SJMS Vol.2, Issue 3, Page: 01-08, March 2020, ISSN: 2676-2714 Impact Factor (SJIF): 8.871 Journal DOI: 10.15373/22501991 International Peer Reviewed & Refereed Journal with Indexed Journal Platforms

web: www.damaacademia.com email: editor@damaacademia.com Download from Journal site https://damaacademia.com/sjms/

Author(s) Cornelius Adablah (PhD) Amina Sammo

Business University of Costa Rica School of Finance & Financial Management, Ghana Campus.

Correspondence Amina Sammo

Business University of Costa Rica School of Finance & Financial Management, Ghana Campus

The Importance Common Sense vs. GDP Sense, and Depleting Natural Resources

Hajia Amina Sammo (PhD)

Abstract

Gross domestic product (GDP), this is a term which is familiar to pretty much anybody who has ever read any newspaper. This number is considered by many to be the most important indicator of the state of the economy. However, how little clarity we have on the subject is remarkable. The average public is not completely ignorant about what GDP is. They do have some idea about the GDP number and its importance. The issue is that they harbor a lot of wrong notions about this subject. If many economists are to be believed, these wrong notions are extremely dangerous and may have in fact played a huge part in the recent economic crisis that halted the growth of the global economy. All these arguments, the pros and cons make any sense only after we have a clear idea about what GDP is. In the previous article, we understood why the GDP number was created and what purpose is it supposed to serve. However, this does not state the importance of the GDP number. The average person begins to believe that GDP is one of the many numbers that economists use. However, this is not the case. The Gross domestic product (GDP) is central to the subject of macro-economics. This article is dedicated to understanding the applications of the GDP number. Once we know how widespread the use is, we can understand how the system will be gravely affected, if the number is incorrectly defined!

Keywords: Common Sense, GDP Sense, and Depleting Natural Resources

1.0 INTRODUCTION

In older days, statesmen found that gauging the health of the economy at any given point was a very difficult task. Any policies meant for the improvement of the economy could only be implemented if the present state of the economy was known. However, economy is a very complex system. There are numerous factors like employment levels, inflation levels, debt levels etc. that need to be considered before any conclusion about the present state of the economy can be arrived at. Therefore, the answer to the question "How is the economy doing?" was pretty complex. The statesmen wanted a simpler answer, a simple barometer that would tell them the current state of the economy. They could then use this information to formulate policies. GDP was the end result of this quest. The main reason of GDP is to communicate to the general public information regarding the health of the economy. The GDP number, therefore, in many ways is a composite metric. The purpose of GDP is to assimilate all the information is all metrics like inflation numbers, debt numbers etc. and present it to the general public and the policymakers in the form of actionable information.

Secondly, GDP is meant to free economists from the realm of opinions. Prior to GDP, any conclusion regarding the state of the economy was purely based on opinions and had very less backing in the form of quantitative evidence. With GDP, this has changed and the average person can state with precision the direction as well as the magnitude in which economic movement has occurred. The GDP number is considered so important because of its perceived simplicity. While many economic indicators are complex to decipher, the GDP number is extremely simple. If the number goes up, it means good news and if the number goes down it means bad news, that's it! The magnitude of this good or bad news is also stated in terms of percentages. Hence, the number is exceedingly simple to interpret. "Gross domestic product (GDP) includes the monetary value of all goods and services which are produced within the geographical boundaries of a given country in a given time frame" Notice the defining criteria. Production should have happened within the country's boundaries and within a given time period. The logic behind the GDP idea is simple as well.

Economists have discovered through empirical analysis that if the production within a country increases, then so does the employment and the inflation comes under control and so on. All major measures which correlate to the good health of the economy are also correlated with the Gross domestic product (GDP). Hence, when the news that

GDP has grown spreads into the economy, the common population assumes that the economy is in a very healthy state. As we shall see in the rest of this module, this is a false assumption. It is possible for the GDP to grow when all the underlying metrics are in fact declining. In this case, the link between GDP and the underlying economic growth is broken and the GDP number becomes misleading at least and dangerous at worst!

1.1 The Importance of GDP

In the previous article, we understood why the GDP number was created and what purpose is it supposed to serve. However, this does not state the importance of the GDP number. The average person begins to believe that GDP is one of the many numbers that economists use. However, this is not the case. The Gross domestic product (GDP) is central to the subject of macro-economics. This article is dedicated to understanding the applications of the GDP number. Once we know how widespread the use is, we can understand how the system will be gravely affected, if the number is incorrectly defined!

GDP: Building Block of Macro-economic: The Gross domestic product (GDP) number is the building block of macroeconomics. This is the case because modern day macro-economics is more or less about government making policies to help better the performance of the economy. Now, we are aware that the government extensively uses the GDP number to create policies and hence this number is the basis upon which many of our policies are made.

GDP: Identification of the Present State of Economy: The official definition of the current state of the economy is based on the GDP number. For instance, recession is defined in terms of GDP number. If the GDP number records a fall for two consecutive quarters, we call it recession. On the other hand, if the GDP number records a decreasing rate of growth for two consecutive quarters we call it a slowdown. Hence, any economy officially identifies itself on the boom bust cycle based on the GDP number and so does the entire world.

GDP: Objective of policy formulation: The Gross domestic product (GDP) number is not only the basis for diagnosing the problem with the economy. It is also useful in correcting it. Any government policy's objective is measured in terms of the effect that it has on the GDP. For instance, if the GDP number is falling, the objective of the government policy would ideally be to reverse this position and create a situation where in the GDP number is rising. The government policy will define in clear quantifiable terms, what change they intend to bring to the GDP number. The success or failure of the government policy will be measured against this number that they have mentioned in their stated objectives.

GDP: Comparison between Economies: The GDP number helps us make cardinal and ordinal comparison between economies. We can rank the economies of nations or regions by considering their GDP number. We can also draw conclusions about the relative size of the economy based on the GDP number. For instance, we can state that the economy of USA is 14 times larger than the economy of India. This statement really means that the GDP of USA is 14 times larger than the GDP of India.

GDP: The Root Cause: Now, as we can see above that the GDP number is really the only thing that matters as far as macro-economic policy formation is concerned. Hence, the GDP number is of massive importance. Now, if this number was possibly defined wrongly or there were loopholes in the definition, it would allow for a massive misallocation of taxpayer resources and the policies that were created for a certain purpose could end up having the exact opposite effect. This is the case today, if you believe many eminent economists. The people criticizing GDP are not some conspiracy theorists. Rather they belong to the realm of Nobel Prize winners and other mainstream economists. They believe that the wrong definition of GDP has a lot of unintended consequences. To a large extent, they attribute the recent economic crisis to the wrong decisions made as a result of this GDP misunderstanding.

1.2 The Ever Increasing GDP

The Gross Domestic Product (GDP) is one of the main issues highlighted by the media. The media is incessantly bombarding us with information pertaining to GDP. It is considered to be the "be all end all" metric. News about increasing GDP is taken with great enthusiasm whereas news about decreasing GDP creates an atmosphere of pessimism. Needless to say, that any matter which is so important to the economy will get politicized. Therefore, GDP also has the power to make or break governments. This is why governments all over the world always promise an increasing GDP during their regime. When you add up all the economic noise and the political promises we get a scenario wherein we are expecting the GDP to grow endlessly until perpetuity! When we consider the fact that growth in GDP is caused by using up the natural resources, and that those resources are finite, the absurdity of this expectation become clear. So, this leaves us with the all-important question, "Is it possible for the GDP to continue rising forever?"

Unrealistic Expectations of Perpetual Growth: There is a famous saying which says that "A person who expects perpetual growth is a either a mad man or an economist" This statement finds its most appropriate use while describing the GDP phenomenon. Recession is considered a negative state for the economy. The mere mention of the "r" word is enough to strike fear into the hearts of workers all over the world. Recession is equated with job loss and

poverty all over the world and hence attracts immense negative sentiment. A close cousin of the "r" word is the "s" word. Since slowdown signals a forthcoming recession, mention of the word slowdown also attracts a very negative sentiment and adverse reactions. Now, the text book definition of slowdown is reduction in the rate of GDP growth. If the GDP were growing at 10% last year and it grew at 9% this year, we call it a slowdown! Since the word slowdown has such a negative connotation, all measures are taken to avoid using it. Therefore, our society is implicitly harboring the expectations of perpetual growth at an ever increasing rate.

Perpetual Growth vs. Finite Resources: The real problem of perpetual growth comes to the forefront when it is juxtaposed against the way nature really is. GDP growth is to a large measure dependant on the natural resources. The land we have, the amount of fossil fuels we have, the amount of coal, mineral ore etc that we have on hand. True that technology can play quite a major role in harnessing these resources better but our society is still by and large completely dependent on these resources. These resources are governed by natural laws. The process by which these resources are created takes years and sometimes even centuries. We therefore are dealing with a finite amount of natural resources on our hands. The expectation of perpetual growth at an ever increasing rate is therefore terribly off base and has no logical backing if we confront the facts!

Penalty for Falling Growth: The real problem with this wrong expectation is the political impact that they have. The cycle generally begins with media painting pictures of gloomy days coming ahead. Soon the mania catches on and negative sentiment becomes the norm. Many times this has led to governments being voted out of office. Corporations, governments and individuals therefore have a perceived incentive to delay the recession as much as possible. Pay attention to the words perceived incentive. There is no incentive in reality, but the perception makes it real.

Loopholes to Delay Falling Growth: Governments all over the world have therefore resorted to many gimmicks to ensure that they can delay the onset of a recession as much as possible. These incentives will be discussed in detail later in this module. For the moment it is important to realize that GDP measures spending and if governments can find a way to keep on spending, they can at least temporarily create a world in which the GDP will rise indefinitely at an ever increasing rate. The repercussions of doing so will be grave in the future. However, at least momentarily the perceived objectives can be achieved and recession can be delayed.

End Result of the idea that GDP Must Always Increase: The idea that GDP must always rise has disastrous consequences in the long term. Some of these consequences have been listed below:

- 1. Ever increasing fiscal deficit and the debt spiral
- 2. Massive and wasteful government spending
- 3. Massive corruption and loot of the taxpayer's money while conducting the government spending
- 4. Corporate mal-investments
- 5. Ever increasing household debt burden

Each of these consequences will be discussed in more detail as we progress through this module. For the moment, it is important to understand that the idea of an ever rising GDP is a fundamentally flawed fallacy.

2.0 PROBLEM #1: GDP DISREGARDS DEBT

Debt was once an individual and social vice. Individuals and organizations in heavy debt were considered to be inefficient and heading towards disaster. However, the GDP system has turned this age old system of thrift being a saving and debt being a virtue on its head. The modern day GDP system not only incentivizes debt but also crowns the most indebted nations as being role models for other nations. One does not have to go too far to see the effects of this system. Governments all over the world, small or big, have one thing in common. They are all in debt! It doesn't matter if it is the mighty federal government of the US or a municipality in a developing nation like India, they all owe more money than they earn. In fact, the governments of the most developed nations i.e. the US, Japan and the Euro zone have dangerous levels of debt. A lot of these nations are simply borrowing to pay off interest due on old debt. The situation is alarming to say the least! Yet when you see the GDP system's list of the top performing nations, these very nations occupy the top spots on the list.

The above situation is as ironical as it is dangerous. True that the economies of countries like US would be far better off than the economy of a third world nation. Yet it is nowhere close to being strong or robust. In reality all countries, developed and developing have a serious debt crisis emerging. We have seen glimpses of this as minor trouble erupted in Euro zone and Japan. A simple analysis of the underlying facts explains that the worst is yet to come. The reason why GDP systems calculation of debt is dangerous is because it builds a false sense of complacency. The GDP system is not explaining the gravity of the system. If economies like US and Japan collapse, then many small economies which are based on exporting goods to these countries will also collapse. A full-fledged crisis comparable to the Great Depression may be very near, yet the system provides no warnings. Debt on an individual level is dangerous. But at a government level, it simply becomes out of control. The reason is that as an individual if

you borrow money, then you are the one that is supposed to pay it back. However, as a government, you can borrow the money on behalf of the people. By the time, the money has to be paid back and a crisis emerges, a very different set of people will be in charge. As the eminent economist Milton Friedman puts it, "No one spends other people's money like it is their own!" Hence a true barometer of the economy should account for this tendency and should place a heavy penalty for governments which decide to borrow money incessantly and excessively.

2.1 Government Debt and Social Inequality

The GDP system's tendency to encourage reckless borrowing not only leads to wastage of the government resources but it all leads to social inequality. The system and the blind pursuit of a higher GDP, creates a situation in which the rich get richer and the poor get poorer in the following ways:

Corruption: Countries with the highest GDP today also have the highest government expenditures. This is not a co-incidence but rather a logical outcome of the GDP system. Governments want to ensure that they have control over the GDP and hence tax the general population and then spend the same money themselves. In this manner they can ensure that the expenditure and therefore the GDP always keep rising. The problem is that once the money is taxed, it is in the hands of the corrupt politicians, who then claim to use it for social purposes. However, across the world the money intended for the poor never reaches them in full. There is always some amount of leakage due to corruption. If there were no GDP system, the governments would not have a pretext to justify taxation and expenditure and thus corruption could have been avoided to a large extent.

Inflation: Also, governments all over the world resort to monetization i.e. printing money when they face a shortage of funds. The money created benefits the people who have it first. This is because they get to use the money before the price levels in the economy rise. The GDP system once again creates pretexts for monetization and inflation. The corrupt politicians and their stooges are the first ones to get their hands on the newly created money. Hence they derive more from it in terms of purchasing power than the average citizen. By the time, the money reaches the average citizen, the prices have already risen.

The above factors hint towards an urgent and important need to overhaul the GDP system. The study of monetary history is absolutely clear. Right from the times of Roman empire, debt has been the prime cause behind the fall of nations. Hence an economic barometer cannot afford to ignore debt in its calculations. A new metric is required to replace the GDP system. This new metric must not blindly focus on increasing production. It must also ensure that minimal debt is taken on reasonable terms. This new metric should warn governments and general people about the possibility of a debt crisis in the future.

2.2 GDP and the Perpetual Debt Trap

In the previous article, we read about how the GDP system encourages incessant and reckless borrowing on the part of the governments. This system rewards both the governments and the individual politicians for indulging in financially imprudent behavior. However, the problem does not end there. The GDP system not only makes borrowing money seem like an attractive proposition. It also makes paying off debt seem like a bad thing to do. When both these factors are combined, we can see why the GDP system has implicitly encouraged and even led governments into the perpetual debt trap.

Borrow and Raise GDP: As we already know that government spending forms a major part of the GDP in most countries. In many developed countries the government spending accounts for as much as 40% of the total GDP! This means that the government has the power to simply borrow money and create the illusion of economic prosperity at least momentarily. Needless to say, that these powers are being widely exercised by governments worldwide. The recent debate and the resultant raising of the debt ceiling by the Obama government is testimony to this fact. Also, one needs to consider that United States, which is arguably the biggest economy in the world with a \$45 trillion GDP needs to borrow \$2 billion on a daily basis merely to stay afloat. If the US government simply failed to raise these \$2 billion dollars on any given day, it would end up defaulting on its previous debt obligations and a cascading spiral of economic failures would erupt.

Artificial Rise vs. Legitimate Rise: So, now we have a problem. We have two different types of growths happening in the economy. One is the good kind of growth i.e. the legitimate growth. This means that this growth has been accomplished by more efficient use of resources. For instance, when a car is developed which is more fuel efficient, growth has happened. Technology has enabled more transport to happen with the same or lower amount of gas being used! This is the real growth. On the other hand, we have this artificially created government growth. There is no concern for efficiency. It doesn't matter if the car is more fuel efficient or less. The idea is to produce as many cars as possible. This kind of growth is artificial growth and causes wastage of resources. However, GDP does not differentiate between the kinds of growth. Any growth is considered an increment in the GDP.

What Happens Tomorrow? When governments fund the artificial growth with borrowed money, big problems emerge in the future. The artificial growth was basically wastage of money. This means that it is not sustainable i.e. it cannot pay for itself. Since it cannot pay for itself, but the government borrowed the money, now the taxpayers have to pay the bill. Thus, poor government borrowing decisions lead to high interest and principal payments in the future. Since the projects were never economically viable in the first place, taxpayers have to shell out more and more in taxes as time passes by.

Disincentives to Pay off Debt: Let's say that governments and taxpayers find themselves in a downward debt spiral. They realize that the expenditure has been wasteful and also realize that they need to pay the debt back, then what happens. Well, if the government pays off more debt, it means less spending. Less government spending means a smaller GDP. A fall in the rate of GDP is defined as recession. Therefore, if the government decides to do the right thing and pay off the debt, it ends up creating a recession! The effects of the recession once again have to be borne by the common people in the form of unemployment and job losses. Thus, any government which relies on excessive borrowing, even in the short term ends up creating a debt spiral. Firstly, cutting down on spending becomes extremely hard because of the added interest costs. Even if the government took the difficult steps, it would end up creating a recession and be voted out of power! It is no wonder that governments across the world do not try to cut debt unless it is absolutely necessary.

Incentives to Borrow More: Governments would have to take so many drastic and unpopular steps to restore the economic system. However, on the other hand, if the government simply continued to borrow more, it would keep up the illusion of prosperity. More borrowing would show up as more expenditure and would therefore boost the GDP! The governments and politicians would win laurels for improving the growth rate when in reality they have taken reckless decisions. The GDP system is therefore bound to create a debt spiral for any country which chooses GDP maximization as their objective. Like a drug, GDP maximization keeps nations hooked on debt. Any attempt to restore the underlying economic fundamentals is extremely difficult in the short run.

3.0 CASE STUDY: GDP, DEBT & EUROPE (PART 1)

Anyone who is even remotely familiar with basic economics will tell you that the German economy was more robust than the Spanish, Greek, Italian and other economies in Europe. However, that is about common sense and as we already know from previous articles, common sense is very different from GDP sense. Hence, if we were to look at the GDP numbers, for five years preceding the economic crisis, the numbers would tell you a very different story. The Greek economy was one of the fastest growing economies in Europe during that time (as per the GDP system). The Greek growth rate had surpassed the German growth rate multiple times during that 5-year period. Hence, if the GDP system was to be believed, Greece was doing exceedingly well during those years. Yet, all of a sudden the Greek economy collapsed with unimaginable debt. There were no warning signs signaling an impending doom. Instead the GDP system deceptively made up believe that all was going well in Greece and other European economies. When the crisis began, many analysts started questioning what was wrong with the current system and how a catastrophe of this magnitude could slip under the radar and suddenly appear when least expected. Most of the answers found link directly to the GDP system.

It is important to understand that the European crisis may have appeared in the media overnight however, the underlying economic fundamentals did not change overnight. The seeds of the European crisis were sown many years before its appearance. Let's consider Greece as an example. What happened in the other European countries is more or less the same? However, it happened on a massive scale in Greece making it an interesting case study. It started with the elections in Greece. Both the political parties in Greece were making absurd election promises. Promising goodies and government jobs in exchange for votes was the norm and both political parties wanted to outshine the other when it came to offering freebies. The Greek population was also interested in these freebies and would vote whoever offered the maximum benefits to power. And if the politician wanted to stay in power, they had to make good their promises. That is what happened in Greece. Around 35% of the Greek working age population was employed in government jobs during the time before the Greek crisis. Government jobs provided pay and benefits which the private sector could not compete with. The most interesting thing was that a large number of these jobs were not required in the first place. They were created merely to fulfill the election promises made by the government. Needless to say that the freebies distributed during the election process and the jobs created strained the treasury to a large extent. Now the government making extravagant promises and fulfilling them with wasteful expenditure is not the problem of the GDP system. However, the GDP system did not show any red flags when this was happening. In fact, all those salaries paid out by borrowing money to jobs that were not required in the first place showed up as an increase in GDP i.e. a good thing further reinforcing the cycle of wastage.

The Greek government also borrowed humungous amounts of money to create a public infrastructure. Metro rails and freeways came across all over the country. The problem is that in many of these places, this infrastructure

was not required and the projects were simply unviable. However, once again the government refused to acknowledge this and went ahead with the creation of these projects with borrowed money. Today, many of these projects are functioning. However, most of the projects do not generate enough cash flow to even pay off the loans that were taken for their creation. Hence, these projects are today a drain on the taxpayer's money and still adding up to the European crisis. Once again the GDP system does not take wrong decisions on the government's behalf. However, when a government does make a wrong decision, the GDP system ends up incentivizing it. All these projects were part of the remarkable growth rate that Greece exhibited for five years prior to the crisis.

The Greek government went on a really massive spending binge when it hosted the 2004 Olympics. Olympics had originated in Greece and therefore were very close to the hearts of the Greek people. However, the Greek government took this too far. Extensively large sums were spent on creating sporting infrastructure. There were race tracks and swimming pools that were built especially for this event. The overburdened Greek treasury did not have the money for this event. Once again, they borrowed massive amounts and spent them on hosting the Olympics. Any search on the internet will today show this very same infrastructure lying in ruins. This depicts the wasteful nature of the expenditure. Greece neither required Olympic size swimming pools nor did it have the money to pay for them. However, as and when the Greek government was borrowing these large sums of money, all of it reflected positively in the GDP creating the illusion that all was going well at a time when it wasn't. The whole point of this article is to demonstrate that GDP is nowhere close to a reliable metric. When the GDP states that all is going well with the economy, there is a major chance that it isn't. The Greek and the larger European crisis are testimony to this fact. In the next article, we will see the consequences that the people of Greece and Europe had to bear thanks to following the goal of maximizing GDP.

3.1 Case Study: GDP, Debt & Europe (Part 2)

In the previous article, we have understood the causes of the European crisis and how using GDP as a barometer was a major factor in leading up to it. In this article, we will concern ourselves with the consequences of the European crisis and how it is going to affect the economic activity in Europe in the future. We will also try to trace the behavior of GDP during the aftermath of this crisis.

3.2 Consequences

Forced Austerity: The European crisis started with an abrupt awakening that European governments had been on a massive spending spree in the past. It brought about a realization that this perpetual expenditure growth cannot continue forever. Foreign lenders and international institutions like IMF got involved in the process. These institutions have agreed to bailout the economies only if they enforce austerity measures i.e. expenditure reduction. These bailouts will not solve the entire issue for these economies but will buy them time to fix the underlying issues. It needs to be reminded at this juncture that GDP defines expenditure as production. Therefore, any attempt at reducing expenditure, even wasteful expenditure is depicted as GDP reduction. The forced austerity measures are therefore causing unprecedented drops in GDP across all major European nations. Also, since GDP reduction is defined as recession, the European economies are considered to be in recession right now. Now, let's for a moment, consider what is really happening. The governments have first gone on a massive spending spree in the name of increasing the GDP. A lot of the expenditure that they incurred was wasteful. The GDP rewarded them for being wasteful until the entire system blew up! Now, when the countries are acting rational and cutting wasteful expenditure the GDP system penalizes them. The system is working upside down. It is encouraging wrong measures and discouraging the right ones.

Massive Unemployment: Another consequence of the European debacle has been the massive unemployment rates in European countries. Many of these countries are rumored to have unemployment rates as high as 25%. The balance 75% includes part time employees and underemployed people. Thus the employment situation is pretty bad in these countries. Once again, when jobs which are not required were being created and big salaries were being doled out by governments using taxpayer's money to hire unproductive employees, the GDP system rewarded these actions. Now, when the reality has sunk in and these economies are trying to correct their past actions, the system discourages this. It must be noted that the people who worked as employees are actually the victims of the system. Sure they were given fat salaries with not much work to do. However, who would say no to such a job? The onus lies with the government and the economists who were using such a faulty metric to measure economic activity that it did not warn them about the dangers awaiting them until it was too late.

Forced Privatization: Another big consequence of the GDP system has been the forced privatization of many essential services like water, electricity etc. These services should ideally be provided at low cost in any country. However, since the Greek government owed so much money to foreigners, in many cases they had to give away these public services to foreign corporations who in most countries around the world are known for profit maximization.

Following the GDP system has thus negatively impacted the quality of life of the average European citizen. They will now find it more expensive to maintain a basic standard of living because their governments had successfully chased the dream of raising their GDP's in the past.

Law and Order Breakdown: Lastly, these countries are also facing a law and order breakdown situation. Rioting and protests against the government have become pretty common. Also, since a large amount of people are unemployed, criminal activity has also shown an alarming rise. Once again the standard of living of the common people has been negatively impacted by the pursuit of the GDP dream. From the above examples, one can clearly derive the fact that GDP is not a reliable metric for the economy. Also since the GDP number has such massive implications, the Nobel prize winning authors have named their book "Mis-measuring our lives" That is how important and how grave the GDP problem really is. Lastly, it may appear that the IMF and the Euro zone have the problem in control. In reality, they do not. It might surprise many readers that the problem which was caused by massive debt in the first place is being solved by even more debt! Countries all over Europe are borrowing money to pay off the interest due on their previous loans. The European Financial Stability Fund (EFSF) is enabling these countries to borrow more while the common people and taxpayers are bleeding. It will be interesting to see where this crisis finally ends. However, at the present moment, the European crisis is far from over.

3.3 Components of GDP

I have spoken in great detail about GDP. By now, we are aware of the dangers of setting GDP maximization as a country's prime economic objective. To study more about the GDP, we need to have a closer look at what it is made up of i.e. its components. Once we know the components and the way they are calculated, we can delve further into their pros and cons. Hence, at a macro level, we can say that GDP is the sum of all the goods and services produced a nation's boundaries. However, not all goods are the same and not all producers are the same. Some types of goods benefit the economy more than the others and same is the case with producers. Hence, for a thorough analysis of GDP, it is essential to bifurcate the GDP into its component parts. The first bifurcation happens between domestic trade and foreign trade. We first separate the goods produced for our own consumption from goods that were sent abroad. Then the next level of bifurcation happens within the domestic goods. Domestic goods are then segregated into goods produced by the private sector and goods produced by the public sector i.e. the government. Further the goods produced by the private sector are then subdivided into goods produced for immediate consumption and goods that will act as capital investment and aid the production of goods in the future.

The components of GDP can therefore be expressed in the form of this equation:

$$GDP = C + I + G + (X - M)$$

Wherein:

- C is the quantity of goods produced for consumption
- I is the quantity of investments made
- C + I together represent the private sectors contribution
- G is the quantity of goods produced by the government and
- X M is exports minus imports i.e. the net contribution that exports have made to the GDP

Let's study each of these components in greater detail

Consumption: Consumption represents all the goods and services that were purchased by households' i.e. individual consumers. This component of the GDP is the best indicator of the purchasing power in any given economy. A higher C number relative to the total GDP is considered a good sign. This means that the economy is driven by the market i.e. by consumer spending and is not artificially inflated.

Investment: Investment, also referred to as fixed investment is the amount of capital goods added by a country in a given year. It is very important to segregate the goods produced for present consumption versus the goods that will aid in maximizing production in the forthcoming years. The I component gives a good idea about what the GDP of an economy in the future years will be. A higher investment in capital goods by the economy is a good sign implying that production is expected to take off in the forthcoming years. The "I" component is further divided into residential and nonresidential investments. This is because residential investments do not necessarily mean higher production in the future whereas industrial investments do.

Government Spending: The next component is government spending. This is the component that has been criticized in great detail in the past few articles. Government spending simply measures the amount of money spent by the government in any given year. This expenditure does not include transfer payments i.e. payments for social security or unemployment benefits.

A higher government spending has often been correlated with poorly managed economies. However, this does not necessarily have to be the case. Countries like China have become economic powerhouses despite the fact that a substantial part of their GDP still comes from the "G" component.

Net Exports: The next component is the net exports i.e. X-M. Now just the fact that imports are being subtracted from the GDP often given imports a negative connotation. However, this is not true. Imports are subtracted from the GDP to avoid double counting. This is because imports have already been considered under the "C" component. Imports are not necessarily harmful to the country and may in fact aid in more judicious use of the natural resources that are available at a country's disposal. It is important to segregate foreign trade from domestic markets. This gives economists an idea as to what drives the GDP. If the GDP of a nation is export driven, then a slowdown in other countries will have an adverse impact on the GDP. On the other hand, if an economy is driven by internal consumption and has less dependency on foreign markets, then the GDP will be less affected by a slowdown in other markets. To sum it up, the analysis of the GDP can only be done by dividing it further into smaller and smaller categories. These components still provide only a macro level picture of the economy. Economic analyses go further into the details trying to find out exactly what goods, sectors or markets are driving the GDP number.

4.0 GDP AND DEPLETING NATURAL RESOURCES

The GDP system's absurdities do not end with social evils. Mindlessly following this system has also wreaked havoc on the environment. Many arguments have been made against the GDP system from an environmental point of view. There is no questioning the fact that the resources of earth have been severely depleted in the recent past. The debate remains as to whether GDP has significantly contributed to this depletion and if so how.

4.1 Alarming Scenario

They say that numbers tell you a story. In this case, the story being told by numbers is a disturbing story. Consider the fact that 40% of the world's forests have been destroyed compared to the 1700's. The world therefore has 40% less green cover. Is it any surprise that many species are facing extinction and the planet is battling global warming? Also, studies have indicated that the world supply of fossil fuels is expected to be depleted by the year 2057! That is within the lifetimes of most people in this generation. True that discovery of shale oil and the "fracking" technology may extend this depletion by a decade or so. However, the number still is disturbing to say the least considering that most of energy needs are met by fossil fuels. The groundwater reserves in many parts of the world have been severely dwindling or polluted and same is the case with reserves of precious metals like silver which have extensive industrial usage as well.

4.2 Doomsday Predictions

Pretty much every other day, some reports showcase these alarming numbers one after the other. There are so many of these doomsday reports that many people have simply stopped paying attention to them. However, the threat is real. What's even worse is the fact that the human race seems to be on a path where it cannot stop itself. These statistics and the threat they pose have not led to the reduction in the usage of natural resources. Instead, data would show you that usage of these natural resources has been accelerated in the past decade or so.

The Cause: Lust for Exponential Growth

So, how does the GDP system have anything to do with any of this? Well, consider these questions?

- Who is cutting down forests?
- Who is using and polluting groundwater?
- Who is using up fossil fuels at an alarming rate?
- Who is using up scarce metal resources at an accelerated rate?

Well, the answer to all these questions is "humans". Now, why are human beings accelerating the path to their own self destruction? Now consider the fact that we live in a society that wants exponential growth. If we built 100000 homes last year, this year we have to build 5% or 10% more. So year on year we have to keep growing. Same is the case with vehicles, computers or pretty much anything that is produced. The more production there is, the higher the GDP and hence this mindless pursuit of more production.

Note that the impetus has shifted from efficient utilization of resources to excessive utilization of resources. Human beings, their organizations and even their governments are highly influenced by the GDP system. The share prices of companies rise or plummet based on this system. The people in power remain in power or are replaced based on this system. Is it therefore any surprise that governments all over the world are focused on ensuring that the GDP number never ever comes down? This focus works to the detriment of the environment which bears the brunt of all the wastage.

It would therefore be valid to say that in a world without GDP, economics would focus on economizing. The focus would therefore be to ensure proper utilization of scarce resources. The GDP system changes the meaning of growth from "efficiency" to "excessiveness" and hence is the main culprit behind the sad state of affairs pertaining to the environment.

Since we have established that he GDP system and the environment are simply incompatible, it is important to realize that these systems are opposed to each other. This means that as long as the GDP system remains in place, the environment would always be under threat. The solution therefore is to replace the GDP system. This may sound radical considering the importance that has been given to the GDP system. However, the voices demanding change are no longer obscure and distant. Top economists of the world are of the opinion that GDP needs to be replaced. Hopefully we will be able to witness this change in time before human beings go too far on the path of self-destruction.

5.0 CONCLUSION

GDP Disregards Debt: The first and foremost flaw in the GDP system is that GDP disregards debt. As we stated above, the GDP is a measure of the production that is taking place within a nation's boundaries. Now, since what the producer's produce is what the consumer's consume, another way to state the same would be that GDP measures the consumption in a given economy in any given year. Now, regardless of whether we consider the production or consumption perspective, it must be noted that GDP fails to account for where the money came to produce or consume in the first place. Let me explain this with an example. If we know 2 people, Mr. A and Mr. B and Mr. A spends within his means i.e. from the money he has earned, whereas Mr. B borrows money on credit cards to fund his spending, who would you call financially prudent? The GDP system ignores prudence. It ignores how the production activity was funded and on what terms. It simply measures the spending. Whoever spends more wins! GDP fails to consider the fact that the person (or economy) may have borrowed money on horrendous terms and a bleak financial future awaits them. At the present moment, a higher spending means a higher GDP.

GDP Disregards Destruction: Another major flaw with the GDP system is the fact that it does not differentiate between money that was spent for productive purposes or for destructive purposes. Therefore, in this sense, many economists have argued that the GDP system implicitly encourages war. Many people observe that America was able to come out of the great depression thanks to the spending push it got from World War-2. However, less known is the fact that GDP always rises in countries which are at war. The GDP growth in Afghanistan was close to 40% during the recent war. Also, the GDP growth in Iraq was in mid-20%'s during the war. The reasoning behind this is fairly simple. War destroys entire countries. First an obscene amount of money is spent on bombing the country and destroying the entire infrastructure i.e. roads, rails, bridges, communication networks etc.

Later an even bigger amount of money is spent in rebuilding the same infrastructure. Therefore, in terms of GDP, which measures spending, a huge spurt is seen. However, when we see the real life of the citizens, almost nothing has changed on ground. A higher GDP does not translate into a higher standard of living or more prosperity for these people.

GDP Does Not Differentiate Between Wasteful and Useful Expenditure: A third major flaw in the GDP metric is that GDP calculates the total expenditure and considers the higher expenditure as being the higher GDP i.e. better for the economy. The GDP system does not differentiate between wasteful and gainful expenditures. This makes GDP particularly liable to manipulation. The biggest reason being, that governments can simply start expenditure programs which do not add any value and increase the GDP in the short run. In the short run, it may appear to be a good state of affairs to be in. However, in the long run it is certainly harmful for the economy. Wasteful expenditure must be avoided and the limited natural resources available must be rationed appropriately.

GDP Does Not Consider Qualitative Factors: Another very important flaw in the GDP system is that GDP does not consider the qualitative factors of life. For instance, a country with a high healthcare expenditure on a government or an individual level is facing a crisis. If GDP were the correct barometer, it would warn governments about these crises being perpetuated. However, higher healthcare costs mean higher expenditure which translates into higher GDP. The GDP system therefore implicitly encourages poor health, wellbeing and happiness of the people. It is no irony that the nations considered the most developed in the world, have the highest healthcare costs and the maximum number of people facing life threatening medical conditions.

GDP Does Not Measure Household Services: Lastly, GDP does not consider household services to be of any value. If you pay a maid a certain amount to cook your food, that gets added to the GDP. However, if your wife renders the same service and there is no monetary payment being made, then there is no addition to the GDP. Ideally this should not be the case. The production of food has taken place in both scenarios and hence both should get added to the GDP. In many countries where wives provide household services because of cultural norms, the GDP is artificially deflated and does not provide a true measure of the economic activity which is taking place. Thus, the GDP system is highly flawed. Economists all over the world have realized its flaws and hopefully soon governments all

over the world will give impetus to the idea of finding an alternate metric which truly explains the underlying state of affairs.

Reference

- Agbenyega, J. S. (2011). Building new identities in teacher preparation for inclusive education in Ghana. *Current issues in Education*, *14*(1).
- Akankwasa, R. R. (2001). Indigenous Peoples and Their Cultural Survival in Uganda:
 - The Legacy of Educational Dependence. East African Journal of Peace and Human Rights, 7(2), 229-255.
- Amedahe, F. K. "Fundamentals of educational research methods." *Mimeograph, UCC, Cape Coast* (2002).
- Anamuah-Mensah, J. (2008). Role of practicum in teacher education in Ghana.
- Asare, K. B., &Nti, S. K. (2014). Teacher Education in Ghana. SAGE Open,4(2), 2158244014529781.
- Bandura, A. (1991). Social cognitive theory of moral thought and action. *Handbook of moral behavior and development*, *1*, 45-103.
- Bempechat, J. (1990). The Role of Parent Involvement in Children's Academic Achievement: A Review of the Literature. Trends and Issues No. 14.
- Blase, J. (2006). Teachers bringing out the best in teachers: A guide to peer consultation for administrators and teachers. Corwin Press.
- Bokova, T. (2012). THE ROLE OF—SIGNIFICANT LEARNING IN THE EDUCATIONAL SYSTEMS OF THE USA AND RUSSIA. *Vol. 2.SOCIAL SCIENCE*, 136.
- Carrington, B., Francis, B., Hutchings, M., Skelton, C., Read, B., & Hall, I. (2007). Does the gender of the teacher really matter? Seven-to eight-year-olds' accounts of their interactions with their teachers. *Educational Studies*, 33(4), 397-413.
- Clarke-Stewart, K. A., Vandell, D. L., McCartney, K., Owen, M. T., & Booth, C. (2000). Effects of parental separation and divorce on very young children. *Journal of Family Psychology*, 14(2), 304.
- Dewey, J. (1986, September). Experience and education. In *The Educational Forum* (Vol. 50, No. 3, pp. 241-252). Taylor & Francis Group.
- Fafunwa, B. (2003). Falling standard of education in Nigeria. *Ibadan: National Association for Educational Administration and Planning*.
- Fatima, N., &Sahibzada, S. A. (2012). An empirical analysis of factors affecting work life balance among university teachers: the case of Pakistan. *Journal of International Academic Research*, 12(01).
- Fidelis, B. T. (2013). FALLING STANDARD OF EDUCATION A CASE OF EKITI STATE COLLEGE OF EDUCATION. *European Scientific Journal*, *9*(19).
- Finlayson, M. (2009). The impact of teacher absenteeism on student performance: The case of the Cobb County School District.
- Hammond, L. D., & Ball, D. L. (1999). *Teaching for High Standard, what Policymakers Need to Know and be Able to Do.* US Department of Education.
- Harrison, C., & Killion, J. (2007). Ten roles for teacher leaders. *Educational leadership*, 65(1), 74.
- Israel, G. D. (1992). Sampling the evidence of extension program impact. University of Florida Cooperative Extension Service, Institute of Food and Agriculture Sciences, EDIS.
- Kagoda, A. M. (2016). Teaching of Geography in Uganda Secondary Schools:

 Reflections of Geography Teacher Trainees at the School of Education, Makerere University,
 Uganda. *Advances in Social Sciences Research Journal*, *3*(5).

- Katz, D., & Kahn, R. L. (1978). Organizations and the system concept. Classics of organization theory, 161-172.
- Kochhar, S. K. (1971). Secondary school administration. Sterling Publishers Pvt. Ltd.
- Kotirde, I. Y., &Yunos, J. B. M. (2014). Teachers' role in improving teaching and learning in Nigerian secondary schools' education.
- La Rocque, L., & Coleman, P. (1991). Negotiating the master contract; Transformational leadership and school district quality. *Understanding school system administration: Studies of the contemporary chief education officer*, 96-123.
- Leithwood, K., Seashore Louis, K., Anderson, S., & Wahlstrom, K. (2004). Executive Summary: Review of Research: How Leadership Influences Student Learning.
- Lodhi, F. A., & Faizi, W. U. N. (2009). The Main Reasons of Declining Educational Standards at Secondary Level in Karachi, Pakistan. *Online Submission*.
- McGrath, K., & Sinclair, M. (2013). More male primary-school teachers? Social benefits for boys and girls. *Gender and Education*, 25(5), 531-547.
- Mulindwa, S. M. (2010). Student leaders' empowerment and management of discipline in secondary schools in Kampala District.
- Mullins, L. J. (2007). Management and organisational behaviour. Pearson education.
- Nassozi, I. (2010). The effect of teachers' leadership role on students' discipline in secondary schools in Wakiso District (Doctoral dissertation, Makerere University).
- Northouse, P. G. (2011). *Introduction to leadership: Concepts and practice*. Sage Publications. *sociology*
- Nukunya, G. K. (2003). *Tradition and change in Ghana: An introduction to Sociology*. Ghana Universities Press.
- Nunnally, J. C., Bernstein, I. H., & Berge, J. M. T. (1967). *Psychometric theory* (Vol. 226). New York: McGraw-Hill.
- Okumbe, J. A. O. (1998). *Educational Management: Theory and Practice*. African Books Collective Ltd., The Jam Factory, 27 Park End Street, Oxford OX1 1HU, United Kingdom (paperback: ISBN-9966-846-42-5, \$18).
- Ololube, N. P. (2013). The Problems and Approaches to Educational Planning in Nigeria: A Theoretical Observation. *Mediterranean Journal of Social Sciences*, 4(12), 37.
- Orlando, M. (2013). Nine characteristics of a great teacher. *Higher education teaching*Strategies from Magna publications. Retrieved from http://www.Facultyfocus.com/articles/philosophy-of-teaching/nine-characteristics-of-a-great-teacher.
- Rasul, S., &Bukhsh, Q. (2011). A study of factors affecting students' performance in examination at university level. *Procedia-Social and Behavioral Sciences*, 15, 2042-2047.
- Sahlberg, P. (2011). Developing effective teachers and school leaders: The case of Finland. *Effectiveness*, 13.
- Stoll, L., & Reynolds, D. (2002). Connecting school effectiveness and school improvement. *Restructuring and Quality: issues for tomorrow's schools*, 16.
- Sherrill, J. A. (1999). Preparing teachers for leadership roles in the 21st century. *Theory into practice*, *38*(1), 56-61.
- Teacher Leadership Exploratory Consortium. (2011). Teacher leader model standards. *Accessed October*, 20, 2011.
- Topor, D. R., Keane, S. P., Shelton, T. L., & Calkins, S. D. (2010). Parent involvement and student academic performance: A multiple mediational analysis. *Journal of prevention & intervention in the community*, 38(3), 183-197.
- Wahlstrom, K. L., & Louis, K. S. (2008). How teachers experience principal leadership:
- The roles of professional community, trust, efficacy, and shared responsibility. *Educational administration quarterly*, 44(4), 458-495.

