

WORKING P A P E R

The Returns to Work for Children Leaving the SSI- Disabled Children Program

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**Final Report for Year One Financial Literacy Research Center
The Returns to Work for Children Leaving the SSI-Disabled Children Program**

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I. Introduction

A substantial fraction of children receiving Supplemental Security Income (SSI-child) benefits for disability apply to move directly onto the SSI-adult program without attempting to enter the labor market. Thus, most SSI-children are aging into what is likely to be a permanent life on the SSI-adult program or, in the event of denial of SSI-adult benefits, turning to other forms of social welfare. Once this transition is complete, very few seek employment while receiving SSI-adult or other benefits. This is costly to both the beneficiaries who live their lives at or near the poverty threshold and to taxpayers who are funding the benefits. The cost of providing such a low level of economic well-being to a growing number of young adults has raised concerns among policymakers (Social Security Board 2006) and resulted in a large scale attempt by the Social Security Administration to support work among these young adults (SSA Youth Transition Demonstration Project, 2010).

There are many reasons why the vast majority of youths and young adults with disabilities are not investing in work. The MDRC SSA Youth Transition Demonstration Project report (2008) provides an excellent summary of these barriers, identifying several potential hurdles that youth in transition must overcome in order to transition from the SSI-child program to work as adults.¹ Our Year 1 Financial Literacy Research Center project focused on documenting evidence with respect to one of these barriers to work, the financial incentives to work for youth aging onto the SSI-adult program.²

Specifically, we produced a computation algorithm designed to determine the returns to work, including the value of wages and the eventual value of Social Security Disability Insurance (SSDI) benefits once the quarters of coverage requirement is met, for young adults receiving SSI-adult benefits. The algorithm produces unique values for youth living in different states where SSI benefits vary, and for youth of different ages, achieving different earnings

¹ These are summarized in Figure I.1, p.3 of the MDRC Report to the Social Security Administration and Mathematica Policy Research (2008).

²Subsequent work will focus on using this research to address some of the other barriers listed in the report including “low expectations for working and self-sufficiency and “lack of knowledge about how benefits change when a person works”.

levels, and completing different work histories. Using these algorithms we examined the financial incentives/disincentives of working for young adults on the SSI program.

The results show that the long term financial returns to work can be much greater for young SSI-adult recipients than has previously been considered. Our analysis shows that those who age out of the SSI-children program and onto the SSI-adults program can benefit from working in two important ways. First, they are able to receive earnings and still retain a substantial portion of their SSI-adult benefits, meaning their monthly income rises with work. Second, and much less well understood, young SSI-adult beneficiaries can, with a modest amount of work in SSDI covered employment, earn enough quarters of coverage to become eligible for a lifetime SSDI benefit. Moreover, with relatively low levels of wage earnings during this short work period, they can earn a SSDI benefit that exceeds the value of their SSI benefits.³ The earnings levels that generate this higher benefit are well below the SSI-adult earnings breakeven point—the point at which SSI benefits are reduced to zero based on the earnings reduction. Thus, SSI beneficiaries who work can gain a PIA well above the SSI benefit without crossing the earnings threshold that would reduce their SSI payment. In principle, this allows young SSI beneficiaries to invest in an employment option that produces little downside risk, but considerable upside risk in terms of future income streams.

This analysis underscores the importance of educating young adult SSI recipients about the value of working in the labor market. To assist in this effort we are taking this algorithm and the values it produces as inputs and developing a financial education tool for SSI-child and young adult beneficiaries and their advocates that will show alternative long-run income paths with and without work. This tool will be designed to show young SSI-adult recipients that working, especially early in their life, produces long term positive benefits for them well in excess of the net earnings they receive from employment in any one year while on the program. Our reading of the data suggests that this opportunity is little understood by young recipients.

A prototype of this instrument will be presented at the New Insights and Advances in Financial Literacy: Translation, Dissemination, Change; The First Financial Literacy Research Consortium Conference: November 18-19, 2010 in Washington, DC. Testing of the instrument will begin in late 2010 at the Experimental Economics Lab at Cornell University.

³The relatively low threshold of earnings required to dominate the SSI benefit owes in large part to the rules for quarters of coverage and the number of highest earnings years necessary to calculate AIME in this age range as well as the PIA progressive benefit formula.

II. Background and research Program

A substantial fraction of children receiving Supplemental Security benefits for disability move directly onto the adult SSI program without attempting to enter the labor market. Hemmeter, Kauff, and Wittenburg (2008) find that nearly two-thirds of SSI-children transition directly from this program to the SSI-adult disability rolls. Once this transition is complete, very few attempt to work while receiving SSI-adult benefits. Moreover, of those who do not move directly onto the rolls, only about 60 percent are employed at age 19 Hemmeter et al. (2008). Thus, most SSI-child are aging into what is likely to be a permanent life on the SSI-adult program or in the event of denial of SSI-adult benefits, turning to other forms of social welfare.

This is costly to both the beneficiaries who live their lives at or near the poverty threshold and to taxpayers who are funding the benefits; in April 2005, approximately 776,000 youth 14 through 25 years old were receiving SSI benefits totaling more than \$340 million each month (MDRC 2008). The cost of providing such a low level of economic well-being to a growing number of young adults has raised concerns among policymakers (Social Security Board 2006) and resulted in a large scale attempt by the Social Security Administration to support work among these young adults (SSA Youth Transition Demonstration Project, 2010).

There are many reasons why so many youths and young adults with disabilities may not be investing in work. The MDRC SSA Youth Transition Demonstration Project report (2008) provides an excellent summary of these barriers, identifying several potential hurdles faced by youth in transition from SSI-child benefits. Specifically, the report identifies the following potential barriers:⁴

- **Low expectations for working and self sufficiency**
- **Lack of access to employment services and work-based experiences**
- **Uncoordinated handoff to adult services**
- **Inadequate access to social and health services**
- **Financial disincentives to work**
- **Lack of knowledge about how benefits change when a person works**

⁴ These are summarized in Figure I.1, p.3 of the MDRC Report to the Social Security Administration and Mathematica Policy Research (2008).

Among these barriers, a critical and under-investigated one is the financial disincentives to work. This topic has received very limited study in the economics literature, with almost no attention paid to the particular incentives or disincentives faced by young adults deciding either about working while receiving SSI-adult benefits or when deciding whether to apply for those benefits at all. To fill this knowledge gap, we focused on understanding the financial incentives and disincentives facing young people whose impairments meet or exceed the medical listing standard for eligibility for the SSI-adult program.⁵ Specifically, our research examined the following questions:

- For those SSI-children who transition onto the SSI-adult program, what are their economic incentives to pursue employment?
- Are the benefits of working robust to state supplemental SSI-adult benefits?
- How do the incentives to work change with potential wage earnings?
- How do the incentives change when other government transfer programs are taken into account, including Medicaid and Medicare?

Policy Relevance

The Social Security Administration, as well as other policymakers, has agreed that the transition to adulthood for youth receiving SSI-child benefits can be difficult. The fact that so many young people end up on the SSI-adult program or unemployed and on other forms of social support underscore the need for study of this issue. Our work adds directly to the evidence needed to devise the tools necessary to assist these young adults in making the transition to adulthood with greater self-sufficiency and less dependence on social welfare benefits.

Methodology for Developing Computational Algorithms

Central to our research has been the development of a computational algorithm to extrapolate monthly income trajectories for young adults based on their decisions about working while receiving SSI-adult benefits. The development of a single algorithm based on complicated program rules and a large number of possible work strategies is difficult. To simplify the analysis and make the results manageable for use in financial literacy tools, we begin with a baseline algorithm that takes as inputs an individual's work history including starting age, full-

⁵ Our focus on young people who meet the medical criteria is meant to simplify the examination. In all of our work we assume that eligibility is granted and that recipients are not uncertain about their ability to continue on benefits. Of course, other scenarios are possible but they are beyond the scope of our current work.

or part-time status, and earnings level and computes: (1) whether the individual is eligible for SSDI; (2) what his or her SSDI benefit would be at various months following eligibility; (3) how SSI benefits, both federal and state (if specified) change as a result of current income; and (4) what the individual's income would be if he or she had chosen to take SSDI benefits as soon as possible.

Details of the algorithms

Since the algorithms are meant to reflect the exact costs and benefits of working while receiving benefits all the computations are made with full information about the disability benefit and work rules. The algorithms are programmed to precisely account for (1) the work credits earned toward SSDI, (2) the number of computation years relevant for the AIME calculation, ; (3) income and earnings tests for SSI-adult income, (4) including the definition of 'countable' income; and (5) the interactions among SSDI, SSI, and earnings.

SSDI rules and computations. To be eligible for SSDI, an applicant must be both fully insured and disability insured. These criteria and the Average Indexed Monthly Earnings (AIME) calculation formulation, are defined in the Social Security Administration (SSA)'s *Annual Statistical Supplement*.^{6,7} The issue of becoming disability insured is key to the results we get regarding the value of work to young adults. Over the age of 30, to be disability insured, a worker must have earned 20 quarter-credits in the past 10 years; in other words, a worker older than 30 must have earned credits for at least half of the previous 10 years. The dollar amount required to accumulate a credit is indexed to wages. In 2010, a quarter credit (QC), is accrued for every \$1,120 earned in a year, with a maximum of four accrued per year. Although a maximum of 4 credits can be earned per year, they do not have to be earned at a rate of one per quarter; thus, one can earn 4 credits by earning \$4,480 in a single quarter.

For younger workers, the system is far more generous. For example, between the ages of 24 and 30, an applicant for SSDI requires credits equal to working half the number of years between his or her current age and age 21. The system is even more generous for younger

⁶ Details of the basis for our computations can be found at <http://www.ssa.gov/pubs/10072.html>.

⁷ To not be fully insured while satisfying the additional disability insurance recent work requirements an individual would have to have not earned any work credits for over half of his or her working-age life—the first half—and then accumulate credits at a rate low enough to not accumulate credits too quickly, but high enough that the applicant still satisfies the recent work requirement. This earnings rate is a very narrow band of monthly earnings following a period of no earnings, but more importantly, since we are focusing on young adults, this scenario is not applicable to our current analysis. Thus, for the purposes of this analysis, if an individual satisfies the additional work requirements of disability insurance, he or she is also fully insured.

applicants. Prior to age 24, a worker requires credits equal to working half of the previous 3 years (or 6 QC in the last 12 quarters). The generosity of these credits at younger ages is taken into account in the algorithm and underlies the financial benefit of working we show in the results. The algorithm calculates the individual's potential AIME in every month. The AIME varies by the number of computation years: the number of earnings years between the applicant's current age and 21, minus the number of dropout years, which accrue every fifth year after age 21. The applicant's years of highest earnings are then used for these computation years. Since the number of computation years can never fall below two, for young adults, there is a substantial period of time, namely, up until age 24, that his or her AIME is based on two years of work.

SSI rules and computations. SSI benefits are calculated according to SSA's *Redbook*, and current benefit amounts for both state and federal SSI benefits are taken from the SSA website.⁸ State SSI benefit amounts and structure vary from state to state, but the current algorithm captures this variation for every state. Although no prior work history is required to receive SSI benefits, they are means-tested both for eligibility and amount (with both earnings and asset tests). The maximum benefit for a non-blind individual in 2010 is \$674. Benefit reductions vary depending on the source of income. Unearned income reduces SSI benefits dollar-for-dollar after a \$20 general income exclusion. Earned income has an additional \$65 exclusion, and SSI benefits fall by 50 cents for every dollar earned.

Taking these program eligibility and benefit formulas into account, our final algorithm provides a month-by-month picture of the alternative incomes available to young adults receiving SSI benefits who do or do not attempt to work. Because the algorithm accepts a variety of inputs including work history since age 15, state of residence, hours worked per week, hourly wage, current asset value, and current age it delivers a rich set of alternative scenarios and serves as a foundation for the types of financial calculators common in the retirement literature.

Results

A key goal of this project was to examine and document the value of the work option for young adults making the transition off of the SSI-child program, demonstrating the benefits, in

⁸ Rules are available at <http://www.ssa.gov/ssi/text-benefits-ussi.htm> and <https://secure.ssa.gov/apps10/poms.nsf/lrx/0502302200>.

addition to wages, related to earning the right to coverage under the SSDI program. Using the algorithms described above the remaining results show the returns to work for young SSI-adult recipients, how and why they have changed over time, and finally how they change with the intensity of work effort and rise with the value of the wage.

Returns to work

The first goal of our examination was to show to what extent the rules for SSI-adult and SSDI created financial incentives or disincentives for young adults to work. The next two figures discussed here summarize the results from this examination. Figure 1 shows the relationship between AIME on the x-axis and the corresponding SSDI benefit for each AIME on the y-axis for an individual who works for two consecutive calendar years between the ages of 18 and 24. Drawing vertical lines down from the intersection points of the SSDI benefit line (red) and the horizontal SSI lines (Federal, Alaska, California, and Massachusetts), shows the average monthly earnings a young adult would need to make the SSDI benefit match the respective SSI-adult benefits. For example, given the initial PIA formula of 0.9, young adults would only need an AIME of \$750 (\$9,000 per year or 1,242 hours of work per year at the federal minimum wage of \$7.25 per hour) to hit the federal SSI-adult monthly benefit line of \$674. While it takes a bit more earnings to hit the federal plus state supplement lines, all these points are well within the 0.32 PIA formula line so it does not take that much more earnings to have SSDI benefits exceed SSI-adult benefits in the most generous states of Alaska and California.

Figure 2 provides a more detailed set of values for the state cross-over points. The key finding of this analysis is that because the quarters of coverage required to become eligible for SSDI are very low up until age 24, young adults moving off of the SSI-child program have an opportunity to enter the workforce and relatively rapidly build an SSDI benefit that dominates the SSI-adult benefit they would receive if and when they were no longer able to work. Of course, these results do not take into account program interactions (availability of food stamps, etc.) or the value of Medicaid immediately on SSI-adult versus Medicare two years after receiving SSDI. That said, under recent health insurance reforms, individuals below 133 percent of the poverty line will be eligible for Medicaid even if working (and possibly even if they are on SSDI). These reforms are due to begin by 2014 and would greatly reduce the

Medicaid/Medicare tradeoff for young adults moving off SSI-child program and attempting to work.

Changes in the returns to work over time

The relatively low level of earnings needed to make a young SSI-adult recipient eligible for SSDI is surprising and raises the question of why so many young SSI-adult beneficiaries forgo work. One potential answer is that the returns to working have not always been so high. Figure 3 shows historically the AIME at which SSI benefits and SSDI benefits are equal. This breakeven AIME has decline considerably in real terms since the start of the SSI program. The breakeven point reached its maximum in real terms in 1980s, at nearly \$1,200 (2010 dollars). It fell nearly continuously in the early 1980s, changed little from the mid-1980s through the mid-1990s, and then began declining again in the late 1990s. In 2010, it was the \$750 level used in the baseline algorithm.

What explains the variability in the breakeven level and why is it so much lower now than it was when the SSI program began? The answer lies in how the program benefits change over time. In the case of SSI, benefits are indexed to general price inflation (CPI-W). In the case of SSDI benefits, the PIA bend points are indexed to wage inflation. When real wages grow, wage inflation is higher than price inflation, meaning the breakeven value of earnings required to qualify for SSDI benefits falls. Moreover, since the PIA benefit formula is progressive, the 90 percent rate used for income below the first bend point applies to a growing real portion of a beneficiary's AIME. This growth, being wage indexed, has exceeded the growth in the SSI benefit.

Importance of early work activity

Although the value of work clearly has been rising for younger SSI adult recipients, the window of time during which these young individuals can generate these high returns is relatively short. Figure 4 illustrates this window, showing how the two key requirements for SSDI eligibility increase for young adults and Table 1 which provides examples of how work requirements vary over time for an applicant with a real monthly earnings value of \$750. At young ages (aged 16-23), any two out of three years of work averaging \$750 per month will satisfy eligibility and benefit calculation requirements. As these young adults age, however, the years used in the calculation of their AIME, as well as the work credits requirement, rise, increasing the necessary number of years-of-work. Given the current system for determining

AIME for young adults with disabilities who are able to work, it is best to do so as soon as possible since the age window to earn these generous AIME values closes quickly and permanently.

Value of work and earnings trajectories

The final component of our analysis focused on how the value of work is related to the earnings opportunities of these young adults. The following two plots (Figure 5) show the income trajectories for two different earnings scenarios—part-time and full-time employment—at the federal minimum wage and the breakeven for SSDI and SSI at the federal and state levels. The alternatives show that at very low earnings levels the long-term financial benefit of working is not large if one exits from the labor force as soon as the maximum SSDI benefit for that earnings level is achieved. However, the charts also show that the benefit of work rises substantially when work intensity (part-time to full-time) or hourly wages increase within plausible amounts, even if the young person can only work until the SSDI maximum for that earnings level is reached.

The first panel shows that for a young person working part-time and earning \$7.25 per hour, the increased monthly benefit on SSDI versus SSI is around \$20. However, if that same young person is able to move to full-time work at the same wage, the monthly benefit on SSDI rises considerably, even if that young adult is only able to work until the SSDI maximum for that earnings level is obtained—about 25 months. Of course, if workers are able to earn higher hourly wages these income gains would be even larger.

These two plots provide examples of the types of alternative scenarios that the algorithm allows for and also show the extent to which the young adults on the SSI-adult program who are able to work can improve their long-term financial situation, even if they are unable to work for their entire career. Since the algorithm allows for a full range of individual data to be input, these types of calculations can be produced for individuals with a wide range of backgrounds, skills, and earnings expectations.

Project Summary

Our analysis has demonstrated that the long term financial returns to work are positive and can be much greater for young SSI-adult recipients than has previously been considered even in the economics literature. Currently most models of the benefits of working while on the SSI-adults program are single period ones that do not consider how the decision to work affects the eligibility for SSDI over the life course. Much like the social security retirement literature of 30 years ago, which modeled the decision to work while receiving Social Security retirement benefits as a single period one, these single period models for young adults on the SSI-adults fail to capture the long-term value of work in terms of eligibility for higher SSDI benefits.

The contribution of our work is to show that those who age out of the SSI-child program and onto the SSI-adult program can, with a modest amount of time in covered employment, earn a sufficient number of quarters of coverage to satisfy that criteria for a lifetime SSDI benefit. Furthermore, with surprisingly low levels of wage earnings during this short work period their potential SSDI benefits will exceed the value of their SSI-adult benefit.⁹ The earnings levels necessary to do this are well below the SSI-adult earnings breakeven point—that is, below the point at which SSI-adult benefits are reduced to zero based on the earnings reduction. So, SSI-adult beneficiaries can in principle gain a PIA well above the SSI-adult benefit with modest enough earnings so that they are still receiving SSI-adult benefits while doing so.

That said, not every young adult will want to move onto the SSI-adult program, especially if application is costly. Our algorithms allow for this possibility and show SSI child beneficiaries and their advocates the monetary implications of making that decision. The point of this analysis is to show that a relatively low amount of earnings for a small amount of time will assure an SSDI benefit, should the individual be unable to work through their career, that exceeds the federal SSI-adult program benefit and in many cases the federal SSI-adult benefit and state SSI-adult supplement combined. The algorithms also show the value of continuing to work for as much of working age as possible, something that young adults might not fully understand. Whether the individual chooses to work while on SSI-adult program or work instead of applying for SSI-adult program benefits has very little impact on the value of work

⁹ The relatively low threshold of earnings required to dominate the SSI benefit owes in large part to the rules for quarters of coverage and the number of highest earnings years necessary to calculate AIME in this age range as well as the PIA progressive benefit formula.

and likely owes more to the anticipated risk of being denied entry onto the rolls should one delay in applying for SSI-adult benefits and attempt to work.

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Figure 1: SSI Adult Income vs SSDI Benefits

(Federal and Selected States)

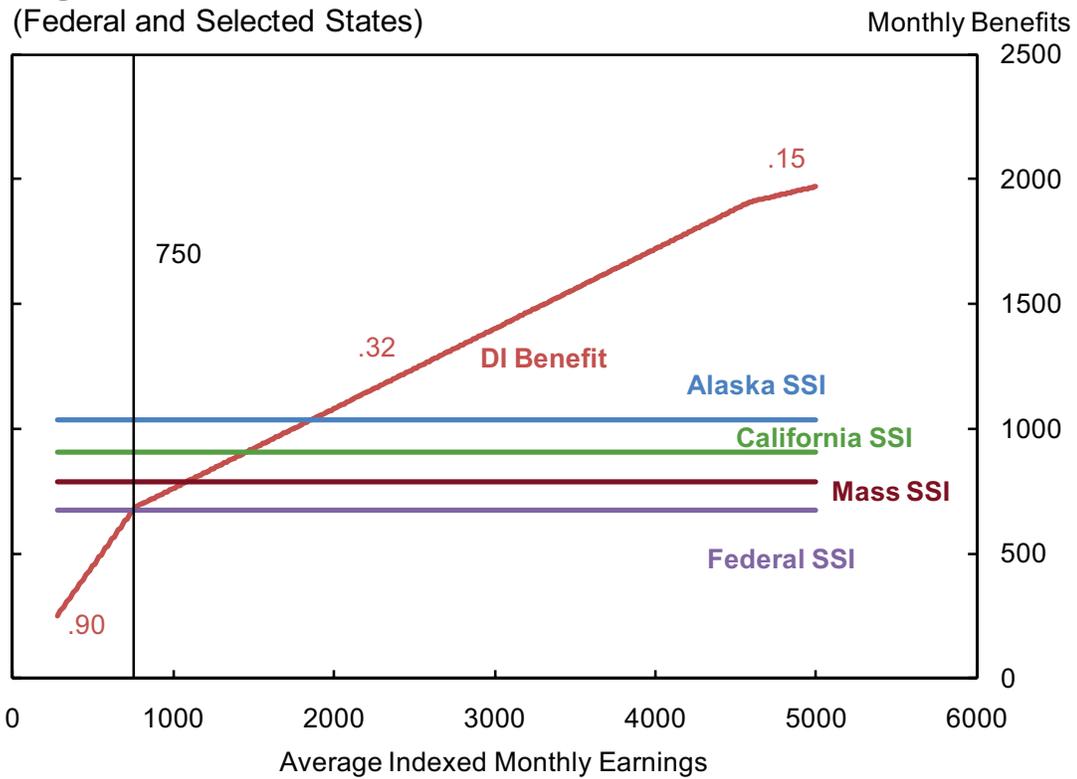


Figure 2: SSI Adult Income vs SSDI Benefits

(Federal and Selected States)

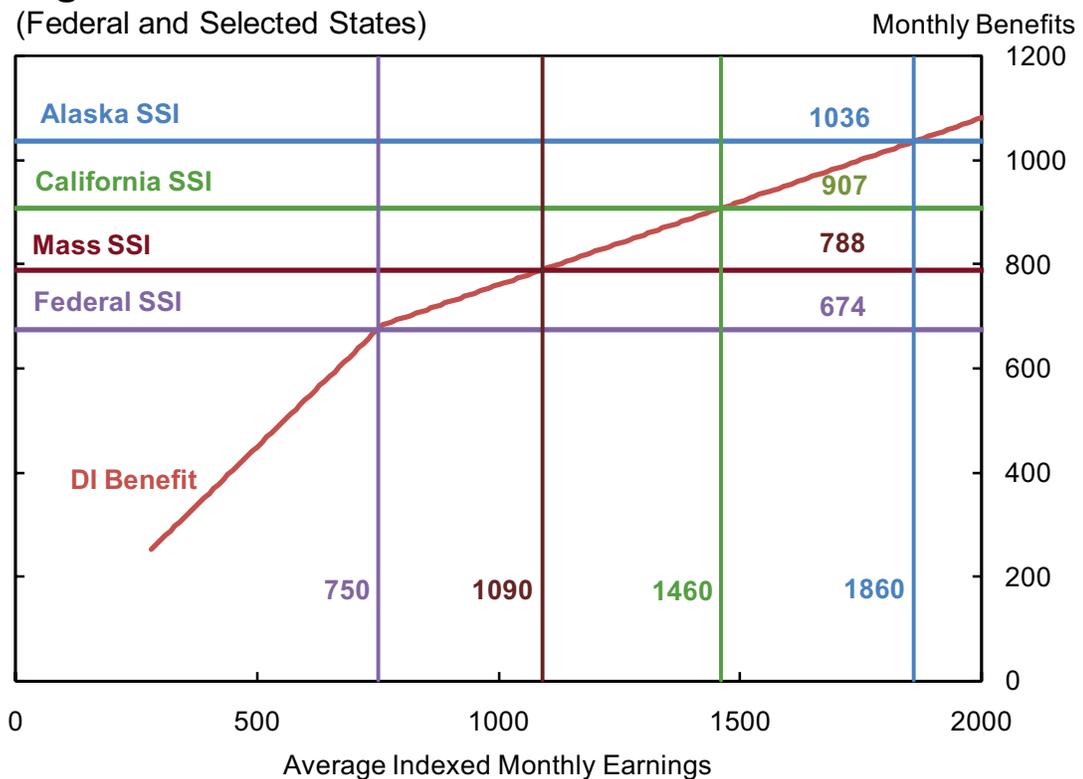


Figure 3. Inflation-Adjusted SSI-SSDI Breakeven AIME

Adjusted for price inflation

2010 Dollars

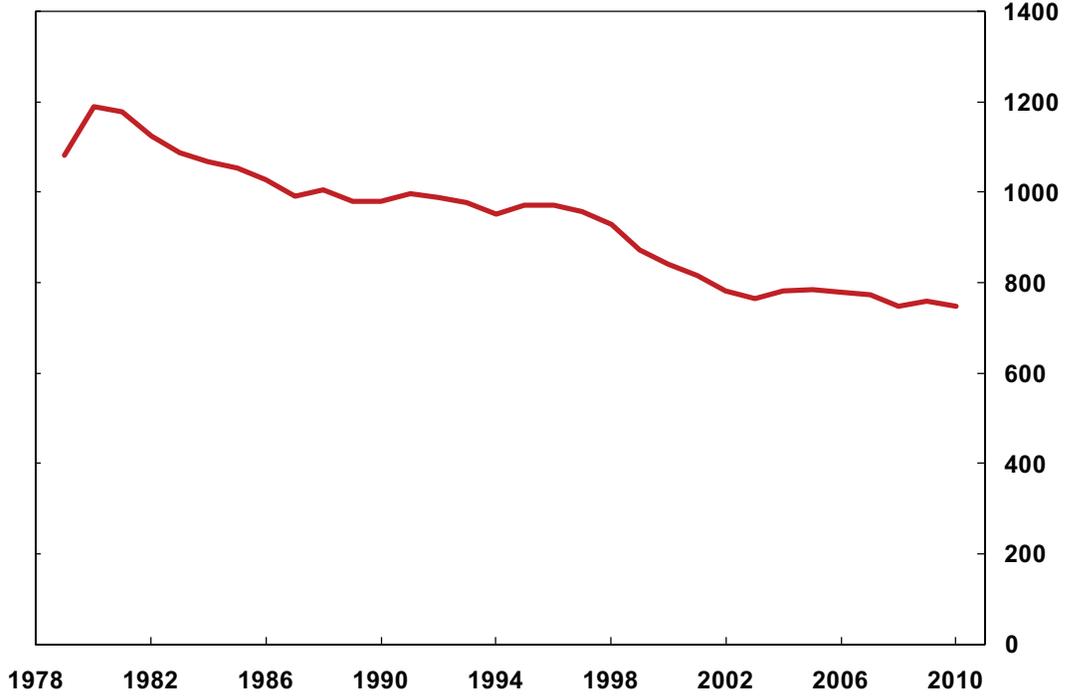


Figure 4. Computation and Eligibility Requirements

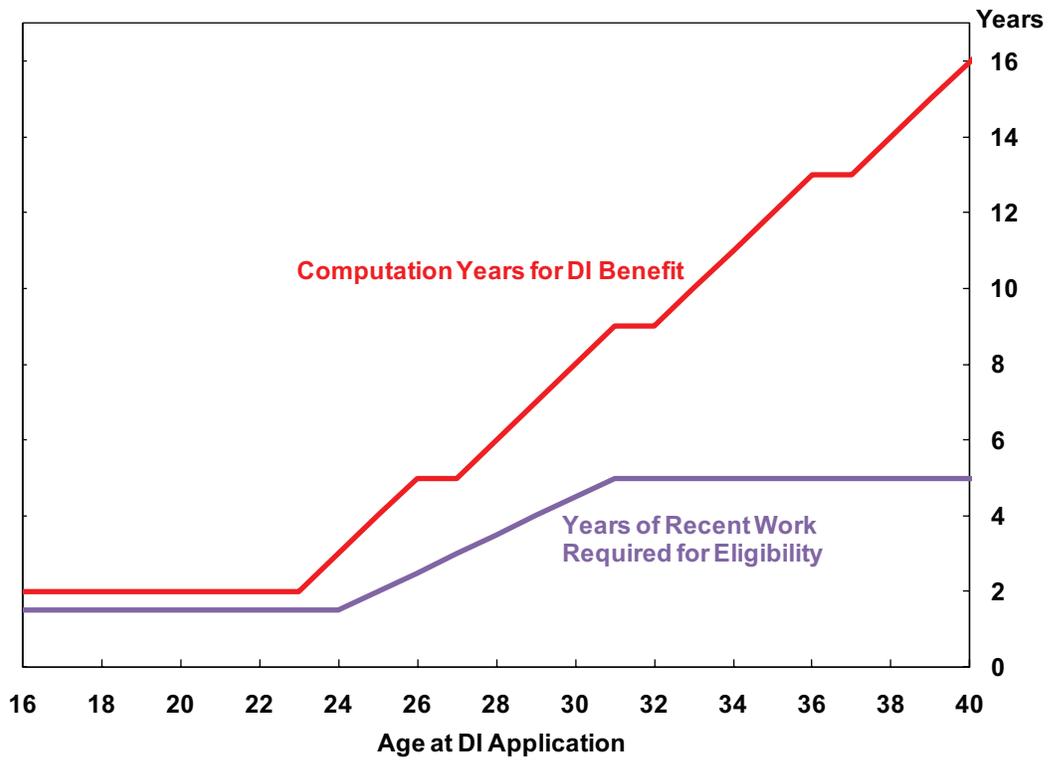


Figure 5. Panel A

Alternative income path: Part-time, \$7.25 Hourly Wage

SSI non-income eligibility assumed for all paths

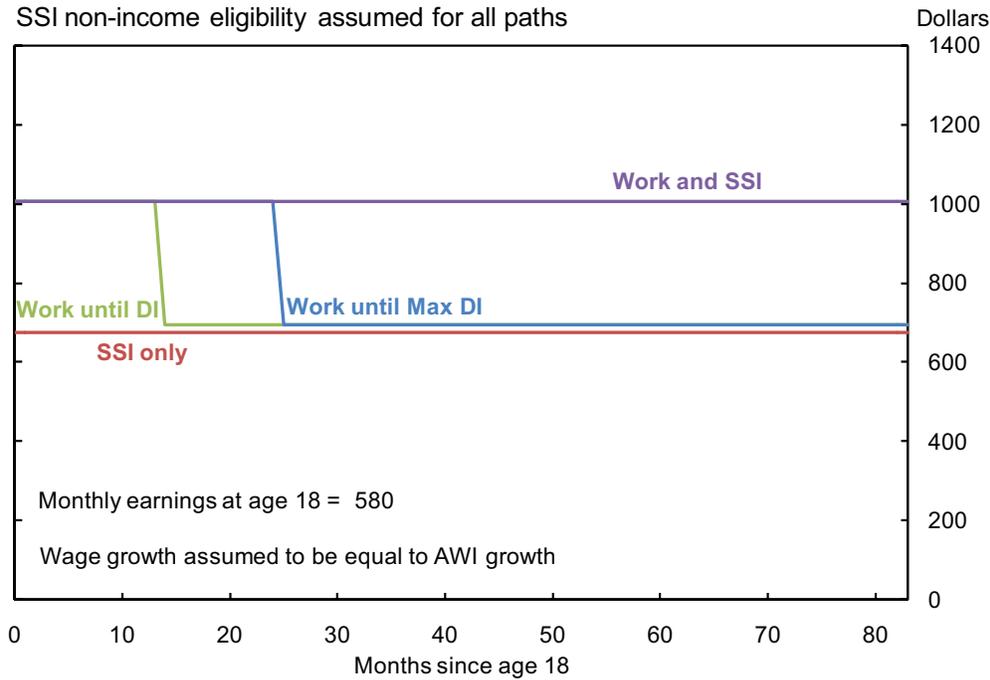


Figure 5. Panel B

Alternative income path: Full-time, \$7.25 Hourly Wage

SSI non-income eligibility assumed for all paths

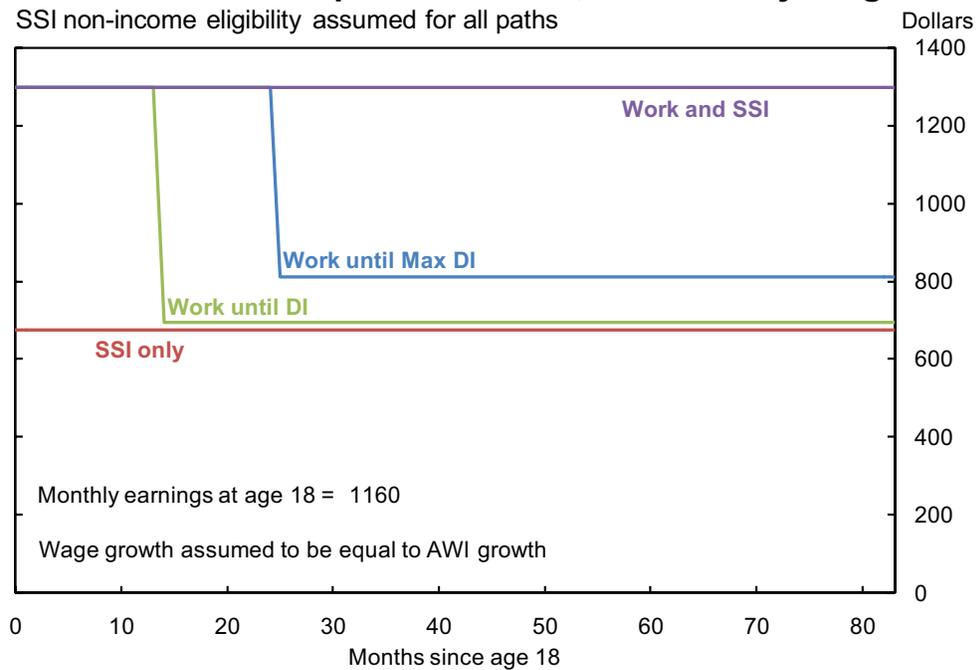


Table 1. Eligibility under Alternative Work Scenarios, \$750 Monthly Earnings

	<u>Years until Eligible</u>	<u>Years until Maximum AIME</u>
Age of Starting Work 22	1.6	2
23	1.6	5
24	2	9
25	3	13

Note: Assumes constant real earnings, 2010 program rules