

Employ Young Americans Now:
Beyond Education

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Abstract

America for the past few decades has faced rising inequality. Education is thought to be a path which can allow anyone out of poverty and provide equal opportunity to all Americans. While the individual benefits of education are great, it is a fallacy of composition to assume those benefits can be obtained by all Americans through education alone. Looking at available jobs in the economy we see a constant gap between the demand for labor and the number of unemployed workers. Employ Young Americans Now is a policy which moves beyond education and gives young disadvantaged Americans paying jobs. It has the potential to hire 500,000 young people and reduce inequalities depending on its implementation. The most optimistic implementation reduces the black white youth employment gap from 12.33 to 11.85. While this is thus found to be a small program, it's structure is such that expanding it could help move America towards full employment.

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(Name and Signature)

thanks go to the entire human family, especially my parents and sister

Table of Contents

INTRODUCTION.....	4
EDUCATION AS AMERICA’S CURE-ALL.....	7
EDUCATION IS NOT REDUCING INEQUALITY.....	10
REDUCING INEQUALITY THROUGH JOB CREATION.....	13
THE PRECEDENCE FOR EYAN.....	16
MODELING EYAN.....	20
RESULTS OF EYAN SIMULATION.....	28
CONCLUSION.....	39
APPENDIX.....	42
BIBLIOGRAPHY.....	50

INTRODUCTION

For the past three decades, America has become an increasingly unequal society¹. The economy is complex and interconnected, so pinning down any one reason as the cause for this phenomenon is impossible. Binder and Stiglitz (2015) argue that this has happened because of a range of policies enacted in the 1970's, and that we have to rewrite the rules to reverse it. Their proposal is multifaceted, arguing we need rules to tame the top of the income distribution along with ensuring financial security and opportunity for the middle class. The Full Employment and Balanced Growth Act of 1978² established price stability and full employment as the goals of economic policy within the country. These two goals make up the dual-mandate of the Federal Reserve, the institution in charge of monetary policy in the economy. A main policy tool of the Federal Reserve is setting interest rates. However, the channels through which interest rates affect employment are contested and weak. As the Binder Stiglitz report says, "monetary policy has been able to stimulate the economy only to a limited extent, and in ways that have actually increased wealth inequality, contributed to a jobless recovery, and increased the risk of future instability." If monetary policy is not the answer, this means we have to rely on Congress to stimulate the economy and improve equality through fiscal policy.

Public investment is one of the most promising levers for growing the bottom of the income distribution. American infrastructure is falling apart, with the American Society of Civil Engineers (ASCE) giving the US a D+ in their recent report (2013). They estimate that an investment of \$3.6 trillion dollars is necessary by 2020 to properly support the demands on American infrastructure. They argue that at least \$270 billion of that will be necessary just to modernize public schools, most of which were built to educate baby boomers. Beyond investing in infrastructure, Stiglitz notes other low hanging fruit such as investing in universal child care and early education. Social care provisioning is shown to induce large employment effects and

¹ See for example Sommeiller, Estelle, and Mark Price. "The Increasingly Unequal States of America." *Economic Policy Institute* (2015) or Binder, Carola, and Joseph E. Stiglitz. "Rewriting the Rules of the American Economy." *Roosevelt Institute* (2015)

² Also known as the Humphrey-Hawkins Act after the congressmen who introduced the legislation

be more pro-poor than infrastructure investment (Antonopoulos 2011). Women in low-income households already constitute a major part of the care sector, and paying them for currently unpaid work is a prime candidate for reducing poverty and increasing equality. The popular African proverb “it takes a village to raise a child” demonstrates the public aspect of caring for our youth, especially important in low-income neighborhoods where poverty makes it harder to invest in one's children.

Inequality is perpetuated by the fact that being born into a rich neighborhood gives a young person a large head start. Duncan (1994) shows that already at age 5 IQ's are higher in neighborhoods with greater concentrations of affluent neighbors, while the prevalence of low-income neighbors increases incidence of externalizing behavioral problems. This problem then gets worse after age 5, as local funding for public schools relies on property taxes, meaning the best public schools are in the wealthiest neighborhoods. Beyond wealth, this intersects with racial inequality, as “African-Americans make up 42.5 percent of students in high-poverty elementary and secondary schools, despite accounting for less than 16 percent of the overall student population. Latino students make up nearly 31 percent of students in high poverty schools while accounting for just 23.7 percent of the student population” (Binder 2015). Whole communities are thus divided on class and racial lines, and improving this will require targeted investments in these underserved segments of the population.

Poverty, by its very definition, implies a lack of income necessary to meet a family's needs. Having more education in America's meritocracy gives you access to higher paying jobs. This explains the focus on education as the path to improve incomes and reduce inequality. At the individual level, there is substantial evidence showing how more education improves employment and incomes. However, it is a fallacy of composition to think this will hold for society at large. Improving access and outcomes of our schooling system will not be enough to bring the economy to full employment, an essential condition for reducing poverty and inequality. Education improves the supply side of labor, but does not directly create more demand for businesses. Without businesses expecting higher demand for their goods and services, they are unlikely to hire more workers. When they do hire workers, they are likely to select the most educated. Without a tight labor market, education can only improve one person's position at the expense of another. Government policy can increase demand by raising the

incomes of those with high propensities to consume. Raising the minimum wage is one promising way to do this, but directly creating jobs for the unemployed has even more potential.

The BLS estimates that there were 5.8 million job openings in April of 2016, yet U6 unemployment shows 15.6 million people who want work (BLS, author's calculations). Even if every unemployed person were to obtain a bachelor's degree, this labor demand gap for almost 10 million jobs would not be filled. Konczal (2016) shows that declining entrepreneurship and labor mobility also have their roots in insufficient demand. Mainstream Keynesian policy suggests a model where raising aggregate demand drives employment. Employment levels, however, are not a problem of purely aggregate demand. Tcherneva (2013) argues that fiscal policy needs to orient itself towards the clearly defined labor demand gap, rather than an ambiguous demand gap for output. She shows how the traditional demand side approach focuses on aggregates, which benefit higher skilled workers. The American Recovery and Reinvestment Act of 2009 had less than 1% of its \$787 billion in spending used to employ low-skill workers (Tcherneva 2012). If fiscal policy is going to be used to improve equality, we will need programs that focus on hiring low-skill workers. Direct employment is preferred since "such an approach has the highest primary, secondary and induced employment-creation effects of any fiscal policy" (Tcherneva 2013). Such a policy would have the most impact on poverty and equality by hiring low-skill workers as they are, and training them on the spot.

Employ Young Americans Now (EYAN), legislation introduced by Senator Bernie Sanders, is a targeted employment policy which focuses on filling the labor demand gap. The bill specifically targets \$4 billion in government spending towards creating jobs for the youth³ of the 6.7 million families with young people living in poverty (ACS, author's calculations). Tcherneva (2013) warns that "government policy itself reproduces the vicious and virtuous cycles of private sector hiring behavior" if it "improves the job prospects of those whom the private sector deems 'more employable' first and those who are considered 'less employable' last (if at all)." A model of employability for disadvantaged⁴ youth is constructed using the 2014 American Communities Survey (ACS) in order to determine who would get jobs under EYAN.

³ 16-24 year olds for the purpose of this bill

⁴ The bill spells out that a disadvantaged youth is one whose family income does not exceed the poverty line for their family size, or 70% of the lower living standard income level (LLSIL) - which is an alternative poverty line based on the cost of living in major metro areas defined by the Workforce Innovation and Opportunity Act of 2014

The effects of hiring the “most employable” and “least employable” young people are shown in order to showcase the range of possible impacts the bill could have. In order to encourage EYAN as a policy which moves the economy towards full employment, local boards are urged to use the money to target job creation for the “least employable” population.

This paper will show the slew of benefits individuals gain by having higher education levels. It then argues, however, that improving the education system alone cannot reduce the high levels of inequality seen in American society. Based on theoretical and empirical underpinnings, direct government job creation is introduced as a path towards reducing poverty and inequality. EYAN is introduced as such a policy that can potentially reverse both of these trends. Based on Hyman Minsky’s work, EYAN contains all the necessary components of a policy which can go beyond education and be a small step towards getting the economy to full employment.

EDUCATION AS AMERICA’S CURE-ALL

Presidents Kennedy and Johnson started The War on Poverty over 50 years ago. This war set a goal “not only to relieve the symptoms of poverty, but to cure it and, above all, to prevent it.”⁵ Social Security was amended to expand benefits for the elderly, the Elementary and Secondary Education Act (ESEA⁶) doubled public school funding from \$4 billion to \$8 billion, and programs like Head Start⁷ and Job Corps which focused on training and disciplining the workforce were introduced. Johnson’s Council of Economic Advisors (CEA) motivated these programs with beliefs that “poverty was not inextricably linked to unemployment, unemployment could be decreased by aggregate fiscal policies, and millions of Americans would have to be maintained as an unemployed buffer stock to keep inflation in check” (Bell Wray 2004). These beliefs led to the War on Poverty’s focus on supply side training and skill upgrading. For example, Job Corps does not offer program participants an income. These changes were implemented in an era during which high school graduation rates were increasing

⁵ President Johnson’s inauguration speech

⁶ Today known as No Child Left Behind

⁷ An early childhood education program, which was appropriated \$8.5 billion in 2015 (<http://www.acf.hhs.gov/ohs/about/what-we-do>)

drastically. For 25-29 year olds the graduation rate doubled from 37.8% in 1940 to 85.8% in 1980 (Morgan 1984). Today, the 25-29 year old cohort has a high school graduation rate of 92.2% (ACS, author's calculations). The new trend has been for increasing college graduation rates, with the number of workers with a bachelor's degree doubling from 26 million in 1989 to 54.2 million in 2016 (Carnevale 2016). Overall then, the historical trend since the War on Poverty started has been for Americans to acquire more education.

Increasing one's education is promoted as the ticket out of poverty. This makes sense, as receiving an education improves one's chances of being employed, and one's income. Just over half of 21 to 65 year olds with less than a HS education are employed, two thirds of HS graduates are employed, and with just one year of college, the proportion goes up to 79% (ACS, author's calculations). The recovery since 2008 has been divided between the college educated and not (Carnevale 2011). Since the bottom of the recession, 99% of the 11 million new jobs have gone to college educated workers. By contrast, 5.6 million of the 7.2 million jobs lost were to those with high school diplomas or less (Carr 2016). For most businesses "the least educated workers, those with a high school diploma or less, were the first fired in the recession and the last hired in the recovery. Conversely, those with the most years of college were the last fired in the recession and the first hired in the recovery" (Carr 2016). Average personal incomes for those with less than a HS education are at \$17k/yr, with a HS diploma that jumps up to \$28k/yr, and those with bachelor's degrees earn \$68k/yr on average (ACS, author's calculations). Carnevale et al estimate that an average bachelor's degree is worth \$2.8 million in lifetime earnings (2011). This is 74% more than the lifetime earnings of those with a high school diploma. The CEA also estimates that having a bachelor's degree provides an estimated \$1 million boost in lifetime earnings (2016). Card (2011) demonstrates that these correlations can be causally attributed to one's education.

If the War on Poverty were to be successful then, everyone would at least need to graduate high school. For young people born into families already in poverty, this can prove challenging. Nearly 37% of high school dropouts come from families living in poor or near poor⁸ conditions (Sum et al 2009). Bridgeland et al (2006) surveyed high school dropouts across the country in order to determine the primary reason they did so. They find that 47% drop out

⁸ 125% of the poverty line

because classes are not interesting and seem irrelevant to the world around them, with 81% saying that if school had more real-world learning they would have been more likely to graduate. For 70% a reason for dropping out was a lack of inspiration and motivation. For 45% school was too challenging, and they did not adequately feel prepared from their previous education level. Finally, for some it was other responsibilities with 32% saying they had to get a job and make money, 26% becoming parents, and 22% taking care of family members. Many did not see the connection between school and an opportunity to make money. Without employment opportunities, the most immediate way to make an income for many high school dropouts may be to turn to crime.

Sweeten et al (2009) show that there are correlations between dropping out of high school and being incarcerated. However, these correlations may be spurious and making a causal link has been challenging. Still, 50% of the incarcerated population are high school dropouts. It has been shown that increasing education rates reduces criminal activity. Lochner and Moretti (2003) use compulsory attendance laws as an instrument for schooling to determine that educational attainment accounts for 23% of the gap in black white male incarceration rates. Whether this educational attainment decreases incarceration because it leads to employment or for some other reason is unclear.

Education improves one's chances of being employed at a higher wage. It keeps youth away from criminal activity, and should help to prepare them to be active engaged citizens. Yet even education does not serve everyone equally. Black youth face higher incarceration rates and have less opportunities for employment, no matter the education level. Darity (2013) explains how even with high school diplomas black youth face worse employment opportunities than white high school dropouts. Freeman (1986) shows that "overall, we see a picture in which many black youths face unappealing labor market choices and therefore find other ways to obtain income and spend their time." Education does not offer an immediate income, so for many youth living in poverty completing high school may not even be an option. Some children are born into a situation where they need to help feed their relatives. Rather than continually promise that education will solve their woes, it is time to offer incomes to our families living in poverty. By helping relieve immediate needs on the family, perhaps we can encourage a "stop out" rather than a "drop out" from the education system.

EDUCATION IS NOT REDUCING INEQUALITY

While education has been shown to improve outcomes for individuals, it is impossible for it to solve the problems of poverty and inequality alone⁹. The trend towards employment opportunities favoring those with the highest educations means that education levels will continue to inflate as labor competes for the best possible jobs. With the labor demand gap still indicating over 10 million missing jobs, getting the 1.8 million young high school dropouts diplomas will not guarantee them work (ACS, author's calculations). While education promises that there will be "No Child Left Behind," without a tight labor market this is simply impossible. Even for those who complete higher levels of education and get jobs the results are not equal. Students from poorer families do not see the same returns from college as students from higher income levels (Bartik 2016). Hamilton and Darity (2015) show that for racial and wealth inequality, education is not the great equalizer. They find that black families headed by a college graduate have 2/3rds the wealth of a family headed by a white high school dropout. Still, more people want to go to college since they believe it will get them better jobs, and the government has expanded the debt financing system in order to accommodate this. This has hurt black and Latino students at a disproportionately high rate (Huelsman 2015). Since the 1980's the chances of moving to the top decile of the income distribution from a middle one have declined 20% (Carr and Wiemers 2016). Reduced economic mobility and increased inequality are not problems having a more educated population can solve.

While having an educated population is certainly a net public benefit, the way American society pushes education has its flaws. Rosenbaum (2010) explains how college-for-all rhetoric has come to dominate our public education system. The goal of high school has become "college and career" readiness, with heavy emphasis on the college side. College has also come to mean a four year bachelor's degree, and students today are less aware of alternative options such as associate's degrees and career certifications. This stigmatizes other pathways to higher earnings, even though these alternative pathways have been shown to be more effective for

⁹ John Marsh in *Class Dismissed: Why We Cannot Teach or Learn Our Way Out of Inequality*, makes a similar argument to the one I will make that "education is not a reliable weapon against economic woes like income inequality or poverty"

students coming from poverty. Jacobson (2009) details the evidence showing that low-income families are underrepresented at every stage of the educational pipeline. Students from the lowest quintile in the income distribution are six times more likely to drop out of high school. Only six out of ten high school graduates attend college versus nine out of ten for families making over \$88k/yr. Most disheartening of all, the 146 most selective colleges only have 3% of students from the lowest income quintile. Rosenbaum (2003) discusses how the goal for educating our population should not be “the unrealistic vision of everyone becoming a doctor, but rather the elimination of the all too common outcome of youths facing dead-end jobs and unemployment as their only options.” With today’s economy, a fulfilling career is available without a four year bachelor’s degree, so we should not push this path on everyone.

Higher education since the last recession has been increasingly debt financed. The CEA (2016) released a report detailing how this debt financing is still a net benefit to the economy because it allows low-income students access to educations they would not be able to get otherwise. They argue that because the present cost of student debt is on average \$20k, and on average those with bachelor’s degree make \$1 million more in lifetime earnings, that this is a justified investment. This justification has problems and shows how we continue to push a college education on everyone. First, Hiltonsmith (2013) has found that average levels of student debt can lead to over \$200,000 in lost lifetime wealth, relative to those who do not have to borrow for college. Clearly low-income families are the ones who have to borrow to finance educations more often than others, exacerbating inequalities. Bartik (2016) used a longitudinal study showing degree payoffs adjusted for family backgrounds. He divided families into those making over 185% of the poverty line, and those under it. He found that going to college for individuals from low income families gave them additional lifetime earnings of \$809,600, versus \$1,561,900 for those from higher income families. If low income families had the same returns on education, there would be an over half-million boost to their expected lifetime earnings.

The CEA notes how low degree completion rates at for-profit and community colleges have accounted for many of the loans that have gone into default. African-Americans and Latinos are overrepresented at these schools, another way in which education is not improving racial equality. Sullivan (2015) shows that the black white racial wealth gap would improve

\$10,000 if college returns were equalized between races. Rosenbaum (2003) shows how community colleges have been pushing transfer programs to participants, rather than credentialing programs which have better access to jobs. Black and Latino students go to these colleges that are closer to home more often, and the CEA (2016) shows how financing for associate's degrees and certificates has been a large part of the increased debt burden. This plays into the overall picture, whereas Huelsman (2015) shows, “our debt-financed system not only results in higher loan balances for low-income, black and Latino students, but also results in high numbers of low-income students and students of color dropping out without receiving a credential.” This places an additional burden on those who debt finance their education and do not finish. Without tight labor markets, it is hard to find part time work which makes it possible to go to school any other way.

The fact that public education is financed locally by property taxes makes it hard for the education system to reduce inequality. Sullivan (2015) shows that 71% of white households owned their homes in 2011, while only 47% of Latinos and 45% of blacks were homeowners. For every \$1 of wealth that the median black household accumulates into their household, the median white household accumulates \$1.34. The problem gets worse and black and Latino families faced more discriminatory lending in the last recession, and lost more of their wealth with the housing crash. The wealth accumulated into these richer neighborhoods benefit their school systems and allow their students to reach higher levels of education. There are other ways that schools dominated by students of color get less resources than just unequal property taxes. Spatig-Amerikaner (2012) shows that there are federal loopholes that cause less spending to make its way into schools dominated by students of color, due to the “comparability loophole.” This loophole means schools have to have the same student-teacher ratios, but experienced teachers end up at richer schools so money spent per pupil is not the same. Rich families are also able to spend more on SAT test preparation, making it easier for them to get into the best colleges from these better public primary schools¹⁰. Wealthier schools in wealthy neighborhoods make it easier for those students to succeed. Education has a long way to go to become a tool which fights inequality and poverty for everyone.

¹⁰ William Deresiewicz' book *Excellent Sheep* showcases stories from his time at Yale about how this plays into elite college admissions.

Minsky worried that the War on Poverty would be a failure from the beginning. He saw that it “tried to change the poor, not the economy” (1971). Minsky believed rather than a program of unpaid skill upgrading, we should focus on creating paid opportunities for human capital development. This would mean, as Minsky said, that “programs must be designed which hold out a promise of a useful and productive life for our high school dropouts” (2013). The benefits of high school dropouts getting incomes are higher than their getting formal educations, especially when those educations do not lead to jobs. Jorgensen (2016) argues that to see growth from returns to education like we have seen in the past, we will have to increase the participation rate of the less-educated workforce. As Hossain (2015) puts it, “the understanding that higher educational attainment can improve one’s labor market outcomes is pervasive, yet it has not led to major improvements in academic outcomes among disadvantaged youth, who often lack access to early opportunities and structural supports to properly prepare them for academic institutions and the job market.” For education to live up to its promises, we have to make sure there are tight labor markets.

REDUCING INEQUALITY THROUGH JOB CREATION

Keynes saw two major faults with the capitalist system: its failure to maintain full employment and its arbitrary and inequitable distribution of income. With the understanding that unemployment and poverty are intricately linked, employment becomes the strongest tool towards fighting poverty and inequality. The formal education system has not been reducing inequalities, so it is time to focus on the demand side of the labor market. The private sector has a responsibility to profit, which means that it is not always in their interest to hire more workers. They often stop investing in labor before full employment is reached. Yet tight labor markets are an essential component of a poverty and inequality fighting strategy. Dr. Martin Luther King Jr. called the Civil Rights Movement “a campaign for jobs and income, because we feel that the economic question is the most crucial that black people, and poor people generally, are confronting.” Since the private sector is not generating enough jobs to employ our unemployed, the public sector has to fill the gap.

This view led Hyman Minsky to call for a federally funded Job Guarantee, or Employer of Last Resort, as a policy to move towards eliminating poverty in America. Employment has a wide range of benefits. Brenner (1977) shows “that actions which influence national economic activity-especially the unemployment rate-have a substantial bearing on physical health, mental health, and criminal aggression.” Unemployment is stigmatized in American society, so welfare programs are not likely to be as beneficial as jobs programs. With employment programs, you also have the opportunity to produce socially useful output that does not get organized under welfare programs or private sector employment. Child care, education, green jobs, and art are all areas that are not particularly profitable today but provide public benefits. These jobs could be organized through a job guarantee program.

Cherry (1999) shows how black employment rates have faced an ominous trend over the past few business cycles. Each cycle has had more young black men losing their jobs in the downturn than gaining jobs on the way up. Masterson (2016) uses LIMEW¹¹ to show how racial inequality has persisted even in the latest recession. Black families experienced a loss of earnings which was higher than any other group. These inequalities have improved most when the economy has had tight labor markets. From 1992 to 1998, one of the tightest labor markets in recent history, the black employment rate among youth in cities jumped from 52% to 64% (Cherry 1999). Cherry contends that there will be a significant core of black men who will not be reached simply by generally targeting tighter labor markets, however. We must demand specific programs designed for these people who have had to exist in informal, sometimes criminal, markets because they could not find employment. Holzer (2003) uses a cross-sectional survey of employers in the 1992-2001 period to find that they became more willing to hire disadvantaged workers during the boom. Freeman (1990) looks at local labor markets to show that in the tightest labor markets the position of young black men improved the most. The close relationship between unemployment and their economic position leads him to conclude that most of the problems faced by inner-city youth are a direct result of job loss in those areas.

Youth who can find employment have an alternative other than education and crime, one which helps out their family at home with an income. Raphael (2013) shows “considerable evidence that economically-motivated crime increases with unemployment and decreases with

¹¹ Levy Institute Measure of Economic Wellbeing

average wages, especially the average wages of low skilled workers.” Apel (2008) instruments adolescent employment with state labor laws to show that allowing youth to work more increases employment but decreases delinquency, contrary to previous evidence showing an increase in both when youth are allowed to work more. Stearns (2006) suggests that employment is a factor which pulls youth out of education as they grow older and have to take more responsibility for helping out at home. Gould (2006) in a longitudinal study from 1979-1997 establishes that employment and wages have a causal effect on criminal activity. Over this period employment prospects for young men decreased and then increased, at the same time as crime rates increased and then decreased. By giving young Americans jobs and incomes we give them alternative opportunities.

Mental health is also improved with employment. Paul (2009) has a meta-analytic¹² model that looks at 237 cross-sectional and 87 longitudinal studies with results showing the average amount of people with psychological problems is 34% among the unemployed and 16% among employed individuals. Unemployment has a social stigma in today’s society which may be why these problems arise. Pelzer (2014) concludes that unemployment is an important stressor which induces depression and other health issues rather than depression causing unemployment. Linn (1985) creates a group of men matched for age and race where some became unemployed and some continued working. Those who became unemployed had higher incidence of depression, somatization, and anxiety. Granados (2014) shows that joblessness strongly raises the risk of death among those suffering from it. They also show that overall death rates decrease during recessions, but it is hard to understand why this is.

Creating jobs can also help organize workers to create socially productive output which makes it better than an education or welfare strategy for reducing poverty and inequality. Forstater (2001) argues that government job creation could be used to unleash a new wave of green jobs, helping us work towards environmental sustainability. One of the simplest jobs under this program could be to plant trees in communities, which Roosevelt did with the Conservation Civilian Corps (CCC). Under that program the government hired more than 3 million young men to plant over 2 billion trees, earning them the affectionate name “Roosevelt’s Tree Army” (Maher 2008). Planting trees may not be particularly profitable, but has great social

¹² an analytic model that looks at the results of other analytic models

benefits, which makes it a good candidate for a public job. Child care is another place which pays dividends beyond just creating an income for someone. By employing someone to take care of the child of a young single mother, she is freed to gain an income also. Bivens et al (2016) shows how early childhood education plays a large role in later life outcomes, where currently rich families are able to invest more. They show estimates that closing the childhood educational achievement gap between income classes could create a \$70 billion benefit annually. This leads them to call for universal early child care, which a government employment policy could help organize. There is also the potential to pay artists, or any number of other public goods investments which the private sector has not prioritized.

Jobs are a surer way than education to reduce inequality within marginalized communities. Tight labor markets have been shown to improve the opportunities for young black males. Employment is associated with lower rates of criminal activity and better mental health. Public employment particularly also has the opportunity to create socially beneficial output. Employ Young Americans Now creates employment for disadvantaged youth, moving us towards tighter labor markets and all of the associated benefits.

THE PRECEDENTS FOR EYAN

In the 1950's and 1960's, high school dropouts could find employment more readily than today (Warren 2006). These may have been "dead-end" jobs, but they were certainly better than no job. In that era, the minimum wage was a living wage for a single person, which is not the case today. In the 1970's we see a break in the trend for minimum wage to keep up with productivity increases. If the minimum wage had kept trend with productivity it would be over \$18.00/hr instead of the \$7.25/hr it is today (CEPR 2016). Most of education's promises are linked to the employment opportunities made possible through it. Without tight labor markets, the opportunities for high school dropouts and high school graduates are nearly the same. EYAN can build upon previous experiences with employment policy to create more opportunities for a population which does not have many options.

Hossain and Bloom (2015) review previous employment policy to figure out which pieces of them were most effective. The 1973 Comprehensive Employment and Training Act

(CETA) subsidized wages for young people participating in the public sector. While the aim of the bill was to create new jobs, concerns about “fiscal substitution” abounded, where private and local governments would replace current projects with the wage subsidies from the bill. This led many in general to conclude that CETA failed to have any impact on employment or earnings of the youth who participated. CETA transformed into the Job Training Partnership Act (JPTA) in 1982, which gave more oversight to local governments in how to use the money rather than the federal government. This program also offered supports like child care and transportation, but ultimately the program was found not to be cost effective since it did not produce large earnings impacts. This program was one that focused on training, but failed to have strong links to paid work experience. Most youth did not participate in the full length of the program because of this.

EYAN is an improvement to these programs since it requires that “funds provided under this Act shall only be used for activities that are in addition to activities that would otherwise be available in the absence of such funds” (22). This means that these programs can not be used as substitutes for private sector wages. EYAN is an improvement to JPTA since it pays youth for the entire duration of the program, making it more likely for young people to see it through to completion. It also makes clear that the jobs created should be ones which give “industry recognized credentials,” meaning there should be a strong linkage to employment upon completion. EYAN participants can produce something socially useful to their local communities. They also get paid while they are doing it, making them likely to stay involved. Child care seems to be a great option as child care workers already make up 1.52% of the disadvantaged youth workforce (author’s calculations ACS), and could free up time for individuals from families with young children to earn income.

In this way EYAN is following some new programs which have had better results than CETA and JPTA. Job corps, Conservation Civilian Corps, ChalleNGe, and Year Up have shown promise. Hossain and Bloom conclude that the programs that have had the most success have a few features in common. Opportunities for paid work and financial incentives while in the programs keep young people in for the full length of time and help them receive maximum benefits. ChalleNGe and the job corps all paid weekly stipends to youth who were participating. Year Up had strong links to the private sector, corporations helping to create the training

curricula. This industry focus allowed access to higher wage jobs rather than generic low wage jobs. While JPTA was advertised as being locally administered, it failed to continue engaging with local employers over time. The most successful training site was in San Jose, California, where workers in the program had strong links to local job markets. The successful programs also provided for some of the most pressing needs facing youth. It was hard to participate if still struggling with unstable living situations, and access to food and childcare. The most successful participants in these programs were ones who got access to childcare and transportation vouchers, making participating effective for the young person and not forcing them to abandon their other responsibilities in the household.

This provides evidence that a job creating solution like EYAN would be effective, and provides ideas for how to make it even more effective. EYAN as written provides strong financial incentives for participating, giving young people at least a year of work. If the jobs provided by the program help provide childcare and transportation for participants this evidence suggests the outcomes will be better. The bill makes a specific callout that funds “may be used to provide supportive services, such as transportation or child care” (EYAN). This shows that the bill is designed to get people working, and work with them for their needs in order to make that happen. Implementation also needs to make sure that there would be strong links to the private sector afterwards, so it does not become a year long program that does not improve outcomes in the longer term. These outcomes rely on what type of jobs local governments would implement when using their money from the bill. The bill says that employment from the federal funds should prioritize “emerging or in-demand occupations in the local area” and “the public or nonprofit sector [to] meet community needs” (EYAN). This leaves the decision for which jobs to create within communities affected, as Minsky suggested for a job guarantee (JG) program.

A single job creation experiment modeled after Minsky’s JG in Argentina suggests that such policy can have wide reaching results. *Plan Jefes y Jefas de Hogares* was implemented after their 2001 recession. Tcherneva notes that “Plan Jefes is the only direct job creation program in the world specifically modeled after the modern ELR proposal developed in the United States” (2012). In a paper written with Wray, they show that “by most measures, the program has been a tremendous success, providing jobs to 2 million workers or about 5% of the

population, and about 13% of the labor force” (2005). The program increased the incomes of these families by about 150 pesos per month for 4 hours of daily work. Women were the largest recipients of the jobs and reported benefits to their communities, families, and themselves. Projects included improving the water supply, sewage systems, healthcare, and education. At least 87% of projects were targeted toward local communities, and some funds were even used to start small businesses. The fact that it was mostly women who participated in the program had large benefits for their wellbeing, and improving gender disparities in the workforce. Beyond the income, they felt empowered simply by having the job. This outcome shows that jobs are important for individual wellbeing, and how creating jobs is thus a better solution than direct income transfers (welfare). In the United States, the Earned Income Tax Credit (EITC) is currently considered the largest poverty fighting policy in existence. Newmark (2000) shows how it is more beneficial than even increasing the minimum wage. Implementing EYAN would be a way to test the power of creating meaningful work, over just giving people incomes.

Within the country, beyond the recent programs such as CETA and JTPA which focus more on training, there is also the historical precedent of job creation programs after the Great Depression. President Roosevelt with his New Deal created over 3.6 million jobs (Wray 2009). Part of the direct job creation done then was through the National Youth Administration (NYA). Daniel (1935) analyzed the NYA and the participation rate for black Americans. They note that there were 20 million youth in America at the time, and 12.5% were black. In urban areas, black youth received a higher proportion of the jobs, but in rural areas they constituted 17% of the job recipients while they made up 27% of the rural youth population. He suggests for rural areas this was discriminatory, showing even well meaning policy can extend inequalities. Salmond (1965) shows a case where in Georgia the black population was 36.8% of the total but no non-whites received jobs under the CCC. This was because applicants were prioritized into groups by need, and white people all made it into the first group where all applicants were hired from. Deciding who gets the jobs from EYAN will be a challenging problem for local communities, and so I estimate a range of possibilities for who the recipients are.

MODELING EYAN

EYAN targets federal money to Public Use Microdata Areas (PUMAs) which can locally administer jobs with the funds. The bill specifies an allocation rule for the PUMA the money goes to, but once the money is distributed to locales the jobs that are created could be targeted to different members in the disadvantaged community. Since poverty is determined by family income, the target universe consists of some parents with disadvantaged youth and some disadvantaged youth who are the family heads themselves. Disadvantaged not employed youth (DNEY) and their family heads (DNEYF) are thus sometimes overlapping groups, but the DNEYF universe makes the most sense since poverty is defined for a family unit.

I model four different ways the funds could be targeted within this universe. This range of possible outcomes is presented in order to understand how this policy may change inequalities within the economy. Before getting to the models, some data on present inequalities within this target universe are shown. Out of 131 million heads of families in America, 4.2 million are DNEYF. Of these, 1.8 million DNEY live as the only person in their family, 400,000 are DNEY with other family members, and the remaining 2 million do not head their own families. White and Asian, Native American, Alaskan Native, or Pacific Islander (ANAP) youth have their own family unit in higher proportions than other races. Table 1 shows for each race the percentage of DNEYF where the DNEY is the only family member or whether they are apart of another family.

Table 1: Percentage of DNEYF by race that are one person or multiperson families

Race	DNEY single	DNEY family
White, non-Hispanic	55.3%	44.7%
Black, non-Hispanic	25.9%	74.1%
Hispanic	24.7%	75.3%
ANAP	63.6%	36.4%

Source: ACS, author's calculations

Thus, white and ANAP DNEY start their own families at higher rates. This will be important later on for understanding the incomes of these groups by race. DNEYF also have a smaller proportion of white people than the overall population. By race of the DNEYF, 46% are non-Hispanic White, 21% are non-Hispanic black, 24% are Hispanic, and 9% are ANAP. This is shown in Table 2 compared to the general population.

Table 2: Percentage of DNEYF and Overall Family Heads by Race

	White, non-Hispanic	black, non-Hispanic	Hispanic	ANAP
DNEY	46%	21%	24%	9%
Overall	68%	12%	13%	7%

Source: ACS, author's calculations

White family heads thus are underrepresented in the DNEYF cohort. While in the general population they make up 68% of family heads, they make up only 46% of DNEYF. This suggests from the beginning that EYAN will be a diverse program, within the target universe no race has a majority of people. DNEYF are also disproportionately led by females. While in the general population families are led by males or females nearly equally, for DNEY family heads 64% are female. Only 11% of those females are married with the spouse living at home. Table 3 shows the distribution of DNEYF and overall family heads by sex and whether their spouse is present.

Table 3: DNEYF and Overall Family Heads by Sex and Spouse Present

	Female, single or no spouse present	Female, spouse present	Male, single or no spouse present	Male, spouse present
DNEY	57%	7%	27%	9%
Overall	33%	16%	25%	25%

Source: ACS, author's calculations

DNEYF disproportionately live in families with only one parent or are single themselves, and two-thirds are female. Usually there are other family members at home, 57% of DNEYF have a family size greater than 1. This opens up lots of opportunities for types of jobs to be administered under EYAN depending on the family composition. Young sons and daughters can be paid to watch siblings under EYAN, freeing up time for parents to make incomes. Young mothers could also simply be paid to raise their youth. Average family sizes by race are presented in Table 4.

Table 4: Average family size of DNEYF and Overall Family Heads by Race

	White, non-Hispanic	black, non-Hispanic	Hispanic	ANAP
DNEYF	2.15	3.07	3.54	2.13
Overall	2.08	2.15	2.66	2.47

Source: ACS, author's calculations

We can see how Hispanic and black families, particularly DNEYF, have larger average family sizes. In the overall population, ANAP have bigger families than they do in the DNEYF cohort. Because the poverty line is based on how many people are in the family, this plays into how DNEYF have higher family incomes for the DNEYF cohort. We must also combine this data with Table 1 to understand that white and ANAP DNEY are often the only ones with incomes in their families, whereas for black and Hispanic families their DNEY more often are counted as being a part of a larger family unit. Table 5 shows the average income of DNEYF and overall family heads by race.

Table 5: Average Family Income of DNEYF and Overall Family Heads by Race

	White	black	Hispanic	ANAP
Actual	\$6,350	\$8,819	\$11,166	\$5,297
Overall	\$72,129	\$44,051	\$47,291	\$78,992

Hispanic and black families have lower family incomes in the overall population, but higher incomes in the DNEYF cohort. White and ANAP DNEYF make over \$5000 less on average than Hispanic DNEYF, and over \$2000 less than black families. As we know education gives access to more employment at higher incomes. Education has a large intergenerational component, and we can see in Table 6 the education rates of DNEYF and family heads overall.

Table 6: DNEYF and Overall Family Heads by Highest Educational Attainment

	Less than HS	High School	1-2 yrs college	4+ yrs college
DNEYF	23%	36%	32%	9%
Overall	10%	33%	25%	31%

Source: ACS, author's calculations

Nearly 60% of DNEYF have a high school education or less, compared to 43% in the overall population. DNEYF are thus less educated; only 9% have completed a bachelor's degree compared to 31% overall. Many could look at this as say that educational attainment should then be the goal for DNEY or their parents. Yet many DNEY families need incomes immediately and having to wait eight years from the time they start high school to see economic benefits from a bachelor's degree is not always an appealing path. Low-skill workers have been facing consistent job shortages, making it hard for less educated young people to find even part-time jobs. EYAN expands opportunities for DNEY, allowing them to earn an income and help out at home immediately. This doesn't mean abandoning higher educational attainment, but going for it when the time is right for the individual in their family.

These demographic variables and others go into building a model of youth employability. Stata's probit command is used to generate a probability of being employed for all youth based on their educational attainment, race, sex, marital status, family income, rural status¹³, state they are in, and whether they are attending school or not. The predict command then generates a likelihood of being employed for all youth based on this model. Results of the model are presented in the next section. Before the results can be used to hire youth however, I

¹³ 22% of family heads overall live in rural areas, the same percentage as DNEY family heads.

use the bill’s funding allocation formula to determine how much money makes its way to each state and PUMA. The bill states that money gets distributed to the states based on four components each responsible for distributing one fourth of the \$4 billion initial allocation. The first component gives to the states equally, while the remaining three give based on the relative number of youth, unemployed, and disadvantaged youth, within the state compared to the nation overall. I also develop an alternative distribution measure which removes the equal distribution component, and makes these latter three give a third of the funds each. The probit model and these two distribution rules make the basis for the range of possibilities I present for who is hired under EYAN. For each distribution rule, I model hiring the highest and lowest predicted likelihoods generated. This makes a total of four plans, labeled A through D as shown in Table 7.

Table 7: Different job distribution rules

	Including Equal State Distribution Component	Not Including Equal State Distribution Component
Highest Likelihood	Plan A	Plan B
Lowest Likelihood	Plan C	Plan D

Plans A and C end up creating 504,945 direct jobs and plans B & D create 501,879. All plans can thus employ 10% of the just over five million not employed disadvantaged youth. These job numbers are derived by dividing the funds distributed to the state by that state’s minimum wage and assuming one thousand hours worked annually. Plans B and D have slightly lower job numbers since they target more funds to states with higher minimum wages. Table 8 shows the data that goes into the funding distribution rule, along with the amount of money each state will be allocated under the different plans.

Table 8: State Distribution Statistics & Resultant Funding

State	# of youth	# disadvantaged youth	% disadvantaged youth	% unemployed	State funds A & C (million dollars)	State funds B & D (million dollars)
Alabama	563,534	147,998	26.26%	3.96%	70.22	66.95

Alaska	94,478	17,370	18.39%	3.68%	27.03	9.37
Arizona	798,842	205,779	25.76%	3.7%	88.73	91.61
Arkansas	340,965	88,953	26.09%	3.11%	48.22	37.61
California	4,748,303	1,059,475	22.31%	4.23%	422.69	536.78
Colorado	598,556	121,353	20.27%	2.91%	64.81	59.73
Connecticut	383,120	53,482	13.96%	4.37%	50.51	40.67
Delaware	102,466	17,566	17.14%	3.60%	27.86	10.48
District of Columbia	65,761	19,486	29.63%	5.22%	27.05	9.4
Florida	2,120,282	473,960	22.35%	3.87%	202.97	243.90
Georgia	1,185,056	295,948	24.97%	4.03%	123.89	138.49
Hawaii	151,197	22,197	14.68%	2.53%	29.95	13.27
Idaho	191,465	50,204	26.22%	2.61%	35.13	20.16
Illinois	1,486,030	320,009	21.53%	4.35%	148.47	171.25
Indiana	762,088	182,190	23.91%	3.57%	83.55	84.71
Iowa	349,538	80,903	23.15%	2.43%	45.99	34.66
Kansas	343,708	78,541	22.85%	2.75%	45.96	34.60
Kentucky	483,429	124,579	25.77%	3.54%	61.99	55.97
Louisiana	550,088	142,624	25.93%	3.56%	66.86	62.47
Maine	128,323	29,005	22.60%	2.98%	30.50	13.99
Maryland	644,077	99,000	15.37%	3.87%	69.80	66.38
Massachusetts	723,121	123,053	17.02%	3.76%	76.58	75.42
Michigan	1,176,864	298,199	25.34%	4.08%	123.87	138.46
Minnesota	585,391	122,127	20.86%	2.59%	63.26	57.66
Mississippi	349,741	109,682	31.36%	4.55%	54.72	46.28
Missouri	680,431	157,355	23.13%	3.41%	75.78	74.36
Montana	113,926	31,510	27.66%	2.75%	29.41	12.55
Nebraska	210,528	42,731	20.30%	1.95%	34.18	18.91
Nevada	325,733	59,663	18.32%	4.58%	47.61	36.80
New Hampshire	142,453	21,577	15.15%	2.98%	29.96	13.27
New Jersey	969,022	133,605	13.79%	4.02%	94.13	98.82
New Mexico	256,849	65,826	25.63%	3.98%	42.33	29.76
New York	2,199,758	451,170	20.51%	3.64%	197.46	236.55

North Carolina	1,109,871	283,911	25.58%	4.04%	119.98	133.27
North Dakota	96,211	18,991	19.74%	1.51%	25.93	7.90
Ohio	1,374,592	293,823	23.05%	3.63%	127.29	143.23
Oklahoma	456,321	112,609	24.68%	2.65%	55.20	46.922
Oregon	427,545	111,103	25.99%	3.78%	58.36	51.13
Pennsylvania	1,322,433	283,784	21.30%	3.61%	130.84	147.74
Rhode Island	118,233	26,311	22.25%	4.08%	10.13	13.51
South Carolina	542,801	136,280	25.11%	4.07%	68.53	64.69
South Dakota	92,489	23,942	25.89%	1.80%	26.79	9.05
Tennessee	736,165	196,367	26.67%	3.80%	85.80	87.7
Texas	3,305,353	750,099	22.69%	3.03%	273.46	337.86
Utah	402,130	79,385	19.74%	2.33%	46.77	35.69
Vermont	62,867	9,402	14.96%	3.27%	24.62	6.16
Virginia	906,669	175,723	19.38%	3.13%	88.84	91.77
Washington	798,469	166,021	10.79%	3.41%	83.21	84.26
West Virginia	196,194	53,094	27.06%	2.95%	36.60	22.13
Wisconsin	647,459	153,366	23.69%	2.88%	70.90	67.85
Wyoming	66,847	16,774	25.09%	2.69%	25.25	6.99

Source: ACS, author's calculations

Removing the equal distribution component enables large states like Texas, California, and Florida to receive high levels of funding that more adequately match their higher levels of poverty and unemployment. A smaller state like Vermont goes from 25 million to 6 million in funding to make up for it. Vermont however only has 9,000 disadvantaged youth compared to California's one million. Some of the states with the highest rates of disadvantaged youth are Mississippi, Alabama, and Arkansas. These states end up with less funding under plans B and D. It is thus a tradeoff between smaller states with higher rates of poverty and larger states with higher levels but lower rates. Again, the range is presented so that policy makers can get an idea of who is targeted depending on how the law gets implemented. Within the states, the funds get distributed to PUMAs based on the relative number of youth, unemployment, and disadvantaged youth. There is no equal component for the PUMA distribution. Under plans A and C an

average of 1.77 million makes it to each region with a max of 10.52 and a min of .44. Under plans B and D an average of 1.76 million makes it to each region, with a max of 7.58 and a min of .53. Plans A and C having a higher max reinforces the idea they are better able to address the depth of poverty at a regional level as opposed to breadth addressed better in B and D.

Finally, money is distributed to the local administrators. Boards are formed in each PUMA which are composed of educators, businesspeople, and community leaders. These boards are ultimately responsible for determining what type of jobs to create. The bill tasks them to identify employment opportunities in emerging or in-demand occupations in the local area, and in the public or nonprofit sector to meet community needs. To simulate a range of possible hiring practices, I model two different scenarios. First I order DNEY by their likelihoods, then within each PUMA DNEY are selected for jobs from maximum to minimum likelihoods in plans A and B, and from minimum to maximum likelihoods in plans C and D. The results of the employment model and boosting each of these families incomes by the job wage is presented.

RESULTS OF EYAN SIMULATION

The full results of the probit model can be found in table A.1 in the appendix. Marginal effects are calculated and presented in table A.2. Sex was found to not have an effect on employment results for young people. As we might expect from the earlier education discussion, educational attainment has some of the largest marginal effects for employment outcomes. Relative to having less than a high school education, having a diploma increases the z-score of the probability of being employed by .251 all else held equal. The increase is .404 and .464 for 1-2 yrs of college and 4+ years of college respectfully. By race, relative to being white and non-Hispanic, black non-Hispanic people experience a decrease of .091. Being Hispanic decreases the z-score .02, and being ANAP decreases it .12. Being in North Dakota, Minnesota, or Wyoming gives some of the largest marginal increases to youth employment probabilities, while living in California and New York have the largest negative effect on youth employment. These coefficients go into calculating the likelihood of a young person being employed.

The calculated youth employment likelihood (YEL) is the measure used to determine who receives jobs. I show the average YELs by race and educational attainment in Table 9 to give a picture of how the current employment system prioritizes certain workers.

Table 9: Average Youth Employment Likelihood by Race and Educational Attainment

	Overall	Less than High School	High School	1-2 yrs college	4+ yrs college
Overall	.509	.230	.589	.644	.773
White	.554	.258	.629	.677	.810
Black	.430	.164	.514	.589	.716
Hispanic	.485	.232	.586	.646	.767
ANAP	.401	.144	.427	.485	.609

Source: ACS, author's calculations

Overall whites and Hispanics have the highest YEL at .554 and .485 versus .430 and .401 for black and ANAP youth. No matter the education level white youth have higher YELs than other races. Black and ANAP youth without high school educations have the lowest YELs at .164 and .144, compared to the highest group: white youth with a bachelor's degree, who have a .81 YEL. Interestingly ANAP with college degrees have lower YELs than white high school graduates. Already this data suggests that plans A and B will hire more educated white youth, while plans C and D will hire less educated youth of color. Back to the education argument, these YELs reinforce that graduating high school increases the chances of employment the most. Still, that is only a chance and cannot apply to everyone. Everyone graduating high school means these likelihoods could drastically change. Next I present YELs by family income levels, marital status of the young person, and sex of the young person.

Table 20: Average Youth Employment Likelihood by income, marital status, and sex

	Overall	Female married, spouse	Male married, spouse	Female no spouse present	Male no spouse present

		present	present		
Overall	.509	.682	.671	.499	.502
0-5k	.267	.312	.256	.277	.256
5-10k	.537	.602	.569	.547	.522
10-25k	.563	.547	.636	.569	.549
25-50k	.525	.673	.670	.512	.510
50-100k	.525	.726	.717	.506	.515
100k-250k	.535	.716	.708	.527	.536
250k+	.426	.648	.643	.425	.422

Source: ACS, author's calculations

Nearly across the board, having a spouse living at home increases the likelihood a young person is employed. YELs in poor families are the lowest and then trends upwards, but likelihoods start decreasing in the highest income brackets. This makes sense as young people from richer families do not need to work and attend school at higher rates. Youth from the 10-25k income bracket are the most likely to be employed. The differences between male and female YELs are small, but poorer single females tend to be employed more than poorer single males, and single males have slightly higher YELs at higher incomes. No matter the sex, being a young married person increases the likelihood of employment. Married female youth have a .22 higher YEL than female youth without a partner present at home. This likelihood summary and previous data presented on DNEY form the basis for understanding who EYAN employs. Since two-thirds of DNEYF are led by females, and sex does not affect youth employment likelihood, we can expect more females to be employed under EYAN. Jobs are assigned under each plan based on the two strategies for assigning by increasing or decreasing likelihood. Results of EYAN are first presented by what percentage of the DNEYF target population receive jobs under each plan in table 11.

Table 11: Percent of DNEYF who receive jobs under each plan

Plan A	Plan B	Plan C	Plan D
11.85%	11.77%	11.85%	11.77%

Source: ACS, author's calculations

Under each plan nearly 12% of DNEYF have their youth receive jobs. Plans A and C hire a slightly higher percentage because under these plans more money makes it to states with lower minimum wages. EYAN only has \$4 billion in funding, if this were to scale up to \$40 billion then we could expect to create enough jobs for the entire DNEYF cohort. To understand how these plans distribute the jobs I breakdown these employment results by education, race, sex, and income level. The goal is to understand if any particular plan offers a better targeting for the EYAN jobs, and understand the range of possibilities.

Table 12: Percent of DNEYF who receive jobs by educational attainment of family head

	Less than HS	High School	1-2 yrs college	4+ yrs college
Plan A	8.77%	13.43%	11.09%	16.29%
Plan B	9.12%	13.19%	10.81%	16.53%
Plan C	21.77%	11.49%	6.01%	8.67%
Plan D	21.97%	11.39%	5.78%	8.59%

Source: ACS, author's calculations

By educational attainment we can see how the lower likelihood plans prioritize high school dropouts within the DNEYF community but the higher likelihood plans prioritize DNEYF with higher educational attainments, as we would expect from the YELs. Remember only 9% of DNEYF have 4+ yrs of college, so plans A and B giving jobs to 16% of them does not come to a large proportion of the total jobs created. Plans C and D hire 22% of DNEYF who do not have high school diplomas. High school dropouts have higher crime rates, and coming up with jobs for criminals may be more challenging than coming up with jobs for higher educated youth. This should not be a deterrent for EYAN however, as it was shown that employment

reduces criminal activity. Leaning towards the latter plans thus could have a higher impact on youth crime rates. It may take creativity on part of the local community to come up with jobs for high school dropouts, but as suggested before planting trees is something any able bodied person can do. Already this suggests that targeting towards C and D could have a larger impact. The next table shows how the employment picture looks by sex and race.

Table 13: Percent of DNEYF who receive jobs by demographic characteristic

	Male	Female	White	Black	Hispanic	ANAP
Plan A	11.56%	12.01%	15.02%	8.31%	11.09%	5.72%
Plan B	11.55%	11.90%	14.28%	8.59%	12.20%	5.12%
Plan C	10.82%	12.43%	9.45%	16.89%	9.80%	17.92%
Plan D	10.69%	12.38%	8.83%	17.34%	10.54%	17.31%

Source: ACS, author's calculations

If the jobs were distributed equally between race and sex we would expect them all to equal the average employment of almost 12% of DNEYF. In all the plans just about 12% of females are hired, with slightly higher proportions in plans C and D. In plans A and B white youth receive above this average 12% rate, suggesting they disproportionately receive jobs. In plan B, Hispanic families receive slightly more than the average amount of jobs at 12.2%. Hispanic families also do better in plan D relative to plan C. Plans B and D both have the equal state distribution component removed, which funnels more money to California, Texas, and Florida which have higher Hispanic populations and likely accounts for this difference. In plans C and D black and ANAP youth both receive above the average 12%. The highest likelihood plans hire more white and Hispanic youth, and the lower likelihood plans hire more black and ANAP youth. As we saw that there exists racial biases in the job market, this makes plans C and D more favorable for reducing this inequality. The measure Darity (2013) suggests as indicating the level of racial discrimination in the job market is the black white employment gap. For young people, this number is 12.33. Under plans C and D this number sits at 11.85, and under plans A and B it is 12.65. In order to reduce racial disparities, hiring workers less likely to be

employed has a bigger impact. Table 14 presents how DNEYF receive jobs based on their family incomes.

Table 14: Percent of DNEYF who receive jobs by family income

	0-5k	5-10k	10-25k	25-50k	50k+
Plan A	2.36%	19.61%	21.61%	18.31%	22.33%
Plan B	2.04%	18.67%	22.25%	19.11%	26.84%
Plan C	18.15%	7.36%	5.28%	6.13%	3.27%
Plan D	18.15%	7.16%	5.15%	6.14%	4.71%

Source: ACS, author's calculations

The EYAN employment picture by family income is drastically different depending on the plan. Very few youth with family incomes of 0-5k get employment in the highest likelihood scenario, while higher income families are employed at rates of nearly 20%. The income brackets above 25k are rather sparse in the DNEYF population, as these are larger families who are under the poverty line due to higher poverty lines. Thus the first three income brackets are most important for understanding the distribution. Table 14 shows the income brackets by percentage of the DNEYF population. For each row, the total number of families is the original DNEYF universe of 4.2 million families.

Table 15: Percentage of DNEYF population by income, original and under each plan

	0-5k	5-10k	10-25k	25-50k	50k+
Overall	48.16%	16.32%	30.78%	4.69%	.05%
Plan A	47.04%	13.99%	31.85%	7.03%	.09%
Plan B	47.20%	14.05%	31.56%	7.11%	.09%
Plan C	39.42%	21.99%	33.20%	5.33%	.07%
Plan D	39.42%	22.02%	33.18%	5.32%	.06%

Source: ACS, author's calculations

Combining tables 14 and 15 shows how plans C and D do a better job of getting income to the bottom of the income distribution. The DNEYF that are worse off get jobs when hiring by lowest likelihood. The number of families in the 0-5k bracket drops from 48% to 39% in plans C and D while only dropping 1 percentage point in plans A and B. This increases the percentage of families in the 5-10k bracket for plans C and D while in plans A and B this group actually decreases in proportion. Trying to understand which of these results is better is a challenging problem. In general, I consider getting incomes to the very bottom of the income distribution better than getting incomes to the middle of the disadvantaged community, however. Average yearly incomes of the DNEYF population increase by about \$900 under all plans. Considering the average family income is \$7900 to begin with, this is an increase of 11% to their average income. Table 16 shows how average family incomes in the DNEYF population change by race under each plan.

Table 16: Average Family Income of DNEYF By Job Plan and Demographic

	White	black	Hispanic	ANAP
Actual	\$6,350	\$8,819	\$11,166	\$5,297
Plan A	\$7,527	\$9,464	\$12,065	\$5,761
Plan B	\$7,471	\$9,484	\$12,159	\$5,716
Plan C	\$7,092	\$10,132	\$11,963	\$6,756
Plan D	\$7,045	\$10,166	\$12,025	\$6,717

Source: ACS, author's calculations

Going back to Table 1 helps us understand why ANAP and white DNEYF have the lowest average family incomes to begin with. Black and Hispanic families are generally larger. That disadvantaged white families with unemployed youth have lower incomes may go against expectations, but the family characteristics account for it. Plans C and D raise average black DNEYF incomes by \$1200 versus \$600 in plans A and B. ANAP families do better under plans C and D as well. In plans A and B white DNEYF receive an increase in average income by

\$1100 versus by \$700 in plans C and D. Hispanic families increase by about \$900 under every plan. This result may seem to go against the previous results which suggest that targeting C and D may be better. Here, white families have lower average incomes and plans A and B improve their situation more. If we can assume that white DNEYF start their own families more often because they are better off, however, then plans C and D are still preferred.

The next measures used to analyze the effectiveness of EYAN are poverty gaps and poverty rates. Poverty rates remain relatively unchanged under all EYAN plans as the minimum wage income is not enough to bring the families receiving it above the poverty line. This is especially true for plans C and D as they target families with lower incomes to begin with. Table 17 shows the percentage of DNEYF who are still in poverty after EYAN is implemented under each plan.

Table 17: Percentage of DNEYF still in poverty under each plan

Plan A	Plan B	Plan C	Plan D
92.8%	92.7%	98.5%	98.5%

Source: ACS, author's calculations

These results do not suggest that plans A and B are better however, due to definitions of the poverty line. We can understand the extremes of poverty by looking at the poverty gap. Related to the higher family incomes of black and Hispanic DNEYF, the depth of poverty for white DNEYF is higher than for black and Hispanic families. ANAP, with the lowest family incomes in this group, also have higher poverty gaps. The poverty gaps by race under each implementation of EYAN are shown in table 18.

Table 18: Poverty Gap of DNEYF by Job Plan and Demographic

	White	black	Hispanic	ANAP
Actual	.671	.598	.552	.762
Plan A	.623	.575	.524	.745
Plan B	.627	.575	.522	.746

Plan C	.625	.527	.506	.663
Plan D	.628	.525	.503	.665

Source: ACS, author's calculations

While overall white and ANAP families look worse off here, we have to account for the family characteristics. Instead of looking at the levels then it is better to look at the differentials. Plans A and B reduce black families from being 60% below the poverty line to 57.5%, and white families get reduced from 67.1% to 62.5%. Plans C and D affect white families at about the same rate, but black families have their depth of poverty reduced 5 points more to 52.5%. ANAP families are better off under plans C and D, reducing the poverty gap to 66.3% from 76.2% versus only reducing to 74.5% in plans A and B. Overall this suggests a picture where white DNEYF improve about the same under all plans, but nonwhite DNEYF have the depths of poverty reduced more under plans C and D. We can also look at poverty gaps by educational attainment. The poverty gap for those who did not complete high school is reduced the most under plans C and D, while plans A and B reduce the poverty gap for youth with college degrees. This is shown in Table 19.

Table 19: Poverty Gap of DNEYF by Job Plan and Educational Attainment

	Less than HS	High School	1-2 yrs college	4+ yrs college
Actual	.585	.596	.701	.682
Plan A	.565	.558	.666	.624
Plan B	.564	.560	.667	.624
Plan C	.471	.544	.677	.649
Plan D	.469	.545	.678	.650

Source: ACS, author's calculations

Overall, the expectations based on YELs hold up once jobs are assigned. Higher educated white and ANAP youth are hired more often in plans A and B, while plans C and D

hire less educated black and Hispanic youth. The family incomes of ANAP and white families are at the lowest levels by race, but this is because ANAP and white youth have their own family more often than black or Hispanic youth. The plans that hire youth more similar to those with lower YELs will have a better chance at correcting the racial disparities present in the job market. Wilson (2012) argues that race specific policies should not be implemented, but can help in an overall strategy in moving towards balanced growth and full employment. Race specific policies were found to benefit those better off within the race rather than the most impoverished. These results suggest that EYAN should find a balance between the plans, but skew towards something closer to plan C. All the plans presented are extremes, and EYAN should not target to meet one of these plans exactly. Race and poverty intersect, so perhaps the best plan would be to target families with the lowest income levels. In plans C and D 9% of DNEYF move out of the 0-5k income bracket. These families more often than not will also be headed by black and Hispanic high school dropouts.

If traditional hiring practices are continued under EYAN, then the families who have been stigmatized from employment will not benefit. Since EYAN is publicly funded it does not need to focus on profitability, and education levels can partially be ignored. The jobs are supposed to serve the community through nonprofits, or be in emerging or in demand occupations. These two goals seem to reflect public and private interests. The balance between these two interests seems to reflect the balance in the lowest or highest likelihood plans. Private employment determines much of the model and employment practices embodied in it. Public employment can focus on paying EYAN workers to learn skills that serve their communities. Many DNEY probably already participate in local soup kitchens and homeless shelters, so they can be paid to be on the other side of the serving spoon under EYAN. Nonprofits and community service organizations are continually at a shortage for funds, and help serve well defined needs. EYAN can direct public funding to help these groups employ labor that serve their community missions, and there is no reason why the labor they hire necessarily should be the highest educated DNEY. Those from low family incomes have lower education levels, and our evidence suggests giving them incomes can encourage a stopping out of school rather than dropping out for life. EYAN can thus use its public function to help the myriad of workers who are displaced from the formal private labor market.

The previous results showed how DNEYF could be affected by EYAN. This is a small group of the larger American population. Some poverty data by race is presented in Table 20 on the larger picture results of statically modeling EYAN.

Table 20: Overall Poverty Rate by Race of Family Head

	White	Black	Hispanic	ANAP
Actual	13.3%	27.4%	25.1%	19.2%
Plan A	13.3%	27.4%	25.1%	19.2%
Plan B	13.3%	27.4%	25.1%	19.2%
Plan C	13.3%	27.4%	25.1%	19.2%
Plan D	13.3%	27.4%	25.1%	19.2%

Source: ACS, author's calculations

We can see how EYAN does not really change poverty rates. The jobs created under the program assume minimum wage, so even getting one of these jobs often is not enough to lift a family out of poverty. This serves as a reminder though that the white population faces lower rates of poverty than other races in America. Poverty gaps similarly change very little in the overall American picture from EYAN. The appendix shows additional tables (A.3-A.7) with poverty rates and gaps regionally and by educational attainment, all with very little change.

EYAN offers a small solution to a subset of families in America. The overall gini for family income moves from .652 to .651. This is not a significant reduction in overall poverty rates or inequality. Still, within the DNEYF community EYAN has a larger impact, creating jobs for youth in 11% of DNEYF. EYAN has the largest impact on the bottom of the income distribution when it gives job based on minimum YELs. Removing the equal distribution component from the bill targets more money to states with higher levels of poverty, but then less money makes it to PUMAs where there are higher depths of poverty. It seems keeping the equal distribution component in is then preferred. This makes skewing towards plan C preferable. To target minimum YELs EYAN should not specifically target black and Hispanic youth, but should try to target based on income levels. It happens that today one extremely impoverished

group in America are young black people, and EYAN, by prioritizing lower income families, is also prioritizing this group at first. The local boards should find a balance between hiring employable workers and hiring impoverished youth to help their situation. EYAN can teach skills on the job, and as we saw we remove the highest depths of poverty by hiring high school dropouts, which directly causes having a low income. The job allows the young person to help out their family immediately. Once their situation improves, they can go back to school to earn a higher income.

CONCLUSION

The War on Poverty focused on education and training, but did not target the root cause of poverty: unemployment. In the decades since the war started we have seen increasing inequality and job opportunities diminishing, especially for particular groups. Education is shown to be a way to increase one's chances of employment and access higher incomes, but without tight labor markets it can not work for everyone. Loose labor markets have left some groups behind. It was shown that employment prospects for black males have gotten worse in at least the five most recent recessions, and did not recover to previous peaks in the subsequent booms. Since the last recession almost all new jobs created went to people with college educations. With this fact established young people wishing to contribute at home have to get higher education levels in order to do so. This has led to education inflation where young people have increasingly gone to college where they learn things not necessarily relevant to the job. I think this is a good thing: having a more educated population seems like a net public benefit. As it is however, a college education is more expensive for families living in poverty. Educational attainment does not payoff equally across race and income class. To solve inequality and poverty we cannot focus on education alone. A new focus should be on employment opportunities.

Poverty is multifaceted and often goes beyond just lacking income. Unemployment is associated with higher rates of criminal activity, mental health issues, and societal stigmas. The focus on employment tries to alleviate more than just the issue of lacking money. It offers a chance to be connected to the community and contribute meaningfully. Employ Young Americans Now is a small piece of legislation which takes this approach. The stated goal of the

legislation is to employ disadvantaged young Americans. I simulated how these funds would get distributed down to the PUMA level, and created an employability model to determine who specifically gets employed. It was found that EYAN would create over 500,000 jobs for young Americans, hiring over 11% of youth that are disadvantaged and not employed.

Depending on how EYAN is implemented it has the potential to reduce discrimination that exists in the job market. Tcherneva (2013) warned that government policy has the potential to exacerbate or reduce inequalities present in the private job market. I calculated youth employment likelihoods for various groups of the population. It was found that on average white youth without high school diplomas had an employment likelihood of .258 versus .164 for black youth without high school diplomas. With college degrees, white youth had an employment likelihood of .81 compared to .72 for black youth with college degrees. No matter the education level, white youth were found to be more likely to be employed. Darity and others suggest that this is due to racial discrimination. I presented plans that hire disadvantaged youth based on ascending and descending calculated likelihoods.

In a case preferring minimum likelihoods, plan D, EYAN can create jobs for 17% of black youth in DNEYF. This is compared to plan A's maximum likelihood preference where EYAN would hire 8% of black youth in DNEYF. The extremes shown in plans C and D also show how EYAN could reduce the black white youth employment gap by .5 points. This is compared to plans A and B which increase the black white youth employment gap .3 points. In order to reverse discrimination skewing towards plans C and D is preferred. Out of C and D, plan C keeps one billion distributed equally to the states where plan D distributes that one billion based on poverty rates and unemployment to the states. It was found that keeping the equal distribution component allows more money to make it to PUMAs with higher depths of poverty. This, combined with the fact that having the equally distributed component is how the law is actually written, suggest keeping that distribution component is preferred.

Local board members do not have a perfect measure for how they would create jobs skewed to look more like plan C's distribution. Wilson (2012) argues policies targeting specific races are not preferred since those more well off from that race generally benefit rather than those from that race who are not doing well. This skewing would be best done by targeting the lowest income youth, but local boards may not have a reliable indicator for the youth's family

income. It was found that targeting by minimum likelihood gave jobs to 22% of non high school graduates, compared to 9% under plan A. High school graduation status thus makes a good proxy to use for local boards as we have seen graduating increases employment likelihoods. Minsky argued that programs must be designed which offer useful lives to our high school dropouts, and EYAN could be such a program. Youth were one of the groups impacted hardest in the last recession and offering them jobs and incomes is the surest way to reduce poverty and inequality within this group. It is time to go beyond education. If EYAN is successful it can be expanded with ten times more money and potentially hire all disadvantaged youth.

Tight full employment should be a part of the new strategy for fighting poverty and inequality. As we rewrite the rules of the American economy, we should ensure that they work for everyone. The tightest labor markets have shown the best improvements in black male employment prospects. EYAN moves us towards tighter labor markets in the group that will determine our future. With businesses competing to hire labor rather than labor competing for jobs the skills and educations of the entire community can rise together rather than leaving some behind. Our unequal past will not be corrected if labor markets and educational opportunities stay on the same course. EYAN offers the opportunity to change course. Future research could look beyond the initial static effects I looked at and into different potential multipliers depending on what jobs they are employed in. Estimating the improvements in mental health and crime rates through public employment would be another good topic to look into. With a renewed focus on employment, America can be a country where anyone who is willing and able can find a job. This will be a necessary step to fight poverty and inequality.

APPENDIX

How to get the ACS Data and STATA code for the entire model and tables presented can be found at www.github.com/braddv/employamericansnow

Table A.1: Result of Probit Model

variable	coefficient	Standard error (** = $p < .01$)
high school ¹⁴	.723	(1,178.60)**
1-2 yrs college	1.161	(1,878.95)**
4+ yrs college	1.356	(1,403.82)**
no spouse present ¹⁵	.059	(57.13)**
black ¹⁶	-.280	(411.56)**
Hispanic	-.063	(100.98)**
ANAP	-.364	(368.23)**
5-10k ¹⁷	.721	(572.06)**
10-25k	.900	(902.25)**
25-50k	.871	(905.14)**
50-100k	.927	(994.42)**
100-250k	.969	(1,007.78)**
250k+	.743	(1,007.78)**
Female	0.00	(0.59)
Rural	-.059	(96.39)**
In school	-.599	(1,155.48)**

¹⁴ education variables are relative to less than a high school educational attainment

¹⁵ relative to married with the spouse present

¹⁶ race variables are relative to white non-Hispanic

¹⁷ Relative to 0-5k family income

Alaska ¹⁸	.203	(42.45)**
Arizona	.072	(30.20)**
Arkansas	.096	(32.71)**
California	-.130	(67.12)**
Colorado	.279	(110.28)**
Connecticut	.095	(33.35)**
Delaware	.178	(38.57)**
District of Columbia	-.072	(12.61)**
Florida	-.018	(8.85)**
Georgia	-.016	(7.08)**
Hawaii	.198	(49.93)**
Idaho	.211	(59.35)**
Illinois	.050	(23.29)**
Indiana	.217	(91.07)**
Iowa	.424	(143.69)**
Kansas	.283	(96.42)**
Kentucky	.175	(65.93)**
Louisiana	.072	(28.04)**
Maine	.339	(79.80)**
Maryland	.080	(32.38)**
Massachusetts	.191	(78.73)**
Michigan	.151	(69.11)**
Minnesota	.442	(172.89)**

¹⁸ State variables are relative to Alabama

Mississippi	-.019	(6.66)**
Missouri	.236	(96.56)**
Montana	.398	(89.81)**
Nebraska	.448	(127.33)**
Nevada	.097	(32.32)**
New Hampshire	.328	(81.05)**
New Jersey	-.030	(12.97)**
New Mexico	.141	(43.54)**
New York	-.104	(50.92)**
North Carolina	.080	(36.29)**
North Dakota	.545	(110.66)**
Ohio	.238	(109.99)**
Oklahoma	.196	(72.89)**
Oregon	.116	(42.21)**
Pennsylvania	.1	(46.60)**
Rhode Island	.015	(3.57)**
South Carolina	.116	(44.93)**
South Dakota	.546	(109.39)**
Tennessee	.066	(27.76)**
Texas	.085	(43.31)**
Utah	.342	(121.83)**
Vermont	.263	(45.23)**
Virginia	.162	(70.68)**
Washington	.087	(37.02)**

West Virginia	-.056	(15.74)**
Wisconsin	.396	(159.49)**
Wyoming	.454	(80.77)**
constant	-1.185	(509.38)**
<i>N</i>	36,584,754	

Source: ACS, author's calculations

Table A.2: marginal effects

Variable	Label	Marginal Effect
Educational attainment	High School	.2507578
	1-2 yrs college	.4034645
	4+ yrs college	.464029
Race	black, non-Hispanic	-.0910887
	Hispanic	-.0205944
	ANAP	-.1180756
Family Income Class	5-10k	.2215422
	10-25k	.280443
	25-50k	.2709471
	50-100k	.2890952
	100k-250k	.3029545
	250k+	.228903
Marital Status	No spouse present	.0191326
Metropolis Status	Rural	-.0191985
State	Alaska	.065974

	Arizona	.0233069
	Arkansas	.031249
	California	-.0422827
	Colorado	.0901835
	Connecticut	.0309381
	Delaware	.057775
	District of Columbia	-.0235375
	Florida	-.0058716
	Georgia	-.0050448
	Hawaii	.0641286
	Idaho	.0685949
	Illinois	.0161129
	Indiana	.0703689
	Iowa	.1358022
	Kansas	.0913519
	Kentucky	.0568496
	Louisiana	.0233969
	Maine	.1091762
	Maryland	.026037
	Massachusetts	.0619318
	Michigan	.0492083
	Minnesota	.1414504
	Mississippi	-.0063335
	Missouri	.076328
	Montana	.1276216

	Nebraska	.1432777
	Nevada	.03141
	New Hampshire	.1059119
	New Jersey	-.0096342
	New Mexico	.0458604
	New York	-.0336259
	North Carolina	.0261044
	North Dakota	.172558
	Ohio	.0772487
	Oklahoma	.0635868
	Oregon	.0376434
	Pennsylvania	.0326854
	Rhode Island	.0050219
	South Carolina	.0376377
	South Dakota	.1728263
	Tennessee	.0215917
	Texas	.0277386
	Utah	.110085
	Vermont	.0850865
	Virginia	.0527786
	Washington	.02845
	West Virginia	-.0182685
	Wisconsin	.1269787
	Wyoming	.1451494

Source: ACS, author's calculations

Table A.3: Poverty Gap by Race of Family Head

	White	black	Hispanic	ANAP
Actual	.072	.145	.129	.117
Plan A	.071	.144	.127	.116
Plan B	.071	.144	.127	.116
Plan C	.071	.141	.126	.112
Plan D	.071	.141	.126	.112

Source: ACS, author's calculations

Table A.4: Poverty Rate by Region

	Northeast	Midwest	South	West
Actual	15%	16%	18%	17%
Plan A	15%	16%	18%	17%
Plan B	15%	16%	18%	17%
Plan C	15%	16%	18%	17%
Plan D	15%	16%	18%	17%

Source: ACS, author's calculations

Table A.5: Poverty Gap by Region

	Northeast	Midwest	South	West
Actual	.079	.087	.097	.094
Plan A	.078	.086	.095	.093
Plan B	.078	.086	.095	.093
Plan C	.078	.085	.095	.092
Plan D	.078	.085	.095	.092

Source: ACS, author's calculations

Table A.6: Poverty Rate by Educational Attainment

	Less than HS	High School	1-2 yrs college	4+ yrs college
Actual	23.5%	15.1%	12.7%	5.1%
Plan A	23.5%	14.9%	12.5%	5.0%
Plan B	23.5%	14.9%	12.5%	5.0%
Plan C	23.5%	15.0%	12.6%	5.1%
Plan D	23.5%	15.0%	12.6%	5.1%

Source: ACS, author's calculations

Table A.7: Poverty Gap by Educational Attainment

	Less than HS	High School	1-2 yrs college	4+ yrs college
Actual	.184	.106	.098	.038
Plan A	.182	.105	.096	.038
Plan B	.182	.105	.096	.038
Plan C	.176	.104	.097	.038
Plan D	.176	.104	.097	.038

Source: ACS, author's calculations

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