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**“The Impact of the Great Recession on Middle Class Americans”**

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**Topic:** Analyzing the Impact of the Great Recession on the Middle Class in the U.S.

**Abstract:** This research paper studies the effect of the Great Recession (Late-2000s Recession) on middle-class Americans. It will analyze and cover the extent of the impact through evaluating data on several factors, such as the percent of the middle class in college, percent female participation rate, single parent households (female householder), middle class income, unemployment rate, and several other factors from the years 1970 to 2010. This research will offer insight into the extent of the Great Recession’s impact on the middle-class and identify which key factors had the most significant effect.

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**I. Introduction**

The economy of a country often expresses many things. It tells about the amount of wealth and resources a country has in terms of their production and consumption of goods and services. It conveys how prosperous people of a nation are and also exposes the fluctuations of their country’s production and standard of living. The state of the economy can create recessions and possibly from those recessions turn into a depression. The study of the impact of a country’s state of economy is important in learning how it affects our own daily lives today, how will it affect us in the future, and what can we understand from a recession (why/how does it happen). This research paper will explore the Great Recession’s impact on middle class American lifestyles. Through the discussion of literature review on other economists’ works (describing their view on the impact of the recession on the middle class), a theoretical analysis with a model will be created. There will be empirical testing of that model using advanced econometric techniques to further help explain see the impact. The impact will include their income, stability, length of unemployment, and the differential impact on educational status. We would hope to gain a clear understanding of the major forces that impact the middle class.

**II. Literature Review**

In order to better understand the research topic, a review of existing literature relating to the effects of the Great Recession on demographic groups, graduating college students, the labor market, and unemployment is examined. The fluctuations of a country’s economy can affect the standard of living its citizens’ experience and impact how they live their daily lives. Through a review of journal articles by other economists and researchers from the field, the impact in related areas is examined. This review would provide detailed background information needed to understand the full impact of the Great Recession and help with further research on its effect on middle-class Americans.

*Who Suffers During Recessions?*

Hilary Hoynes (UC Davis and NBER), Douglas L. Miller (UC Davis, Princeton University, and NBER), and Jessamyn Schaller (UC Davis) [October 1st, 2011] have performed research of the Great Recession’s business cycles effect on the labor market. Their objective was 1) to conduct a detailed analysis of how cycles affect outcomes differently across people of different ages, education, race, and gender and 2) compare the cyclical sensitivity of the Great Recession to the Early 1980s recession.

Their findings supported the belief that the impacts of the Great Recession are not experienced by all workers equally. National statistics obscures differences in the severity of the cyclical impact for different groups of differing ages, education, race, and gender. It is found through the results of their regression analysis that white individuals are less affected than black individuals to changes in the business cycle. Higher education groups are less impacted than lower education groups, and women are less affected than men. The researchers explained that the reason behind large gender differences for cyclical responsiveness of the employment rate is due to women being more likely to act as added workers (labor force increasing in recessions) and men being more likely to act as discouraged workers (labor force decreasing in recessions). As a whole, it is found that men, nonwhites, youth, and those with lower education levels are the most impacted by downturn in the economy.

In comparing the Great Recession to the earlier 1980s recession focusing on the period of January 1979 to July 2011, the study focused on two questions: 1) For each demographic group, is the pattern of business cycle responsiveness in the Great Recession similar to the Early 1980s recession and 2) are the changes that occur (changes in responsiveness) similar across demographic groups? A regression model was created to test whether the cyclical responsiveness to the Great Recession is qualitatively different for the subgroup than the 1980s recession.

It is found for both recessions during the recession periods, men, nonwhites, youth and those with lower education levels are more affected while women, prime aged workers, and higher education groups are less so. In race and gender groups, the cyclical responsiveness is similar across recession periods; however in the Great Recession effect on men for all races is significantly higher than the 1980s recession. The over-time differences are small, however. The Great Recession also has a greater impact on older workers and for each education category. Overall, the Great Recession has had a deeper impact than the Early 1980s recession, but the groups that were impacted are more or less similar. The journal article also discusses expansionary periods following the early 1980s recession and the Great Recession, but for purposes of this research topic it is not included.

In conclusion, the researchers have found four interesting results. The first finding is that in the Great Recession, the labor market decline is deeper and longer than the early 1980s. The expansion period from the end of the Great Recession (according to the researchers from NBER) has been weak with slow employment gains. The second finding is that the impact of the Great Recession is not uniform across demographic groups and the differences are economically and statistically significant as described earlier. The third finding is that the dramatic differences in the cyclicality across demographic groups are stable across time and recessionary periods compared to expansionary periods. The last finding is the differential cyclicality across demographic groups in the Great Recession is also stable.

One reason why there is a larger difference in the impact of business cycles across demographic groups is due to a variation of cyclicality across industries. Certain industries such as construction and manufacturing are more cyclical than service or government jobs. The results suggest that an important part of cyclicality across demographic groups is due to the industries different groups tend to work in. The researchers make the final statement that the groups who lose during the Great Recession are the same ones who lose during the recessions of the 1980s and who experiences weaker labor market outcomes even during prosperous times. The Great Recession is different from business cycles over three decades earlier in size and length, but not in type. This means that the Great Depression has the same type of experiences in which demographic group is usually affected during economic downturn as the 1980s recession, but has had a much deeper impact and longer length of period.

*The Long-Term Labor Market Consequences of Graduating from College in a Bad Economy*

In this research paper written by Lisa B. Kahn from Yale School of Management [August 13, 2009], the study of labor market experiences of white male college graduates during poor economic conditions is explored.

Kahn uses the National Longitudinal Survey of Youth (NLSY79), in which respondents graduated from college between 1979 and 1989. She estimated the effects of both national and state economic conditions at the time of college graduation on labor market outcomes. She followed the respondents for at least 17 years post-college graduation gathering information on the individuals, such as aptitude test scores, detailed work, and school information. She focuses on the results of before, during, and after the recession of the early 1980s. Wages, labor, supply, occupation, and education attainment are all analyzed as a function of economic conditions in the year an individual graduated from college. Since the timing and location of the college graduation could be potentially affected by economic conditions, Kahn also used the year of birth (state of residence at an early age for state analysis) as an instrument for the college unemployment rate.

Kahn points out that with the NLSY79, while she is given the ability to observe exactly when a person graduated from college and allows her to follow their tracks for at least 17 years, she is restricted to the 11 cohorts and would not be able to extend the results of her findings to other recessions. Therefore, she used the Current Population Survey (CPS) as a way to extend her research. The CPS supported the results that workers who graduate college in a bad economy experience large wage losses that would persist for several years post-college graduation.

Her findings support her hypothesis that graduating from college in a bad economy has a long-run, negative impact on wages. There is also a negative effect on occupational attainment and slight increases in educational attainment and tenure for graduates in poor national economies. Labor supply is generally unaffected using national and state unemployment rates. Also, wage losses range from 1 -20% each year, relative to the cohorts with minimum state and national unemployment rates. It is also discussed whether according to the wage findings, if workers would be better off waiting to enter the labor market until the economy improves. She came to the conclusion that those who graduate during poor economic conditions should try to perform the best they can, even with their restricted options. This would not carry a negative signal to employers, as it would if many graduates chose to not venture into the labor market.

One theory Kahn discusses to explain the long-run, negative effects of a poor early labor market experience is general human capital differences. General human capital differences could partially explain the wage effect using national rates, since it is found that workers who graduate in poor economic conditions have lower-level occupations on average, but occupation differences can’t count for all of the wage differences. However, wage differentials continue within both job and occupation. A more complicated model is needed to explain the findings more thoroughly.

Kahn refers to a study by Gibbons and Waldman (2003) in which a task-specific human capital model was used to explain cohort effects. It is found that for those entering a firm in a poor economy starting at a lower-level job would cause the worker to invest more time into developing their skills. Later when the worker is promoted, some of their skills would go to waste because not all of the skills are transferrable. Gibbons and Waldman predicted wage differences within job level, career, and firm, which are consistent to Kahn’s findings.

Overall, there are more significant effects in the national regressions than in the state regression with the exception Kahn mentioned of instrumented state wage regressions. This can be due to the fact that college graduates are not as sensitive to local labor markets as to the national market. However, Kahn mentions that this does not mean that the possibility of another factor other than the college unemployment rate can be ruled out in affecting the national regression results. It is also suggested that because the 1982 recession was followed by another recession just 10 years later that this particular recession could have been particularly damaging. The CPS results show that the early 1990’s recession could have had a smaller impact on college graduates. Given Kahn’s findings in the national results, the support of the state-level results, and the CPS analysis, wage effects related to graduating from college in a bad economy would be significant, at least in the medium-term for most groups of college graduates.

In conclusion, it is found that business cycles’ effects on recent labor market enterers are significant and does continue. Further study focusing on other factors, such as demographic groups and observing cohorts for a longer time period would most likely explain and tell more about the business cycle’s effects and could possibly even determine which policy measure would be best in this type of situation.

*The Labor Market in the Great Recession*

Michael W.L. Elsby from the University of Michigan, Bart Hobijn from the Federal Reserve Bank of San Francisco, and Aysegul Sahin from the Federal Reserve Bank of New York [Spring 2010] performed research on the labor market in the Great Recession. Their research is divided into three sections. Section I covers patterns over time of the key labor indicators of unemployment, employment, labor force participation rate, and hours per worker during the 2007 recession. Section II investigates the sources of increased unemployment in the 2007 recession by analyzing the behavior of unemployment flows. It also assesses the role of labor turnover in the recession. Lastly in Section III, the outlook for the recovery of the labor market in the economic downturn is assessed. The outlook will also be compared to the European unemployment problem of the 1980s.

The results showed that the researchers’ analysis of the labor market in the current downturn reveals it to be the deepest deterioration in labor market outcomes on record in the postwar era. Every indicator of labor market activity suggests that the recession has been unique in both depth and duration. The rates of joblessness among all groups in the labor market have reached historic postwar highs.

It is found that the features of labor market dynamics in the behavior of unemployment, labor force participation rate, use of intensive versus extensive margin in the adjustment of labor input, and the differential impact on demographic groups (with young workers, male workers, less educated workers, and those from ethnic minorities) are similar to those seen in earlier recessions as those labor market features are hit harder. Also similar to earlier deep recessions, increased joblessness in the current downturn can be linked to both increased rates of inflow into unemployment and increased duration of unemployment, with higher inflows more important early on in the downturn.

Analysis of worker turnover data from new Job Openings and Labor Turnover Survey (JOLTS 2010) gives a new look into the driving forces of job loss in the 2007 recession. It has been emphasized through recent literature that the relatively acyclical (moving independent of the overall state of the economy) behavior of the rate at which workers separate from employers suggests that job loss has only a limited role in driving recessionary unemployment. With data from JOLTS and CPS, it is revealed that increased inflows into unemployment have been driven mostly by a change in the composition of separations toward layoffs, which are likely to lead to unemployment and away from quits, which is likely to lead to a new job at separation. An increase in layoffs plays a role in increasing unemployment in recessions.

A divergence from past trends of previous economic downturns for the Great Recession is that the rates of unemployed workers exiting from joblessness have slowed down to record low levels. The record rise in long-term unemployment connected with the recession would be likely to produce a persistent overhang of workers facing long unemployment, which would slow economic recovery. Also, the extension of emergency unemployment compensation (EUC) in June 2008 most likely increased long-term unemployment as well. The researchers concluded that even though the rate at which workers are leaving unemployment for the U.S. labor market is relatively slow, it is not as slow as Europe in the 1980s. It is expected that there would be a slow recovery, but not as gloomy as the one seen in Europe.

*How Will Unemployment Fare Following the Recession?*

Edward S. Knotek II, a senior economist and Stephen Terry, a research associate at the Federal Reserve Bank of Kansas City investigate how unemployment will behave following the Great Recession. [2009]The research paper is divided into four sections.

Section I explores the similarities between the current recession (Great Recession) and past severe recessions, which were followed by declines in unemployment. The level of severity in recessions greatly varied over the last 40 years. It is found that the Great Recession was most closely related to the 1973-75 and 1981-82 recession. Each of the three recessions had lasted longer than the average postwar recession. The National Bureau of Economic Research (NBER) indicated that the 1973-75 and 1981-82 downturn lasted sixteen months, much longer than the average of ten months. The Great Recession is expected to last as long if not longer. Based on NBER’s date for the most recent business cycle peak (December 2007) and other data as well, the Great Recession is believed to likely be the longest since the Great Depression.

A seconding finding is that all three recessions have had above-average drops in GDP. The average postwar recession has a 1.7 percent decline in GDP level, while the 1973-75 recession dropped 3.1 percent and the 1981-82 recession dropped 2.6 percent. In the current recession, GDP dropped 2.2 percent in the first quarter of 2009. A third finding was that also in all three recessions, unemployment experienced strong increases. In May 2009, the unemployment path was very similar to the 1973-75 and 1981-82 recessions.

It is believed that with the similarities of the Great Recession with the two other recessions, the recovery path for unemployment will take a similar direction. Generally for unemployment, the more unemployment rises during a recession, the more it would fall in the year after. However, it is believed that this would not be the case. The two most recent recessions had unemployment rise towards the end and remained high during the recovery period. This suggests that the behavior of unemployment following recessions may have changed.

Section II looks at the jobless recoveries following the recent recessions and the changes in the labor market since the early 1980s. The two most recent recessions in 1990-91 and 2001 raise the probability that unemployment is less likely to fall rapidly when a recession ends. After the recessions, unemployment continued to rise instead of fall. The changes in the labor market since the 1980s could have changed the behavior of unemployment after recessions. The time period when a recession ends but unemployment continues to rise is referred to as jobless recoveries.

Some explanations as to why jobless recoveries occur are that perhaps the long expansions of the 1980s and 1990s gave firms incentives to delay organizational restructuring until the next recession. A second explanation suggests that jobless recoveries occur because mild recessions are often followed by weak recoveries. The third explanation is that labor markets have changed fundamentally since the early 1980s. Two labor market changes are 1) the pattern of layoffs and 2) the rise of just-in-time employment practices.

Layoffs have changed from temporary layoffs to more permanent ones. The 1973-75 and 1981-82 recessions have had the composition of the unemployed shift dramatically to both permanent and temporary layoffs. Permanent layoffs also change the worker-firm relationship. It forces the worker to search for a new job at a new company or even in a new field, industry, and geographical area. Matching a new worker with a new firm requires more time and energy than rehiring a layoff worker back, costing more money for the firm and uncertainty if the match with the new worker works out well. This means that the use of permanent layoffs would cause a firm to be more likely to delay hiring during recoveries.

Second, the just-in-time employment practices of overtime hours, part-time workers, and various forms of outsourcing have risen and given firms more flexibility and leaner staffing of permanent, full-time workers. The availability of just-in-time labor after a recession could also delay hiring. With the option of just-in-time labor, it becomes less important to hire workers when there is an anticipation of stronger future demand. Firms would instead wait until demand comes and then quickly adjust labor. Therefore, the structural changes in the labor market have continued through with the Great Recession and it is possible that unemployment will not decline as quickly as it did in the other severe recessions of 1973-75 and 1981-82.

Section III examines the international experiences with the banking crises and unemployment. One key difference between current and past recessions is the ongoing bank crisis in the U.S. In order to get a better sense of the effects of these types of crises, other countries’ experiences with the banking crises is explored.

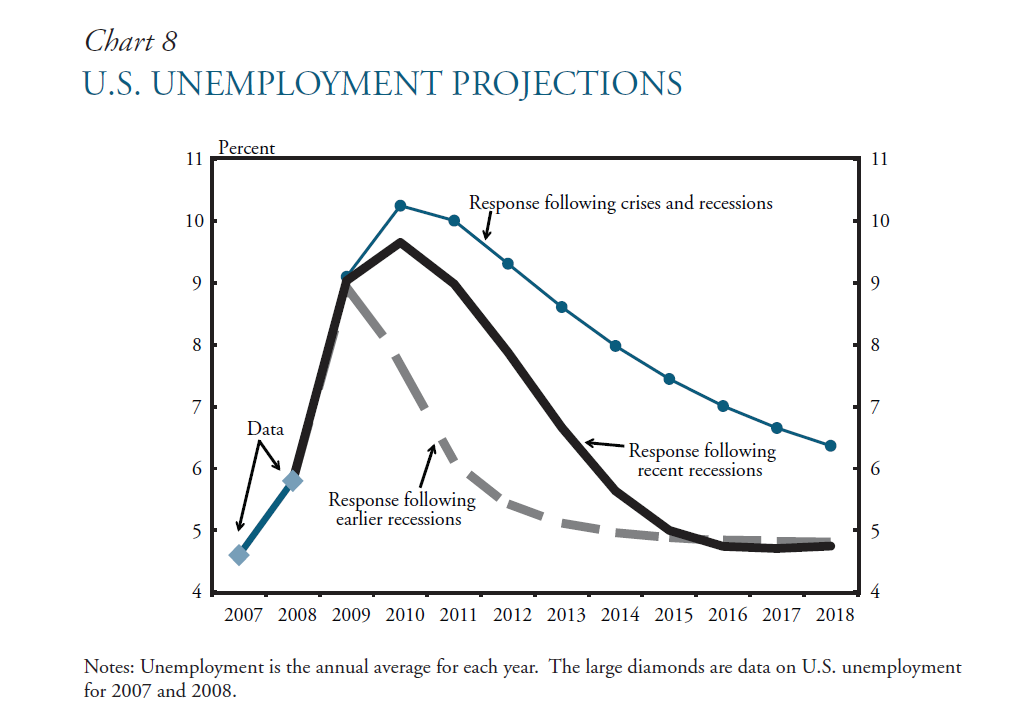
The recent U.S. experience of the banking crisis is very similar to the banking crisis in other countries. Before the crisis, there was easy access to credit, high levels of consumption with low saving rates, and rapid appreciation in asset prices. Once the crisis happened, changes immediately occurred. Financial intermediaries tightened the flow of credit, housing and equity prices fell sharply, and consumption growth and residential investment declined more than usual during the recession. This similarity during the banking crises suggests that the behavior of output and unemployment from studies of foreign banking crises can offer important lessons for the U.S. on how to move forward.

Studies of banking crises in foreign countries have showed that the crises are usually followed by significant declines in output; this means large declines in levels of GDP. The declines are also highly persistent. For example, in high-income countries the level of GDP remains 15 percent below their previous trend ten years after a banking crisis. Okun’s law assumes that slow output growth is most likely associated with rising unemployment. If banking crises are followed by reductions in output, they would also be associated with increases in unemployment. Slow growth following banking crises can only explain part of the increase in unemployment. There are other factors associated with the banking crises than can also influence unemployment as well.

The researchers have chosen to assess the relationship between banking crises, unemployment, and GDP using a vector autoregression (VAR). It is found that over four years, the estimated unemployment rate increases almost 2.5 percentage points, meaning that the unemployment rate begins a slow decline. Previous studies have also shown that recessions and financial distress can interact with each other in consequential ways.

Banking crises that occur with a recession are associated with large and persistent increases in unemployment. After this, unemployment typically increases by 3.5 percentage points over four years before slowly declining in later years. With banking crises without recessions, the unemployment rate is effectively unchanged. So, when a recession occurs and it is not associated with a banking crisis, unemployment rises two percentage points in three years before declining. The VAR results suggest that the unusually large increase in unemployment following the combination of a banking crisis and recession is due to two factors. One is that those situations are often associated with large declines in output and two that the combination of a banking crisis with a recession could also have an unemployment effect above and beyond the output channel.

Section IV discusses the implications of past U.S. recessions and the international evidence surrounding banking crises for the future course of the U.S. unemployment rate. The researchers created three different scenarios into Chart 8 and came upon the following results:



For the first line (dashed lined), the scenario captures that recessions similar in severity to the current recession have historically been followed by strong rebounds in output and declines in unemployment. Therefore, unemployment would fall immediately in the fourth quarter of 2009, averaging nine percent for the year. Unemployment would then decline to six percent in 2011 and five percent in 2013.

The second line (solid line) was constructed under the assumption that the current recession shared more important similarities with the 1990-91 and 2001 recessions due to structural changes in the labor market. The forecast showed that unemployment took a considerable amount of time to decline during the jobless recoveries from the 1990-91 and 2001 recessions. Unemployment continues to rise in 2010, when it averages 9.7 percent. Unemployment goes down to nine percent in 2011 and eight percent in 2012. It does not go to five percent until 2015.

The third line (line with circular markers) was created under the assumption that the current combination of a recession and a banking crisis is similar to other high-income countries’ experiences. The results reflected that such events would have large and persistent effects on unemployment. Unemployment rises above ten percent and stays that way through 2011. Unemployment goes down to eight percent by 2014 and seven percent in 2016. At the end of the ten-year horizon, unemployment is still greater than six percent. Overall, evidence proves that unemployment will take a long time to recover after the downturn.

In conclusion, the labor market trends that contributed to jobless recoveries and the international evidence on banking crisis suggest unemployment could remain high in the U.S. for a considerable time after the current downturn. As a policy implication, the researchers suggest that it might be best if estimates of the natural rate of unemployment are taken into account.

*How the Great Recession Has Affected Americans*

Rich Howard [August 2010] from CreditLoan has written about the Great Recession’s impact in the U.S. He writes that as the Great Recession is ranked as the worst slowdown the country has suffered in decades, it is not surprising that this economic downturn has affected U.S. residents in many ways.

The recession has affected the spending habits of U.S. consumers; it is found that 62 percent of respondents had said that they cut back on their spending since the start of the recession. 6 percent of respondents said that they were spending more, while 30 percent said that they were spending about the same.

The recession has also affected the way people work. 32 percent of U.S. residents said that they either are or have been unemployed because of the recession. 28 percent have said that they have had their work hours reduced, 12 percent had to take unpaid leave, and 11 percent had to switch to a part-time work schedule. 23 percent of respondents said that they had to take a pay cut and 6 percent say that they are now under-employed.

The amount of time it is believed that it would take for families to recover from the Great Recession also varies. 5 percent of U.S. families say that it would take them less than a year to recover, 27 percent believe that it would take them about a year to two years to recover. Other families have responded that the recession has had a much larger impact and estimated a much longer time. 40 percent estimate that it would take about three to five years to fully recover and 10 percent believe that it would take about six to ten years. Included within the last group are also families who believe that they would never recover from the effects of the Great Recession.

Home values have also have fell due to recession. In a survey, 26 percent of U.S. homeowners have seen their home values fall significantly during the recession. 22 percent have seen their home values fall a little, while 33 percent say that they have stayed the same. Only 8 percent of homeowners say that their home value have gone up a little and 4 percent have said that their value has gone up a lot.

Consumers have also taken steps to adjust to these troubling economic times. A large group of 71 percent has said that they have purchased less expensive brands during the recession and 15 percent have increased their credit card balances to pay bills. 27 percent have struggled to pay medical bills, while 57 percent have cut back and cancelled on vacations. 24 percent have borrowed from family members or friends. 11 percent have even postponed big decisions, such as getting married or having a baby because of the recession.

An interesting aspect that the surveys have found was that despite the effects of the Great Recession, many people still see the U.S. as a land of prosperity. 52 percent of lower-class respondents said that the U.S. is still a prosperous nation and 70 percent of middle-class respondents agreed. 63 percent of the upper-class respondents have also agreed.

*Can the Middle Class Be Saved?*

Don Peck from The Atlantic (September 2011) wrote about the Great Recession’s effect on the accelerating the divide (gap) between the Middle Class and the Wealthy. The Great Recession has allowed us to see the widening gap between the two more clearly.

In the article, Peck describes three Citigroup analysts that had released a report in October 2005 on the pattern of growth in the U.S. economy. They said that America was composed of two distinct groups, the rich and the rest. Most of the “action” in the American economy occurred in the richest one percent of households. This group earned as much each year as the bottom 60 percent of households put together and possessed as much wealth as the bottom 90 percent. It is said that with each passing year a greater share of the nation’s income was going to this group, holding the power of future growth and returns in their hands. The analysts were Ajay Kapur, Niall Macleod, and Narendra Singh who had given the term “plutonomy” for this situation and commented that the “economic growth is powered by and largely consumed by the wealthy few.” Even though the author points out some flaws in their theory, such that it is too simply of an idea to divide America into only two classes, Peck does point out some interesting facts.

Income equality usually shrinks during a recession, but during the Great Recession it did not. From 2007 to 2009, it has showed that the gap has widened a little. The top one percent of households did see their income drop more than other Americans in 2008, but the decrease was due mainly to the stock-market crash with a fifty percent reduction in realized capital gains. However, top earners have even seen their share of national income rise in 2008, excluding capital gains. As the stock market improved, corporate profits had increased quarter after quarter since the beginning of 2009. Even though during the financial crisis, massive layoffs occurred in Wall Street, the financial industry remained well shielded compared to other sectors, such as construction and manufacturing. Throughout the recession, it has been found that the unemployment rate in finance and insurance has been substantially below the national average.

The Great Recession has also affected different classes of people in different locations. In 2009 to 2010, while wage were mostly flat nationwide, areas like Manhattan and Silicon Valley have seen a rise. 11.9 percent increase in Manhattan and 8.7 percent in Silicon Valley. It is also found that in March 2011, the national unemployment rate was 12 percent for people with only a high-school diploma, 4.5 percent for college graduates, and 2 percent for those with a professional degree.

Since the stock market had bounced back, while housing values have still not, the middle class as a whole has seen more of its wealth erased than the rich, who have more-diverse portfolios. In a 2010 Pew Study, the typical middle class family had lost 23 percent of their wealth, while the upper class lost just 12 percent.

One of the most interesting features of recessions is that they tend to accelerate deep economic shifts that were already underway. Declining industries and companies fail, which would lead workers and capital to go towards rising sectors. Declining cities shrink faster and workers whose work was replaced by technology are pushed out of the industry and never asked to return. Some economists have argued that deep economic downturn periods do nations a favor in clearing the way for new innovation, more-efficient production, and faster growth. It is found that job losses have been much more severe in “middle-skilled white- and blue-collar jobs than in either high-skill, white-collar jobs or low-skill service occupations.” From 2007 to 2009, the total employment in professional, managerial, and highly skilled technical positions was essentially unchanged. Jobs in low-skill service occupations, like food preparation, personal care, and house cleaning were also stable. The recession impacted the jobs in between. It is found that “almost one of every 12 white-collar jobs in sales, administrative support, and non-managerial office work vanished in the first two years of the recession; one of every six blue collar jobs in production, craft, repair, and machine operation did the same.”

Both trade and technology have increased the number of low-cost substitutes for American workers with only moderate cognitive or manual skills. The skills associated with these functions became less valuable and workers without a higher education have suffered as machines and low-paid foreign workers took up the jobs. Those however who do have a good education and exceptional creative talents or analytical skills for the most part have been doing well. David Autor, an MIT economist, has noted that “among people with professional and even doctoral [degrees], in general the job market has been very good for a very long time, including recently. The group of highly educated individuals who have not done so well recently would be people who have a four-year college degree but nothing beyond that. Opportunities have been less good, wage growth has been less good, and the recession has been more damaging. They’ve been displaced from mid-managerial or organizational positions where they don’t have extremely specialized, hard-to-find skills.”

Some of the reasons why a college education might not have as much benefits as it use to include that since more Americans have gone to college, the quality of a college education has become arguably more inconsistent and the value of a degree from a nonselective school is perhaps diminished. Regardless, although findings have proven that it is better to have a college degree than not having one at all, a college degree is no long a protection against job loss or wage loss as it used to be.

According to Michael Greenstone, an economist at MIT, men without higher education have been the biggest losers in the economy’s long transformation. Real median wages of men have fallen by 32 percent since their peak in 1973, including the men who seem to have dropped out of the workplace all together. Harvard economist Lawrence Katz says “since the 1980s, the labor market has been placing a higher premium on creative, analytic, and interpersonal skills, and the wages of men without a college degree have been under particular pressure.” Ironically, it also seems that men have not pursued either higher education or service jobs. The proportion of young men with a bachelor’s degree today is still about the same as it was in the 1980s. In the sociologists, Maria Charles and David Grusky’s book, *Occupational Ghettos* [2004], found that while men and women mix more easily on different levels in careers, many industries and occupations still remain segregated with men continuing to look for work in dwindling manual jobs and women going more towards non-manual jobs that offer more pay and higher status. It is also found in social settings that women tend not to marry or stay married to jobless and economically insecure men, although they do have children with them.

In recent decades, people who have been born into the middle class have moved up and down the class ladder effortlessly. However, now the classes are sticker among those born to parents who were either rich or poor. 39 percent of children born to parents in the top fifth of earners stayed in the same class as the adults. Also, 42 percent of those parents that were in the bottom fifth stayed there themselves. Only 6 percent reached the top fifth. A smaller middle-class means fewer opportunities available to people born in low-income families. If economic and cultural trends continue this way without restriction, then class mobility will decrease and class divides may grow out of our ability to bridge them in the future.

Peck, the author, says that true recovery from the Great Recession is not through bringing back the economy to the way it was before, but it is about changing its path. No single action or policy can fix the variety problems we face today, but a combination of approaches could help. Some of the approaches would be aimed at increasing the growth rate of the economy and some would ensure that more people would be able to benefit from that growth.

Some of the suggestions Peck recommends are not comprehensive and do have drawbacks, but they are symbolic of the type of proposals we need to do in the coming years. He suggests that we need to better harness the advantages that speed up innovation by putting a higher priority on investment, instead of consumption. This means raising and broadening both national and private investment in basic scientific progress and later in stages of research and development through a combination of more federal investment in scientific research and maybe bigger tax breaks for private research and development spending, and much lower corporate tax rate overall.

To move towards innovation, we also need to increase our commitment to improving U.S. schools and letting in a much larger number of creative, highly skilled immigrants each year. We also need to keep the production of new, high-value goods within American borders for a longer period of time and press upon China on currency realignment (as they undervalue their currency), since this has hurt the U.S. industry.

Regarding to schools, it is suggested that vocational training programs should be set in place as one recent major study have showed that on average, men who attended career academies were earning significantly more than those who attended regular high schools, in both four and eight years after graduation. Career-academy programs should also be expanded as well as apprenticeship programs that are designed to build an ethic of hard work to allow young people to develop skills and achieve goals outside of the traditional classroom and inside of it. This would help students gain more information about career possibilities and clearer pathways into real careers.

The long-term problem facing American society is not that employers would run out of jobs, but it is that the market value of low-skill and some middle-skill work and the wages offered give little incentive for Americans to strongly commit to the work, thus affecting productivity. It is also a major reason why so many people at the lower end of the economy drift in and out of work. American economists have long advocated for subsidizing low-wage work as a means of social inclusion by offering an economic compact with everyone who embraces work, no matter their skill level. A stronger reward for work could encourage young, less-skilled workers, men especially, to develop solid, early connections to the workforce, improving their prospects and their marriageability.

Overall, a push for better schooling, the creation of clearer paths into careers for people who don’t immediately go to college and stronger support for low-wage workers together could help alleviate the gap between classes in U.S. society and strength the middle class. Although, these solutions so not solve all of the problems faced today, it does create conditions for a more predictable and comfortable lifestyle by continuing rewards for work and education, a precondition for middle-class life and a healthy society.

With more of the income inequality coming from the wealthy, the need to find an answer to offer a greater distribution of wealth is essential, but also difficult.

*Summary & Conclusion*

For all of the articles reviewed here, there are similarities in that each one acknowledges the point that the Great Recession is more significant and is different from other recessions previously experienced in the past. The labor market decline is deeper and longer then the Early 1980s recession, which is the recession that is most compared to in all of the journal articles. It is also supported that the demographics for those who were most affected by the Great Recession are men, nonwhites, youth, and those with lower education levels.

The journal articles by Lisa B. Kahn on “*The Long-Term Labor Market Consequences of Graduating from College in a Bad Economy”* and “*How Will Unemployment Fare Following the Recession?”* by Edward S. Knotek II and Stephen Terry both support that the poor economy for workers will continue to affect them even after the current recession is over. With the articles *How the Great Recession Has Affected Americans* and *Can the Middle Class Be Saved?* impacts of the Great Recession on the middle-class were discussed with declining figures in income with other figures and the widening gap between the middle-class and wealthy. These effects of the Great Recession on the middle-class prove that this is an important topic of study that cannot be left out.

Through further research and collection of data, I hope to discover by how much the recession actually affected the middle-class in their income, those that have graduated from college, and the differences in gender from years 1970-2010. With this, I hope to analyze and gain more knowledge on how significant the effect of the Great Recession is.

**III. Theoretical Analysis**

A theoretical model is created to determine the factors that have affected the Middle Class from the years 1970 – 2010. This will allow us to also see how other previous post WWII recessions besides the Great Recession have affected Middle Class Americans.

The theoretical model consists of the data on each of these factors from the years 1970 – 2010. These factors would be compared with the Middle Class as divided between households. The Middle Class is defined based on income distribution levels.

**Percent Distribution of Households**

|  |  |  |
| --- | --- | --- |
| **Households** | **Each Fifth** | **Income Distribution** |
| Lowest Fifth | Lowest 20% | $0 - $25,000 |
| Second Fifth | 20% - 40% | $25,000 - $50,000 |
| Third Fifth | 40% - 60% | $50,000 - $75,000 |
| Fourth Fifth | 60% - 80% | $75,000 – $110,000 |
| Highest Fifth | Top 20% | $110,000 or more |

Through the data displayed above, the Middle Class is defined as the sum of the Second Fifth (lower middle class), Third Fifth (working middle class), and Fourth Fifth (upper middle class).

After gathering and analyzing various figures on factors, such as middle class income (in real dollars), Gini coefficient, unemployment, real GDP, single parent households (female householder), percent college education (2 years and higher), and many other factors from 1970 to 2010; they will be compared to the percent distribution of the middle class to identify which factors had the most significant impact.

**The Percent Distribution of the Middle Class over the time periods of 1970 – 2010:**

**The breakdown of the Middle Class in quintiles:**

**The distributions of the Middle Class are also displayed graphically:**

**Figure 1**

Figure 1 shows the distribution of the middle class (2nd Fifth, 3rd Fifth, and 4th Fifth) has dropped 6.2 percentage points over time.

**Figure 2**

Figure 2 shows the Lowest Fifth (Bottom 20% of Households) distribution has dropped 0.8 percentage points over time.

**Figure 3**

Figure 2 shows the 2nd Fifth (Lower Middle Class) distribution dropped 2.3 percentage points over time.

**Figure 3**

Figure 3 shows the 3rd Fifth (Working Middle Class) distribution dropped 2.8 percentage points over time.

**Figure 4**

Figure 4 shows the 4th Fifth (Upper Middle Class) distribution dropped 1.1 percentage points over time.

**Figure 5**

Figure 5 shows the Highest Fifth (Top 20% of all Households) distribution increased 6.9 percentage points over time.

**Data on Factors Gathered:**



**Data Continued:**





**Sources:**

Data obtained from U.S. Census Bureau: Percentage Distribution of Middle Class, Gini Coefficient, Middle Class Income (In Real Dollars), Mean Middle Class Income (In Real Dollars) & Median Middle Class Income (In Real Dollars)

Data obtained from Bureau of Economic Analysis (BEA): GDP in Current Dollars (Billions), Current Money Growth Rate of GDP, Real GDP Growth Rate (In 2005 Dollars)

Data obtained from U.S. Bureau of Labor Statistics: Percentage of Female in Work Force, Percentage of Male in Work Force, Unemployment Rate, Unemployed

Data obtained from United States Department of Agriculture - Economic Research Service (USDA): Real GDP

Percentage College Education for 2 & 4 Years - Education Levels obtained from U.S. Census Bureau divided by Civilian Labor Force (16 & over) obtained from U.S. Bureau of Labor Statistics

\*Note for Percentage College in Education: Labor Force used was 16 years & over from the Bureau of Labor Statistics, Not 18 & over

Data obtained from U.S. Census Bureau - Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS): Single Parent Households (FM Householder)

**IV. Empirical Results**

1. **The Data**

Using the data on the various factors gathered from 1970 – 2010, an empirical testing of the model using advanced econometric techniques was done to identify which of these factors had the most impact on the distribution of the middle class. Correlation matrix and regression tests through excel were conducted several times on these factors. The results showed that percent college education (2 years and higher), single parent households (female householder), unemployment, and real GDP (in billions) had the most significant impact on the distribution of the middle class.



**Correlation Matrix Test**



**Regression Test**

1. **Interpretation of Empirical Analysis**

Through the results of our correlation matrix and regression tests, we have found that the variables of percent college education (2 years and higher), single parents householders (female householder), unemployment, and real GDP indicate the most influence and impact on the percent distribution of the middle class.

The results of this study show that as percent college education increases, so does the size of the middle class. This means that in the long-run, education is beneficial. This indicates that the level of education plays an important role into the level of impact a recession has on an individual based on their education level. The higher educated the individual is, the less likely the recession will negatively impact them. However, there is a lesser chance that having a college education will protect you from economic downturns as it had in the past during previous recessions. The article published in September 2011, “Can the Middle Class be Saved?” by Don Peck from The Atlantic in the literature review also supports this finding.

Single parent households (female householder) refer to households that are run single-handedly by females with no spouse partner. This means that as single parent households increase, the middle class declines. This shows an important significance, in that as more females are running the household, the income level for the middle class will also decline. This is due to fact that females tend to earn less wages and income levels than men do due to several factors, such as gender discrimination and that many top level positions in a corporation are still blocked off from women.

Real GDP was an interesting finding, in that it indicated as real GDP increased, the size of the middle class declined. While this was counterintuitive at first, it was later recognized that this revealed that the U.S. had an increasing income inequality level. This is shown through our data of the Gini coefficient from 1970 to 2010. The Gini coefficient measures the level of income inequality in a country. 0 means that the country has perfect equality; everyone has equal income and 1 meaning maximal inequality; only one person has all the income in a country. It appears that the wealthy individuals in the U.S. hold most of the income.

Also, this could explain the widening differential in education in the society and the greater emphasis placed on education in job creation and income. There has also been an increasing amount of manufacturing jobs in the U.S. moving to overseas and the decline in pay.

Unemployment has been found to not have as much as a significant impact as first thought on the middle class. It has been found that the other significant factors had a more of stronger impact on the distribution of the middle class.

**V. Conclusion**

The research was conducted to study the impact of the Great Recession (Late-2000s Recession) on the middle class in the U.S. Using correlation matrix and regression tests, the results showed that out of all the various factors collected from 1970 to 2010, the factors of percent college education (2 years and higher), single parents householders (female householder), unemployment, and real GDP had the most impact on the percent distribution of the middle class. The results exhibited the changes of the structure of the U.S. economy.

Education is seen as a link to jobs and the level of income received, while the growing inequality level shows that the wealthy individuals continue to hold most of the wealth on society. Other factors, such as the movement of manufacturing jobs overseas has also negatively impacted the middle class. The journal article, *Who Suffers During Recessions?* by Hilary Hoynes, Douglas L. Miller, and Jessamyn Schaller in October 2011, it was found in their research that during recessions, men, nonwhites, youth and those with lower education levels are more affected by economic downturns. Women, prime aged workers, and higher education groups are less affected.

The most interesting finding is that the decline of the Middle Class has been happening over time, well before the start of the Great Recession as shown in Figure 1 under theoretical analysis. The decline of the Middle Class goes back to the mid-1970s. This reveals that this decline of the middle class has been a continuation from previous recessions and this decline we see in the Great Recession is simply a continuation of what has already been happening.

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