

How Trauma and Business Cycles Affect Peoples' Future Budgetary Choices

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Abstract:

Trauma is such a powerful experience-occupied term. When we think about life and the challenges we face, perhaps plenty of us have gone through trauma. What if something as frightening as traumatic experiences was actually helpful to people? Believe it or not, there's remarkable economic evidence that supports the idea that this is actually so.

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Introduction

This paper is in support of the claim that people who endure traumatic and difficult economic experiences gain resilience and become economically better off. It's crucial to understand economics to be a social science that focuses on individuals and groups as a whole. How people's choices affect the economy themselves, individuals, and communities. The claim is referring to the long run. The long-run is in regards to a certain point in time after the trauma has been endured.

How people's economic choices are affected has been heavily researched in economics that has fascinated economists. Economies are entities that tend to exist in the largest societies in the world and people don't have full control over them. The fact that they aren't directly controlled by one group of people per se is often the motivation to know as much as possible about economies. They've been discussed and examined for hundreds of years and new discoveries are found every few years.

Additionally, the claim at hand has a second claim that trauma makes individuals better suited to make economic choices. Which leads to them being more resilient in the future. To further explain the subclaim is focusing on the microeconomics behind the mass traumas that will be researched and explained in the scope of the paper. Thinking about times in your life that you've gone through a traumatic experience and you've come out stronger will help you understand this paper.

Academic articles relating to trauma and recovering economies, recessions, depressions, and other situations are strong supporting items for this paper. They offer explanations of accounts of events such as bombings with an in-depth analysis of the economy as well. When focusing on the macro in this case of mass traumas there are so many cases of communities going through large scale disasters.

Business Cycle Theory

A business cycle is an interesting topic and one that is misunderstood by many, for most a business cycle is seen as a literal cycle in which this is not the case. A business cycle is a movement in the economy with usually two directions. The first direction is called a peak in which the upward movement is toward the peak as the name implies and the trough is the opposite. Business cycles are measured in different ways, usually gross domestic product, interest rates, aggregate demand, and other factors. The important thing to note when looking at business cycles is the fact that it's seen as a movement that occurs for a certain period of time in an economy. Great examples are often recessions because they're known to be times the economy is at a low and they also have fluctuating amounts of time that they are present. Booms are also another great example of these occurrences and many economists study them and why exactly they occur.

A similarity seen with these two movements is the fact that they can occur longer or shorter than expected. Often there are warning signals with interest rates and they can be predicted other times they occur and confuse economists and market analysts. Similarly approached is business cycles. There are reasons behind these economic movements and economists seek the cause of the movement. Arguments have been made about why they occur, some argue that it's because of the gross domestic product being affected, others argue it's a case of the aggregate demand and supply not being fulfilled. However, a measure that isn't argued as much is the full employment model of an economy. The basic understanding of a business cycle often starts here because in a

full-employment economy there isn't a need for movement. The consumers have their demand supplied at an amount that is to their liking in common terms and producers are receiving the amount for their goods that they are satisfied with. The next step in understanding a business cycle is often a look at the population as it's known to affect this model of full employment directly. If both the demand and supply are full for an economy and then more people are introduced *ceteris paribus* meaning all else is held constant these new people will have their own demand if they are producers, this supply will get calculated in the total model. Business cycles are known factors of the economy that have roots in many historical recessions as well as booms in multiple economies.

Post Keynesians and institutionalists believe upturns create the conditions that cause downturns. Neoclassicals and Austrians believe in the "and then- something happened approach. From 1921-1930 to 2011-2016 business cycle as a percentage of all citations in EconLit has increased from 0.75%(37 of 4908) to 1.05%." Wesley Clair Mitchell proposed a business cycle theory he was known for. He served as the President of the American Economics Association in 1924. Mitchell saw business cycles as widespread crossing many industries and enterprises including finance and commerce. Every business must worry about the bottom line of making money. His main focal points were profits, prices, and finance. He also argued that as businesses become less profitable priorities are shifted from making profits on sales to maintaining solvency. So in a sense business cycles are caused by finances mostly and the effects of different financial states lead to the fluctuations we are familiar with in these cycles.

Interest Rates and Monetary Policy is another popular theory of business cycles. The main argument in this theory lies in the different factors of Endogenous vs Exogenous arguments that dominate this theory. Irving Fisher argues that the relationship between prices and interest rates is crucial and when firms borrow too much from banks and overinvest. Interest rates are also impacted, profits are lessened and the amount of loans taken out can lead to a recession. He argues that if interest rates were high enough they wouldn't have overinvested. Others see interest rates and monetary policy to be exogenous and controlled by the central bank. It's also argued the central bank is also too "generous with credits".

Michal Kalecki, known for his contributions in the area of business cycles argued that for an investment to be made to lead to an increase in capital, one goes through steps that are impacted by the past economy. Another part of the argument claims investment is very important for the economy and creates income, output, wages, consumption, employment, and profits. A large part of this theory also lives in the fact that the larger the investment the larger the risk

Keynesian business cycle theory is by far one of the most popular theories. Even though the name Keynesian implies Keynes it's well known what Keynesian economics became was very different from what Keynes argued. A quote from Jason Furman a Keynesian that was a former Chair of Barack Obama's Council of Economic advisors "Just as there is no regularity in the timing of business cycles, there is no reason why cycles have to occur at all. The prevailing view among economists is that there is a level of economic activity, often referred to as full employment, at which the economy could

stay forever,”(Romer 2008). A common Keynesian assumes that cycles are created by stop-go policies. It's further believed that because of rigidities involuntary unemployment can exist even though self-regulating tendencies of the economy may in fact solve these problems they don't happen instantly. The go portion can be thought of as the government employing monetary and fiscal policy to aim in speeding this recovery. The stop portion can be defined as the governments calming down the economic activity level so inflationary pressures aren't created. During the time period, 1990 Keynesians drifted further away from Keynes fundamentals

Austrian business cycles were another very popular theory and a class of economists that were also noted for many contributions. Austrians believe that central banks cause business cycles. They argue this occurs due to the lowering of interest rates by the Central Bank.

To make sense of the individualistic thinking the Austrians take into thought that individuals generally would prefer consumption in the present instead of the future. They will accept future consumption if there is a reward and incentive to do so. Banks pay interest to attract savings that can be profitable by lending to investors. If people are interested in consumption in the present interest rates will increase and decrease investments also known as future consumption. Vice versa, if people would have interest consuming in the future, interest rates would decrease and investment would increase. Austrians believe that the appropriate signal, incentive, and outcome could be reached by people pursuing their most interesting activities.

Trauma and Recovery

The first example that will be used in this paper is the Hiroshima bombings. The bombings took place when the United States felt threatened after Pearl Harbor and decided to retaliate and show Japan what nuclear power they had been working on. The conversation of Hiroshima's bombing is often talked about when the worst tragedies in the world are discussed.

In the article "The Physical Growth and Development of Children Who Survived The Atomic Bombing of Hiroshima or Nagasaki" studies were conducted about the children in Hiroshima that survived vs. children in Kure, another city in Japan which wasn't bombed. Skeletons were assessed by X-ray in 1947 or '48 then again in 1950. The variable and control groups were matched for ages 7-13. Results were also evaluated with data collected in the SCAP Nutrition Study. The findings were that children in Hiroshima were shorter. In fact, their skeletal age was "retarded" relative to the skeletal age of the children from Kure. The bombing had done a lot of damage to the young children's bodily structures. This puts into great perspective the harsh effects on Hiroshima. Interestingly, the aftermath of the bombing years later has also shown some interesting aspects of people's lives that wouldn't be expected given the severity of the situation. Some citizens managed to improve and gain resilience making it through the trauma. The article "Hiroshima, Nagasaki, and the world Sixty Years Later" takes a look into the effects. Research has been done culturally on how Hiroshima functions and also

interviews were conducted from citizens and their everyday actions were observed. They found that Hiroshima has moved on but the history of the bombing is seen in everyday life. It's formed a great amount of the culture of Hiroshima. The fact that the communities have been able to endure such a harsh tragedy is proof that overcoming trauma can leave communities stronger. It's important to make the distinction that they are celebrating the strength and culture they've gained through surviving such a dangerous bombing. In celebrating this it's clear even further that these communities continue to build resilience by basing their culture off of it quite a smart way to endure.

In fact, further studies showed even more outstanding things about the Japanese culture in Hiroshima. *The Atomic City: Military Tourism and Urban Identity in Postwar Hiroshima* Zwigenberg, Ran. Military tourism was explored in Hiroshima in 2016. The paper was looking to address what exactly the effect on military tourism had in Hiroshima. Interviews were conducted with Hiroshima natives, and history was researched before and after the war. Interestingly enough as time went on the natives became more accepting of the military tourists and even began strategically selling certain merchandise. Strength the argument was made in part from the resilience that was gained. Considering that they're trading with the soldiers also shows that the economy is extending out and growing.

Trade-in a nation is very crucial to economic growth as it helps with the circulation of money, reflects what consumers and producers value and also allows markets to exist. An interesting counter-argument exists, however, about the article. Since generations don't have as strong of a feeling associated with those that actually

endured the trauma it's proven that they're able to move past associations of said past. In comparison studies were done that were confirmed children of Jewish religion closer to the most recent generations feel less in reference to the holocaust to those of earlier generations.

This, however, does not take away from the fact that the residents of these villages in Hiroshima are in fact benefiting from the military personnel and they are residents of the country that caused much turmoil years ago. Additionally, the argument is present that in order for trade and what not to even exist, the relations had to be built over time showing increased resilience.

Markets have been evolving all over the world ever since trade has existed. Trades have been a great phenomenon and there are so many markets worldwide, it's very important not to only be concerned with one place that's been affected by mass trauma as the world has countlessly gone through such events. The distribution of economic activity brings more insight into the importance of trades and how markets focus. Markets tend to reflect economic stability and instability and are great indicators of economic health and well being at a given point in time.

Supporting text from an article takes a look in a very basic sense at the question of how to explain the distribution of economic activity across countries, regions within a country, and cities. The paper was written exploring three principal theoretical approaches: increasing returns, random growth, and locational fundamentals. Increasing returns are referring to for-profit organizations and businesses within the economy. Random growth is as it sounds growth that appears random within the economy.

Locational fundamental is a position that argues an economy could favor different locations due to the market processes. Von Thunen of the late seventeenth and eighteenth-century developed a model that explained this. Interestingly they found economies have great resilience and can bounce back in new revolutionary ways.

Take for instance the Allied bombing of Japanese cities during WW2 that they bring up. Most of the bombed cities actually returned to their relative position in 15 years. This relates to the random growth theory. For the next theory, regarding the increasing returns, the theoretical possibility of spatial catastrophes; in practice, the distribution of city sizes seems to be highly robust to temporary shocks even of great magnitude. Once again, even though a view at a few world economies studies on resilience shows, they bounce back. This is very crucial to understand that it's a worldwide phenomenon that all economies have the ability to grow stronger from setbacks.

Famines are quite difficult for any country or community of people to get through because often famines aren't just a problem of adequate food it's often a problem of water as well. For an economy to sustain itself when people that are holding jobs and businesses aren't doing so can cause large shocks to the economy and even lead to collapse. The government can do things like borrow funds from other countries and help organize efforts to improve the situation. However, the question arises about the governments that participate in helping their country if they're truly being helpful in the long run. The article Famines and Economics set out to explore the question. Did institutions help protect people from starvation or did they help make matters worse? And

what can be done to prevent them? The article has references to works from famous economists such as Thomas Malthus, and Adam Smith.

Famines are quite difficult to explain as they happen across a large range of economies and geographical ranges. However, economics can help explain famines instead of a one answer approach as to why they happen and the effects. “Famine can thus be viewed as a tragic magnification of normal market and government failures.” “The nonlinearities, cumulative effects, and aperiodic behavior that can transform a shock into mass starvation appear to be intrinsic features of quite normal economies rather than peculiar features of highly distorted or badly damaged economies.” Famines occur in every economy as described by the paper. That's quite important in that if certain warning signs become more and more prevalent in an economy a famine can hit. Even more important is that economics is helping to explain what causes and what helps against a famine.

As explained famines have been occurring since economies were forming and since they have been so prevalent in history, the records of them are numerous. This benefits communities because the advantage to study these mass trauma causing disasters is a step towards decreasing them from occurring. Now let's look into how some societies have handled famines.

The article *Famine, Exchange Networks and the Village Community* demonstrates how certain societies have found resilience to maintain famines. There is a comparative analysis of the subsistence crisis of the 1740s and 1840s in Flanders. It explains the crisis, the aftermath, and points that highlight something of importance to

resilience, “The main thesis is that the impact of hunger crises in peasant societies is directly related to the level of stress absorption within the local village community.” In presenting the evidence and facts presented in the article, information was grouped together and explained in charts.

This article proves that with the correct systems in place, economies can move past, even through crises like famines. Sometimes very large societies are the ones that have a famine arise such as the United States in the 1930s where the dust bowl was occurring and in western Europe, where the great famine was taking place. In the article Finance and Economics: East or Famine; The Balance of Economic Power this paper takes a look at the power tilt of Asia’s economy growing and enduring its famine in comparison to the United States and Europe is explained and examined. Data and country statistics were used to provide support. Asia continues to grow but the power shift still has to keep going in Asia’s direction for a few more years to fully gain power. The world powers dictate many decisions of the world and are even seen as controlling much of the occurrences. The article shows that the financial crises mentioned in the article support Asia’s power and Asia went through a financial crisis much better than America and Western Europe went through theirs.

This article ties together historic proof that as economies go through more they gain further resilience to shocks and across multiple countries. In a short summary, Asia recovering faster than the United States and Europe shows a few important points. Firstly, it shows that the crisis that Asia is going through has already been endured by two other places in the world so there's economies to base the progress off of. Secondly,

in showing that Asia is recovering quicker, an advantage of the knowledge that could be obtained from other countries that endured before is available to Asia that wasn't. And so Europe and America didn't recover as fast as Asia did. They didn't have as much knowledge available on resilience as Asia did.

Apparent exogenous versus endogenous variables are important to distinguish when discussing mass traumas. Famines have a strong shock to an economy and the inhabitants' argument is valid that people can in fact leave a famine more easily than they can leave a bombing or a hurricane. The reason this is of major importance in this paper is because in order for people to have suffered from trauma on a mass scale the cases of trauma that are brought up should have the smallest number possible of people able to escape and not endure the trauma after all. It's been explained how those that didn't endure the famine in Ireland actually did worse the next disaster they had to face. Hurricane Katrina took place from August 23rd to the 31st in 2005. It was a category 5 hurricane that did catastrophic damage in the United States, especially in the southern states. Hurricanes are a variable that is not likely to be endured, George Mason University dedicated a whole project named the Gulf Coast Recovery on post-Katrina including lessons that were learned. The damage to New Orleans in particular leftover half a million people displaced and caused over a hundred billion dollars in damages. Interestingly the FA Hayek program explained how social entrepreneurship helped areas gain resilience through the hurricane.

Additional lessons learned from the George Mason University study Learning From Katrina: How Communities Can Flourish In The Wake Of Disaster included that

the main parts of an area are the Economy, Society, and Political sectors and when a disaster takes place, it's a shock to one or more of these areas. The amount of damage that is done is proportionately related to how far apart these three elements drift from each other. Another thing learned that's very fascinating is regulated innovation during a time like Katrina in New Orleans drastically slows down recovery in comparison to free economic innovation. Economics is a study of human action in comparison to the economy and the acts of many that have endured trauma such as those that did so for hurricane Katrina in innovating built resilience for themselves and their communities. Knowledge of how to navigate through an economy is often the result of societies telling the history and studies being done. Knowing the history of economics is an important skill in being able to take away more from articles and other academic papers.

The use of knowledge in society written by the well-known economist Friedrich A. Hayek relates to the conclusion of this paper in that resilience can not be gained if knowledge isn't properly accounted for. A was taken into the different effects of knowledge that people have, what is assumed and what is actually true about knowledge. The piece also relays the focus on knowledge to compare it to the effects of what it can do in relation to social and economic problems. Rational economic order is a concern in regards to knowledge because different people hold different places in a society and have different knowledge. This further relates to this paper because comparisons were made between different societies and even the same society at different time periods and resilience was gained.

Some of the knowledge that can vary from person to person is in fact the knowledge gained from experience. What's meant by this is being in a particular place at a particular time. The importance of this is that one person that is given the power to make all the economic choices or thought to understand all has missing knowledge. Economic problems come into effect due to change and when things change people have to adjust, it's the way society works. An argument to why more progress hasn't been made is that because of all of this change people are concerned with different issues than trying to figure out economic problems. As explained the market acts the way it does because different knowledge from different people are intertwining and reacting with each other. Things such as equilibrium will not solve the problem which is stated but do, however, enable us to study the problems. This article, while not explaining trauma directly gives headlines into the importance of knowledge in economics. Trauma is an interesting case in economics and will continue to provide more insight into what's possible in economies and societies as long as history is recorded. Very similar to trauma is an upheaval that can occur to people in the form of business cycles, which continue to ensue and many people have a difficult time finding their way through these difficult movements.

A problem exists where the central bank isn't interested in allowing the market forces to control interest rates. Austrians argue in a downturn the best way for the market to recover is to let the failing enterprises fail. So in a simple statement, Austrians believe that government interference during business cycles actually does more bad than good.

Karl Marx has inspired much of modern-day economics and history overall. Marx himself said “Everyone sells first of all in order to sell, that is to say, in order to transform commodities into money” It’s believed that demand is determined only by production. Easy credit conditions lead to unfit financial ventures and fraud and also leads to falling wage shares. A Marx business cycle theory isn’t a true one in the sense that Marx didn’t intend to build one; he was focused on the comprehensive analysis of the capitalist system.

In a Monetarist business cycle theory, gaining an understanding of the monetarist theory is essential to start with the quantity theory of money $MV=PY$. M is the money supply, V is the velocity of money, P equating to the price level, and Y is real output. For monetarists, they believe a natural rate of growth and output exists. Technological growth, growth of labor supply, rate of real investments, and institutional arrangements are also important factors. Unexpected fluctuations in the money supply lead to temporary movements of real output of both increases and decreases. Expectation stickiness in the Monetarist model acclaims that this stickiness directly affects aggregate demand, real output, and unemployment. They argue recessions are caused by money growth being lower than people anticipate it to be. Expansions are argued to be the natural rate being higher than anticipated.

Real business cycle theory argues that fluctuations are a reaction to external shocks. Furthermore arguing that short term changes are just a rational answer to long term adjustments talked about in terms of productivity. The productivity of this theory exists in the way that when there is an increase in productivity, it’s argued to be more rational for this to boost wages. The opposite is also seen that when productivity falls there is a decrease in wages. An increase in wages is seen to have an increase in employment and a decrease in wages is seen as leading to

decreased employment and people working. These exogenous shocks in the Real Business Cycle Theory cause the expansions and recessions. Other important components include markets having perfect competition, agents having perfect information, and the natural rate of output being constant

Hyman Minsky was best known for his financial instability hypothesis. He argues that stability creates instability in particular when there is an upturn in the economy; the “economic agents’ become more optimistic and so debt repayments become more and more pushed into the future. As this continues to occur of course the debts become larger and it becomes a case of the straw breaking the camel's back. Another part of his hypothesis is the payoff from innovation depending on the state of the financial system. His approach doesn’t relate to the argument that full employment reaches equilibrium. Short term interest rates become high very quickly according to Minsky. Minsky wasn’t necessarily trying to explain business cycles he was trying to touch on the change of institutions.

John Maynard Keynes claimed, “The essential character of a trade cycle and, especially, the regularity of time-sequence and of duration which justifies us in calling it a cycle, is mainly due to the way in which the marginal efficiency of capital fluctuates,” (Keynes 1936 313). Great uncertainty can lead to the downturns that are present, disappointment may not be exciting to consumers but uncertainty is the real danger according to Keynes. Animal spirits control people's actions and choices. Entrepreneurs being too optimistic plays a part in recessions.

Business cycle theory is also explained in other ways by non-economist such as Ray Dalio, the famous hedge fund manager. Because people borrow we have business cycles. If the United States prevented borrowing then the only way for one to go and increase their income is

to become more productive. Now this force in productivity is very hard on a person and creates a lot of stress for oneself. Now take for example an economy with borrowing. If people are allowed to borrow then they can acquire more. They acquire more by this debt because they can get things they can't acquire outright with the income they own but they can get things with the debt. For people to buy something they cannot afford they need to borrow from themselves in the future. What's meant by this is the amount that they borrowed does have to be repaid in the future and they have to promise to repay the debt when they get the credit. When someone spends money, someone else is essentially earning income off of that spending. As people engage in trade someone offers a product and someone offers money which is used for short transactions. The debt that's been talked about is essentially a promise to pay in the future, hence this is the long run that separates money from credit. Business cycles are created by the addition of these different elements. As you have to spend less than you make to pay back the future this makes a cycle. This can then be applied to the scale of the whole economy. This is why there are business cycles. Economies with more credit actually have access to more spending than those that have less or even no credit.

There are problems with credit however, it isn't always good to credit that just helps improve the health of the economy. In certain situations, lenders can over finance borrowing and this is a very tricky situation. In fact, most lenders don't find out about this overborrowing for a long time because people are in a boom and spending a lot of money. As this happens the people giving credit become more and more in trouble until they catch on to what is going on and raise interest rates. As they raise interest rates people begin to start borrowing less and people borrowing less affects people's spending. This is a huge problem since people get income from

others spending money so this decrease in spending leads to deflation where if it decreases enough inflation occurs. Trauma ties into business cycles in the sense of a recession in a recession. People are so worried about the state of the economy, they are too afraid to spend money. In this lack of spending, they are further decreasing the state of the economy but they are unaware of this.

Analysis of Business Cycles and Traumas

Natural disasters and economic crises are becoming more frequent due to external factors and these stall efforts of developing countries to achieve stable GDP. For example, GDP fell by more than 4% or more in Latin America and the Caribbean. In an effort to gain and disseminate knowledge on economy-wide shocks in November 2001 the International Food Policy Research Institute and the Inter-American Development Bank with support from the World Bank and United States Agency for International Development organized a conference titled Crises and Disasters: Measurement and Mitigation of their Human costs.

Poorer households are typically less equipped to deal with shocks, and informal insurance arrangements most likely will have serious limitations especially for shocks that are common to all members of the formal or informal insurance group. Without a public safety net system, poorer households may attempt coping strategies that prevent households from ever escaping poverty or reaping benefits from future economic growth. An example of such is selling productive assets leading to a permanent environment of poverty or for years after the crises. Another example includes decreasing their investments in the human capital of their children by not being able to provide proper nutrition and health care or even changing time children devote towards school to time earning income.

Natural disasters affect household welfare through the destruction of physical and human capital stock. In contrast, economic crises can affect household welfare in a slowdown of economic activity which leads to a decrease for labor services, a decrease of finding employment, a decrease in earnings, changes in relative prices or removal of price subsidies of staple foods which leads to a decrease in real income, cutbacks in the level of public transfers, and changes in value and return of assets.

A feature that distinguishes economic crises and natural disasters from other shocks experienced by households are that they affect many households simultaneously. The extent to which aggregate shocks impact household welfare is very closely related to their capacity to cope with shocks.

Figure one shows the relationship between spending during the recession of 2007 also occurring during the time of the recession was the collapse of the housing market. The decline of consumer-supported employment declined in manufacturing industries from 2007 through 2010 as seen in figure two. Explaining even more of the relationship of consumer spending figure three looks at the effect on consumer spending. This figure shows that service providing industries were the most dependent on consumer spending.

Quarterly Personal Consumption Expenditures during the 2007-2009 Recession and Recovery

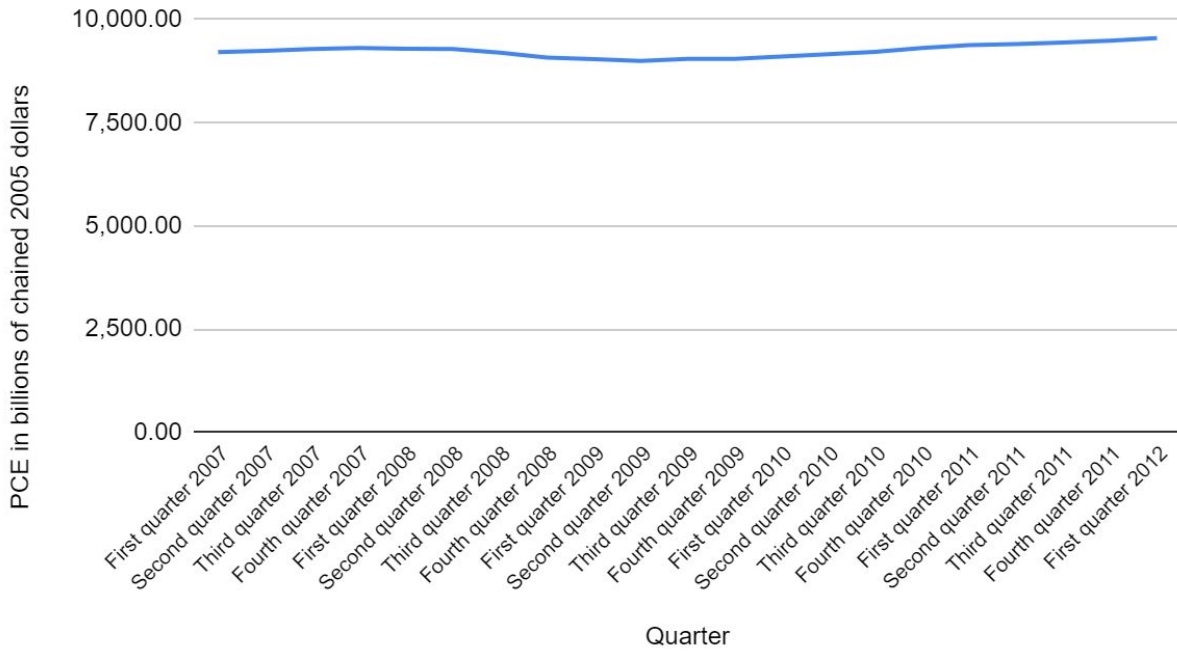


Figure 1

Constructed with data from U.S. Bureau of Labor Statistics

Distribution of 2007-2010 job loss by final demand component

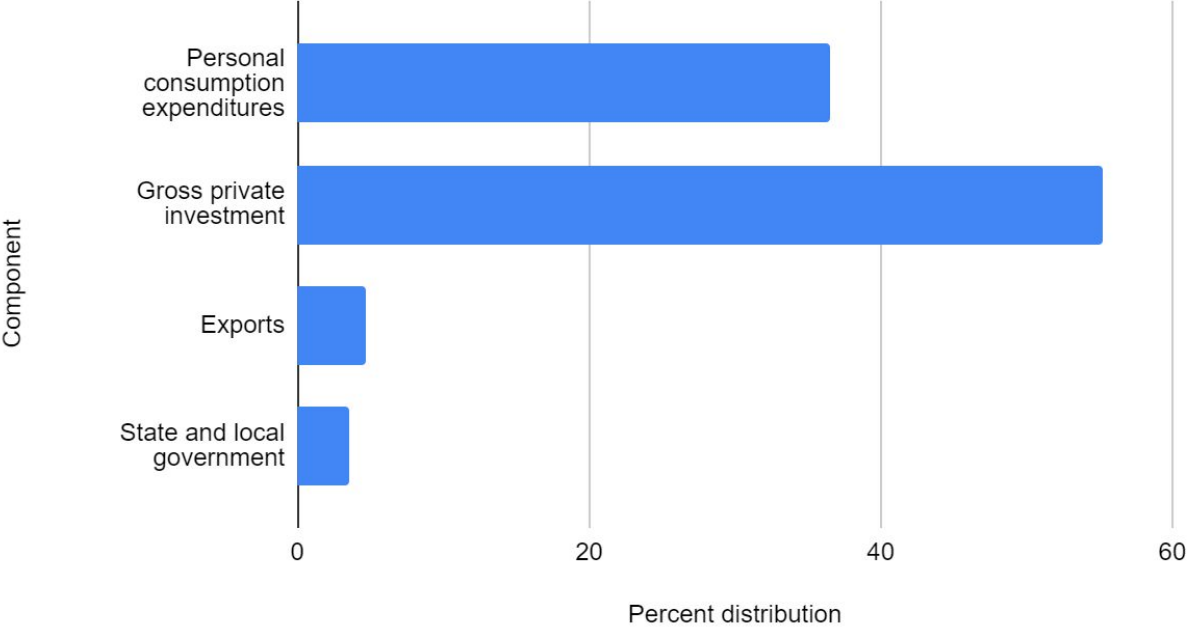


Figure 2

Constructed with data from U.S. Bureau of Labor Statistics

Industries most dependent on consumer spending

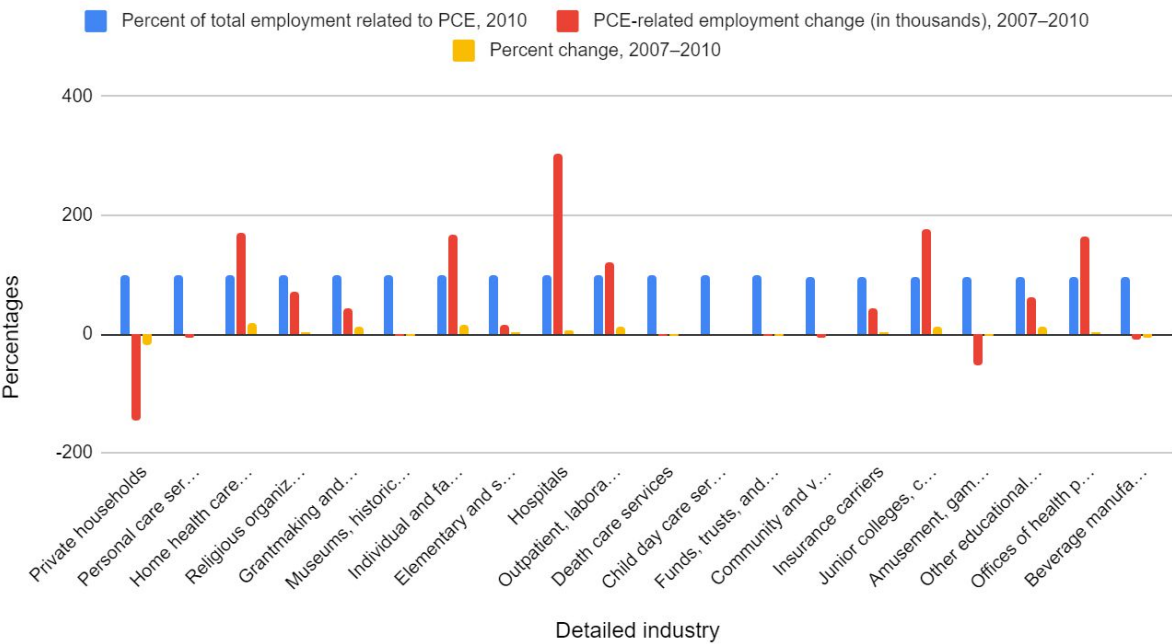


Figure 3
 Constructed with data from U.S. Bureau of Labor Statistics

Conclusion

This paper looked at Business Cycles and situations such as natural disasters and other traumas to see what effects they had on people, and economies. Interestingly enough I found that these difficult situations can lead to resilience being developed but the level of resilience is correlated with how early or late procedures that prevent excess loss in natural disasters, recessions, and depressions occur. If procedures to protect against these occurrences are implemented too late then, of course, a prolonged recovery can be seen. Much of the literature on this topic takes a look at the trauma and tracks the effects to see how long recovery may take, and in a majority of the cases, there is a recovery thankfully due to past business cycles and traumas. Looking forward to continued improvement in policy and procedures that protect the economy and citizens will lead to better resilience for future traumas.

References:

- Greulich, w. w. ; Crismon, c. s. ; Turner, m. l. ; Greulich, m. l. ; Okumoto, y., 1953,
The physical growth and development of children who survived the atomic bombing of Hiroshima or
Nagasaki. *Journal of Pediatrics* 1953 Vol.43 pp.121-145
- A.J. Jacobs University of Cincinnati Symbolic Urban Spaces and The Political Economy Of Local
Collective Memory A Comparison Of Hiroshima And Nagoya Japan
(Winter): 253-278 Vol. 31, No. 2 Bones, bombs, and break points: the geography of economic activity
Journal of Political and Military Sociology, 2003,
- Davis, Donald R; Weinstein, David E. *The American economic Review*; Nashville Vol. 92, Iss. 5, (Dec
2002): 1269-1289
- Lindsley, Cameron. Hiroshima, Nagasaki, and the world Sixty Years Later *The Virginia Quarterly Review*;
Charlottesville Vol. 81, Iss. 4, (Fall 2005): 26-X
- Zwigenberg, Ran *The Atomic City: Military Tourism and Urban Identity in Postwar Hiroshima*
American Quarterly; Famines and Economics College Park Vol. 68, Iss. 3, (Sep 2016)
- Ravallion, Martin. *Journal of Economic Literature*; Nashville Vol. 35, Iss. 3, (Sep 1997): 1205-1242.
- Eric Vanhaute, Thijs Lambrecht *Famine, exchange networks and the village community. A comparative
analysis of the subsistence crisis of 1740's and 1840's in flanders*
- Anonymous. *The Economist Finance and Economics: East or Famine; The Balance of Economic Power*
; London Vol. 394, Iss. 8671, (Feb 27, 2010): 79-80.
- O'Rourke, Kevin. *The economic Impact of the famine in the short and long run The American Economic
Review*; Nashville Vol. 84, Iss. 2, (May 1994): 309.
- Ó Gráda, Cormac; Chevet, Jean-Michel. *Famine and Market in Ancien Regime France The Journal of
Economic History*; Santa Clara Vol. 62, Iss. 3, (Sep 2002): 706-733.
- F. A. Hayek Program, *The Role of Social Entrepreneurship in Post-Disaster Recovery Journal Article*
December, 2009
- Peter J. Boettke *Learning from Katrina: How Communities Can Flourish in the Wake of Disaster August
24, 2015*
- Steven Horowitz, F.A. Hayek Program, *Walmart, Katrina, and Disaster Response August 24, 2015*

Ray Dalio How The Economic Machine Works Sept 22, 2013

John Harvey, Business Cycle Theory: A Critical Historical Survey John Harvey Texas Christian University
Sept 2017

Skoufias, E.2003. Economic crises and natural disasters: coping strategies and policy implications. World
Development, 31(7): 1087–1102.

Valerie Mueller, Agnes R. Quisumbing, How Resilient are Labour Markets to Natural Disasters? The Case
of the 1998 Bangladesh Flood December 2011

Yasuyuki Todo, Kentaro Nakajima, Petr Matous, How do supply chain networks affect the resilience of
firms to natural disasters? Evidence from the great east Japan earthquake april 15 2014

Hardjo Koerniadi, Chandrasekhar Krishnamurti, Alireza Tourani-Rad, Natural Disasters blessings in
disguise? Dec 8,2011

US Bureau of Labor Statistics October 2014, Consumer Spending and US employment from the
2007-2009 Recession through 2022