbanked household has a bank account, "but [uses] a service that either (1) the bank does not offer, (2) the bank offers, but the household does not qualify, or (3) is offered elsewhere at a lower price or with more convenience" (Goodman and Morris 2020, 20).

The most common occupations for disabled people typically yield lower earnings, thus contributing to the issue of being unbanked or having minimal savings. According to the US Census Bureau, janitors and building cleaners are identified as the most common occupations for people with disabilities, followed by roles such as drivers, sales workers, retail workers, truck drivers, and laborers (US Census Bureau, 2021). While median earnings within specific occupations may appear similar between people with disabilities and those without, the disparity remains significant. Workers with disabilities earn only 66 cents for every dollar earned by those without disabilities when all workers are included, regardless of work schedules or occupations (US Census Bureau 2021). As a result, disabled households are at greater risk of falling into the poverty trap when they must rely on any savings they may have in times of crisis, such as the COVID-19 pandemic.

BEHAVIORAL ECONOMICS

The discussion of savings is often examined through the lens of behavioral economics, in which the derived models and theories assume a base level of financial agency and economic self-sufficiency. However, this lens primarily centers on able-bodied or able-minded individuals who face fewer financial limits that are beyond their self-control. As a method, behavioral economics seeks to analyze the cognitive biases of individuals and apply psychological insights to human behavior to explain economic decision-making (Witynksi 2022). Many behavioral economics theories do not consider barriers to decision-making that people with disabilities face, and yet these differences are not explored. The theories do not account for the lack of universal design in the workplace and the lack of a savings structure for public assistance programs. Both factors restrict an individual's economic decision-making and their ability to move off social programs. As a result, policies and programs stemming from the findings of behavioral economic theories may seek to correct behavior the individual themselves have little control over, especially on public assistance programs with asset tests where consumption and savings decisions are severely limited.

Universal design refers to the design of a place, event, or product that is functional for as many people as possible without requiring an accommodation to make it accessible (The UD Project, n.d.). Lack of universal design, or access, means that people with disabilities face more restrictions on their economic behavior than their able-bodied or able-minded peers do. Additionally, they often face more limited employment opportunities that are restricted to certain ability levels or accessible work locations. If people with disabilities do not maintain the same level of financial agency or self-sufficiency as their peers, then the conclusions drawn from a behavioral economics analysis will not produce applicable results for disabled people due to the failure to account for fundamental differences.

Therefore, future research is necessary and required to fill in these gaps. The self-control component of many behavioral economic theories indicates that people find self-control difficult when it comes to saving, so they take steps to constrain future behavior (Thaler 1990, 195). In his article "Anomalies Saving, Fungibility, and Mental Accounts," Thaler argues aspects of the Social Security system function as an example of legislated self-control; placing limits on recipients through SSI asset tests ensures that receiving benefits remains a last resort. Instead, the way that Supplemental Security Income is constructed and administered by the Social Security Administration prevents decision-making. People with disabilities often have no choice but to prioritize immediate consumption over saving because they must provide for their essential and immediate needs or risk a further deterioration in their quality of life. The real costs associated with living with a disability are not captured by the amount of their monthly benefits. This proves especially true when considering that the amount of benefits disabled people receive falls below the poverty threshold. Though these benefits do not cover the extra costs associated with disability, they are restricted by legislated self-control. Once enrolled in the SSI program, this last resort becomes their only option for survival, as they are unable to accumulate enough wealth to safely transition off public assistance.

In essence, the option for disabled people to save is limited. The concept of self-control is less applicable in most areas of public assistance programs meant to support disabled people. The federal poverty level is $1,132.50 per month or $13,590 per year, and yet in 2023, the maximum Supplemental Security Income benefit that people with disabilities could receive each month was $841 per month or only 74.3 percent of the poverty threshold (Social Security Administration 2023). Considering that benefits do not cover the hidden costs of disability and do not deconstruct barriers to employment, there is little money for people with disabilities to cover the costs of living: shelter, food options within their dietary restrictions, medications, appointments, accessibility tools, compliance costs for the benefits process, etc. In order to achieve the same standard of living as a comparable household without a member with a work-related disability, "...household[s] containing an adult with a work disability requires, on average, 29 percent more income (or an additional $18,322 a year for a household at the median income level)" (Morris et al.2022, 158). Additionally, the asset test limits for an individual are $2,000 and $3,000 for couples, and a marriage penalty if there are two disabled individuals in the marriage (Social Security Administration 2022). Low asset tests prevent sufficient income accumulation to rise above the poverty threshold because there is no room for savings, and scant benefits fail to capture the disabled experience.

Relatedly, a behavioral economics theory called "libertarian paternalism" is a useful mechanism for showcasing how policymakers consider the welfare of the audience they are trying to reach with a policy, especially when an underrepresented group is not involved in the process. The interests and welfare of a group are not properly evaluated when they are excluded from the process by those who believe they have an objective understanding of their welfare. According to Thaler and Sunstein, libertarian paternalism is "an approach that preserves freedom of choice but that authorizes both private and public institutions to steer people in directions that will promote their welfare," whereas they would otherwise make inferior choices because they lack self-control (Thaler and Sunstein 2003, 179). This aspect of behavioral economics evaluates choice and self-control in response to economic and moral nudges from the government and private entities.

In practice, the theory of libertarian paternalism assumes individuals do not always make choices in their best interests, so "if no coercion is involved, [then] some types of paternalism should be acceptable" (Thaler and Sunstein 2003, 175). Thaler and Sunstein assert that nudges of libertarian paternalism do not eliminate choice entirely. Instead, they seek to influence the choices of affected parties in a way that is intended to make those parties better off. They claim that some forms of paternalism cannot be avoided, as they assume "individuals make inferior choices, choices that they would change if they had complete information, unlimited cognitive abilities, and no lack of willpower," so they presume that the ones creating the policy do not make these same inferior choices (Thaler and Sunstein 2003, 175). The creation of nudges within policies is grounded in the idea that an agent is subject to their cognitive weaknesses, and their subsequent behavior is involuntary. Thus, they require a corrective form of governance to lead them to choices that improve their personal welfare on an objective level. This is done without consideration of how a paternalistic nudge meant to target a wide community affects someone on an individual level because “the libertarian paternalist doesn’t advocate an intervention to check the will and knowledgeability of her target, she acts to promote an outcome she thinks will be good for her target” (Ryan 2018, 69). In this case, libertarian paternalism encapsulates the disability poverty trap as disabled poor are coerced into remaining on public assistance programs such as SSI because it is framed to be in their best interest. Libertarian paternalism assumes that the disability community’s “limited capacity to work” would otherwise lead to more dire economic outcomes for the individual and employers.

Though Thaler and Sunstein claim individuals can retain agency despite the presence of a nudge, nudges are often based on wrongful perceptions and interests that are far removed from the intended targeted community (Hertwig 2019, 1384-1387). For the disability community, policymakers seemingly believe that if left to their own devices, the disability community will make financial decisions that are neither in their best interest nor in the best interest of society at large. This idea is reinforced by the statistic that only one in ten elected officials creating policy for the disability community in the United States report having a disability (Rutgers School of Management and Labor Relations 2019). Policymakers have implemented nudges within disability-related public assistance programs based on the belief that certain individuals are worthy of assistance (i.e., if they have paid into the system throughout their working age years), while others should only use public assistance as a last resort. This approach emerges because not enough policymakers have disabilities themselves and are, therefore, unable to account for the barriers faced by the disability community.

Within the current structure of public assistance programs, such as SSI, the goal is not poverty reduction. The program was not designed to be the sole source of support but rather a supplement (Jimenez et al. 2015, 29-30). Despite presenting itself as a supplement, the low benefits combined with low asset tests prevent beneficiaries from obtaining any other form of income. The program is constructed as a poverty life sentence, reducing the number of individuals who would make the choice to start receiving benefits. In essence, many policymakers presume disabled people would choose not to work if the qualifications for receiving benefits were different, such as in the qualifications of a lack of Substantial Gainful Activity (SGA) and having little to no resources. The Social Security Administration describes SGA as a level of work activity and earnings with gainful work referring to “work performed for pay or profit, or work of a nature generally performed for pay or profit, or work intended for profit whether or not a profit is realized” (Social Security Administration 2023). As of 2023, earnings over $1,470 constituted SGA and made you ineligible for benefits

(Social Security Administration 2023).

The financial agency of those seeking public assistance is limited by a system influenced by an anchoring bias resulting from media and historical presentations that those in poverty seek to take advantage of the system rather than return to work. Anchoring bias refers to the tendency to be influenced by the first piece of information heard about a subject. Historically, much of the conversation around disability has been dominated by the perceptions able-bodied and able-minded people have about the disability community, particularly about the level of agency people with disabilities should have. As a result, many people, including policymakers, initially encounter information about disability that does not originate from disabled people themselves. This lack of direct insight can lead to anchoring bias, where people fail to familiarize themselves with the interests of the disability community.

While it is apparent that people with disabilities make up a small percentage of politicians and policymakers, there is little reliable data for an exact percentage. This is largely due to data collection problems associated with studies and programs about disability. Specifically, many surveys report on disability differently and utilize a variety of definitions (Blaser and Ladner 2020, 1-8). The National Council on Independent Living indicates "…the disability community is likely severely underrepresented in public office," but there is "an absence of solid quantitative data" to provide precise estimates on the number of elected officials on disability (National Council on Independent Living 2022). This lack of qualitative data stems from a transition away from medical and rehabilitation models of disability to the social model that centers the definition of disability on the interaction between an individual and their environment (O'Day and Killeen, 2002). Differing definitions of disability across time and across qualitative studies have created discrepancies in data collection. Qualitative interviews allow researchers to understand how changing definitions of disability have affected individuals' perceptions of their own disabilities, improving the soundness of future research efforts (O'Day and Killeen 2002). If there is not a substantial number of people with disabilities working in the government on policy, then libertarian paternalists cannot argue that they are providing nudges that are in the best interest of people with disabilities. As it currently stands, disabled people lack the ability to intervene and prevent the implementation of policies that fail to address the experience of living with a disability – especially pertaining to the risk of an ever-present poverty trap

Government and private institutions do not know better than disabled people themselves, a sentiment captured by the well-known disability rights slogan: "Nothing About Us Without Us" (Charlton 1998, 3-18). The phrase underscored the idea that no policy regarding the disability community should be made without the direct participation of disabled people. The current use of libertarian paternalism in the disability community currently runs contrary to this idea. Libertarian paternalists assume through their theory that people with disabilities have a self-control problem with saving their received benefits and that when they are unemployed, they cannot help but be tempted towards more leisure hours and away from labor hours. This view reflects an ableist perception of disability and a negative perception of those who rely on welfare. Applying this theory to the disability poverty trap fails to recognize current barriers to economic self-sufficiency and employment.

Despite the inadequacies of behavioral economic theories in unraveling the disability poverty trap, the impacts of framing and bounded self-control (rationality) may provide insight into necessary changes to the structure of the Social Security Administration (SSA). Utilizing framing and bounded self-control may create the changes necessary to improve savings and employment opportunities, particularly when benefits increase or during periods when individuals have enough to save. The concept of bounded self-control refers to "a general tendency whereby people would like to take an action with future benefits but fail to do so" (Congdon, Kling, and Mullainathan 2011, 6-7). It assumes individuals do not act rationally when making decisions because of limited time and attention. This leads people to make a satisfactory choice rather than an optimal one. Framing takes bounded rationality into account and seeks to convince the individual of a better alternative by playing on cognitive biases.

An effective strategy for utilizing framing could involve nudging recipients of public assistance benefits to save through an automatic enrollment system that they must opt out of if they believe that nudge is against their interest. By presenting an opt-out choice versus an opt-in choice, individuals are more likely to be prompted to save because of the additional effort required to opt out. If the benefits were easier to claim, then assistance would reach more qualifying individuals. However, this framing will only work when people with disabilities are given the option to save in the first place, a possibility prevented by inadequate benefits. Disabled peoples' only option is to survive on benefits when low asset test limits prohibit disabled people from accumulating any other resources or additional forms of support. The involvement of people with disabilities in the policy development process is crucial. Social Security system reform is vital to making behavioral economics applicable to people with disabilities.

LEISURE DEMAND CURVES AND THE LABOR MARKET

When exploring the lower workforce participation among individuals with disabilities, economic tools like leisure demand curves and the labor supply model are valuable for explaining the workforce barriers faced by the disability community. Labor supply refers to the total hours that workers choose to work at a given wage and the leisure demand model refers to how much utility is derived from consumption at the chosen allocation of leisure and labor hours. Leisure hours are “sold” for an hourly wage from the given endowment. The worker's choice set is the number of leisure hours they decide to give up for work hours, which reflects the set of all consumption bundles affordable to the consumer given their own resources and the prices of goods. The amount of leisure is determined jointly with hours of labor supply given the wage rate available, tastes, assets, ability to participate in the labor market, assets, and rules of welfare programs the person is eligible for. Disabled people on public assistance programs cannot sacrifice leisure hours for labor because of their limited capacity to work, as assumed by the program structure. This perception of limited capacity stems from the disability determination process of SSI and SSDI programs that define disability as “an inability to work due to a medical condition, without reference to the environment" (Stapleton, O'Day, and Livermore 2006, 708). The program fails to recognize environmental and structural barriers to employment beyond the medical implication of the disability itself and its effects on the ability of a person with a disability to work productively. Fundamentally, people with disabilities are unable to sacrifice leisure hours for work hours, which leaves little opportunity to expand their worker choice set. This leaves disabled people with no other income (besides their monthly benefits) and no other option but to view leisure as a normal good. A normal good is defined as a good or service for which income and demand are directly related, meaning that when income increases, the demand for the normal good will also increase (Higher Rock Education, n.d.).

Though public assistance programs are not often thought of as income when benefits are the only source of income for people with disabilities, there is no other basis by which to analyze how the community views leisure time. This is because the disability community is trapped in staying on benefits and out of the workforce, so all their time is effectively leisure. For example, if there was a slight increase in monthly benefits, then the demand for leisure hours increases because they are still not incentivized to substitute towards work if current asset test limits are not also increased. An increase in the asset test, along with the monthly benefits, would allow people with disabilities to access a fraction of their monthly benefit after providing for necessities. The structure of the SSI program shapes how people with disabilities value leisure. If an individual or household still requires benefits as they increase, then they will not reduce leisure demand. If the income they receive monthly from public assistance programs were to increase with no reform to the transitional period of moving off benefits and adjustments to asset test limits, then there would be no incentive for people with disabilities to view leisure as an inferior good. Leisure remains a normal good, even for the very poor, as it represents access to life-saving and immediate benefits within limited budgets.

The option of shifting toward labor means risking guaranteed income for the coverage of healthcare needs and the extra costs associated with living with a disability. This makes labor an inferior good if the level of monthly benefits were to rise. Leisure must currently be viewed as a normal good for disabled people because as they receive more benefits, they have less incentive to trade immediate and life-saving benefits for unguaranteed long-term employment opportunities. While receiving benefits does not necessarily alter the allocation between leisure and labor hours, the disincentive toward work means that people with disabilities value leisure in a way that is not comparable to the way in which a non-disabled worker may value leisure.

A recipient's budget constraint represents a limit on all possible consumption bundles at a given income. However, the budget constraint is the result of program disincentives toward work and is dependent on the monthly benefits the disability community receives rather than an hourly wage. This is where the leisure demand model is no longer applicable to people with disabilities. Individual choice about how to allocate leisure hours is denied to those whose consumption is restricted to monthly benefits. There is no choice about saving or borrowing because money cannot be borrowed from future monthly benefits. Additionally, there is no incentive to save in the face of asset test limits because of a limited budget for monthly necessities. Ideally, if the inability to work requirement was removed from the disability determination process for public assistance programs, then the model would showcase a kink in the graph. This would represent a guaranteed level of consumption equal to the amount of the monthly benefit at the endowment point, with the rest of the worker's budget constraint being impacted by wages once they gain employment if they are able to work. Disabled people would then be able to choose how to allocate their leisure hours and hourly wage, expand their consumer choice set, and make decisions around saving and consumption.

After the beginning of the COVID-19 pandemic, there was a "[shift in] career priorities and the desire for better working conditions," with "one probable factor affecting the labor force participation rate [being] the pandemic" (J. Jones 2021). Indeed, “in November [2021], 3.6 million people reported that they couldn’t work, or worked fewer hours, due to COVID-19” (J. Jones 2021). People prioritize their health and their desire for better working conditions, which helps explain the employment gap between disabled and non-disabled people. During the pandemic, people with disabilities had to reexamine how they value their leisure and their eligibility for welfare support as a result of the risks associated with working during a pandemic. Policymakers seeking to address these issues must first make consumption beyond basic needs possible and deconstruct disability stigmas. Though leisure will most likely remain a normal good for disabled workers, given the realities of disability and the increased value of rest, policies that expand the possibility to consume and incentivize work may be able to produce an upward-sloping labor supply curve. An upward-sloping labor supply curve is critical because it signifies a greater supply of labor as wages increase.

Policymakers will need to increase the opportunity cost of working hours to make the substitution effect overpower the income effect produced by monthly benefits. In a model such as this, increasing monthly benefits would move the kink point, a point that represents a sudden change in the slope of the curve, further up the graph for a greater level of consumption. By providing workplace modification subsidies and employment quotas, the barriers to employment could be removed, and people with disabilities would have a greater opportunity to earn an hourly wage. By increasing monthly benefits alongside financial incentives for employment, the government can alter the size of the substitution effect for people with disabilities.

INCOME AND SUBSTITION EFFECTS

The income effect refers to a shift in an individual's budget due to a change in income or wealth. The substitution effect refers to a change in behavior resulting from a change in opportunity costs or prices. Given the complexity of limited financial agency associated with being on public assistance programs, applying these effects to the labor supply model and the leisure demand model is essential for understanding how disabled people make decisions about their employment and savings. For those currently on SSI, leisure must be viewed as a normal good, given the constraints on financial agency. As the number of monthly benefits increases, disabled people are unable to give up their leisure hours for labor hours and may also be at risk of losing their benefits. Increasing monthly benefits will increase the change in income and cause budget lines to shift outward, which will allow for more purchasing power and consumption. The ability for people with disabilities on SSI to contribute to the economy through consumption is limited, restricting their ability to transition off the program. A policy change like this would produce a large income effect that increases consumption and allows for recipients to save, laying the groundwork for a changing opportunity cost in lost work that, eventually, will produce a larger substitution effect and a greater incentive to work. However, this is not possible with the current public assistance programs that discourage rejoining the labor force and include disincentives to work.

The high costs associated with living with a disability, which are not captured in the monthly benefits from public assistance programs, raise the opportunity cost of not participating in the labor force. Yet barriers to unemployment prevent the expected substitution effect of people with disabilities toward labor force participation. Once the pandemic began, lower-wage workers were more likely to lose their jobs as the labor market "shift[ed] toward higher-wage workers among the employed," raising the "median hourly wage to $23 in the second quarter of 2020" (Kochhar and Bennett 2021). The changes in the cost of living for lower-wage workers increased as lower-wage workers lost their jobs and the labor market contracted, creating a dire economic condition for disabled people both on and not on benefits. Workers with disabilities can even be paid a subminimum wage “under section 14(c) of the federal Fair Labor Standards Act” if they receive a certificate from the Wage and Hour Division, though there have been numerous changes to this at the state and federal level, and as of July 2022, “67,000 workers with disabilities [were still] making a subminimum wage” (National Conference of Legislatures 2023).

This change in economic conditions caused an inward rotation of their budget constraint to reflect a lower level of purchasing power and a slimmer margin of economic agency. After the beginning of the COVID-19 pandemic, the unemployment rate for people with a disability was 8.2 percent in 2021, which was twice that of those without a disability at 3.7 percent (Edwards et al., 2022). Now, working and risking benefits, as opposed to staying on benefits, pays less than it did before. People with disabilities face a budget constraint problem when they have to rely on the benefits of public assistance programs. Policy to address the disability poverty trap, therefore, must either focus on improving employment opportunities to promote a substitution effect toward work or income supports that increase the income effect to the point that disabled people can live above the poverty threshold.

Currently, there are no incentives to move off benefits, despite their low financial benefit, because there is no transitional period nor earnings saved while being in the program due to asset tests. Overall, in the current public assistance program structure, policymakers must address the low level of substitutability between work and benefits or disincentivize work altogether with greater income effects from an increase in benefits. Low substitutability means that there is little curvature on the indifference curve of the worker's choice set. There is a smaller substitution effect toward work because of the high risk of losing benefits despite scant monthly SSI benefits.

SAVING VS. BORROWING

Saving and borrowing decisions involve a trade-off between present and future consumption. When consumers save, they give up consumption now to acquire an asset that can be later sold to consume in the future – a necessary step to achieving long-term economic security and avoiding the poverty trap. In contrast, when consumers borrow, they sell future assets or earnings to consume now. A person who saves may currently have a steady income but expects to earn less or no income a year from now, motivating them to reduce consumption now in favor of future consumption. Ideally, this is how disabled people would build economic security if they were able to save properly, but asset test limits mean that they have less of a choice on whether or not they save. People with disabilities have no guaranteed future income to borrow from because benefits are provided on a monthly basis, with no way to access future benefits in advance. If long-term employment were an option in public assistance programs for people with disabilities, then the individual would have more choice over the decision of whether to save or borrow.

Another aspect to consider in analyzing the disability poverty trap is the employment landscape and its contribution to the disability poverty trap. Disabled people comprise 12 percent of the working-age population, and 21.3 percent of the disabled population is employed, yet they account for more than half of those living in poverty (Bureau of Labor Statistics 2023). While the Americans with Disabilities Act (ADA) attempted to eliminate employment discrimination and promote workplace access, it has not done much to improve labor force participation rates. The ADA set out to provide an equality of opportunity standard for employment “by mandating an employer provision of reasonable accommodations” (Hasegawa 2007, 54). However, this language of “reasonable” provides little specificity on what constitutes discrimination, acceptable and proper accommodations, and the inaccessibility of the workplace beyond the physical. As a result, there is little incentive for businesses and institutions to work toward universal design and access for people with disabilities. Language in this legislation falls short of mandating a commitment toward comprehensive workplace modifications or allocating appropriate funds to subsidize the costs of such modifications. This issue is especially important in older buildings that lack adequate accessibility infrastructure to support large-scale, costly changes.

Furthermore, prohibitions on employment discrimination have “not demonstrated positive effects with respect to the advancement of employment for people with disabilities" (Hasegawa 2007, 54). Prohibitions do not function as a form of affirmative action; "the essential theoretical basis of affirmative action lies in attempting to eliminate the influence of past social prejudices by implementing temporary aid measures that advance the opportunities of a minority," (Hasegawa 2007, 50). The elimination of discrimination through reasonable accommodation or "temporary aid measures" alone does not deconstruct underlying societal prejudices. These prejudices refer to perceptions about the productivity of people with disabilities in the workforce and concerns about the costs associated with accommodating disabled employees. Relying solely on disability discrimination laws as the sole use of promoting employment opportunities is "associated with lower relative earnings of the disabled" and "slightly lower disabled relative participation rates" (Beegle and Stock 2003, 806). Employers often undervalue the work of people with disabilities, associating them with lower levels of productivity. This bias leads to discrimination during the hiring process, either based on misconceptions of their capacity to work or on the basis that the accommodations requested are "unreasonable." This can largely be explained by the expected costs of accommodation for the role or industry. Unfortunately, it is difficult to prove that reasons for not hiring or for terminating are based on biased decision-making or the failure to thoroughly investigate the reasonableness of an accommodation request. As a result, these employment barriers further exacerbate the disability poverty trap.

In contrast, employment quotas represent a substantial avenue for improving employment outcomes for people with disabilities. Japan's employment levy-grant quota systems, despite their strict medical model of disability, have achieved a moderate amount of success in increasing the employment rate for people with disabilities (Hasegawa 2007, 53). A study from the Journal of Japanese and International Economies demonstrated that the employment of disabled workers does not necessarily decrease the firms' profits, and the coefficient (effect size indicator) of disability employment has a downward bias (Mori and Sakamoto 2014, 11-12). This means firms who "employ a higher proportion of disabled people place greater importance on their welfare or corporate social responsibility" rather than solely profits (Mori and Sakamoto 2014, 12). Researchers in this study showcase the varying incentives and disincentives for hiring disabled workers when considering their level of emphasis on productivity. If a firm wants to increase profits and improve productivity in the short term, then they are less likely to hire disabled workers without enforcement or incentive. Currently, there is little research on the long-term effects of investing in disabled workers through quota systems on an organization's profits and productivity. This area requires more attention and research efforts.

Quota systems mandate employment opportunities based on firm size but often fail to change the behavior of firms without altering their ability to maximize profit. For example, Japan fines firms who are not compliant with their quotas and uses the fees to subsidize workplace modifications for compliant firms. The International Labour Organization found in their report "Promoting Economic Opportunities for People with Disabilities" that 40 percent of reviewed quota schemes included financial incentives, with 17 of the cases reviewed including more than one incentive (n=109) (International Labour Organization 2019, 5). They also included employment-related support services to bolster employment in forms such as wage subsidies for employees with disabilities, tax rebates or exemptions, and subsidies for workplace modifications (International Labour Organization 2019, 5). The most frequently used incentives were wage subsidies (35 percent), tax exemptions or rebates (33 percent), and workplace modification subsidies (30 percent) (International Labour Organization 2019, 5). Data from these quota systems are in place around the world and showcase the importance of financial incentives for firms to change their behavior. However, because these quota systems are meant to promote the employment of people with disabilities, the fees for not meeting the quota must be substantial to impact firm behavior. Otherwise, firms may choose to pay fines instead of hiring people with disabilities, despite the financial incentives meant to challenge this bias.

Quota systems can boost the participation of people with disabilities, but anti-discrimination policies help normalize inclusion and equal opportunities by promoting employer initiatives and social consciousness (Momm and Geiecker 2006). Integrating quotas with anti-discrimination policies and financial incentives to hire and accommodate disabled persons is necessary to address statistical discrimination against people with disabilities based on productivity concerns. Statistical discrimination, in this case, refers to when employers with limited information make decisions about whether to hire or fire employees by relying on costs and risks alone. Essentially, past experiences of low productivity from disabled workers in the past, regardless of whether the proper workplace modifications or accommodations were provided, may bias employers against hiring disabled individuals in the future.

CONCLUSION

Overall, the current economic condition of people with disabilities in the United States remains dire. While the ADA signified a transition away from the medical model and toward the social model of disability by shifting focus to deconstructing societal barriers and away from individual rehabilitation, it does not mark the end of the disability community's fight for financial stability and economic agency. Public assistance programs need to include the perspective of people with disabilities in the policymaking process, ensuring they create programs that reduce poverty. The actual costs of living with a disability are high and rapidly changing, especially following the COVID-19 pandemic. Policymakers need updated economic models that include disability and reformed public assistance programs that are more aligned with theories of behavioral economics and the leisure demand model. The current structure creates an income effect through its provision of benefits by preventing beneficiaries from substituting their leisure hours for work hours.

Alongside program reform, government intervention within the labor market is necessary to ensure disabled people have opportunities to achieve long-term economic security and agency. This would occur once the value of leisure for disabled employees can be altered toward labor and away from benefits, specifically in circumstances where the individual is able to work. The United States government should consider the benefits of quota systems and/or subsidies for workplace modifications rather than rely on nudges that eliminate choice and the financial agency of people with disabilities. Current public assistance programs, such as SSI, limit worker choice sets and suggest disabled people view leisure differently than their able-bodied and able-minded peers. These social programs prevent long-term economic security by imposing asset test limits and benefit penalties on the disability community as they reenter the workforce, perpetuating the disability poverty trap. This poverty trap is a phenomenon that the United States government has systematically reinforced through misunderstandings about disability. Nonetheless, through urgent policy reforms, the government has the ability to correct the disability poverty trap and liberate people with disabilities from its binds.

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