Social Security 2.0:"The Great Compromise"

The following white paper was written by BWFA interns, Andrew Cade, Jake Canfield, Cameron Marino, Annie Shi, and Steven Stanislav, as part of a culminating summer research project. The first premise of this assignment was for the students to truly understand the problem and solve it in a way that improves the lives of every American. Second, make the solution non-partisan and non-political. What we believe you will find, is that this novel approach will help every American take part in the American dream.

THE CURRENT SYSTEM

The Social Security Act of 1935 was signed into law by President Franklin D. Roosevelt to provide a long-term benefit payment to retired American workers. In 1956, an expansion of the system was established to support citizens with disabilities. These payments are funded by payroll taxes that are then used to pay those who are eligible to collect Social Security benefits. Currently, Social Security pins public health and wellbeing as a societal responsibility, as the system is progressive by nature, meaning that workers with lower incomes enjoy a higher ratio of benefits to payroll taxes paid. Overall, the necessity of Social Security is clear: it is the main source of money for some retirees and the disabled, allowing them to continue receiving an income after retirement.

THE KEY ISSUES—AND OUR PROPOSAL

Today, 85 years since the inception of Social Security, the same system is in place—but with clear flaws.

- There is more money being taken out of the Social Security Trust Fund than there is being deposited, largely attributed to the diminishing ratio of workers to beneficiaries.
 Consequently, the Social Security Trust Fund is expected to be depleted in its entirety by 2037.
- Since the 1930s, life expectancies have increased significantly. Initially, Social Security
 was constructed as a "safety net" for those with lower incomes that happened to live
 beyond the lifespan; however, today, more Americans than ever are surviving for decades
 post-retirement, and there are insufficient funds in the Social Security Trust Fund to
 provide for such benefits.
- The sheer number of people receiving Social Security benefits is increasing; according to the Social Security Administration, 90% of retirees today receive Social Security benefits, as opposed to only 69% of retirees in 1962.

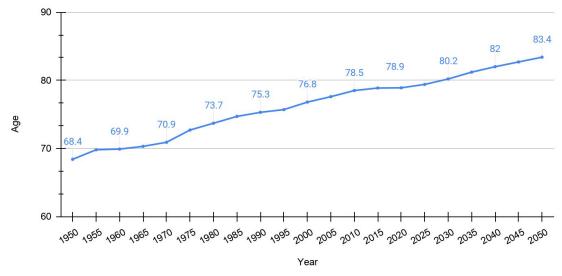
Given the outdated nature of the system, there has been significant debate surrounding the future of Social Security, and what possible changes could be made. Our solution, which will be explored throughout the remainder of this paper, is to adjust the current Social Security system to one that is market-weighted. It will allow Social Security funds to grow as long-term investments in the domestic markets and give American workers control and choice in funding their retirement.

THE FACTS OF THE MATTER

At the core, the current crisis is that there is more money being taken out of the Social Security Trust Fund than there is being deposited. As life expectancy increases, more retirees require benefits to sustain them, and there is simply a shortage of funds to make those payments.

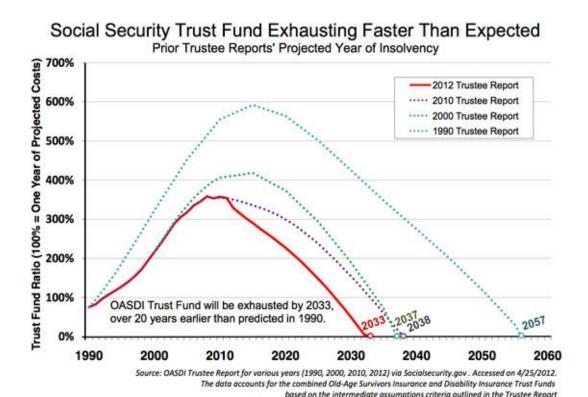
Today, 97% of those aged 60 to 89 have received or will receive some sort of Social Security benefit. However, when Social Security was established 85 years ago, the average life expectancy of humans was a mere 61 years, compared to today's much higher life expectancy of 79 years. As technology and healthcare advance in capability, efficiency, and accessibility, people can live much longer—which, for most, is certainly a positive fact, but in the case of Social Security, this presents a hurdle.





¹ "Policy Basics: Top Ten Facts about Social Security." *Center on Budget and Policy Priorities*, 14 Aug. 2019, <u>URL</u>

The famous Baby Boomer generation of those born between 1946-1964 are reaching the age of retirement, and retirees typically begin taking Social Security benefits between the ages of 62-70. By 2031, the US population over the age of 65 will be about 75 million, nearly double what it was in 2008², and consequently, the Social Security Trust Fund is expected to be depleted due to increased life expectancy and the gradual retirement of the baby boomer generation. As the name suggests, the huge "boom" of babies born between these years are now ready to retire, and the sheer volume of people requesting Social Security benefits will deplete the available funds rapidly; in fact, the worker-to-beneficiary ratio is projected to fall from 2.8-1 to as low as 2.1-1 by 2035.³

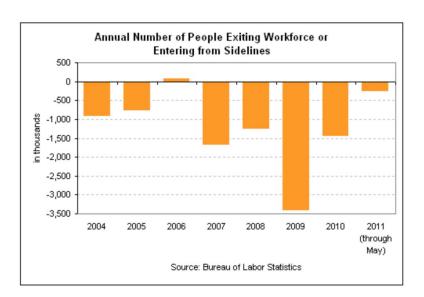


² "What Retiring Baby Boomers Mean for the Economy." smartasset, 09 Dec. 2019, URL.

Produced by: Veronique de Rugy, Mercatus Center at George Mason University

³ Williams, Sean. "The 4 Biggest Problems Facing Social Security." *The Motley Fool*, The Motley Fool, 27 Aug. 2016, <u>URL</u>.

This means that those who are currently around the ages of 40-50 years old may not be able to receive the benefits of Social Security during their retirement years, despite having been paying into the system for years. This is because more people are exiting the workforce than there are entering. Between 2004 and 2011, the number of people exiting the workforce was significant, as can be seen in the chart below. The negative trend of the graph indicates a shrinking workforce, and not only is the size of the workforce contracting, the population growth is outgrowing the workforce. With regards to the Social Security Trust Fund, this depletion is of great concern for those approaching retirement: without enough people entering the workforce, there will not be enough support to fund the benefits of older generations.

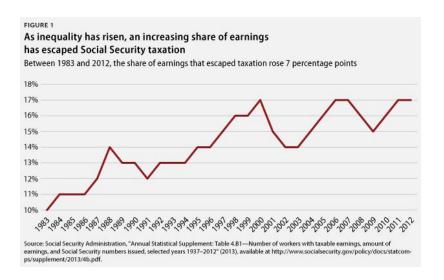


Notably, the current Social Security system has a capped wage base that tax payments are applied to, but the amount of workers earning above this base continues to increase. Although

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⁴ Indiviglio, Daniel. "Chart of the Day: Americans Exiting and Entering the Workforce." *The Atlantic*, Atlantic Media Company, 3 June 2011, URL.

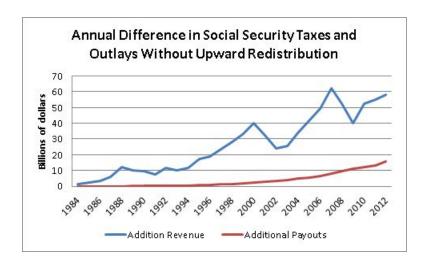
the maximum taxable income increases as well— for instance, the cap increased from \$132,900 to \$137,700 between 2019-2020 — the number of wealthy Americans and therefore the amount of money that escapes Social Security taxation is rising disproportionally against the cap increase.



The issue here is that as the United States experiences an upward redistribution of income, more and more dollars become exempt from the Social Security payroll tax. In the last three decades, for instance, the nation's earnings subject to the payroll tax has decreased from 90% to 83%. Meanwhile, lower-income workers are expecting higher and higher benefits due to the progressive nature of the system.

⁵ Rebecca Vallas, Christian E. Weller. "The Effect of Rising Inequality on Social Security." *Center for American Progress*, URL.

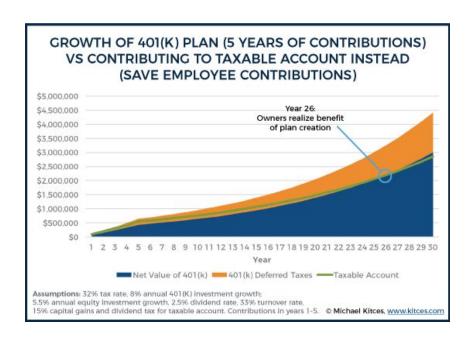
⁶ Mhl. "Prepare For The Coming Attack On Social Security." *Reports from the Economic Front*, 24 Feb. 2017, URL.



EXPLORING REFORM: THE MARKET-WEIGHTED APPROACH

As of April 2020, the 75-year actuarial deficit of the Social Security Trust Fund is about \$5.1 trillion, a daunting monetary deficit to overcome. There have been several different arguments for what a reformed Social Security system could look like, and what the benefits and consequences of each might be. These arguments range from abandoning the system altogether, raising the earnings cap, or simply increasing the payroll tax.

However, while the aforementioned proposals may be feasible, the most notable solution with the greatest potential lies in the idea of a market-weighted Social Security system, similar to the functionality of a 401(k) plan. In this new, time-appropriate approach to reforming the outdated system, participants can invest their Social Security deposits into the United States economy, which eliminates the previous fixed income system and instead replaces it with one that is market-weighted and allows investments to grow. While this growth may occur over several decades—potentially 20, 30, or 40 years — there are many benefits to this system, the most obvious being the fund's capacity to grow.

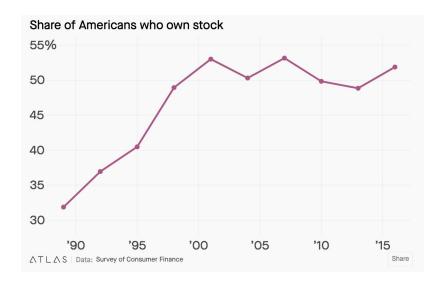


In August of 1950, the Dow Jones Industrial Average (DJIA) was approximately 943. Since then, the market's industrial average has increased rather steadily, coming in at 26,643 as of August 13, 2020. Over this 70-year time frame, the DJIA has risen by 1,184%. As projected, the market is still rapidly increasing, which then causes the continual growth in the DJIA. By the year 2040, the DJIA is projected to hit 116,200⁷, and this could be made all the more possible with a market-weighted Social Security system.⁸

Such growth is not only beneficial for those who partake in a Social Security plan, but it would also serve as a tremendous push for the US economy as a whole. As of 2020, only about 55% of Americans invest in the stock market, although there is an upward trend in the number of investors over the last twenty years.

⁷Jaffe, Chuck. "Dow 20,000 Shows Why a 21-Year-Old Forecast for Dow 116,200 in 2040 Still Makes Sense." *MarketWatch*, MarketWatch, 26 Dec. 2016, <u>URL.</u>

^{8 &}quot;Dow Jones - DJIA - 100 Year Historical Chart." MacroTrends, URL.



Most notably, there was a sharp rise in the popularity of stock market investing from 1990 to 1995, which is likely attributed to the fact that 401(k) plans became popular during that period of time. If a revitalized Social Security plan were to act similarly to a 401(k) plan by giving participants more options as to how to finance their future retirements, it is expected that the popularity of stock market investing would continue its upward trend, which has many benefits. According to a study by the National Bureau of Economic Research, when the market is up, shareholders are inclined to spend more; specifically, for every dollar of stock market wealth created, people spend an average of 2.8 cents more per year. This could serve as a huge boost to the economy, as unemployment rates may decrease and workers may receive higher wages. Furthermore, if more people own shares of the market, then when the market is up, more

⁹ Schrager, Allison. "More Americans than Ever Own Stock." Quartz, Quartz, 5 Sept. 2019, URL.

¹⁰ Chodorow-Reich, Gabriel, et al. "Stock Market Wealth and the Real Economy: A Local Labor Market Approach." *NBER*, 14 June 2019, <u>URL</u>.

401(k) plans allow workers to invest their money into the market, but in a relatively limited fashion. With the market-weighted Social Security system, one could have more access and freedom to domestic investment opportunities and asset classes. This would naturally be made possible if there were a greater demand for shares in the market. With so many new participants in a stock market that already has most of its stocks sold, this increase in demand would drive up share prices, incentivizing companies to potentially increase the number of shares outstanding.

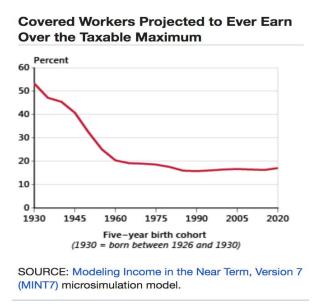
To account for such a high volume of share demand, utilizing the Wilshire 5000¹¹ would be most logical in this new market-weighted Social Security plan to give the most option and access to the market. Participants in this market-based plan would have the liberty of choosing their own investments within the Wilshire 5000. An expansion of investment opportunities would allow the economy to continue to grow, as increasing numbers of Americans choose to invest in the stock market.

By giving people exposure to the market, as part of the market-based investment plan, we would decrease the risk and increase the potential returns on the investments. The variety would also allow this plan to cater to a wide range of people, from younger, low-income workers just entering the job market to older, wealthier workers approaching the early stages of retirement.

On the matter of wage differences, it is important to note that the current Social Security system has a taxable income maximum of \$137,700. However, about 20% of current and future covered workers are projected to earn more than the taxable wage base maximum at some point, according to the Social Security Administration. 12

¹² "Social Security Administration." Population Profile: Taxable Maximum Earners, URL.

¹¹ Wilshire 5000 Total Market Index. URL.



Yearly, about 6% of all covered workers have earnings above the taxable maximum income.



SOURCE: Social Security Administration, Annual Statistical Supplement 2013, Table 4.B1.

Currently, for the 2020 75-year projection period, the actuarial deficit of the Social Security Trust Fund is about 3.21%; in other words, taxes would need to increase by 3.21% to erase the deficit. This is an unfavorable and generally unpopular solution, and it is therefore logical to approach the issue in a different manner.

THE GREAT COMPROMISE

Our solution to the decreasing amount of reserves in the Social Security Trust Fund is to gradually switch to a market-weighted approach. The general structure of this system, with more details further in the paper, would be as such:

- Those workers aged 55+ earning annual wages above \$100,000 will be subject to reductions on the amount of Social Security benefits they receive. Specifics on this will be elaborated upon in a later section.
- Throughout a period of about 30-40 years, the Social Security benefits that this group of workers would have received are being gradually reallocated towards the younger generations who would subsequently invest their Social Security payments into the market, where the money can grow. This is similar to the workings of a 401(k) plan.
- The older group will not participate in the new market-based Social Security plan;
 instead, the contributions that these people are making to the younger generations would grant them tax deductions.

With this market-based Social Security system, people have increased choice in their ability to fund their retirement. There will no longer be one large, stagnant pool of Social Security money acting like a checking account, under the current system. This will be replaced by individual retirement accounts for each beneficiary with an opportunity within each account for the benefit amount to grow over several decades as it is invested into the market.

A concern that may arise is the implication of reducing income tax collection. As can be seen from Table A on page 20, there are about 7 million people aged 55 and older that make over \$100K annually as of today's dollar, and this number will increase by 3% for the cost of inflation. Among this age and income group, up to 75% of their Social Security benefits go into collection. Assuming a 35% tax on the \$168.5 billion that this group is no longer receiving as Social Security benefits, the IRS would be potentially losing about \$59 billion.

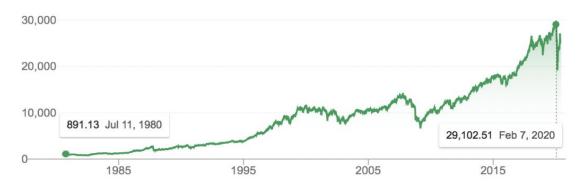
However, discussed more thoroughly in a later section of this paper, this new Social Security plan will boost domestic GDP growth and create wealth for the US economy, which will comfortably relieve any present losses in the future. This is what we must consider: What is the government willing to give up today in tax collection to save Social Security in the long run? These are necessary sacrifices to make, as the importance of Social Security cannot be overstated, and this is a pressing issue that must be addressed with urgency. Should Social Security be allowed to completely deplete, unemployment and poverty rates would significantly increase. The cost of trying to mitigate that disaster as a consequence of allowing Social Security to deplete would surely be significantly greater than the cost of taking action now and remodeling the system.

ADVANTAGES

This switch from a passive defined benefit plan to a much more involved defined contribution plan comes with several advantages. A defined contribution plan, in which workers finance their retirement, provides more flexibility for employees and less worry about financial risk in the long-term, as compared to a defined benefit plan which can cause workers to worry if their employer can provide them their promised funds several decades later. With that said, the current restriction is that one must withdraw their Social Security by age 70 to maximize benefits. However, with the American life expectancy having increased nearly 20 years since the inception of Social Security, it is only logical that the age to begin receiving benefits increase as well. Since the life expectancy in 1935 was only 61 years, and the age to begin taking Social Security was 62, perhaps the new system could limit retirees to begin obtaining benefits between the ages of 72-80.

What would be the result if the money that workers paid into Social Security was instead invested into the market and therefore allowed to grow? Based on the pure growth of the S&P 500 and the Dow Jones over the past 40 years, if historical trends were to persist, the return would be exponentially higher. Perhaps the stock market is intimidating to many, as prices fluctuate countless times a day, but historical evidence suggests that in the long run, the market will continue to go up. This new Social Security system is capable of achieving solvency in the next 30-40 years, a sufficient period of time to expect the market to go up, assuming trends continue. As this occurs, it is to the benefit of society that people participate in the market and discover the opportunity to increase their wealth as the market increases.

Dow Jones Industrial Average over 40 years



Dow Jones shows 3,265% growth in under 40 years

The Dow Jones is projected to hit 40,000 by December of 2025. To reach that number, the stock market only needs a 6.75% increase annually, and the market has historically returned an average of 10% annually. ¹³ Investing in the stock market would not only bolster the stock market's existing upward trends, but it could also generate bigger profits as a result. With many people investing their money into the actively growing stock market instead of putting it into a stagnant Social Security fund, this approach would bring trillions of dollars into the market, causing a huge push.

Another advantage to the market system would be having more people involved in the stock market, allowing for the market to grow exponentially. According to Gallup, only about 55% of Americans own stocks either as an individual stock, a stock mutual fund, or in a self-directed 401(k) or IRA¹⁴, and that percentage has roughly remained the same since 1998. With this new

¹³ Dave S. Gilreath, partner and founder of Sheaff Brock Investment Advisors. "Here's Why the Dow Will Hit 40,000 by 2025." *CNBC*, CNBC, 10 July 2018, <u>URL</u>.

¹⁴ Saad, Lydia. "What Percentage of Americans Owns Stock?" *Gallup.com*, Gallup, 8 June 2020, <u>URL</u>.

system, that number could drastically increase, allowing the market to grow. If people utilized the market to deposit their retirement funds, the stock market could experience record-breaking numbers of participants and would henceforth increase exponentially in percentages.

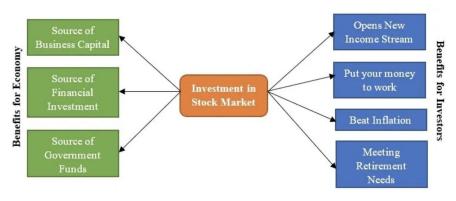
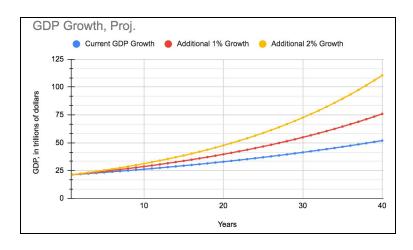


Figure 1: Benefits of investing in the stock market

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This increase in the number of participants in the domestic stock market can lift the economy by promoting GDP growth, which would benefit all Americans, regardless of income. Currently, GDP grows at an average annual rate of about 2.3%. Greater involvement in the US markets has the capability to contribute an additional 1-2% growth to the US GDP.



¹⁵ Riya JainResearch analyst at Project GuruRiya is a master in Economics from Amity University. She has a keen interest in econometrics and data analysis. She was a part of the Innovation Project of Daulat Ram College. "Categorizing Stock Market Investments into Income, Growth & Value Stock." *Project Guru*, 15 Apr. 2020, URL.

As can be seen from the graph above, this revised Social Security system has the potential to lift the economy, which is especially important today, due to the COVID-19 pandemic. Unlike other various proposed solutions, this would not only fix the Social Security crisis, but it would also raise the national GDP significantly, therefore benefiting the entire nation.

ACHIEVING SOLVENCY

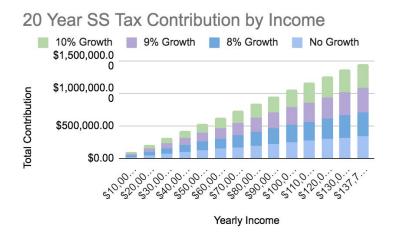
As the market grows, individuals' retirement funds will grow with it, and the overall deficit in the Social Security Trust Fund will be reduced over time. As such, the sooner that the system can undergo reform, the sooner that solvency may be reached and Americans can feel security in retirement. We can observe the growth of retirement fund investment by working income groups in the United States, ranging from those who make an annual income of less than \$10,000 to those who make an annual income of above the Social Security wage base of \$137,700.

Currently, the annual Social Security tax that all workers must pay is 6.2%, which is then matched by an employer, totaling annual contributions of 12.4% per worker. Those who are self-employed pay the full tax themselves at 12.4%. Over 20 years, a person making \$10,000 a year would, with a matching contribution from his or her employer, contribute \$24,800 to Social Security, whereas a person making \$137,700 a year would contribute \$341,496. Among the whole working class, the 20-year average contribution per person is approximately \$185,593.

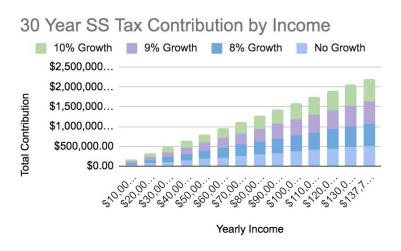
However, if the Social Security system were market-weighted, and these annual contributions over the entire 20 year period were allowed to grow at rates of 8%, 9%, or even 10%, the total

¹⁶ Oact. "Social Security Quick Calculator." Quick Calculator, URL.

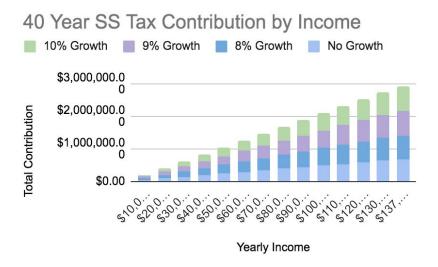
amount of money in Social Security after the 20 years would be significantly higher. The average increase per person over 20 years given growth rates of 8, 9, and 10 percent would be about \$16,703. This number is the average of the differences between each person's current 20-year matched Social Security Tax Contribution and what that contribution would be if it were allowed to grow at rates of 8, 9, and 10%.



Over 30 years, among the working class, the average 30-year contribution per person (with a matching employer contribution) is approximately \$278,389. Again, allowing these funds to grow at annual rates of 8%, 9%, and 10%, the average increase per person over 30 years would be about \$25,055.



Finally, observing 40 years, the average 40-year contribution per person (with a matching employer contribution) is approximately \$371,185. Allowing these funds to grow at annual rates of 8%, 9%, and 10%, the average increase per person over 40 years would be about \$33,407.



As shown, the longer the funds are allowed to grow, the greater the total growth would be, thus allowing Social Security to become solvent over time. Therefore, the sooner Social Security can undergo systematic reform, the sooner the actuarial deficit can be surmounted and the system become solvent. To achieve such solvency, the best possible compromise would be to phase out the amount of Social Security that the wealthier workers receive over time.

Table A		<u>ALL VALUES IN THOUSANDS</u>					
Age Group	Average Income	Number of Employed Workers	Total Average Annual SS Contribution	Number of workers earning over \$100,000	Total Estimated Annual SS Benefit for \$100K+ workers		
16-24	\$20,855.85	24,472	\$63,287,660	514	\$16,120,392		
25-34	\$48,600.50	35,087	\$211,450,472	4,456	\$139,777,345		
35-44	\$65,704.70	33,127	\$269,898,350	5,598	\$175,612,587		
45-54	\$71,857.70	32,042	\$285,505,588	6,120	\$191,972,850		
55-64	\$71,433.30	26,893	\$238,210,911	5,163	\$161,967,288		
65-74	\$75,052.10	8,444	\$78,583,751	1,638	\$51,385,050		
75+	\$66,257.67	1,903	\$15,634,954	362	\$11,341,727		
Total	-	161,968	-	23,851	\$748,177,240		

Observing Table A, over 23 million workers in the United States make an annual salary of at least \$100,000. To those aged 55 or older, over \$200 billion is paid annually in Social Security. In order to gradually transition to the new market-weighted approach, a reallocation of money will occur by moving the Social Security money of those aged 55 or older who earn over \$100,000 to younger generations who will invest said money into the market.

Table B	<u>NUMBERS IN THOUSANDS</u>							
Year	Amount into market-weig hted system	Additional Amount to market-weight ed system	Total	8% Gr.	9% Gr.	10% Gr.		
1	\$63,287,660	\$56,173,516	\$119,461,176	\$129,018,070	\$130,212,682	\$131,407,294		
5	\$63,287,660	\$56,173,516	\$119,461,176	\$175,527,660	\$183,805,827	\$192,393,419		
10	\$63,287,660	\$56,173,516	\$119,461,176	\$257,907,719	\$282,808,049	\$309,851,525		
15	\$274,738,133	\$112,347,033	\$387,085,166	\$772,178,495	\$846,907,920	\$930,030,091		
20	\$274,738,133	\$112,347,033	\$387,085,166	\$1,134,583,544	\$1,303,072,813	\$1,497,822,762		
25	\$544,636,482	\$168,520,549	\$713,157,031	\$2,146,182,002	\$2,506,641,028	\$2,937,400,535		
30	\$544,636,482	\$168,520,549	\$713,157,031	\$3,153,445,474	\$3,856,777,932	\$4,730,712,936		
35	\$830,142,072	\$168,520,549	\$998,662,621	\$4,633,445,974	\$6,373,416,656	\$7,618,860,491		
40	\$830,142,072	\$168,520,549	\$998,662,621	\$6,808,052,261	\$9,806,291,541	\$12,270,251,009		

Referring to Table B:

- In the first ten years, 25% of the total Social Security benefits granted to those aged 55+ who earn over \$100K will be reallocated towards the 16-24 age group. This is about \$56 billion. 16-24 year olds already contribute about \$63 billion in collected Social Security taxes per year, amounting to a total of \$119.5 billion invested into the market.
- In years 10-20, 50% of the Social Security benefits granted to those aged 55+ who earn over \$100K will be reallocated. This is about \$112 billion. At this point, people aged 16-34 are now participants in the market-weighted approach. 16-34 year olds already contribute about \$274 billion annually in collected payroll taxes, amounting to a total of \$387 billion invested into the market.
- In years 20-30, 75% of the Social Security benefits granted to those aged 55+ who earn over \$100K will be reallocated. This is about \$168 billion. At this point, people aged 16-44 are now participants in the market-weighted approach. 16-44 year olds already contribute about \$545 billion annually in collected payroll taxes, amounting to a total of \$713 billion invested into the market.
- In the subsequent years, all workers aged 16-54 are participants in the market-weighted approach, contributing about \$830 billion annually. The \$100K+ earners aged 55+ will only contribute up to 75% of their Social Security benefits (about \$168 billion) towards the younger generations, keeping at least 25%.

Under this approach, the Social Security pensions of the \$100K+ earners will be allowed to gradually phase out over four decades as new generations enter the workforce and become subsequently able to participate in the new Social Security System. Table B shows the

breakdown of this phasing-out process, as well as the potential growth of Social Security at varying rates.

There are many unique financial situations that must be addressed. For example, it is possible that an individual made a lot of money when he or she was young, but lost it all at an older age. The opposite is also possible, in which an individual did not begin to make a fair sum of money until later in life. A variety of cases, including factors such as market destabilization, recessions, and other uncontrollable factors, may result in many high-income workers requiring Social Security benefits. Although all workers will be eligible to receive at least 25% of their Social Security, this may not be sufficient in certain circumstances. Thus, a means test should be established to evaluate individual cases that demonstrate financial need through Social Security.

Currently, Social Security's reserves are depleting rapidly, which is why the Trust Fund will deplete within the next 15 years. If we begin to phase out those who make \$100,000 annually by reducing their Social Security benefits, and then completely phase out those who make \$150,000 or more this could begin a reserve for the new market-based system. One can thus obtain a benefit for not having to take money out of his or her IRA or pension plan. Observing Table B above, the gradual switch to a market-based approach is capable of reaching solvency in about 31-37 years. In other words, this new system would eliminate the 75-year Social Security actuarial deficit of \$5.1 trillion in only about three decades.

CONCLUSION

A market-weighted Social Security plan would give Americans their control and choice back in funding their retirements. Social Security will no longer be just a safety net for people who happen to live an extra few years; rather, this reformed system will reduce the burden on the government and instead give power to the people in making investment decisions that will best benefit them. After all, America's individuals experience such different lives- why should we try to stifle these differences with a blanket policy that treats all as one? Instead, why not embrace a Social Security policy that embraces the differences of the American citizens and offers the freedom for each individual to pursue a plan that works best to his or her favor, and none other?

Allowing Social Security money to grow in a market that, in the long run, has only gone up, will not only benefit all Americans but also the nation's overall economic health as millions of people enter the stock market for the first time. Furthermore, trillions of dollars are saved through reducing payouts for older Americans making over \$100K annually, yet the system is still able to provide that group some sort of retirement savings benefit. In combination, these recommendations can ensure the solvency of Social Security and therefore the safe retirement for all working Americans.

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