The United States’ Economic Performance (2008-2023)

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Abstract

This paper looks at the U.S. economy's path from 2008 to 2023, a time filled with big challenges and policy responses. Using data from the Economic Report of the President (ERP) and some data sources like Federal Reserve Data (FRED), Bureau of Economic Analysis (BEA), WorldBank Data, IMF Global Debt Database, we examine key numbers like GDP, inflation, unemployment, and debt levels to get a clear picture. We start with the Great Recession and Early Recovery (2008-2011), where housing and credit issues sparked a severe financial crisis, huge job losses, and a big GDP drop. Government stimulus and Fed rate cuts helped, but recovery was slow due to weak spending. Next, the Sustained Recovery and Emerging Challenges (2012-2016) continued with moderate growth, slower than usual due to population changes and lasting crisis effects, though the job market improved. The Fed kept the money policy loose, then slowly raised rates. After that, Strong Growth and Low Unemployment (2017-2019) saw real GDP speed up and joblessness hit historical lows, driven by consumer spending, business investment, and the TCJA, outperforming other countries despite global slowdowns. Finally, the Pandemic Recession and Rapid Recovery (2020-2023) covers the sudden pandemic shock, causing record drops in GDP and jobs, followed by quick rebounds. This period saw an inflation surge from supply issues and demand, leading to the Fed rapidly raising rates and huge government spending. Importantly, 2023 showed surprising resilience: faster GDP growth, low unemployment, and moderating inflation. Overall, this report tracks how the U.S. economy handled major crises and changes, showing how economic forces and policy actions shaped its dynamic path.

1.Introduction

This academic paper will analyze the evolution of the United States economy during the period spanning from 2008 to 2023. This timeframe encompasses a series of significant economic events and policy responses that have profoundly shaped the nation's economic landscape. Beginning with the latter stages of an economic expansion[1]**,** the U.S. economy experienced a major financial crisis and subsequent recession in the late 2000s, followed by a protracted recovery, and concluding with the economic disruptions and recovery associated with the COVID-19 pandemic.

The period under examination witnessed substantial interventions by policymakers aimed at mitigating economic downturns and fostering growth. These included significant fiscal stimulus packages, monetary policy adjustments by the Federal Reserve, and various regulatory reforms. The analysis will consider the interplay between these policy decisions and key macroeconomic indicators such as gross domestic product (GDP) growth, employment rates, inflation, and the performance of financial markets.

Drawing primarily on the **Economic Report of the President (ERP)** published annually during this period, this paper will provide a comprehensive review of the major economic developments and the perspectives of the Council of Economic Advisers (CEA) on these events[1] The ERPs offer detailed analyses of the economic conditions, policy recommendations, and the Administration's forecasts for the years ahead The initial focus will be on the immediate aftermath of the financial crisis in 2008, as documented in the 2008, 2009, 2010, and 2011 ERPs, which provide insights into the unfolding recession, the policy responses implemented, and the early stages of recovery.

The subsequent analysis will extend through the period of economic recovery following the Great Recession, the economic conditions leading up to the COVID-19 pandemic, the unprecedented economic shock of the pandemic in 2020, and the subsequent recovery efforts through 2023. By examining the "The Year in Review and the Years Ahead" sections of the ERPs from 2008 to 2011, and other relevant sections from later reports, this paper aims to understand the challenges faced by the U.S. economy, the policy levers employed to address these challenges, and the resulting economic trajectory over this dynamic fifteen-year period. This study will provide a detailed account of the major macroeconomic shifts

[1] Economic Report of The President, 2008

and policy debates that characterized the United States economy between 2008 and 2023, using the ERP as a central source of information and analysis.

2. Data

This section outlines the key economic indicators used to analyze the evolution of the United States economy from 2008 to 2023. This period was marked by significant events, including a major financial crisis, recession, protracted recovery, and the disruptions of the COVID-19 pandemic. The selection of these indicators, heavily referenced in Table 1, is based on their availability and relevance for comprehensively understanding macroeconomic trends during this timeframe.

Macroeconomic Indicators	**2008-2011**	**2012-2016**	**2017-2019**	**2020-2023**
GDP per capita (Billion $)	48,620	55,149	63,043	74,134
GDP growth	0.5	2.3	2.7	2.3
Consumer Expenditures	0.4	1.6	1.7	2.0
Government Expenditures	0.1	-0.1	0.4	0.3
Gross Fixed Capital Formation	-0.6	1.0	0.8	0.5
Net Exports	0.4	-0.2	-0.2	-0.4
Exports	0.5	0.3	0.3	0.1
Imports	0.0	-0.5	-0.5	-0.4
Inflation (CPI)	2.1	1.3	2.1	4.5
Unemployment	8.4	6.4	4.0	5.2
Money Supply (M2)[a]	23.4	26.5	28.0	33.1
Budget Deficits[a]	-11.1	-6.1	-5.8	-9.5
Output Gap	-3.0	-2.0	-0.1	-0.4
Current Account Balance[a]	-3.3	-2.2	-2.0	-3.4
Total Factor Productivity	0.4	0.5	0.9	0.9
Labor Productivity	2.2	0.9	1.7	1.9
Labour Compensation	0.0	0.8	1.4	0.7
Gross Savings[a]	15.2	19.0	19.2	18.0
Domestic Business	14.5	14.4	14.0	13.9
Households and Instutions	6.9	7.0	7.7	9.8
Gross Government Saving	-6.3	-2.6	-2.6	-5.9
Outstanding Debt by Sectors[a]				
Public Debt	90.0	105.2	107.2	125.4
Households	95.2	81.8	77.7	77.6
Non-financial Sector	134.8	139.0	148.1	151.0
Financial Sector	104.2	81.2	73.5	74.2

[a]As percent of GDP.
Source: FRED; BEA; Worldbank; IMF Global Debt Database

GDP per capita, normalizes the total monetary value of all finished goods and services produced within a country's borders by its population, indicating average economic output per person.

GDP Growth, shows the annual percentage change in GDP, reflecting the rate of economic expansion or contraction. This indicator also has subsets of consumer expenditures, government expenditures, gross fixed capital formation, net exports, exports, and imports which shows the contribution of these indicators to GDP growth

Inflation (CPI), tracks the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services, indicating the rate at which purchasing power is falling.

Unemployment, measures the percentage of the total labor force that is unemployed but actively seeking employment and willing to work, serving as a key indicator of labor market health.

Money Supply (M2), is a broad measure of the money supply, expressed as a percentage of GDP to show its size relative to the overall economy.

Budget Deficits, show when government expenditures exceed government revenues; expressed as a percentage of GDP, it shows the deficit's size relative to the economy.

Output Gap is the difference between an economy's actual output and its potential output, with a positive gap suggesting overheating and a negative gap indicating underutilization of resources. It is important to note that the output gap does not necessarily average zero over a business cycle.[15]

Current Account Balance, records a country's net trade in goods and services, net earnings on cross-border investments, and net transfer payments with the rest of the world, expressed as a percentage of GDP for significance.

Total Factor Productivity (TFP), measures the efficiency with which inputs are used, reflecting technological progress. Historical analysis indicates significant TFP growth in periods due to factors like infrastructural investments and reconfigurations of transport systems[17]. Labor Productivity measures output per unit of labor input. Labor Compensation refers to the total remuneration paid to employees for their work, including wages, salaries, and benefits, important for production costs and household income.

Gross Savings represents the portion of national income not consumed. It's broken down into savings from domestic business, households and institutions, and gross government savings.

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[15] Why CBO Projects That Actual Output Will Be Below Potential Output on Average, CBO, 2015

[17] The origins of US total factor productivity growth in the golden age, Alexander J. Field

Outstanding debt by sectors category examines the total debt held by different sectors (Public debt, households, non-financial sector, financial sector) relative to GDP, providing insight into financial leverage and stability.

It is also important to note the computation of financial sector debt; as direct data was unavailable in the IMF Global Debt Database, it necessitated calculation using nominal data from the Federal Reserve. To analyze the outstanding debt of the U.S. financial sector as a proportion of economic output, data for "Domestic Financial Sectors; Debt Securities and Loans; Liability, Level" (DODFS) were obtained from the FRED database, series DODFS. This series represents the total outstanding debt of the U.S. domestic financial sectors. For consistency with other debt-to-GDP ratios presented in this paper, and to provide a comprehensive annual measure, the annual debt figures for the financial sector were derived from the end-of-period (Q4) quarterly values. Specifically, the reported annual DODFS value reflects the stock of outstanding debt at the close of the fourth quarter of each respective year. This end-of-period debt level was then divided by the corresponding GDP for the entire year, also obtained from FRED. By using the end-of-year debt stock against the full year's economic output, the resulting percentage provides a meaningful representation of the financial sector's leverage relative to the size of the U.S. economy for each given year.

3.Great Recession and Early Recovery (2008Q1-2011Q4)

The period spanning from 2008 to 2011 marks a critical point in the United States economy. Encompassing the onset of the Great Recession and its immediate aftermath, followed by the initial stages of slow recovery. By early 2008, the U.S. economy had concluded a substatnial six-year expansion. This era showcased remarkable strength, defined by continuous job growth, controlled inflation, minimal unemployment, and steady productivity improvements[1]. This robust foundation was supported by deep capital markets, flexible labor markets, low taxes, and open trade and investment policies[1]. However, by the close of 2007, economic indicators began to show mixed signals, with growth anticipated to slow in the first half of 2008, primarily due to a weak housing sector, credit tightening, and high energy prices[1].

[1] Economic Report of The President, 2008

The National Bureau of Economic Research (NBER) formally declared the Great Recession's inception with a peak in economic activity observed in December 2007[2]. This initiated a period of economic contraction that subsequently characterized the entirety of 2008. Preceding this, a significant contraction in the U.S. housing market began to intensify in the summer of 2007, clearly evidenced by rapidly rising default rates on subprime mortgages. This development quickly sparked a widespread concern among investors regarding the inherent risks of mortgage-backed securities. Consequently, credit markets experienced substantial disruptions, private debt security yields rose sharply, and demand for these assets crashed. These financial shocks, compunded by record-high commodity prices and several natural disasters, collectively triggered a modest economic contraction in the third quarter of 2008, which then escalated into a sharp decline in the fourth quarter. Overall, Real GDP experienced a notable decline throughout 2008.

The recession deepened considerably into early 2009. Financial distress, which first surfaced in mid 2007, intensified severely through 2008, affecting various markets. The failures and near failures of several major financial institutions in September 2008 caused financial stresses to reach levels unseen in the post-World War II era[2].

The labor market, in particular, experienced a significant impact of this economic downturn. Payroll jobs began to decline in January 2008, effectively ending a record setting 52 consecutive months of job growth. By January 2009, the scale of the contraction was evident, with the economy experiencing monthly job losses exceeding 700,000[4]. Between its peak in January 2008 and its trough in February 2010, the U.S. economy lost 8.75 million nonfarm jobs, a number nearly equivalent to the combined losses of the three preceding recessions adjusted for economic size. This represented the largest share of job losses relative to the economy in 65 years[4]. The unemployment rate subsequently peaked at 10% in October 2009.

In response to this escalating crisis, policymakers launched a series of what became largely unprecedented measures. On the fiscal policy front, the President initially advocated for an economic growth package, resulting in the Economic Stimulus Act of 2008 in February, which injected approximately $113 billion into the economy through tax rebates

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[2] Economic Report of The President, 2009
[4] Economic Report of The President, 2011

and accelerated business equipment expensing[1]. This was swiftly followed by the Housing and Economic Recovery Act of 2008 in July and the Emergency Economic Stabilization Act of 2008 in October, which authorized substantial investments in financial assets[2]. These significant fiscal actions, alongside simultaneous monetary policy interventions, aimed to restore confidence in the financial system and catalyze an economic rebound in 2009. Indeed, the Recovery Act enacted in 2009, coupled with the Financial Stability Plan and further Federal Reserve interventions, is largely credited with substantially boosting U.S. GDP and employment, effectively preventing a more severe economic collapse that some feared could have mirrored a "second Great Depression"[5]. Meanwhile, the Federal Reserve pursued aggressive monetary policy, lowering the federal funds rate from 5.25% in August 2007 to near zero by December 2008. Beyond conventional interest rate adjustments, the central bank also proactively introduced various emergency programs designed to inject crucial liquidity into financial institutions and stabilize the broader financial system[2]. In periods where the policy rate approaches its zero lower bound, the Federal Reserve can employ unconventional tools such as additional purchases of longer term securities and adjustments to its communication strategy to provide further stimulus[16]. Its securities purchase programs are primarily determined by the quantity and mix of securities held, rather than just the pace of new purchases.

The U.S. economy started its recovery in the second half of 2009[5]. By the end of 2010, this comeback lasted for six quarters in a row, with the real GDP growing at an annual rate of 3.2% in the last three months of that year. Even though the recession caused huge job losses, the period after saw jobs start to grow quickly, though not fast. Job growth began nine months after the 2007-2009 recession ended and continued through the end of 2010. This was a faster start for job growth compared to the 2001 recession's recovery. However it's worth noting that the 2007-2009 recession itself was longer and led to much bigger job losses than the recessions in 1990-91 and 2001. In 2011, real GDP growth slowed down to 1.6% over the year, a drop from 3.1% in 2010, partly because of outside issues like rising oil prices.

Throughout this period, several economic problems didn't go away. Consumer spending dropped sharply in the third quarter of 2008 and stayed low because households had lost a

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[1] Economic Report of The President, 2008
[2] Economic Report of The President, 2009
[5] Economic Report of The President, 2012
[16] Opening Remarks: The Economic Outlook and Monetary Policy, Ben S. Bernanke

lot of their wealth. This likely led to people saving more in 2009 as they tried to pay down their debts. While businesses did start investing more in certain areas like software etc. after the 2008 downturn, investment in things like transportation equipment remained especially weak. State and local government budgets also faced big problems in 2011, which limited how much they could spend.

4. Sustained Recovery and Emerging Challenges (2012Q1-2016Q4)

The years from 2012 through 2016 represented a period of sustained but slower recovery for the United States economy, as it gradually healed from the deep impact of the Great Recession. By the fourth quarter of 2012, real GDP had managed to grow 2.5%. Despite this growth and a clear drop in the unemployment rate, the speed of the recovery was still more modest than what we've typically seen in post World War II recoveries[6]. Research points to this slower growth being mostly due to two main things: two-thirds of the slowdown might be explained by long-term demographic shifts, and the rest by unique cyclical issues directly from the financial crisis. These included things like households and small businesses finding it hard to borrow money, a slow housing market demand and budget pressures on state & local governments.

The job market showed continous and strong improvement throughout this period. The economy added a total of 6.1 million private sector jobs since employment hit its lowest point in February 2010[6]. By December 2012, the unemployment rate had dropped by 0.7 percentage points to 7.8%. This positive trend kept going with the unemployment rate falling significantly by 1.2 percentage points. In 2014, the job market saw the fastest rate of job gains since 1999 and almost the fastest drop in the unemployment rate since 1983[8]. December 2015, marked the strongest two-year job growth since 1999, and the unemployment rate reached 5.0%. Even with these gains, some indicators still pointed to remaining weakness in the job market, like the share of workers who were part-time because they couldn't find full-time work, which stayed above its pre-recession average even as other numbers got better.

Monetary policy remained supportive to help the recovery, with the FOMC keeping interest rates extremely low and buying assets to push down long-term interest rates. The FOMC slowly changed how it communicated its future, first saying low rates would last until mid 2013, then extending that to late 2014[6]. By September 2012, they were clearly linking their

[6] Economic Report of The President, 2013
[8] Economic Report of The President, 2015

decisions on interest rates to specific levels of the unemployment rate and inflation targets. In December 2013, the FOMC started to gradually reduce its asset purchases[8]. A big moment happened in December 2015 when the Federal Reserve raised interest rates for the first time since the 2008 financial crisis, showing they were beginning to shift monetary policy back to a more normal setting.

On the fiscal side, government spending generally went down, mostly because of cuts to defense. By 2012, the government deficit as a share of GDP had decreased for the third year in a row, which was the biggest three-year reduction since 1949. This careful spending continued into fiscal year of 2014, with the government budget deficit dropping to 5.2% of GDP, marking the steepest five-year decline since World War II. Even though state and local governments were collecting more tax money, their spending stayed much lower than it was before the crisis throughout this whole period, which held back the overall economic recovery.

Real GDP growth wasn't super steady during this time. After a moderate 1.6% in 2011, growth sped up to 2.3% in 2012 and then a solid 2.9% annually across both 2013 and 2014. However, it slowed down to 1.8 in 2016. Consumer spending, homebuilding, and exports became the main things driving overall demand in the economy. Business investment was also strong, especially in equipment and software, but investment in housing showed a slower recovery, even though it seemed to stabilize a bit towards at the end of this period.

Inflation remained generally moderate. However, productivity growth was a key concern, consistently lagging behind its long-term average. This was attributed to both less investment in capital per worker and total factor productivity. To get a potentially more accurate reading of economic activity, CEA began emphasizing Gross Domestic Output (GDO) and Gross Domestic Income (GDI). They viewed this as particularly useful in a dynamic and complex economy where individual measures might be imperfect, aiming to reduce measurement errors and provide a more comprehensive view[9].

Overall, the 2012-2016 period saw the United States economy make considerable progress in healing from the Great Recession, showing resilience and performing better than many

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[9] Economic Report of The President, 2019

other advanced economies. However, it also highlighted ongoing structural challenges, especially concerning productivity growth.

5. Strong Growth and Low Unemployment (2017Q1-2019Q4)

The period from 2017 through 2019 represented a distinct phase in the United States economic landscape. It was characterized by an unexpected accelaretion in growth that surpassed earlier predictions and continued the longest economic expansion in the nation's history, even with emerging global challenges. This era also saw major policy changes aimed at boosting supply-side growth and was marked by a very strong job market.

Real GDP growth picked up to speed in 2017, hitting 2.5% for the year, which was up from 1.8% in 2016. It then accelarated even more to a 3.2% compound annual rate during the first nine months of 2018[9]. These growth rates consistently beat both what the government and private forecasters expected for those years, with 2017 growth surprising everyone and 2018 growth doing so far a second year in a row[89]. The economic expansion, which started way back in 2009 actually reached its 127th month by the end of 2019, making it the longest one in United States' history. This ongoing growth was supported by a strong consumer spending and a increase in business fixed investment.

The labor market showed remarkable strength and tightening throughout this period. The unemployment rate steadily went down, reaching 4.4% which is its lowest level since 2000, and dropping even more to 3.7% by the end of 2018. In 2017, the economy added 2.2 million nonfarm jobs, averaging 181,000 per month, and kept up this strong pace by adding 223,000 jobs per month during 2018[89]. This tightening job market meant that real wage growth improved. The share of income going to labor also continued to increase in 2019. Policy discussions increasingly focused on ways to support and expand job opportunities, including ideas like requiring work for some public benefits[9].

One of the biggest policy moves we saw was the Tax Cuts and Jobs Act (TCJA), which became law in December 2017[8]. This law aimed to give tax relief to middle-income families, make individual taxes simpler and boost economic growth by cutting business taxes and

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[8] Economic Report of The President, 2018
[9] Economic Report of The President, 2019

encouraging firms to bring money earned overseas back to the U.S. The TCJA was projected to significantly increase GDP with the corporate tax changes estimated to raise GDP by 2% to 4% in the long run. The individual tax changes were expected to boost GDP by 1.3% to 1.6% over two to three years, along with an estimated average increase of 4,000$ in annual household wages. This tax cut, along with the Bipartisan Budget Act of 2018, contributed to a rise in the federal deficit in 2018[9].

Monetary policy shifted from being very supportive towards a more normal setting. The FOMC started raising interest rates, increasing the federal funds rate three times in 2017 to a range of 1.25% to 1.50%[8]. Then they raised it four more times in 2018 to a range of 2.25% to 2.50%, showing the strengthening job market and solid economic activity. Beyond just interest rates, Federal Reserve also began a process of normalizing its balance sheet in October 2017. This meant gradually reducing its holdings of treasury and mortgage-backed securities that it had bought during earlier quantiative easing programs. By December 2018, these holdings had decreased to 3.88 trillion dollars[9]. However, despite the strong U.S. economy, the Federal Reserve actually cut rates three times in 2019. This was different from other advanced economies, which had negative or very low policy rates and saw money flowing into the United States[10].

Exports continued to be a notable contributor to United States' economic growth. While net exports initially took away a small amount from real GDP in 2016 and 2017, they provided a positive boost in the first three quarters of 2018[9].

Labor productivity growth, even though it was still below its long-term historical average of 2.2%, started to show signs of picking up. It grew 1.1% until TCJA, and then reached to 1.4% after TCJA. This was notably better than other G7 countries in terms of how much output each worker produced[8][10]. This improvement was partly linked to increased "capital deepening" resulting from the TCJA's business tax reforms which aimed to incentivize domestic capital formation[9].

[8] Economic Report of The President, 2018
[9] Economic Report of The President, 2019
[10] Economic Report of The President, 2020

6. Pandemic Recession and Rapid Recovery (2020Q1-2023Q4)

The period from 2020 to 2023 was hugely impacted by the totally unprecedented economic shock of the COVID-19 pandemic. This basically put an sudden end to the longest U.S. economic expansion ever in 2020. What happened next was a sharp downturn. But then, the economy started to recover, and even though it wasn't always smooth, it was actually super resilient and stronger than expected in 2023. Real GDP even sped up to grow 2.9% over the whole yar, which totally went against earlier predictions of really weak growth or even a recession. This whole time was marked by massive government spending and central bank actions. Problems with global supply chains and changing inflation patterns.

The United States economy faced the largest negative economic shock since the Great Depression in 2020, seeing record drops in both real GDP and employment rates. This contraction in real GDP hit almost every part of the economy with the consumer spending making up the biggest part of the decline. While the second quarter of 2020 experienced record setting declines, the third quarter of 2020 saw record rebounds in both real GDP and employment, signaling the start of a recovery that continued into 2021 with Real GDP growing significantly and surpassing its pre-pandemic peak[11][12]. By the end of 2022, real GDP had caught up to its pre-pandemic level, showing strong resilience. This is important, especially with new problems like the Russia-Ukraine war causing more big jumps in energy and food prices. And for 2023, the prediction was that real GDP would only grow a bit around 0.4%[13].

The Pandemic really hit the job market hard in 2020, with jumps in unemployment claims in March and the broader "U-6 employment rate"[11]. Throughout 2021, the job market showed a strong comeback, though still below its pre-pandemic trend. By 2022, employment kept growing fast, with the unemployment rate getting pretty close to its low points from before the pandemic for most of the year. The government's forecast for 2023 expected the unemployment rate go up just a little, averaging 4.3% and peaking at 4.6% in the last three months of the year[13].

This whole period was defined by enormous government spending and central bank actions. These were all aimed at trying to lessen the economic damage from the pandemic

[11] Economic Report of The President, 2021
[12] Economic Report of The President, 2022
[13] Economic Report of The President, 2023

and help the economy get back on its feet. Big government spending plans, like the American Rescue Plan (ARP), gave a lot of financial relief[12]. The ARP alone was even estimated to have added at least 2.5 percentage points to real GDP growth in 2021, and economists expected them to actually pull down growth a bit in 2022 as they stopped.

Inflation became a big worry especially in 2021 and 2022. CPI hit 9.1% in June 2022 which haven't seen since 1981. This inflation was widespread, coming from food, energy, regular goods, and services. The Phillips curve seemed to get steeper in 2022, as low unemployment now coincided with rising inflation. Despite the actual inflation going up, long-term inflation expectations stayed anchored, meant people thought inflation would be high for a short time but wouldn't stick around[13]. Back in 2022, the government expected inflation for 2023 to drop to 3.0%[13]. However, the actual CPI for 2023 ended up being even lower at 2.6% (end-of-year to end-of-year)[14], which showed some significant progress. Plus, the unemployment rate for the whole year averaged 3.6%, which was super close to how low it was before to the pandemic.

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[13] Economic Report of The President, 2023
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