Project Dissertation Report On

GENERATING INSIGHTS FROM USA GDP DATA

Submitted By

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Under the Guidance of

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Certificate

This is to certify that the project report entitled "Generating Insights from USA GDP data" submitted to Delhi School of Management, DTU in partial fulfilment of the requirement for the award of the post graduate degree of MASTER OF BUSINESS ADMINISTRATION (MBA), is an original work carried out by Ms. Varsha Rani Roll No. 2K19/DMBA/108 under the guidance of Associate Prof. Dr Archana Singh.

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Declaration

I thus proclaim that the Research venture report titled “**Generating insights from USA GDP data”** submitted to the college Delhi School of Management (DSM), Delhi Technological University (DTU), in partial satisfaction of the necessities for grant of the degree Masters of Business Administration, is a submission of unique paper work concluded by myself, under the mentorship and oversight of Prof. Archana Singh and Miss. Sakshi Kukreja.

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Acknowledgement

This Endeavour has been finished due to the help and direction of many individuals. I am appreciate Prof. Archana Singh and Miss. Sakshi Kukreja for the extension of help in resolving my queries related to the project work timely and guiding me all the way to complete my work.

Last but not the least I might want to extend gratitude towards my family without whose help and consolation this venture would not have been conceivable.

Student Name: Varsha Rani

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Executive Summary

The basic idea that I wanted to project using my project work is the impact of the Pandemic on the Gross Domestic Product (GDP) of the United States of America (USA).

I have accumulated data of the USA GDP for a 10 year period and also the data related to the other factors that impact the GDP of the country. I have also built a Power BI Dashboard using this data and even tried to explain the relationship between various data variables and along with predicting future trends associated with them.

This study used the Correlation analysis in order to see the relationship and relativity between the various variables.

The database that we used is FRED which is an open source data base of the USA geography.

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The variable that I have used are plotted in graphs on the basis of their YOY (Year On Year) Growth rate and I have researched about the impact the various factors and variables have caused on the economy.

I have researched using the Google Scholar research papers and reports from the big 4 firms. I have plotted various graphs from the accumulated data in order to justify the trends from the data with the help of various research work available online

I concluded that the USA GDP is highly affected due to the pandemic as spending on the service sector has decreased. Many people have lost their jobs and many have adjusted to the virtual business settings. The consumer spending have deviated from their pre-pandemic trends and savings of the citizens have also changed considerably.

This research covers the major that contributes to the major drivers of the USA GDP. Known the ambiguity about the rigorousness, severity and phase of the infections and associated illnesses, the GDP of USA has seen a drastic impact. The study considers a comprehensive list of causal factors affecting the GDP like consumer spending, housing sector, government sector etc. This research includes database of the USA economy from authentic data sources like FRED. U.S. impacts are estimated to be very adverse and may take a long time to recover from the losses.

Abstract

Purpose

The basic idea that I wanted to project using my project work is the impact of the Pandemic on the Gross Domestic Product (GDP) of the United States of America (USA).

Design

I have accumulated data of the USA GDP for a 10 year period and also the data related to the other factors that impact the GDP of the country. I have also built a Power BI Dashboard using this data and even tried to explain the relationship between various data variables and along with predicting future trends associated with them.

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Findings

I concluded that the USA GDP is highly affected due to the pandemic as spending on the service sector has decreased. Many people have lost their jobs and many have adjusted to the virtual business settings. The consumer spending have deviated from their pre-pandemic trends and savings of the citizens have also changed considerably.This research covers the major that contributes to the major drivers of the USA GDP. Known the ambiguity about the rigorousness, severity and phase of the infections and associated illnesses, the GDP of USA has seen a drastic impact. The study considers a comprehensive list of causal factors affecting the GDP like consumer spending, housing sector, government sector etc. This research includes database of the USA economy from authentic data sources like FRED. U.S. impacts are estimated to be very adverse and may take a long time to recover from the losses. The economy remains in concerned zone, fresh confidence notwithstanding.

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Introduction:

This research covers the major that contributes to the major drivers of the USA GDP. Known the ambiguity about the rigorousness, severity and phase of the infections and associated illnesses, the GDP of USA has seen a drastic impact. The study considers a comprehensive list of causal factors affecting the GDP like consumer spending, housing sector, government sector etc. This research includes database of the USA economy from authentic data sources like FRED. U.S. impacts are estimated to be very adverse and may take a long time to recover from the losses. There is no confidence in the current economic scenario as the GDP is facing a lot of issues. After the prompt growth in the third quarter and even after stood at least 3.5% less than what it was in the last quarter of 2019. This seems to be the similar situation as to what it was in the year 2007-2009 when the country was facing recession.

Background

One some of the foremost mysteries concerning the economic system is that how detrimental the impairment is.

When standard public to start with spoke back to the Covid-19 pandemic virus with inside the month of February and March,2020 with the aid of using annulling tourism plans and inn reservations, maximum expected disturbances to be short-lived however now extra than a year has passed, human beings are having to adjusting their expectancies and plans each frequently. Full recuperation will consequently begin from a completely extraordinary factor than absolutely everyone anticipated with inside the starting of the pandemic time.

In March, numerous corporations have been possibly to closed down or modify operations for a someday or, at worst for an extended term. Much forecasting, and authorities strategy, changed into deliberate to channel this exceptionally length. Handling to perform in the course of the pandemic for over a year changed into an not going task—and an intimidating one. A vast quantity of corporations—mainly small corporations—with the aid of using now have failed or will now no longer persist, irrespective of the Federal Reserve's pre- eminent determinations to maintain less expensive and without difficulty to be had credit. Substituting and/or reviving the ones corporations as quickly because the pandemic is over will want extra sources and hypothesis than in the event that they had persisted to be functional.

In the meantime, many personnel and pupil the make money working from home state of affairs became out to be a possible answer till the uncertainty concerning the state of affairs prevails. We won't realize the overall impairment till recuperation clearly receives underway. The baseline state of affairs assumes that the impairment is satisfactorily acute that boom—predominantly employment development—may be constrained after an initial length of recuperation, assuming that economic system will keep to stay underneath the earlier than pandemic fashion in the course of the five-yr projection perspective.

I actually have additionally blanketed a tremendous state of affairs on this forecast, one which assumes that limited call for hastily will increase in sectors together with tourism, meals and housings, and refreshment offerings as soon as the chance of the pandemic is gone. Since those divisions incline to lease lower-paid and for that reason lower-skilful workforces, rehiring can arise extra hastily than in divisions together with long lasting items commercial enterprise which are in general hit extra adversely in the course of financial recessions.

And right replace concerning vaccines has allowed to lower the probability of the lengthy slog state of affairs from 25% to simply 10%. Many citizens seem to be very reluctant towards the vaccination news which has caused the uncertainty regarding the economy contributing slower growth in the long slog economic scenario where the growth is very slow because the vaccination news seems to be very drastic change in the life of the USA citizens.

This studies covers the important regions that contributes to the important drivers of the USA GDP. Known the anomaly approximately the rigorousness, severity and segment of the infections and related illnesses, we the GDP of USA has visible a drastic impact. The research considers a complete listing of causal elements affecting the GDP like purchaser spending, housing zone, authority's zone etc. This studies consists of database of the USA economic system from proper facts like FRED. U.S. affects are predicted to be very detrimental and can take a long term to get over the losses. The economic system stays in involved zone, sparkling self-belief notwithstanding. After the 0.33 quarter's spark off boom, GDP rested at 3.5% much less than the best in 2020 Q4. That's now no longer very multiple from the most drop from the topmost factor within side the 2007–09 recession and could take almost a yr and a 1/2 of inverse on the modern day years' common GDP boom stage. Known the ambiguity about the rigorousness, severity and phase of the infections and associated illnesses, the GDP of USA has seen a drastic impact. The study considers a comprehensive list of causal factors affecting the GDP like consumer spending, housing sector, government sector etc. This research includes database of the USA economy from authentic data sources like FRED. U.S. impacts are estimated to be very adverse and may take a long time to recover from the losses. The economy remains in concerned zone, fresh confidence notwithstanding.

Problem Statement:

There is a deviation in the GDP trends of the USA economy.

Objectives of the Study:

The research is conducted in order to

- See the trends in the various contributors in the USA GDP.
- Cover the major that contributes to the major drivers of the USA GDP.

Scope of Study

This research covers the major areas that contributes to the major drivers of the USA GDP. Known the ambiguity about the rigorousness, severity and phase of the infections and associated illnesses, we the GDP of USA has seen a drastic impact. The study considers a comprehensive list of causal factors affecting the GDP like consumer spending, housing sector, government sector etc. This research includes database of the USA economy from authentic data sources like FRED. U.S. impacts are estimated to be very adverse and may take a long time to recover from the losses. The economy remains in concerned zone, fresh confidence notwithstanding.

Literature Review

The role of underground economies in calculating a country's GDP has been further explored, assuming they are included in this calculation. The shadow economy challenges the current method of calculating the GDP and is different from how it is conventionally intended by assessing and measuring the following economic sectors of a country: private consumption, gross investment, government investment, public spending and net exports is an occasion worthy of further analysis as its sectorial association may not be appropriate. The study of economic scenario is very difficult to predict but as it is based on various factors which makes the concept very elaborate. These factors are also responsible for adding certainty.

Major problem has arisen in standard practice in calculating GDP are taken into consideration with the help of these factors.. Due to the high level of uncertainty, the results suggest that they should be included in the GDP measurement, but with caution as there is a risk of conclusions being drawn.

About GDP:

The importance of the shadow economy in relation to the calculation of a country's GDP is further considered when the calculation is assumed. When evaluating and measuring the following economic sectors of a country, challenge current GDP methods and how GDP is traditionally calculated: Underground consumption shows private consumption, total investment, government investment, public spending, and net exports. It is worthy of a more detailed analysis because its layout may not be appropriate for any department. Although it is difficult to censor with certainty the illegal activities that constitute the black economy, the enormous benefits of using these factors bring enormous benefits to the GDP evaluation which is based on these factors that people have issues with the subjective nature of understanding. Although these economic factors are full of countless uncertainty, the results of the study show that it is included in the GDP measurement standard, but we must proceed with caution because it is possible to draw conclusions.

Definition and Measurement of GDP

For determining the factual nature of a country's economic conditions, the economic researchers have preserved the formula based calculation of implementing a single method of composing an answer. According to data from (Investopedia.com), "the monetary value of all manufactured goods and services produced in a country within a certain period of time" is defined as GDP. Although this ideology may not be obvious to many people, it has become a daily routine for those responsible for collecting the required data. Obtaining the GDP data is a rather tedious process. Although the GDP equation listed in (1) may seem simple in itself, it is a rather complicated process. In this equation, "consumer expenditure" (C), "government expenditure" (G), a "investment" (I) and "net exports" (NX) are calculated. When doing this calculation, you will consider purchasing a new property, having social security, or buying traded products. The extraordinary value of GDP is a major attraction for the economists, but this value is very uncertain.

"GDP = C + G + I + NX"

Although the end outcome of this equation provides economic researchers with different values, which may lead to thinking that it represents the economy of a country, this is only an approximation. This has nothing to do with whether we can calculate GDP, but to accept how to underestimate it. Through research and thesis, the largest and most important sectors are housing, Government fundings, financial markets, consumer purchases and existing trades. However, as researchers continue to explain the current situation in the UE, its position in GDP remains unclear. The importance of the above mentioned sectors in a country's GDP (US) are emphasized in this report. When discussing the importance of these factors in a country's GDP many other factors are kept stable and are rooted in the entrenched importance of why it is necessary to establish an established understanding based on the existence of country's government sector. . Although the vast majority of illegal activities (such as human trafficking etc.) constitutes some part of the economy but these factors are prohibited in this research which are a part of the black economies, these activities are very important factors in its contribution. Seemingly illegal and harmful activities such as prostitution and drug trafficking can be beneficial and beneficial. The results of a number of studies show that even if economic activities are illegal, the shadow economy is beneficial to a country's GDP. From many attempts and estimates of the UE's all-inclusive GDP, it can be concluded that the basic principle is that GDP will increase substantially. Based on these findings, we believe that the overall welfare of a country will gain greater benefits.

However, in order to bring certainty in the economic GDP calculations the variables are to be accumulated sicerely, because a certain amount of information fusion is required between factors that directly contribute and the variables associating with these factors for accumulating the GDP calculation, and the difference between what is observed and what is not considered.. However, once economists have established integration, it may be more feasible to obtain favorable prospects for the future from it. In addition to the benefits of a good GDP value, there are other countries that benefit from this good economic situation. Economists found that a country will have greater confidence in keeping its financial leverage or fixed expenses to a minimal level or in line with the country's own objectives. By reducing the level of the national debt, it is possible to trade more goods across nations, especially in countries like for outsourcing company operations, for example china exports a lot of manufactured items and is an outsourced hub for many companies. It is within such situation that the GDP of one country helps in the revival of another economy, where there is so much of uncontrolled and income with no tax deductions. Schneider is consistent with this idea and emphasized that if the UE and the factors influencing it are accumulated by determining the various scenarios of the UE, then the UE sector itself can be reduced, thereby increasing taxation and public expenses and stimulate GDP growth. By taking this into account when setting GDP, the result of this research add more value by determining the risk factors of this research which seem to add value in the GDP evaluation. However, these factors, risks and scenarios are the main reason for the analysis, it shows that it has some beneficial effects on GDP evaluation, so it is not easy to calculate the average value of the UE in GDP, because the current GDP method is completely the complementary situation. Methodological problems encountered Many economists know that this is a typical GDP methodology, which can identify and measure the various variables of the GDP which are NX G, I, and C. However, categorizing GDP activities under these different sectors is still a problematical task and massive to execute successfully . By collecting GDP factor variables and data about researched events and providing calculated figures and trends, execution of GDP calculations becomes smooth. Feige & Urban did not reach a consensus on dealing with GDP calculations when considering traditional GDP calculations, because in this case, basic data collection procedures are rarely used in the earlier times. Since the illegal calculations are usually slurred for prostitution, drug trafficking and other activities, some economists questioned whether it is a good thing to measure these in order to see the economic contribution of these sectors, because this practice itself challenges Common advantages and methods. Instill in practice. Considering that the general rule of thumb for running a business is to maintain the status of a legal person, if these researchers are willing or not to inhibit the new trends in GDP measurement is still in doubt. Economists further found that due to many factors and risks that are too complex to understand or highly skeptical, the calculation of GDP contributors and their evaluation has become more difficult.

If the UE is included, what remains is uncertainty, it will be infinite. Dale Anno (2016) believes that this is not the case. They understand that even if there is uncertainty, calculations should still be made, but they must be cautious. As there is no UE data or established data available, and therefore, due to many beliefs, disagreements and inferences, each calculated number should always be treated as an approximation. For ensuring the best results while calculating the GDP, integrated methods i.e the usage of traditional and improved methods have been proposed and used by various economists in order to understand the flow and execution of various factors and calculations.

The solution to achieve this goal is still to challenge the current GDP approach, hoping to review the components that make up GDP itself. However, with many efforts, including UEs, a final distinction must must be a way in implementing the information accumulated together for more accurate and certain results.

The new methodology that underestimates current GDP, through observations observed in the economy, underestimates what is happening in a country. Instead of talking about the unknown in the economy, it is better to restore the classification of official sector activities. Feige & Urban (2008) reported that since the main national currency is controlled outside national borders, we do not know the amount of currency in circulation or the current amount of currency in circulation. In the current GDP methodology, measured by the various variables of the GDP which are NX G, I, and C, many scenarios that seem to be less important are ignored in the process of data accumulation and evaluation. Unemployment and poverty may be affected through these factors but not to an extent that can be implemented in the big picture involving the reasons why these problems occur. The unemployment rate of a country is directly related to the unemployment rate. Therefore, although in the almost transitional period and in developing countries, the UE has almost acted as a "safe haven" for people who depend on it as a means of survival, but people have found that the increase in inequality has exacerbated the UE scale.

Research Methodology

This research accumulated data of the USA GDP for a 10 year period and also the data related to the other factors that impact the GDP of the country. This research also built a Power BI Dashboard using this data and even tried to explain the relationship between various data variables and along with predicting future trends associated with them.

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Regression:

Linear regression is a linear model, e.g. a model that assumes a linear relationship between the input variables (x) and the single output variable (y). More specifically, that y can be calculated from a linear combination of the input variables (x).

For our project we have used linear regression to show the correlation between Consumer spending /Unemployment rate /Real GDP.

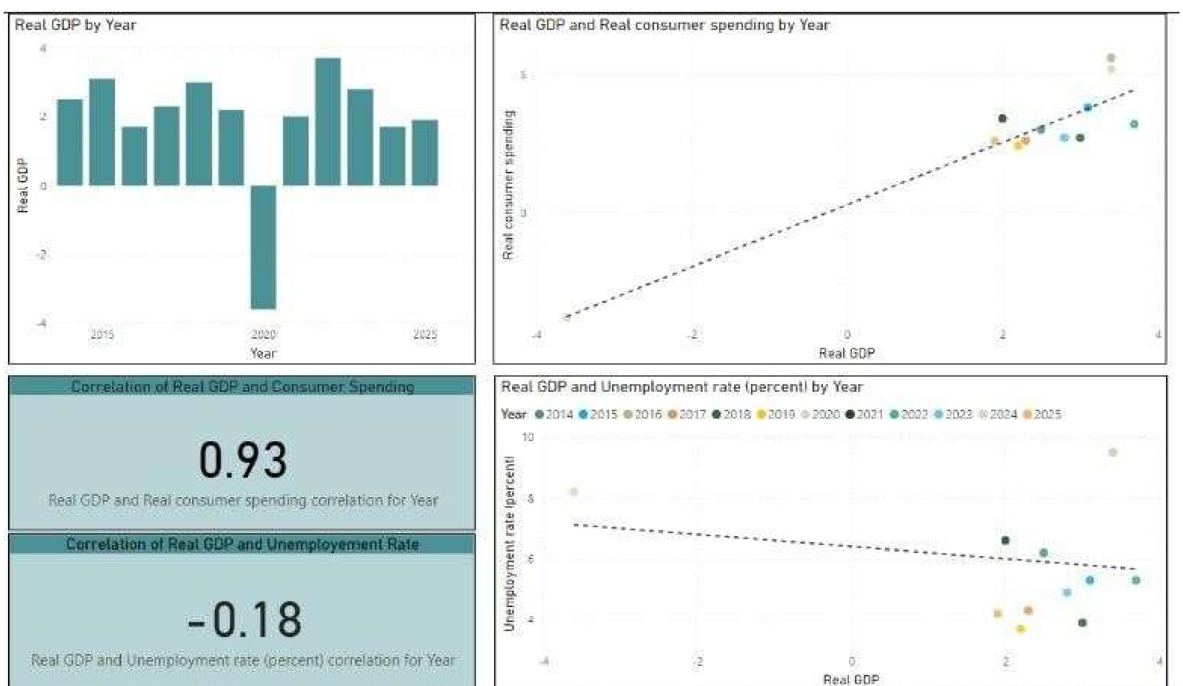
Using this linear relationship model we have predicted the future trends in the Consumer spending along with the unemployment rate:

Dependent Variable: Consumer Spending and Employment Rate. Independent Variable: Real GDP

This is the dashboard of our project and shows the following:

- Correlation between Real GDP and the consumer spending. The value is 0.93 which means a highly positive linear relationship between the two variables.
- Correlation between the Real GDP and the unemployment rate.
- The value is -0.18 which is highly negative which states there is a negative linear relationship between the two variables.
- The year 2020 has an adverse value of the real GDP due to the pandemic situation.

Figure 1 Correlation Analysis



I. Variables

The Variable used are as follows. Table 1. The Variables.

Table 1. Variables

1	Real GDP
2	Real consumer spending
3	Real consumer spending, durable goods
4	Real consumer spending, nondurable goods
5	Real consumer spending, services
6	Real investment in private housing
7	Real Fixed business Investment
8	Real inventory accumulation
9	Real exports of goods and services
10	Real imports of goods and services
11	Real government consumption and investment
12	Real federal government consumption and investment
13	Real state and local government consumption and investment
14	Consumer price index
15	Chained price index for personal consumption expenditures
16	Chained GDP price index
17	Employment cost index
18	Average monthly change in employment (thousands)
19	Unemployment rate (percent)
20	Employment to population (percent)
21	Real disposable personal income
22	Net household wealth (US$ trillions)
23	Personal saving rate (percent of disposable income)
24	Corporate profits before test(with inventory valuation and capital consumption adjustments)
25	Housing starts (thousands)
26	Total housing stock (millions)
27	Interest rate on 30 year fixed rate mortgage (percentage)
28	Current account balance, share of GDP (percent)

I. Baseline:

The shortfall of a critical help financing lead US GDP to fall, beginning toward the year's end 2020. The mistake to expand business protection (and raise advantage levels) burdens purchaser spending. What's more, the requirement for the country and its government involvement to cut the expenditure having an impact on the GDP? The decrease in the number of Covid-19 cases required extra terminations and kept numerous individuals from requiring to work in unlikely jobs. Schools began to teach online (virtual sessions) possible specialists (particularly ladies) from getting back to the workforce, so business development eases back. The new antibodies being created are sent barely (to medical services laborers and people on call) from the outset, with minimal monetary effect in the main portion of the year 2021.

II. Fast returns:

A critical alleviation charge keeps request filling in the principal half of 2021, and afterward repressed interest makes an enormous explosion of expenditure beginning in MID-2021 as immunizations are broadly sent. Customers are perched on significant investment funds and are prepared to spend. What's more, not at all like in past downturns, the Fed has forestalled huge monetary harm to the economy. Banks stay all around promoted and ready to loan, and organizations are dissolvable and able to go through cash to bring in cash once clients return. What's more, the vast majority of the work misfortunes have happened in areas that recruit low-talented laborers, and those areas (food and convenience, travel, and sporting administrations) can increase immediately when request recuperates. Gross domestic product speeds up quickly once antibody organization gets far and wide.

III. Long Slog

Coronavirus cases keep on moving through the colder time of year, and states are compelled to endeavor as far as possible monetary movement. Schools meet essentially, and a few guardians leave the workforce to deal with their youngsters' tutoring. The inaccessibility of one or the other treatment or a powerful vaccination will help people move back to normal life and resulting in better GDP performance. The chances of improved organizational workings will increase but the threat of further recession will impact the working of the economy. The GDP development will be slow due this dilemma and uncertainty and businesses will move towards restructuring their workings resulting in employee joblessness. This disintegration due to economic recession can seem to have a long term impact on the lives of the citizens thus preventing them from spending money and leading to keep saving for future emergencies.

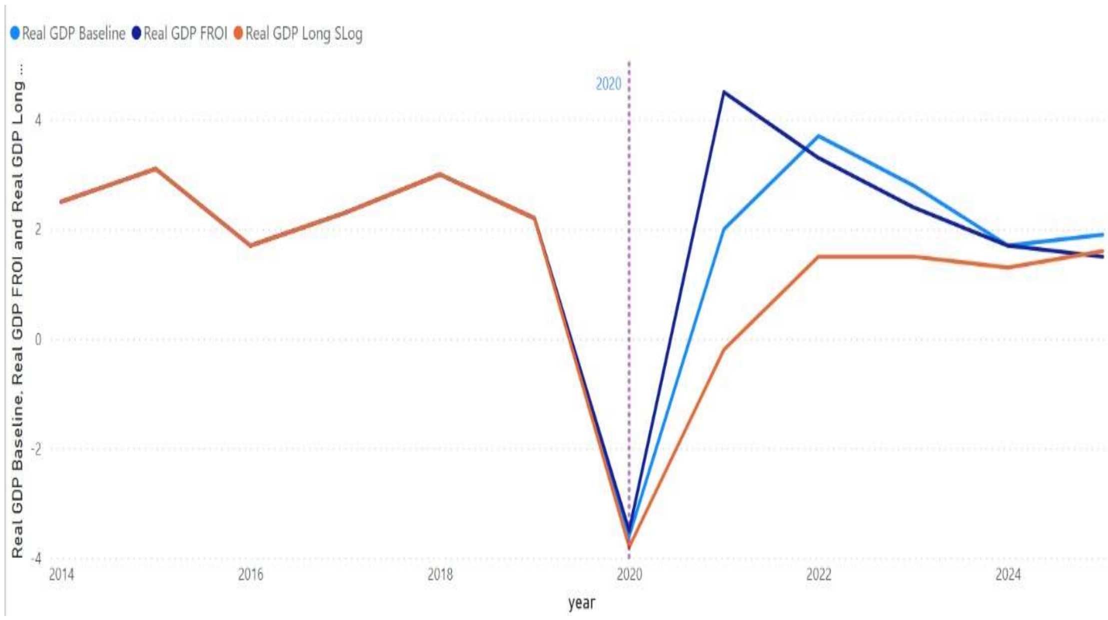


Figure 2 The figure shows year over year GDP growth rate.

Areas

Consumer spending

Has been shockingly solid in the course of recent months. The unemployment fund of the US dollar 600 week after week provided support to joblessness protection in the month of July and continued further, and even the increasing number of covid-19 cases is a major issue which was to be catered to, individuals keep on being willing to spend. This is halfway a direct result of the huge investment funds that happened right off the bat in the pandemic, when even the jobless expanded reserve funds. What's more, work creation, despite the fact that easing back, is stable enough to contribute towards the GDP by maintain certain spending records.

The expenditure seemed to shift from traditional patterns due to the pandemic , nonetheless. In the last quarter, products represented 34 percent of purchaser spending which showed an increment of previous data of 31 percent with administrations. Up until clinical intercessions render the Covid-19 inspections very reluctant, the consumer expenditure will continue to reduce in future if the situation does not improve due to future uncertainty from exercises that customers see as hazardous—delight, Administration, convenience, food requirements—and toward utilization that can occur in a separated manner in the society.

The probability of being vaccinated is not guaranteed which brings up the issue of how shoppers will act once the covid is not, at this point a danger. One chance (predictable with our pattern) is that consumers will stay careful for quite a while. This recommends that families will keep a more significant level of reserve funds, and that shopper administrations spending will recuperate gradually. Another chance, appeared in our quick return situation, sees purchasers quickly getting back to their past trends on spending.

The consumer has been spending immensely in long shelf live products, rising 14 percent from last January through March. This has given rise to an issue which is - Even before an immunization camp for vaccination is broadly being announced, customers may hinder their interest for such products that will lead to disturbance in the future supply chains. In the wake of expenditure the for the most part unused eatery financial plan of a half year on a home rec center, how does a family manage the following a half year's café financial plan?

Some tough merchandise providers, for example, vehicle makers, are utilized to flourish fail cycles in purchaser interest. Others may encounter this interestingly.

In the more extended term, we anticipate that the pandemic should intensify existing shopper issues. Coronavirus has tossed the issue of imbalance into sharp help, stressing the financial plans and everyday environments of millions of lower-pay families. These are the very individuals who are more averse to have health care coverage—particularly after cutbacks—and bound to have medical issue that entangle recuperation from disease. Furthermore, retirement stays a huge issue:

Retirement is an issue as more than half of the non- retired people do not invest in retirement funds further leading to less money for spending on goods and services thus resulting in reduced economic growth.

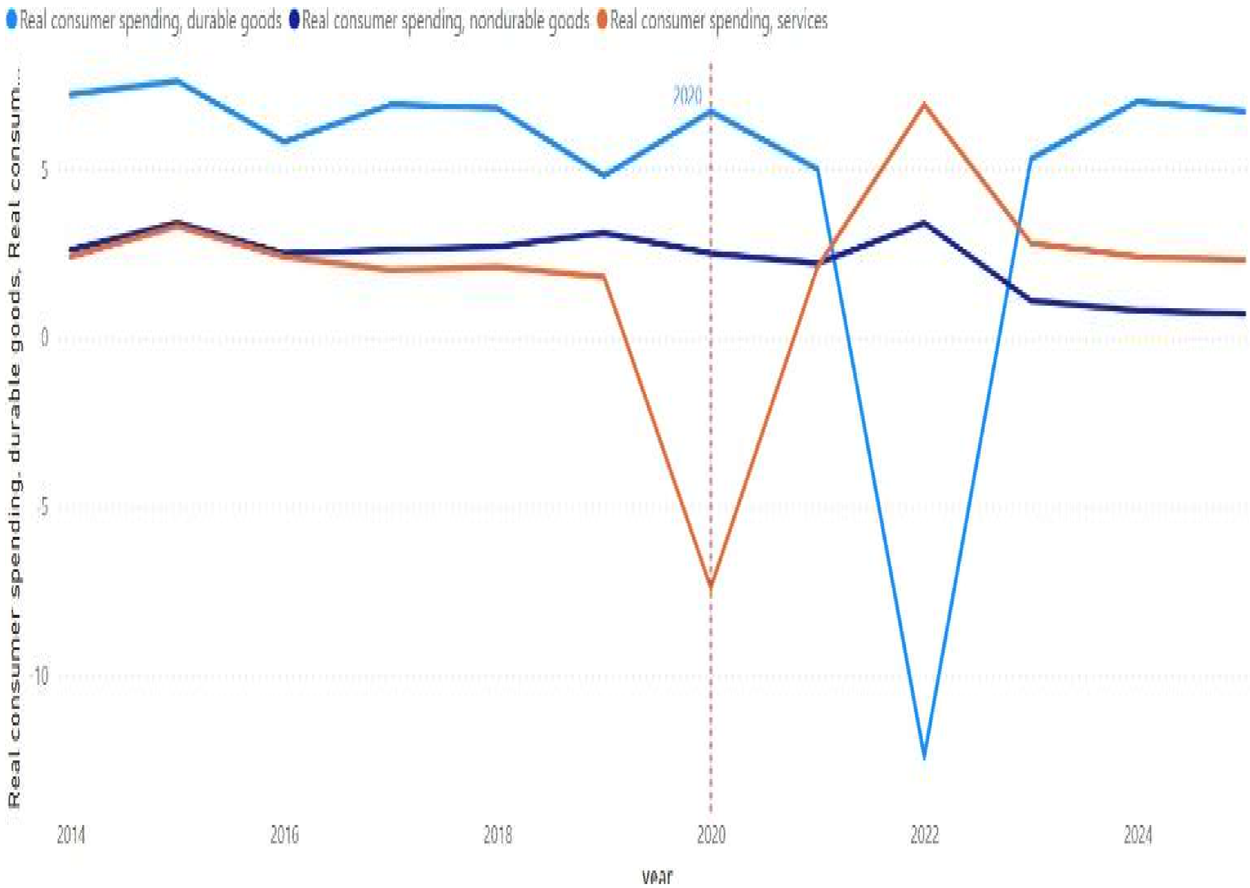


Figure 3 Consumer Spending Trends

Housing

The housing area has beated the more extensive economy in the wake of the pandemic. Aside from the way that purchasers and dealers have discovered approaches to explore the limitations of the pandemic, a couple of elements have consolidated to support housing demand.8 These incorporate the proceeded with solid monetary places of high-wage telecommuters, generally low home loan rates, and more twenty to thirty year olds moving into prime home-purchasing age. This has lifted homebuilder certainty above pre–COVID-19 levels, and by October, housing begins had effectively made up practically all the ground lost among February and April. High-wage telecommuters have been moderately sound during the pandemic, have profited by rising home value, and are probably going to require more space as distant working perseveres. Besides, the 30-year fixed-rate contract has been underneath 3% since July. This has been a significant fascination for purchasers notwithstanding the frail work market.

Solid interest combined with stifled housing supply are probably going to support house costs in 2020 and 2021. When the work market recuperation is plainly in progress, we may see a further spray in housing action.

Despite the fact that a rush of recent college grads entering home-purchasing age may help the housing area in the short to medium term, since quite a while ago run basics guarantee that housing doesn't turn into a vital driver of financial development in our estimate. Easing back populace development implies that the interest for housing will develop generally gradually after the underlying leap in housing development as the pandemic effect dies down in the benchmark. Additionally, a maturing segment implies that in excess of a fourth of the country's current proprietor involved homes are probably going to open up throughout the following 20 years as the current proprietors either die or clear their homes.

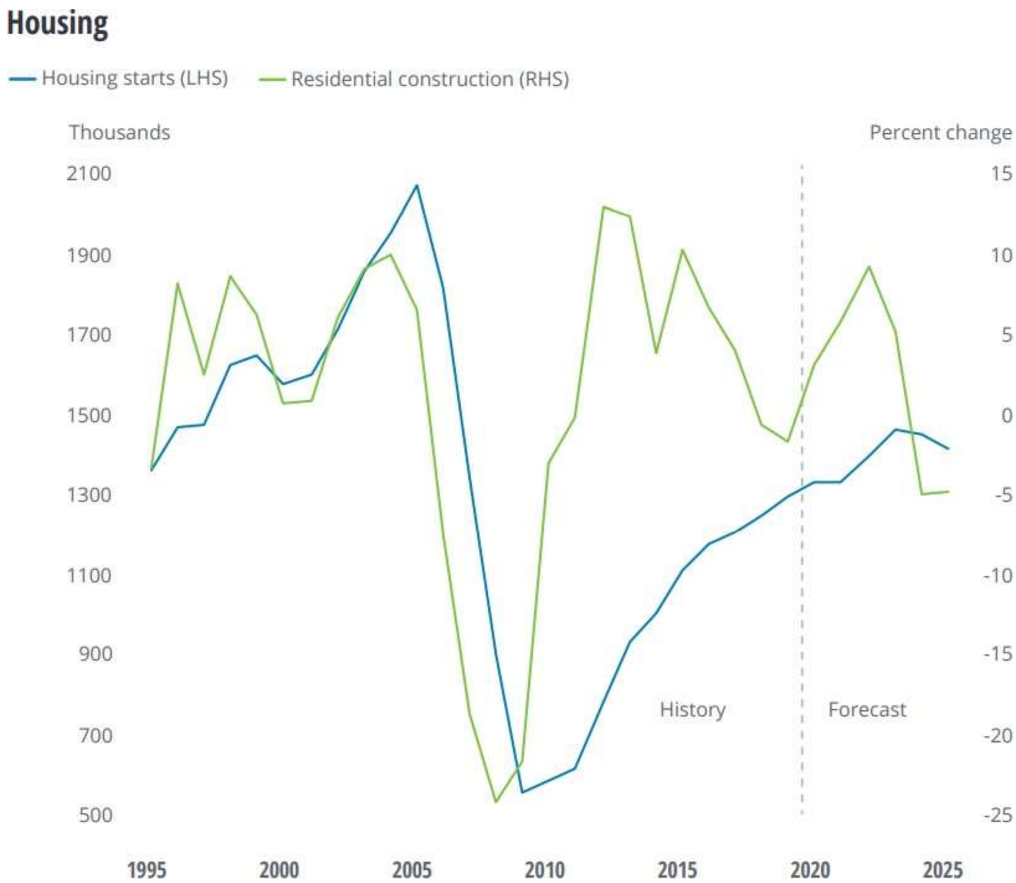


Figure 4 Housing Trends

Business Investment:

Quite a bit of business venture was intruded on, similar to all the other things, by the end of the economy to moderate the pandemic's spread. Putting resources into certain particular zones that upheld virtual tasks enlisted a great increase—business acquisition of data handling hardware, for example, increased by 5 percent even when the overall GDP declined. Yet, this could not help the GDP from Declining. Constructions venture has kept falling yet was balanced by proceeded with development in data preparing hardware and a bounce back in different kinds of gear speculation.

Organizations presently face vulnerability in a few measurements. There is vulnerability about the actual illness, bringing up hard to-answer issues for any business—inquiries regarding activities, clients, and expenses. There are inquiries regarding the monetary framework and the capacity to finance new ventures.

Furthermore, there are inquiries regarding the recuperation—how rapidly the jobless will actually want to secure new heights once this situation comes under control, and the government and public support can help in the economic revival.

These contemplations may make business speculation stay quieted for quite a while. The estimate states the business spending will continue to suffer due to the decreased consumer interest in this sector and businesses not willing to spend due to the economic uncertainity.

Due to the pandemic there might be a chance for the business to start restructuring and adopt to the attest technologies in order to adapt for future references. A portion of those reasons, tragically, may really diminish efficiency. To begin with, numerous organizations should spend on wellbeing gear which will result in stagnant or inefficient behavior leading into unrealized benefits. The government will intervene for "essential" businesses, particularly restoratively related enterprises like instruments and drugs, contending that it merits some failure to acquire better public command for future references so that the businesses are prepared for any disruptions.

The organizations will probably consider putting resources into approaches to make their operations and supply networks more powerful, including exports and imports, enhancing providers, also additionally expanding basic items inventory storage spaces. These will probably help keep outrageous occasions from closing down creation yet decrease proficiency and enhance the costs incurred.

The country, accordingly, can observe generally significant degrees of awareness in the given recuperation. However, the higher usefulness may not be accomplished, We have to see that the investments are produced for the economic growth.

Figure 5.

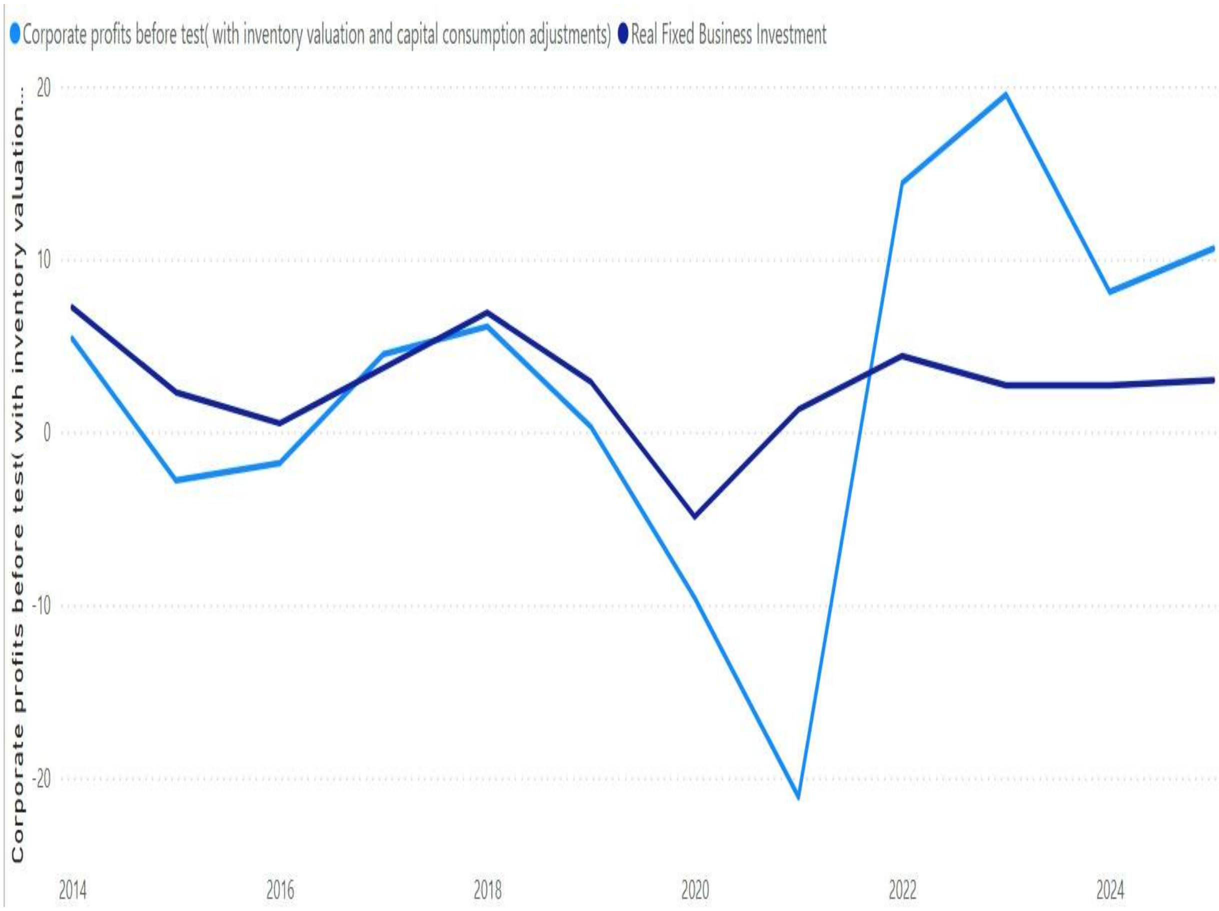


Figure 5 Business Investment Trends

Trading

In recent years, analysts began facing the possibility of harvesting. The global GDP has observed that the exports have increased to 34 percent in the year 2012 which is far better than they were in 1970 which was only 13 percent. But deglobalization seems to disrupt these trends.

It suggests that policies to promote globalization can change in the future, the United States and the United Kingdom).

The pandemic has shown more shifts towards forbidding trades. The pandemic has affected the entire world but the leader surpasses the important decision on how to fight against it, and the country is both national policies. The most pronounced example of this is the withdrawal of the USA. China and Russia have built their own vaccines leading to the initiation of trade tensions of the same evidence of the World Health Organization. In the pandemic, the United States Commercial War China shows no signs of abuse. And after the adoption of these steps the US seems to be reluctant towards other nations as well increasing the tax rates for imports. It is not a good sign for the future of international cooperation and the future of continuous limits. President Biden can move quickly to reduce trade tensions with traditional allies. The President does not require Parliament's approval to eliminate or reduce duties imposed by the previous administration. However, the position document of the Biden campaign suggests that the new administration is likely to interfere with traditional liberal trade emphasis on former free traditional democratic private trade, such as Clinton and Obama.

Companies can respond to the recent volatility of commercial policy. An important issue is whether the business reconstructs its supply chain to create more recovery shocks, such as changes in the trading policy of the pandemic and the United States. Of course, it is not possible to quickly promote promoting quickly and quickly to reduce foreign dependencies. American companies continue to supply China's supply in the coming years. However, even if a single source is the cheapest, companies will reduce dependence on foreign suppliers and try to have a portfolio of suppliers instead of a single source.

The engineering supply chain of the league necessarily means an increase in the general cost. As "Chinese prices" have been infer for many years, an attempt to avoid China depending on China can produce inflation pressure on the second half of the predicted land flat line. And if the market accepts inflation, companies must accept low profits to diversify the supply chain. Globalization provided a relatively painless form to improve the lifestyle of most people. Collection includes expenses accompanied by pain and limits the growth of real income during recovery.

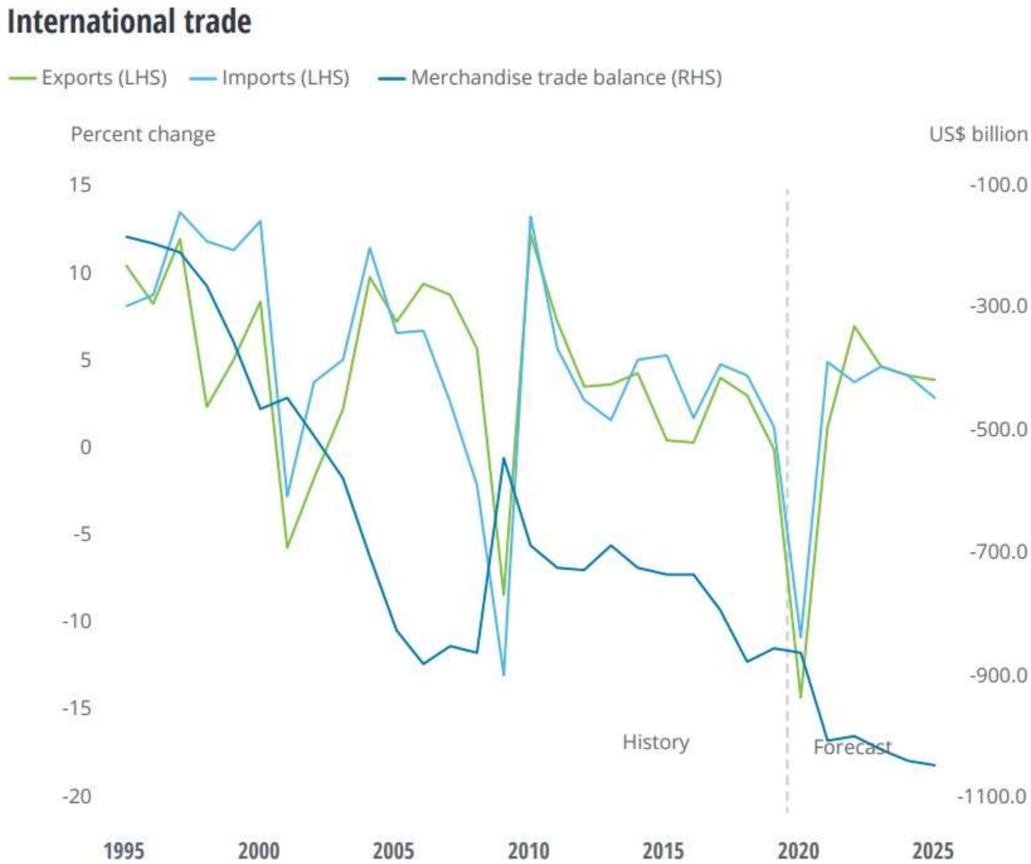


Figure 6 Foreign Trade Trends

The government

The citizens of the US as well as the government seem to be in a dilemma that will the government provide more funding in the future even if the pandemic continue to flourish in the future or will they abandon it due the bad condition of the economy. And will the situation be completely normal after the vaccination will have been employed. These doubts have created mental chaos among the natives. These relief bill if not continued can lead to poverty for many US families as the unemployment was at its peak during this pandemic and in order to go back to jobs timelines can be very diverse.

The problems faced are as follows:

- Expanded timelines for providing unemployment fundings specially prepared for concert performers will cease to be paid in January. This is in addition to the unemployment insurance benefit of the loss of $600 which is a major concern for the 20 million holders of this funding will face a lot of issues. If the continuous increase in unemployment benefits will disrupt, many people will lose their income.
- Funding problems are common in the various sections of the government. This because the taxes stands unpaid due to the loss of jobs and reduced buying capacity along with more saving oriented nature of the citizens for future. The federal government will intervene for helping the government to come out of this situation.
- The government of various states will require monetary help in order to manage the expenditures related to the Covid-19 relief funds especially at the end of November, La-foot duck relief bill unlikely to pass. After the new Congress takes office, it is possible to adopt a new method, although most Senate Republicans have a history of opposing state and local aid on a large scale, which made it more uncertain if the benefits for the unemployed will continue or not. This posed a huge risk that will the "congress" be able to bring more relief aid for the citizens and a sufficient number of aid bills to solve, at least partially, the above problems. Our baseline assumption is that Congress passed a simplified aid bill.

The relief stimulus depends upon how economic conditions will be. Several assumptions regarding the rapid growth are made as there will be more competition in the market as the companies have adopted certain measures and technologies to overcome such situations in the future.

- System finances are functioning normally with banks having enough monetary capital.
- Many companies' financial conditions remain healthy , Can borrow and spend on demand to expand production capacity and restore
- The layoffs are mainly concentrated in the most unskilled workers. Although this focuses the People who have suffered adversely during the pandemic and were not able to recover from

the unemployment will find more jobs in the market once the demand increases for employees Other considerations that will develop due to huge layoffs in the present:

- Users have become used to certain products and dropping off the other leading to demand uncertainty in the future.
- If travel is not resumed, then these sectorial changes may also cause investment to be deserted, such as being engrossed in a surplus of aircraft. In essence, the economy will suffer due to the wastage of such infrastructures.
- White and blue collar employees have been unemployed for a long time have more difficulty returning to work.

Our baseline assumption is that economic growth will be relatively slow as the vaccine begins to be fully rolled out in mid-2021. In this case, the stimulus (we haven't assumed it yet) will be useful. Our quick return scenario assumes that even without a major stimulus bill, full employment will be achieved soon after the passage of the covid pandemic. Once in the vaccine implementation stage, legislators will need to determine whether further encouragement is needed.

However, if the government ultimately fails to find a way to reduce the deficit and consequent debt, it will face a crisis. This crisis may still take many years and the current situation shows the need to wait. Once these conditions are removed, waiting too long will be a bad idea.

The government of various states will require monetary help in order to manage the expenditures related to the Covid-19 relief funds especially at the end of November, La-foot duck relief bill unlikely to pass. After the new Congress takes office, it is possible to adopt a new method, although most Senate Republicans have a history of opposing state and local aid on a large scale, which made it more uncertain if the benefits for the unemployed will continue or not. This posed a huge risk that will the “congress” be able to bring more relief aid for the citizens and a sufficient number of aid bills to solve, at least partially, the above problems. Our baseline assumption is that Congress passed a simplified aid bill.

- Expanded unemployment benefits and casual job unemployment benefits will cease in January. This is in addition to the unemployment insurance benefit of the loss of $600 which has been funded to more than 20 million people. If the continuous increase in unemployment benefits cannot continue, many people will lose their income.
- Governments sectors in various localities are facing major funding problems.

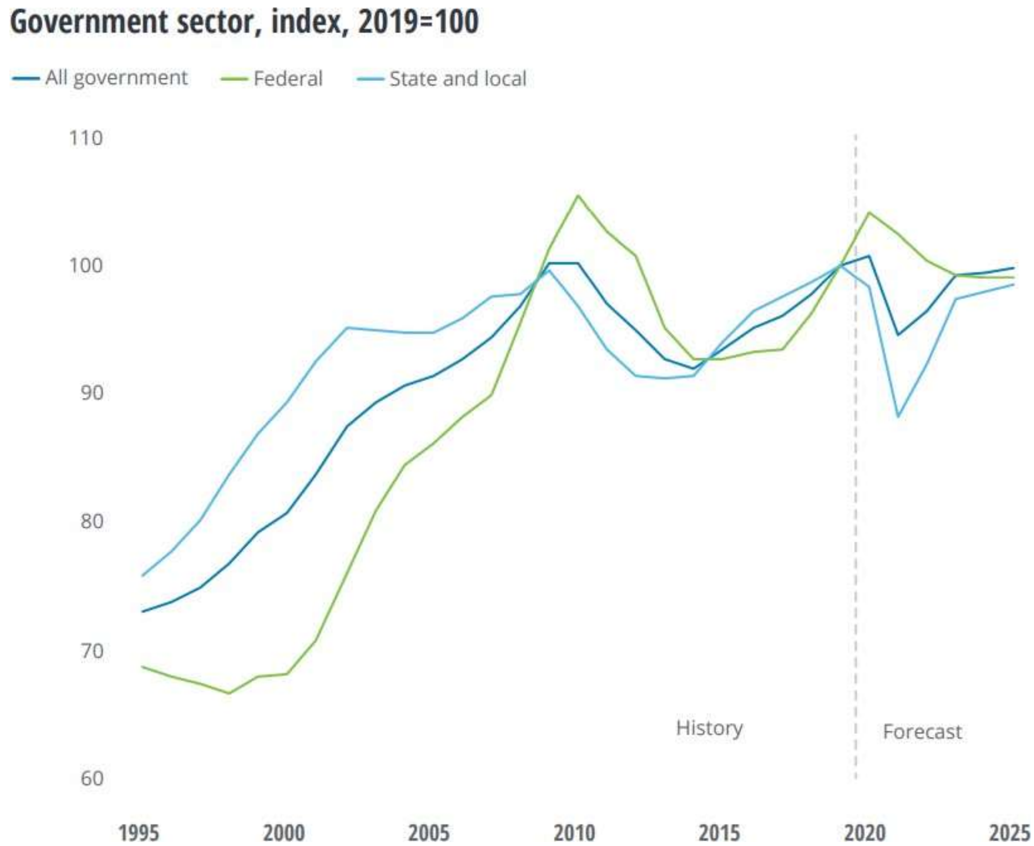


Figure 7 Government Spending Trends

Labor market

The major layoffs in April 2020 caused the number of jobs to plummet by more than 20 million, and the unemployment rate in most industries has fallen by more than 9 percent More than half of the workers working in daily wages jobs were fired which created a huge loophole in the economy. Even though the jobs seem to be employing again but the number of employed people is still about 10 million below pre-pandemic levels. The huge gains from employment may become standstill.

- The pandemic has disrupted the demands leading to the economic developments to not occur.
- As the pandemic has lead to increased number of positive cases and leading to hospitalization. Many people will find it difficult to cope up with this situation.

In the long term, companies will continue to seek talent, but they may be in different industries and occupations. Efforts to restock part of the supply chain and build a more powerful manufacturing system are likely to mean that manufacturing and related industries will have job opportunities. How to attract people from catering and accommodation services to the manufacturing industry? In the past, the lack of opportunities in the region would help, but even if the unemployment rate remains high, many companies in the manufacturing sector may still need to invest a lot of energy (or even higher wages) to attract workers.

This type of labor market adjustment tends to occur slowly, which is one of the reasons we expect the baseline general economic recovery to be relatively slow. Promoting a more efficient labor market can help accelerate the recovery, but it means acknowledging that the pre-pandemic economy will never recover. For workers, companies and legislators, this may be a difficult choice.

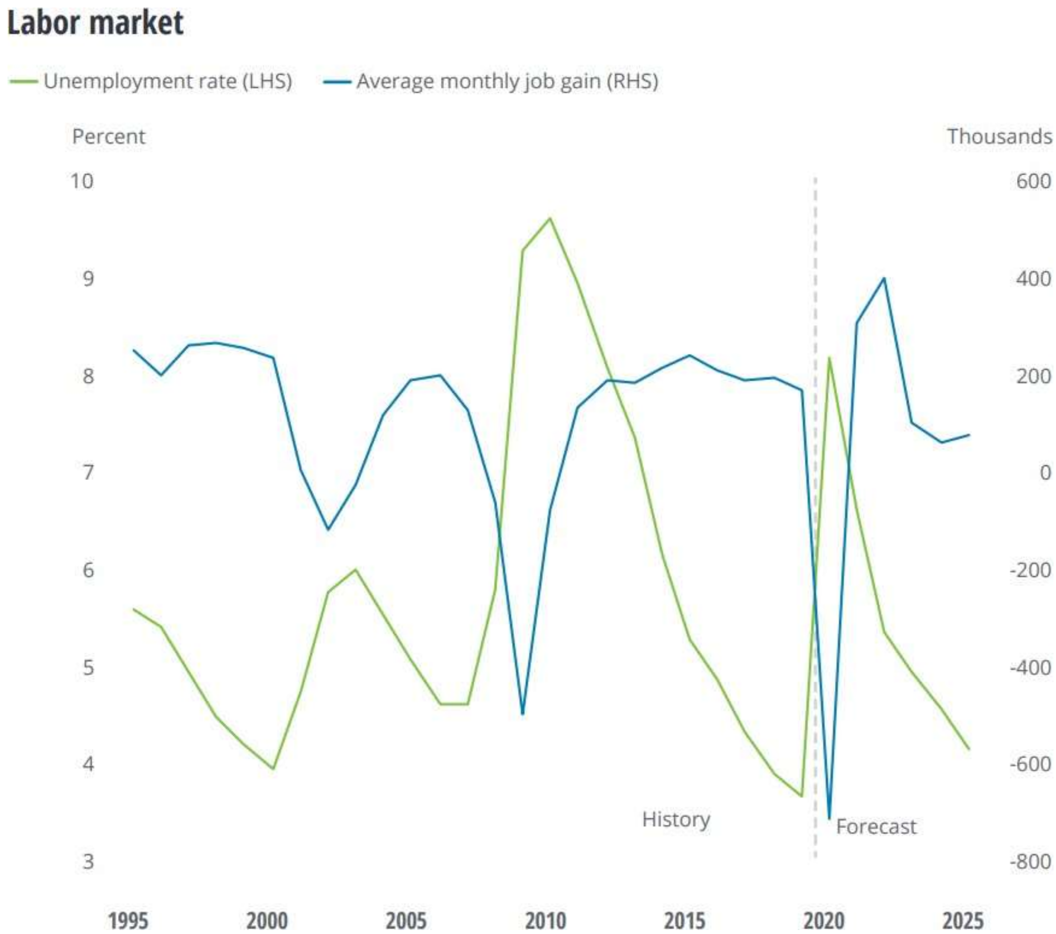


Figure 8. Labor Market Trends

Financial Markets

The Fed's actions have been one of the bright spots in the response to the pandemic. When the disease begins to spread in the United States, the financial market collapse is likely to exacerbate the country's economic problems. Swift and forceful actions by the Fed kept financial markets fluid and functioning, thus avoiding further pain. Certainly comes at a price.

Federal Reserve intervention in many different markets. Traditional concerns about the Fed buying private assets have disappeared. The Fed has created a method of direct lending from US states, counties, and cities (Municipal Liquidity Financing) and small and medium-sized businesses (High Street Loan Program). This is unprecedented: the Fed has traditionally avoided direct lending, avoiding the hassle of dealing with nonfinancial companies. Other plans aim to stabilize specific financial markets. Although the loan size of many of these loans is still only a small part of the announced level, the Fed's willingness to make loans has calmed the credit market.

However, what the Fed can do is limited. The Fed can keep the financial market going, provide liquidity to the market, and even lend directly to companies to prevent them from going bankrupt. But it cannot support the income of the unemployed, nor can it make loans to state and local governments, nor can it provide funds for necessary health care expenses. That is why Fed Chairman Jerome Powell emphasized the importance of action by Congress and the president. 18 As he noted, the Fed has "creditworthiness, not spending power." It would be foolish to expect only the Fed to act to solve this economic crisis.

In the long run, the Fed will want to get rid of its aid market. But this may happen within a few years. And since the sale of these assets will take place before the Fed will raise interest rates, we assume that the fund interest rate will remain close to zero during the five-year forecast period. We assume that as the financial market "normalizes", long-term interest rates will rise slowly. However, by 2025, the 10-year US Treasury bond yield will remain at 2.5%. Interest rates are always the most uncertain part of all forecasts: any major news is possible and will greatly change interest rates.

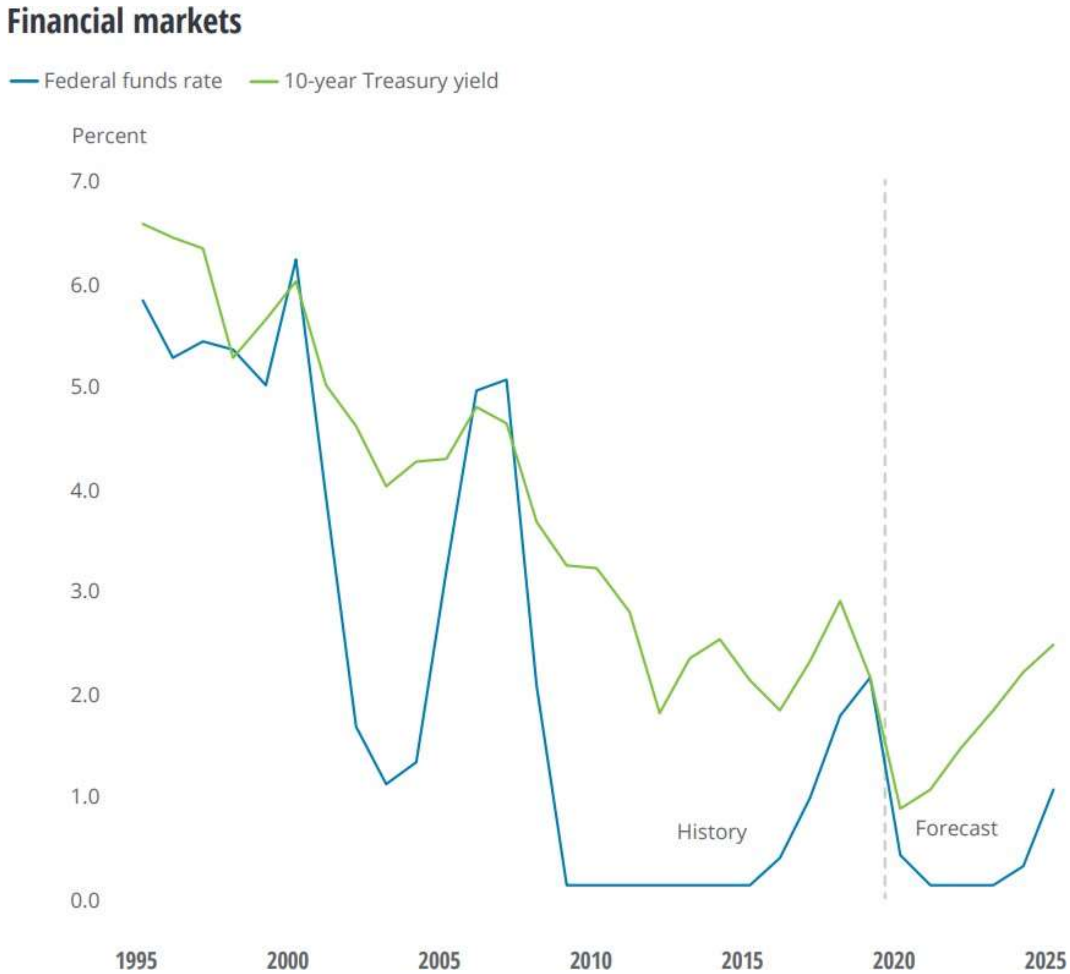


Figure 9. Financial Market Trends

Price

With the supply chain locked in, shutting down most of the US economy to combat COVID-19 can drive up prices. As consumer demand collapses, prices may drop. The supply shock of the

pandemic has clearly raised some prices. Due to problems in the supply chain that led to a shortage of consumer goods, the Consumer Price Index (CPI) for household foods increased by 4% in the second quarter, and then some changes occurred as the situation improved. This is a short-term impact, but there may be some significant long-term impacts. For example, cleanliness and social distancing requirements can drive up prices for restaurant meals, air travel, school education, and many services (like daycare) over the next year. 4,444 companies in these areas will not only face higher costs, but will also lose the ability to take advantage of economies of scale. Additionally, companies can adopt practices such as larger inventories to reduce their vulnerability to shocks. These practices will also increase prices and reduce productivity.

On the other hand, demand shocks have started to lower certain prices. This is most obvious in the energy sector, where the CPI in October was 9 or lower than the previous year's level. In recent months, the price of gasoline has been about $2.25 per gallon, which may make motorists happy, but the mileage has also been reduced. In fact, this has been a key driver of low gasoline prices. In the baseline forecast, we expect that overall demand will remain low, not only because of the pandemic, but also because there are many people who have lost their jobs.

Figure 10. Prices Trends.

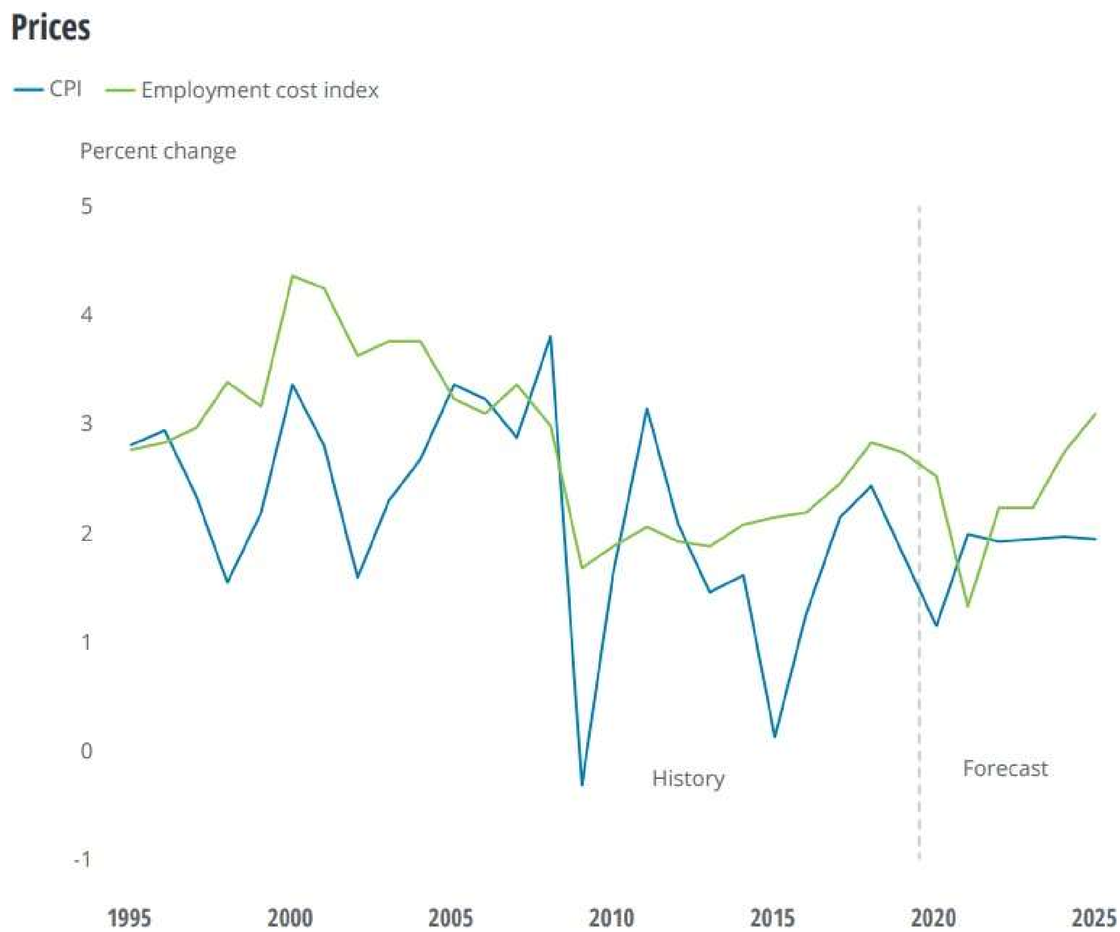


Figure 10. Price Trends

Data

Table 2. Data

Baseline:

Table 2. Data

	History						Forecast					
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Baseline												
Real GDP	2.5	3.1	1.7	2.3	3	2.2	-3.6	2	3.7	2.8	1.7	1.9
Real consumer spending	3	3.8	2.8	2.6	2.7	2.4	-3.8	3.4	3.2	2.7	2.6	2.6
Real consumer spending, durable goods	7.2	7.6	5.8	6.9	6.8	4.8	6.7	5	-12.4	5.3	7	6.7
Real consumer spending, nondurable goods	2.6	3.4	2.5	2.6	2.7	3.1	2.5	2.2	3.4	1.1	0.8	0.7
Real consumer spending, services	2.4	3.3	2.4	2	2.1	1.8	-7.4	2.1	6.9	2.8	2.4	2.3
Real investment in private housing	3.8	10.2	6.6	4	-0.6	-1.7	3.1	5.7	9.2	5.2	-5	-4.9
Real Fixed Business Investment	7.2	2.3	0.5	3.7	6.9	2.9	-4.9	1.3	4.4	2.7	2.7	3
Real inventory accumulation	86	138	25	16	53	49	-65	123	118	119	84	58
Real exports of goods and services	4.2	0.4	0.3	3.9	3	-0.1	-14.4	1.2	6.9	4.5	4.1	3.8
Real imports of goods and services	5	5.2	1.7	4.7	4.1	1.1	-10.9	4.8	3.7	4.6	4.1	2.8
Real government consumption and investment	-0.9	1.8	1.8	0.9	1.8	2.3	0.7	-6.1	2	2.9	0.2	0.4
Real federal government consumption and investment	-2.6	0	0.6	0.3	2.8	4	4.1	-1.6	-2	-1.2	-0.2	0
Real state and local government consumption and investment	0.2	2.9	2.6	1.2	1.2	1.3	-1.7	-10.3	4.6	5.6	0.4	0.6
Prices												
Consumer price index	1.6	0.1	1.3	2.1	2.4	1.8	1.2	2	1.9	2	2	1.9
Chained price index for personal consumption expenditures	1.5	0.2	1	1.8	2.1	1.5	1.1	1.9	1.9	1.9	2	1.9
Chained GDP price index	1.8	1	1	1.9	2.4	1.8	1.1	2	2	2	2	2

Employment cost index	2.1	2.1	2.2	2.5	2.8	2.7	2.5	1.3	2.2	2.2	2.7	3.1
Labor markets												
Average monthly change in employment (thousands)	214	240	210	188	192	170	-710	307	399	102	62	77
Unemployment rate (percent)	6.2	5.3	4.9	4.3	3.9	3.7	8.2	6.6	5.3	4.9	4.6	4.2
Employment to population (percent)	59	59.3	59.7	60.1	60.4	60.8	56.6	57.8	59.4	59.6	59.6	59.6
Income and wealth												
Real disposable personal income	4.1	4.2	2	3.1	3.6	2.2	5.5	-1.8	1.8	0.6	0.8	1.1
Net household wealth (US$ trillions)	88	91	96	105	106	119	128	139	141	141	140	143
Personal saving rate (percent of disposable income)	7.3	7.5	6.9	7.2	7.8	7.5	15.8	11.6	10.4	8.6	7	5.8
Corporate profits before test(with inventory valuation and capital consumption adjustments)	5.4	-2.8	-1.8	4.5	6.1	0.3	-9.6	-21.1	14.4	19.5	8.1	10.6
Housing												
Housing starts (thousands)	1,000	1,107	1,177	1,207	1,248	1,295	1,329	1,331	1,397	1,465	1,450	1,415
Total housing stock (millions)	134	135	136	137	138	140	141	142	143	145	146	147
Interest rate on 30 year fixed rate mortgage (percentage)	4.17	3.85	3.65	3.99	4.54	3.94	3.16	2.99	3.25	3.62	4	4.26
Foreign trade												
Current account balance, share of GDP (percent)	-2.1	-2.2	-2.1	-1.9	-2.2	-2.2	-3.2	-3.4	-3.1	-3.1	-3.1	-2.8
Merchandise trade balance (US$ billions)	-727	-737	-735	-797	-878	-857	-864	-1,006	-1,001	-1,022	-1,041	-1,048
Relative unit labor costs (index, 2008=100)	89.2	100.5	102.9	104.1	102.6	106.2	112.6	113.8	110	105	102.3	100.9
Financial												
Federal funds rate (percent)	0.13	0.14	0.39	0.97	1.78	2.16	0.42	0.13	0.13	0.13	0.31	1.06
Yield on 10-year Treasury note (percent)	2.54	2.14	1.84	2.33	2.91	2.14	0.87	1.07	1.47	1.84	2.22	2.48
Government												
Federal budget balance unified basis (share of GDP, percent)	-2.9	-2.6	-2.9	-3.5	-3.9	-4.5	-12.4	-9.3	-5.7	-5.1	-4.9	-4.9

Fast **Returns**

Real GDP	2.5	3.1	1.7	2.3	3	2.2	-3.5	4.5	3.3	2.4	1.
Real consumer spending	3	3.8	2.8	2.6	2.7	2.4	-3.8	5.8	3.4	2.1	2.
Real consumer spending, durable goods	7.2	7.6	5.8	6.9	6.8	4.8	6.7	7.5	-12.3	4.7	6.
Real consumer spending, nondurable goods	2.6	3.4	2.5	2.6	2.7	3.1	2.5	4.6	3.5	0.5	0.
Real consumer spending, services	2.4	3.3	2.4	2	2.1	1.8	-7.4	4.4	7	2.2	1.
Real investment in private housing	3.8	10.2	6.6	4	-0.6	-1.7	3.6	8.9	10.8	2.7	1.
Real Fixed Business Investment	7.2	2.3	0.5	3.7	6.9	2.9	-4.9	4.5	3	2.1	2.
Real inventory accumulation	86	138	25	16	53	49	-65	185	100	97	8
Real exports of goods and services	4.2	0.4	0.3	3.9	3	-0.1	-13.6	9.9	9	3.7	3.
Real imports of goods and services	5	5.2	1.7	4.7	4.1	1.1	-10.6	11	5.1	2.6	2.
Real government consumption and investment	-0.9	1.8	1.8	0.9	1.8	2.3	0.7	-6.1	2	2.9	0.
Real federal government consumption and investment	-2.6	0	0.6	0.3	2.8	4	4.1	-1.6	-2	-1.2	0.
Real state and local government consumption and investment	0.2	2.9	2.6	1.2	1.2	1.3	-1.7	-10.3	4.6	5.6	0.
Prices											
Consumer price index	1.6	0.1	1.3	2.1	2.4	1.8	1.2	2.3	2.2	2.1	2.
Chained price index for personal consumption expenditures	1.5	0.2	1	1.8	2.1	1.5	1.2	2.2	2.2	2.1	2.
Chained GDP price index	1.8	1	1	1.9	2.4	1.8	1.2	2.2	2.4	2.4	2.
Employment cost index	2.1	2.1	2.2	2.5	2.8	2.7	2.5	1.8	2.2	3.1	3.
Labor markets											
Average monthly change in employment (thousands)	214	240	210	188	192	170	-680	509	295	95	6

Unemployment rate (percent)	6.2	5.3	4.9	4.3	3.9	3.7	8.1	5.9	4.7	3.9	3.5	3.2
Employment to population (percent)	59	59.3	59.7	60.1	60.4	60.8	56.8	58.9	60	60.2	60.3	60.2
Income and wealth												
Real disposable personal income	4.1	4.2	2	3.1	3.6	2.2	5.5	-1.8	1.7	1.2	1.2	1.2
Net household wealth (US$ trillions)	88	91	96	105	106	119	129	149	146	140	137	138
Personal saving rate (percent of disposable income)	7.3	7.5	6.9	7.2	7.8	7.5	15.7	9.6	8.1	7.3	6.6	5.8
Corporate profits before test(with inventory valuation and capital consumption adjustments)	5.4	-2.8	-1.8	4.5	6.1	0.3	-8.5	2.3	9	10.5	7	3.7
Housing												
Housing starts (thousands)	1,000	1,107	1,177	1,207	1,248	1,295	1,355	1,452	1,506	1,524	1,510	1,486
Total housing stock (millions)	134	135	136	137	138	140	141	142	143	145	146	148
Interest rate on 30 year fixed rate mortgage (percentage)	4.17	3.85	3.65	3.99	4.54	3.94	3.17	3.1	3.57	4.11	4.66	4.88
Foreign trade												
Current account balance, share of GDP (percent)	-2.1	-2.2	-2.1	-1.9	-2.2	-2.2	-3.1	-3.3	-2.9	-2.6	-2.3	-2.2
Merchandise trade balance (US$ billions)	-727	-737	-735	-797	-878	-857	-852	-976	-967	-968	-972	-991
Relative unit labor costs (index, 2008=100)	89.2	100.5	102.9	104.1	102.6	106.2	112.7	113.6	109.4	105.4	103.4	100.6
Financial												
Federal funds rate (percent)	0.13	0.14	0.39	0.97	1.78	2.16	0.42	0.13	0.13	0.75	1.56	1.63
Yield on 10-year Treasury note (percent)	2.54	2.14	1.84	2.33	2.91	2.14	0.88	1.23	1.79	2.33	2.88	3.1
Government												
GDP percent												

Long Slog

Real GDP	2.5	3.1	1.7	2.3	3	2.2	-3.8	-0.2	1.5	1.5	1.3	1.6
Real consumer spending	3	3.8	2.8	2.6	2.7	2.4	-4	1.5	1.3	1.1	1.5	1.8
Real consumer spending, durable goods	7.2	7.6	5.8	6.9	6.8	4.8	6.5	3.1	-14.1	3.7	5.8	5.9
Real consumer spending, nondurable goods	2.6	3.4	2.5	2.6	2.7	3.1	2.4	0.3	1.4	-0.5	-0.2	0
Real consumer spending, services	2.4	3.3	2.4	2	2.1	1.8	-7.5	0.1	4.9	1.2	1.3	1.6
Real investment in private housing	3.8	10.2	6.6	4	-0.6	-1.7	1.1	-5.2	0.7	0.8	0.8	0.8
Real Fixed business Investment	7.2	2.3	0.5	3.7	6.9	2.9	-5.2	-1.7	1.7	1.5	1.9	2.2
Real inventory accumulation	86	138	25	16	53	49	-65	75	52	72	59	43
Real exports of goods and services	4.2	0.4	0.3	3.9	3	-0.1	-14.4	0.3	3.8	3	2.9	2.9
Real imports of goods and services	5	5.2	1.7	4.7	4.1	1.1	-11.4	2.8	2.9	3.2	2.8	2.3
Real government consumption and investment	-0.9	1.8	1.8	0.9	1.8	2.3	0.7	-6.1	2.2	3.1	0.3	0.4
Real federal government consumption and investment	-2.6	0	0.6	0.3	2.8	4	4.1	-1.6	-1.4	-0.6	0.1	0.2
Real state and local government consumption and investment	0.2	2.9	2.6	1.2	1.2	1.3	-1.7	-10.3	4.6	5.6	0.4	0.6
Prices												
Consumer price index	1.6	0.1	1.3	2.1	2.4	1.8	1.1	1.7	1.7	1.8	1.8	1.7
Chained price index for personal consumption expenditures	1.5	0.2	1	1.8	2.1	1.5	1.1	1.6	1.7	1.8	1.8	1.7
Chained GDP price index	1.8	1	1	1.9	2.4	1.8	1	1.6	1.8	2	1.9	1.8
Employment cost index	2.1	2.1	2.2	2.5	2.8	2.7	2.4	1.1	2.6	2.3	1.9	2.2
Labor markets												
Average monthly change in employment (thousands)	214	240	210	188	192	170	-830	-113	296	203	201	167
Unemployment rate (percent)	6.2	5.3	4.9	4.3	3.9	3.7	8.5	8.2	7.3	6.5	6.1	5.6
Employment to population (percent)	59	59.3	59.7	60.1	60.4	60.8	56.1	55	56	57.1	57.7	58.2
Income and wealth												

Real disposable personal income	4.1	4.2	2	3.1	3.6	2.2	5.1	-2.4	1.8	0.9	1.3	1.3
Net household wealth (US$ trillions)	88	91	96	105	106	119	125	125	123	125	133	143
Personal saving rate (percent of disposable income)	7.3	7.5	6.9	7.2	7.8	7.5	15.6	12.5	12.9	12.7	12.6	12.2
Corporate profits before test(with inventory valuation and capital consumption adjustments)	5.4	-2.8	-1.8	4.5	6.1	0.3	-7.1	-27.9	-13.8	3.3	3.1	6.6
Housing												
Housing starts (thousands)	1,000	1,107	1,177	1,207	1,248	1,295	1,320	1,267	1,258	1,250	1,242	1,234
Total housing stock (millions)	134	135	136	137	138	140	141	142	143	144	145	146
Interest rate on 30 year fixed rate mortgage (percentage)	4.17	3.85	3.65	3.99	4.54	3.94	3.16	2.94	2.91	2.91	2.97	2.98
Foreign trade												
Current account balance, share of GDP (percent)	-2.1	-2.2	-2.1	-1.9	-2.2	-2.2	-3.1	-3.2	-3.1	-3.2	-3.1	-3
Merchandise trade balance (US$ billions)	-727	-737	-735	-797	-878	-857	-848	-943	-962	-1,000	-1,019	-1,024
Relative unit labour costs (index, 2008=100)	89.2	100.5	102.9	104.1	102.6	106.2	112.6	113.9	110.3	105.3	102.2	100
Financial												
Federal funds rate (percent)	0.13	0.14	0.39	0.97	1.78	2.16	0.42	0.13	0.13	0.13	0.13	0.13
Yield on 10-year Treasury note (percent)	2.54	2.14	1.84	2.33	2.91	2.14	0.85	0.81	0.98	1.12	1.19	1.2
Government												
Federal budget balance unified basis (share of GDP, percent)	-2.9	-2.6	-2.9	-3.5	-3.9	-4.5	-12.4	-10	-7.2	-7.1	-7.3	-7.5

Conclusion

The importance of measurement the country's value proves to perform as a welfare measure, because it is claimed to incorporate all the last product and services created among the country's boundaries. The researchers have noticed certain things in the trends that they need issue establishing and grip this common belief, because the economy and the GDP remains questionable in terms of acceptance and legitimacy of new and traditional approach. Though several of the roles related to the world economy are illegal, researchers have found that an attainable contribution to those national GDP might prove helpful to the country. From increasing GDP of the country to the assembly of bulk capital expenditure, there's a continuation of the event and growth of operations and management of the country. However, because of ancient practices of conducting value calculations, and the factor analysis in GDP, remains a question. The findings counsel that the factors need to be enclosed within the country's GDP, because it applies to the importance bringing certainty in the calculations, particularly in developing countries. Therefore, being convinced with the factor research is a bit tedious, the difficulties faced during the possession of data and analysis can be overcome by the benefits of the approach for understanding the working of the calculations and the research for understanding the economic reviews.

Since the past few months the disbursal on users has been astonishingly robust and expanded timelines for providing unemployment funding specially prepared for concert performers will cease to be paid in January. This is in addition to the unemployment insurance benefit of the loss of $600 which is a major concern for the 20 million holders of this funding will face a lot of issues. This can be partially because of the large savings that befell at the start of the epidemic, wherever even the fired hyperbolic the savings.

Job creation, albeit a slow one, continues to be large enough to feature to its financial gain - and to fund shopper spending. Within the third quarter of 2020, product accounted for 34% of shopper disbursal with services falling capable 66%. Disbursal is probably going to still take away from what shoppers see as dangerous - entertainment, food service, shelter

- and potential uses aloof from the general public eye. (Untill the vaccination) disbursal on solids on solids was terribly robust with a 13% increase from Jan to March. Even before the vacines is wide distributed, consumers will eliminate their would like for solid merchandise that replace the employment of services.

The housing sector has affected into a wider economy when the epidemic. Robust economic positions for low-income workers, low-income mortgages, and time periods over home age. Would like more room as device continues. The calculable 30-year money loan was below 3% since July. This has been a serious consider attracting shoppers despite the weak labor market.

Whereas the millennial wave of home-buying have shown positive bend in the housing sector for a short or average term, semi permanent foundations make sure that housing isn't a major driver of economic growth. The retardation in increase means the demand for housing can increase slightly when the initial begin of housing construction as the impact of the epidemic diminishes on an initial basis. The aged population means quite 1 / 4 of existing across the country

Closely-held homes are possible to be no inheritable within the next twenty years as current house owner move in or out of their homes.
Business purchases of knowledge process instrumentality, for example, hyperbolic by 5% as value declined in the second quarter. However this wasn't enough to stay the general investment from falling. The investment in buildings continuing to fall but it was terminated by the continuous growth of data analysis (big data) technologies and also the reversal of alternative forms of investment. There's uncertainty about the disease, raising tough inquiries to declare any business, customer, and cost. Business consumption will stay soft till the final economy begins to recover firmly by mid-2021.
Several businesses will got to invest in services until it result in profitability due to the heavy losses incurred in the past. The distribution of "strategic" industries will be encouraged by the government, particularly medical-related industries love tools and pharmaceuticals, expression it's even within the unskillfulness of gaining higher state management in these areas in the coming crisis. Businesses may take into account investment in ways in which to form their offer chains stronger, together with redistribution, provider supply, and / or increasing the list of vital issues.
Facilitate forestall excessive obstructive of the merchandise however scale back potency and increase prices for traditional operation. The global GDP has observed that the exports have increased to 34 percent in the year 2012 which is far better than they were in 1970 which was only 13 percent.

Business purchases of data method instrumentality, for example, hyperbolic by 5% as price declined within the second quarter but this wasn't enough to remain the overall investment from falling. The investment in buildings continued to fall however was halted by the continuing growth of data process instrumentality and additionally the reversal of various varieties of investment. There's uncertainty about the disease, raising robust inquiries to declare any business, customer, and cost.

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Annexure

Consumer Spending

	History						Forecast					
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Real consumer spending	3.0	3.8	2.8	2.6	2.7	2.4	-3.8	3.4	3.2	2.7	2.6	2.6
Real consumer spending, durable goods	7.2	7.6	5.8	6.9	6.8	4.8	6.7	5.0	-12.4	5.3	7.0	6.7
Real consumer spending, nondurable goods	2.6	3.4	2.5	2.6	2.7	3.1	2.5	2.2	3.4	1.1	0.8	0.7
Real consumer spending, services	2.4	3.3	2.4	2.0	2.1	1.8	-7.4	2.1	6.9	2.8	2.4	2.3
Net household wealth (US$ trillions)	88	91	96	105	106	119	128	139	141	141	140	143
Unemployment rate	6.2	5.3	4.9	4.3	3.9	3.7	8.2	6.6	5.3	4.9	4.6	4.2
Consumer price index	1.6	0.1	1.3	2.1	2.4	1.8	1.2	2.0	1.9	2.0	2.0	1.9

Annexure 1

Housing

	History						Forecast					
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Real investment in private housing	3.8	10.2	6.6	4.0	-0.6	-1.7	3.1	5.7	9.2	5.2	-5.0	-4.9
Housing starts (millions)	1.00	1.11	1.18	1.21	1.25	1.30	1.33	1.33	1.40	1.46	1.45	1.41
Stock of houses (millions)	134.4	135.3	136.3	137.3	138.5	139.6	140.8	142.0	143.2	144.6	145.9	147.2
30-year fixed mortgage rate (percent)	4.2	3.9	3.6	4.0	4.5	3.9	3.2	3.0	3.2	3.6	4.0	4.3

Annexure 2

Business Investment

Annexure 3

	History						Forecast					
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Real fixed business investment	7.2	2.3	0.5	3.7	6.9	2.9	-4.9	1.3	4.4	2.7	2.7	3.0
Real inventory investment (US$ billions)	86.3	137.6	24.5	15.8	53.4	48.6	-64.9	123.5	118.2	118.6	84.5	58.4
Employment cost index	2.1	2.1	2.2	2.5	2.8	2.7	2.5	1.3	2.2	2.2	2.7	3.1
Corporate pro?ts before tax	5.4	-2.8	-1.8	4.5	6.1	0.3	-9.6	-21.1	14.4	19.5	8.1	10.6
Yield on 10-year Treasury note	2.5	2.1	1.8	2.3	2.9	2.1	0.9	1.1	1.5	1.8	2.2	2.5

Annexure 3

Foreign Trade

Annexure 4

	History						Forecast				
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Real exports of goods and services	4.2	0.4	0.3	3.9	3.0	-0.1	-14.4	1.2	6.9	4.5	4.1
Real imports of goods and services	5.0	5.2	1.7	4.7	4.1	1.1	-10.9	4.8	3.7	4.6	4.1
Current account balance (share of GDP)	-2.1	-2.2	-2.1	-1.9	-2.2	-2.2	-3.2	-3.4	-3.1	-3.1	-3.1
Merchandise trade balance (US$ billions)	-727	-737	-735	-797	-878	-857	-864	-1006	-1001	-1022	-1041
Relative unit labor costs (index, 2008=100)	89.2	100.5	102.9	104.1	102.6	106.2	112.6	113.8	110.0	105.0	102.3

Annexure 4

Government

Annexure 5

	History						Forecast				
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Real government consumption and investment	-0.9	1.8	1.8	0.9	1.8	2.3	0.7	-6.1	2.0	2.9	0.2
Real federal government consumption and investment	-2.6	0.0	0.6	0.3	2.8	4.0	4.1	-1.6	-2.0	-1.2	-0.2
Real state and local government consumption and investment	0.2	2.9	2.6	1.2	1.2	1.3	-1.7	-10.3	4.6	5.6	0.4
Federal budget balance, unified basis (share of GDP)	-2.9	-2.6	-2.9	-3.5	-3.9	-4.5	-12.4	-9.3	-5.7	-5.1	-4.9

Annexure 5

Labor Market

Annexure 6

	History						Forecast					
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Average monthly change in employment (thousands)	214	240	210	188	192	170	-710	307	399	102	62	77
Unemployment rate (percent)	6.2	5.3	4.9	4.3	3.9	3.7	8.2	6.6	5.3	4.9	4.6	4.2
Employment-to-population ratio (percent)	59.0	59.3	59.7	60.1	60.4	60.8	56.6	57.8	59.4	59.6	59.6	59.6
Employment cost index	2.1	2.1	2.2	2.5	2.8	2.7	2.5	1.3	2.2	2.2	2.7	3.1

Annexure 6

Financial Markets

Annexure 7

	History						Forecast					
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Federal funds rate	0.13	0.14	0.39	0.97	1.78	2.16	0.42	0.13	0.13	0.13	0.31	1.06
Yield on 10-year Treasury note	2.54	2.14	1.84	2.33	2.91	2.14	0.87	1.07	1.47	1.84	2.22	2.48
Interest rate on 30-year fixed-rate mortgage	4.17	3.85	3.65	3.99	4.54	3.94	3.16	2.99	3.25	3.62	4.00	4.26
Net household wealth (US$ trillions)	88	91	96	105	106	119	128	139	141	141	140	143

Annexure 7

Prices

Annexure 8

	History						Forecast					
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Chained GDP price index	1.8	1.0	1.0	1.9	2.4	1.8	1.1	2.0	2.0	2.0	2.0	2.0
Consumer price index	1.6	0.1	1.3	2.1	2.4	1.8	1.2	2.0	1.9	2.0	2.0	1.9
Chained price index for personal consumption expenditures	1.5	0.2	1.0	1.8	2.1	1.5	1.1	1.9	1.9	1.9	2.0	1.9
Employment cost index	2.1	2.1	2.2	2.5	2.8	2.7	2.5	1.3	2.2	2.2	2.7	3.1

Annexure 8