INCOME INEQUALITY:

ANALYSIS AND RECOMMENDATION USING THE BARDACH METHOD

A Thesis

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by

Michael W. Billingsley

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Department of Public Policy Administration

Abstract

of

INCOME INEQUALITY:

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by

Michael W. Billingsley

This thesis examines current income distribution in the U.S. An increasing number of researchers, scholars, and interested citizens find the large and growing difference between incomes at the very top of the U.S. income scale and the rest of society as a problem for the economic, social and political well being of the nation. This thesis examines U.S. income distribution, and analyzes income inequality using the Bardach (2009) method. The Bardach (2009) method requires; presenting a problem statement (in this thesis that problem is that current U.S. income dispersion is too great), presenting evidence that supports this claim, developing and accessing alternatives, confronting the tradeoffs in choosing one alternative over another, and then making a recommendation. In this thesis, the problem definition is followed by a literature review of the theories that inform the debate and a review of the literature that describes the most common alternative mitigation strategies.

This thesis uses an outcomes matrix as suggested by Bardach (2009) to confront the tradeoffs and assess the alternatives identified in the literature against a set of decision criteria. The outcomes matrix illustrates that very few of the alternatives sufficiently fulfilled the entire criteria standard. In most cases, this was due to the unlikely prospect of garnering sufficient political support. However, one alternative, investing in infrastructure, appeared to satisfy the

criteria better than the others did. Therefore, this alternative is the cornerstone of a recommendation to invigorate the economy and reduce income inequality. This thesis presents a final recommendation that consists of re-calibrating estate taxes to produce revenue for a comprehensive infrastructure program that will not only lower income inequality, but also boost middle class jobs and make America more competitive.

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Chapter 1

INTRODUCTION

The manner in which economic rewards are distributed in a society has been an important, and divisive, topic. Around 100 CE the ancient Greek philosopher Plutarch is attributed with the comment, “An imbalance between rich and poor is the oldest and most fatal ailment of all republics” (Hacker & Pierson, 2010, p.75). Today positions on income inequality range from ideas that the focus on a more equitable distribution of rewards is about “envy and class warfare” (Luhby, 2012) to Warren Buffet’s assertion that the wealthy are being “coddled” and that the tax code is reverse class warfare being waged on the middle and lower class (Bradford, 2011).

This thesis examines income inequality, presents the historical and current levels of United States income dispersion, explains the research on the societal, health, economic and political consequences of inequality, and then proposes recommendations for government action intended to mitigate this condition as well as the criteria that is used to evaluate the mitigation strategies. This thesis uses a set of basic assumptions about income inequality. Those assumptions are that markets are dependent upon governmental regulation and therefore government has an important and appropriate role in lessening income inequality and that huge differences in the distribution of economic rewards in a society are important indicators of the fairness of that society.

This thesis utilizes the strategy and philosophy of policy analysis elucidated by Bardach (2009). This intuitive approach consists of defining a precise problem,

collecting relevant evidence, stating a set of alternative approaches, deciding on the appropriate decision criteria to assess the alternatives, imagining the probable outcomes of implementation of the alternatives, realistically facing the trade-offs inherent in the respective alternatives, and then deciding on the most appropriate approach informed by the analysis.

The thesis follows this analysis strategy and concentrates on the trade-offs between mitigation strategies and probable real world outcomes. A concentration on trade-offs is appropriate because strategies intended to mitigate income inequality will likely consist of some recalibration of market or taxation levels or processes. Governmental intervention into the market is necessary but also comes with risks. Poor outcomes resulting from governmental intervention are sometimes characterized as "government failure" (Mintrom, 2012). Government failure can be understood as a situation where attempts to mitigate a problem create more problems than they solve, or where "the cure is worse than the disease." In this case, the disease is income inequality, or more precisely the current level of inequality in U.S. incomes. This thesis does not propose attempts to produce complete equality. Some inequality is natural in the human world. This is generally a result of variation in individual's effort, needs and abilities (Colander, 2008). However, current income inequality in the U.S. is at levels that are not completely indicative of these aspects of individual traits. This thesis will concentrate on solutions to the problem that *current levels of income inequality in the U.S. are too great.*

The remaining sections of Chapter 1 present the basic context of income inequality in America. First, I discuss why income inequality matters and is an

appropriate topic for a thesis. Then the most utilized income inequality metric, the Gini Coefficient, is explained, followed by a historical overview of inequality trends and a description of the current condition. This chapter concludes with a brief outline of the remaining chapters of this thesis.

Why Income Inequality Matters: Societal, Economic and Political Effects

Is it a concern that some have so much and others so little? Is it simple envy or class warfare that causes so many to look negatively at such a vastly unequal distribution of income? There is some debate about whether income inequality should be viewed as a concern or a necessary outcome of a competitive and dynamic market economy. A growing number of studies are beginning to develop causal links between income inequality and poor societal, health, economic, political, and personal outcomes, highlighting the importance of understanding current levels of inequality as a problem.

Societal Effects

There are those who propose that changes between groups in a society do not matter if the total society is getting more affluent (Wilkinson, 2009). This is an argument about the effect of relative versus absolute economic position. As many social scientists, neurologists and economists have explained, it is the relative position of an individual that makes the most difference in how people understand the world around them (Hill & Myatt, 2010; Frank 2007; Kahneman, 2012). This is not simply a matter of feeling; there are real economic and social ramifications of a decreasing relative position. In contradiction to the standard model of rational choice economic theory, the field of behavioral economics posits that there is no absolute assessment of conditions. People

can only view and understand conditions contextually. Kahneman (2012) calls this "the endowment effect" (p.292) and explains that it is a cognitive impossibility for humans to think solely in terms of absolute position or utility. All outcomes and conditions are viewed and understood in comparison to some reference point. The reference point that matters in income inequality is the individual's relative position. People primarily view their position in relation to what others have, that is why concern about relative position is not simple envy, but innate human nature.

The resulting social costs of vast inequality harm the whole society, not just the poor. Wilkinson & Pickett (2010) were among the first to discern causal relationships between income inequality and adult and infant mortality, increased mental illness, and poor health outcomes. Perhaps the most important finding from this research is the fact that all members of a society suffer when a society is highly unequal. This research revealed that income inequality is closely correlated (r=0.87) with poor outcomes on a range of health and social problems, such as worse mental health, more crime and violence, more obesity, and others. Additionally it appears that this phenomenon is consistent across different societal measurement. In other words, countries suffer more social and health problems the more relatively unequal they are, and this trend holds for states, and counties as well, both in the United States and other nations (Wilkinson & Pickett, 2010).

Other research has demonstrated a positive correlation between income inequality and violent crime including homicide (Kennedy, Kawachi, Prothrow-Stith, Lochner & Gupta, 1998; Aitken & Elgar, 2010). These studies indicate that great income inequality

results in diminished societal trust, and decreases the common bonds that enforce collective societal norms. The majority of these studies examine the idea of income inequality as leading to erosion in social capital, or cohesion. The hypothesis is that as income inequality becomes more pronounced, the bonds between people in a society begin to unravel. This results in decreased levels of trust and community strength. The ideal of everyone pulling together erodes to a social Darwinist struggle of the fittest. If more and more members of a society feel the social and economic arrangement works against them they have less reason to abide by the generally accepted norms of that society and that society will begin to weaken.

Economic Effects

The economic consequences of income inequality are also great. Income inequality reduces the disposable income for the great majority of consumers who must continue to consume if the economy is to grow. Income that goes to a small number of wealthy families instead of being distributed to a much larger group of lower income families does not result in the same level of consumer spending. Wealthy people have most of what they need already; for the most part they will not buy many more new houses or more groceries with increased income. For example, a family with a $9 million after tax income may purchase 3 or 5 cars, but if that $9 million went to 1000 middle class families ($9,000 each) you could expect 100's of cars to be purchased with that same money (Blodget, 2012). A decrease in middle class spending power is important for those at the top of the income scale as well because they depend on the profits and investment dividend from consumption to maintain their relative position and affluence

(Roubini, 2011). At the other end of the income scale the reduction of household disposable income has resulted in many American families straining under massive amounts of debt in the struggle to "keep up with the Joneses." Over borrowing has been the only way for middle class families with declining incomes to maintain the pretense of relative affluence and this growing debt has added to economic instability. Franks (2007) relates the inefficiencies created by this competitive consumption as a market failure and characterizes it as a "consumption externality." This competitive consumption also contributes to a low national savings rate and the condition that the vast majority of Americans are not financially prepared for retirement (Noah, 2012). Additionally Bloomquist (2003) argues that income inequality can be tied to increases in income tax evasion as more income is realized through investments that are more difficult to trace. A recent study illustrates the negative effect income inequality is having on the health of the Social Security program (Whitman & Shoffner, 2011). This study finds that the current taxable maximum of $106,800 (2011) is exempting a growing amount of income from Social Security taxation, and that this is contributing to the fiscal imbalance in the trust fund. It may also be that capitalist economies cannot function properly at certain levels of income concentration. Alesino & Perotti (1994) found an inverse relationship between income inequality and levels of investment in data from 71 countries. The fact that income inequality decreases the societal and political stability needed to attract investment was an early and important finding that began to uncover some of the indirect effects of income inequality on economic conditions. Recent research focusing on metropolitan regions indicates that inequality is a barrier to economic growth, and that

regions with more income equality have grown faster, and more consistently over the past 30 years (Benner & Pastor, 2012).

Current inequality may be a contributing factor to increasing economic tribulation. There is a concern that advanced levels of inequality distort the market to an extent that makes smooth functioning unattainable (Stiglitz, 2012). This concern is supported by the fact that the only previous instance of income inequality at current levels was followed soon after by the Great Depression. As Figure 3 illustrates the top 1% of earners in 1928 captured 24% of the total income of the U.S., a level not seen again until 2007 when the 24% threshold was reached again, and almost immediately followed by the Great Recession. For comparison, the top 1% captured 9% of total U.S. income in 1970 (Noah, 2012).

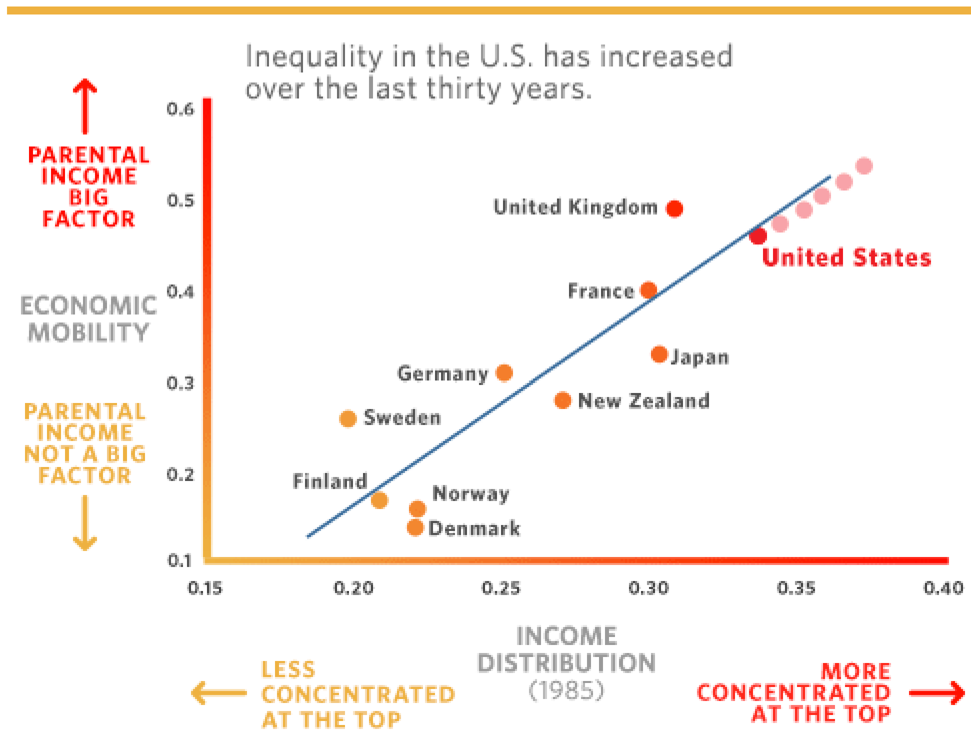
Intergenerational Income Mobility

Possibly the most troubling of the economic and social consequences of vast income inequality is the related occurrence of decreasing intergenerational income mobility. Intergenerational income mobility is a metric that reveals how many people move up, or down, from the income quintile of their parents. This idea goes to the heart of American economic mythology. Studies are beginning to link entrenched levels of inequity to a new caste system and the end of the American dream (Wolfers, 2012). The myth of the “American Dream” is being disproved and with it the belief that people can rise out of the economic position they were born in through hard work and enterprise. Research implies that as inequality in income grows so does inequality in opportunity. Analysis of longitudinal panel data on the difference in generational change in income

shows that the U.S. is last in developed nations in intergenerational mobility (Mazunder, n.d.). For example, in a January 12, 2012 speech at the Center for American Progress, Alan Krueger, the Chairman of the Council of Economic Advisors presented the "Great Gatsby curve," which illustrates the relationship between inequality and generational earnings mobility (Krueger, 2012). The Great Gatsby curve (Figure 1) shows that as income inequality increases the level of movement from different income strata contracts. More simply, income inequality is beginning to be recognized as a factor that keeps poor people poor and wealthy people wealthy through generations. Figure 1 shows the relationship between intergenerational earnings elasticity (the vertical axis), or how much a parents income predicts a child's future income, the higher the number the greater chance the child will either stay poor, if parents are poor, or wealthy if parents are wealthy, in relation to the country Gini coefficient ranking. As Figure 1 illustrates, the U.S. is more unequal and more economically rigid than comparable Western capitalist democracies.

A recent report from the U.S. Federal Reserve illustrates this trend as 47% of children born to U.S. families in the top quintile of income earners remain in the top and only 7% move to the bottom, while 66% of those born to families in the bottom quintile remain in the bottom two quintiles of earners (Bengali & Daly, 2013).

Figure 1. The Great Gatsby Curve



Office of the President (2013)

Political Effects

Income inequality has political ramifications as well. Identifying the true nature of the "American Dream" for example could begin to alter what citizens might accept as equitable. In the past, the narrative has been that America is more unequal because inequality is a necessary component in an economic system with so much dynamism. Now that story has come into question and it is possible that citizens will begin to view great inequality as unfair *and* unnecessary. This could have political ramifications for those who espouse inequality-enhancing policies as necessary ideal. The "Occupy" movement was an example of a political and social response to the current inequality.

Regardless of the lack of electoral or legislative accomplishments of the "Occupy" movement, it helped bring the topic of inequality to the forefront of American political discourse and shaped the national conversation. A common rejoinder from people who do not think income inequality is a problem is, "America doesn't guarantee outcomes, only opportunities." Some who share this sentiment perceive income inequality as the natural and positive outcome of a meritocracy where those who have more talent, ambition, and drive than others are rightfully better compensated. A baseline assumption for this position is that everyone begins at a relatively equal starting place and economic rewards accrue to those who deserve them most. "Deserving" is ostensibly determined by those adding the most to the national marginal product. The vast economic gains to those in primarily "rent seeking" enterprises are challenging this notion (Stiglitz, 2012). Rent seeking behavior occurs when someone gains wealth by taking it from others instead of creating something of value that creates profit. This behavior is contrary to the traditional economic theory that the wealthy deserve their rewards because they create more wealth. The myth that every rich person is a "job creator" is a version of this story. However, research is illustrating that much of the immense gains in income for the top of the U.S. income scale has come from inefficient rent seeking behavior (Stiglitz, 2012). Additionally, a necessary assumption for this position is that America is a place that affords equal opportunity for economic advancement to all. This is the "American Dream," the belief that anyone who works hard and plays by the rules can make a better life for themselves and their family. This is one of the most enduring baseline societal myths of our culture, and for many years it was more true than not. Vast income

inequality is now destroying this myth and calling into question the historic American social contract that accepts inequality as a condition of opportunity.

The concentration of income and the political power that comes with it is also an issue. The Supreme Court ruling in the *Citizens United* case enacted into law the ideal that "money equals speech" (*Citizens United v. Federal Election Commission*, 2009). The implication of *Citizens United* is that the wealthy deserve more speech and influence. Great concentrations of income and wealth were the origin of the feudal aristocracies against whom the founders of this nation originally rebelled.

This section began with a discussion of why inequality matters utilizing evidence of the societal, economic, and political costs of income inequality. The next section of this chapter will define income inequality and explain the most commonly utilized conceptualizations used to measure income dispersion in an economy. A historical overview of the trends in income inequality in the U.S. will follow. The chapter will conclude with a description of the current condition of income inequality.

Income Inequality, definition and measurement

Income inequality is an income gap between segments of a society. It is a measure of income division, or dispersal. It is not poverty *per se*; a society could have all poor people and still have great income equality so it is not a measure of only poverty, but a measure of relative income position through a population. Poverty is important and usually societies with great income inequality suffer from high levels of poverty. Income inequality is important because it centers on questions of fairness, equity, and the maintenance of the "social contract" (Frank, 2007; Stiglitz, 2012). The social contract is

the basic agreement that people accept in a society. This social agreement defines the general normative ideals of what is "right" and "fair." As in all contracts, there is also a degree of reciprocity in the social contract. The general idea is that people give up something, a degree of absolute freedom for example, in order to create societies that provide communitarian advantages such as security or fairness. The social contract matters in examining income inequality because an equitable distribution of economic rewards for effort and achievement are part of the historical democratic social agreement. The distribution of society's economic resources matter because an equitable distribution of economic rewards and opportunities are important maintaining a just society.

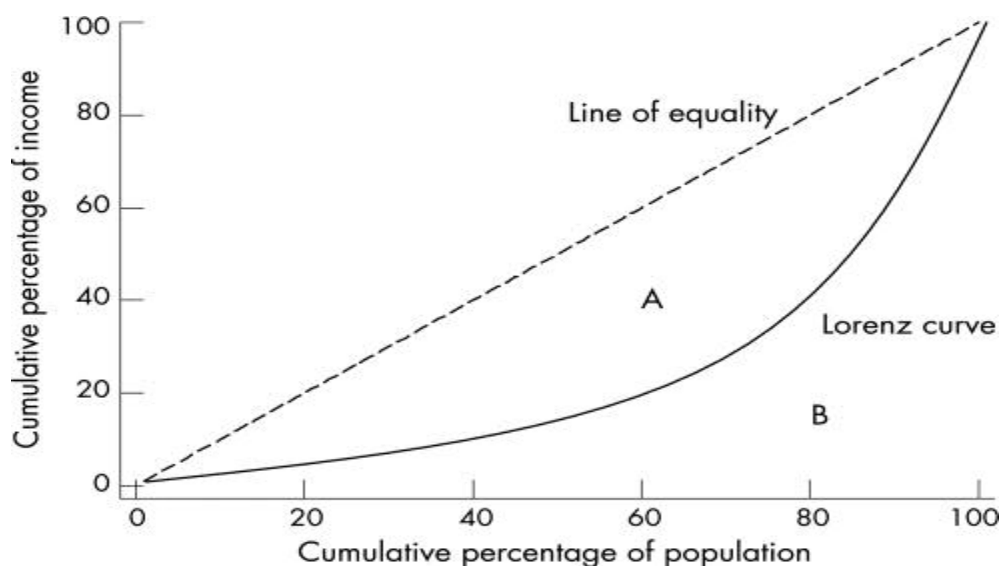
The next section will briefly introduce and more fully explain the Gini coefficient, the most common measurement tool used to express income inequality as well as the metric most often utilized in this thesis.

Gini Coefficient

The most important and widely utilized measure that quantifies and illustrates income inequality is the Gini coefficient. Corrado Gini, an Italian statistician, first developed this conceptualization of distributional dispersion in 1912 in his paper "Variability and Mutability" (Xu, 2004). Since the 1920's the Gini coefficient, or ratio, has been widely used in many different disciplines including sociology, engineering and agriculture. The Gini coefficient represents distribution as a value between 0, (0.0%) which is perfect equality of dispersal, in income terms it would be where all have an equal share, and 1, (100.0%) or perfect inequality, where 1 person, or family, had 100% of the income. The most common mathematical calculation of dispersion using the Gini

conceptualization is A/ (A+B) (Figure 2), although many, and much more complicated calculations are possible using the Gini model. The Gini “score” is a ratio calculated through the application of the Lorenz curve. The Lorenz curve, developed by Max Lorenz, is the arithmetic representation of percentages of distribution in the Gini coefficient model. In the Gini coefficient income distribution model, illustrated in Figure 2, the x-axis represents the population, characterized in percentages or deciles, from 0.0 to 100.0%, the y-axis the percentage of income, and expressed a value from 0.0 to 100.0%. The Lorenz curve demonstrates what percentage of y value, or income, is attributable to the x value, or population. This value is found at the x/y intercept at the Lorenz curve. In Figure 2 the Lorenz curve can be used to ascertain population income distribution by following a point on the x axis, which corresponds to a population percentage, up to the intercept of the Lorenz curve, then following that point back to the y axis to locate the corresponding percentage of income. For example, in Figure 2 (British Medical Journal, 2007) 20% of the population receives about 7% of the income, 40% of the population account for about 10% of the income, etc. Figure 2 illustrates an income distribution Gini ratio of approximately 0.50.

Figure 2. Gini Coefficient Model with Lorenz Curve



British Journal of Medicine (2007)

For this thesis it is sufficient to understand that the closer a group Gini coefficient is to 1.0, or 100%, the more unequal the distribution of income is in that population. For example, in 2012 Namibia has a Gini ranking of .707, which is the world's most unequal, and Sweden the most equitable, has a Gini ranking of .230, (cia.org, 2012). The United States had a 2012 Gini "score" of .450, directly between such outposts of equity as Bulgaria (.453), and Iran (.445) (cia.org, 2012). Other income inequality measurements deserving mention are the Hoover, or Robin Hood Index, that measures inequality using the furthest vertical distance from the Lorenz curve to the 45-degree line of perfect equality (De Maio, 2007). The Kuznets Ratio measures inequality as a ratio of incomes going to the highest earning households to incomes going to the lowest earning households (De Maio, 2007). While the Gini coefficient is useful in measuring distribution in a total population other indices allow different representations of income

dispersion and can allow more precise measurement of dispersion *between* population deciles. Each of these conceptualizations is important to the study, presentation, and understanding of income inequality.

Historical Trends in U.S. Inequality

America has always been relatively unequal and it has been argued that the current condition of income inequality in the U.S. is similar to other periods of great inequality and is not cause for alarm. Others dispute this assertion and posit that current inequality is dangerously different from any other time in U.S. history except for the period directly preceding the Great Depression. This section will examine the general historical trends in U.S. income inequality.

Early America- post Civil War (1776-1900)

Statistical data on largely rural early America is slight, nevertheless research on the subject of historical income inequality contend that inequality in the first 100 years of U.S. history centered on the growing premium enjoyed by the laborers of the emerging skilled trades. This inequality trend is also exaggerated by the change of wealth and income consisting primarily of land and barter crops, to a more currency based system (Noah, 2012). The information that has been analyzed points to increasing income concentrated in the pre industrial cities of the Northeast (Lindert & Williamson, 1976). This trend escalated throughout the antebellum period up to the outbreak of the American Civil War (1860-1864). These early patterns of inequality generally match the Kuznets curve (1955) hypothesis. This hypothesis posits income inequality in an economically advancing society will move in an inverted U pattern, where the movement from an

agrarian to industrial society will initially cause an increase, and then gradually a decrease in inequality, as a society's labor enjoys the productivity gains of increased mechanization (Neilson & Alderson, 1997).

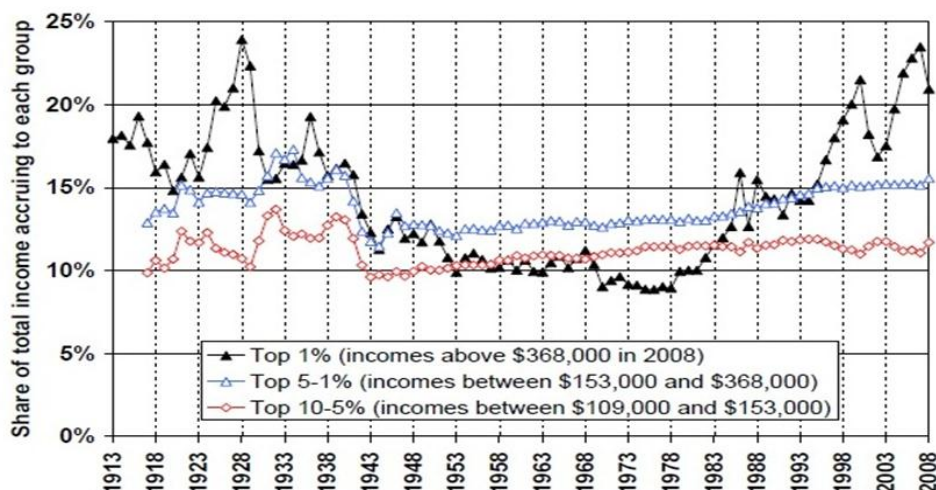
20th Century Inequality Developments

Data that are detailed enough to fully explicate changes in incomes and GDP are difficult to attain until the advent of the federal income tax in 1913. Generally, it is thought that income and wealth inequality intensified through the years from 1880 until the outbreak of World War 1 (1914-1918) which caused a temporary leveling (Lindert & Williamson, 1976). Worldwide productivity gains and labor specification initiated by the industrial revolution was responsible for an increase in absolute levels of affluence and income as well as increased concentrations of wealth. The first well-documented modern instance of great income disparity began during the post WWI boom years and surged until the crash of 1929, which lead to the Great Depression. During the 1930's and early 1940's all income deciles suffered retraction due to decreased earning power and related diminished demand resulting from the Great Depression, however relative inequality remained consistently stable and elevated. Again, as in the Civil War and World War 1, the break out of World War 2 ushered in a brief period of growing equality. Research points to the virtual elimination of unemployment during wartime as the cause of this phenomenon, not a long-term economic movement towards equality.

Post World War 2 – The Great Compression to Reagan (1945-1980)

The historical trend of relative income equality during wartime, followed immediately by periods of growing inequality, was not evidenced in the post WWII era. Income inequality remained relatively low and constant throughout the post war years as the U.S. economy grew to dominate the worlds markets. This condition has been attributed to U.S. manufacturing dominance, the fact that our most important global competitors were devastated during WWII, and a rise in union membership in the U.S., which increased income share for the working class. Historically, the U.S. enjoyed the most equitable distribution of income and wealth in the years from the early 1940's until the mid to late 1970's, in a period characterized as the "Great Compression" (Goldin & Margo, 1992). National GDP rose and President Kennedy's maxim and hope for the future, "a rising tide lifts all boats," seemed to be coming to fruition (Kennedy, 1963). Figure 3 illustrates this trend where income share percentages were the most equitable of the last 100 years (Piketty & Saez, 2012). As the 1960's gave way to the 1970's an equitable distribution of rewards appeared to be the new normal. This was about to change, however, and a new age of increased, and entrenched, inequality was about to begin.

Figure 3. Top Deciles Income Trends from 1913-2008



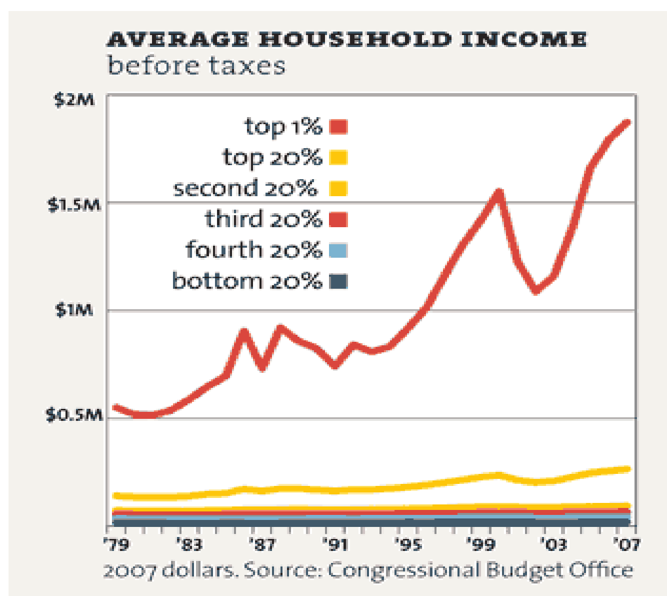
Piketty & Saez (2012)

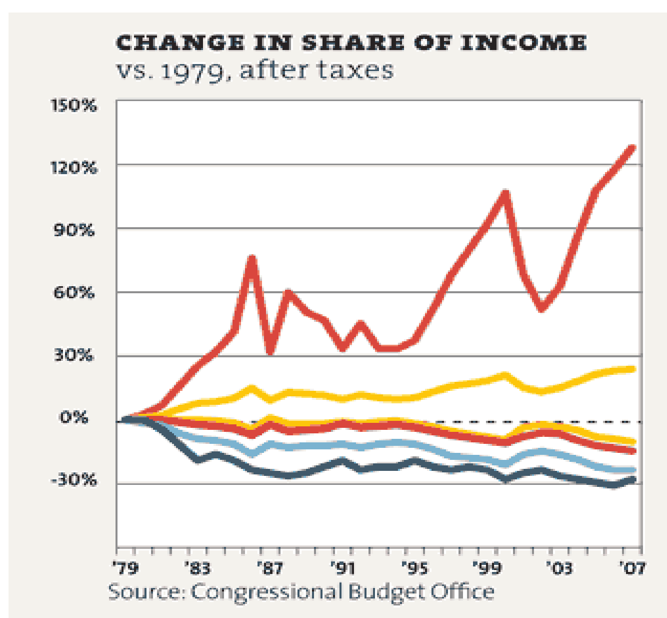
The Great Divide 1980-present

Beginning approximately in 1980, around the time that Ronald Reagan was elected as the 40th President of the United States, the long period of income equality began to disappear. The 1980's ushered in an era of growing income inequality that continues to this day. Income disparity has intensified and washed away the great strides in equality realized in the previous 40 years. Kennedy's rising tide began to leave some boats on the rocks. While U.S. GDP and overall income continued to grow, the rewards of this growth were disproportionately going to the wealthiest Americans (Congressional Budget Office, 2011). Figure 4 illustrates the findings of a Congressional Budget Office (CBO) report that between 1979 and 2007 after tax incomes of the top 1% of households grew at 275%, while the bottom 60% realized gains of almost 40%, and the bottom 10% had income gains during this period of 18% (CBO, 2011). The charts in Figure 4 show

that after taxes and inflation the "gains" at the bottom of the income distribution resulted in real world decreases in purchasing power.

Figure 4. Income Gains 1979-2007



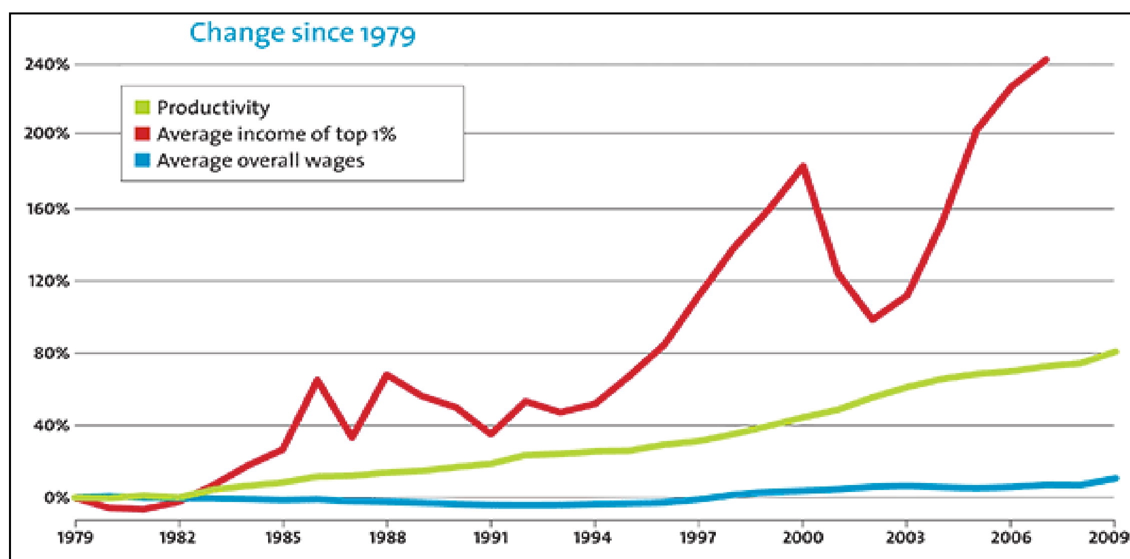


Gilson & Perot (2007)

Current Conditions

The data describing current levels of income inequality in the United States illustrate that inequality is at historic highs and is growing. The rich are getting richer, and possibly more concerning, staying richer, and the poor are getting poorer, and staying poorer. The U.S. economy continues to grow, U.S. workers are increasing their productivity, and real GDP has increased in 15 of the previous 16 quarters (Bureau of Economic Analysis, 2013), but these gains have not been distributed equally. Even with the dramatic slowdown resulting from the 2007-2009 recession productivity per hour has increased from 2000-2010 (Bureau of Labor Statistics, 2013).

Figure 5. Wage/ Productivity Disconnect

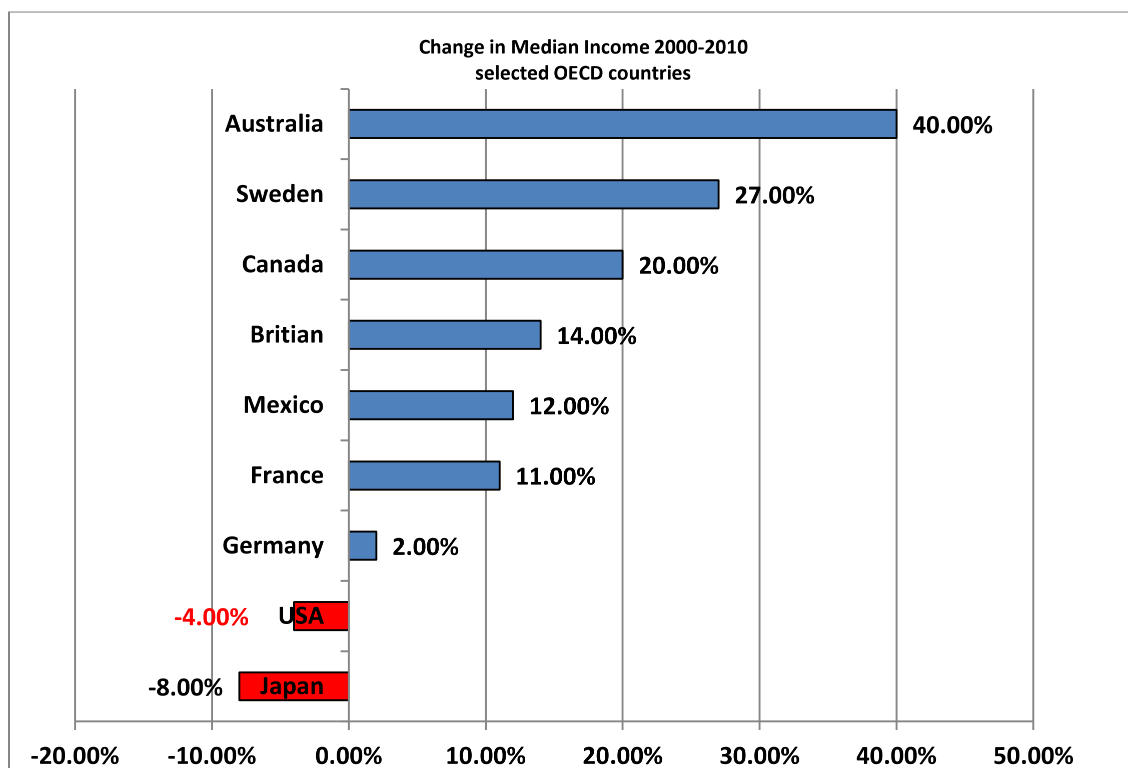


Gilson & Perot (2007)

Since the Recession ended (statistically) in 2009, productivity has accelerated again and the U.S. workforce is continuing its long tradition as the most productive in the world. However, wages have not kept pace with this productivity. The gains from a

more efficient workforce are not going to that workforce and the rewards are overwhelmingly being captured by the top 1% of the income scale. Figure 5 illustrates this disconnect and shows that the historic wage/ productivity bargain began to unravel in the late 1970's. This coincides with the beginning of the "Great Divergence" (Noah, 2012) and the period of growing inequality that continues to this day.

Figure 6. Change in Median Household Incomes 2000-2010



It seems intuitive that a society with a growing GDP and a workforce that is increasing its productivity would enjoy widely distributed economic gains, but this is not the case. Most Americans are not doing better because of the economic expansion occurring in the post-great recession period. In fact, a large percentage of U.S. citizens are actually doing worse. Median household income in the United States has actually

dropped by 1.3% in the short term, from 2010-2011 (U.S. Census, 2013). Long-term trends are no better. A recent report by the Organization of Economic Cooperation and Development (OECD, 2012) illustrated in Figure 6 describes that median incomes have fallen in the U.S. since 2000. U.S. unemployment and poverty rates, two important metrics of economic health, are also at historically elevated levels. Apparently something in the U.S. economy is not working properly. Capitalist orthodoxy proposes that at least some benefits of a rising economic condition will "trickle down" to those in the lower income strata, but this has not happened. Where have all the rewards of this economic expansion gone? Statistical analysis indicates that the overwhelming majority has gone to the very top of America's income scale.

The statistics that illustrate the amount of total national income that the top 1% has captured are incredible. These statistics are delineated by three common periods that illustrate the growing inequality in U.S. income dispersion since the end of the "Great Compression," the period from about 1940 until the Reagan Presidency in 1980. The first period is from 1980 until 2007, followed by the period of the Great Recession, 2007-2009, and then the recovery period of after the Great Recession, 2010-2013. The period 1980-2007 is covered in more detail in the history section of this thesis but this is the time-period where incomes began to diverge dramatically and those in the top 1% began to rapidly distance themselves from the rest of society. Then the Great Recession hit and, similar to the Great Depression, all income groups suffered dramatically. Real family income declined by 17.4% from 2007-2009, and the top income deciles suffered a 36.3% retraction (Saez, 2013). Research explains the drop in top 1% incomes during this period

as primarily resulting from greatly reduced stock and capital gains income (Saez, 2012, Stiglitz, 2012). The strong resurgence of stock prices and corporate profits while real wages were falling for the majority of the workforce greatly exacerbated the divergence of incomes between the top 1% and the rest of society during the post Great Recession recovery period. These two simultaneous trends, the uneven gains captured by the top 1% and the loss of real spending power for the 99% is what created the condition where top 1% income share showed increases of over 100.

Additional analysis reveals more about how much income disparity has accelerated in the post-Great Recession recovery period. The gains to the top 1% are becoming more pronounced as less and less of the rewards for the nation's work is distributed among those who actually perform the work. For example, from 2009-2011 the top .01% has enjoyed income gains 220 times larger than the average gains of the bottom 90%. The top 1% accrued more than 65% of the *increase* in national income in the 2009-2011 periods. Analysis of the latest available data indicates that from 2009-2010 the top 1% gained 93% of all new income (Alvaredo, Atkinson, Piketty & Saez, 2013). This current acceleration is troubling but it is only an alteration of the inequality that has been growing for 30 years. For example, the top 1% captured 80% of the total increase in American income from 1980-2005 (Noah, 2012). An anecdotal example of the vastness of the distance between the very top of America's income strata is the fact that, depending on daily stock fluctuations, the six heirs to the Wal-Mart fortune control as much wealth as the bottom 35-40% of American society (Blodget, 2013).

The general and undeniable trend is that America is a society that is very unequal, and getting less equal each day. While workers have held up their end of the economic / social contract by increasing productivity and creating historically high stock values and corporate profits very little has "trickled down" to them. The middle class is disappearing and the U.S. is in danger of experiencing levels of income inequality historically reserved for failed states and "Banana Republic's." The condition of income inequality in America is that the top 1% began the 21st Century with a major advantage and a very unequal share of income distribution and this situation is rapidly worsening.

This section described the history and current state of income inequality in the U.S. and began to demonstrate the fact that incomes for a very small minority of U.S. citizens are historically unequal. Additionally this inequality is happening at a time when the U.S. workforce is more productive, and corporate profits are growing. The historic socio-economic bargain that promised basic fairness across American society is unraveling.

Chapter Conclusion

This is the current situation faced by this nation, and addressed in this thesis. The remaining chapters of the thesis will generally follow the Bardach (2009) method of analysis. Chapter 2 will be a review of the literature focusing on theories that inform the thinking about income inequality. It will highlight the current state of thinking about what to do about income inequality and the intellectual underpinnings of this thinking. Chapter 3 will review the literature on the most commonly agreed-to strategies for lessening the effects and conditions of income inequality. Chapter 4 will list and explain

decision criteria and the reasoning behind the criteria used to assess my recommendations. It will address the important concerns and trade offs in attempting to mitigate income inequality. Chapter 5 will consist of an outcomes matrix, where the strategies from Chapter 3 will be assessed using the criteria from Chapter 4. Chapter 6 will contain my recommended plan for lessening the magnitude and effects of income inequality informed by the literature review and the results of the outcomes matrix. Chapter 7 will contain a conclusion and suggestions for further research.

Chapter 2

THEORETICAL LITERATURE REVIEW

The focus of this thesis is whether income inequality can be reduced. There is an important distinction between attempts to create a more equitable society over some unachievable utopia. Human life will always have different levels of attainment. It is the extent of current inequality, and the resulting health and social problems, which are the concern for society. The strategies identified in this literature review promote a world that is *fairer*, not completely fair. Even behind Johns Rawls' hypothetical "veil of ignorance," some inequality is inevitable (Sandel, 2009).

This literature review is presented in two chapters. First, in Chapter 2, I present a theoretical review of the most important concepts and ideas that inform positions on income inequality. Then, in Chapter 3, I present a return to the Bardach (2009) process and present a more specific review of alternative strategies, policies and regulations to lessen the condition and effects of income inequality. Chapter 2 informs the reader of the theoretical scope of ideas to equalize either the distribution of income or the effects of current income dispersion in the U.S. Chapter 3 will create a framework for making the subsequent recommendations by presenting and explaining the literature on commonly proposed strategies for promoting greater equality in incomes.

An examination of current income inequality must address redistributive policies because these policies are the method most commonly used by societies around the world to level the economic playing field and increase equity of income. This chapter will concentrate on redistribution and examine the theories that inform the inequality debate.

The first part of the chapter will examine the marginal product theory, followed by a theoretical literature review examining the debate about efficiency and equality in redistribution. This review will address the seminal theories of Okun, Pareto, and Kahldor-Hicks. The efficiency / equity dispute is the philosophic economic foundation for ideas about what to do, or not to do, about income inequality so it is important to grasp the general trend of the foundational theories to better understand this debate. Then the chapter will review the literature about redistributive tax and transfer polices by examining the income, corporate and wealth transfer taxes, the three major taxes that generate revenue for redistribution, and then by inspecting the major transfer programs that allocate this revenue. The chapter will conclude with a review of government programs that are not strictly redistributive but that use government spending to support an overall equalizing effect on income dispersion. This chapter furthers the thesis by building a theoretical foundation of understanding necessary to understand the reasoning for the subsequent recommendations

Marginal Product Theory

People Get What They Deserve

The idea that income inequality is fair and necessary for the proper functioning of a market is an economic philosophy based largely on the marginal product theory (Galbraith, 1998). This theory is the economic foundation for many of the arguments against policies to lessen income inequality. The marginal product theory posits that production determines compensation; therefore, economic rewards are a result of contribution (Colander, 2008; Galbraith, 1998; Hill & Myatt, 2010). However, the

marginal product theory is a hypothetical construct; it is impossible to operationalize in the real world and so it is not an effective reason for accepting inequality.

An important problem with the theory of marginal productivity stems from the difficulty in actually determining how much an individual has actually produced. The idea that personal compensation correspond with individual production, in isolation from others contribution, requires an accurate measurement of individual contribution (Galbraith, 1998). This is impossible in real world conditions. While it is possible to determine how many widgets one worker produced at the end of a widget producing process, it is impossible to determine what that one individual contributed separate from any others involved in the long and interdependent process of production in a modern global economy (Hill & Myatt, 2010). For example, it is impossible to separate the contributions made by the public to protect the property rights of the widget maker, or the contribution of past generations who paid for and built the transportation network utilized to bring the raw material and transport the finished product to market. This is why marginal productivity is not operational or useful in the understanding of income inequality. It is impossible to determine what someone deserves to be compensated if it impossible to know with certainty what they contributed separate from any others (Hill & Myatt, 2010).

Despite much vociferous protestation from conservatives, this is what President Obama was referring to in his now famous (or infamous) remark, “you didn’t build that” (Obama, 2012). President Obama was not denigrating the hard work, ingenuity and sacrifice of successful entrepreneurs, he was pointing out that no one exists, works, or

creates wealth, in isolation; the society we build and maintain has a role and is responsible for providing a tremendous amount of assistance. This is why the idea that people get what they deserve is not applicable. If it is impossible to know what you created, how is it possible to know what you deserve?

Redistribution

The Traditional Government Reponse to Income Inequality - Definition, Justification, and Philosophy

Redistribution is the act of distributing something again in a manner that alters the original arrangement. The practice of redistribution is most often an attempt to transfer economic resources from one group that has the resources, to another group that does not. Historically, economic redistribution is tied to notions of social justice and fairness (Barry, 2011).

Government has a generally accepted role in ameliorating some of the unequal distribution of rewards in a capitalist society (Colander, 2008; Hill & Myatt, 2010). Controversy arises in determining what should be the size and scope of government intervention. There are many tools government can utilize in this effort supported by those that believe in government responsibility to help create and maintain an equitable economic condtion. All Western democracies use redistributive policy to achieve an equalizing effect. Redistributive policy is the subject of the this section.

The idea and practice of wealth and income redistribution has been around at least as long as biblical times. The Bible talks about the Jubilee Year when land was to be redistributed back to the original owners and community (King, 2012; O'Brien, 2012).

Most modern societies have continued the practice of redistribution. The U.S. utilizes redistributive income tax and transfer policy to assist the poor and this helps moderate income inequality (Colander, 2008; DeBacker, Heim, Panousi, Ramanath, & Vidagos, 2013; Franks, 2007; Noah, 2012; Stiglitz, 2012). Research illustrates that these redistributive polices do have a positive effect on lessening the pattern and effects of income inequality (Benner & Pastor, 2012; Noah, 2012 ; Stiglitz, 2012;Wilkinson & Pickett, 2010).

Equity, Efficiency and the Leaky Bucket

Critics of redistributive tax policy propose the idea that this taxation is inefficient and that government attempts at fixing market outcomes create more problems than they repair due to the alteration of incentives and market inefficiencies created by taxation (Miron, 2011; Okun, 1975). The efficiency-equity trade offs citied in opposition to redistributive tax systems propose that attempts to increase equity may result in diminished productivity and a shrinking the total economic pie (Colander, 2008). Okun (1975) authored a seminal work on the efficiency loss incurred by redistributive tax policy that resulted from changes in incentives, the loss of consumer and producer surplus and administrative costs. Okun (1975) equated redistributive policy as a “leaky bucket” that spilled, or wasted, a portion of the resources dedicated to government transfer programs. This metaphor has been used to illustrate the idea that the trade off for more equity is less market efficiency. However the efficiency-equity trade off is theoretical, the empirical evidence to support it has been challenged forcefully and repeatedly (Hill & Myatt, 2010; Lindert, 2004).

Some believers in the efficiency-equity tradeoff support redistributive policy. For example, Okun (1975) proposed a "thought experiment" that would help people decide for themselves the level of efficiency loss a person would accept in a hypothetical government transfer program. Okun (1975) found that under certain circumstances he supported a redistributive policy that resulted in the hypothetical efficiency loss of up to 60% of the money intended for transfer from the wealthy to the less well off. Okun (1975) seemed to believe that even a leaky bucket is better than no bucket at all.

It is possible that there is no substantial loss of efficiency in policies that promote equity (Hill & Myatt, 2010; Lindert, 2004). Research illustrates that more equal societies achieve higher growth, better health, and less violence (Benner & Pastor, 2012; Franks, 2007; Hacker & Lowentheil, 2012; Wilkinson & Pickett, 2010). These are some of the societal goals increased efficiency is meant to enhance. Perhaps it is an increase in equity which leads to an increase in efficiency (White, 2005).

Additionally the criteria of efficiency is not an end social goal (Bromley, 1990; Hill & Myatt, 2010; White, 2005). Efficiency is valued because the efficient allocation of scarce resources leads to optimal outcomes for society. One of those optimal societal outcomes is greater equity, so a preoccupation with a decrease in efficiency should not preclude a societal effort of achieving a more tangible goal, such as increased equity (Fehr, 2006). Additionally there are taxes that increase efficiency. Taxation that reduce externalities enhance efficiency because they properly assign responsibilites (Helbling, 2012). Taxes levied on externalities, like pollution, raise revenue while discouraging

socially harmful behavior and make the people who benefit from an activity responsible for the costs of that activity.

Regardless of the disagreements about the actual lack of empirical evidence to support the extent of the efficiency – equity tradeoff, this idea still persists. The proponents of the efficiency-equity trade off still have significant political power and these concerns will have to be addressed to garner more mainstream popular support to maintain or expand redistributive policy.

Because the efficiency-equity tradeoff is an important concern pertaining to the expansion of resistributive programs it is appropriate to review these ideas. Two of the most important and influential theories that focus on efficiency and inform the efficiency-equity debate and decisions on which economic policy to pursue are the Pareto Optimal and Kahlor-Hicks theories. The next section examines these ideas and their place in the income inequality debate.

Pareto Optimal Efficiency

The concept of efficiency is concerned with the optimal allocation of scarce resources (Colander, 2008). One of the important original theories that developed a principle for determining the efficiency of one policy over another is known as Pareto Optimal (Fuguitt & Wilcox, 1999). Named for Italian economist Vilfredo Pareto, the Pareto Optimal efficiency theory proposes that any policy that makes one person better off and does not make any other person worse off is efficient, or Pareto Optimal, and should be implemented (Colander, 2008; Fuguitt & Wilcox, 1999; Hill & Myatt, 2012; Sen, 1993). A Pareto Optimal condition would therefore be one with complete efficiency

where all resources are utilized at their maximum level because no reallocation of resources could produce more optimal outcomes (Colander, 2008).

Pareto efficient polices are difficult to challenge because they propose to improve someone's condition while doing no harm to any other. Pareto Optimal theory is important to the debate about income inequality because it used to support the view that it is good if rich people keep getting richer as long as poor people do not get poorer because of it (Hill & Myatt, 2010).

However, Pareto Optimal theory fails in properly assessing whether polices are useful for promoting optimal social or economic outcomes. First, the Pareto Optimal theory does not take distribution of rewards into account (Bromley, 1990). A policy is considered Pareto Optimal regardless of the distribution of utility, or income, from which it results (Hill & Myatt, 2010). Therefore, a policy that continues, or accelerates, the uneven distribution of income going to the top of the income scale can be promoted using the Pareto principle because the Pareto idea only takes aggregate gain/loss into account (Colander, 2008). The first chapter of this thesis illustrated that a greatly uneven distribution of incomes does do harm; both those who lose relative economic position, and society as a whole. The Pareto principle lacks sensitivity to distributional equity, which is the idea that the distribution of economic rewards is fair and offers all members of a society an equal chance to capture those rewards (Bird, 2009). This omission is a major shortcoming in the application of the Pareto Optimal theory (Hochman & Rodgers, 1969).

Another shortcoming in the use of the Pareto principle is that policies based on the theory are impossible to develop. Pareto Optimal policy is similar to the conceptualization of truly free markets in mainstream economics; it would be great if it really was possible, but it is not (Colander, 2008). All policies change the status quo and that inevitably harms someone (Colander, 2008; Hill & Myatt, 2010; Hochman & Rodgers, 1969). A rich person getting richer while everyone else stays in the same economic position is not a condition where no one is hurt. Harm results from people experiencing a decrease in relative economic position, so rich people getting richer does damage the rest of society if no one else experiences a corresponding increase in income (Franks, 2007).

These problems in the Pareto theory, the lack of sensitivity to distributional equity, and the fact that Pareto Optimal policies are impossible to develop lead to attempts toward improvement. Two economists in the 1930's have combined efforts and produced the Kahldor-Hicks compensation principle, which they believed solved some of the limitations of the Pareto concept.

Kahldor-Hicks Compensation Principle

As noted above, a true Pareto Optimal policy is unattainable. However, theorists still endeavored to solve the limitations of the policy. The Kahldor-Hicks compensation principle is one of the most important revisions of the Pareto Optimal conceptualization; it is known as the potential Pareto improvement (Bromley, 1990) and became one of the philosophical foundations of the cost- benefit analysis (Fuguitt & Wilcox, 1999). This theory proposes that a policy is efficient and should be promoted if the parties that gain

from it could hypothetically compensate any parties made worse off by the policy (Bromley, 1990; Fuguitt & Wilcox, 1999). This removes the Pareto Optimal requirement that no harm be done. While removing the no-harm condition from the Pareto Optimal theory and adding that winners only need to *hypothetically* compensate losers in a policy outcome makes the Kahldor-Hicks principle actually possible. However, methodological issues make its use controversial and it still disregards dimensions that are vital to good economic policy (Ellerman, 2008, 2009). Ellerman (2008, 2009) famously illustrates the “numeraire” problem of the Kahldor-Hicks principle that makes measurement and comparison of costs and benefits incoherent.

Both the Pareto Optimal and Kahldor-Hicks theories intend to provide a value-free method for determining policy choice by removing equity concerns from attempts to increase efficiency (Bromley, 1990; Ellerman, 2008, 2009). However, the attempt to separate efficiency and equity in decisions of policy is a normative one. Denying, or ignoring, the distributional effects generated by policies is a value-based decision so these theories are not value free (Bromley, 1990). Increasing income inequality does not produce socially optimal outcomes for the reasons already identified in this thesis (Benner & Pastor, 2012; Franks, 2007; Hacker & Lowentheil, 2012; Lindert, 2004; Stiglitz, 2012; Wilkinson & Pickett, 2010). The influence Pareto and Kahldor-Hicks principles hold over decision makers and the public is a challenge to promoters of a more equitable distribution of economic rewards.

Redistributive Tax and Transfer Policy

This section will examine the results that the income tax, corporate tax, and wealth transfer taxes have on income inequality. This is important to the income inequality debate because these taxes generate the majority of revenues used for redistributive policy and attempts to lessen the existing income distribution.

One of the tools government uses to lessen income inequality and its effects is tax and transfer policy (Colander, 2008; Hill& Myatt, 2010; Noah, 2012; Stiglitz, 2012). Tax policy can level the difference in after-tax incomes and provide revenue for transfer policies that reallocate the resources from taxation from those at the top to those at the lower end of the income scale (Fieldhouse, 2013; Hacker & Lowentheil, 2012; OECD, 2012). The transfer of income from the top of the income distribution to those in lower income strata is effective in altering the overall level of inequality (Caron & Repetti, 2013; DeBacker, Heim, Panousi, Ramanath, & Vidagos, 2013; Fieldhouse, 2013). For example, research indicates that in 2007 tax and transfer policies resulted in a 7.2% reduction in the U.S. Gini coefficient score (Linden, 2012).

Progressive Income Tax and Redistribution

The U.S. utilizes a progressive income tax. A progressive tax is one that collects tax amounts based on individual or family income. Tax progressivity means that the more someone makes the higher percentage they pay in tax (Colander, 2008). Progressive income taxes have an effect on income inequality by equalizing differences in after tax incomes (Wu, Perloff, & Golan, 2006). Opponents of redistributive taxation define it as morally unfair and confiscatory (Nozick, 1974; Pethokoukis, 2011). The

opponents of redistributive taxation often point to the theoretical efficiency loss of taxation in general and redistributive taxation in particular, as reasons why such policy should not be implemented (Lemieux, 1995).

Other researchers of the effects of redistributive tax policy support the policy of altering the distribution of economic rewards to promote more equality. Redistributive tax policy is based on some baseline condition of ownership; the term itself refers to a recalibration of some previous state of affairs. Progressive taxation and redistributive policy is simply a change from one state of affairs to another, whether it is fair or not depends on the equity of the original state of things (Barry, 2011). Redistributive policy is also seen as delivering indirect benefits to those whose resources are being reorganized. Because redistribution helps create a better, safer, and healthier society for those at the top of the income scale the resources that are being redistributed do benefit them, and therefore should not be viewed as confiscatory (Barry, 2011; Murphy & Nagel, 2001).

Income tax rates have been analyzed regarding the possibility of the result of market efficiency loss. Researchers have analyzed optimal tax rates to determine which rates generate the most revenue and result in the least market disruption. The debate about the tradeoff between efficiency and equity in income tax rates is not settled, it is still “an open question” (Strom, 2008, p.4). Some research indicates that current tax rates for the top of the income scale are far too low to promote maximum social utility (Fieldhouse, 2013). Studies specify top income tax rates should be well over 50%, possibly as high as 82% (Fieldhouse, 2013; Piketty & Saez, 2012; Stiglitz, 2012). This

would generate much more revenue for any number of programs that could help lessen the effects of income inequality and level the economic playing field for all citizens. There seems to be scant political support for a return to a top rate of 80% (Franko, Tolbert, & Witko, 2013), but some increase is supported by many researchers as minimally disruptive way to raise needed revenue for programs that could lessen the effects of income inequality (Caron & Repetti, 2013; Franks, 2007; Gale & Slemrod, 2001; Noah, 2012; Stiglitz, 2012).

Changes in Tax Progressivity

The U.S. income tax has moved dramatically towards less progressivity since the 1960's (Greenstone & Looney, 2013; Piketty & Saez, 2006). Top marginal rates have dropped from 91% in the 1960's to a current 35% (Piketty & Saez, 2006). Effective marginal tax rates for the top 0.1% of the U.S. income scale have fallen even more sharply and mirror the overall change in income distribution (Fieldhouse, 2013). The result of these changes has been that income tax levels are at historical lows and government tax policy now plays a diminishing role in promoting income equality (Congressional Budget Office, 2011).

Corporate Tax

Taxes paid on corporate profits help ensure that companies, and the people who own them, contribute to the systems they benefit from, including infrastructure, educational and legal systems, and the U.S. military. Corporate taxes also raise revenue that used for programs that help lessen the effects of income inequality. Corporate taxation raises significant revenue for the U.S. but, similar to income tax rates, corporate

tax rates have fallen steadily from a top rate of 53% in 1970 to 35% today (Bowie, Smith, Phillips, & Wamhoff, 2012; Hungerford, 2013; Stiglitz, 2012). Studies show that the corporate tax generates about 10% of U.S. Federal revenue in 2012, down from 30% in the 1970's (Hungerford, 2013).

This is mainly due to changes in the tax code that benefit corporations (Stiglitz, 2012). Some of America's largest and most successful companies pay no effective corporate tax due to complexities in the tax code (National Priorities Project, 2013). General Electric actually has a "negative" tax rate, which means they receive money back from the U.S. taxpayer (Rivlin, 2012). Of the corporations that do pay tax; virtually none actually pay the top rate of 35% (Hoover, 2013). For example, one study identifies 280 profitable companies with profits of $1.35 trillion from 2008-2010 that paid an 18% effective tax rate, about half the top corporate rate of 35% (Bowie, et al., 2012). This resulted in about $230 billion in lost tax revenue (Hoover, 2013).

Additionally, corporate profits are increasingly being used for lobbying efforts that expand the already unequal corporate influence in government and this makes income inequality worse (Stiglitz, 2012). These aforementioned 280 companies also spent about $2 billion on lobbying from 2008-2010 (Bowie, et al., 2012). The condition of historically low corporate tax has exacerbated income inequality because owners of corporate stock are overwhelmingly in the top income classes therefore the lower tax rates unequally benefit those at the top of the income distribution (Noah, 2012; Stiglitz, 2012).

Opponents of corporate taxation cite distortion of incentives as well as the mobile nature of capital in a global economic system where investment will flow to the places with the lower tax rates as reasons they oppose taxes on corporate profits (Cummins, Hassett, & Hubbard, 1996; Norton, 2008; Sherk, 2010). They believe corporate taxes discourage overall investment and create unemployment. Some researchers refute this position, and state there is a lack of actual empirical evidence for these claims (Bowie, et al., 2012; Hungerford, 2013). The evidence indicates that more revenue was previously collected through corporate taxation and corporations still prospered. Taxes on corporate profits helps equalize incomes, both by taxing investment profits that is usually remitted to those in the top income brackets, and providing government revenue that used for programs to lessen the effects of income inequality.

Wealth Transfer Taxes, the Estate Tax

Studies show that the estate tax is an effective method to decrease income inequality (Caron & Repetti, 2013; OECD, 2012; Piketty & Saez, 2013). An estate tax is a tax on property transferred at death (Internal Revenue Service, 2013). Inherited wealth plays a big role in incomes at the top of the income scale. Analysis of the 2012 *Forbes 400* list of the wealthiest Americans indicates that 102 of those 400 inherited their wealth (Caron & Repetti, 2013). Similar to income and corporate taxes, transfer tax rates have been steadily reduced (Piketty & Saez, 2013). Subsequently, the current transfer tax structure has less effect on equalizing income levels than it did previously (Caron & Repetti, 2013).

Major changes in transfer taxation occurred over the last decade. The amount that triggered a tax, called the exemption amount, has increased from $1.5 million in 2004 to $5.25 million in 2013 (Internal Revenue Service, 2013). In other words, estates under $5.25 million do not pay any estate tax. These numbers have risen dramatically since 1977, when the estate tax exemption was about $121,000, or $465,000 in inflation adjusted 2013 dollars (Thurlow, Thurlow & Giachino, 2013; Bureau of Labor Statistics, 2013). As the estate tax exemption has risen, rates have fallen. The top rate in 1977 was 70%, in 2012 it was 40% (Thurlow, Thurlow & Giachino, 2013). These trends have resulted in much less revenue from this tax. Reich (2013) estimates that changes in the estate tax will cost the U.S. $350 billion in 2013 alone, and trillions over the next decade. Other analysis puts the revenue loss from current changes in the estate tax at $1.3 trillion over the next 10 years (Huang, 2009).

Because the estate tax is targeted at the very wealthy, it is highly progressive and affects those with the most ability to pay (Caron & Repetti, 2013; Slemrod & Gale, 2001). Estate taxes are more efficient than taxes that target labor or production because inherited wealth appears to have less robust positive market effects than “earned” income (Caron & Repetti, 2013). Efficiency concerns diminish due to the inevitable nature of death, and the resulting transfers of wealth that occur due to death (Slemrod & Gale, 2001). The thinking that informs this conclusion is that no one wants to die, so bequeaths that take place due to death is largely accidental and provides little or no utility to the benefactor. Therefore taxation of these bequeaths do not diminish the utility of the benefactor (Caron & Repetti, 2013; Gale & Slemrod, 2001).

Traditional economic concerns that increased estate taxes will lead to diminished savings rate and harm small businesses and family farms are not borne out by the research (Gale & Slemrod, 2001; Huang & Frentz, 2013). Recent studies indicate that only 20 small businesses and farms will be subject to the current transfer tax (Huang & Frentz, 2013). A very small portion of estates pays any transfer taxes, so altering rates to produce more revenue and equality would not significantly raise the overall impact to 99.9% of taxpayers (Huang & Frentz, 2013). Research indicates higher estate tax rates also result in increases in charitable giving (Caron & Repetti, 2013).

The previous section illustrates that tax rates have dropped significantly across all the three major tax revenue sources; income, corporate and estate taxes. These tax rate decreases have occurred at the same time that income inequality has become more pronounced and wealth and income have grown exponentially at the very top of the U.S. income distribution. This decrease in tax revenue results in less money for expenditures that can be used to equalize the distribution of income and its outcomes.

Government Expenditure Programs

The government uses a portion of the revenues from taxation for expenditures that contribute to ameliorating income inequality and the resulting effects (Barry, 201; Noah, 2012; Franks, 2007; Stiglitz, 2012; Wilkinson & Pickett, 2010). This next section will explain the role of these programs and the research on their effects by focusing on transfers, or the act of providing resources to the less fortunate. This section will conclude with a brief review of the effects on income inequality that education and infrastructure spending affect. These programs are not transfer programs but they are

included here because they are similar to transfers because they require government expenditure and provide equalizing effects on income distribution.

Government Transfers: Effect on Income Dispersion

The government utilizes transfers to help restore income lost due to an unforeseen circumstance, and to provide a minimal level of financial support for those who have need of it (Betson & Haveman, 1984). Colander (2008) defines transfers as, "payments to individuals that do not involve production" (p.534). Current Federal transfer programs include the Supplemental Nutrition Assistance Program (commonly known as food stamps or SNAP), Temporary Aid to Needy Families (TANF), Social Security, Medicare and Medicaid, among others. Federal spending on transfer programs for low income Americans, not including health care, has averaged about 2.1% of GDP since 1980 (Greenstein & Kogan, 2013).

Transfer programs have been found to be only partially effective in reducing income inequality overall, and their effectiveness appears to be decreasing (Wu, Perloff, & Golan, 2006). In 1979, federal tax and transfers lowered the Gini coefficient between market income and after tax income by approximately 23%, from 0.479 to 0.367. In 2007 these programs affected a 17% Gini decrease from 0.590 to 0.489 (Congressional Budget Office, 2011). Consistent with other measures of income inequality across Western democracies, U.S. transfer amounts are lower and less effective. Comparatively, U.S. transfer programs achieve less average reductions in inequality measured by the Gini coefficient than other OECD countries (Organization of Economic Cooperation and Development, 2011).

This is partially because the distribution of transfers began to shift in 1979 from those at the bottom of the income distribution to those in the middle, or top (Congressional Budget Office, 2011). Programs like Social Security and Medicare/Medicaid, which constitute the majority of transfer payments, overwhelmingly go to the elderly and are not income adjusted so many in the middle and upper income scale receive benefits from these transfer programs (House Budget Committee, 2011). This is partially a result of the amount and intensity of lobbying and other forms of influence utilized by these groups (Lee, 2002).

Criticism of Transfer Programs

Critics of redistributive transfer programs often cite the overall lack of positive family effects and "non trivial" disincentives to work that is associated with government transfer programs (Dixit & Londregan, 1995; Wu, Perloff & Golan, 2006). Wu, et al. (2006) state that Aid for Dependent Children (AFDC) reduces the incentive for some recipients to work because the benefits equal what a low wage job would pay, and that some people may reduce work to meet the income threshold required for inclusion into the program. Research indicates that transfer programs may result in a reduction in average work hours for populations receiving transfer benefits (Danzinger, Haveman, & Plotnick, 1981). However programs such as the Earned Income Tax Credit appear to do a better job of utilizing transfer benefits to achieve improved outcomes for recipients because it rewards and encourages work and enjoys a high participation rate, unlike many other transfer programs (Holt, 2011). Drawbacks of the EITC are that it rewards work but because it does not help the large number of people who do not have any earned

income, it is often a short term fix, it creates a lack of political concern about low wages, and it is plaqued by adminstrative errors (Greenstein & Wancheck, 2011; McMillian, 2007).

Chapter Conclusion

Overall research indicates that government transfer programs have had some success in lessening the effects of income inequality. An important question for the critics of redistributive policies is if they produce sufficient bang for the buck or if they are too inefficient. As previously mentioned, the decision about whether the government should engage in redistributive tax and transfer policy is normative and is based on individual ideas about fairness. While it may be possible to design policies that are more efficient and get more of the resources to those in need, curently these policies are helping people navigate difficult lives and having a positive effect on reducing income inequality (Benner & Pastor, 2012; Noah, 2012; Stiglitz, 2012;Wilkinson & Pickett, 2010).

Income inequality is a controversial topic. The previous section was intended to illustrate the range of theory behind the approaches to income inequality in the literature. The previous section addressed the thinking surrounding the question of whether or not government should do anything about income inequality. The next section returns to the Bardach (2009) approach to analysis and addresses the literature on the alternatives proposed to alter current levels of income dispersion.

Chapter 3

CONSTRUCTING ALTERNATIVES

This chapter continues with Bardach's (2009) eight-step approach to analysis. The first chapter satisfied the first two steps of this process, defining the problem of income inequality in the United States is too great, and presenting the evidence. The initial chapter of this thesis presented evidence that income inequality is real and getting worse and provided supporting research that shows this condition is detrimental to society, even to those at the top of the income scale. U.S. incomes are diverging drastically and this condition corresponds to poor outcomes in health and well-being across all income segments of more unequal societies. The next step in the Bardach (2009) process is constructing the alternatives. This chapter will examine the primary alternative approaches identified in the literature to lessen the current levels of income inequality.

There are two general approaches to the alternatives proposed to lessen income inequality. One approach alters the economic structure in an attempt to decrease the dispersion of incomes; the other approach alters the outcomes of income inequality. This chapter will examine these approaches and an option proposed by Bardach (2009) to let present trends continue and take no action.

Financial regulation commands a major role in the literature concerning attempts to decrease the dispersion of incomes. This is because actions by Wall Street, the banking industry, and the U.S. Federal Reserve are identified as being responsible for a great deal of the current income inequality. This chapter examines the proposed remedies

identified in the literature that change the structural conditions in the financial sector that create and exacerbate inequality. These financial sector remedies are, reinstate the Glass-Steagall Act, break up the "too big to fail" banks, reform the mortgage deduction, change bankruptcy laws, reinstate a more robust estate tax, and re-focus the Federal Reserve Bank on its dual mandate.

Alternatives proposed in the literature and examined in this chapter that lessen the effects of income inequality are campaign finance reform, universal health care, re-unionize the U.S. labor force, and increased investment in education and infrastructure. These outcome oriented alternatives do not focus on the current actual income dispersion but if implemented will lessen some of the consequences of income inequality by creating a more equitable society regardless of income distribution. These alternatives that create more social equity irrespective of income distribution are important because the social costs of income inequality are the main problem with income inequality. If a less-equal society were healthier, more inclusive, educated, and provided more opportunity there would be no issue with a small number of citizens reaping the vast majority of economic rewards. As Chapter 1 of this thesis illustrated this is not the case.

The alternatives examined in this chapter are identified through an extensive review of current research on income inequality. This review of alternatives will begin with the alternative of letting present trends continue, or do nothing. Bardach (2009) proposes this alternative as being relevant in almost any analysis where a recommendation is developed. The option of leaving conditions in the present state is a serious one. There are occasions when implementing change results in less than optimal

outcomes. There is a natural proclivity to action, doing nothing is often the most difficult course. The option to let present trends continue will be examined next.

Let Present Trends Continue - Do Nothing

Bardach (2009) advises in his discussion of alternative construction to always include the opportunity to "let present trends continue," or do nothing other than let natural change take its course (p. 17). This is relevant here because this is the strategy preferred and proposed by many who believe the free market is the most effective and equitable manner to ensure a proper distribution of economic rewards (Feldstein, 1999; Pethokoukis, 2011; Pennington, 2013). They believe that nothing should be, or can be, done about the widely divergent U.S. income dispersion. This is primarily due to strongly held beliefs about the effects of more equality on incentives to achieve, as well as concerns about the negative results of government intervention in the market.

The idea that equality is detrimental to motivation or that deprivation is a factor that creates the necessary desire and effort for economic progress is an assumption of those who think inequality should be resolved by the free market (The Economist, 2013). Government attempts to alter market outcomes to insure more equality are believed to produce negative economic consequences and are bound to fail, and make inequality worse (Lee, 2013). Government can get things wrong and unintended outcomes result from poorly planned or implemented policy. Strategies intended to alter market outcomes such as income distribution, must be well thought out with sensitivity to possible unintended consequences. When government institutes policy, there is always a trade off that must be anticipated (Colander, 2008).

Another argument in favor of "letting present trends continue" is the idea that government intervention in the market usually makes things worse (Sowell, 2008; Woods Jr, 2009). If this were true, it would make sense for government to stay out of the income inequality problem and let the market determine the appropriate income dispersion. However, government has a generally accepted role as the arbiter and guarantor of markets (Colander, 2008; Hill & Myatt, 2012). The idea that a more lassiez-faire economic approach is the best way to organize the market is challenged by those who believe government has failed in its role as referee of the market. Deregulation, especially of the financial industry, has led to a great deal of the current income inequality (Alvaredo, Atkinson, Piketty, & Saez, 2013; Hacker & Lowentheil, 2012; Stiglitz, 2012).

Financial Regulation - Why it Matters

The current state of income inequality in the U.S. has come to the forefront of our social and political discourse around the same time as the great financial crisis and the 2007 economic downturn (Fontevecchia, 2011). It was during this period that actions and practices at Wall Street banks and brokerages came under greater scrutiny from the public. The manner in which Wall Street was conducting its business started to look unfair and dangerous (Lewis, 2011). The outsized bonuses awarded to Wall Street CEO's whose banks were bailed out by taxpayers ignited a strong opposition to those businesses, and their practices (Schwartz, 2011). Wall Street came to symbolize the structural inequities in the U.S. economic system exemplified by the 1% versus 99% construct, and the 99% began to perceive that Wall Street practices and pay were

emblematic of an inequitable system that did not reward success and competition but access to power and influence (Noah, 2012; Stiglitz, 2012).

Researchers disagree about which exact tactics are more vital to alter the income distribution. This is due primarily to what forces they see as being most responsible for the creation, and exacerbation of current income dispersion. Stiglitz (2012) places a large portion of the blame for the current elevated levels of U.S. income inequality on the political influence, business practices and remuneration policies of the financial sector. While there are differences in the interpretation of causal factors, the majority of researchers of income inequality assign culpability to the financial sector (Frank, 2007; Hacker & Lowentheil, 2012; Noah, 2012; Stiglitz, 2012; Wilkinson & Pickett, 2010). Outsized executive pay, rent seeking behavior and the development of opaque financial instruments like collateral debt obligations (CDO's) and derivative trading have led to a Wall Street/Main Street economic and social disconnect (Catlett, 2013; Rasmussen, 2013).

Focusing Event

The public is beginning to pay attention to this situation. Kingdon (2011) advises that a "focusing event" is necessary for a topic to get on the "policy agenda" and into the mainstream of public interest (p. 95). The $2.6 billion awarded to Goldman Sachs employees, and $67.9 million in "performance" bonuses to CEO Lloyd Blankfein alone, in the same year the company received a $10 billion bailout from U.S. taxpayers brought income inequality and the reality of the two Americas into sharp focus (Moore & Harper,

2010). This is a major reason why financial reforms are such a large part of following recommendations for lessening income inequality.

Rent Seeking

Traditional economic theory posits that people benefit according to what they contribute. This entails people creating wealth to be rewarded with wealth (Colander, 2008; Hill & Myatt, 2010). Rent seeking is the practice of making money by capturing someone else's wealth, not by creating wealth (Colander, 2008; Hill & Myatt, 2010; Stiglitz, 2012).

Rent seeking is an important concept in the understanding of the economic and political forces that result in income inequality so a brief explanation is appropriate. The majority of researchers investigating income inequality have concluded that some corporations, such as the banks and the big energy companies, are not contributing commensurate to what they are receiving in return from U.S. society (Franks, 2007; Noah, 2012; Stiglitz, 2012). Additionally there is a sense that these entities are not creating wealth and helping "grow" the economic pie, but using their talents and political influence to transfer the hard-earned rewards of others to themselves. This is classic rent seeking behavior and a distortion of the market that results in economic inefficiencies and exacerbates income inequality (Colander, 2008; Hill & Myatt, 2012; Stiglitz, 2012).

One type of rent seeking behavior is profiting from government largesse. One example of rent seeking is when the U.S. Federal Reserve currently lends money to commercial banks at 0.08% per annum, aptly named the "discount" rate. Banks can take this virtually free money and immediately purchase a 1-year Treasury note that pays the

bank 0.10 % (U.S. Federal Reserve, 2013). That is a 20% profit for doing nothing. It is not hard to get rich when you can do this repeatedly with billions of dollars lent to you free. This is a subsidy to the financial sector paid for by the taxpayers. These transactions provide no social benefit. The discount rate is intended to promote lending to customers to start businesses and invest, but the banks have figured out a way to subvert this intention. This scheme, and others like federal oil and gas leases at discount rates to multi-billion dollar corporations, creates a regressive distribution of income from the majority to the very top of the income scale. This adds to income inequality and is an example of rent seeking behavior (Hill & Myatt, 2010; Stiglitz, 2012). This behavior is contrary to market ideals of fair competition and result in market inefficiencies and a skewed distribution of economic rewards (Colander, 2008; Hill & Myatt, 2012).

Federal Reserve Dual Mandate

Re-calibrating Federal Reserve policy to fulfill its dual mandate would boost employment, especially during a period of low inflation, and is seen as a way to lessen income inequality and help raise millions of Americans out of unemployment and poverty (Frank, 2007; Hacker & Lowentheil, 2012; Matthews, 2012; Noah, 2012; Stiglitz, 2012).

The Federal Reserve Bank was created with a dual mandate. One of the Federal Reserve goals is to contain inflation and promote price stability; the other is to promote full employment (Board of Governors of the Federal Reserve System, 2013). Critics of Federal Reserve policies see an abrogation of this second mandate as Bank has concentrated solely on keeping inflation low.

Regulate Campaign Finance

Campaign finance reform (and a repeal of the *Citizens United* and *Buckley v. Valeo* rulings) is an important step in correcting the imbalances in our political system. These imbalances help create and exacerbate the political and economic separation of the 1% and the rest of society and worsen income inequality (Benner & Pastor; 2012; Hacker & Lowentheil, 2012; Matthews, 2012; Noah, 2012; Stiglitz; 2012). The discount rate example (see *Rent Seeking*, above) is only one of the ways that financial interests have taken advantage of the political system. More accurately, they have shaped the system to their advantage through the political power gained by lobbying, a revolving door between government regulators and Wall Street and the importance of corporate campaign contributions (Johnson & Kwak, 2010; Zingales, 2012). Elected officials are supposed to reflect for the will of "we the people," but increasingly political elites are representing the will of the top 1% (Cilens, 2012). The amount of money needed to win political office is staggering, the 2012 presidential campaign cost $6 billion, up over $1 billion from 2008 (Kane, 2012). This gives unequal power and access to those who can afford to participate in this arena, and leaves the majority out. In a country where Supreme Court Justice Scalia upheld the notion that," money equals speech," coupled with shrinking household income, the danger of the influence of money on our basic democratic rights is a legitimate concern.

Regulate the Banks

Reinstate Glass–Steagall, Limit Risk Taking

There is a growing consensus requiring an alteration of the banking sector is necessary for any meaningful reduction of income inequality to take place (Wilkinson & Pickett, 2010; Noah, 2012; Stiglitz, 2012; Franks, 2007). The ideas for banking reform will reduce income inequality, and make the banking system more fair, transparent and competitive. Tighter regulation of Wall Street practices are listed as a primary approach to financial reform that would lessen income inequality (Noah, 2012; Stiglitz, 2012, Wilkinson & Pickett, 2010; Reich, 2011). These regulations include reestablishing firewalls between depository and investment banks by reinstating some version of the Glass-Steagall Act, raising capital requirments to limit leverage and risk, requiring hedge funds to register with the Securities and Exchange Commisisson, bolster the power of the Financial Protection Bureau, and closing down off shore banking tax havens (Franks, 2007; Noah, 2012; Reich, 2011, 2012; Stiglitz, 2012; Wilkinson & Pickett, 2010).

Break Up "Too Big to Fail" Banks

Finally there is broad consensus that big banks need to be broken up (Franks, 2007; Matthews, 2012; Noah, 2012; Reich 2012, 2013; Stiglitz, 2012; Wilkinson & Pickett, 2010). There is an impressive roster of those who agree to breaking up the big banks including, former FDIC chairs Bair, Bullard and Dudley, the heads of the St. Louis and New York Federal Reseve Banks, Haldene executive director of the Bank of England, previous head of the Federal Reserve Bank Volker, even Purcell and Weil, former CEO's of Morgan Stanley and Citi (Cahoon, 2013). Famously, Alan Greenspan,

a man who many blame for the policies that lead to the current condition of the banks said, “If they’re too big to fail, they’re too big” (McKee & Lanaman, 2009).

These alternatives are accepted by researchers as important in making the U.S. financial system more equitable. A more equitable financial system removes some of the power and influence of insiders, the big banks, and their influence on policy (Hacker & Lowentheil, 2012; Stiglitz, 2012). This would reduce income inequality because part of the tremendous rise of income in the top 1% has come from the way the financial system works to the advantage of the wealthy (Noah, 2012; Stiglitz, 2012). Additionally, reducing the risks that unsafe banking practices will create another economic crisis is important, because economic crisies have had worse long term equity effects for the poor and middle class (Parrott, 2008). Historically the wealthy have rebounded faster, and more completely after financial calamities than the rest of economic society. Regulating anti-competitive practices in the financial sector will level the playing field and create more real equality of opportunity as well (Johnston, 2011).

Reform the Mortgage Deduction

Researchers see the home mortgage deducation as a policy that makes inequality worse because it is a subsidy to wealthy home owners (Stansel & Randazzo, 2011). Currently interest on mortgage debt of up to $1 million can be deducted from a households income tax. These subsidies transfer about $120 billion to home owners each year (Carroll, O'Hare, & Swagel, 2011). The majority of this subsidy goes to households already in the top quintile of earners. Because the mortgage deduction is so entrenched in the pricng of U.S. homes ideas about what to do vary from ending the deduction

immediately (Benner & Pastor, 2013), to a slower winding down (Editors, 2013; Habib, 2013). The exact process would have to be negotiated but there appears to be a consensus forming around the idea of a change in this deduction (Gleckman, 2013; Habib, 2013). This would have a equalizing effect on income disparity by removing a taxpayer subsidy to wealthy home owners.

Bankruptcy Reform

Reform of the bankruptcy system is proposed as an reasonable alternative that will lessen the effects of debt on inequality and allow people to take the chances necessary to move their lives and the economy forward, creating more businesses and jobs (Hacker & Lowentheil, 2012; Stiglitz, 2012; Wilkinson & Pickett, 2010).

One of the consequences of growing income inequality is the explosion of U.S. household debt (Kumhof & Ranciere, 2010). Research by Frank (2007) indicated that as income inequality grows households in the middle class must increase debt to maintain a relative social position. Historically bankruptcy has been a method for households to get a fresh start if they have acquired too much debt through circumstances outside of their control. Bankruptcy laws have been an accepted part of financial systems for thousands of years (Tabb, 1995). Recent changes in bankruptcy laws have made acquiring this fresh start much more difficult, and in some cases impossible (Michon, 2013). Fewer people are allowed to utilize Chapter 7 liquidation of debt and now must use Chapter 13 repayment. These changes also recalibrate the method for determining property values and reduce the amount of allowed income for living expenses protected from bankruptcy (Michon, 2013). This condition adds to the negative effect of income inequality by

making it more difficult for those at the lower end of the income scale to be relieved of crushing debt. There are actual cases of people who cannot afford to declare bankruptcy.

Educational Debt and Student Loans

A great deal of debt is tied to aspirational spending. Reforming student loan policies that could make it possible to discharge student loan debt in bankruptcy would lessen income inequality because student debt is overwhelmingly concentrated at the lower end of the income distribution (Hiltonsmith, 2013). Currently student debt stands at around $1 trillion, and recent research projects this debt could end up costing $4 trillion in lost wealth for those indebted households (Hiltonsmith, 2013). This debt burden is insidious because higher education is seen as a way to lessen income inequality and ensure better long term earning power (Franks, 2007; Hacker & Lowentheil, 2012; Noah, 2012, Stiglitz, 2012; Wilkinson & Pickett, 2010). However this research indicates that a significant portion of this increased earning power will go to finance the debt needed to achieve this level of education. This is a defacto redistribution to the financiers of this debt, traditionally the top of the income scale (O'Neil, 2012). Student loan debt is concentrated among the lower income quintiles. Seventy five percent of Bachelor’s degree earners in families with average incomes of less than $60,000 graduated with student loan debt, while only 48% of those with family incomes of over $100,000 did (Hiltonsmith, 2013). While the Hiltonsmith (2013) study is instructive it does not examine debt in the upper income scale. The study uses family incomes of $100,000 as the top cut off point, so it is difficult to see the exact debt breakdown in the current income distribution. Household income of $100,000 is not even in the top 20% in

the U.S., or the top 25% in Sacramento County, but it is fair to asume this debt level drops rapidly as household income rises (Bureau of Economic Analysis, 2013). The majority of student loan debt can not be discharged through bankruptcy so even in cases of hardship this debt remains a drag on future income. Changes to this part of bankruptcy law could help individuals and require lending institutions to take more responsibility in vetting potential borrowers. Currently the fact that people cannot discharge this debt relieves lenders from performing proper due diligence before lending and creates perverse incentives for banks (Allen, 2010).

Enact Universal Health Care

Bankruptcy laws can discharge some medical bills but medical bankruptcy is a growing problem (Chua & Casot, 2008). Differences in access to high quality healthcare is one of the most nocent problems of income inequality (Wilkinson & Pickett, 2010). Modern healthcare is prohibitively expensive, especially for those at the bottom of the income scale. Lack of access to heathcare exacerbates inequality by consigning less fortunate families to less healthy and prosperous lives (Mukherjee, 2013; Wilkinson & Pickett, 2010). This condition is ameliorated by the next widely cited strategy to lessen the effects of income inequality, enact universal health care. Universal health care is seen as germane to lessening income inequality because it removes an important effect of income differences, the disparity in access to high quality health care (Oxfam International, 2013; Deaton, 2003; Shi, Starfield, Kennedy, & Kawachi, 1999). Medical bankruptcy is rising as a percentage of all bankruptcies, as people lose jobs and employers end the practice of providing health care (Mitchell, 2013; Parker-Pope, 2009).

Universal health care is viewed as a way to end this problem and afford all people access to high quality care (Hacker & Lowentheil, 2012; Noah, 2012; OECD, 2012; Wilkinson & Pickett, 2010).

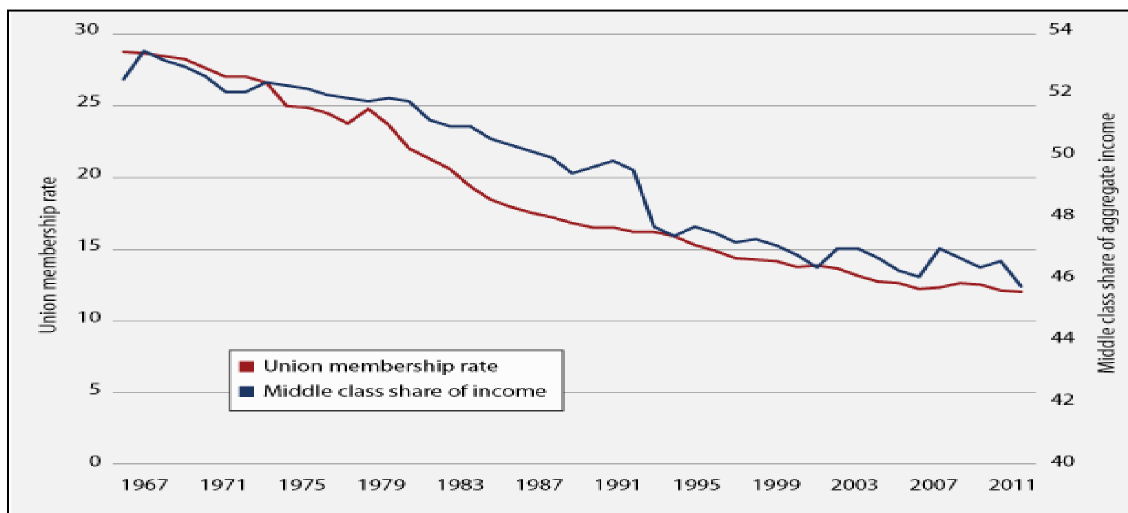
Insecurity about health care has adverse effects on economic decision making and job growth and providing more health security allows people to take more risks, innovate, and create opportunity and allow them to live with less fear of unforseen circumstances (McCardle, 2010; Mohit, 2009).

Re-Unionize U.S. Labor Force

Studies correlate the unionization of workforce with income equality (Franks, 2007; Gordon, 2013; Matthews, 2012; Noah, 2012; Stiglitz, 2012; Wilkinson & Pickett, 2010). These studies indicate income equality moves directly opposite of a society's level of unionized labor. As unionization decreases income inequality increases and vice versa. Unions are viewed as a force that drives wages up across the labor market, even in non-union sectors (Mishel & Walters, 2003). There has been a concerted, and largely successful, effort by conservatives and corporate interests to break union power beginning with the Reagan administrations treatment of air traffic controllers (McCartin, 2011). This effort, coupled with privatization, globalization, the decline of U.S. manufacturing, and "right to work" legislation has resulted a decrease in the percentage of union workers in the U.S. labor force (Fischer, 2010). The U.S. has seen a drop in labor force unionization the from 20.1% in 1983 to 11.3% in 2013 (Bureau of Labor Statistics, 2013). This decrease has had a negative effect on U.S. income equality (Hacker & Lowentheil, 2012; Noah, 2012 ; Stiglitz ,2012). Figure 7 shows the

correlation between labor force unionization and income equality from 1967, when U.S. incomes were most equal, to 2011. This chart represents the percentage share of total U.S. income captured by the middle class, defined as the middle 60% of households (Madland & Bunker, 2012).

Figure 7. Union Membership and Middle Class Income Share



(Madland & Bunker, 2012)

Invest in Education, Especially for the Economically Disadvantaged

Education is one of the factors that enjoy great support as being effective in reducing income disparity (Franks, 2007; Hacker & Lowentheil, 2012; Hiltonsmith, 2013; Matthews, 2012; Noah, 2012; Stiglitz, 2012; Wilkinson & Pickett, 2010). Education is recognized as a path to higher lifetime incomes, and income returns to education are seen as one of the causes of current income dispersion (Franks, 2007; Hacker & Lowentheil, 2012; Matthews, 2012; Noah, 2012; Stiglitz, 2012; Wilkinson & Pickett, 2010). A seminal study by Mincer (1975) was one of the first to demonstrate a

robust quantitative link between education and income. A meta-analysis of 64 empirical studies indicates there is general support for the hypothesis that increased education reduces income inequality in the academic literature (Abdullah, Doucouliagos, & Manning, 2011). The study found that 22.6% of the 64 econometric studies examined found education had a statistically significant equalizing effect on incomes. Conversely, 25.7% of the studies actually indicated education increased income inequality in an statistically significant manner. The authors propose this is due to the fact that education spending in many countires is often allocated toward the middle and upper classes of socieities (Abdullah, Doucouliagos, & Manning, 2011). According to this recent meta analysis, education affects incomes at the very top and bottom of the income distribution, but has little effect on middle class incomes. This may be due to the fact that societies with a large middle class have a higher baseline education level overall and small changes in the income distribution are difficult to attribute to any one factor, including education.

The study reports that variation in the effectiveness in education on altering income distribution may be due to differences in the overall level of economic dvelopement of a country, and that more developed countries have better results attributed to education. Politcal systems are also important and education has more pronounced effect on equalizing incomes in countries with more democratic political systems. The study indicates support for education as a signalling mechanism, or that in a world where people can not know a lot about each other, educational attainment signals that a person has desirable skills and is a indicator of human capital (Wheelan, 2010).

These findings are consistent with other research that indicates education, especially for young children from low income families, can raise lifetime income prospects and create aggreagate improvements in income equality (Mitchell, 2013). Public investment in the nations human capital is needed to reamin competitive and foster the skills needed for people to do the high paying jobs of the next 50 years (Cooper, Hersh, & O'Leary, 2012). The key is to focus education resources towards those at the lower end of the income scale, spending more money on already affluent schools does not appear to have a positve effect on encouraging income equality (De Gregorio, 2002).

Invest in Infrastructure

America's infrastructure is deteriorating rapidly and this condition makes the country less competitve (Alden, 2012), and less equal (Benner & Pastor, 2012). Studies show that improved infrastructure is one of the ways a society can lessen the effects of vast differences in income dispersion by providing efficient, safe and reliable transportation systems for all its citizens, reducing time and transportation costs (Calderon & Serven, 2014). Infrastruture invesments also create jobs at a higher rate than other pubic sector spending, and infrastructure spending creates significant direct, indirect, and induced job creation (Heintz, Pollin, & Garret-Peltier, 2009). Unlike public discontent with other government action, there is widespread support for infrastructure investment. Polls indicate the U.S. public overwhelmingly support increased spending on infrastructure and and large majority have indicated they would pay more in taxes to achieve this (CNN/ORC, 2011; Building America's Future, 2009). Infrastructure investment could be used as an approach where public investment could generate job

growth, promote income equality and build the needed physical plant for a more competitive future.

Chapter Conclusion

This chapter continues the Bardach (2009) process of analysis and presents the most common alternative approaches proposed in the literature to lessen the condition and effects of income inequality. The first chapter was intended to report to the reader of the existence of the problem and the reasons why income inequality is a concern for society. The last two chapters were intended to inform the reader what the literature suggests should be done, and responded to the arguments that nothing should be done. I do not recommend an expansion of redistributive policy in this thesis. Not because they do not work, or because they increase market inefficiencies, but because there are other better approaches that result in more income equality and I believe have a better chance of actually being implemented.

The next chapter will move towards developing specific recommendations by presenting and explaining the criteria I will use to assess the alternatives. These criteria are the most important in assessing and deciding upon the best approaches to lessen the condition and effects of income inequality.

Chapter 4

ASSESSMENT CRITERIA

Criteria judge the potential outcomes of competing alternatives. The choice of alternatives is really a choice about what alternative results in the “best” outcome (Bardach, 2009). The previous chapter illustrated the wide range of alternatives available to alter the condition and effects of income inequality. They all have merit, and choosing between them, or developing other alternatives, depends on the understanding of the problem and individual assumptions about the causes of income inequality. This chapter will list and explain the criteria used to evaluate the outcomes of the alternatives and decide on the recommendations that follow.

Mintrom (2012) posits that the decisions we make about “what to do” convey what we see as important, they are necessarily normative because they flow from the results we hope to achieve. To establish criterion that leads to the hoped for result Bardach (2009) suggests beginning with one overarching goal or objective. This objective intuitively flows from the basic problem statement. The problem this thesis confronts is that income inequality in the U.S. is too great; therefore, the criteria assess the alternatives by their respective projected outcomes on how effective they will be at lessening income disparity. The research, and my understanding of income inequality, has led me to the four criteria that I believe are most essential to assessing the outcome of any proposed recommendations. These are sufficiency, sustainability, least disruptive to market processes, and political acceptability.

Choosing and explaining the decision criteria is important to narrow the focus to a realistic number of alternatives, and to explain the reasoning behind the choice of one alternative over another. The decision about what to do, or not to do, about the current income dispersion will require tradeoffs. Income inequality is a controversial topic; there are disagreements about what outcomes and tradeoffs are most important. As explained in the previous chapter some people believe market efficiency is the top priority, others believe that social and economic equity take precedence. Explicitly indicating the guiding criteria used to decide upon the recommendations will allow critics and supporters of these recommendations to understand the reasoning behind the choices.

Sufficiency means determining if implementation of the alternatives results in a substantial reduction of income inequality. Sustainability determines whether the decrease in inequality resulting from implementation of the alternative will be long term, and if results will persist without constant additional attention and resources. These first two criteria are balanced against the next two; least disruptive to the market, and political feasibility. In other words, an alternative judged as sufficient and sustainable will then be assessed according to the probable effect it will have on the efficient working of the market, and then its respective political feasibility. An alternative that is both sufficient and sustainable but is determined to be too disruptive to the functioning of the market will not be recommended. An alternative that satisfies the initial three criterions will then be assessed by the likelihood of its political acceptance. The implementation of the proposed recommendations will require political action. Therefore, the political probability of their actual implementation is crucial to the assessment process.

Sufficiency

The focus of this thesis is to analyze strategies to lessen either the condition or effects of U. S. income inequality; therefore, the first and most important criterion is sufficiency. Simply put, alternatives are judged by how sufficient the probable outcomes will be in achieving less inequality. This assessment is done by examining the literature and extrapolating the probable results of the proposed policy action. Alternatives that have demonstrated a high probability of success in achieving the overall goal of lessening income inequality will be determined to be superior to alternatives that do not.

Sustainability

The determination of sustainability in this thesis assesses whether an alternative will result in an outcome that will be able make a long term, reduction in income inequality without constant adjustments or additional resources. The outcome must have long-term effectiveness because only decreasing inequality in the short term is inadequate. Changing the trajectory of income inequality will require a degree of effort that is not worth it for a short-term alteration. Similar to sufficiency, the criteria of sustainability will ensure that the recommendations are sensitive to the fact that once implemented they will have to produce positive results.

Least Disruption to Market

Changing the current trajectory of income dispersion will require a market alteration. One of the dangers of governmental recalibration of any market process is that attempts to solve a problem will result in other, more disruptive problems. The recommendations intend to make the market work better, and distribute rewards more

fairly, and evenly. However, damaging effects may arise while attempting an alteration in market rewards.

Government does play a necessary role in promoting and supporting the market (Mintrom, 2012). However, negative unintended consequences are always possible in government market alteration (Colander, 2008). While market efficiency is not the end goal of government action, implementation of policies that have a negative effect on the allocation of scarce resources must be avoided. The goal of the recommendations in this thesis is to make markets work better, by promoting a more equitable distribution of rewards. If these recommendations cause negative unintended consequences it could be that all the work needed to promote and execute them will simply result in trading one bad outcome for another. To avoid any negative outcomes the recommendations are assessed using the lessons from previous research and comparisons of past efforts.

Political Feasibility

This thesis is written during a time of political upheaval. Conflict between political parties has shut down the federal government in 2013, and another shutdown looms. That makes this last criterion, political acceptability, the most troublesome of all. It is difficult to imagine what policy could be politically acceptable to a group of legislators that are willing to suspend the federal government. Regardless, this thesis will attempt to assess the political chances for the recommended alternatives because they will require government action to implement.

It is not responsible to allow income inequality to continue on its current trajectory because a minority group opposes almost any government action. The

previously presented evidence illustrates the danger that the current levels of income inequality pose to everyone, regardless of their economic position or political affiliation. It is possible that this evidence will sway some opponents. Assessing the alternatives by using these criteria will help produce recommendations that are common sense enough to garner some support from foes of government "interference."

All of the judgments made about the outcomes of the alternatives are subjective. It is impossible to know the future. It is possible to make informed assessments about the probable outcomes of action by looking closely at research and experience and using that knowledge to extrapolate the probable outcomes of the respective recommendations. This is the art of analysis. There is no calculator to find the best approach to major issues such as income inequality. The process is complicated, and decisions about what to do are shaped by the viewpoints and biases of each person who examines it. These criteria are guideposts; they are intended to generate a positive strategy for creating an equal distribution of the rewards of the most dynamic economy in the world.

Chapter 5

OUTCOMES MATRIX

This chapter will use the outcomes matrix process suggested by Bardach (2009) to assess the alternatives described in Chapter 3 with the decision criterion described in Chapter 4. First, the alternative will be listed, with a brief restatement, followed by a description of the probable outcomes and tradeoffs, concluding with an assessment of the how well the outcomes satisfies the criterion.

The choice of alternatives outlined in Chapter 3 was informed by the research on income inequality. It is tempting to propose and/or implement all the proposed alternatives. This is not a realistic method. Determining which of the many good alternatives is best is one of the most difficult tasks in policy analysis. The process of deciding between good alternatives is hard because it requires making informed projections about an uncertain future. The outcomes matrix can be used to help make these complex judgments.

Outcomes Matrix Methodology

An outcomes matrix is a process that presents the probable outcomes of each alternative and assesses them according to the decision criterion. Insights and the results from the books, articles, research papers, and studies consulted for this thesis inform the assessment. The outcomes matrix is a grid where the alternatives projected outcomes are in rows and decision criterion are in columns. How well the alternatives outcome satisfies the criteria is presented at the row/column intersection.

Criterion Weights

Properly assessing alternatives according to explicit decision criteria requires weighting the criteria because some criteria may be more important in achieving the desired outcome. This thesis assigns equal weights to each criterion because each criterion is equally important in lessening the conditions and effects of income inequality. Alternatives that fail to meet any of the four criteria would likely not be effective, or have an acceptable probability of implementation. An alternative that has a good chance of being politically acceptable but projects as insufficient or unsustainable will not be useful. Extensive research of the literature concerning income inequality informed the decision to give equal weight to each criterion. The literature contains no specific guidance about which of these criteria are more important. Others may view the criterion weights differently. That is an example of the art of analysis; people can come to different conclusions about the same specifics.

Criterion Measurement Scale

This thesis uses a qualitative interval measurement for the assessment of the alternatives projected outcome. The assessed projected outcome of each alternative is,

- Satisfies Criteria - This measure indicates the projected outcome of the alternative will meet the criteria to a substantial extent.
- Moderately Satisfies Criteria - This measure indicates the projected outcome of the alternative will meet the criteria, but to a modest extent.
- Minimally Satisfies Criteria - This measure indicates the projected outcome of the alternative will meet the criteria, but to a negligible extent.

- Does Not Satisfy - This measure indicates the projected outcome of the alternative completely fails to satisfy the criterion.

Changes in Economic Structure - Financial Regulation

Chapter 3 explained the two general approaches for alternatives to lessen the condition and effects of income inequality. The initial part of the outcomes matrix will assess the probable outcomes resulting from the alternatives that change the economic structure. These alternatives are; financial regulation, reinstate some form of the Glass-Steagall restrictions on depository institutions investment activity, break up “too big to fail” banks, demand the Federal Reserve perform both conditions of its dual mandate, and reform the mortgage deduction.

To paraphrase Chapter 3, financial reform is important to income inequality because financial rules and regulations have helped shape the current system in a way that overwhelmingly benefits the top income scale at the expense of the rest of the nation. The proposed alternatives alter financial rules and regulations in a manner that creates a more even playing field and restores some fairness to a financial system that unevenly benefit the nation’s top bankers, investors and speculators. Previous changes in financial rules and regulations overwhelmingly benefit the 1%, often at the detriment of the 99% (Franks, 2007; Noah, 2012; Stiglitz, 2012). Reinstating Glass-Steagall and breaking up “too big to fail” banks reintroduce safeguards and best practices that enhance the stability and equity of the financial system. This affects income inequality because lower income groups suffer most long term in financial crises like the meltdown of 2008. These regulations also limit the opportunity for the Wall Street investor class to reap immense

gains by betting with other people's money, and other at little or no risk to themselves. This results in Wall Street risk taking as a game of "heads I win, tails you lose" (Dowd, 2009; Noah, 2012).

Alternative #1: Reinstate Glass-Steagall

The Glass-Steagall Act of 1933, or the Banking Act of 1933, mitigated practices in the banking system that contributed to the 1929 bank collapse and lead to the Great Depression. One of the most consequential elements of the Act was a prohibition on banks that accepted deposits being involved in investment banking. This created a firewall between financial institutions that invested, or gambled with people's money and those that held peoples savings. Congress repealed these protections in 1999. Researchers concerned with income inequality have proposed these restrictions be reinstated (Franks, 2007; Noah, 2012; Reich, 2011, 2012; Stiglitz, 2012; Wilkinson & Pickett, 2010).

Probable Outcomes and Trade Offs

Reinstating Glass-Steagall will make the banking system safer and less volitile. Currently banks have less reason to responsibly assess the risks of their investment behavior when using depositor funds. This is because deposits are guaranteed by the Federal Depost Insurance Corporation so depositor money lost by the banks through investments is guaranteed to be paid back by the taxpayers. Therefore banks can gamble depositor money without proper concern. This creates what economists call a moral hazard, a situation where one party is responsible for the interests of another, but has an incentive to put his or her own interests first (Dowd, 2009; Mintrom, 2012). Reinstating

the firewalls between banks that take depositor money, and recieve taxpayer guarantees for that money, and investment banking removes the moral hazard and safeguards the banking system from behavior that threatens it.

The most considerable probable effect of a reinstatement of Glass-Steagall regualtions on income inequality is the way it will alter Wall Street incomes. Wall Street investors have reaped enormous gains in the last 20 years. Making investors put their own money at risk is equitable and reasonable but will likely result in less overall risk taking. Forseeable trade offs of a reinstaement of Glass–Steagall regulations are that the decrease in risk taking will result in some decrease in overall stock market performance and less money for all investors, banks and hedge funds, but also pension funds and indivdual IRA's.

Sufficiency

It is reasonable to expect that reinstating some form of Glass–Steagall would decrease the current level of income dispersion in the long term. Changing the rules to remove taxpayer protection for depository banks from engaging in the same behavior as investment banks would likely reduce the appetite, and rewards for those risks. However this regulation would take time to implement, and banks have armies of highly trained and intelligent experts who would try to circumvent regulation. Therefore this alternative projects as - Minimally Satisfies Criteria.

Sustainability

It is difficult to judge the long term sustainability of financial regulations. Much depends on the political will of regualtors to perform their duties in a conscientious

manner. However using history as a guide the original Glass-Steagall Act lasted for over 60 years (1933-1999) and was in effect during a period of growing income equality and great gains in stock prices, GDP and corporate profits, so the projected outcome of this alternatives sustainability is – Moderately Satisfies Criteria.

Least Disruptive to Market

On its face this alternative should grade poorly on this criterion because the reason for this alternative is to disrupt the current market process. However it is my position that repeal of the Glass-Steagal protections for depositors skewed the market from being fair to being a rigged game where bankers could gamble with depositors money without compunction. Rebuilding the firewalls between investment and deposit banking institutions returns the market to a more truly capitalistic enterprise. For that reason this alternative grades as – Minimally Satisfies Criteria.

Political Feasibility

This alternative grades poorly on this criterion because it is difficult for politicians to regulate the financial sector. Glass-Steagall is not a new idea, it was in effect for over 60 years with good result. However, 155 Democrats and 207 Republicans voted to repeal in 1999. Only 51 Democrats, 5 Republicans and 1 independent voted against repeal (Sanati, 2009). Since then some regulation has been instituted but the votes have been close and illustrate a lack of support for increased financial regulation. The Dodd-Frank bill that created the Consumer Protection Agency was enacted in 2010. This bill was less constrictive on Wall Street practices than Glass-Steagall but was bitterly contested and passed on a mainly party line vote 237 /192 in the House of Representatives, and 60/39 in

the Senate. Considerable lobbying by the financial sector, the revloving door between Wall Street and Washington DC, and a philosphical difference over the role of government and the market are all forces that make the political feasibility of a reinstaement of Glass-Steagall unlikley. This alternative grades as - Does Not Satisfy.

Table 1

Outcomes Matrix- Alternative #1 - Reinstate Glass-Steagall

Alternative	**Criteria #1** ***Sufficiency***	**Criteria #2** ***Sustainability***	**Criteria #3** ***Least Disruptive to Market***	**Criteria #4** ***Political Feasibility***	**Final Assessment**
Reinstate Glass-Steagall	Minimally Satisfies Criteria	Moderately Satisfies Criteria	Minimally Satisfies Criteria	Does Not Satisfy	Minimally Satisfies

Alternative #2: Break Up "Too Big To Fail" Banks

"Too big to fail" banks are widely regarded as a problem for the financial sector, and society (Franks, 2007; Matthews, 2012; Noah, 2012; Reich 2012, 2011; Stiglitz, 2012; Wilkinson & Pickett, 2010). These institutions negatively effect the stability and fairness of the economic system. Breaking up the "too big to fail" banks would influence income inequality by leveling the field for consumers, and contributing to a more competitve market for financial services. This would lower costs for credit and decelerate the upward transfer of resources to the financial investor class. Additionally the "too big to fail" banks are widely believed to be dangerous to mainstream society because it is the common taxpayer who has ulitmately paid the bills for many of the catastrophes created by large, anti competitive institutions (Dudley, 2013; Stiglitz, 2012).

Probable Outcomes and Trade Offs

Trade offs invloved in the break up of “too big to fail” financial institutions are a decrease in scale that allows these institutions to offer certain finanacial services and products to global clients that smaller banks can not (Dudley, 2013). Big banks ostensibly create economies of scale and increased efficiency that would be lost to customers if they were dismantled (Harrison Jr, 2012). There is the chance that ending “too big to fail” banks will only break current big problems up into smaller pieces and not solve the issues of systemic fragility in the modern global financial system (Dudley, 2013). There would also be a direct financial cost to breaking up big banks, and ongoing costs to regulate.

Sufficiency

Breaking “too big to fail” banks could reduce income inequality over the long term by making credit more affordable and reducing some systemic danger to the financial sector. Reducing systemic danger is important to income inequality because research has shown that inequality worsens in the aftermath of financial crises (Franks, 2007; Stiglitz, 2012). However, it is difficult to project how long a breakup of the big banks would take and how long it until the benefits are realized. For these reasons this alternative grades as - Minimally Satisfies Criteria.

Sustainability

The sustainability of this alternative is dependent upon the political will of the people who are responsible for instituting and monitoring the rules of the financial industry. Bank regulation has been enacted previously so there is a precedent. However

current conditions make it less likely that a breakup of the "too big to fail" banks will occur. It is instructive that the banks were not broken up after the financial crash of 2007-08. Since that was not sufficient to compel the break up of the banks it is difficult to imagine a situation that is more persuasive. If the banks are not broken up there is no chance for the sustainability of this alternative. For these reasons this alternative grades as - Does Not Satisfy.

Least Disruptive to Market

Much of the research on income inequality presented in this thesis illustrates that the current processes of the market are creating, or at least contributing to, growing inequality. Therefore, similar to alternative #1, this alternative *intends* to disrupt the market as it is currently constituted. However this disruption should result in a more stable and competitive financial system. This alternative requires a disruption of the market now to reduce the possibility of future, and more disasterous, disruption. For this reason this alternative grades as - Minimally Satisfies Criteria.

Political Feasibility

The fact that the banks were not broken up in the aftermath of the malfeasance of 2007-08 illustrates the political will necessary to break up the banks is lacking. Observers believe that the regulations that were enacted, namely the Dodd-Frank Act, will not be sufficient to dramatically reduce the systemic risk to the financial system posed by the "too big" banks (Edwards, 2013; Rivlin, 2013). The vociferous oppositon to much less dramatic attempts at regulation, like the Consumer Protection Agency, appear to illustrate the too big banks will not be broken up. Actually the trend is in the

opposite direction as recent analysis indicates the too big banks are now bigger than ever (Roberts, 2013). For these reasons this alternative grades as - Does Not Satisfy.

Table 2

Outcomes Matrix- Alternative #2 - Break Up "Too Big To Fail" Banks

Alternative	**Criteria #1** ***Sufficiency***	**Criteria #2** ***Sustainability***	**Criteria #3** ***Least Disruptive to Market***	**Criteria #4** ***Political Feasibility***	**Final Assessment**
Break up Too Big to Fail Banks	Minimally Satisfies Criteria	Does Not Satisfy	Minimally Satisfies Criteria	Does Not Satisfy	Does Not Satisfy

Alternative #3: Recalibrate Federal Reserve Policy to Fullfill its Dual Mandate

The Federal Reserve Bank sets monetary policy for the nation under the Federal Reserve Act. The Federal Reserve Act was amended in 1977 and a dual mandate was added to the responsibilities of the Federal Reseve. This dual mandate required the Federal Reserve Bank to focus on maintaining price stability (keeping inflation in check) and full employment (Federal Reserve Bank of Chicago, 2014). There is evidence that the Federal Reserve is abrogating its responsibility to achieve maximum employment and concentrating almost exclusively on keeping inflation low (Thorton, 2012; Stiglitz, 2012). In the current jobless recovery, and with no signs of rising inflation, the Federal Reserve should perform both parts of its dual mandate and begin to implement policies that can spur price stability and job creation. Unemployment is a driver of income inequality because people without jobs fall behind in income, experience diminished skills that reduce their competitiveness, and often come back into the workforce at lower

wage levels. Using the power of the Federal Reserve Bank solely to keep inflation low primarily benefits the financial sector and invstor class by providing predictability for financial markets (LeBonte, 2013). Rising inflation helps debtors by lowering the real value of future debts.

Probable Outcomes and Trade Offs

In very basic terms monetary policy can keep the money supply tight , keep inflation low and stable and protect investors, or it can increase the money supply resulting in greater liquidity in the market. That increased liquidity "heats things up" in the economy and spurs job creation but can also result in rising inflation. That is the theoretical trade off; policies that spur job creation can result in inflation and policies that tighten money supply keep inflation and job creation low.

Currently inflation has been at relatively low levels, between 1.3 and 3.3% since 1991 (White, 2008). Some economists are actually more concerned about the possibility of deflation (Makin, 2013). Meanwhile unemployment has been historically elevated, especially since the Great Recession of 2007-2008 (Bureau of Labor Statistics, 2014). No responsible person is calling for a policy that would create hyper inflation but Federal Reserve monetary policy could be altered to try to produce job growth even if inflation rose minimally. As mentioned earlier full employment is one of the foundational missions of the Federal Reserve. While too much inflation is bad for an economy, how much is too much is continually up for debate, elevated levels of unemployment also inflict huge economic losses in productivity and efficiency. In 2012 Fed chairman Bernanke agreed, and warned of the severe social consequences of long term growing

unemployment (Cooke, 2010). If the Federal Reserve will not do it, or as some argue, can not do it, the dual mandate should be reviewed, until then they are mandated to try.

Sufficiency

The results of monetary policy are difficult to project. However, there are many who believe Federal Reserve policy could, and should, fullfill the dual mandate (Thorbecke, 2000; Rivlin, 2012; Spicer, 2013; Stiglitz, 2012). If Federal Reserve policy could stimulate employment it should, however even proponents of the dual mandate ae cautious about how much employeemnt monetary policy can generate. Therefore this alternative grades as - Minimally Satisfies Criteria.

Sustainability

Successful monetary policy is a constantly shifting battle against myriad economic forces. While Federal Reserve policy has kept inflation low it has failed to achieve full or even maximum employment since the dual mandate was created. Even if the Federal Reserve concentrated more on promoting employment it is very difficult to imagine that any consequential positive result could be sustainable over the long term. This is primarily due to the complexity of the task and lack of control that monetary policy has over employment. For these reasons this alternative grades as - Does Not Satisfy.

Least Disruptive to Market

Changing monetary policy necessitates the tradeoffs of more inflation for more employment or less employment for less inflation. Markets require stability and certainty; rising inflation does not promote either. The chairperson of the Federal

Reserve has great power over the markets. World markets move on the most ambiguous commentary of the Fed chair. Although unemployment at current levels is as probably as damaging to an economy as a short-term rise in inflation world markets would react, and probably negatively, to a change in Federal Reserve focus. For these reasons this alternative grades as - Minimally Satisfies Criteria.

Political Feasibility

Because of the independence built in to the posts on the Board of the Federal Reserve political feasibility is not an overriding concern for this alternative. The chair of the Federal Reserve serves a relatively long term and enjoys considerable control over Federal Reserve decisions and policy. The President appoints the seven members of the Board of Governors for 14-year terms. From this group the President appoints Governor as the chair for a term of 4 years (Federal Reserve Board, 2003). Many Fed chairs have served numerous 4-year terms. Alan Greenspan served from 1987 until 2006. Federal Reserve chairs have great independence and so if Fed chair Yellen wished to pursue the dual mandate more aggressively she could. Therefore this alternative grades as - Satisfies Criteria.

Table 3

Outcomes Matrix- Alternative #3 - Recalibrate Federal Reserve Policy

Alternative	**Criteria #1** ***Sufficiency***	**Criteria #2** ***Sustainability***	**Criteria #3** ***Least Disruptive to Market***	**Criteria #4** ***Political Feasibility***	**Final Assessment**
Recalibrate Federal Reserve Policy	Minimally Satisfies Criteria	Does Not Satisfy	Minimally Satisfies Criteria	Satisfies Criteria	Minimally Satisfies Criteria

Alternative #4: Reform the Mortgage Deduction

The home mortgage deducation is a policy that makes inequality worse because it is a subsidy that goes primarily to wealthy home owners (Fischer & Huang, 2013; Stansel & Randazzo, 2011). Currently interest on mortgage debt of up to $1 million can be deducted from a households income tax. These subsidies transfer about $120 billion to home owners each year (Carroll, O'Hare, & Swagel, 2011). The majority of this subsidy goes to households already in the top quintile of income earners. In addition the mortgage deduction does not promote home ownership to a substantial extent, the main purpose of the deduction (Fischer & Huang, 2013).

Probable Outcomes and Trade Offs

Proponents of mortgage deduction reform cite the cost of the program, the fact that it appears to be less than effective a promoting home ownership, and the way the deduction encourages household debt as reasons for a change (Fischer & Huang, 2013). Probable outcomes of a change in the mortgage deduction that would prohibit the deduction for second, or third, home, changed the deduction to a tax credit and/or scaled

back the eligible debt limit to $500,000 would be more revenue for the government and a projected minimal effect on home purchasing demand.

Opponents of a change cite the still recovering housing market that does not need any barriers to recovery, no matter how slight. Additionally any change in the deduction would primarily affect lower income homebuyers, and owners, as well as construction workers that could be negatively influenced by a decrease in residential construction.

Sufficiency

A change in the mortgage deduction would eliminate a costly taxpayer subsudy for wealthy home owners. This would have some effect on narrowing income dispersion. However the positive effects could be offset by changes in residential construction and the market for home sales. Therefore, this alternative rates as - Minimally Satisfies Criteria.

Sustainability

The current mortgage deduction has been in effect since the advent of the income tax in 1913. It derived from a basic deduction on any interest paid for any reason (Ritholtz, 2010). This illustrates the sustainability of the deduction. Similarly, any change in the deduction should enjoy the same staying power. There are no strong opponents of the deduction, and many people like it. Therefore, this alternative rates as - Satisfies Criteria.

Least Disruptive to Market

Proponents of a change in the mortgage deduction propose that the people who benefit the most from it do not need it and would not change their economic behavior

regardless (Fischer & Huang, 2013). Opponents cite the possible effects of a change on the housing industry (Vassel, 2013). Some disruption can be projected but it would likley be inconsequential. Therefore this alternative rates as – Moderately Satisfies Criteria.

Political Feasibility

The mortgage deduction enjoys widespread support. A 2013 United Technologies/*National Journal* Congressional Connection poll indicated 61% of respondents characterized the mortgage interest deduction as "very important" (National Association of Home Builders , 2013). While support for a modification of the mortgage deduction is widely supported by members of both parties no actual movement on reform has occurred (Koba, 2013). There is little upside for politicians to face the constituent displeasure that would result from advocating a change in the deduction. Consequently while many think it is a good idea it would likely only be possible if it was included in a larger tax reform package. Tax reform is not currently on the table. Therefore this alternative rates as - Does Not Satisfy.

Table 4

Outcomes Matrix- Alternative #4 – Reform the Mortgage Deduction

Alternative	**Criteria #1** ***Sufficiency***	**Criteria #2** ***Sustainability***	**Criteria #3** ***Least Disruptive to Market***	**Criteria #4** ***Political Feasibility***	**Final Assessment**
Reform the Mortgage Deduction	Minimally Satisfies Criteria	Satisfies Criteria	Moderately Satisfies Criteria	Does Not Satisfy	Minimally Satisfies Criteria

Alternatives that Change the Outcomes of Income Inequality

The first part of this chapter analyzed the alternatives that change the economic structure to lessen the conditon of income inequality. The next part of this chapter will assess how well the the alternatives that change the outcomes of income inequality satisfy the decsion criteria. The alternatives that change the outcomes of income inequality are important because it is very difficult to influence the economic structure of an economy as large and complex as the United States in a manner that appreciably reduces income inequality. Attempting to alter economic systems is an unceratin undertaking and often leads to unintended negative consequences. These alternatives focus on outcomes separate from the economic system that will mitigate some of the most egregious consequences of income inequality. At the end of the day that is what matters most. Concerns about income inequality are not about how rich someone is, or is not. The problem with income inequality is that the great dispersion in incomes is beginning to create a vast difference in the quality of, and the chances for, a great life.

This section will be organized in the same manner as the previous section. The alternative will be breifly explained, then a analysis of outcomes and tradeoffs will be followed by the projected outcomes being assessed according to how well they satisfy the decision criteria. The alternatives examined in this section are universal health care, re-unionize the U.S. labor force, and increased investments in infastructure.

Alternative #5: Universal Health Care

One of the most important cited effects of income inequality is the difference between the health outcomes of people in countries with greater comparitive income

inequality (Wilkinson & Pickett, 2010). There is a considerable difference between the life expectancy, infant mortality, and mental health of people at different ends of the U.S. income scale (Wolfe, 2012). Research on income inequality that centered on health outcomes appeared to indicate more unequal countries had worse overall health outcomes (Wilkinson & Pickett, 2010). Lack of health insurance, and access to routine preventative health care has deleterious effects on people and society. Uninsured people are sicker, and cost more to treat when they finally do become sick enough to avail themselves of medical care (Kaiser Family Foundation, 2013). Universal health care is proposed as a way to mitigate some of these conditions (Hacker & Lowentheil, 2012; Stiglitz, 2012; Wilkinson & Pickett, 2010).

Probable Outcomes and Trade Offs

Outcomes of current (Canadian) universal health coverage include decreased costs and increased overall access to healthcare (McBane, 2009; Nanos, 2009). These positive effects are muted by a comparitively longer wait for doctor visits, elective surgeries and less access to high tech medical devices, such as MRI's. Providing universal health care is expensive and traditionally the costs are assigned to those with the most ability to pay. Universal health care is directly redistributive. Supporting research found that a $1 expenditure on universal health care transmitted about $0.50 to the bottom 40% of earners (Glied, 2008).

Sufficiency

The projected effects on income inequality could be dramatic. Differences in access to healthcare is a substantial effect of difference in income. Leveling this

difference begins to equalize those dissimilarities. Better health across income deciles could level the field between those at the upper and lower levels of the income distribution. Therefore this alternative rates as – Moderately Satisfies Criteria.

Sustainability

The sustainability of universal health care can be assessed by examining support in countries where universal health care has been implemented. Polling indicates overwhemling popular support for public healthcare in Canada with over 85% of respondents providing postitive impressions of their system (McBane, 2009; Nanos, 2009). When universal health care has been instituted public support makes repeal almost impossible. Therefore this alternative rates as – Satisfies Criteria.

Least Disruptive to Market

Universal health care is promoted as delivering better access to healthcare to all members of a society. A healthier society brings a competitive edge compared to less healthy socities. However the disruption to the current U.S. for profit health care system would be immense. This is illustrated by the difficulty in the implementation of the Affordable Care Act. Whole industries are based on charging profit maximizing rates for the care sick people require to live healthy lives. Universal health care would greatly disrupt that system. Therefore this alternative rates as - Does Not Satisfy.

Political Feasibility

The political feasibility of universal health care in the U.S. can be imagined by examining the political upheaval surrounding the implementation of the Affordable Care Act (ACA). Notwithstanding the fact that a very similar plan was promoted by

conservatives and the think tank "The Heritiage Foundation" in the 1990's Republicans intensely oppose the ACA (Reich, 2013). Republicans have actually taken over 50 votes to repeal, defund, or change the ACA since 2011 and are basing a large part of their 2014 mid term election strategy on opposition to the ACA (Parkinson, 2014). It is even unlikely Democrats could agree on such a far reaching program as universal health care. Therefore this alternative rates as - Does Not Satisfy.

Table 5

Outcomes Matrix- Alternative #5 - Universal Health Care

Alternative	**Criteria #1** ***Sufficiency***	**Criteria #2** ***Sustainability***	**Criteria #3** ***Least Disruptive to Market***	**Criteria #4** ***Political Feasibility***	**Final Assessment**
Universal Health Care	Moderately Satisfies Criteria	Satisfies Criteria	Does Not Satisfy	Does Not Satisfy	Does Not Satisfy

Alternative #6 : Re-Unionize Labor Force

The correlation between levels of unionization of the U.S. labor force and growing income inequality are dramatic. The trends of U.S. labor force unionization and percent of total U.S. income going to the top 10% illustrate a reverse mirror image. As unionization has fallen, more and more of the economic rewards have been captured by the top income earners. Many experts have proposed an effort to re unionize the U.S. labor force as a way to reverse the trends of income inequality (Hacker & Lowentheil, 2012; Noah, 2012; Stiglitz, 2012; Wilkinson & Pickett, 2010).

Probable Outcomes and Trade Offs

Unions enjoy a wage premium and tend to raise wages throughout an economy (Gordon, 2012; Hacker & Lowentheil, 2012). An increase in the number of union workers would likely raise wages for some workers. However many of the industries that were heavily unionized, automobile manufacturing for example, face global competition. In those industries union wages result in decreased levels of employment as manufacturers move to regions with more competitive wages. At a very basic level an increase in unionization often leads to less overall jobs. Global competition is not the only factor in the decrease in unionization. Unions also face restrictive legislation such as the Taft-Hartley Act of 1947 (Noah, 2012). Ths law made it much more difficult for unions to organize and is seen as a major limiting factor in the ability of unions to survive.

Sufficiency

History illustrates that the U.S. enjoyed its greatest level of income equality during the apex of union participation. This is an indication that increased levels of unionization are sufficient to alter income distribution. A 2009 study contends that a 10% increase in unionization would result in an increase of about $1,500 per year to an average middle class family (Madland, Walker, & Bunker, 2009). Because the level of unionization is currently low, estimates place current labor force unionization at approximately 10%, it would take a 1% increase in the unionization of the total U.S. labor force to effect the 10% increase that leads to the $1,500 increase. A 1% increase in unionization would require over 1.5 million workers join unions (Bureau of Labor

Statistics, 2014). Therefore it would take a major change in the historical trajectory of unionization to make a substantial difference in income inequality. However if this trajectory was changed an increase in unionization would have a equalizing effect. Therefore this alternative rates as – Moderately Satisfies Criteria.

Sustainability

Unions have been under almost constant pressure since workers coalesced to advocate for more rights and better wages. The political and economic power of corporate interests have always attempted to eliminate, or at least limit, the power and influence of organized labor. It appears that a growing number of Americans have begun to believe that unions are unecessary and/or harmful. Recent polling indicates that 51% of Americans have favorable attitudes toward labor unions (almost an all time low), and 42% (an all time high) had a unfavorable attitude (DeSilver, 2014). These trends, added to the growing power of corporations and anti union lobbying groups make the sustainability of a projected increase in unionization difficult to imagine. Therefore this alternative rates as - Minimally Satisfies Criteria.

Least Disruptive to Market

Economic critiques of organized labor view unions as monopolistic institutions that manipulate the supply of labor causing an artificial shortage. This causes the cost of labor to rise above the equilibrium rate. When finite resources for labor are expended in an anti competitve manner it leaves less for remaining labor needs, resulting in less workers being hired than would be in an truly competitive market (Reynolds, 2008). Economic critiques that support unionization propose that economies with developed

labor relations perform better in the long term, have less labor force disruption, and more social cohesion, resulting in greater productivity (The World Bank , 2003). On balance markets can be profitable in a unionized labor atmosphere, just not as profitable as they would be in an economic condition of no labor organization. The ability of capital to move rapidly across the globe to take advantage of marginally more competitive labor markets makes this alternative troublesome. Therefore this alternative rates as - Minimally Satisfies Criteria.

Political Feasibility

The current climate of anti union legislation in state legislatures such as Wisconsin, Ohio, and Indiana illustrate the political headwinds this alternative faces. Conservatives believe they have followed the example set by President Reagan in his dealings with striking air traffic controllers. However, Reagan only denied the air traffic controllers the right to strike, not to exist (McCartin, 2011). A wide range of state legislation such as “right to work” is attempting to drastically reduce the power of both private and public sector unions. Democratic support for unions has generally not been able to counter conservative anti-union legislation. A re-unionization could happen in the U.S. but it would have to happen with the political parties balancing each other. Therefore this alternative rates as - Minimally Satisfies Criteria.

Table 6

Outcomes Matrix- Alternative #6 - Re-Unionize U.S Labor Force

Alternative	**Criteria #1** ***Sufficiency***	**Criteria #2** ***Sustainability***	**Criteria #3** ***Least Disruptive to Market***	**Criteria #4** ***Political Feasibility***	**Final Assessment**
Re-Unionize US Labor Force	Moderately Satisfies Criteria	Minimally Satisfies Criteria	Minimally Satisfies Criteria	Minimally Satisfies Criteria	Minimally Satisfies Criteria

Alterantive # 7 : Infastructure Investment

Experts have identified infastructure investment as a means of lessening the effects of income inequality because better infastructure benefits lower income groups, and this type of investment creates good middle class jobs, and creates many beneficial indirect and induced economic impacts (Calderon, 2004; Hacker & Lowentheil, 2012; Seneviratne & Sen, 2013; Stiglitz, 2012).

Probable Outcomes and Tradeoffs

At the most basic level an increase in public expenditure lowers the available capital in an economy. The funds required for a major public project, like infastructureinvestment, can not be used for other purposes so less money is available for both private, and public use. Available capital is reduced when the government competes with private business for the funds needed for public investment. A major infastructure program diminishes the ability of private businesses from acquiring investment capital. This could lower economic growth and raise interest rates if capitol and labor are in short supply.

Sufficiency

Many studies have proposed an increase in infastructure spending as a way to lessen income inequality. Infastructure investment diminishes the effects of income inequality by direct, indirect and induced employment and economic activity and because improved infastrucuture helps lower income groups compete in the economic marketplace (Calderon & Serven, 2004 ; Calderon & Chong, 2004). Infastrucuture spending creates short term employment in sectors that pay well including civil engineers, surveyors, heavy equipment operators, welders and others (Bureau of Labor Statistics, 2014). Therefore this alternative rates as – Moderately Satisfies Criteria.

Sustainability

Infastructure spending creates short term direct economic impacts. When the job is finished the impacts withdraw. Some experts believe that infastrucutre spending can stimulate an economy and create indirect and induced benefits that continue on for a period of time. How long benefits continue is a result of the amount of investment and a project's length of time. This alternative rates as - Minimally Satisfies Criteria.

Least Disruptive to Market

Infrastructure investment injects revenue into an economy. This leads to more jobs, and the already mentioned secondary effects. While this spending restricts the money possible for other purposes, infrastructure investment is simulative to an economy, at least in the short term. Infrastructure investment is not economically disruptive at present due to current low interest rates, and availability of underutilized labor. Therefore this alternative rates as – Moderately Satisfies Criteria.

Political Feasibility

The “Moving Ahead in the 21st Century Act” (MAP-21) authorizes federal transportation spending and revenue sources (U.S. Department of Transportation, 2012). MAP-21 expires in 2014 and reauthorization is in doubt. One example of the political opposition to an infrastructure investment increase is the bill proposed by Republican Senator Mike Lee that would drastically cut federal funding of public transportation and slash support for highways by 80% (DeGood, 2014). General concerns about government spending general also animate opposition to an infrastructure investment plan. However, history indicates there has been widespread support for infrastructure investment. For example, the vote that instituted MAP-21 passed with strong majorities in both houses of Congress; 373-52 in the House, 74-19 in the Senate (GovTrack.us, 2012). It is difficult, but not impossible, to anticipate political acceptance of an increase in infrastructure spending substantial enough to alter income inequality. This alternative rates as - Moderately Satisfies Criteria.

Table 7

Outcomes Matrix- Alternative #7 - Infrastructure Investment

Alternative	**Criteria #1** ***Sufficiency***	**Criteria #2** ***Sustainability***	**Criteria #3** ***Least Disruptive to Market***	**Criteria #4** ***Political Feasibility***	**Final Assessment**
Infastrucutre Investment	Moderately Satisfies Criteria	Minimally Satisfies Criteria	Moderately Satisfies Criteria	Minimally Satisfies Criteria	Moderately Satisfies Criteria

Chapter Conclusion

This chapter assessed the alternatives from Chapter 3 with the criteria from Chapter 4 using an outcomes matrix suggested by Bardach (2009). The results are complied in Table 8 (below). For the most part the alternatives fail to satisfy the criteria by themselves. This is not a complete surprise. The literature on income inequality does not envision a one approach solution. Income inequality is complex, and as earlier chapters illustrated, there is disagreement about causes, and solutions This chapter illustrated some of these complexitites. Most of the concerned experts on income inequality accept tht a multi pronged approach is the only way to reverse the economic trends of the last 35 years.

No alternative fully satisfied all of the criteria, some failed to satisfy many of the criteria. This was due primarily to the lack of alternatives judged to be politically acceptable. However, elections have consequences and this condition could change if voters make income inequality a priority. Nevertheless, one of the alternatives, investing in infastrucuture, did satisfy all the criteria successfully. Because this alternative most successfully satsfied the stringent criteria it will be used as the cornerstone for the thesis recommendation presented in the next chapter.

Table 8

Final Outcomes Matrix

Alternative	**Criteria #1** ***Sufficiency***	**Criteria #2** ***Sustainability***	**Criteria #3** ***Least Disruptive to Market***	**Criteria #4** ***Political Feasibility***	**Final Assessment**
Re-Instate Glass-Steagall	Minimally Satisfies Criteria	Moderately Satisfies Criteria	Minimally Satisfies Criteria	Does Not Satisfy	Minimally Satisfies
Break up Too Big to Fail Banks	Minimally Satisfies Criteria	Does Not Satisfy	Minimally Satisfies Criteria	Does Not Satisfy	Does Not Satisfy
Recalibrate Federal Reserve Policy	Minimally Satisfies Criteria	Does Not Satisfy	Minimally Satisfies Criteria	Satisfies Criteria	Minimally Satisfies Criteria
Reform the Mortgage Deduction	Minimally Satisfies Criteria	Satisfies Criteria	Moderately Satisfies Criteria	Does Not Satisfy	Minimally Satisfies Criteria
Universal Health Care	Moderately Satisfies Criteria	Satisfies Criteria	Does Not Satisfy	Does Not Satisfy	Does Not Satisfy
Re Unionize US Labor Force	Moderately Satisfies Criteria	Minimally Satisfies Criteria	Minimally Satisfies Criteria	Minimally Satisfies Criteria	Minimally Satisfies Criteria
Infastructure Investment	Moderately Satisfies Criteria	Minimally Satisfies Criteria	Moderately Satisfies Criteria	Minimally Satisfies Criteria	Moderately Satisfies Criteria

Chapter 6

RECOMMENDATIONS

The first chapter of this thesis defined the problem, in this case, current U.S. income inequality is too great, and presented evidence of the existence and magnitude of the problem. Chapter 2 presented a literature review of the foundational concepts that inform ideas about what, if anything can or should be done to lessen the condition and effects of income inequality. Chapter 3 presented a literature review of the most widely accepted alternatives to improve the condition and lessen the effects of income inequality. Chapter 4 listed and explained the criteria used to decide which of the alternative recommendations is implemented. Chapter 5 used the outcomes matrix process suggested by Bardach (2009) to assess the alternatives described in Chapter 3 with the decision criterion described in Chapter 4. The Chapter 6 of this thesis continues the general process of Criteria Alternative Matrix (CAM) analysis suggested by Munger (2000) and Bardach (2009).

Chapter 7 offers a specific recommendation to lessen the condition and effects of income inequality and explain how the recommended alternatives satisfy the decision criteria. This is accomplished by projecting the probable outcomes of implementation of the recommendations. Bardach (2009) suggests this outcome projection phase of analysis requires facing the practical realities of a policy. This phase is more art than science, and requires the analyst to acknowledge and be watchful for undue optimism in proposing a policy option. Projecting outcomes of policy recommendations is an attempt at discerning the future, and is subsequently uncertain, problematic and susceptible to

strong disagreement. There is no way to prove with complete certainty that the policy recommendations will achieve what you hope they will. That is why any policy should be thought out as completely as possible and offered with humility. Following Bardach's (2009) process helps protect analysis from some errors but there are no guarantees. I present the recommendations of this thesis in this spirit.

The remaining sections of this final chapter are organized in the following way; first, a description of the recalibration of the estate tax, which is the revenue-generating portion of the recommended plan, will be offered. That will be followed by a description of the infrastructure investment component, which is the spending portion of the proposal. The chapter will conclude with an assessment of the recommendations suitability in regards to the decision criteria.

Recommendations

How They Were Developed

The proposed recommendations were developed and decided upon after a comprehensive review of the research on the probable causes and effects of the current income distribution, followed by a review of the most widely proposed corrective proposals and strategies. Assessment of this information was completed in the outcomes matrix form Chapter 5. Policy proposals were examined and judged for suitability in relation to the criteria explained in the previous chapter (sufficiency, sustainability, least disruptive to market processes, and political feasibility). This is the best way to devise a plan that will narrow the growing difference in U.S. incomes. This chapter will present

the recommendation, explain it, and then provide my judgment about the respective suitability.

Recommendation: Recalibrate Estate Tax Rates to 2000 Levels

Raise $1Trillion in Revenue in 10 Years

Those who inherit or receive income through inheritance pay estate taxes. In the United States, these estate tax rates have been falling rapidly in the last 25 years (Caron & Repetti, 2013; Huang & Frentz, 2013). This has had an effect on the enormous growth of incomes at the very top of the income distribution (Stiglitz, 2012). Based upon the research offered earlier in this thesis, I recommend a return to the estate tax rates in effect in the year 2000. This requires the exemption, or the amount where no tax is due, be returned to $1.75 million, from $5.25 million today, and tax rates would revert to a scale with a top rate of 55%. Research indicates this could generate an additional $1 trillion in the next 10 years (Huang & Frentz, 2013; Reich, 2011). Analysis of a similar estate tax proposal from 2006 that called for a $2 million exemption and a top rate of 46% revealed that about one in two hundred estates would be subject to any tax at all under that program (Aron-Dine & Friedman, 2006). The recommended plan with a $1.75 million exemption ($3.5 million per couple) and 55% top rate would capture slightly more estates and revenue than those 2006 report levels but will still result in a small number of inheritances owing any tax at all. The Tax Policy Center estimated that an estate tax with a $1 million exemption would result in 115,000 estates filing and 52,000 owing some tax in 2013 (Rohaly & Lim, 2011). Approximately 2.5 million Americans expire each year,

therefore, about 2% of those deaths bequeath inheritances large enough to be subject to the estate tax (Petz, 2013).

This change is fair. Transfer taxation is equitable because the recipients have no merit-based claim on the revenue. Inheritance is a windfall; no one can claim a right to it because they had no active role in its acquisition. The act of receiving an inheritance or major gift is good fortune. No one can choose his or her parents, or grandparents, therefore inheritance is a matter of pure coincidence. This program does not take anyone's inheritance. The exemption guarantees that $1.75 million dollars can be transferred with no tax paid. For those that are fortunate enough to receive an inheritance of over $1.75 million, the rates are progressive, which means that the tax rate is dependent upon the inheritance amount. The more someone receives, over the $1.75 million exemption, the higher percentage is assessed, up to the maximum rate of 55%. In other words, a person receiving a $50 million dollar inheritance would pay no tax on the first $1.75 million and then be subject to a gradually increasing rate up to the 55% threshold. Even at the top rate that inheritance would be at least $23.5 million ($1.75 exemption, and 45% of the remaining $48.25 million). A $50 million estate may appear fantastic however analysis of estate tax tables reveal that there are about 900 estates worth an about $65 million on average in each year from 2002-2013 (Internal Revenue Service, 2013).

This tax is in the middle range of historical estate tax rates. Transfer tax rates have been much higher at other times. Since the advent of a permanent estate tax exemptions have fluctuated from $50,000 (unadjusted) to the current high of $5.25

million and top rates have varied from above 80% to a current 35% (Caron & Repetti, 2013; Slemrod & Gale, 2001; Tabarrok, 2000).

This thesis recommends the recalibration of estate tax rates to raise the revenue needed for the plan because it is fair, because current rates are at historically low levels, because the estate tax generates the most revenue with the least disruption of the three main governmental revenue sources and the tax has a relatively stable revenue stream. As described earlier, this revenue will be dedicated to a long-term U.S. infrastructure investment program. The next section describes this infrastructure investment and projects the anticipated direct, indirect, induced and employment results.

Recommendation: Invest $1 Trillion Estate Tax Revenue

Rebuild U.S. Infrastructure

The next step in the recommended plan is to invest the $1 trillion generated by the estate tax increase to rebuild U.S. infrastructure. This part of the plan both reduces income inequality and provides direct benefits to the people who will pay for it. Traditional redistributive tax schemes are criticized for providing little direct benefit to those who pay the tax. Revenue generated for redistributive programs is commonly passed on as cash or in kind benefits to those less fortunate. While these benefit programs do achieve indirect and communitarian benefits to the more affluent taxpayers they are seen by some as confiscatory because the revenue they provide is used primarily for others. The plan proposed in this thesis assuages that concern because the revenue generated will go to infrastructure investment, not to direct benefits to those in need.

The amount of revenue dedicated to this project will also allow for a robust

training and apprenticeship program. Part of the final plan must include dedicated funding to create opportunities for unemployed and lower income individuals to receive training and experience in the relevant occupations. The respective state welfare to work and unemployment departments can recruit and identify qualified applicants. A minimum level of minority participation must be included in this project in order for the maximum community benefits to be realized. Where possible American- made and produced materials should be used to complete this project. This will enhance the indirect and induced economic effects of this project.

The U.S. Needs Investment in Infrastructure

U.S. infrastructure (roads, bridges, airports, ports, rail systems and energy grid) is deteriorating to a critical condition. In a widely circulated 2013 report, the American Society of Civil Engineers (ASCE) examined the current state of U.S. infrastructure and concluded that the shortfall between needed and expected funding for infrastructure would be approximately $1.1 trillion over the next 10 years. This is almost exactly the amount projected raised by the recommended estate tax recalibration.

Some who say more spending is needed, and those who call for less spending have challenged the $1.1 trillion shortfall amount proposed by the ASCE. A 2011 report from the New America Foundation calls for a $1.2 trillion infrastructure investment over five years (Albert, Hockett, & Roubini, 2011). Conversely, critics of increased infrastructure spending appear to be both focused on a dislike of government spending in general, added to annoyance over some famously over-budget infrastructure projects like the “bridge to nowhere.” (Lowry, 2008; Smith, 2011). Although critics of an increase in

infrastructure spending correctly cite troubling examples of wasteful spending and cost overruns on some projects, like Boston's "Big Dig," a massive 15-year infrastructure project that is estimated to have run more than $1 billion over budget, few appear to think that U.S. infrastructure is in good condition (Boston Globe, 2014).

Stringent oversight must accompany this project to assure the resources allocated for this are spent in the most efficient manner possible. Best practices in project management must be employed for each individual project, and must be consistently monitored at each geographical level, local, state, regional and national. A panel of experts from the government and private sector should be convened to vet each project for need, efficacy and cost-benefit. Complete transparency must accompany this project and the public must be able to access budgets, timelines and actual progress reports of every project that is undertaken. Every construction project, regardless of size, and complexity is subject to some setbacks and occasional unforeseen contingencies but this project must endeavor to meet the highest possible standards for openness, integrity and responsibility.

Most every concerned party recognizes something must be done to rebuild U.S. infrastructure and in this case, I think it is prudent to accept the assessment of the ASCE even with their natural bias toward increased infrastructure investment. Therefore, this thesis accepts the ASCE infrastructure cost estimates of need for investment of approximately $1.12 trillion over 10 years.

Infrastructure Benefits All Income Groups

This plan is fair because infrastructure investment also benefits the wealthy. Infrastructure is more valuable to the wealthy because they utilize and depend more on transportation networks than those who are not wealthy. Upper income Americans fly more than those in the lower- and middle-class so improved airports will benefit them directly and to a greater degree. In addition, improved infrastructure will lower business transportation costs. Because businesses owners, and the stockowners of those businesses, are overwhelmingly in higher income brackets, this plan will pay them additional dividends. At a personal level it costs a lot more to repair a Mercedes damaged by a pothole than it does a Ford, so improved roads and bridges will directly benefit the wealthy that will be asked to contribute the resources for this program.

Infrastructure and Income Inequality

More Good Jobs, Businesses that are More Competitive; Less Inequality

Infrastructure investment will have a positive effect on equalizing U.S. income distribution by creating good paying jobs that can't be outsourced, many of them unionized, and by lowering costs of distribution, making U.S. businesses more competitive and profitable. A competitive advantage boosted by modern infrastructure that creates profitable and competitive businesses can be expected to employ more workers. This infrastructure project creates demand in the labor market and should result in more jobs and higher wages. One of the conditions that exacerbated income inequality is the disappearance of middle-income jobs, especially in construction and manufacturing (Department of the Treasury & Council of Economic Advisors, 2012; Kotkin, 2013).

Infrastructure investment predominantly employs workers from these hardest hit industry sectors. A large number of these jobs were union jobs or paid wages similar to union wages. Chapters 1 and 3 detailed research that showed job losses in unionized employment overwhelmingly hurt middle class earners and worsened income inequality (Gordon, 2012; Hacker & Lowentheil; Noah, Stiglitz, 2012). Infrastructure investment in general can have a positive effect on reversing that trend (Department of the Treasury, et al., 2012).

Infrastructure and jobs

What can be expected

This thesis contends that an infrastructure investment program will create enough jobs and economic activity to lessen income inequality. I examined and considered other impact estimate claims to develop a probable range of employment and economic ripple effects of the recommended infrastructure spending. I examined the 2009 report on ARRA job creation from the President's Council on Economic Advisors, a working paper from Wilson (2011) that analyzes job growth resulting from the 2009 American Recovery and Reinvestment Act (ARRA), a report on job creation from transportation infrastructure investment by the Federal Highway Administration and Political Economy Research Institute (PERI) at University of Massachusetts, Amhearst, and my own IMPLAN analysis of employment and economic impacts.

Input-Output Analysis

These estimates were developed using input-output analysis. Input-output analysis tracks the ripple effect of an economic activity throughout an economy. This is

done by producing a multiplier index that describes and measures the outcome of an economic activity. Economic outcomes are expressed as direct, indirect, and induced impacts. Direct impacts measure economic results directly related to a primary activity. In the case of infrastructure, direct impacts would include labor, the people hired to do the work, materials and supplies purchased to build or repair the roads and bridges, steel, concrete, equipment, etc. as well as capital costs. Indirect impacts are secondary. They would include the labor and raw materials purchased by the suppliers of the materials, equipment builders and salespeople, etc. that would be needed specifically for the infrastructure projects. Induced effects are a step further away from the primary activity. Induced economic activity would include the individual household level spending of the workers made possible by the wages from the infrastructure improvement project.

I modeled the direct, indirect, and induced multiplier effects of a $100 billion annual infrastructure investment on employment, economic output and taxation using IMPLAN modeling software. IMPLAN is a software program that performs economic modeling of varying complexity. In this case, I used the program for a very basic employment and economic effects modeling query. The methodology was simple; I input $100 million in public infrastructure spending and received the IMPLAN impact results, to calculate impacts of $100 billion spending each value would be multiplied by 1,000 (IMPLAN does not calculate impacts for spending $100 billion). The IMPLAN calculation projected direct employment output at 898 jobs, indirect employments output at 380 jobs and induced employment at 687, resulting in a total of 1,965 jobs created for

each $100 million. This would result in 1,965,000 jobs created for a $100 billion infrastructure investment. This is a substantial employment effect.

Input-output economic modeling is controversial and relies on imperfect economic assumptions and in this case attempts to derive a cumulative national average of regional and local results. However IMPLAN modeling results have been accepted by U.S. courts and a wide range of economic forecasters (University of Wisconsin Center for Cooperatives, 2009). Assessing impacts of such a large amount of spending on a national scale is imprecise but it can be instructive to develop a range of projected outcomes. IMPLAN input-output economic modeling is only one of the sources consulted for assessing the impact of a $100 billion annual infrastructure investment plan.

Comparative Analysis of Average Jobs Created Estimates Range

A report from the President's Council of Economic Advisors (2009) estimates employment impact of $100 billion of direct ARRA government infrastructure spending to be 1,085,355 job years, meaning that 1,085,355 full year jobs are created by that level of investment. Analysis from the Political Economy Research Institute (PERI) at University of Massachusetts, Amhearst, posits $1 billion of infastrucuture spending results in 18,000 jobs (Heintz, Pollin, & Garret-Peltier, 2009).This results in 1,800,000 jobs for a $100 billion infastrucuture investment. The Federal Highway Administration reported a projection of 27,800 jobs created for each $1 billion in federal transportation infastructure spending (U.S. Department of Transportation- Federal Highway Administration, 2012), this projects to 2,780,000 jobs, a total that is far outside the range suppoted in other studies. The Bureau of Labor Statistice (BLS) provides the tables used

in their employment projections on their website. These tables do not differentiate infastructure from other types of construction, but nevertheless indicate 11,768 jobs are directly and indirectly dependent on $1 billion in general construction spending (Levine, 2009). Table 9 shows the range of employment estimates between the different analyses. To arrive at a reasonable employment estimate using these analyses I removed the highest, 2,780,000 from the Federal Highway Adminsistration, and the lowest, 1,085,355 from the President's Council of Economic Advisors and then averaged the remaining estimates. This results in an estimate of direct, indirect, and induced employemnt of 1,647,267 per year for each of the 10 years of the $100 billion investment. This is a substanitial number and would make an important contribution ot alleviating the current unequal U.S. income dispersion.

Table 9

Job Creation Comparison

	Jobs per $1 billion investment	**Jobs per $100 billion investment**
Authors IMPLAN projections	19,650	1,965,000
Council of Economic Advisors	10,854	1,085,355
Political Economic Research Institute	18,000	1,800,000
Federal Highway Administration	27,800	2,780,000
Bureau of Labor Statistics	11,768	1,176,800
Average	17,614	1,761,431
Average with highest and lowest estimates removed	**16,473**	**1,647,267**

This section of the chapter explained the recommended estate tax and infrastructure investment plan. The next section assesses the recommended plan in regards to the decision criteria explained in Chapter 4. This assessment will be done by judging the projected outcomes with the criteria, sufficiency, sustainability, least disruptive to market processes, and political feasibility.

Sufficiency

This plan is not a panacea, but it is sufficient to lessen the conditions and effects of income inequality. The recommendations proposed in this thesis will not end income inequality. Nevertheless, this plan is satisfies the sufficiency criteria because it constitutes a positive and substantial first step in recalibrating the current income distribution by creating mid wage jobs that will help rebuild America's middle class and the training and apprenticeship component will lift many families out of the lower economic strata .

This plan is not the only necessary approach; current programs should be continued and if possible expanded. Nevertheless, this plan generates and invests approximately $100 billion a year for a ten-year period, an amount extensive enough to meet the sufficiency criteria.

Sustainability

This plan is sustainable because once the rates are set they will remain in effect indefinitely. No additional resources would be needed to continue the tax portion of the plan. Some tax plans are not sustainable because behavior can be altered to reduce the amount exposed to the tax. For instance revenue from capital gains taxation is difficult to

project because people may change their market behavior in response. People may wait to sell stocks or real estate to avoid paying capital gains taxes. This makes the revenue from these taxes unstable over the long term. Transfer taxation does not face this problem. People cannot postpone their death to avoid these taxes. This makes revenue from these taxes sustainable because death rates are relatively consistent and constant.

There is legitimate concern over what effect an increase in the estate tax may have on individual work and investment behavior. People may work or save less to avoid taxation, or find other ways to transfer income before their death, and this will reduce the revenue generated by the estate tax. Research by the Congressional Budget Office (2005) indicates actual behavior does not support, or refute, those concerns and that although some may work and save less to avoid taxation at death some may work and save more to offset the taxes. Why people work and save is too complicated and individually determined to accurately predict at this level. The estate tax is not new and past behavior indicates that while some may change their economic behavior many will not, the revenue and number of estates subject to the estate tax has remained relatively stable (Internal Revenue Service, 2013).

Least Disruptive to Market

There are arguments that propose that any taxation is disruptive to market processes. In the most simplistic economic rationale this is accurate. Money that is taxed is not used as it would be if it was not taxed and this creates a theoretical inefficiency. However, research has indicated that estate or transfer taxes are much less disruptive to the overall economy than most other types of taxation (Caron & Repetti, 2013; Slemrod

& Gale, 2001). Caron & Repetti (2013) found that inherited income has a greater effect in worsening inequality than self-generated wealth. Gale & Slemrod (2001) found that commonly raised concerns about the estate taxes negative effect on reducing savings, charitable donations and small businesses " lack definitive supporting evidence and in some cases appear to be grossly overstated" (p.61). Therefore, of the other commonly proposed revenue sources, income and corporate taxation, transfer taxes are the least disruptive to market processes.

Political Feasibility

As mentioned in Chapter 4 satisfying this criterion is extremely challenging. Imagining politically acceptable options is difficult in a world where one political party is willing to shut down the federal government in protest over policy. In this case the criteria will be defined as answering the question what policy is likely *more* acceptable.

Political opposition to this plan can be expected due to philosophical differences about the size and role of government. Conservatives routinely oppose any program they view as increasing the size and scope of a government they view as too large and expensive. These political disagreements are often founded in a core set of beliefs about the efficacy of the market to redress imbalances and create a more equitable society. Concerns about the size of current U.S. deficits also drive opposition to a spending plan of this magnitude. Long standing opposition to any tax increase and cries of "death tax" will be renewed if this plan was attempted. It would be difficult for many conservative members of Congress to support this plan even if they agree with it due to "Tea Party" challenges from inside their party.

These are seriously held concerns that are outside the scope of this thesis to counter fully. Briefly, the quarrel about the size and scope of government will not be settled here, or possibly anywhere. This thesis takes the position that government has a necessary and vital role in ameliorating this situation and if the market could remedy the conditions of income inequality and failing infrastructure it would already be done. The concern about deficits is serious, however allowing the physical plant the U.S. needs to maintain competiveness in global market to deteriorate to save money now is shortsighted and unwise because repair will ultimately cost much more in the future. The U.S. should take advantage of historically low interest rates and invest now.

Apart from philosophical political differences, there are disagreements about the actual need for an infrastructure spending plan. Critics of an increase in Federal infrastructure spending doubt that the need is as great as the ASCE claims. If this concern is accurate and less repair is needed then less repair should be done. It would be a positive development if rebuilding American infrastructure costs less than projected by the ASCE. This thesis does not recommend wasting money on projects that are unnecessary or frivolous. This recommendation will require vetting by a panel of professional engineers from the private and public sector to assure that resources are allocated to needed projects.

Regardless, this proposal satisfies the criterion because it possible to realistically imagine an increase in transfer taxes could generate some support when coupled with the infrastructure spending plan. Opposition could come from the fact that currently over 50% of representatives in Congress are millionaires, the median income for members of

Congress in $1,008,767, and these people may not want to subject themselves to an increase in estate taxation (Lipton, 2014).

The recommendations have been devised to offer both primary and secondary benefits. The revenue piece of the plan, a recalibration of estate tax rates, helps alleviate income inequality in two ways. First, a recalibration of the estate tax regime that reintroduces taxation levels in effect in 2000 will achieve a diminution, albeit small, of incomes for those at the very top of the income scale. This change in estate tax rates will have a small effect on equalizing overall income distribution (Caron & Repetti, 2013). The major effect of this revenue on promoting a more equitable income distribution will be realized when it is used to invest in a badly needed major U.S. infrastructure program. This infrastructure investment will create good high paying jobs, create significant direct, indirect and induced economic growth, and help U.S. businesses to be more competitive in the world marketplace. All of these outcomes will make the U.S. a more equitable and prosperous place.

This infrastructure investment plan will be effective in reducing the growing unequal income distribution because it attacks one of the main problems of growing inequality, the disappearance of the middle class. The large infrastructure investment program proposed in this thesis will create hundreds of thousands of good paying jobs that support middle class lifestyles. Because the middle class sector of the economy is responsible for the vast majority of consumer spending the economic ripple effect of this employment is exponential.

The recommendations are explained individually, however, they must be combined and they are only likely to produce the projected outcomes if they are implemented together. This is a unified plan, one portion raises revenue and the other invests it in a way that will have a multiplier effect on economic growth, creating high wage employment and expanding the middle class, which will bring incomes across the economy closer.

Chapter Conclusion

This chapter presents and explains the recommended plan devised to begin to lessen income inequality in the U.S. This plan is a novel integrated approach, which generates revenue by recalibrating the estate tax rates to 2000 levels and using the projected $1 trillion in revenue on a much-needed infrastructure-rebuilding program. This plan attacks income inequality in a number of ways. First, the estate tax recalibration will alter incomes at the very top of the income distribution, and then invest the revenue creating over a million good mid range jobs in industry sectors that have seen major recent job losses. The jobs themselves will alter the income distribution by helping rebuild the middle class, and providing a substantial economic multiplier effect that will reverberate throughout the economy.

Thesis Conclusion

This thesis has covered a lot of ground because income inequality is a complicated and controversial topic. The Bardach (2009) methodology is ideal for developing understanding of, analyzing, and communicating, topics like this. I wanted this thesis to be an examination of income inequality but also a subject primer. It was my

hope that the reader would come away with a more global understanding of the issue, not just an explanation of a technical piece of the puzzle. The first chapter presented the problem statement, in this thesis, "current U.S. income inequality is too great." The remaining portion of that first chapter presented the evidence I believe makes this case. While income inequality itself is contentious, the economic research is beginning to be widely accepted, and this research indicates that incomes of a small group of Americans are separating rapidly and considerably from the rest of U.S. society. The debate comes from what, if anything can, or should be, done about it.

This question drove the second and third chapters of this thesis where I reviewed the literature surrounding the normative aspects of income inequality. The second chapter, a review of the main economic theories that shape approaches to income inequality was a diversion from the traditional literature review. I took this approach because the debate about what to do, if anything, about income distribution is rooted in basic belief about how economies work, and what role government has in mitigating distributional issues. To understand the topic of income inequality it is vital to grasp the foundational theories held by people who agree income inequality is a problem but also those who think it is not a problem. To be fair I also wanted to address the thinking of those who think income inequality is a problem but believe an unregulated "free" market is the best way to mitigate the problem. However, economic theory indicates that markets are not free, they are created and regulated by people, and in the case of income inequality, it seems markets are currently constructed to overwhelmingly favor those at the top of the income scale. I agree that markets must be part of the solution to income

inequality but the idea that free markets can create more fairness is based on folklore, not economics. The regulation of markets has led to the current condition of vast inequality; therefore, markets can be altered to engender more distributional equity.

Chapter 3 was a review of the literature on alternative approaches to lessening the condition and effects of income inequality. This follows Bardach's (2009) next step to develop alternatives. This chapter explained and examined the many alternatives presented in the literature. Chapter 4 listed, explained, and presented the rationale for the decision criteria. Chapter 5 presented an outcome matrix suggested by Bardach (2009) as an assessment tool that evaluated the alternatives using the decision criteria. Chapter 6 used the assessment of alternatives from Chapter 5 and presented a recommendation plan that could begin to change the trajectory of U.S. income inequality towards a more equitable and equal distribution of economic rewards.

Future Research

As stated previously income inequality is a contentious subject. Part of the disagreement about the topic is philosophical; some people believe inequality is good because it provides motivation to strive, and achieve, some think that even if incomes are diverging too much there is not anything government can do to mitigate the problem. These positions are deeply held and may not be subject to significant alteration. However, some of the debate about income inequality comes from the lack of data. Much of the empirical research done on income inequality was not developed for the purpose of investigating income dispersion. A large amount the data is anecdotal; some is too broad to establish causation. This needs to change. It was the establishment and

analysis of the top income database from Piketty and Saez that really began the income inequality debate when they showed the great divergence in incomes using IRS tax data . More precise data must be collected and analyzed to determine exactly how incomes are diverging. Longitudinal data sets must be developed to illustrate whether or not intergenerational income mobility is constricting or whether the "American Dream" is still a possibility for the majority.

The social costs of income inequality require more research. Income inequality appears to be creating a vicious cycle where social trust is eroding and creating a less communitarian, and trusting society. When people lose trust in each other society can devolve to a Darwinist survival of the fittest struggle. Democracy and democratic society is dependent upon people working together. If people begin to view society as a rigged game that only benefits the already powerful and wealthy social capital is diminished and social norms begin to break down. The diminishing belief in society results decreased participation. Decreasing participation results in less voting. Less voting from ordinary citizen's results in overwhelming political and economic influence going to the wealthy. This creates anger, frustration and apathy in the general public and that reinforces the vicious cycle.

It will be difficult to address income inequality until there is a common acceptance that a greatly skewed income distribution it is bad for everyone, rich and poor. Research and data need to be developed to convey the actual condition and consequences of income inequality. Often research can indicate solutions, and solutions do exist. I tried to present many of them in this thesis. If both wealthy and not wealthy understand

that a vastly unequal society is a detriment to all then change can begin. The historical arc of Western civilization is a movement towards greater equality. Our society has determined inequality is unjust and unproductive in regards to race, gender, ethnicity, sexual orientations, and many other human attributes. This has made our society better, more efficient, and productive. Western society is as free, as equal and as productive as any time in history. This is because equality is the best way to order a society. When people are free and respected they feel valued and are more able to freely contribute to the social order. In my opinion income inequality will one day be viewed similar to racial and ethnic equality. Society cannot function properly in conditions of great inequality of any type. The more equal a society, the more productive, successful and lasting, for rich, middle class, and poor alike.

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