

The Role Debt Plays in Causing a Recession

Habib Diongue

Master of Science in Finance Candidate

Master's Thesis

05/18/2022

Saint Peter's University

Dedication

I dedicate my dissertation work to my family and many friends. A special feeling of gratitude to my loving parents, Mass and Mame Diongue whose words of encouragement and push fortensity ring in my ears. My sister Rama Diongue who has never left my side and are very special.

Brief Author Biography

Habib Diongue was a Finance and Economics major at Saint Peter's University who graduated with Bachelors of Science in May 2021. He is graduating from the Master's of Science in Finance from Saint Peter's University in December 2022 with a concentration in Quantitative Finance.

Table of Contents

Introduction.....	01
Chapter One: Scope of the issue	04
Chapter Two: Arguing the thesis	10
Chapter Three: Policy implications	18
Conclusion.....	21

Introduction

Debt is mainly an amount of money which is borrowed or rented by one party from the other. It is used by different kinds of individuals and organizations in order to buy something expensive that would not have been possible otherwise (Guo and Seaman, 2011). The arrangement of the debt permits the borrow money in order to borrow the money on a condition that the debt will have to be paid back in specified time and possibly along with additional charges as interest rate. The most widely known kinds of the debt include the loans on vehicles, mortgages, personal and the debt of credit card. The first and most prominent term of the debt is that the borrower has to return the burrowed amount in the defined time period which can be from a few days to even years. The second most prominent term is the amount of the interest rate fixed on the amount of loan as well as the time or return, as if the return time is delayed, the interest rate is significantly increased. Sometime, the burrower has to return the interest rate after regular intervals for example on the annual basis in order to make it sure that the debt lender is adequately compensated for its lending risk in addition to stimulating the burrower to return the debt as soon as possible (Nugroho et al., 2011).

In the domain of economics, the recession can be defined as the contraction in the business cycle as a result of the weakening of the economic activity. Usually the recessions happen as a consequence of the large scale decrease in the spending based on an adversative shock in demand (Leamer, 2008). The recessions can be prompted by numerous actions including “the external trade shock, financial crisis, the bursting of an economic bubble, an adverse supply shock, or even a large scale natural disaster including the pandemic”. In the economic terms of the United States, a recession can be defined as “a significant decline in economic activity spread across the market, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales” (Moore, 1967). On the other hand, the definition of the recession in the economic terms of the United Kingdom is, “a negative economic growth for two consecutive quarters in a fiscal year”. The expansionary macroeconomic policies are generally adopted by the governments in order to respond and overcome the issue of recession. These policies include the increment of the supply of money, increment in the spending of the government and sometimes reduction in the tax rates (Giuliano and Spilimbergo, 2014).

Introduction

Talking about the recession at national level, during the times of recession, it can be observed that the economy of a country start stumbling, unemployment occurs and increases, the sales and revenues of the companies are decreased which eventually results in the decline of the overall output of the country. There are a number of factors which define the point at which the recession will occur. An economist named Julius Shiskin presented his thumb rule in 1974 in order to come up with a definition of the recession (Achuthan and Banerji, 2008). The most acceptable thumb rule was the decline in the GDP for at least two successive quarters of a year. Normally, the economy of a normal healthy nation increases with the passage of time which means that there is significant issue underneath if the economy has not grown for two successive quarters. This thumb rule remained a standard for the identification of recession for many years.

The “National Bureau of Economic Research (NBER)” is a renowned organization that outlines the start and end dates of the recessions in the USA. The NBER also has a definition of the recession of its own which is stated as “a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP, real income, employment, industrial production, and wholesale-retail sales”. The definition of the BBER is quite more flexible as compared to the definition thumb rule stated by Shiskin in order to determine the recession (Abberger and Nierhaus, 2008). For instance, the fall of the economy in the form of a W shaped graph as a result of issues like the recent pandemic COVID-19 which will cause alternations of rise and fall in the economies of the countries but according to the thumb rule of the Shiskin, it cannot be considered as a recession, however it is. There are many potential reasons behind causing the recessions. Some of the most important reasons are unexpected economic shock, asset bubbles, extensive inflation, extensive deflation, technological change and extensive debts.

As far as unexpected economic shock is concerned, it is a surprise issue that significantly damages the finance of a country. For instance, OPEC stopped the oil supply to the US without prior warning which causes recession. Another example is the sudden burst of the spread of pandemic which disturbed the economies of the whole world. In case of asset bubbles, there is a saying that, “when investing decisions are driven by emotion, bad economic outcomes aren’t far behind”. It means that the investments done on the assets that apparently look charming but they are flawed, will result in recession as the investments will be lost. The

Introduction

inflation can be defined as a gradual increase in the prices of the goods and services. If it continues, the central bank will have to increase the tax rate in order to reduce the inflation but the intensive increase in the tax rate will result in recession. Similarly, the effects of deflation are also deadly as when the deflation persists, the wages of the labour are decreased and the businesses are decreased because of loss of spending causing recession. The gradual change in the technology is good for the economy of a country while the instant change cause loss of jobs of the labour which causes huge amounts of recession. Finally, the extensive debt also causes recession as when the businesses of the individuals borrow too much, the interests of the debts as well as costs of retuning the debts also grow so much that they are not able to return. The increase in the debts results in the bankruptcy and upset the economy of a nation overall. The most prominent reason of recession is the debt. Therefore, the relationship between debt and recession is discussed in the present study along with the arguments on the debt and policy implications in order to deal with the issues of recession caused by the debts.

Chapter 1: Scope of the issue

Recessions in sense of business cycle

The business cycle of an organization or overall of a country as a whole, designates the way in which the economy of a country interchanges between the phases of expansions and recessions. When the economic expansion occurs, the economy of a country becomes healthy and the economic growth becomes sustainable. This results in the easier and less-expensive lending of debt which encourages the individual and business related consumers to get as much debt as they need. The “irrational exuberances” start to overtake the prices of the assets (Kehoe et al., 2018).

As the economic expansion becomes longer, the values of the asset increase extensively and the load of debts become more and more. At a specific point of time one of the already mentioned factors most probably the extensive debts start derailing the economic expansion. This load of debt causes more shocks in the forms of bursting of the asset bubbles, and crashing of the stock market etc. ultimately leading to further enhancement of the loads of the debt. In result of this, the economic growth of a country starts slowing down and a point reaches when it stops and may even start going downwards if the drastic conditions persist. Consequently the economy of the country starts to go to recession.

Recession and depression

At this point, it is worth mentioning that there are two terms that mean similar but they have different aspects. These terms are recession and depression. The recession and the depression have almost similar causes, however, the overall effects of depression are more drastic as compared to the effects of recession. In case of the depression, more inflation, more unemployment, and sharper drops in the GDP of a country are observed. In addition to this, the depression in an economy remains there for longer periods of time as compared to the recessions as the recessions can last for months but the depressions can persist for years and even for decades in extreme conditions. Eventually, the depressions are very difficult to remove and the economy of a country takes much longer to completely get rid of the depressions (Tobin, 1975). The USA had only one depression in its history called as the Great Depression.

“The Great Depression of USA” started in the year 1929 and persisted for almost 4 years in the country till 1933, however the effects of the depression were so much that the post-depression scenarios were persisting there until after the end of the 2nd World War which took a decade. Throughout the Great Depression, the

Chapter 1: Scope of the issue

un-employment of the country increased to more than 25% while the GDP of the country decreased by more than 30%. This depression was the most extraordinary economic failure throughout the whole history of the superpower. On the other hand, there was a huge recession by the name of “the Great Recession” after the end of the great depression which was the vilest recession since the economic history of the world. During the time of great recession, the un-employment of the country increased to about more than 10%. The great recession lasted for only 2 year though from the year 2007 to the June of year 2009 (Temin, 2010).

The economic losses of the almost all of the countries of the world are so huge that this tenure has been named as a recession. Some of the experts consider it to be the great recession even greater than the great recession of the year 2007. As the effects persist in the world, it is now being considered that this recession due to the pandemic COVID-19 can be converted into the depression but it will be decided on the basis of how long the effects persist. Hopefully they are not too long. The un-employment of the world had increased to more than 15% in the May of 2020 which is considered to be the worst level of un-employment observed since after the scenarios of the Great Recession.

Length of a recession

It is generally the responsibility of the NBER to track and report the average tenure and length of the recessions in the United States of America. According to the reports of the data acquired by the NBER from the year 1945 to 2009, it was observed that the average length of the recession in the country was about 11 months. This is also observer that the average length of the recessions has been decreased as the economic progresses has been made not only in the country but also in the whole world. This is therefore considered to be an improvement as compared to the earlier eras of the recessions typically from the year 1854 to 1919 when the average length of the recession was calculated out to be more than 21 months (and more than a couple of years in some cases). The USA has faced 4 recessions within the last 30 years of the country history (Cerra et al., 2020).

The oldest recession of the 30 year history is the “Gulf War Recession” which lasted from the July of the year 1990 to March of 1991. At the start of the last decade of the 20th century, the country faced a short term recession of around eight months which was mainly caused by extreme increase in the prices of the natural oil prices as a result of the effects of the “First Gulf War” which is why this

Chapter 1: Scope of the issue

recession is termed by most of the economics as the “Gulf War Recession” (Goodrich, 1991).

Another recession termed as the “Dot Com Recession” hit the country from the March of the year 2001 to the November of 2001. At the end of the time period of the century, the country was facing numerous large economic issues which included the fallout from the crash of the technological bubble along with the scandals of accounting in the number of companies including the Enron. In addition, there was a disaster of so-called terrorist attack of the 9/11 when the world trade centre was got destroyed by the airplanes. This is however a mystery as the true reason behind the attack and the people involved could not have been announced by the government of USA so far. These issues together created the brief recession in the country, however the economy of the country was able to balance itself in a very short amount of time (Zumeta, 2010).

The third recession in the history of the country was a huge recession also called as the “Great Recession” as mentioned before which persisted from the December of the year 2007 to the June of 2009. As the reason mentioned of the “Great Recession”, it was caused mainly by the burst of a bubble in the market of real estate. “The Great Recession” was not as severe and strong as was the “Great Depression” in the country, however, its mimicry to the “Great Depression” as being long and drastic, it was got a similar signature in the name as to be called “The Great Recession”. Lasting for almost a couple of years, “the Great Recession” was almost double in the terms of length as well as effects as compared to the recent recessions of the country (Christiano et al., 2015).

Lastly, the country has faced and still facing as the rest of the world is the recession by the pandemic COVID-19, also called as the “COVID-19 Recession”. This is the most recent recession in the history of every nation and it started from the start of the 2020 and previously lasted for only a few months, then ended, then started again, making the alternate curves in the economy of the country.

Characteristics of a recession

As the large scale forecasting in the economy of a country is almost impossible, it is not easy to predict the coming of a recession in a country. It is usually caused by an extensive and quick issue that became large scale in a relatively short amount of time. For instance, the spread of the pandemic COVID-19 was so quick that most of the countries in the world did not have enough time to understand the situation before it was too late for them to handle the economy

Chapter 1: Scope of the issue

earlier in the 20s. Within a few months, the economy of many developed countries including the USA and almost all the developing and under developed countries became the victim of the recession. This recession resulted in an extensive increase in the unemployment level of the world. Because of the hugely drastic conditions imposed by the pandemic, the era has then officially been declared as a recession by the NBER.

Although the prediction of a recession is very difficult task, yet there are a few indicators by which can predict the forthcoming trouble. There are some “warning signs” by which the characteristics of the recession can be identified in order to provide the enough time to figure out the preparations for the coming recession even before it will occur. These signs are described as follows.

1. Changes in the yield curve: The yield curve is a form of a graph which plots the yield or the market value of an array of the government bonds of the country with the bank notes for the extended period of time. Now if the economy of a country is behaving normally as in normal conditions, it can be observed that the yield curve for the long term bonds is high or constant as compared to the short term bonds. However, as the yield curve of the long term bonds starts decreasing and goes below the yield of the short term bonds, it means that a recession is coming and possibly it has established its roots in the economy and quick and suitable measures must be taken in order to prepare for the recession. This difference in the yield curve is termed as the “yield curve inversion”, this phenomenon has successfully predicted the previous recessions in the history of many countries including the US.
2. Drops in the confidence of the consumers: Consumer spending is generally considered to be the main driving force in the economy of any country. It is achieved and analyzed by a series of the successive surveys in the population of consumers at regular intervals of time. Now if these surveys result in the information of a gradual drop in the confidence of the consumers, this might be a sign of the coming recession in the country that has the potential to disturb the economy of that country. The explanation of the reduction in the consumer confidence mean that the consumers do not feel confident in spending their savings especially the disposable income of the consumers. This means that the recession is about to hit the economy of a country. As the decline in the consumer spending continues, the economy

Chapter 1: Scope of the issue

will start dropping and will eventually result in inflation, unemployment and even reduction in the GDP.

3. Reduction in the “Leading Economic Index (LEI)”: This LEI index is published on the monthly basis by the Conference Board, and it struggles to forecast the trends in the future of the economy of a country. This index takes into account various aspects including the unemployment, orders for the manufacturing of various goods and services, and the performance of the stock market. If the index of LEI starts dropping, it means that the “trouble may be brewing” in the economy of a country and the management must be prepared in order to deal with the coming issues of the recession in order to survive.
4. Abrupt decline in the stock market: This is another important indicator of the coming recession in the economy of a country. A huge and abrupt drop in the prices of the stock market might be a signature of the coming recession. As the economy of the country starts slowing down, the investors start selling off either the parts or even sometimes almost all of their assets, which results in the strong indication of the coming recession in the country.
5. Increase in the unemployment: This is not actually the sign of the coming recession, it is the sign of the recession that has started playing with the economy of the country. Increase in the level of unemployment of a country means that the economy of the country has started crumbling, and sudden efforts must be done in order to balance it otherwise the effects will start becoming even worse. If there is a steep decline in the employment level of a country, it means that the recession is imminent even if the NBER has not officially announced the start of a recession. This tells the management of a country to start taking the suitable steps in order to deal with the recession to slow down its effects on the economy of the country (Knudsen, 2011).

Effects of the recession

The effects of a recession are wide and may result in an array of scenarios which will directly or indirectly impose the consequences on the citizens of a country. The people can lose their jobs during the recession which will likely result in a large scale unemployment with increasing trends in the country. Not only the current jobs will be lost but also finding the new jobs will become much difficult as most of the organizations will either cut short their businesses or even stop operating completely in a specific area. On the other hand, the salaries of the

Chapter 1: Scope of the issue

people who were not fired, will start going down significantly along with the benefits the company or the organization was providing them (Lansdall-Welfare et al., 2012).

As the values of almost all the assets and stocks including the bonds, real estate and other related assets decrease, it means that if the investments are done in these assets or other related assets, there are high chances of losing the invested money in this because of the reduction in the asset values with the passage of time as a result of recession. This will eventually result in the reduction of the savings and the upsetting in the plans for the retirement. In addition to this, if the bills are not payed on time because of the loss of job or reduction in the salaries, this might result in the loss of the home and property.

As the interest of the population in spending the money has lost as a result of the recession and reduction in the incomes, the businesses will also face drops in the revenues because of the lesser number of sales with the passage of time. In some of the extreme scenarios, the businesses might be forced into the bankruptcy because of the increased debts and decreased business growth. The role of the government is very critical to assist the businesses to keep going by trying to support the businesses during the recession such as the works of the PPP during the era of the pandemic coronavirus crisis. However it is simply impossible to keep everyone and every business above the water level in such hard times.

With the reduction in the incomes and loss of value of the assets, the loan lender will tighten the conditions on the basis of which the load can be provided. The people will have to show more of the values in order to get the loan as compared to the times without the recession, because the lenders will also be worried that the borrowers might not be able to return the money which will cause huge losses to the lenders. Even if the planning for the recession is already been done and the people as well as the government is already prepared for the recession, it can still be a terrible experience to face. If there is any positive thinking in this scenario, it is the fact that the recession does not last forever. Even “the Great Depression” ended eventually and the end of the “great depression” was followed by strong periods of economic growth in in the country.

Chapter 2: Arguing the thesis

As confusing as it sounds, the characteristics as well as the reasons behind the recessions are obvious as well as undefined at the same time. Generally explaining, the recessions are usually characterized by a collection of failures in the businesses which are not realized until it is too late for the management of a country to find out what and why it is happened. The organizations and firms are pressurized by the recessions in order to re-allocate their resources in addition to the scaling back of the production and manufacturing of the goods and services to minimize the losses limit which is also followed by firing off the employees to cut short the expenditure of the company and business. These are the most evident and visible characteristics of the recessions. There have been identified many different ways in order to explain the causes and reasons behind this collection of failures in the businesses, in addition to the information of why and how this issues has been realized and what can be done to potentially avoided or to survive in these conditions. Most of the economists disagree regarding the answers of these questions, and therefore numerous different theories have been put forward and popularized regarding these concepts.

General causes of the recession

Most of the renowned economic theories related to the recession mainly focus on the financial, the psychological, as well as the fundamental economic factors that can result in a series of the business failures which eventually contribute towards a recession. On the other hand, some of the other theories focus at the long term trends in the economic aspects of a country that become the base of the recession in the coming years in a country. While the other theories focus on the immediate and visible aspects of the trends in the economy which start appearing just before the recession which means that they might be directly associated with the coming recession. However, it is not necessary that only one theory relates to the recession correctly, as various factors mentioned in various theories can be simultaneously related to the recession at the same time.

The financial factors on the other hand, are the most important factors that can directly contribute towards the fall of an economy into the pit of a recession as it is indicated by the US crisis during the first decade of the 21st century. The over-extension of the credit and debt on the risky loans along with the marginality of the loan borrowers can directly and drastically lead to a huge accumulation of the risk factors in the financial sector of a country. In order to cool down this heated up process, the expansion of the credit and money supply in the economy is

Chapter 2: Arguing the thesis

performed and operated by the government by using the Federal Reserve. This further drive can in turn, process towards the extremes in the financial sector which can stimulate the production of the risky “asset price bubbles”.

This artificial suppression of the tax rates by the government in the times of crisis of a country can lead towards a huge recession in the economy of the country resulting in the distortion of the relationship structure between the consumers and businesses. Actually this is done by covering the reality by showing what is not there. For instance, the values of the different tax rate sensitive business projects, investments, as well as the consumption decisions (including the decisions of purchasing a big house or a risky long term expansion in the business) are shown to be much more attractive as compared to their original and actual values which will lead to short term relaxations but will surely cause troubles in the long runs. As the time passes and these decisions fail, the rates of the projects and properties etc. are dropped and all the investments are lost, which reflects the reality and eventually constitutes towards a main component of the impetuosity of the business failures with ultimately lead towards the recessions (Kornai, 1994).

Psychological factors

The psychological factors are also recurrently reported by a number of reputable researchers as well as economists for their involvement in causing the recessions in a country. The extreme excitement and enthusiasm of the investors during the flourishing years of a country takes the economy of the country towards the heights of values and success. However, as the market crashes, the psyche of the investors regarding the doubts of increase or decrease in the market value enhances the chance of the disturbance in the normal investment processes which also gives birth to a number of factors including the financial as well as economic factors that can be associated directly with the recessions (Houdmont, and Addley, 2012).

In addition to this, as most if not all of the decisions and actions related to the economic aspects are largely related to the future predictions and forecasting, this means that the idiosyncratic expectations of the businesses, investor as well as the consumers are mainly involved in the commencement and spread of an economic decline or recession (Kirsch and Ryff, 2016).

Economic factors of a recession

In addition to the factors mentioned above, actual alterations in the economic essentials and fundamentals also make serious contributions towards the

Chapter 2: Arguing the thesis

recession in addition to the financial factors as well as the psychology of the investors. Here, some of the economists suggest that the recessions are largely caused by the fundamental and essential economic shocks including the disturbances in the supply chains and the impairment they cause towards a wide array of the businesses.

These shocks which influence the dynamic businesses including the energy and transportation sectors can have extreme and drastic impacts so that they can cause issues in many businesses across the economy to “retrench” and cancel out the investments as well as the hiring plans at the same time, with much drastic impacts of the consumers, workers and stock market as well (Sobotka et al., 2011).

The economic factors are also tied to the financial markets where the market tax rates determine the cost of the financial liquidity for the various organizations and businesses as well as the preferences of the savers, consumers as well as the investors for the current as well as the future consumption trends. In addition to this, the clampdown of the tax rates during the prosperous years in the economy of the country before the onset of a recession misrepresents and distorts the financial markets and business along with the decisions of the consumption. All of these mentioned factors have a potential to cause the recession individually as well as in association with the other factors over the passage of the time. However the impacts of the debts on the recessions are much more obvious as drastic as compared to the other factors (Haw et al., 2015).

Debt related vulnerabilities

Debt can disturb the macroeconomic performance of a country by many channels as well as methods. In some cases debt can directly transfer or even enhance the effects of the shocks to the various sectors within a country (Setser et al., 2005). On the other hand, it can also destabilize the capability of an economy in order to damp the shocks. For instance, comparatively increased levels of debt can also increase the sensitivity of the individuals, households or even the organizations and firms in order to the changes in the macroeconomic performances that might encourage the modifications in consumption, borrowing, as well as investment behavior of the individuals, households as well as businesses and organizations. The proportions of the debts have increase over the years in different sectors of the country of an economy and still different sectors hold different proportions of the debts in a country (Figure 1). The empirical indications

Chapter 2: Arguing the thesis

propose that as the household debt is increased and reaches increased levels, the consumption of the households becomes comparatively more volatile (Figure 2).

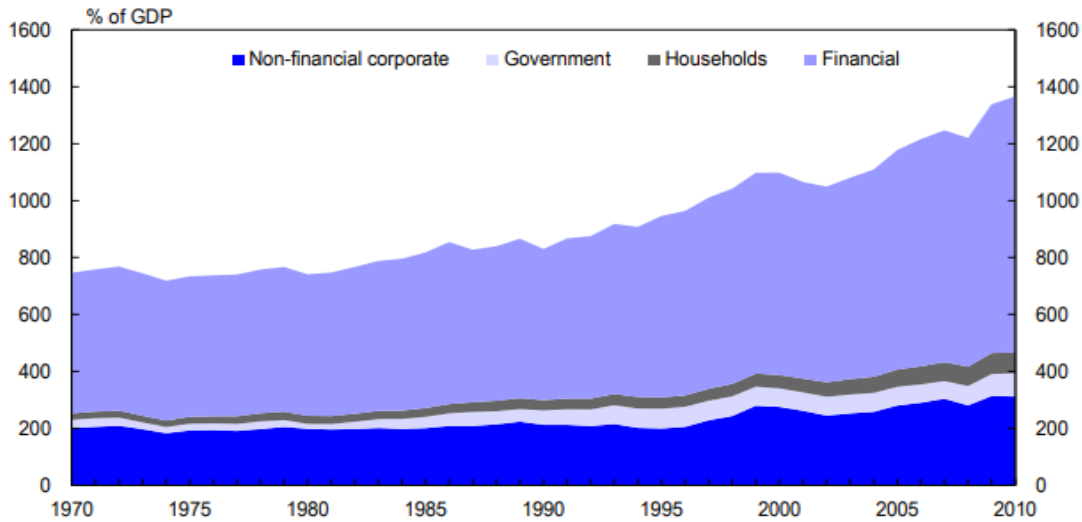


Figure 1. Proportion of the debts in the sectors of economy (Sutherland and Hoeller, 2012)

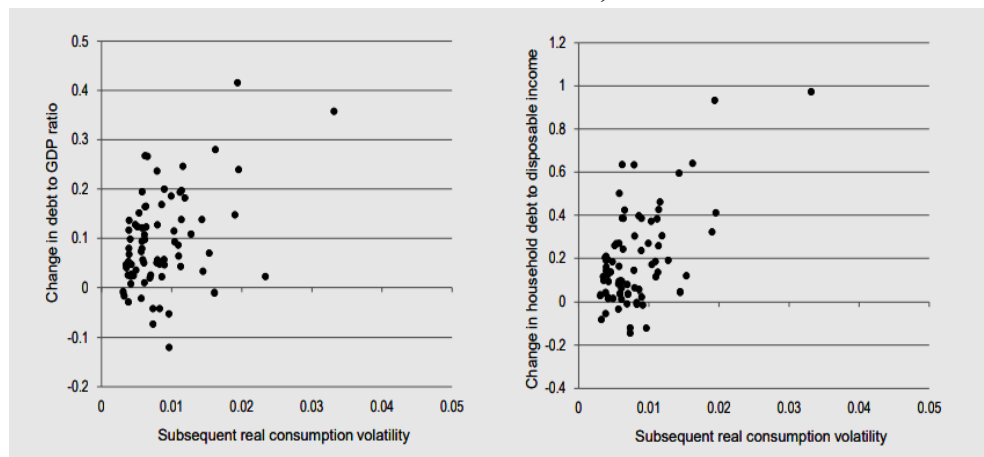


Figure 2. Changes in consumption volatility in increase in debt (OECD, 2012)

On the other hand, in consistency with these above mentioned vulnerabilities in the households and their expenses, the increases in the debt affects the business cycles as well. In order to demonstrate this, a data set of the business cycles since the 1980 of the OECD countries was split up into the high as well as the low debt business cycles. When the total debt is considered, this results in the increase in the real activity of the businesses moves above the trend at the top of high debt as compared to the low debt business cycles (Figure 3). The real GDP at the level of 4% above the trend line is almost double than that of the “above trend figure” which is observed at the top of the low debt business cycles. On the other hand, the

Chapter 2: Arguing the thesis

succeeding go-slow can also observe the dropping of the activity below the trend line after the 4 quarters of the year in case of both of the high as well as low debt cycles. Here it keeps dejected in case of the high debt business cycles while on the other hand, it turns back to the trend during the low debt business cycles. The consumption of the government discloses a design of the initial support of the government on the economy during a “high debt” recession. However, after the almost one year of the turning point, this starts to drop down significantly and very abruptly below the trend line.

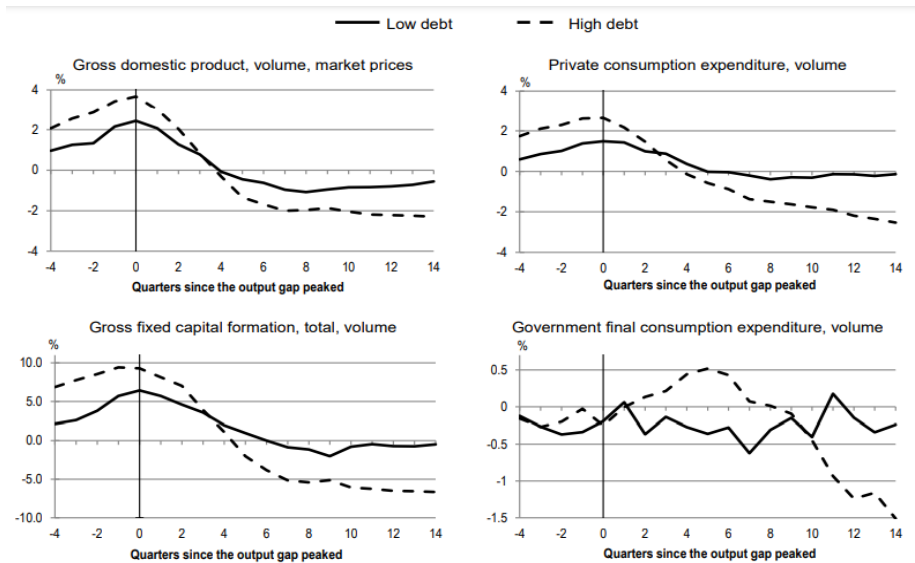


Figure 3. Changes in real activity when the debt is high (OECD, 2012)

Debts in the different markets and different economies have changed in various sectors of the markets with the passage of time. It can be seen from the figure 4 that the dynamic trends of the private as well as the public debt in the “Emerging Market Economies (EMEs)” as well as in the 4 Asian EMEs have changed from 1990 to 2016. Unlike the “Asian Economies (AEs)”, the EMEs have collected household as well as the corporate debts more quickly after the GFC. However, the level of the corporate debt has indeed continued to reduce before the GFC while it started to grow again very quickly after the observed crisis.

While being comparatively less melodramatic, the household debts have increased so much with a rapid pace as compared to the corporate debts since the start of the 21st century. They also have continued to perform the same even after the GFC. The public debts in the case of the EMEs have also amplified after the GFC, however, its level was observed to be comparatively lower in the year 2016

Chapter 2: Arguing the thesis

as compared to that in the year 2003. In case of the 4 Asian EMEs, the upsurge of the corporate debt was observed to be most distinct before the “Asian Financial Crisis (AFC)” in 1997. It however dropped since after the crisis, and has not observed to expand expressively after that.

On the other hand, it has also been observed that while the household debts raised quickly before the AFC, they have also increased faster even at more speed that before since the start of the 21st century including the era of the GFC. Public debt, on the other hand, in the case of the 4 “Asian EMEs” has also been observed to be comparatively low and it also remained this way even after the GFC. The details of the debts regarding the share of debt as a percentage of the GDP in case of advanced economies, emerging market economies as well as the 4 Asian emerging market economies has been described in the below figure (Figure 4).

High debt increases the recession

When debt levels increases in the economy of a country, the probability and chances for that economy to enter into a recession are significantly increased. These chance for the economy of the country for entering into the recession are also increased as the debt in the private sector, especially related to the household as well as the non-financial sectors, is increased as compared to the trends. In order to understand this, it can be assumed that when the household debt is around the trend value, there will be a chance of around 10% of the probability that the economy will now enter in the recession within the next fiscal year (Dunn and Mirzaie, 2016) However, when the household debt is increased above the trend level by about 10% of the GDP, then there will be an increase of about 40% in the probability for the economy for entering into the recession in the coming fiscal year (Figure 5).

Chapter 2: Arguing the thesis

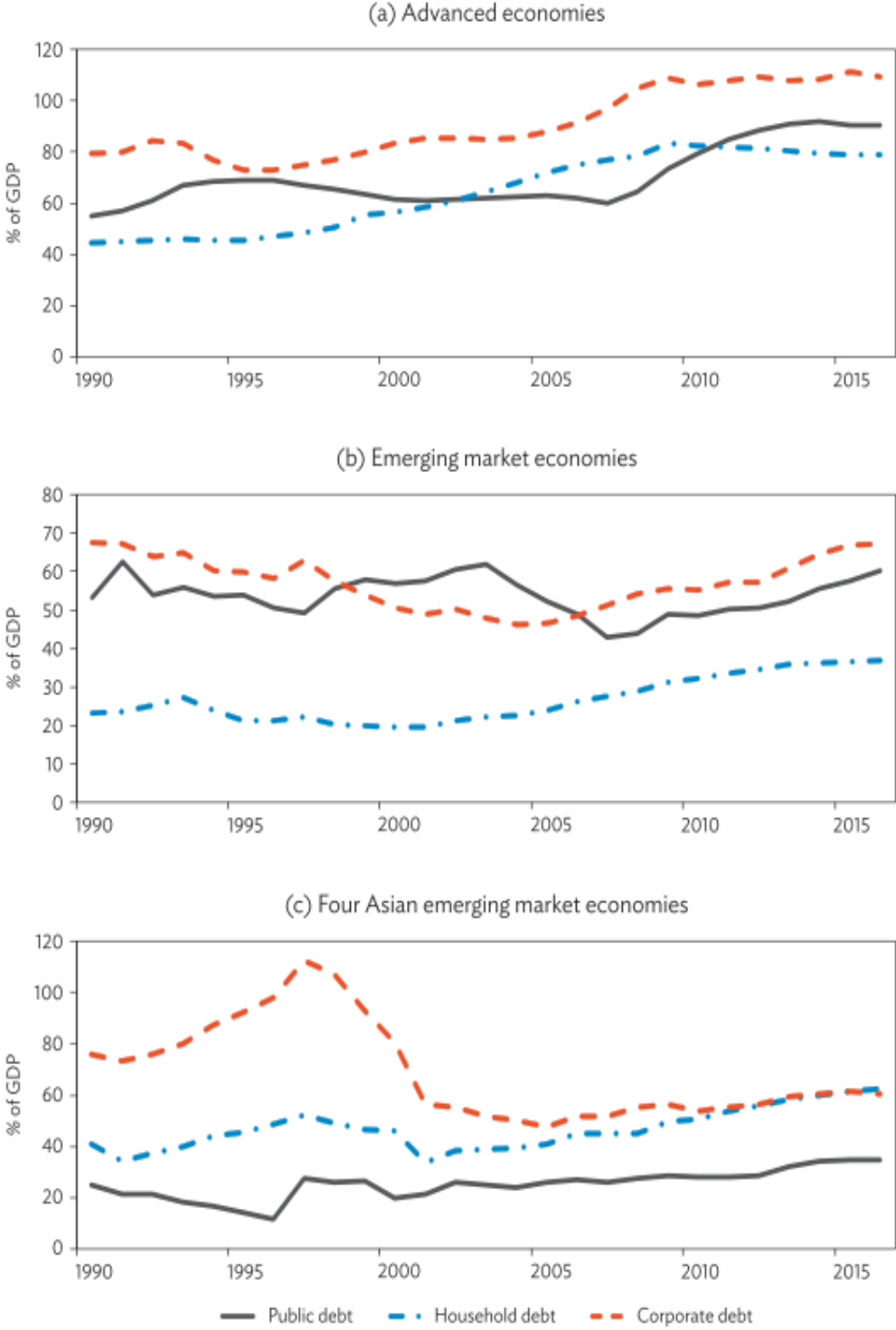


Figure 4. Dynamics of the debt to the GDP

Chapter 2: Arguing the thesis

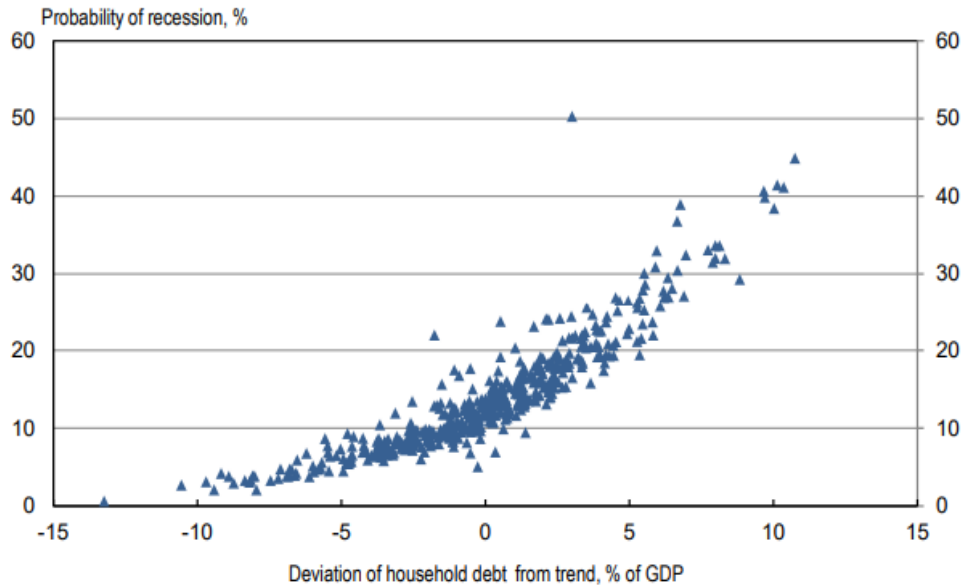


Figure 5. Probability of recession with increasing the household debt (Merola, 2012)

Although this effect seems to be very large but an increase in the chances of the getting into the recession are not so common until a significant increase in the debt is observed. Some of the examples of reaching such high levels of debts are found in the scenarios of Spain, Estonia, United Kingdom as well as United States on the era of the recent crisis in the first decade of the 21st century. However, the impacts of the debt for making the recession in the economy for the other sectors in the country are comparatively less powerful, however, the increase in the “non-financial” corporate debt seems to have a more or less tougher impact which is negative on either the increase in the debts of the total economy or even the financial sector (Ziemann, 2012).

The developments as well as progresses before the high debt related recessions are usually more lengthy and large, which assists the increase in the levels of debt above the trend lines, and the recessions on the other hand are on an average more drastic. This is predominantly true when the debt of the households as well as the corporate sectors is predominantly high. In case of the increased debt in the private sector, a correlation is observed between the length of the progress and the harshness of the following recession that can be particularly marked in the case of the recent business cycle (Sutherland et al., 2012).

Chapter 3: Policy implications

As it is already mentioned that the high levels of the debt in the financial sector are the main causes of creating the vulnerabilities, which can resonate throughout the economy of a country. When the funding of the bank relies lesser on the deposits of the bank, the greater role of the security markets develops a new group of vulnerabilities which are arising from the sudden changes in the liquidity as well as corresponding difficulties in the domain of valuation. In addition to this, the counter-party risks have also been protruding during the economic crisis of a country. When these risks are materialized, they are able to cause the spill-over and contamination effects because a default leads to dropping of the asset values, which then in turn leads to the losses which depress the financial equity of the organizations. As a result, they are pressurized in order to sell the assets in fire sales, which in turn, further depresses the asset values and prices, and increase the losses (Piketty and Saez, 2013).

As the economic growth of a country is weakened, or generally speaking, when a country is hit by a recession, the government of a country can also sanction an expansionary fiscal policy. For instance, this can be done by increasing the expenditure without an off-setting of the increases in the taxation. On the other hand, by reducing the expenditures as well as maintaining the tax revenues, the contractionary policy might help in the reduction of the economic activity. The fiscal policy, of the other hand, can therefore play a very significant as well as important role in the stabilization of an economy.

The implications of the susceptibilities which are created by the debt along with the interconnections between the sectors suggest that high amounts of the debt can transfer and torrent across various sectors. Generally, the debts are build up most rapidly in the case of private sectors, and when the economy arrives in the recession, the private sector debt as a share of GDP declines and decelerates, while the government debt tends to increase or accelerate on the other hand. The increased government borrowing during this recession helps cover the impacts of the large and severe shocks. Eventually, as it has been observed in the recent most crisis, the governments can be pressurized in order to rescue the financial most importantly as well as some of the parts of the non-financial corporate sector as well. More incidentally, but typically as well as quantitatively, the budgets of the government are most affected by the cyclical feebleness as the other sectors of the country deleverage, through the automatic reactions of the budget as well as the counter cyclical fiscal policy of the country. However, at the high levels of the

Chapter 3: Policy implications

government debt, the fiscal policy is very less likely able to stabilize the economy. The recent experiences of the recessions demonstrate that high initial levels of the government debt can force the fiscal policy in order to become the pro-cyclical during the economic recessions (Michaelas et al., 1999).

A more stimulating issue for the policy is whether it should lean against the accumulation of the debt towards the increased levels, or should it clean when a recession assaults. As the costs of the recessions during the high debt business cycles are generally larger as compare to the ones during the low debt business cycles. The recent highlights of the crisis also describe the fact that how costly they can be. Now the question arises that whether and how the monetary as well as the financial market policy should react to the build-up in the debt. Micro sagacious directives represent the first line of defence in this case. By increasing the flexibility of the financial sector, comprehensive micro sagacious directive can help clammy the shocks as well as short circuit the transfer of the problems which are induced by the debt across various sectors. Macro sagacious directive, by identifying the systemic coercions to the financial as well as the economy wide steadiness offers the second line of defence which may be missed by the micro sagacious directive alone. On the other hand, the final line of defence is the monetary policy itself. The monetary policy can also influence the desired levels of the debt by changing the prices of the influence. While in principle, the monetary policy can have a substantial influence, still it is a dulled tool and misunderstanding the impacts of the financial innovation and miss timing interferences could experience in the heavy costs. For instance, the tightening of the monetary policy without the knowledge of the build-ups in the debt heights could see the economy being smash instantaneously with the higher tax rates as well as the falling of the credit, so infuriating the economic recession.

Government borrowing on the other hand, increases during the recession because of the automatic stabilizers and also possibly the unrestricted fiscal policy, thereby restraining the dissemination of the shock or shudder. In this situation, temporarily increasing the government debts can also help in order to ensure the macroeconomic steadiness. However, there seem to be limitations to the ability in order to stabilize the economy in the cases when the government debts are too high. In fact, the government financial liabilities as well as the output volatility are also correlated which in turn suggests that the soothing role of the fiscal policy of a country becomes weaker at the higher levels of the debt. "This replicates that the

Chapter 3: Policy implications

dynamics of the debt may also threaten to become unstable and that household behavior expecting that greater government debt will eventually result in higher taxes, will reduce the effectiveness of fiscal policy in smoothing economic fluctuations.” When debt levels are too high, the fiscal policy of a country may even be pressurized in order to become the “pro-cyclical”.

Therefore, the need in order to bring down the government debt levels to judicious levels during the better times. The institutional frameworks on the other hand, including the fiscal councils as well as the fiscal rules can help in order to maintain the judicious debt levels of the government, which in turn allows the fiscal policy to react or respond to the levels of shocks. Getting the assemblage of rules and institutions right on the other hand is quite difficult. Practically speaking, the institutional settings habitually allow the rules to be surrendered in the time of facing the bigger shocks and then let “bygones be bygones”. The disproportionate management of the fiscal consequences as such, by not necessitating a counterweighing effort during the succeeding improvement have a tendency to favour the debt levels tiptoeing upwards (Carfagnini, 2012).

Finally, and in the light of the potentials for the macroeconomic unpredictability, the dealing with high levels of the debt is a substantial as well as a significant challenge. In this context, therefore, the legal frameworks as well as appropriate measures for writing down the debt are extremely important. Debt “write-downs” can also speed up the deleveraging and outgrowth a more energetic repossession from a high debt recession and adopt to the social costs of the unsystematic bankruptcy. However, they might also be estimated by the creditors as well as the debtors and hence, they cause an increase in the cost of capital. A higher price of the capital is more likely to cause depression in the investment which in turn will also decrease the long term growth.

Conclusion

In the present investigation study, the relationship between the debt and the recession was discussed based on the effects of the debt as well as the causes of the recession. It was studied that the recession has many significant causes but among them, debt is the most significant and statistical cause which can directly become the reason of the recession if the debt becomes too high to be paid off.

First of all, the concepts of the debt and recession were discussed according to the different schools of thought, followed by the effects of the recessions in the business cycles, the concepts as well as the differences of the recession and the depression were discussed and it was described that the depression is actually the more drastic and severe form of the recession as if the recession is prolonged enough and has reached a peak of the inflation, unemployment and decrease in the GDP, it is therefore termed as the depression. Later on, the various scenarios of the recessions in the history were discussed followed by the discussion on the length of a recession which indicated that the recession can last from a few month up to a few years. The characteristics of a recession were later on discussed in order to determine the onset of the recession to make the suitable preparations in order to face the coming recession. It was the followed by the study of the effects of the recession overall with a special focus on the economy of a country.

In the section of the arguments, first of all the causes of the recession were discussed focusing on the general causes, psychological causes and the fundamental causes followed by the economic factors of the recession focusing on the financial market of the country, followed by the discussion on the vulnerabilities of the financial markets of a country due to the debt resulting in the recessions. Not only the vulnerabilities of the financial markets were discussed but the aspects of the households and businesses were also considered. It was observed that the most of the debts in a country are directly linked to the financial market of the country and different sectors have different proportions of the debts which occupy various proportions of the GDP of a country. In addition to this, the proportions of the debt in the GDPs of the various regions were also discussed to find out the dynamics of the debts on the GDP in various regions including the Asia, emerging markets as well as the advanced economies of the world.

At the end of the study, a thorough description regarding the relation of the debt with the recession was discussed by considering the levels of the debt in relation to the chances of that economy of the country to fall into the traps of the recessions. The results were discussed in accordance with the recent most

Conclusion

scenarios of the recessions in the various countries of the world including the USA as well as UK which were mainly caused, or had a significant proportion of the increased amounts of the debts related to the recessions in those countries. At the end of the study, the implications of the policy regarding the debt as well as recessions were discussed in order to describe the causes, effects and measures related to the recessions by the fiscal and monetary policy of the country.

Works Cited

1. Abberger, K. and Nierhaus, W., 2008. How to define a recession?. In CESifo Forum (Vol. 9, No. 4, pp. 74-76). München: ifoInstitutfürWirtschaftsforschung an der UniversitätMünchen.
2. Achuthan, L. and Banerji, A., 2008. The risk of redefining recession. Cable News Network (CNN).
3. Carfagnini, M.W., 2012. Policy Implications of the Financial Crisis and Recession: Canadian Performance in Comparison.
4. Cerra, V., Fatás, A. and Saxena, S.C., 2020. The persistence of a COVID-induced global recession. VoxEU. org, 14.
5. Christiano, L.J., Eichenbaum, M.S. and Trabandt, M., 2015. Understanding the great recession. American Economic Journal: Macroeconomics, 7(1), pp.110-67.
6. Dunn, L.F. and Mirzaie, I.A., 2016. Consumer debt stress, changes in household debt, and the great recession. Economic Inquiry, 54(1), pp.201-214.
7. Giuliano, P. and Spilimbergo, A., 2014. Growing up in a recession. Review of Economic Studies, 81(2), pp.787-817.
8. Goodrich, J.N., 1991. An American study of tourism marketing: impact of the Persian gulf war. Journal of Travel Research, 30(2), pp.37-41.
9. Guo, Y. and Seaman, C., 2011, May. A portfolio approach to technical debt management. In Proceedings of the 2nd Workshop on Managing Technical Debt (pp. 31-34).
10. Haw, C., Hawton, K., Gunnell, D. and Platt, S., 2015. Economic recession and suicidal behaviour: Possible mechanisms and ameliorating factors. International journal of social psychiatry, 61(1), pp.73-81.

Works Cited

11. Houdmont, J., Kerr, R. and Addley, K., 2012. Psychosocial factors and economic recession: the Stormont Study. *Occupational Medicine*, 62(2), pp.98-104.
12. Kehoe, P.J., Midrigan, V. and Pastorino, E., 2018. Evolution of modern business cycle models: Accounting for the great recession. *Journal of Economic Perspectives*, 32(3), pp.141-66.
13. Kirsch, J.A. and Ryff, C.D., 2016. Hardships of the Great Recession and health: Understanding varieties of vulnerability. *Health Psychology Open*, 3(1), p.2055102916652390.
14. Knudsen, E.S., 2011. Shadow of trouble: The effect of pre-recession characteristics on the severity of recession impact.
15. Kornai, J., 1994. Transformational recession: the main causes. *Journal of comparative economics*, 19(1), pp.39-63.
16. Lansdall-Welfare, T., Lampos, V. and Cristianini, N., 2012, April. Effects of the Recession on Public Mood in the UK. In *Proceedings of the 21st International Conference on World Wide Web* (pp. 1221-1226).
17. Leamer, E.E., 2008. What's a recession, anyway? (No. w14221). National Bureau of Economic Research.
18. Merola, R., 2012. Debt and Macroeconomic Stability: Case Studies.
19. Michaelas, N., Chittenden, F. and Poutziouris, P., 1999. Policy implications arising from the impact of the last recession on the capital structure of UK SMEs. *Environment and Planning C: Government and Policy*, 17(4), pp.411-430.
20. Moore, G.H., 1967. What is a recession?. *The American Statistician*, 21(4), pp.16-19.

Works Cited

21. Nugroho, A., Visser, J. and Kuipers, T., 2011, May. An empirical model of technical debt and interest. In Proceedings of the 2nd workshop on managing technical debt (pp. 1-8).
22. OECD, 2012. Debt and Macroeconomic Stability, OECD Economics Department. Policy Notes, No. 16 January 2013.
23. Piketty, T. and Saez, E., 2013. Top incomes and the great recession: Recent evolutions and policy implications. *IMF economic review*, 61(3), pp.456-478.
24. Setser, M.B., Nystedt, M.J., House, M.B.E., Halikias, M.I., Keller, M.C., Pitt, M.A. and Rosenberg, M.C.B., 2005. Debt-related vulnerabilities and financial crises. International Monetary Fund.
25. Sobotka, T., Skirbekk, V. and Philipov, D., 2011. Economic recession and fertility in the developed world. *Population and development review*, 37(2), pp.267-306.
26. Sutherland, D., Hoeller, P., Merola, R. and Ziemann, V., 2012. Debt and Macroeconomic Stability, OECD Economics Department Working Papers, No. 1003, OECD Publishing.
27. Sutherland, D. and Hoeller, P., 2012. Debt and macroeconomic stability: An overview of the literature and some empirics.
28. Temin, P., 2010. The great recession & the great depression. *Daedalus*, 139(4), pp.115-124.
29. Tobin, J., 1975. Keynesian models of recession and depression. *The American Economic Review*, 65(2), pp.195-202.
30. Ziemann, V., 2012. Debt and macroeconomic stability: Debt and the business cycle.
31. Zumeta, W., 2010. The great recession: Implications for higher education. In *The NEA* (pp. 29-42).