

2023, Volume 10, e10100 ISSN Online: 2333-9721 ISSN Print: 2333-9705

Is the Gross Domestic Product (GDP) a Reliable Indicator of the Economic Growth and Future Economy of the United States of America?

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How to cite this paper: Bryniuk, K. (2023) Is the Gross Domestic Product (GDP) a Reliable Indicator of the Economic Growth and Future Economy of the United States of America? *Open Access Library Journal*, 10: e10100

https://doi.org/10.4236/oalib.1110100

Received: March 31, 2023 Accepted: April 25, 2023 Published: April 28, 2023

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Abstract

The Gross Domestic Product (GDP) is the most common indicator used to measure economic growth. It is calculated by adding up all the expenditures in an economy from production, consumption, and government spending. This common indicator is still used by mainstream economists. However, it has been shown that this indicator does not accurately represent economic growth because it fails to consider many additional factors including diminishing industries and services, inadequate income distribution, rapid growth of financial sector, environmental disasters, growing national debt, etc. These factors cause a distortion in the measurement of economic growth. Omitting these factors leads to the underestimation or overestimation of real economic activities. It also contributes to incorrect assumptions about what is happening within an economy which could potentially cause us to make incorrect predictions about future economic growth. It should be noted that the GDP was implemented during the era of manufacturing. During the past decade, the US lost a significant number of manufacturing jobs and now the service industry segment accounts for over 80% of jobs. The current Gross Domestic Product is an "artificial" and distorted measure of economic growth, and it does not accurately reveal the future of the U.S. economy. The author recommends a major revision in this "artificial" and misleading measure to make it a more accurate and useful tool.

Subject Areas

Development Economics

Keywords

Gross Domestic Product, Economic Growth, Economy, Economic Predictors, U.S. Economy, Economic Indicator

1. Is the Gross Domestic Product (GDP) a Reliable Indicator of the Economic Growth and Future Economy of the United States of America?

The general situation of financial markets has been further complicated by the introduction of new financial products as well as other modes of operations including globalization and current situations (e.g., Covid-19 Pandemic and War in Ukraine). The global financial market seems to be playing a different function in our economy which continues to operate despite new regulations, the Covid-19 pandemic situation, supply chain disruptions, War in Ukraine, and new upcoming changes. The COVID-19 pandemic and War in Ukraine have caused some major economic changes in U.S., including a significant spike in inflation.

In view of the recent and current economic and geo-political stressors: "Is the Gross Domestic Product (GDP) a reliable indicator of the economic growth and future economy of the United States of America?" What are some pending issues and possible future direction(s) of the U.S. economy in the context of the current situation?

This paper evaluates some of the commonly known predictors of economic growth such as Gross Domestic Product (GDP). Moreover, this paper talks about some pending issues in the context of the current political and economic situation in the United States of America.

2. GDP as an Indicator of Economic Growth

According to mainstream economics, one of the best indicators of the economic growth and economic activity is Gross Domestic Product (GDP). Most economic textbooks, news, governments, business communities, and central bank define the GDP as a comprehensive measure of the economic activities that include the total market value or monetary value of all finished goods and services produced within one country during a specific period. According to Mankiw (2021), "Gross Domestic Product (GDP) measures the total income of the nation. GDP is the most closely watched economic statistic because it is thought to be the single best measure of a society's economic well-being." (p. 86) [1]. Most economic textbooks describe the GDP as a comprehensive measure of U.S. economic activity. Mainstream economics describes the GDP as the most accurate measure of a nation's economy because gives information about the size of the economy and the performance of the economy in specific periods of time. Fagan (2022) calls the GDP as a perfect measure of economic well-being. "GDP tells us whether the economy is expanding by producing more goods and services or contracting due to less output. It also tells us how the U.S. is performing relative to other economies around the world" (Fagan, 2022, p. 2) [2]. The GDP is calculated as C + G + I + NX where "C" indicates personal consumption expenditures, "G" attitudes for total government expenditures, "I" is gross private investment, and "NX" is net exports.

The GDP is calculated on the annual basis by the Bureau of Economic Analysis (BEA) and is computed using data collected from manufacturers, retailers, builders, surveys, and trade flow reports. In addition, the mainstream economics postulates that the GDP is appreciated by companies because it helps to evaluate markets. The investors may use the GDP to evaluate the productivity of the country on the macro scale. The GDP also provides the understanding of which country(ies) are growing at the fastest rates and might provide the greatest returns on investment. Most economic textbooks state that the GDP is very useful for politicians and policymakers as an indicator of how policies impact the economy and economic growth. Fagan (2022) states that "policymakers, government officials, businesses, economists and the public alike rely on GDP and related statistics to help assess the economy's well-being and to make informed decisions" (p. 4) [2]. According to the U.S. Bureau of Economic Analysis (2022) [3], the GDP measured over \$20 trillion in 2020-2021 (Figure 1). The following Figure 1 shows the contribution of each component to GDP from 1947 to the end of 2021. It also shows Real Government Consumption Expenditures and Gross Investments. Figure 1 illustrates Real Gross Private Domestic Investment. The U.S. Bureau of Economic Analysis (BEA) [3] is the statistical agency charged with compiling the data used by the U.S. Bureau of Economic Analysis. These data are collected by government agencies and supplemented by trade associations, businesses, and other sources. The Washington Post (2022) [4] published a report based on BEA, the report states that "U.S. economy grew by 5.7 percent in 2021, the fastest full-year clip since 1984, roaring back in the pandemic's second year despite two new virus variants that rocked the country. The economy grew at a 6.9 percent annual rate from October to December in 2021" (p. 2).

However, there are some politicians and economists who point out many defects with the Gross Domestic Product. They argue that GDP does not reflect an accurate state of the economic activities and they suggest new alternatives. For

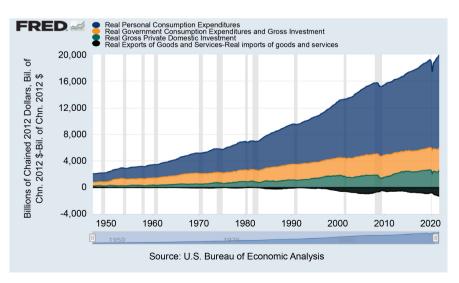


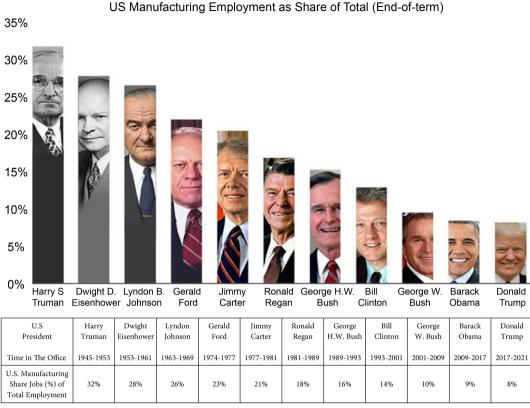
Figure 1. GDP from 1947 to 2021.

example, Former French President Nicolas Sarkozy and Joseph Stiglitz (a Nobel economist) do not believe that GDP is an accurate measure of economic growth. "The world is facing three existential crises: a climate crisis, an inequality crisis, and a crisis in democracy. Yet the accepted ways by which we measure economic performance give absolutely no hint that we might be facing a problem" (Stiglitz, 2019) [5]. Also, Sarkozy thinks that GDP creates a dangerous issue for all economics, and he said, "between experts sure of their knowledge and citizens whose experience of life is completely out of sync with the story told by the data" (World Economic Forum, 2018, p. 1) [6].

Even the creator of the GDP was critical of its measure. In the 1940s, Simon Kuznets constructed the GDP as a simple metric that could be computed from limited market data. The GDP was constructed as an equivalent to the sum of everyone's income including wages, profits, rents, and taxes reflected in the aggregation of the goods and services produced in the country. However, Kuznets (World Economic Forum, 2022) [7] repeatedly warned the Gross Domestic Product "measures market activity and should not be mistaken for a metric of social or even economic well-being.

During the financial crisis of 2007-2008, the United States experienced "the housing bubble" and the U.S. economy simply failed, enormously. The President Obama administration decided to implement the bailout plan that improved GDP. According to Stiglitz (2020) after the 2008/2009 debacle, "91 percent of the gains in income in 2009 to 2012 [were] going to the top 1 percent, the majority of Americans experienced none". The United States began to recover after the financial crisis however "even as GDP continued to rise, life expectancy and other broader measures of health worsened. Food companies were developing and marketing, with great ingenuity, addictive sugar-rich foods, augmenting GDP but precipitating an epidemic of childhood diabetes" [8]. Also, other issues needed immediate attention such as an income inequality crisis, lower life expectancy, the climate crisis, and the opioid crisis.

The current GDP reflects an "artificial" measure, and it does not indicate a strong economy in the future. The GDP was born in the era of the manufacturing age. According to a report from the St. Louis Federal Reserve Bank [9], in 2021 U.S. manufacturing jobs accounted for only 1 in 12 jobs. Total goods-producing jobs declined from 32 percent in 1945 to just 8 percent of total employment in 2017 (Figure 2). The Service industry counts for over 80% of jobs in the United States, and GDP does not include food quality or service improvements. In addition, the airlines' safety record improved during the past 20 years however the GDP might prefer to include the number of plane crashes and include the value of the new aircraft. In the current economy, the GDP became bewildered due to the Internet boom. Otelmize (2019) [10] reports that after the Internet expansion only the electronic commence travel agencies gained 40% of the market share, as 50% of traditional travel agencies disappeared from the U.S. market. Today people can purchase their own airline, vacation, or cruise tickets.



Source: While Sector Remains Strong, U.S. Manufacturing Jobs Share Dip, Beitsch (2021) [11].

Figure 2. The total share of U.S. manufacturing jobs has declined during every presidential administration since Harry Truman's.

Via Internet websites, consumers can select airlines, vacation packages or cruise cabins. They act as travel agents therefore the convenience level went up considerably. However, the Gross Domestic Product declined because of people acting as their own travel agents. A decade ago, traditional travel agents' jobs were performed by employees on the payroll and they were a part of the GDP.

According to Travel Age West (2021) [11], in 2020, 62 percent of travel advisors in the U.S. were laid off. A survey of close to 300 advisors conducted by Travel Age West (2021) found that only 28 percent of travel agencies were hiring although 35 percent of them reported having fewer agents on the payroll than prior to the pandemic. As another example, Wikipedia now can provide free information (human knowledge) bringing up our convenience level as well.

The GDP does not say anything about the distribution of income so incorrectly forecasts the economy. Let's say a country's population is 100 people. The entire population's annual incomes are \$40,000 equal to \$4,000,000 of the GDP. Therefore, the GDP per person is \$40,000. However, the society may have 10 people who earn \$400,000 and the rest (90 people) have nothing at all. GDP per person tells us what happens to the average person, but behind the average lies a large variety of personal experiences. Therefore, the averages are really misleading everyone especially in a time where a primary cause of social dislocation is

inequality in the U.S. "A rise in average GDP could be retrograde, if it leaves 99% of population resentful at how the 1% is making very good..." (Pilling, 2018, p. 4) [12].

Another issue is that GDP perspective is inaccurate where "bigger" means always better for economic growth. According to a Federal Reserve and McCain Report (2022) [13], in 2021the financial sector has grown to \$1.5 trillion. The finance and insurance industry accounts for over 7% of the U.S. total GDP. In addition, there are over half a million establishments with total revenues of \$4.85 trillion. The rapid growth of the financial sector means a possible financial crisis in the future like the 2007-2008 financial crisis. A bigger financial sector also means higher costs (out-of-control costs).

GDP does not indicate the future of the U.S. economy because it is omitting negative effects on nature. The mainstream economics shows that the "GDP as a calculation that it is ill-equipped to counterbalance the negative effects of events against the positives" (Williams, 2020, p. 1) [14]. One of the most important problems facing the U.S. is all kinds of natural disasters. For example, after a natural disaster, such as a hurricane, a particular region requires enormous rebuilding efforts including substantial investments and new developments. According to a NY CNN Business Report (2022) [15], in Florida losses caused by 2022 Hurricane Ian were estimated above \$37 Billion (\$22 Billion of wind damages and \$15 Billion of flood damages). The subsequent rebuilding efforts after a large natural disaster provides a temporary surge in GDP which is not offset by losses due to the disaster. And, some economists argue that "that GDP actually incentivizes short-term growth at the expense of long-term global health because it does not take into account the value of things such as clean air and sustainable means of production" (Williams, 2020, p. 1) [14].

3. The U.S. GDP Declines and the Country Falls behind on Other Measures and Pending Issues

The U.S. economy does show signs of improvement, however, it does not prognose positive economic growth. In 2022, the United States national debt almost reached \$31 trillion (**Figure 3**), and it increased due to past recessions. It should be noted that the U.S. national debt is greater than the entire annual output of the country's GDP. One hundred years ago, in 1922, U.S. national debt was only \$410 Billion (Fiscal Data, 2022) [16].

During the past decade, the U.S. has lost its position as a global merchandise exporter, and China constantly is gaining a leader position in the World Market. In addition, the United States falls behind in technology and innovation progress. According to the 2022 Information Technology and Innovation Foundation [18], the U.S. ranked as the 49th nation in global innovation-based competitiveness. In 2021, the U.S. has fallen from 10th to 11th place in the most innovative countries ranking in the world (Jarmisko, 2022) [19]. The World Economic Forum (2022) [20] ranked the U.S. at 33rd among 37 nations in GDP gain

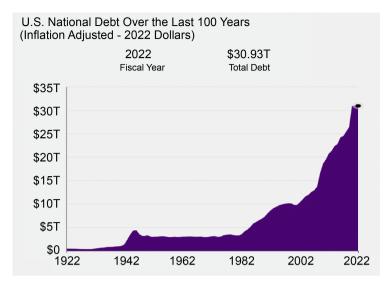


Figure 3. U.S. National Debt over last 100 Years. The Congressional Budget Office (2023) [17] is projecting that U.S. government public debt will hit 716% of GDP by the year 2080. More than 25% of the budget is spent on military. The war in Iraq, Afghanistan, and Ukraine cost approximately \$10 Trillion. Source: The U.S. Bureau of Statistics, 2022.

from investment in education. U.S. students consistently score very low among other nations in math and science. According to a Business Insider report in 2018 [21], the U.S. ranked 38th in math scores and 24th in science. The OECD (2022) [22] report also shows that students in the U.S. rank very low in the world in both science and math. According to the National Bureau of Economic Research (2020) [23] 42% of doctorate recipients in science and engineering were foreigners most of whom will return to their countries.

The U.S. ranks very low, at 19th place in poverty level ranking, based on the 2023 Legatum Prosperity Index [24]. The U.S. is the worst country with high poverty levels among advanced nations like Estonia, Ireland, Iceland, New Zealand, and others. Legatum's report also measures country's performance in three areas: basic physical, mental health, health infrastructure, and preventive care. According to Summers (2014) [25], the U.S. needs "changes in the distribution of income, both between labor income and capital income and between those with more wealth and those with less" (p. 69). The U.S. ranks 68th in the world. According to OECD (2021) [22] report, life expectancy in the U.S. is below the average compared to developed countries, with the highest rate of obesity. In addition, the U.S. instead of "making medical care protection a right of citizenship, reduces the current and future efficiency of the American economy by as much as six or seven percent of GDP (Gordon, 2014, p. 27) [26].

In addition, persistent inflation continues to weigh heavily on both economic growth and household budgets, in the past 12 months inflation rate was around 7.7%, according to U.S. Labor Department [27]. The real value of the dollar is decreasing over the years. The purchasing power decreased by almost 8% compared to the previous year.

Also the real unemployment rate is increasing and in November was 7.4% (Amadeo, K., 2022) [28] what is equal to 12,262,500 unemployed labor force in the U.S. Therefore, the population of unemployed individuals in the U.S. is equivalent to the entire population size of countries such as Belgium or Jordan. However, these numbers do not reflect the large numbers of "discouraged" workers who dropped out of the labor market completely.

4. Conclusions

"It's time to retire metrics like GDP. They don't measure everything that matters" (Stiglitz, 2018) [29]. The purpose of this research paper was to investigate and answer questions about the validity and legitimacy of the Gross Domestic Product as a reliable indicator (measurement) of economic growth and a dependable predictor of the United States economy. Presented research reveals that the GDP is not a reliable indicator of economic growth because does not consider additional variables related to income distribution (inequality), the convenience level, the negative effect of nature (climate change and pollution), growing cost of the financial sector, and national debt. There is no doubt that we are living in a very different world than 100 years ago. Today the world is overflowing with people and man-made capital. In my opinion, the emphasis on growing Gross Domestic Product as the principal measurement of economic activity leads us (people) toward the edge of financial collapse. There are many unresolved pending issues such as a costively growing national debt, international trade deficit, poor educational system, "sick" health care system, growing poverty, high unemployment rate, and sky-rocketing inflation. The American population is generally not very financially or economically literate. The government should recognize this and endeavor to provide more comprehensive, nuanced, accurate and meaningful data. Public economic data, mainstream economics, and projections should be enlightening and informative not misleading, obsolete, partial or downright confusing.

The current GDP reflects an "artificial" measure, and it does not indicate a strong U.S. economy in the future. It either requires a substantial makeover or should at least not remain the primary indicator. Perhaps expressly acknowledging and identifying the limitations of GDP and supplementing it with a number of other pertinent statistics and indicators would suffice as an interim measure. In the future, it may be advisable to consider the creation of a "National Economic Information Resource Committee/Center" to work in conjunction with the Federal Reserve Board, Congress, and responsible Federal Agencies to evaluate the current system of reporting and projections and make recommendations for a new model of National Economic analysis, measures, reporting and projections. Such a proposal would probably have to originate in the U.S. Congress and it might not have the constituency, support or will to proceed. Due to the nature of this research paper's question about the GDP as an incorrect economic indicator, this research paper was based largely on qualitative research

methods. Therefore, it may require future studies with more statistically significant results.

Conflicts of Interest

The author declares no conflicts of interest.

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