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Analyzing the Financial Future of the Millennial Generation

Grand Valley State University

Matt Smartt

4/17/2015

Analyzing the Financial Future of the Millennial Generation

In the early 1980s, America welcomed a new generation into the world. The nation had no idea what to expect and, even today, the new wave of youths is still full of surprises. The generation born after the year 1982 is popularly known as Generation Y or the Millennials. Many thought they would continue down the dysfunctional path of Generation X, but the Millennials chose to take the road less traveled and forge their own trail. As they reached their teenage years and the end of the 20th century, they began to create an identity for themselves. This generation was full of energy and optimism. They were products of parents that were overwhelmingly supportive, allowing their children luxuries and experiences that previous generations were not able to enjoy at that age. The Millennials had a respect for authority, unlike the generations that preceded them. Along with this reverence to their elders, the Millennials also enjoyed working together and being a part of a team. Add in their knowledge and expertise of technology to the equation and this generation seemed to be set to be the most successful cohort to date. However, things began to change. Events took place that were out of their control. Beginning in 2007, the nation went through a recession that was detrimental to the economy and curbed the Millennials' expectations of what was to come. The economic decline came at a time when a vast majority of the Y Generation was entering the workforce. The labor market proved to be stingy and forced many millennials to move back home with their parents and work part-time jobs that did not require a degree. This shortage of jobs put a premium on a college education with hopes that a degree would make the candidates more attractive to employers. With an emphasis on education, the amount of student loans taken out vastly increased, putting Millennials deep into debt. Upon graduation, important decisions and large purchases were being pushed back, such as getting married and purchasing a home. With low-income jobs, if any, and large amounts of debt, saving for the future seems almost impossible for

this generation. This is unfortunate because saving on their own for their future is going to be paramount for the long-term success of this generation. With the existence of Social Security and pension plans looking bleak in the future, the Millennials will have to rely on defined contribution retirement plans and company matching to fund their retirement. It will take specific strategies that will encompass saving for the future, as well as paying down debt as efficiently as possible. This paper will analyze the Millennials as a generation, explain the effects the Great Recession had on the generation, discuss the burden of student debt, and provide recommendations and strategies for the generation to have as successful of a future as possible. The Millennials are a unique generation and they will face unique challenges. Will they be able to overcome these obstacles and become one of the most successful American generations in history?

The Millennial generation is the largest cohort in America to date as shown in Figure 1. This generation is defined as those being born during or after 1982 and 2002, as has grown to 85 million individuals today.[1] This large total could be due in part to the birthrate increasing, the fertility rate increasing, and an increase in immigration into the United States. This generation is continuing to grow as it makes up almost 27% of Americans. It is estimated that by 2020, Millennials will make up 33% of Americans and, by 2025, Millennials will make up almost 75% of the American labor force.[2] This generation is also the most diverse generation, both ethnically and racially. Because of this, the generation is a very accepting group.

[1] Millennials Rising
[2] Millennials Rising

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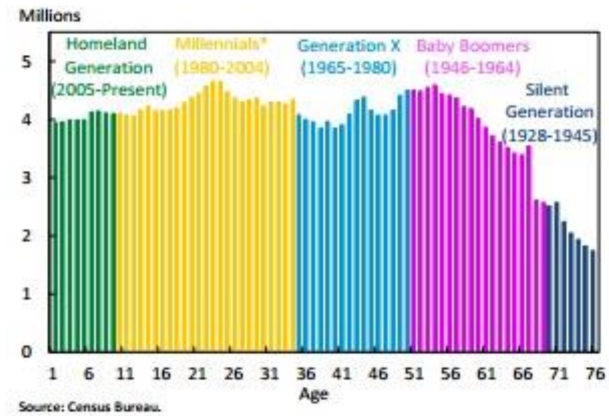
Figure 1 - Population Distribution by Age; Source: The Council of Economic Advisors



The Millennial generation is filled with young Americans that received overwhelming support from their parents. Their parents were there to lend a helping hand and worked hard to keep their children from making mistakes, rather than allowing their children to learn from them. The young Millennials received trophies for just simply participating, rather than succeeding. They worked well with others and were happy to be part of a team. The Y generation was also very social and upbeat. They had a very optimistic and hopeful outlook on life. Whenever there was a problem, somebody was there to lend a helping hand. It was almost as if they were living life with a safety net, not having to take responsibility for their actions. They also grew up with never-before-seen advances in technology. They were a part of the rise of the smart phone, and made it more popular to communicate with their fingers than by word of mouth. This generation had a very optimistic outlook on life, and why wouldn't they? However, as most of them began

to enter their coming-of-age years and enter the workforce, they encountered a road block they were not prepared for: the Great Recession.

One of the biggest challenges the millennials have dealt with to date was the Great Recession. The great recession began in late 2007 and lasted until 2009. The financial crisis was caused by a number of elements that came together at once. In an article from the Wall Street Journal titled, “What Caused the Financial Crisis?” the authors, Bill Thomas, Keith Hennessey, and Douglas Holtz-Eaki, highlighted a few of the key causes that contributed to the great recession. The authors stated, “We agree with our colleagues that individuals across the financial sector pursued their self-interest first, sometimes to the detriment of borrowers, investors, taxpayers and even their own firms. We also agree that the mountain of government programs supporting the housing market produced distorted investment incentives, and that the government's implicit support of Fannie Mae and Freddie Mac was a ticking time bomb.”[3] Banks were granting collateralized loans to individuals that surely did not qualify to receive these loans. The homes being bought were used as collateral. The banks were selling their mortgages into mortgage-backed securities. The investment banks saw this as an opportunity and took advantage of it. They created collateralized loan obligations with different tranches. Each of these tranches represented a different amount of risk, with the riskier tiers expecting a higher return. The first tranch was the most risky because it would experience the losses first. The last tranch was considered the safest and had a rating of AAA. Many people, including banks, believed that this level of the CLO was incapable of experiencing any loss. The banks began investing their reserve funds into these mortgage-backed funds. When the homeowners began defaulting on their loans, the banks would seize the homes and sell them. However,

[3] What Caused the Financial Crisis?

during this time, the housing market had dropped by 20%, causing the banks to lose large amounts on the homes. This triggered a chain reaction and caused large losses within the CLO's through every tranch, including the AAA rated tranch where the banks invested their reserves. The banks were losing their invested reserve funds and many were forced to close. Individuals began withdrawing their money from banks and the stock market. This process sent a shockwave through the financial world and caused the stock market to plummet. There are speculations that a similar scenario may occur with the massive amounts of student loans that are being granted today. However, that in itself is a topic for another paper. The Great Recession was felt by all generations, but it hit the millennials the hardest.

The recession came at a time where the Millennials were just getting into an income earning phase in their life so they directly felt the blow of the crisis, or they were at a point in life where they experienced the impact though their parents. Either way, it was a learning experience that forced them to adapt. They may not have the safety net or support from their parents now and are forced to handle it on their own. Some may not know how to handle it on their own and are being thrown into the fire. They are in danger of not reaching their full potential, and most may not be confident with their financial future.

One of the largest consequences from the recession for the Millennials was the barren job market. In the years following the financial crisis, unemployment numbers for young Americans were very high. "In 2012, forty-five percent of all unemployed Americans—5.6 million—are between ages 18 and 34.8. The unemployment rate for this age group remains higher than it was in the 1990s. In 2012, the labor force participation rate for young adults declined to the lowest

level in four decades."[4] In another article published by the Atlanta Fed's research department, the author, Mark Carter, describes the vast impact the recession had on the millennial generation. According to the article, unemployment rates in 2007 for millennials were lower than they were in 2013 and into 2014. Cater explains, "Though labor markets today continue their slow rebound from their recession-era lows, the U.S. Bureau of Labor Statistics (BLS) says youth unemployment rates (ages 16–24) remained around 15.5 percent in 2013 and began 2014 at 14.2 percent, roughly twice the rate of overall unemployment. In fact, excluding those under the age of 25, the overall U.S. unemployment rate was only 5.4 percent in January 2014, according to the BLS." [5] Of those Millennials that do have a job, many of them are underemployed. They are working jobs that do not require a degree or a job that requires fewer credentials than they have. It is common to find members of the Y generation working in retail or other part-time jobs because there were no other options. The tough labor market made it very popular for the millennial cohort to move back in with their parents after being on their own for some time. According to the same article, in 2012 36% of individuals between the ages of 18 and 31 were living with their parents, which was the largest percentage in almost 40 years. The decline in job opportunities also forced the Y generation to push back major decisions and purchases, such as getting married or purchasing a home. According to a government study, recovering from a recession in terms of income can take many years, especially for college graduates. The author explains, "Early career economic conditions have large and lasting impacts on lifetime wages, particularly for college graduates. Research shows that entering the labor market during a recession can result in substantial earnings losses that persist for more than a decade, with negative effects lasting longer for college graduates. Workers who start their careers in a

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[4] Millennials Rising
[5] Economic Plight of Millennials

recession earn 2.5 to 9 percent less per year than those who do not for at least 15 years after starting a career. Research further suggests that one reason for these lower earnings is that new entrants take jobs that are a worse fit for them when they start their careers in a recession."[6] Because of this income shortfall, the Millennials may be the first generation to not out-earn their predecessors.

Historically speaking, Americans born in the first half of the 20th century have out-earned the generation before them.[7] This pattern has begun to break with the Millennial generation. This generation has accrued less wealth than their parents did at the same age. There is a popular saying: "It takes money to make money." This phrase perfectly explains why the Millennials have the lowest net worth compared to individuals at the same age in the past. With either no job or low-paying jobs, the Millennials have not been able to purchase assets that would increase their net worth. According to research done by the Federal Reserve, in households headed by an individual 35 years of age or younger, the mean income decreased by 5% between 2010 and 2013.[8] According to the same research, the median net worth of the same individual is around $10,000, which is 41% decline from 1995. This trend of decreasing income and net worth goes against of the patterns set by the previous generations. It is rare for the overall wealth of a generation to steadily decline over a span of five years, 2009 to 2014. Young Americans have only recovered about one third of their money lost in the recession.[9] The only section on the Millennials' financial statements that has steadily increased over the past few years is the liabilities section. Debt has continued to grow for young Americans. This is due mostly to the increasing popularity and necessity of student loans.

[6] 15 Economic Facts About Millennials
[7] Millennials Rising
[8] The Federal Reserve Bulletin
[9] Millennials Rising

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Generation Y is the most educated generation the nation has ever seen. The number of 25 to 29 year olds that have a bachelor degree has grown by almost 50% since the early 1980s.[10] On top of that, more than 84% of today's 27-year-olds have spent at least some time in college, and 40% of those individuals hold a bachelor's or associate's degree.[11] These numbers show that attending college is much more popular than in the past. This could be due in part to the fact that there is a smaller opportunity cost while attending school during a recession. Many young people grapple with the decision of working or going to school. Some believe that they would be better off working right away and gaining four years of income rather than spending four years of their time and money in school. During a recession with a stingy job market, that decision becomes easier. If it is likely an individual will spend time unemployed, it makes sense for them to spend that time working on acquiring an education that will make them more attractive in the job market. With the present labor market being so competitive, the Millennials believe that having a college education will set them apart. They may be on to something.

The Millennials are much more apt to invest in human capital, as the data above shows. They believe a college degree will yield a high return in the future. Although it didn't seem like a sound investment in the years following the recession, the results are beginning to change. in 2010, the unemployment rate for individuals between the ages of 18 and 34 was over 13%.[12] In September 2014, the rate had decreased to 8.6% and had decreased by 1.8% between June 2013 and June 2014.[13] In 2013, the unemployment rate for Millennials with a college degree was 3.7%.[14]While the unemployment rate for Millennials still remains high, it is heading in the right

[10] Millennials Rising
[11] Millennials Rising
[12] 15 Economic Facts About Millennials
[13] 15 Economic Facts About Millennials
[14] 15 Economic Facts About Millennials

direction. Not only are jobs becoming more readily available for Millennials with college degrees, but they are paying higher salaries as well. Between 2010 and 2013, the mean income of households headed by an individual that had a college degree increased by 5%.[15] Although the job market woes and income shortfalls are beginning to move in the right direction for this young generation, they still have a huge obstacle to overcome in the immediate future. This obstacle is the immense burden of student debt.

Student debt is now the largest form of debt in the nation, besides home mortgages. According to the Bureau of Labor Statistics, student loan debt has reached a total of $1.2 trillion with the average balance per person standing at almost $30,000. Student loans are unique to other debt, such as auto loans or credit card debt, in the fact that the sought-after product is not consumed immediately. For instance, when an individual takes out a loan for a car, they immediately purchase the car; or when an individual accrues credit card debt, they do this by purchasing an item that is immediately consumed, such as a pair of shoes or a suit. Student loan debt is incurred for a long term investment in human capital. When a student acquires a student loan, they are using it to better prepare themselves over the next four years of their life for the hope of living a more successful life in the future. The product that student loans are used to acquire is more superior to products purchased with auto loans or credit card debt. There are three different types of student loans that can be acquired. There are federally guaranteed loans made by banks, federal loans made directly by the government, and private loans.[16] With the guaranteed loans, the government pays a subsidy to lenders that provide the loans and guarantee the amount loaned. Congress sets the interest rates for the direct and guaranteed loans and pays the interest while the students are in school until the students are required to pay the loans back.

[15] The Federal Reserve Bulletin
[16] Philadelphia Federal Reserve

There is usually a grace period of six months after graduation until the graduates are required to begin paying back their loans. Private loans usually have worse terms than either of the government loans and offer much higher interest rates. The federal loans include the Subsidized Stafford Loan, the Perkins Loan, and the Unsubsidized Stafford Loan. The subsidized Stafford Loan and the Perkins Loan are very similar. They both require the student to have a need for the loan. Also, for both of these loans, the interest does not accrue while the student is still in school. The Unsubsidized Stafford Loan is different in that all students can qualify for the loan, regardless of need. Also, the interest begins to accrue while the student is still in school.[17] Some students turn to private loans because they offer a higher loan amounts and more flexible payment plans. A new form of education financing that is beginning to emerge is peer-to-peer loans. The loans do not involve a bank and can be facilitated through websites such as GreenNote. These loans are growing in popularity, but have a large drawback. Most peer-to-peer loans offer a very short payback period, which is usually one to three years.[18] Most federal loans offer payback periods of 10 to 30 years. According to FASFA, the most common student loans today are the Federal Stafford Loans that offer fixed interest rates as low as 3.86%.[19] It is obvious that the student loan debt has drastically increased due to the rising popularity of receiving a college education. However, there are many factors that go into that assumption.

The phenomenon of the rising student loan balance can be examined from a supply and demand perspective. The demand for student loans has increased for multiple reasons. First, employers are demanding higher-skilled workers within their operation. With the advances in technology being used in the workplace, it is imperative that workers enter the labor market with

[17] Income-Driven Repayment Plans
[18] Income-Driven Repayment Plans
[19] FASFA

credentials that will qualify them for the most sought-after positions. The best way to become qualified is through acquiring a college education. According to a paper published by the Philadelphia Federal Reserve Bank, there is a large gap in lifetime wage earnings between individuals with and without a college degree. The difference in earnings throughout their lives is between $650,000 and $1 million. Another factor that influenced the increase in demand for student loans was the rising cost of a college education. The visual below from Bloomberg Business shows the how much the cost of a college education has grown compared to other popular expenses.

Figure 2; Source: Bloomberg Business

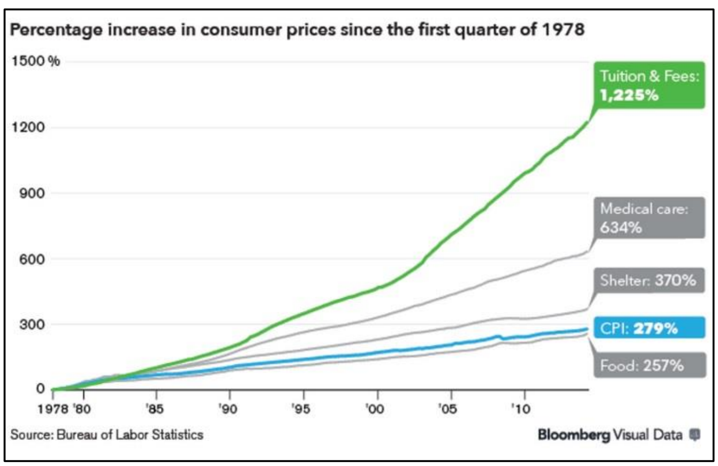


Figure 2 shows that the cost of tuition has risen a staggering 1,225% since 1978, which is 946% greater than inflation. Young Americans could not keep up with this rapidly rising cost, so they were forced to take out loans to make up for the cost that they could not afford. On top of the increase in demand for an education and the rise in the cost of that education, the demand for student loans has increased due to the lack of funding available from the student's family. The Great Recession hit American families hard and hindered their ability to pay for their children's

college education. Investment accounts that were subject to market volatility were diminished to almost 50% of their value. This forced Americans to put whatever savings they had left toward other expenses such as mortgages and credit card bills, and put college funding aside. Between 2007 and 2010, the median household income fell 11% and the median household net worth fell by 39%.[20] On the supply side of student loans, the government took action to make student loans cheaper by decreasing and freezing interest rates. They also decreased subsidies provided to banks to eliminate the guaranteed and private loans. The government succeeded by taking over the majority of the market. In 2011, Federal Student Aid, which is a division of the Department of Education, managed $713 billion in student loans, which accounted for almost 90% of the market.[21] With this massive student debt balance continuing to grow, it is proving very tough for borrowers to keep up with their payments.

With the balance of student loan debt continuing to rise combined with the tough labor market and declining household income and net worth, default rates for student debt remain high. Past due balances on student debt had grown steadily from 2003 to 2011, increasing from $18 billion to just over $80 billion.[22] In 2012, the Federal Reserve Bank of Philadelphia reported a delinquency rate of 14%. In the fourth quarter of 2014, the Federal Reserve Bank of New York reported a delinquency rate of 11.3%. In 2009, student loans surpassed credit card debt to have the highest delinquency rate among consumer loans, as Figure 3 shows. While the rate has decreased, it is still the highest delinquency rate of any consumer debt. Unlike the other forms of consumer debt, student loan debt did not follow a cyclical pattern that is typical for recessions. Credit card debt, auto loans, and home equity loans all experienced an increase in past due

[20] Philadelphia Federal Reserve
[21] Philadelphia Federal Reserve
[22] Philadelphia Federal Reserve

balances when the recession hit. All of these forms of debt saw a decrease in those balances as the recession subsided. Student loan debt saw a steady increase throughout the recession and did not begin its slight downturn until 2011. It then began to increase again in 2012. Figure 4 below from the Federal Reserve Bank of Philadelphia further explains this information.

Figure 3; Source: Federal Reserve Bank of Philadelphia

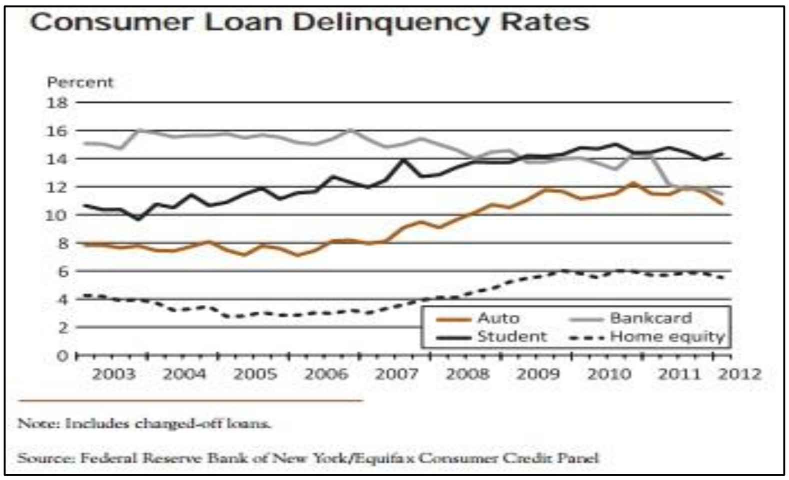
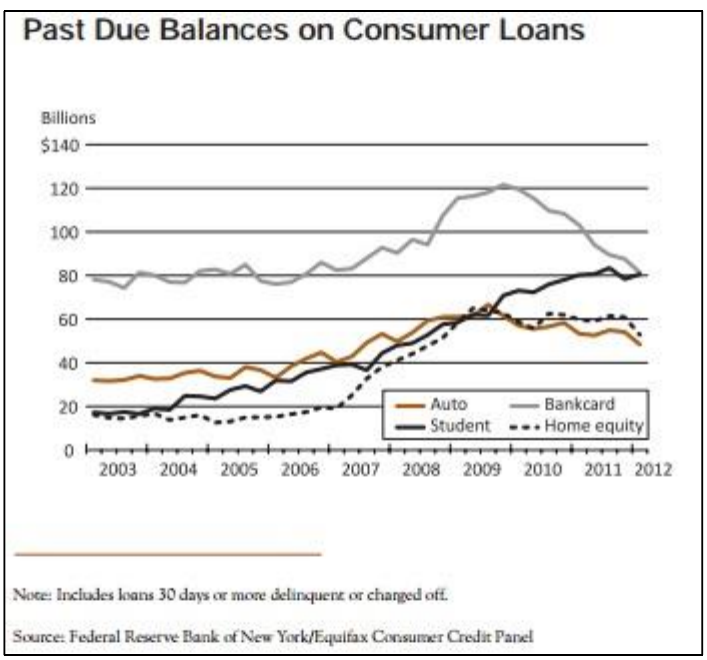


Figure 4; Source: Federal Reserve Bank of Philadelphia



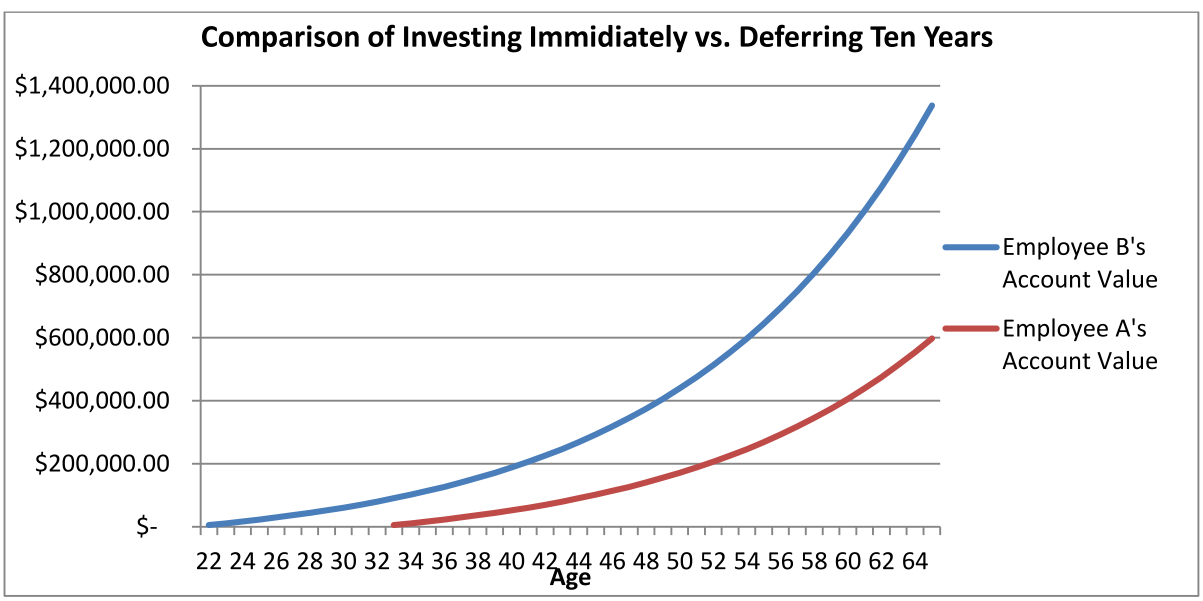
Unlike other consumer debt, student loan debt does not get eliminated or decrease in an event of a bankruptcy. The individual enters into a long term payment plan to return the borrowed money back to the government over time. With individuals in their sixties still repaying student loans, the Millennials whom have student debt will be affected for many years to come. One way this generation will be heavily impacted will be saving for retirement. It is uncertain if social security and pension plans will be available when it comes time for the Millennials to retire. This makes it imperative for the young generation to save as early as possible to maximize their chances of retiring comfortably. Without outside retirement plans, the burden of saving will fall on their shoulders. However, the responsibility of paying down student loans will hinder their ability to save.

When investing in the stock market, the most influential element that must be taken advantage of is time. A long time horizon is an investor’s best friend. The longer the time horizon, the more volatility a portfolio can handle. A portfolio with a long holding period can rebound from a market crash because it will have time to experience the upside of that crash and regain the money that was lost. On top of the ability to recover, time also allows the portfolio take to take advantage of the power of compounding. Compounding is described as generating earnings from previous earnings. Another way to define compounding is to examine a question: would you rather receive $1 million today or take a penny today and double it every day for 30 days? Most people would take the $1 million today. These people don’t understand the power of compounding. If an individual chose to receive the penny, they would earn more than five times the amount than the person who chose the $1 million. On day 15 of having the penny doubled, they would have $163.84. This number doesn’t seem very significant, right? On day

30, however, that one penny grows to $5,368,709.12. This same principle can be used to save for retirement.

A simple scenario can be run to show that Millennials with student loans are at a greater disadvantage when it comes to saving for retirement. There are two individuals, both 22 years old, and both want to retire at age 65. They both want to begin saving for retirement as soon as possible. They each graduated college and both received jobs making a salary of $50,000 per year. Both companies offer a match of 3% of income. Each employee will contribute 5% of their income to a retirement plan when they are able to. Employee A has student loans that need to be paid off. This employee will use the money that could be saved for retirement to be put toward paying off the loans for 10 years. Employee B does not have student loans and will begin to contribute immediately to a retirement plan. Employee A will contribute from ages 32 to 65 and Employee will contribute from ages 22 to 65. An interest rate of 7% and annual compounding will be used for this simulation.

Figure 5



As Figure 5 above shows, deferring 10 years of investment to pay for student loans significantly sets Employee A back from Employee B. The ending balance of Employee A's retirement account was $597,717 while the ending balance of Employee B's retirement account was $1,337,025. This scenario may not be completely realistic, but it was done to show how much the power of compounding can benefit the millennial generation while saving for retirement. It was also done to show how much of a burden paying down student debt is going to be for the generation as well. Another scenario can further show how important it is to start saving as early as possible.

In this next simulation, the same individuals will be used, Employee A with student debt and Employee B without student debt. This test will show how much each individual will need to save annually to reach their desired retirement income and the effect that payment deferment has on the annual required amount. Both individuals would like to have an income of $100,000 per year when they retire. Assuming a life-expectancy of 100 years of age, a 10% return before retirement, and an inflation-adjusted 4% return after retirement, both employees would need $2,465,985.24 at retirement to reach their goal. Employee B would begin investing immediately at 22. This employee would have to make annual payments of $4,162.70 to reach their goal. Employee A will not start investing until they are 32 because they decided to pay off their loans first. This individual would have to make annual payments of $11,095.47 to reach their goal. The 10 years of deferment adds an extra $6,932.77 to the annual payment. The figure below shows the assumptions used for the simulation and the results. These numbers were produced by using advanced time value of money calculations in Excel.

Figure 6 – Annual Payment Comparison

Retirement Worksheet	Employee A	Employee B
Current Age	32	22
Retirement Age	65	65
Years in Retirement	35	35
Annual Retirement Income Need	$ 100,000.00	$ 100,000.00
Expected Rate of Inflation (post-ret)	2.0%	2.0%
Rate of Return before Retirement	10.0%	10.0%
Rate of Return after Retirement	4.0%	4.0%
Savings Required at Retirement	$2,465,985.24	$2,465,985.24
Initial Deposit	$0.00	$0.00
Annual Investment Required	$11,095.47	$4,162.70

Obviously, an optimal situation for a Millennial graduating college would be to not have to worry about any student loans. Today, however, that situation is very unlikely. Therefore, it is very important for these individuals to develop a strategy that best fits their situation. They usually have three options: pay off student before saving for retirement; save for retirement while making only the minimum payment required for student loans; or a combination of sufficiently paying for both at the same time.

The first scenario is the least recommended. However, many graduates feel compelled to take this option. They believed that student debt would be temporary and they want to erase the debt as soon as possible. This is not a good strategy because money invested in the future is worth less than money invested today, as the above example showed. Even though this option may not always be the smartest one, there is a time and place for its execution. The most important factor to pay attention to while making a decision on what vehicle to dedicate your money to is the interest rates. An average historical return gained from investing in the stock market is 7% to 8%. If the investor has student loans that surpass interest rates of 8%, it would make sense to pay those off as quickly as possible. Their money would be best used paying this debt down because it could get very costly if they neglect the debt and fall behind in payments.

Student loans with this high of interest payments are rare, but they do exist. The second option is just the opposite of option one.

In option two, the individual decides to invest the majority of their money in the stock market for retirement and only make the minimum payments on their student loan balance. This strategy makes sense when the interest rate of the student loan is less than the historical return of the stock market at around 8%. Their money would be put to better use because it has the opportunity generate earnings from the investment. The earnings generated would be greater than the payments that would be added to the minimum payments for the student loan balance. The best strategy combines options one and two, but will need to be optimized to provide the individual with the highest level of future net worth given the available options.

Paying down student debt and saving for retirement are both essential practices that need to be done for young individuals to increase their odds of having a comfortable retirement. It is important for young individuals to take advantage of saving for retirement as soon as possible for many reasons. First, most employers offer a matching program for retirement savings to encourage the use of the program. That offers a return on their money just for contributing to the plan. On top of employer matching, retirement plans offer tax advantages. There are two different types of retirement plans: traditional and Roth. These options come with both IRAs and 401(k)s. With a traditional IRA, the contributions are tax-deductible, but the withdrawals are taxed at the ordinary income tax rate. With Roth IRA accounts, there is no deduction for the contributions, but the withdrawals are tax-free. So with traditional accounts, the tax benefit is realized at the time of the contribution, and the tax benefit for a Roth account is realized in the future. For traditional 401(k) plans, the contributions are made with pre-tax dollars. However, the withdrawals are taxed at the ordinary income tax rate. With a Roth 401(k), the contributions

are made with money that was already taxed and the withdrawals are tax-free. For young investors, contributing to a Roth IRA makes more sense than contributing traditional IRA. The main reason is tax benefit. When an investor is young, they will most likely be in a lower tax bracket than they will be when they retire. So the contributions will be taxed a lower rate than the withdrawals would be in the future. Also, who knows what taxes will be like in the future? By paying taxes early, the investor shields themselves from paying higher taxes in the future. Choosing the correct student loan payback method is another essential step in creating the best strategy for an individual to save for retirement while paying down debt. A great way to lower the required monthly payment is to apply for an income-driven repayment plan.

Income-driven repayment plans are based on an individual's income and family size. The type of loan that the individual has plays a role as well. These plans extend the duration of the loan and offer lower monthly payments than the standard 10 year Federal Repayment Plan. The monthly payment amount is based on a percentage of income. In order to be eligible for these programs, the amount of debt that an individual has must be more than their annual income or it must represent a significant portion of your annual income. These plans also offer the Public Service Loan Forgiveness Plan. These plans allow the balance remaining after 120 on-time payments from an income-driven payment plan to be forgiven. In order to be eligiable for this forgiveness, the individual must work full-time for a federal, state, or local government agency. There are three different type of income-drvien payment plans: Income-Based Repayment Plan (IBR Plan), Pay as You Earn Plan, and Income-Contingent Repayment Plan (ICR Plan). [23]

[23] Income-Driven Repayment Plans

The IBR and Pay as You Earn Plans are both very similar. They have requirements that must be met to be eligible to enter into the plans. An individual will qualify if the payment they would make under one of these plans is less than what the individual would pay under a standard payment plan with a 10 year payment period. "For the Pay as You Earn Plan, the individual must be a new borrower as of October, 1 2007 and must have received a disbursement of a direct loan on or after October 1, 2007."[24] The ICR Plan is a little different than the other two plans. It has no initial income requirement. The payments are usually higher than the IBR Plan and the Pay as You Earn Plan. Details about each plan are shown in the figures below.

Figure 7 - Plan Payment Period; Source: Federal Student Aid

Income-Driven Repayment Plan	Repayment Period
IBR Plan for those who are not new borrowers on or after July 1, 2014	25 years
IBR Plan for new borrowers on or after July 1, 2014	20 years
Pay As You Earn Plan	20 years
ICR Plan	25 years

[24] Income-Driven Repayment Plans

Figure 8 - Payment Amount; Source: Federal Student Aid

Income-Driven Repayment Plan	Payment Amount
IBR Plan for those who are not new borrowers* on or after July 1, 2014	Generally 15 percent of your discretionary income, but never more than the 10-year Standard Repayment Plan amount
IBR Plan for those who are new borrowers* on or after July 1, 2014	Generally 10 percent of your discretionary income, but never more than the 10-year Standard Repayment Plan amount
Pay As You Earn Plan	Generally 10 percent of your discretionary income, but never more than the 10-year Standard Repayment Plan amount
ICR Plan	The lesser of the following: 20 percent of your discretionary income or what you would pay on a repayment plan with a fixed payment over the course of 12 years, adjusted according to your income

The benefit of these plans is that they lower the required monthly payments for the student loans. However, they also extend the payment period to 20 and 25 years. This prolongs the duration of the loans and increases the amount of interest that the borrower will pay on the loans. These payment plans can be a critical tool for Millennials as they struggle with the battle between paying off student loans and saving for retirement.

As the majority of Millennials have reached a point in their life when they can begin to save for retirement, it important that this generation takes advantage of all they can to ensure a

comfortable retirement. Here are some recommendations that might help these young Americans.

The first thing Millennials should is create a very detailed budget. They should be in complete control of their money. The individuals should know where every dollar is going. The budget should contain categories such as rent or mortgage, groceries, dining out, car expenses, entertainment, etc. They should also include an emergency cash fund. Each budget will be unique individual based on their lifestyle. Once their money is organized, they will be able to decide how much money they have available to allocate toward paying off debt and saving for retirement. The individuals will also be able to easily decide where they can take money from if need be. For instance, they can reduce the discretionary expenses, such as entertainment or dining out, if cash flow begins to run low. Once this step is complete, they can dive into paying off their debt and saving for retirement.

When the individual has decided what amount of money they can dedicate to paying off debt they can choose the payment plan that best suits them. They can elect pay into the Standard Federal Repayment Plan if they feel that they have enough free cash flow to make debt payments and make sufficient contributions to savings at the same time. This method will have to highest monthly payments. If they would like to pay lower debt payments, they can choose to pay into an income-driven repayment plan, as described above. These plans will allow more money to be invested for retirement, but they also increase the payment duration as well as the interest cost. This option would make sense for an individual if they have a low annual income because the payments will start out low based on a percentage of their income. Their payments would increase as their income increases, but they will never exceed the

payments of a Standard Federal 10 Year Plan. Once the suitable plan is chosen, the rest of their available funds can be allocated to retirement savings.

There are a lot of variables that are associated with investing for retirement. The first question to answer is whether or not the investor's company offers a retirement plan. If they do, it might be the best option to take advantage of that plan. The most common plan that companies will offer is a 401(k), but some will offer IRAs. To encourage retirement saving, some companies will offer a match as described above. If the investor's company offers a match, it is imperative that this is taken advantage of. If the company does not offer a retirement plan option, the investor should open an IRA and take the Roth option over the Traditional option due to the tax advantages. Once the account type is determined, payment frequency and allocation can be decided upon.

Millennials have a low risk tolerance that stems from their fear of the market based on the financial crisis. Because of this, they invest very conservatively, if they even invest at all. This is backwards. Young Americans should have a high risk tolerance based on the length of their potential time horizon in the market. With a savings period of between 30 and 40 years, their cash should be invested in risky assets because of the large amount of time their money will have to recover if the market experiences a downturn. Based on this, their retirement accounts should be heavily invested in equity, not bonds. The money should be invested into the account on a monthly basis. This will allow the investor to take advantage of dollar cost averaging. By contributing on a regular basis, the investor will able to benefit from the fluctuations of the market. For instance, if they own a mutual fund that is trading at $10 per share and are investing $200 per month, they purchase 20 shares each month. If during the next month, the price drops to $5 per share, the investor will purchase 40 shares. When the

fund rebounds back to $10 per share, the account will be worth more because the investor was able to purchase more shares at a discount. If the investor was making quarterly or annual payments, they would not have been able to take advantage of the downturn. An automatic investment will also help the investor with budgeting. They will know exactly when those payments are being paid each month. If the individual has any questions or is seeking advice along the way, they can take part in credit counselling or consult a financial advisor.

While these recommendations may help Millennials cope with the obstacles that have been placed in front of them, there are organizations that can help eliminate these obstacles in the future. The government could step in and lower the interest rates for the student loans. They could also allow the student loan debt to be discharged in bankruptcy. Another solution could be to reduce the cost of a college education. This is more of a long-term solution, but it would make a huge difference for graduating students. An increase in college savings in the future could also help reduce the obstacles. Students would be entering college with less of a need to take out massive loans. This would allow them to contribute to the economy earlier, as well as save for retirement immediately. The Y generation has tough a road ahead when considering their financial future. They have to overcome many obstacles, such as the lasting effects of the Great Recession, the rising cost of tuition, the barren job market, and burden of student loans. All of these roadblocks will make it tough for this generation to adequately save money for their future and retirement. To better increase their odds for a comfortable retirement, it is imperative that the Millennials take advantage of certain strategies that exist. These strategies include finding the optimal balance between paying off student debt and saving for retirement. This can be done by creating a budget, choosing the correct repayment plan, taking advantage of company match benefits and retirement plans, and investing

aggressively on a monthly basis. The Millennials remain optimistic, as they were when they were younger. The generation will overcome these obstacles and prove to be one of the most successful cohorts America has ever seen.

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