Sacred Heart
UNIVERSITY

April 19th, 2019

The Role of Investing: How Finance is Affecting an Individual's Well-Being

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Introduction

There are several statistics about an American's finances that are indicating their struggles to thrive amongst their daily lives. For example, BlackRock recently interviewed 27,000 respondents in 13 nations to conduct the largest study ever on wealth and well-being. Specifically in the US, 60% of non-investors said they don't have enough money to start investing; 64% of non-investors find information about investing difficult to understand; 47% of non-investors are too worried about their financial situation today to think about the future - they're more interested in short-term goals; and 31% of non-investors are afraid of losing everything (BlackRock "Investor Pulse" 2019). Why is this happening? What caused this? What other effects do these statistics have in the average individual? There has to be something that can be done improve these statistics and improve the lives of our American citizens. <u>The average American's health is being impacted by their finances because of their decreased capacity to save and invest a portion of their income.</u>

Financial Behavior Post-2008 Recession

The 2008 Financial Crisis had a very negative impact in the average American's behavior with their finances. According to a study done by Pew Research Center, 62% of Americans reduced their spending after the recession; 48% said they were in worse financial shape than pre-crisis; 4 in 10 respondents with savings or a retirement account made withdrawals to pay their bills; and 71% said they had bought less expensive brands to help make ends meet (O'Neill, Xiao 34)**.** All of these struggles that Americans went through with their finances caused them to take a lot of risk off their investments, stop investing completely, and/or caused future generations to think twice about investing.

Why are people having trouble investing?

There are various factors that come into play when asking why most Americans are currently not investing in the stock market and improving their financial behavior.

I. Distrust in the market

The first reason why many Americans are not investing in the stock market is because of the correlation between the historical crashes and the distrust in the system. A big reason for this distrust is because Gen-Xers went through one of the worst tragedies that they ever experienced, the 2008 stock market crash, and Millennials always take this into consideration when deciding whether or not to invest in the stock market.

To provide a bit of a historical background, the Dow was down to 12,000 in early 2008 from its 14,000 peak in October 2007. The rest of the year was characterized by a general decline until the crash of October. In March 2008, there was a failed bailout of Bear Sterns - which was then sold to JP Morgan. On September 2008, Lehman Brother filed for bankruptcy. The financial system was thought to be in severe danger, and it took a few weeks of uncertainty and heated debates before the U.S. Congress passed the TARP bill on October 3rd. The Fall of 2008 also witnessed the run-up to the Presidential election on November 4th, which focused many people's attention towards economic issues, but it also led to a natural uncertainty about future economic policy (Hudomiet 2). These events had a major impact of the average household's future expected returns of the stock market because (a) the uncertainty of returns caused them to use recent realizations to update their beliefs, having a negative effect on everyone's expectations; and (b) the news that was being provided on politics and policy could have affected people's perceptions about the future of the economy, financial sector, and the stock market in particular (Hudomiet 3).

After witnessing the savings and retirement funds of their parents and grandparents basically vanish overnight due to multiple market crashes, Americans are now having a difficult time trusting the stock market. "It is difficult to trust something that you have seen fail multiple times in your young life" (Martin 5). A majority of millennials are not investing in the stock market due to the low amounts of excess cash generated by their former generations, and are instead putting any excess cash they have into savings for security and liquidity purposes (Martin 4). They would much rather have access to their funds while other alternatives to investing are currently being explored. It was also found that, even for those who do invest, they have become a lot more risk-averse, which means that around 85% of Millennial investors are choosing to "play it safe" with their investments (Martin 6).

II. An unfamiliarity with investing

After forming a big distrust in the market, young Americans and Gen-Xers have opt out of starting or continuing with their financial literacy education. While not limited to one gender, around 75% of young women and 60% of men now believe that investing can be seen as confusing due to the amount of jargon that is spoken amongst experienced investors. By not starting or continuing their training, they are now limited the ability of understanding the jargon that these financial-savvy investors are familiar with. They also see investing as a place that is only for the "old white man", proving a divide in millennials' stock market perception and how they don't really see themselves when thinking about traditional investing (Martin 6).

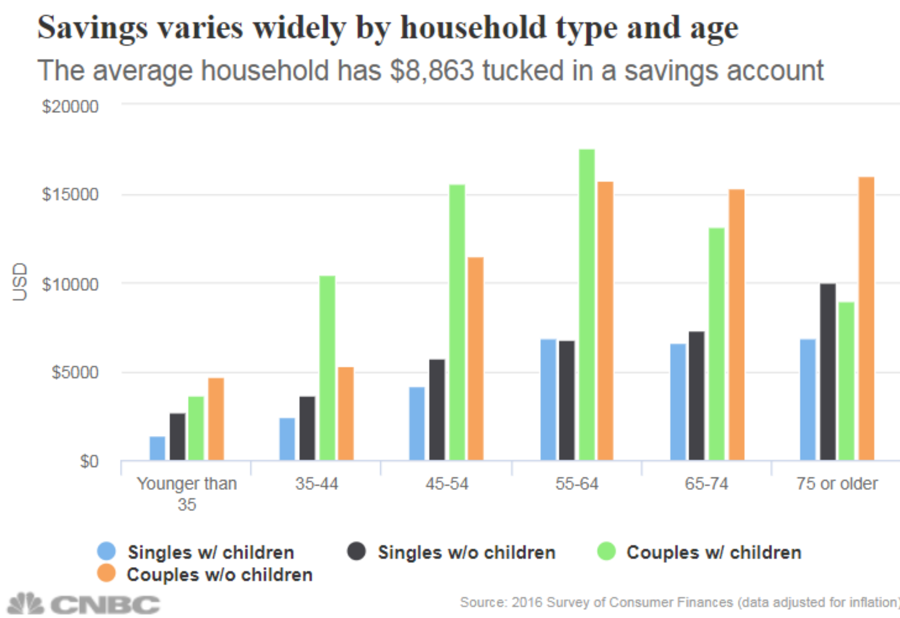
Not only are young adults financially illiterate, but the Wall Street uncertainty has caused them to become over-confident and form unrealistic expectations about the stock market. Millennials currently expect an average annual return of 13% in the stock market, while more experienced Boomers are expecting 7.7% of average annual returns (Martin 6). This build-up of high expectations and Millennial investors believing that they're 4 times more likely to consider themselves highly knowledgeable about the stock market than experienced boomers (Martin 7) causes a situation where they get disappointed when they don't get the results that they logically wanted and a deeper resentment in the stock market, thus keeping them away from the stock market and investing overall

III. People can't afford it

There is also a perceived high cost of investing because people are not saving the right amount of cash to cover for retirement nor annual recurring expenses. As of 2019, Americans are saving on average 6% of their pre-tax income instead of the 10-15% that is recommended worldwide by financial advisors. These numbers prove that Americans have a long way to go in order to be comfortable with investing.

Why aren't people saving enough money?

In order to have a good amount of savings, one must have saved up enough to cover at least 6 months of recurring expenses. For self-employed individuals, this number should be 9-12 months. According to CNBC, the number that Americans are supposed to save as of 2019 is falling short every year (E. Martin).

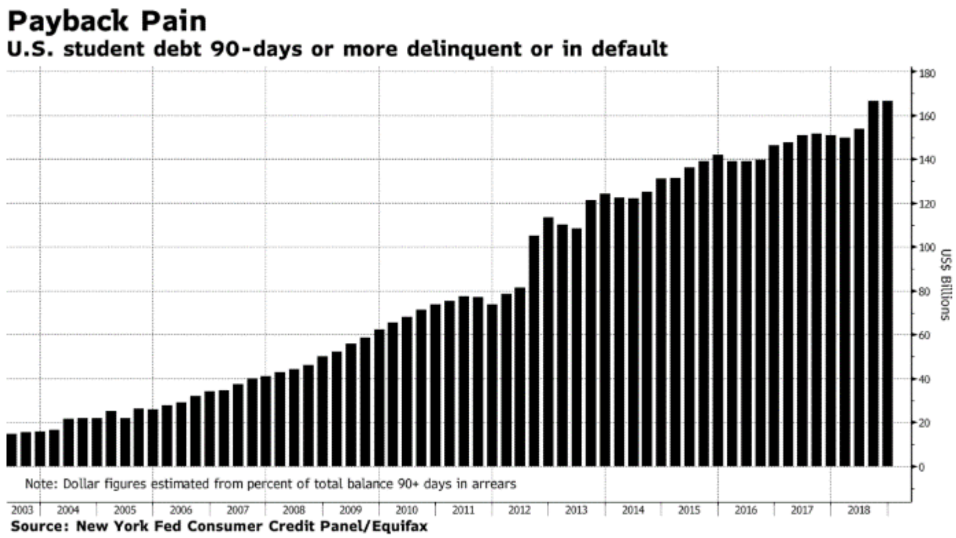


There are various factors that come into play to explain why Americans are not saving enough of their money, but there are two that I believe are the most significant:

I. Increasing Debt Levels and Repayment Struggles

In January 2019, consumer debt in the United States rose to $4.035 trillion versus $2.518 trillion in July 2010. Of that $4 trillion, student debt reached a record high of $1.6 trillion versus $600 billion in 2009 - about $500 billion more than the US total credit card debt. If a person asks a recent college graduate what their biggest financial struggle is after joining the real world, a large portion will answer with the repayments of student loans that they took out before joining their respective colleges. The main reason why student debt is continuing to tick up is because students and families are forced to rely on debt to fund a college education due to the increasing amount of students around the US that are borrowing debt, rising college costs, stagnant wages, and state and federal disinvestment in higher education.

In the US, around 20% of graduates have debt that is exceeding their income. These graduates are leaving school with loans of $37,000 on average and making a starting salary of $40,00-50,000 (Student Loan Hero 2019). This makes it very challenging to pay off their debts during the recommended 10 years after they graduate.



Many will make the case that this is not a problem due to a 4% unemployment rate in the US. However, there are still cases where students are taking $37,000 of student loans, but are leaving school with a degree that is not worth enough to find a job in the labor market. This is because the job market is getting more competitive and businesses are targeting students with a higher level of education than the national average. Not only that, student debt delinquencies are also continuing to climb. In 2018, student debt delinquencies reached a record $166 billion. This suggests that the strong U.S. job market hasn't generated enough wage growth to help them manage their increasing obligations (Tanzi 2019).

II. Wealth gap and income inequality in the United States

According to a paper released by the Economic Policy Institute, income inequality has been growing in every state since the 1970s and it has been seen in states people wouldn't generally consider. “From 2009 to 2015, the incomes of the top 1% grew faster than the incomes of the bottom 99% in 43 states and the District of Columbia. In 2015, a family in the top 1% nationally received, on average, 26.3 times as much income as a family in the bottom 99%” (Sommeiller, Price 2). This was seen in states other than Los Angeles, New York or San Francisco, even though a large share of 1 percenters are found in those areas.” (Sommeiller, Price 2). The Economic Policy Institute believes that the earlier era of 1928-1973 was characterized by a different and better environment of workers because it was surrounded by a steady rise in minimum wage, low unemployment levels after the 1930s, widespread collective bargaining in private industries, and a cultural, political, and legal environment that kept a lid on executive compensation in all sectors of the economy (Estelle, Price 2).

In 2019, the capitalist economy has led to a point where the rich are getting richer, and the poor are getting poorer. A large group of the working population is living in a household where they live paycheck-to-paycheck and the combined income is more than the federal poverty level, but less than the basic cost of living in their area (Bailey 148). The reason for that is because a majority of the jobs in the US are offering low wages to their workers.

Year	Qtr1	Qtr2	Qtr3	Qtr4	Annual
2008	659	666	656	680	666
2009	674	672	678	689	678
2010	691	675	676	687	682
2011	683	704	693	687	693
2012	702	722	689	713	707
2013	716	706	710	701	708
2014	727	711	720	743	726
2015	736	721	739	743	735
2016	737	753	758	758	751
2017	778	776	778	762	773
2018	793	794	820	820	808

Median usual weekly earnings for 25-34-year-old wage and salary workers, excluding incorporated self employed

According to the Bureau of Labor Statistics in 2018, the average salary for Americans ages 25-34 was around $40,000. This amount is insufficient to afford basic necessities like housing, child care, food, health care, and transportation, thus hurting their financial well-being. On average, people in the US are spending their earliest years working to pay off debts from the past, instead of building wealth for their future. This puzzle between annual salary, debt, and cost of living gets even more complicated when people take into consideration what states have higher costs of living and what each consider to be low-income. For example, a person in New York City makes $69,000 on average, but his/her cost of living is 129% higher than the national average.

Mental & Physical Health Issues Coming from Financial and Chronic Stress

Having to worry about people's finances can be severely stressful. According to BlackRock's 2019 Investor Pulse, the majority of respondents said that money was their #1 cause of daily stress (BlackRock "Investor Pulse" 2019)**.** In the US, only 2/5 of nonretired adults believe their retirement savings are on track; 1/4 have no retirement savings or pension whatsoever; and 1/4 of adults would not be able to cover an unexpected charge of $400 or would have to pay for it by selling something or borrowing money (Bailey 147). The following section will define the term of financial well-being, discuss how financial stress and overall chronic stress is impacting the overall health of American citizens, and provide an example of an American population that is going through a great amount of financial stress.

What is financial well-being?

In order to thrive as a human being, psychologist Abraham Maslow hypothesized that humans first have to be fulfilled on basic needs like food, water, shelter, and rest. Only when those needs are satisfied can individuals have the desire or capacity to direct attention toward higher order needs, like financial well-being (Bailey 147). However, if they are not financially well, the fulfillment of our basic needs can be severely distracted.

The Consumer Financial Protection Bureau – CFPB - defines financial well-being as a state where a person has control over day-to-day, month-to-month finances, can absorb a financial shock, is on track to meet financial goals, and has the financial freedom to make the choices that allow him or her to enjoy life (Bailey 148).

The Risk of Financial Stress in Our Health

One thing that is causing people to be financially well is stress, especially financial stress. Financial stress is the difficulty in meeting one's financial obligations, with given economic behaviors being best understood in light of individuals' attitudes and beliefs related to resource availability and management (Robb 515).

One of the largest factors that is causing stress amongst Americans is the responsibility of repaying debt. Obtaining debt has proven in the past to have a lot of positive aspects in any household. For example, student loans can be seen as a beneficial personal socioeconomic investment, or a high amount of debt reflects consumer spending which enhances symbolic capital and is thus an investment in social prestige and status (Sweet 7). Unfortunately, taking out higher amounts of debts, or having a higher debt-to-asset ratio, has also been proven to have negative health outcomes like higher perceived stress, depression, and/or worse self-reported general health (Sweet 8). This perceived stress has been linked to migraine, cardiovascular disease, absences from work, etc.

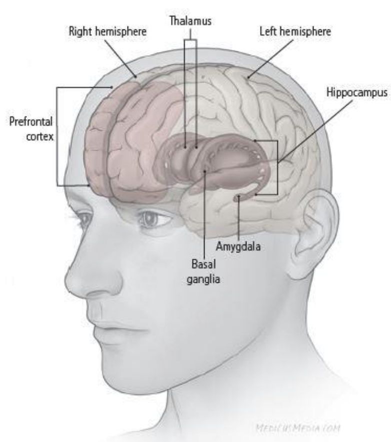
Another way that financial stress has impacted individuals negatively is in their social relationships. Every time their financial suffering increased, participants of the Gallup Well-Being Index, for example, saw a decrease in their perceived strength of social relationships. This lack of wealth generation is not only affecting people's social relationships, but low wages has also been found to predict higher prevalence of obesity, which is in turn linked to absenteeism and presenteeism, because of the unaffordable high costs of healthier and/or organic meals. Another way that having a scarcity of financial resources can impact individuals is with mental health, including cognitive functioning and problem-solving ability. This is because more planning is necessary to determine how to allocate limited funds among necessities (Bailey 148-149).

How Chronic Stress Affects the Body

As this uncontrollable financial stress tends to build up and is constantly present in their lives, Americans are now experiencing an additional struggle called chronic stress. No matter what the cause – money, death of a loved one, loss of a job an illness, a relationship spiraling downward, an early loss of a parent, violence, or sexual abuse - chronic stress and an overuse of our stress response system can be very dangerous.

The genes in our body make proteins that are involved in the biological processes of every part of our human body. In order to make the right proteins at the right time, different genes are constantly turning on and off. However, if they get it wrong they can alter your biology in a way that results in your mood becoming unstable. For example, in a genetically vulnerable person, any stress - a missed deadline at work or a medical illness, for example - can then push this system off balance (Harvard Health 2017).

Stressful life situations can have several physiological changes in our bodies. We feel it when our heart starts pounding, muscles tense, breathing quickens, and beads of sweat start to appear. These physiological changes are known as stress responses, and they start when a cascade of stress hormones is triggered if we feel a real or perceived threat to our bodies. If our level of stress is short-lived, the body usually returns to normal. However, when stress is chronic and our stress response system is constantly active, changes in the body and brain can be long-lasting. This leads to the point that when genetics, biology, and stressful life situations all come together, depression can result (Harvard Health 2017).



The regions shown here are mirrored in both hemispheres of the brain. Also, these structures are interlocking; the illustration suggests location and relative region but not precise location.

When it comes to depression, the three main areas of the brain can be affected by it are the amygdala, thalamus, and hippocampus. By definition, the amygdala is part of the limbic system, a group of structures deep in the brain that's associated with emotions such as anger, pleasure, sorrow, fear, and sexual arousal, and its activity is increased when a person is sad or clinically depressed. Thalamus is the part of the brain that receives most sensory information and relays it to the appropriate part of the cerebral cortex, which directs high-level functions such as speech, behavioral reactions, movement, thinking, and learning. And finally, the hippocampus is part of the limbic system and has a central role in processing long-term memory and recollection. It is this part of the brain that registers fear when you are confronted by a barking, aggressive dog, and the memory of such an experience may make you wary of dogs you come across later in life (Harvard Health 2017). This leads to the point that people need to start being careful when they feel stress in any type of situation, and the importance of improving the financial situation in every person's lives.

<u>What can be done to improve Americans' behavior with their finances and reduce their financial stress?</u>

I. Educating Americans About Financial Literacy

Financial literacy has been proven to have a positive effect on risk aversion and expectations on retirement planning, as well as the effect of these antecedents on the retirement portfolio (Mahdzan 267). Learning about financial literacy can have an impact in retirement portfolio allocation choice, which supports past studies that have found that it has an impact on high risk asset participation - stock, shares, etc. The responsibility for having adequate retirement savings has shifted from governments and employers to the individuals themselves, so it is thus important for them to be equipped with more skills and financial knowledge if they are to ensure desired plans meet their desired objectives (Mahdzan 284). Furthermore, people with low risk aversion are less likely to hold risky assets in their portfolio. If Americans learn about decision-making of retirement planning, they will then start to increase their risk by learning about different financial products according to their own risk and return.

Not only can adults learn about financial literacy, but so can students. Studies have shown that low-income seniors are forming inaccurate early perceptions about college finances outside of school and vague ideas about college finance calcified into “college finance literacy” (Greenfield 331)**.** If these students become more “college finance literate”, they will be able to get the best deal for financial aid and not have to worry about it as much when they graduate from their respective colleges. Receiving that early education will also help them to start thinking about how much money they think they want to make when they graduate and also what major will or will not help them get there.

II. Implementing Financial Technology to Save and Invest

In our current generation, young Americans have begun to use their expertise in technology to deviate from traditional investing and explore different ways of investing their income to not be overly exposed to the stock market letting history repeat itself. “They are reigning in the money they do have and exploring other technological means in which to apply it” (Martin 9)**.** Examples of these technological advances are Micro-Investing and robo-advising.

Micro-investing has allowed investing to become more convenient than ever before. It is “a more accessible and automated way to start investing with as little as $5, and you can do so right from an app on your phone. There’s minimal risk, low investment requirements, and it is rooted in technology, all of which are characteristics sought by this generation” (Martin 7)**.**

Companies like Stash and Acorns are shifting towards the mobile platform to enable this kind of technique. These types of fintech businesses will see and are seeing a lot of upside towards the Millennial demographic because this group comes from a tech savvy background, and it allows investing to feel like more familiar territory when using technology to take advantage of its convenience and experience in trading.

Another way people are using technology towards approaching investing and financial advice is by using a robo-advisor. "These are automated software programs that use algorithms at a far lower cost than a traditional human financial advisor. Predominantly, if not exclusively accessed through the web, robo-advisors were built targeting and relying on millennials who grew up on technology and rely heavily on it for their day-to-day activities. Robo advisors appear to be a perfect blend between old and new when it comes to investing, and all signs appear to show that it will continue its meteoric growth" (Martin 8-9).

How Financial Technology Can Help You

I believe that micro-investing will improve people's behavior with their finances in the future in a way that benefits them beyond the immediate savings for a single goal because it will give them the discipline of tracking their spending so that they won't spend money on things that are not a priority; their priority should be paying their debt first. In tough economic times, people are likely to relieve stress by turning to unhealthy activities such as smoking, drinking, gambling, emotional eating, or even shopping. With the power of technology, people can micro-invest their savings by using the automatic recurring option towards your savings. This will allow people to limit these unhealthy activities because (a) they know they'll have enough money saved up for "a rainy day"; or (b) they won't have enough money to spend on those unhealthy activities anyway because, after they deduct a certain percentage off their income, they'll have the obligation to use that income to pay for their short-term expenses. This will help them to start budgeting their variable expenses and save for other things they have in mind for the long-term.

There are different ways in which micro investing can work for you. One way is by "using an app that rounds up the dollar amounts on purchases you make on a credit or debit card and diverts the extra cash to an investment account." (Finra 2018) These apps can also determine your risk tolerance and the type of investment that fits your investment goals and risk answering some additional questions designed to do just that. "Some micro investing apps use algorithms to create a risk profile based on your responses to various questions, then make recommendations on how and where you should invest your money" (Finra 2018) Some apps present investment options thematically, so you can choose investments that align with your social or environmental views. "You also might have the option to set up a recurring daily, weekly or monthly allocation into an investment account, or contribute to a retirement account, such as an IRA, with the help of an investment professional" (Finra 2018).

By using this type of technology, people will also have the moral obligation to start learning about financial literacy. They finally found a simple and convenient way to save and invest their money, so they're going to want to know what's going on with their money, why it's happening, and what else they can do to increase their wealth - which, by the way, is not only associated to the rich).

Conclusion

Being stressed every day about our finances is having a negative impact in our mental and physical health. This because the average American is generally not investing towards their future, due to their distrust in the stock market, a lack of knowledge of investing, and the high cost of investing due to their low amounts of excess savings. Furthermore, they are incapable to save the suggested amount because of the issues of income inequality and the wealth gap in the US, and the "hole" that they dug themselves into when they took out excessive amounts of debt in the past & they're now struggling to pay it back. Yes, there are certain policies that can be implemented in order to reduce income inequality and fix our current economy. However, instead of waiting for politicians and the government to fix our problems with their policies, Americans can get a "head start" by implementing financial technology into their lives. Micro-investing and robo-advising can have a very positive impact in the lives of these American individuals because it will improve their financial behavior, financial literacy, and mental/physical health that was caused by financial stress.

Considerations for Future Research

Since micro-investing and robo-advising are two very new and up-and-coming fields in the US, there was not a lot of data collected in order to conduct a quantitative research on this matter. However, there were several questions that came up during this study that could be used for future quantitative research.

First, if people improved their financial behavior and were trained about financial literacy, would that decrease overall student debt levels in the United States? By improving graduates' behavior with their finances, they will be able to repay/refinance their debts to able to pay them in the future, and/or won't make the mistake of taking out a loan if they're not credit-worthy.

Second, if people improved their financial literacy and increased their savings, is there a higher probability of children from low-and middle-income families attending college? Could micro-investing play a role in improving this outcome? Micro-investing is fairly new, so the possibility of answering this questions would be higher once fintech companies have more data on their clients.

Acknowledgements

I would like to thank Dr. Alicja B. Stannard, Dr. Brent J. Little, and Dr. Michael J. Gorman for all of their academic support and mentorship. Throughout the past several months, Dr. Gorman played a key role in sharing and organizing ideas that were crucial for this specific topic, and Dr. Stannard and Dr. Little's guidance and encouragement paved the way to finalizing this extensive paper. The time that these professors put it revising my assignment cannot go unnoticed, so I am immensely grateful for helping me in every step of the way.

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