

## **Abstract**

This paper will explore the role of the economist within a society dominated by market and oligopolistic sectors and capitalist and working classes. It discusses the goals of the economic system, emphasising full employment. It explores the political aspects of full employment and the political barriers to implementation. A microeconomic analysis using ACS data of a concrete policy proposal is examined for its potential role in direct employment creation. It then argues that such a policy, creating over 382,857 jobs, could be a stepping stone for implementing a direct public job guarantee. Such a job guarantee would eliminate the poverty and resulting societal problems associated with unemployment. As such, it could be a key policy which drives the system towards a moral economy.

## **Acknowledgments**

*thanks to my family*

## Introduction

John Maynard Keynes once said that “the master-economist must possess a rare combination of gifts .... [They] must be mathematician, historian, statesman, philosopher—in some degree.” This combination of fields is the motivation for this paper. As a philosopher, one asks questions like “what is good?” and “how do we get there?”. The statesman understands the political system of the society being studied, bringing actionable activities to answer the questions asked as the philosopher. Society does not exist in a vacuum, the historical context is necessary to know how we got here, and what has been tried before. Finally, as mathematicians, models transmit stylized facts about the economy. As long as the models help demonstrate where we have been, in order to help understand where we possibly could be going, they serve as practical tools to disseminate information. These talents, diverse and varied, have to be vigilantly combined. Reflexivity makes studying society within society inherently difficult, science requires an impartial observer, and no one in society is impartial. Luckily, we are standing on the shoulders of giants. Some of the hard questions have been asked and answered. Their writing preserved their knowledge, couched within their historical context. We are tasked with picking up where the greats left off. The battle for a good society, happiness for all, is not an easy one. Since inception, it hasn’t been solved. It may never be solved. Yet it is still worth fighting for, as so many have fought for it before with lasting results.

It is a miracle that economists of today have largely agreed that full employment and stable prices are their goal. This agreement should be recognition that these goals would ensure people have access to basic life necessities. Karl Popper argued that truth can never be absolutely certain. All it takes is one negative instance to make a theory false, yet no number of positive instances confirms the theory absolutely, just increases its likelihood. Considering the last century has never had full employment and stable prices, it is impossible to prove or disprove that this is the wrong goal. Without another espoused goal, this will be taken as a practical best. The first philosophical question is answered, for now. As a statesman, one must understand which levers can be pulled in order to strive towards the dual goals of full employment and stable prices. Broadly speaking, these levers exist as monetary and fiscal policy. Monetary policy

can control the entire interest rate structure through buying and selling government bonds. Fiscal policy controls how government spending gets distributed into the economy, and how taxation removes money from the system influencing the incentive structure of the economy.

Understanding history lets us analyze the effects these two levers have had throughout their recent past. A look at the New Deal reforms implemented after the Great Depression is one instance of the potency of fiscal policy. The reforms and job programs put in place led America to what many called “the golden age” of capitalism. Jan Kregel argues that “initially the federal employment programs were not based on any idea of Keynesian macroeconomic stabilization, but rather on moral and ethical grounds that employment was preferable to the dole and would have a better psychological impact on the elimination of fear.” Rather than being argued for based on a mathematical model, employing people was argued for as necessary for the wellbeing of the country. There are many recent studies which expound on the human costs of poverty and unemployment. Raj Chetty et al show that there is a 15 year difference in life expectancy for low and high income persons. Harvey Brenner links unemployment as a major determinant of many mental health issues. In the New Deal fiscal conservatism and employment were at odds, but it was the realization that the benefits of employment outweighed the costs of a higher government deficit that led to the high levels of employment seen after the New Deal era reforms.

Mathematical models can be used to support or harm this argument. There exist studies that have models which argue that the New Deal spending was ineffective and it was only the war that helped America out of the Great Depression (Folsom). Yet other models support the effectiveness of the Works Project Administration, with other factors hindering a full on recovery (Bernstein). In an American society that idolizes technology and scientific “truth” models are probably overemphasized. In economics especially it seems most models encapsulate stylized facts that explain a fictitious economy rather than the one we live in. The global economy is vast and interconnected, and breaking it down to its essence requires retaining a lot of said complexity. Models need to be taken with an understanding of the window of context the model gives us a view into. Derek Abbott in *The Reasonable Ineffectiveness of Mathematics* discusses three views on modeling by mathematicians, physicists, and engineers. Mathematicians mostly take a Platonic view - that mathematical concepts exist in some third world that humans

merely grasp at. He argues physicists take a non-platonic view of the world but in public they have a platonic world view. Engineers however “have argued that mathematics is a merely mental abstraction that serves useful purposes” (Abbott 2149). Economics, a profession described as having “physics envy”, I would conjecture is composed mostly of Platonic views. My own philosophy is strictly non-platonic and my approach to modeling follows. Abbott explains strong non-Platonism as a view “where all physical laws are tainted with anthropocentrism and all physical models have no real interpretative value”. John von Neumann stated all this more succinctly: “The sciences do not try to explain, they hardly even try to interpret, they mainly make models. By a model is meant a mathematical construct which, with the addition of certain verbal interpretations, describes observed phenomena. The justification of such a mathematical construct is solely and precisely that it is expected to work.” Combined with a Keynesian theory of investment, to spend time investing in learning models, one has to expect them to work.

A macroeconomic approach to modeling that seems to work has been found in the work of Godley and Lavoie. This approach, dubbed “stock flow consistent modeling” follows the approach of Nicholas Kaldor in modeling “stylized facts” which appear to capture the essence of the real economy. The stylized facts which I believe in are mostly couched in the post-Keynesian tradition of economics. This tradition starts with the idea of effective demand as espoused by John Maynard Keynes. This idea states that businesses invest in an amount of labor and capital such that they expect to turn a profit and grow their business in monetary terms. The next stylized fact that I believe is important is captured in the idea of the political business cycle discussed by Michal Kalecki, Joan Robinson, and John Kenneth Galbraith. The structure of the cycle is couched within the institutional structure of the global economy. This means having a theory about how the current world reserve currency, US dollars, enters and exits the economic system. Finally, as the goal of the model should be to help guide political leaders towards full employment and price stability, stylized facts of employment and employment policy follow the lead of Hyman Minsky.

A microeconomic approach would look to use data to explicitly model impacts of real proposed policies and tax structures. Based on the amount of information available in American

survey data (the ACS and CPS) we are able to construct first order information like employment rates by different categorical variables such as income, race, and gender. First order effects of different policies are relatively straightforward calculations. For example, with pre and post tax incomes available we can model how different tax rates would affect current incomes for different households. While second order effects such as inflation rate and indirect employment changes can be difficult to model in such a framework, such static analysis allows for understanding how the initial thrust of the policy would move the economy. We need to turn back to a macroeconomic model to understand how these different effects can cumulate into further order effects. Based on the goals of full employment and inflation, of which Alfred Eichner in *Full Employment and the Human Element* argues full employment is the more important attribute, we can analyze direct government spending programs on their employment impact. Alfred Eichner also proposes a microeconomic foundation for this macroeconomic context which focused on the degree of monopoly in business and the amount of labor power which helps determine the wage rate and micro inflationary tendencies.

Much of this approach is an application of so called post-Keynesian economics. Alfred Eichner and Jan Kregel called post-Keynesian economics a reconstitution of political economy, with a focus on growth and distribution rather than an economics that focuses on profits alone. This approach to economics fills a dire gap in the economics community. American academic institutions largely support a view of economics that does not touch on any of the ideas discussed above. Almost all institutions teach economics argued from a platonic world view with heavy emphasis on mathematics in an ahistorical apolitical context. Rather than engage with neoclassical ideas, in the spirit of Martin Bronfenbrenner's view on *The "structure of revolutions" in economic thought* it is not necessary to disprove old ideas to forge forward new ones in social science. In economics he notices that rather than paradigm shifts there is a tendency for old ideas to ebb and flow in. As it may be impossible to completely end an economics that is currently built into the institutional academic setting, rather than engage with outmoded ideas my philosophy is to push a positive analysis forward.

In the spirit of this approach, this paper will briefly explain some of the major stylized facts of the economy, then present a static microeconomic analysis of Senator Bernie Sander's

Employ Young Americans Now Act. Time constraints prevented touching base with a macroeconomic stock-flow consistent model which could estimate the amount of fiscal spending which would be necessary to reach full employment with minor inflation. Such a model would fit within the type of beneficial stylized models proposed above. A job guarantee funded by direct government spending would be the mechanism through which full employment is achieved in the model.

## **Effective Demand**

The principle of effective demand was introduced by John Maynard Keynes in the 1930's as unemployment rates reached upwards of 30% and he decided that the typical discourse in economics did not have the theoretical apparatus to understand why that occurred. He laid out a theory where employment is determined based on business people's expectations, influencing their willingness to invest. Labor will only be hired if business people expect it will help them sell more goods and services at a profitable rate. Keynes in the General Theory says "this analysis supplies us with an explanation of the paradox of poverty in the midst of plenty" (28). Businesspeople generally stop expecting it to be profitable to employ more labor long before full employment in the system is reached. Even if goods are overproduced, if consumers do not have enough income to purchase these goods then businesses are forced to sell at a loss, lower their expectations, and produce less in the next period. It follows directly that if businesses want to produce more goods, consumers need to have adequate incomes. Higher demand leads to higher supply of goods to be bought, as adequate incomes for the general public leads to higher expectations in the business community.

This principle of effective demand is what leads Keynes to call for a full employment policy of burying banknotes and leaving private enterprise to dig them back up. If enough banknotes are buried, businesses will expect it to be profitable to hire people to dig them up, employing people to do so. He goes on to say "it would, indeed, be more sensible to build houses and the like; but if there are political and practical difficulties in the way of this, the above would be better than nothing" (85). In the 21st century mechanization leads one to ask the question if

business would really hire people to dig or if they would employ robots instead. It then becomes a question not only of burying the banknotes, but also ensuring their distribution in some way. It is within the power of the state theoretically to provide jobs and incomes for everyone. Full employment is thus a political economy problem of not only deciding how many banknotes should be buried, but figuring out who gets access to the jobs that dig them all up. The government needs to ensure there are enough jobs and notes buried so everyone gets some basic level of access. If whenever someone cannot find a job in the private sector, that is, no banknotes are buried, the government steps in to bury some and hires those people to dig them up, unemployment could be ended.

## **Money Creation**

That the government actually can create enough banknotes to bury in the first place is based on an institutional understanding of how money is created in today's modern monetary economy. For the purpose of this paper, I will refer to money as bank deposits. Flows of new money creation happens through two different channels. The first is related to effective demand and the banking sector, and the other way is through the budget process and fiscal spending. American commercial banks are able to extend loans whenever they see profitable business ventures. When they extend a loan to someone, they create deposits as a liability in corresponding banks and acquire the loan as an asset on their own balance sheet. After loans are created, the banking system as a whole needs to meet reserve requirements. If they do not have enough reserves they can purchase them from the Fed in exchange for assets. The Fed seems to always accommodate the reserve demands of the banking sector. This portion of money creation is endogenous, as it solely depends on the banking sector's willingness to invest, and the institutional structure always accommodates the banking sector when they choose to invest.

The second channel through which money is created is through the budgetary process and fiscal spending. When the government deficit spends deposits are also created in banks. The government is not legally obligated to maximize profit like a private sector firm however, so this spending can happen even if profitable ventures are not envisioned by the government. The

United States government is run by people who need to be reelected, and some of the literature suggests certain policy positions get promoted to maximize the politicians chances of getting elected. One such consequence would be that if voters largely believe that government debt is the same as household debt, politicians would promote balanced budgets. Since the government authorizes spending first and the tax code largely determines receipts independently of spending, balanced budgets are a political constraint rather than an economic one. Kalecki in *Political Aspects of Full Employment* noted that “a solid majority of economists are now of the opinion that, even in a capitalist system, full employment may be secured by a government spending programme, provided there is in existence adequate plan to employ all existing labour power, and provided adequate supplies of necessary foreign raw-materials may be obtained in exchange for exports.” To achieve full employment then requires an understanding of why such an adequate plan does not exist, and how one potentially could be introduced into the system. Then government could be used to achieve our goals of full employment and stable prices.

### **The Political Business Cycle**

Today’s economic system seems to be a dynamic monetary economy with built in booms and busts. There exists a large array of real and financial assets in which wealth can be saved. Alongside that, there exists many ways to become formally indebted on a balance sheet and dissave as well. In the US most people hold their wealth as bank deposits which are immediately redeemable for cash at an ATM for a small fee. They receive their incomes mostly from private sector jobs. The money generated each period in the economic system ends up in the hands of two general classes, capitalists and workers. Since bank lending is a much larger component than government spending, the amount of profit in the system is largely determined by capitalist investment. To simplify slightly, Kaldor summarized Kalecki as saying that workers spend what they get and capitalists get what they spend. Thanks to changes in campaign finance laws starting in the 70’s, capitalists are able to overtly buy more political power (Levitt). The theory put forward by Ann Mari May in *The Political Business Cycle: An Institutional Critique and Reconstruction* is that politicians will largely design policy to benefit the capitalists by focusing



on inflation unless they are close to facing reelection, in which case they attempt to fight unemployment. James Kenneth Galbraith argued in *Economics and the Public Purpose* that it is better to think of the economy as two systems that operate together to make up the whole, the planning and the market subsystems. This ability to capture political power and regulate the system they are operating within is part of the planning system, or oligopolist sector. The market sector on the other hand responds to these rules and operates within them. Capitalists and workers exist within both subsystems, although workers in the two may hardly recognize the differences. The distinction is made clear in normal language between the small entrepreneur and the large mega CEO. These two subsystems play fundamental roles as either price takers or price setters within the larger system.

Let  $\psi$  be defined as the wage share, and  $\pi$  be the profit share of the total income  $Y$ .  $\pi$  is split between  $\pi_m$  for the market sector and  $\pi_o$  for the oligopolist sector. Wages can be split in the same way. This distinction is made it try to understand effects such as “the median private company CEO compensation package totaled \$362,900 in 2011 — just 3.8% of the \$9.6 million median compensation package given to S&P 500 CEOs” (Perry). As a starting point we will say these large firms are in the oligopolist sector and the smaller firms are in the market sector. The large firms can cause large macro movements, as they are the largest employers. According to the BLS 2015 data, 137,896,660 people in America are employed with 16% in the public sector and the rest in the private sector. The largest sectors of employment include nearly 22 million office workers averaging \$36,000 a year in wages, over 12 million food preparation and service workers averaging \$22,000 a year, 8.7 million retail sales workers averaging \$24,500 a year, 8 million in education averaging \$55,000, 8 million in healthcare averaging \$77,000, and 9 million each in production and transportation averaging \$35,000 a year. These sectors account for over half of those employed. Within each of these sectors we can think of a large representative firm such as IBM for office workers, Wal-Mart and Home-Depot for retail, and Kroger and McDonald’s for food. Wal-Mart employs 1.4 million of its 2.2 million employees in America (Fortune). That these large companies employ so many people and have lots of wealth offers them special distinction. These wealthiest companies in the oligopolistic sector act as tastemakers for those companies in the market sector. For the small entrepreneur the most

common exit strategy has been to sell to the big player, while a small few strive to make it to the top. Measurement of firm size seems to indicate that it follows a power-law type distribution (Axtell). From the Pareto principle these sectors may thus be split roughly 80% market and 20% oligopolistic, with the oligopoly having 80% of the profits and the market having 20%.

The capitalist class contains a group of 238,900 CEO's averaging \$185,000 a year in wages alone, a small part of a CEO compensation package. Average CEO compensation is on the order of 200 times higher than average worker pay. Most of this contribution to the average comes from the oligopoly capitalists. Again the median firm, a market capitalist, has a CEO compensation package near \$400,000, only 8 times higher than the median household income of \$50,000 (DeNavas-Walt). The oligopolists operate in a global economy across multiple national boundaries. US corporate profits topped \$1.6 trillion in 2015. Galbraith argued that some share of the oligopolistic profits would be used to influence national politicians to promote policies that sustained their profit share. In the US such a representative politician could be Hillary Clinton, who has had 182 million dollars spent on her campaign (OpenSecrets). Hillary if elected will come to power at an interesting time in the business cycle, as the US has faced 8 years of sluggish growth. The inflation adjusted S&P500 is back at its 2000 level which was not even reached in 2008, and median household balance sheets remain loaded with debt. The last recession saw laborers with large mortgage debts defaulting as the S&P500 collapsed. Wynne Godley noted in 2000 that it would be an unsustainable process for households to continue borrowing while profits pumped up asset prices. Ultimately he was right, and we got the Great Recession along with a meager fiscal spending package as compensation. That household budgets seem unsustainable, that the US government has not used policy to repair them, and a global slowdown causing a reduction in US exports means we are likely in unsustainable territory again (Papadimitriou). The result of this next election affects how likely it is for policies to get implemented that would be able to repair household balance sheets, and whether they would be able to be implemented before or after the next bust.

Assuming such an oligopoly capitalist group works to maintain faith in the establishment which Hillary and Trump represents, we can model a simple game to understand when and how it would be in their interest to repair worker balance sheets. I assume that voters will view

favorably the candidate in office if during their tenure jobs are being created and wage share is rising. In 2008 President Obama won the presidency which Hillary had hoped to win, along with a democratic majority that led to a 111th congress that was one of the most productive in recent legislative history. For whatever reasons his policies did not produce a recovery for the working day American but bailed out the banking sector and sustained corporate profits. Now Hillary is running a campaign promoting policies influenced by an agenda by Senator Bernie Sanders that would help repair household balance sheets by increasing the minimum wage and promoting investments in infrastructure, education, and healthcare. These policies would help raise the wage share, and more importantly the market sector share of the profit share. In this game the oligopolists get to choose the outcome. Based on the current unsustainable processes, it is assumed the S&P500 has to crash and the economy has to enter recession sometime within the next 6 months to 5 years unless fiscal conservatism ends, demand for US exports increases, or the private sector experiences an increasing wage and market profit share. In this game the oligopolists have the choice of electioneering Donald Trump or Hillary Clinton. If Donald Trump is elected president then mass emigration will cause US denominated deposits to be exchanged in mass for other world currencies, weakening the US balance of payments situation and triggering the next recession in 6 months. If Hillary Clinton is elected president, they face two options: business as usual or reform with a Democratic Congress. Under business as usual extend and pretend policies continue, weakening US household balance sheets, setting up the next recession in 4-5 years. On this path the trigger could potentially be the weak ability of new labor force participants to pay back their \$1 trillion in student loans, new fraudulent subprime automobile loans causing defaults (Andriotis), or any number of asset price corrections downward could lead to firms laying off workers and substituting capital for production. On the reform path, fiscal conservatism could be subverted and a massive round of fiscal stimulus could create jobs and income supports for the bottom of the income distribution.

The cost and benefits of the oligopolists in the model will be analyzed under the three scenarios, and the results compiled into a formal game. In scenario 1, mass emigration to Canada and Europe causes a run from the dollar, leaving America with a higher percentage of gun loving racists. The oligopolistic sector would experience costs as they reorganize the world economy

around a dysfunctional closed off America. Still profits could be sustained as new immigrants stimulate demand in those countries and other governments potentially promote more pro-poor policy. The cost here is the increased risks that come from unstable geopolitical environments. A mass emigration of Americans would call into question the belief systems of many participants. Stable modes of control such as the American University would play less of a global role as other nations rose to fill the gap. In this scenario the oligopolists face gain of  $\Delta_T$  with some high probability of  $1 - \sigma_L$  and a loss of  $\tau * \Delta_T$  with small probability  $\sigma_L$ .  $\tau$  is a number greater than 1 that corresponds to the cost factor of losing control during the transition to Trump. These probabilities and gains are unknown to the oligopolist sector. In scenario 2 of business as usual they face gain of  $\Delta_{HB}$  but worry about the cost of the recession in the future with some worry factor  $\omega$ . Scenario 3 of reform presents a gain of  $\Delta_{HR}$  but risks introduction of a positive view of government deficits which is a short step towards understanding the nature of money. This learning risk will be called  $\lambda$ . Thus the oligopolist decision resides on weighing three different benefit equations:

- 1)  $(1 - \sigma_L) \Delta_T - \sigma_L \cdot \tau \Delta_T = \Delta_T(1 - \sigma_L - \tau \sigma_L)$
- 2)  $\Delta_{HB} - \omega$
- 3)  $\Delta_{HR} - \lambda$

The cost of implementing each of these policies is assumed to be the same so the oligopolist sector in the face of radical uncertainty has to make a guess as to the values associated with each variable. This requires guessing at some bounds for the different variables. Scenario 1 faces more uncertainty and a wider range of possible values. Scenario 2 and 3 are relatively the same, it just depends on if the worries about the repercussions of a recession in the future are worse than the fears of using the system to help all of its constituents. This makes the latter scenarios more likely targets for the oligopolist sector. If the reform option is taken, it likely will not come in the form of establishing permanent full employment.

Kalecki argued that there could be three things that would worry business leaders if government spending were used to achieve full employment. They could dislike the fact that government interferes with employment at all, they could dislike what the government would invest in, or they could worry about socio political changes that result from establishing full

employment. He said “‘Full employment capitalism’ will, of course, have to develop new social and political institutions which will reflect the increased power of the working class. If capitalism can adjust itself to full employment, a fundamental reform will have been incorporated in it. If not, it will show itself an outmoded system which must be scrapped.” We can improve the income distribution within capitalism, but if we do so the working class understanding that a different system could exist threatens existing power relationships.

### **A Job Guarantee**

The political business cycle would be patently changed if a job guarantee as envisioned by Hyman Minsky and many others were to be put in place. Minsky’s employer of last resort (ELR) program is one which would employ anyone who is ready and willing to work at a defined minimum wage in which any skills required would be obtained as the result of paid training. The sack would cease to play a disciplinary role, as anyone could get a job with a living wage in the public sector. Minsky said that the current minimum wage is actually \$0 since some people live in unemployment. Making a baseline government job actually guarantees that the minimum wage is accessible by all. This would shift the profit share more towards the market sector and away from the oligopolistic sector, as all companies are forced to raise minimum wages and benefits to match the public sector job. An increasing wage share initially benefits the long tail of firms, meaning the market sector gets the profit gains initially. How the system evolves from there determines whether the oligopolistic sector would be able to regain their profit share or would be forced to reconcile some power to the market sector. Galbraith argued the wage of such a program should be set such that it “should be modestly below what can be earned in the planning system” (262). Beyond setting the minimum standard of workers, it also sets a limit to the “self-exploitation” that entrepreneurs in the market system engage in. An entrepreneur would be less willing to reduce their wages under such a guaranteed income, especially if the only reason they were pursuing the idea in the first place was for profit. Beyond limiting such banal profit maximizing innovation, it could also stimulate other sorts of

entrepreneurship. If everyone has basic standards of living guaranteed within the system, it becomes a lot easier to think about ways to improve society rather than just ways to stay alive.

Such a job guarantee would eliminate the type of poverty that is associated with unemployment. Minsky argued that current war on poverty type policies place the blame for unemployment on individuals, rather than systemic defects. They chose a life of alcohol and drugs rather than one of education. Mental illness is the fault of the individual rather than societal problems. Yet psychologist Harvey Brenner argues “that actions which influence national economic activity-especially the unemployment rate-have a substantial bearing on physical health, mental health, and criminal aggression.” While this opens up a world of excuses for the individual to complain they are merely a confluence of forces, it is important to realize that individuals and society interact through complex feedback loops, and blame lies partly on both parties. Galbraith notes the mental costs also associated with working at unfulfilling jobs, a critique of which the job guarantee is not immune to. There is a worry that the government would appropriate dead end jobs such as digging up bank notes. This is why a well designed job guarantee program would have to focus on the individual, taking them as they are and working with them personally to find a job fitting their humane desires while giving them an income.

The best jobs would be those that cannot function in the market system and those that do not develop in the oligopolistic system. Many caring type jobs in the United States currently exist in such a vacuum. Antonopoulos and Kim argue that public job creation in social care would contribute to gender equality and mobilize an underdeveloped workforce. Galbraith notes artists and educators as other potential benefactors. Carlos Maciel argues that a job guarantee could be implemented such that it could help develop “a green jobs” sector within the market. This is not unprecedented, as in the New Deal Roosevelt mobilized a “tree army” which developed our natural park system. They planted trees, built campgrounds and paths, and employed over 9 million people in its 9 year lifespan to do so. Anna Chiesura demonstrates that public parks largely evoke feelings of happiness and freedom within individuals. While public parks do not generate a profit, they still generate societal wellbeing. These types of jobs are some candidates for those that could be accomplished with a job guarantee proposal, but there is a greater benefit as well. Directing investment towards social good allows humans to unleash their

ingenuity to an underdeveloped sector of the economy. Everyday language notes this conflict between profit and good. Within the small entrepreneur market sector you hear all the time ideas shot down because “while it is a good idea, there’s no money in that.” Even within the business community the idea of triple bottom line accounting and corporate social responsibility are becoming more prevalent, but these are largely innovations in the market sector, and will take time to infiltrate the oligopolistic sector. Collective action can speed up the impetus for the transition, and a job guarantee offers a starting point for the conversation of this development.

A job guarantee could be implemented within the current system in a few ways. Largely though, they all rely on increasing government expenditures. Currently the Job Corps, Peace Corps, and AmeriCorps exist as alternatives to private sector employment which may offer good models to start with but their scale is severely lacking. Kevin McCarron of the BLS says there are just over 110,000 individuals employed within all three organizations. Past workforce development acts like the Comprehensive Employment Training Act of 1973 also have continued the legacy started by the New Deal programs. This program “employed painters, muralists, musicians, performing artists, poets and gardeners to work in schools, community centers, prisons and wherever their skills and services were of value to the community” (wikipedia). Why such programs are continually deemphasized after implementation is a question worthy of its own study, but the motivation behind their implementation could play an influence. Most of these programs were not designed to secure guaranteed lasting full employment. If a program is introduced as a short term solution to a slump, their short lifespan is by design. Designing and implementing a permanent public jobs program is a political and economic tool which could improve the faults of the current system. The inability to sustain full employment and the arbitrary and inequitable distribution of wealth and income remain as defects of the system just as Keynes saw them. Beyond expanding existing institutions to secure full employment, new ones could be implemented. Senator Bernie Sanders has introduced the “Employ Young Americans Now Act” which could be one such publicly funded employment tool.

## **Employ Young Americans Now**

The bill establishes a fund initially endowed with \$5.5 billion to be used by the Secretary of Labor to employ young americans. Young for the purpose of the act is defined as those in the ages of sixteen to twenty-four inclusive. \$4 billion gets used to provide summer and year round employment for low-income youth, while the other \$1.5 billion is used for competitive grants which are to be granted to local entities to carry out work based training and education to provide necessary skills to gain future employment. The \$4 billion dollars gets divided between states and then further between Public Use Microdata Areas (PUMA) within each state. .5% of the funds gets divided equally between the states, for the initial endowment this comes to \$20 million for each State. The remaining \$3 billion is divided between the states on the basis of the relative amount of youth to the overall amount of youth, the relative amount of unemployed relative to the overall unemployment level, and the relative number of disadvantaged young adults compared to the overall number. A disadvantaged young adult is one who is 16-24 and lives in a household whose income is one which does not exceed the higher of the poverty line for their family size, or 70% of the lower living standard income. The lower living standard income was established in the Workforce Innovation and Opportunity Act as a regional minimum standard of living and is used in many other employment programs to determine eligibility. It helps alleviate some of the many problems with using the federal poverty line. After the money is allocated in this way to the states, the money is allocated within the State to each PUMA. The money is divided between PUMAs by calculating the relative number of youth, unemployed, and unemployed youth compared to the total for the state. For example the formula yields \$300 million dollars that go to California, then the formula allocates \$1.7 million to the Lancaster PUMA which has .41% of the State's youth and .43% of the State's unemployment.

While the money is allocated formulaically, the state's and local boards must submit plans for how they plan to correctly use the funds in order to receive the money. In general the funds must be made available to provide summer and year round employment opportunities for



low-income youth. The priority is to identify opportunities that are in emerging or in-demand occupations in the local area, in the public or nonprofit sector in order to meet community needs, and opportunities that lead to activities that will provide industry-recognized certificates or credentials. No more than 5% of the funds allocated to each area can be used for administrative purposes, the rest of the money must make its way into the hands of disadvantaged youth, which means more can be spent on administration duties if young americans are employed to do so. While the bill does not provide specifics on how each local area would identify or create these opportunities, past experience shows that administering programs like this through community colleges and workers centers has provided lasting impacts on the communities.

The allocation of the remainder of the funds, the \$1.5 billion in grants, would work differently. Here the bill specifies that in order to receive a grant the application must be in partnership with a chief elected official and the local board for the local area involved, or be an entity eligible for a grant under section 166 of the Workforce Innovation and Opportunity Act. Then the bill lists potential entities for partnerships, which also seems like likely candidates for groups that would administer the first \$4 billion. These include employers or employer associations, adult education providers or postsecondary educational institutions including community colleges, community-based organizations, joint labor-management committees, work-related intermediaries, and labor organizations that sponsor training or employment upgrade programs. In the applications specifics must be included for how the eligible entity will provide unemployed low-income youth with skills that will lead to employment, along with a laundry list of other criteria which will help determine the ideas which would have the most impact, which in this sense means lifting the youth in America's most marginalized regions out of unemployment. The goal is to give unemployed low-income young adults entry into, and retention in, unsubsidized employment and attainment of industry recognized credentials.

The following table shows how the \$4 billion would be distributed among states, assuming a \$10,500/yr job. This income may be high for some smaller states but the money is allocated before jobs are created, so the choice of the income level only affects the distribution within unemployed youth in the state, not the funds the states receive.

Figure 1

state	# of youth	# disadvantaged youth	# unemployed youth	% youth unemployed	youth jobs	% newly employed
Alabama	677702	255244	71965	10.6%	6537	9%
Alaska	117878	34800	9939	8.4%	259	26%
Arizona	947570	346541	81939	8.6%	8166	10%
Arkansas	414093	162536	30113	7.2%	4561	15%
California	5669637	1840512	514594	9%	39112	7.6%
Colorado	732209	230799	52579	7%	6220	11.8%
Connecticut	490279	135112	45725	9%	5083	11.1%
Delaware	133009	37359	9589	7.2%	2701	28%
District of Columbia	105839	51013	8912	8.4%	2725	31%
Florida	2557144	841195	222741	8.7%	18969	8.5%
Georgia	1453421	533913	139363	9.6%	11728	8.4%
Hawaii	194618	53219	13617	7%	2950	22%
Idaho	225594	82562	13488	6%	3257	24%
Illinois	1795641	573933	187503	10%	13951	7.4%
Indiana	933728	339372	79033	8.4%	7958	10%
Iowa	438075	165870	31522	7%	4513	14%
Kansas	417665	144394	29483	7%	4370	15%
Kentucky	596342	233818	57237	9.5%	5959	10%
Louisiana	657550	243450	57909	8.8%	6196	11%
Maine	163576	60076	10495	6.4%	2962	28.2%
Maryland	803108	212299	71935	9%	6838	9.5%
Massachusetts	983452	330712	79963	8%	8184	10%
Michigan	1399039	508772	136296	9.7%	11435	8%
Minnesota	720809	227961	54066	7.5%	6077	11%
Mississippi	433483	190426	49307	11%	5137	10.4%
Missouri	829813	290054	72181	8.6%	7190	10%
Montana	142543	60479	10542	7%	2821	26.7%
Nebraska	262325	91886	14859	5.6%	3356	23%
Nevada	377760	105141	34812	9%	4446	12.7%

New Hampshire	186131	54429	13703	7%	2980	21%
New Jersey	1159603	272298	94900	8%	9024	9.5%
New Mexico	300734	111928	30386	10%	3938	13%
New York	2767635	908392	230685	8%	19503	8%
North Carolina	1372215	525683	138124	10%	11434	8%
North Dakota	123798	47441	4564	3.6%	2566	56%
Ohio	1555889	541645	152053	9.8%	12130	8%
Oklahoma	552551	196237	40761	7%	5171	13%
Oregon	505953	192322	44590	8.8%	5439	12%
Pennsylvania	1721766	605658	151486	8.8%	13197	9%
Rhode Island	159091	61343	13827	8.7%	2984	21.5%
South Carolina	676282	269024	73655	10.1%	6642	9%
South Dakota	122036	48157	8329	6.8%	2606	31%
Tennessee	902409	344814	92778	10%	8070	8.7%
Texas	3919149	1283632	292039	7.5%	25053	8.6%
Utah	469197	134904	29149	6%	4328	15%
Vermont	89428	34724	6016	6.7%	2483	41%
Virginia	1174466	382689	91522	7.7%	8980	9.8%
Washington	952826	287219	89944	9%	7753	8.6%
West Virginia	238712	93399	18847	7.9%	3453	18%
Wisconsin	790368	278033	54257	6.8%	6708	12%
Wyoming	81169	29309	3211	4%	2390	74%

Source: ACS and author's calculations

The total number of jobs created under such a program would be 382,857. This is already three times larger than the combined AmeriCorps, Peace Corps, and Job Corps constellation. A

state like Wyoming would receive enough funding to eliminate 74% of its official youth unemployment, while California would receive enough to eliminate 7.6%. These again are first order effects. If pricing power resides in the oligopolistic sector, then because this policy would boost the market sector and because of its small size its inflationary effect would be negligible. This type of program would be a good starting point for a job guarantee for a few reasons. It creates a fund rather than just appropriating spending a single time, which allows for its permanent use unless abolished. It does not specify "how it is paid for" because it knows that taxation is not necessary for spending. Everything gets paid for through Congress allocating it on the budget. To pass through Congress such spending may have to be matched by taxation, but that is a political rather than a mechanical constraint. The bill would take the young unemployed people as they are and give them training, allowing them to put their idle time to use rather than turning to alcohol or crime. We can look into individual households in the ACS to understand the human element behind those people who could be employed by such a bill.

Serial 1104 is a 20 and 19 year old black couple in rural Alabama. They have 1 year of college and grade 9 respectively. He works in the Inspectors, Testers, Sorters, Samplers, and Weighers sector for 40 hrs a week making \$6000 dollars a year. His partner could get a second job for the family which would nearly triple their income. If she worked as a caretaker for another mother who was stuck at home taking care of her child and unable to work, this opens up the opportunity for the mother to go to work as well. A 43 year old black couple (serial 1166) who worked intermittently as a government laborer and a nurse had an income of \$20,300 a year supporting a 17 year old son and 12 year old daughter. If the son got paid to get good grades in school and plant trees in the community their income increases 50% and the family is lifted out of poverty. Serial 733174 is a native american 22 year old man in Omaha who made 1400 in law enforcement with 1 year of college but is looking for a job. He is given the opportunity to work full time instead. In Portland the 16 year old son of a family of 5 can be paid to complete schooling supporting the family and heavily increasing high school completion rates. Serial 886301 is a family of 4 with a single father in New York making 20,000 a year to support all 3 kids. The 17 year old son is still in school but could end up dropping out before graduating to help support the family, as 28% of black youth do not graduate high school (NCES). By getting a

summer income he lifts the entire family out of poverty. 151312, a 22 year old single male in my hometown Lancaster CA, could very well be my best friend. If he is able to make a decent salary not even working full time maybe he could go beyond his associates degree, but making \$10,000 a year as a customer service agent working over 30 irregular hours a week nearly year round degrades him as a human being and kills his drive.

This human aspect gives a small window into the over 380,000 families that would benefit from the proposed bill. This amounts to about 10% of the 3.8 million families that have unemployed youth. If the fund could have ten times more funding allocated towards it, then all youth unemployment could be ended. This is a step towards full employment and a moral economy. If we direct this spending towards jobs that care about fellow humans the dividends will be huge. Antonopolus shows how the multiplier of the social care sector is much larger than infrastructure in figure 2. The bill as is currently disproportionately helps rural america, so I would suggest lowering the component in the distribution rule which allocates money equally among the states, freeing up more income for California, New York, Texas, and Florida which have higher youth unemployment rates and populations as shown by figure 3.

Figure 2 - Job creation from \$50 billion investment

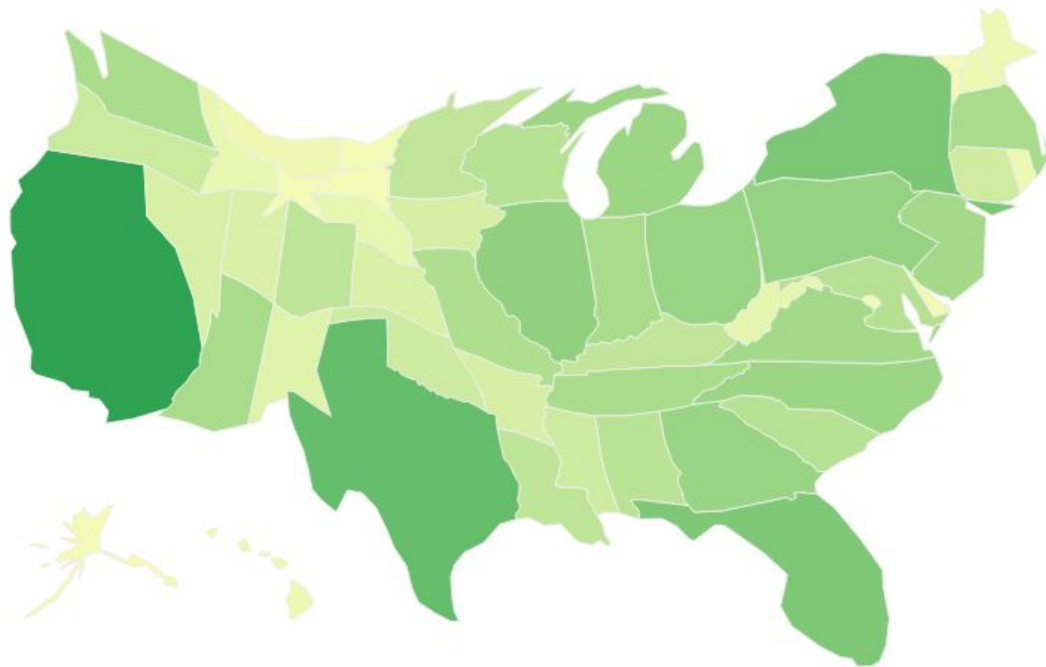
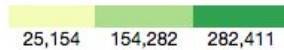
Industry	Social Care	Infrastructure
Agriculture	2,928	1,969
Mining	520	2,463
Utilities	773	1,808
Construction	4,489	345,955
Manufacturing	16,797	46,402
Wholesale	7,139	11,421
Retail	4,432	36,628
Transportation and Warehousing	7,020	12,715
Information	4,989	4,312
Financial and Real Estate services	13,621	11,474
Professional and Business services	57,672	55,675
Education	688	719
Health Care and Social Assistance	21,046	675
Social Care	956,082	107
Leisure and Hospitality	15,650	6,509
Other services	3,113	5,009
Government	69,384	12,099
<b>Total</b>	<b>1,186,342</b>	<b>555,942</b>

Source: Antonopoulos et al. (2010)

Figure 3 - Distribution of Employ Young Americans Now Spending

the map is scaled by the relative proportions of young people (16-25) in each state, and colored by the amount of funds the state would receive under Bernie's "Employ Young Americans Now Act"

millions of dollars

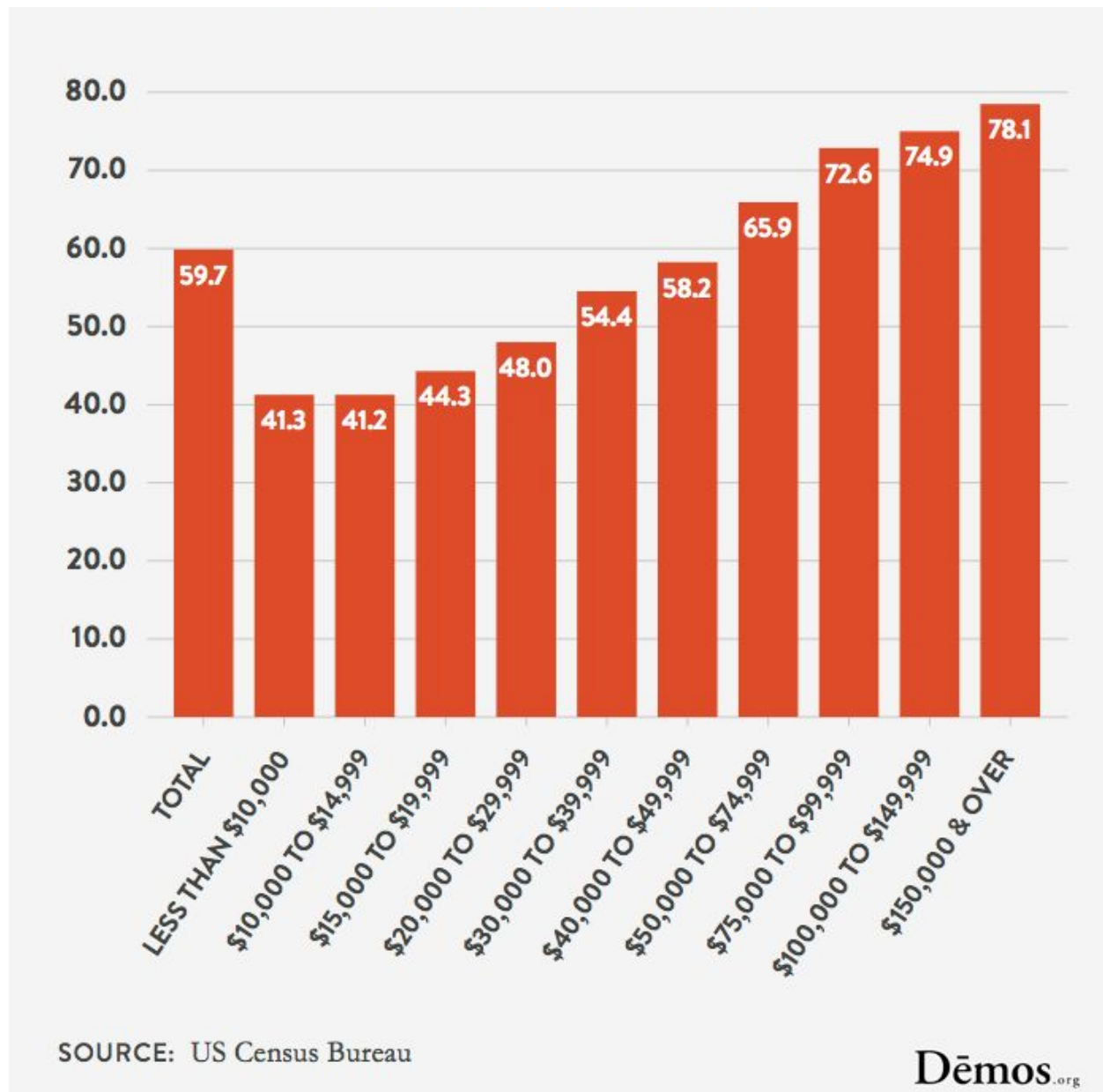


source: ACS and author's calculations

## To Full Employment

In the discussion of the political business cycle so far I have failed to acknowledge the role played by the voter, a majority of which are in the working class. For whatever reason, voter turnout is lower the further down the income distribution you go. Only above incomes of \$30,000 a year do even half of those in each income class start participating in the Presidential election as shown in Figure 4. These numbers are even lower on non presidential election years, and it would be interesting to see what the class bias looks like in those years as well.

Figure 3 - Voter turnout by income, 2008 presidential election



source: demos.org

Political scientists have hypothesized that the lower voter turnout at the bottom of the income distribution is related to their lack of income and thus time to go participate. The voting process is not easy and it is not standardized across the country. Not even every citizen is registered to vote in every state. If this is the case, then an ancillary benefit of a guaranteed living income would be that voter turnout may increase. Even if it is not an oligarchical sector which



organized the voting process to be this way, this is the way it is. It seems easy enough to believe that the government at least represents the people who vote in it. By this measure it seems the government would unfavorably bias towards the higher end of the income distribution. If we all become well informed active caring citizens and participate in our government then perhaps we can bias the system in the other way. As economists who believe in democracy it is imperative that we strive towards creating conditions that allow all voices to be heard in the process. Again, full employment seems to be a goal which would foster these conditions. Thus it is imperative that those who are active push the current system towards full employment. This requires an understanding of how incomes and jobs are created within the system. It requires the morals and wherewithal to fight for what one believes in. It requires a bit of faith in the direction one is heading, and a lot of luck for it to turn out to be right.

## **Conclusion**

The current economic system seems to be one in which booms and busts happen regularly. Stability seems to breed instability, and since the last recession everyone has expected the next one to be right around the corner. It seems likely the system can continue churning on but unstable processes have been set in motion which need to be corrected in some way. The feedback loops in the economy have not changed drastically. By guaranteeing employment and an income which gives access to basic food and shelter for everyone the system would change markedly. It may induce many to try to become United States citizens since they are guaranteed a better life. This was the promise that brought so many people to this country and made it great in the first place. Trump would be appalled this is happening, and hopes a wall would be built to keep people out. If it comes to that, maybe we are no longer the land of great opportunity. Targeted employment policy would ensure that government spending is used most effectively by directly hiring the unemployed. If full employment with living wages at decent hours was the norm, clearly the great opportunity of living here would still be present.

It is not time to give up on America. Our ingenuity has brought rapid innovations and excessive developments in the parts of the economy we have cared about. It is time to bring that

ingenuity back to the social good rather than profit maximization. It is time we cared about humans more than we care about profit. It is time we stopped spending 40 hours a week in an office wasting half of them bored. It is time we stopped having people living on the streets and going hungry. Many Americans have had a tendency to turn their attention towards the poverty in the rest of the world. Instead of thinking we can help other countries, we have to realize we first need to help ourselves. We should lead by example. America should have no one living in poverty before it thinks it can help anyone else in the world. Our underdeveloped care sector is an embarrassment when compared to a modern Scandinavian country. It's up to us to organize and fix it. Bring on the moral economy.

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