

United States of America

Description



The United States of America is composed of 50 nation states, totaling 9.8 million km², making the 3rd largest country in the world (by total area). The country is the main political, economic, technological and military power in the world, with a total output close to a quarter of the world's total and military expenditures around 4% of GDP. The country was born in 1776 with the declaration of independence from Britain and has been growing ever since.

Economic Overview



The US economy was in the longest expansion on record and it was expected to continue until 2021. The expansion was backed by robust employment growth, reflected in historically low values of unemployment levels that have allowed consumer expenditure and GDP to grow steadily in the past few years. Unemployment pre covid-19 was sitting at 3.5% with salaries growing at a near average of 1%.



However, recent economic developments, related with the impact from the coronavirus changed the entire Outlook. According to the World Economic Outlook from the IMF, it is expected that economic output will decline by 5.9% due to the economic impact of the coronavirus pandemic, with an accelerated recover of 4.7% in 2021. The impact is felt mainly through the direct impact of the pandemic that forced people into social isolation, leaving whole sectors of the economy completely closed. The unemployment is expected to surge to an estimated level of around 15%, given that in the first 5 weeks of containment the number of unemployment claims increased exponentially like never before in the history of the country, reaching 26 million who filled for unemployment benefits, which is more than the 22 million jobs added since the 2009 when the economy started to recover from the financial crisis.

Capital: Washington D.C

Economic Indicators	Value
USD GDP Bi (June 2019)	21,340
Expected GDP Growth (Sep 2019)	2%
USD GDP/Capita (Dez 2018)	62,605
Unemployment % (Jan 2020)	3.50%
Inflation (Jan 2020)	2.30%
Ind Prod YoY% (Sep 2019)	-0.10%
Exports % GDP (Dez 2018)	7.87%
Imports % GDP (Dez 2018)	12.36%
Manufacturing PMI (Sep 2019)	0.48
Services PMI (Sep 2019)	0.51
Non Manufacturing PMI (Sep 2019)	52.6
Average Hourly Earnings YoY, % (Sep 2019)	2.90%

On a more positive note, both the Federal Reserve and the U.S. government stepped up their response to the crisis like never seen before. The Federal Reserve quickly brought down the reference rate leaving the target at 0%-0.25%, increased the available liquidity for financial counterparties and announced that it would purchase as many debt securities as necessary to maintain financial stability. The government passed an historic bill of USD 2.2 tn to help several sectors of the economy, American households through direct payments, but mainly to preserve employment through loan schemes guarantees. The government latter passed another bill of USD 484 bn to add more funding to the previously announced programs. It is expected than in the near future a third fiscal stimulus will be approved.

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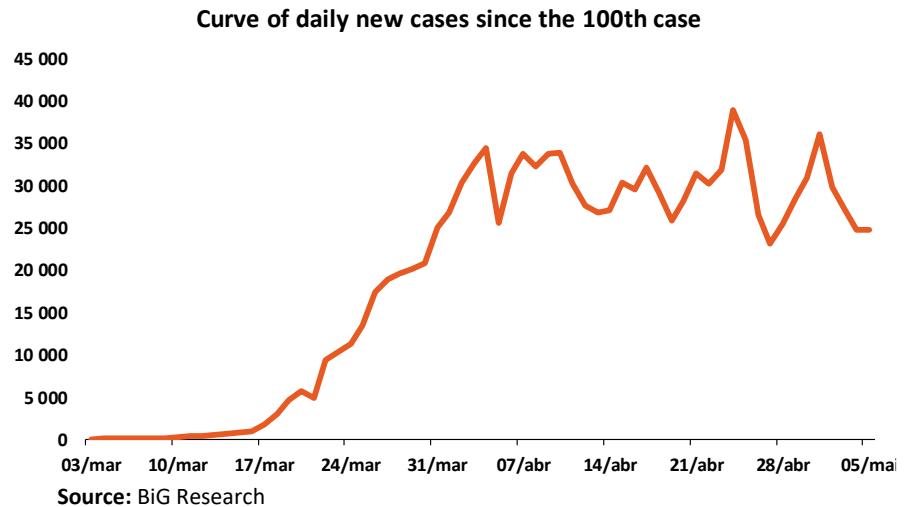
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▲ Coronavirus

Population: **330mn**/ Cases: **1.2mn**/ Deaths: **72,334**/ Recoveries: **201,152**



Government measures:

- **January 31:** The American Health Department announces the coronavirus is a public health emergency. Restriction on travelers coming from China to the U.S.
- **March 4:** USD 8.3 bn are made available to help the health system, and to support the development of a vaccine and treatment medicine.
- **March 11:** Restriction in the entry of foreigners that had been in Europe for the last couple weeks.
- **March 13:** Donald Trump classifies the outbreak as a National Emergency, conceding authority to the Health Department to relax restrictions on the limit of access to health services (Medicare, Medicaid), and gave permission to free up to USD 50 bn in funds to fight the outbreak.
- **March 16:** Many states announced the closure of stores. In 33 states the schools were closed.
- **March 20:** Trump invokes the Defense Production Act.
- **March 25:** The Senate passed a massive USD 2 tn stimulus package that is meant to soften the economic blow of the coronavirus pandemic. The measure provides billions of dollars in credit for struggling industries, a significant boost to unemployment insurance and direct cash payments to Americans.
- **April 16:** The U.S. government presented a three-stage prescription for restarting normal life.
- **April 21:** Donald Trump announced he will temporarily suspend immigration to the U.S. during the pandemic.
- **April 22:** The Senate passed a USD 484 bn stimulus package to reinforce the previous stimulus by supporting small businesses, increase test capacity and help hospital.

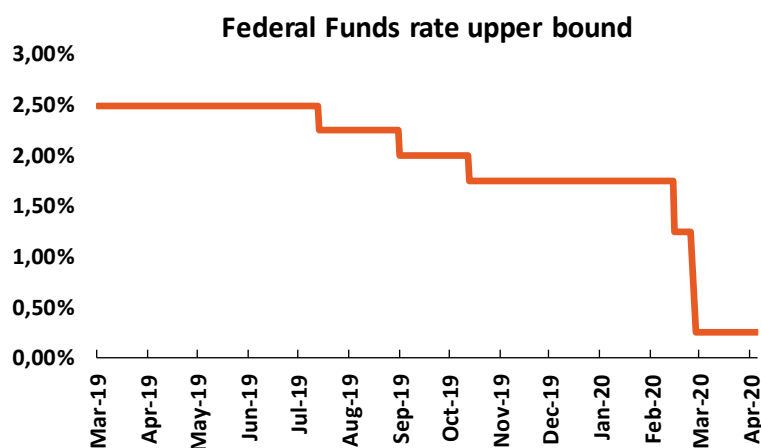
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Federal Reserve (Fed) measures:

- **March 3:** The Fed cut the reference rate by 0.5%, leaving the target at 1-1.25%.
- **March 12:** The central bank added USD 1.5 tn to its liquidity system to provide funding to lenders.
- **March 15:** Emergency cut of 1% on the federal funds rate, leaving the target at 0-0.25% and announcement of the purchase of bonds in the amount of USD 700 bn.
- **March 17:** Federal Reserve Board announced establishment of a Primary Dealer Credit Facility (PDCF) to support the credit needs of households and businesses.
- **March 18:** The Fed establishes Money Market Mutual Fund Liquidity Facility (MMLF) to support the flow of credit to economic agents.
- **March 19:** Federal Reserve announces the establishment of temporary USD liquidity arrangements with other central banks.
- **March 23:** Fed pledges asset purchase with no limit. The Fed also said that it would add corporate bonds to its asset purchases. The Fed originally said participants in the corporate bond-buying facility must have at least BBB credit rating as of March 22. However, it later opened the program to investment-grade companies that have recently been dropped to "junk" rating. Firms must be rate at least BB- at the date of the purchase.
- **March 26:** Federal Reserve offers regulatory reporting relief to small financial institutions affected by the coronavirus.
- **March 31:** The central bank announces the establishment of a temporary FIMA Repo Facility to help support the smooth functioning of financial markets.
- **April 6:** The Fed established a facility to facilitate lending to small businesses via the Small Business Administration Paycheck Protection Program (PPP) by providing term financing backed by PPP loans.
- **April 8:** The Fed announced, due to extraordinary disruptions from the coronavirus, that it will temporarily and narrowly modify the growth restriction on Wells Fargo so that it can provide additional support to small businesses.
- **April 9:** The Federal Reserve takes additional actions to provide up to USD 2.3 tn in loans to support the economy.



Source: Federal Reserve

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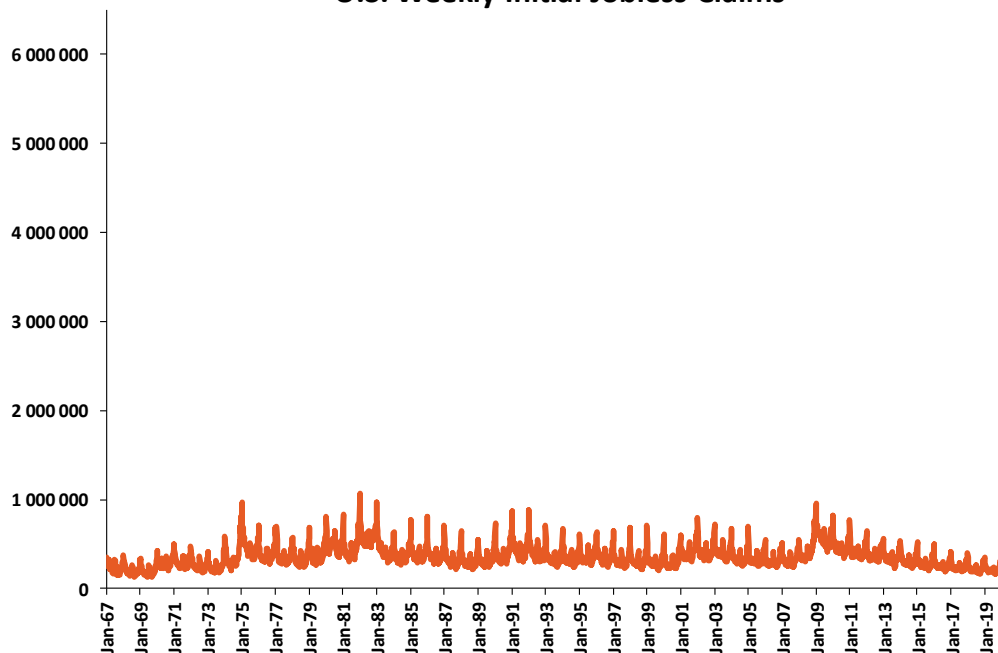
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▲ Economic Impact from Coronavirus

The Covid-19 pandemic poses unprecedented health, social, financial and economic risks. The priority now is to contain the spread of the virus but unfortunately there is a price to pay. The necessary containment measures applied to limit the spread of the virus are causing a dramatic decline in economic activity.

U.S. Weekly Initial Jobless Claims



Source: Bureau of Labor Statistics

The presence of the virus in large extent in many states led to the confinement of the population throughout the country. The closure of businesses and production is leaving long lasting scars in the economy. The number of weekly jobless claims, that is, the number of Americans that apply for unemployment subsidy in each week has reached record levels never seen before in any other major crisis. Until March 2020, the highest level on record was 695,000 claims in October 1982. On March 28, a total of 6.6 million people filed initial unemployment claims, more than double the roughly 3.3 million the previous week (March 21).

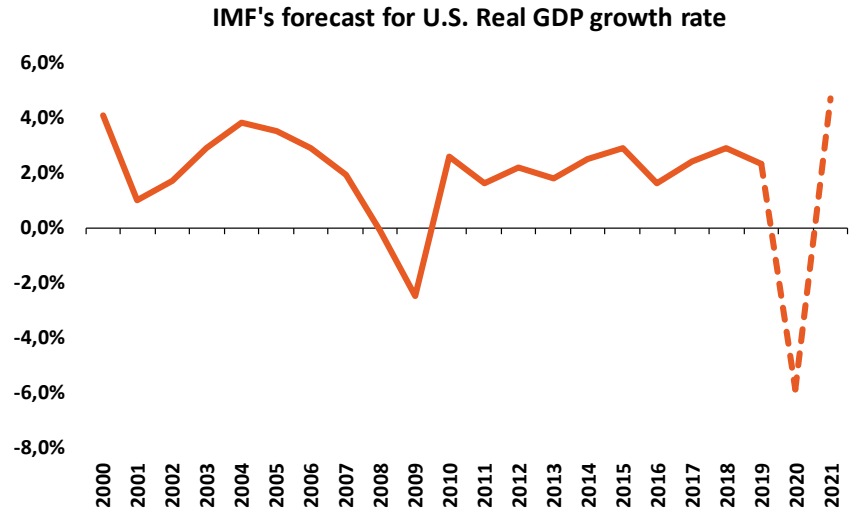
To put the figures in some perspective, it took around six months to add 10 million people to the unemployment rolls during the Great Recession of 2008/09. Currently as of May 6, the number of Americans who've filed for unemployment over the last five weeks has reached 26 million. Which is above the 22.442 million jobs added to payrolls since November 2009, when the U.S. economy started to recover from the financial crisis.

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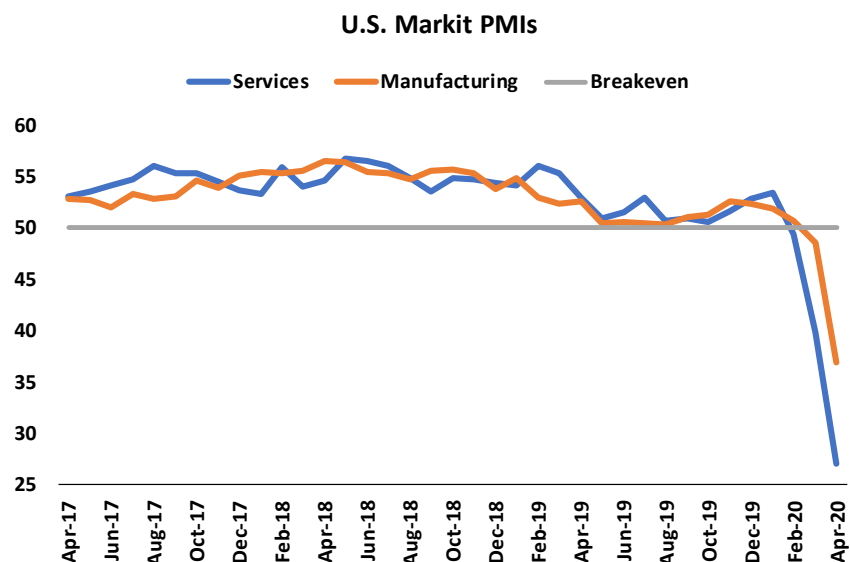
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According to the World Economic Outlook from the IMF, it is expected that economic output will decline by 5.9% due to the economic impact of the coronavirus pandemic, with an accelerated recover of 4.7% in 2021.



Source: IMF

The IMF forecast is a reasonable indication of the impact from the coronavirus crisis will leave in the country. Surveys of purchasing managers pointed to plummeting economic activity both in March and April. The services and manufacturing PMIs which for the last years have been always above the 50 threshold – level for which above that value the sector is expected to expand and for values below it is expected to contract – are now both sitting at deep contraction territory. The services PMI is currently at a record low of 27 and the manufacturing PMI at 36.9 at the end of April.



Source: Markit

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Government response:

At this point there is no doubt that the economy is moving towards its deepest recession since the Great Depression. Now the question is to what extent will the recession leave long lasting scars due to its deflationary nature and its impact in the labor market. Therefore, it is essential that the government supports the economy by providing liquidity to avoid the failure of companies and consequently a high structural level of unemployment. This is essential to guarantee a rapid recover because as long as companies are preserved the loss employment can be recaptured when the economic activity returns to its normal state.

At the end of March the U.S. Senate passed a USD 2.2 tn emergency relief package, marking it the biggest rescue deal in the U.S. history. The package includes direct payment of up to USD 1,200 to American households that qualify. It also includes loans for big corporations, which includes the bail out of the Aerospace sector: USD 25 bn for passenger air carriers, USD 4 bn for cargo air carriers and USD 17 bn for businesses that work in national security. To preserve the employment in the small businesses, a funding of USD 367 bn was made available for small companies through credit with low interest rate, and if the companies preserve the employment of their workers the loans can be forgiven. The funding for small businesses received such a high demand that in less than two weeks the total amount available was already totally subscribed.

Weeks later the Senate approved a new coronavirus aid of USD 484 bn for small businesses and hospitals and more funding for testing, leading to a total fiscal expansion of roughly USD 2.7 tn, or, 12.4% of 2019 GDP.

Emergency Relief Package, March 26	
Amount	Description
USD 560 bn	Provide up to USD 1,200 in direct relief for American adults
USD 500 bn	Lending program for Big corporations
USD 367 bn	Funding for small businesses (Paycheck Protection Program)
USD 339.8 bn	State & local governemnts
USD 153.5 bn	Public health
USD 43.7 bn	Education/others
USD 26 bn	Safety net
Second Coronavirus Aid, April 21	
Amount	Description
USD 310 bn	Additional funding for the Paycheck Protection Program
USD 75 bn	Funding for hospitals
USD 60 bn	Emergency disaster loans and grants
USD 25 bn	Funding to increase testing for coronavirus

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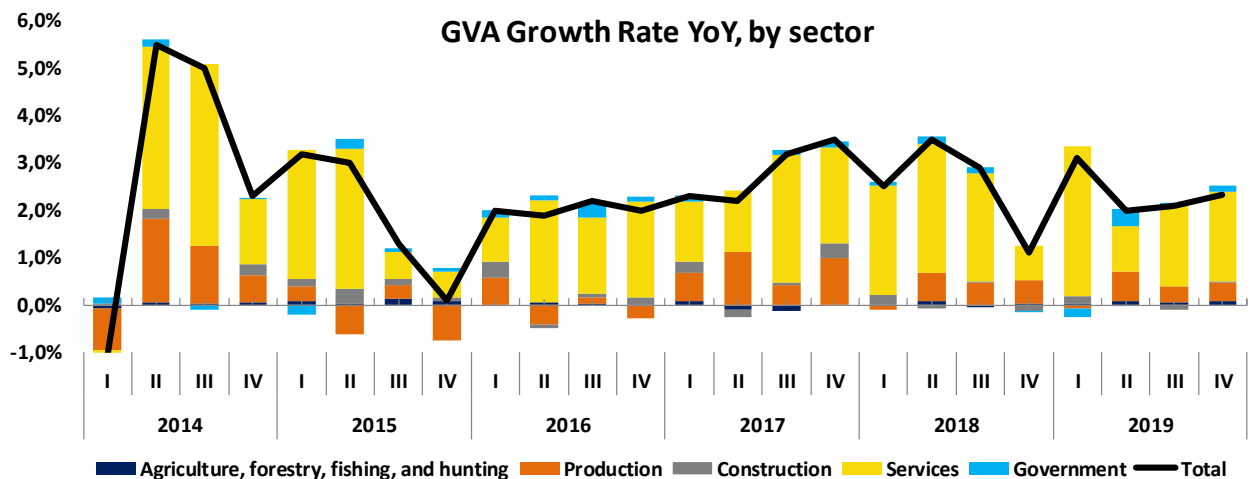
▲ Economic analysis

1. GDP Breakdown

Analyzing GDP growth over the past 5 years, services have been the main driver of growth, followed by production and Government. The service sector has contributed to GDP growth with an average of 1.88% YoY since 2014.

Production is an important sector in the US; however, it went through some periods of contraction. Since the first quarter of 2018 it has been consistently contributing positively to the economic growth. As of Q4 2019, production added 0.4% to the economic expansion.

The average growth rate of GDP was 2.42% in the period of analysis, which is in line with 2.3% YoY GDP growth rate in the 4Q 2019.



Source: Bureau of Economic Analysis

1.1 Services

Looking at the composition of the service sector, the main elements are Professional and Business Services; and Finance and real estate related services, although their contributions have been somewhat unstable over the years. Educational and Health, services and Information have also displayed a significant relevance when evaluating this sector.

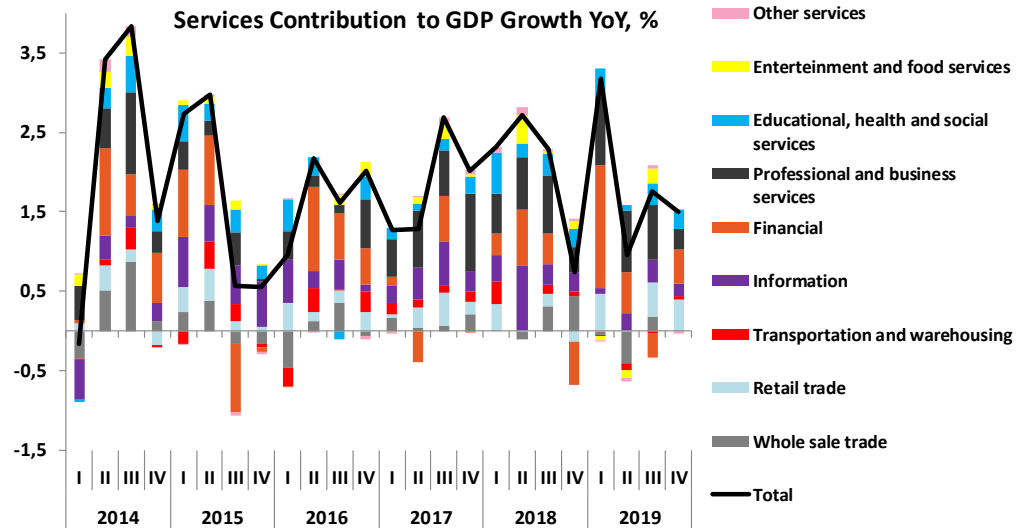
When looking at the GVA graph, the fourth quarter of 2018 saw a symbolic reduction in growth trend, basically because the service sector shrank. The cause of that reduction was the negative contribution of the Finance and real estate related services. Adding to that almost all the other major segments underperformed in that quarter, and one should take into consideration the fact that it was a time of high uncertainty regarding the world economy, which resulted in a massive drop in the financial market.

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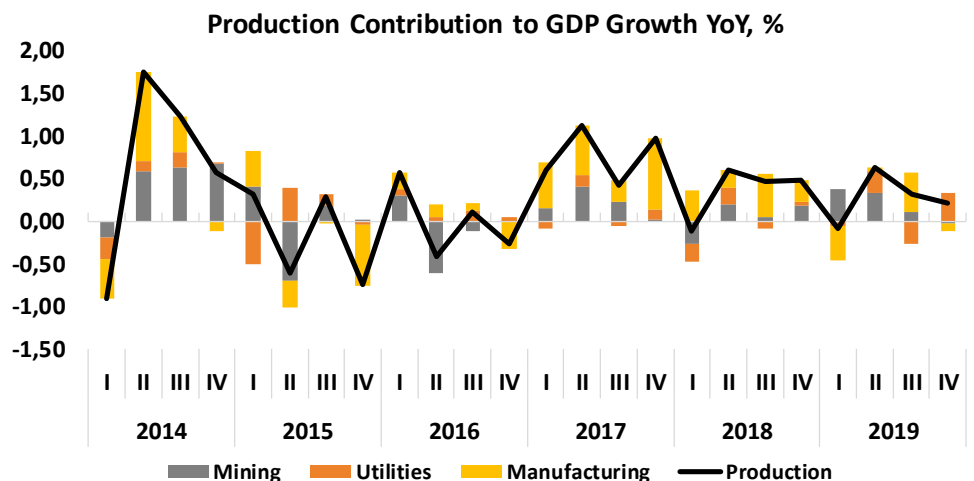
After the “blood bath” of the end of 2018, the following year has shown to be much brighter. The first quarter of 2019 recovered extremely fast with an increase in the services sector of 3.17% YoY. The contributor to this recovery was an extreme increase in the Financial and real estate segment, adding 1.55 percentage points.



Source: Bureau of Economic Analysis

1.2 Production

Production has been highly volatile in recent years, reflecting the trend that the manufacturing is following. Production has been performing better from the first quarter of 2017 onwards (0.5% YoY on average against 0.16% YoY in the previous period) and given its dependence over the manufacturing sector, it seems that Donald Trump’s policies have not been penalizing the manufacturing sector as many feared.



Source: Bureau of Economic Analysis

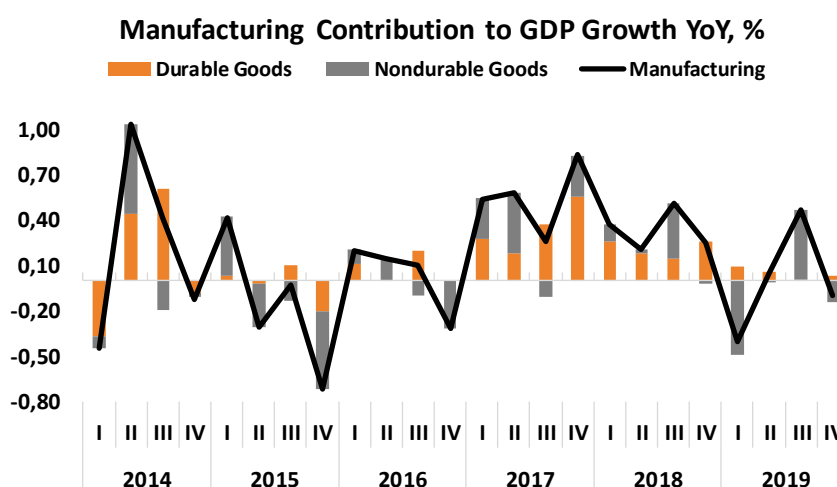
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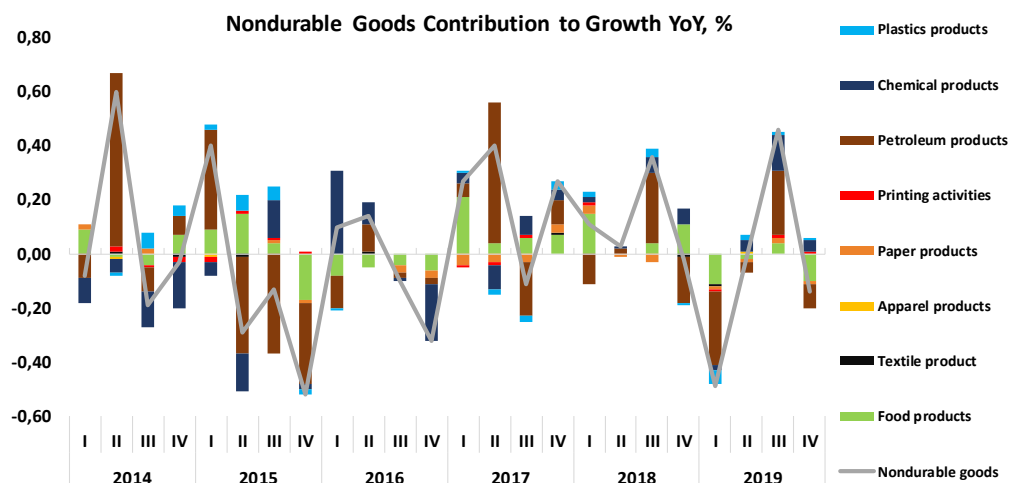
1.2.1 Manufacturing

From the first quarter of 2017 until the last quarter of 2018, the manufacture industry performed exceptionally well, contributing 0.33% YoY on average to economic growth per quarter. However, in the first quarter of 2019, it plunged, dragging growth down by 0.4% YoY. This was due to a significant drop in nondurable goods production driven by a reduction in refined petroleum production. The segment has recovered in the third quarter, however, recent event (price war between Saudi Arabia and Russia as of 9/03/2020) in the petroleum market might drive the manufacturing to contraction territory once again. Since 2017, the durable goods have been growing at a high pace, only to slow down during 2019 in the face of a global slowdown and the trade war uncertainty.



Source: Bureau of Economic Analysis

Below we can see that the accentuated drop in nondurable goods in the first quarter of 2019 was the result of a sharp decrease in petroleum products adding to a significant decrease in food and plastic products. Since then, the production of nondurable goods is growing at a high pace. However, we expect that the economic slowdown in China (due to Covid-19) and the oil price war will affect all manufacturing, highlighting the adverse impact in petroleum products.



Source: Bureau of Economic Analysis

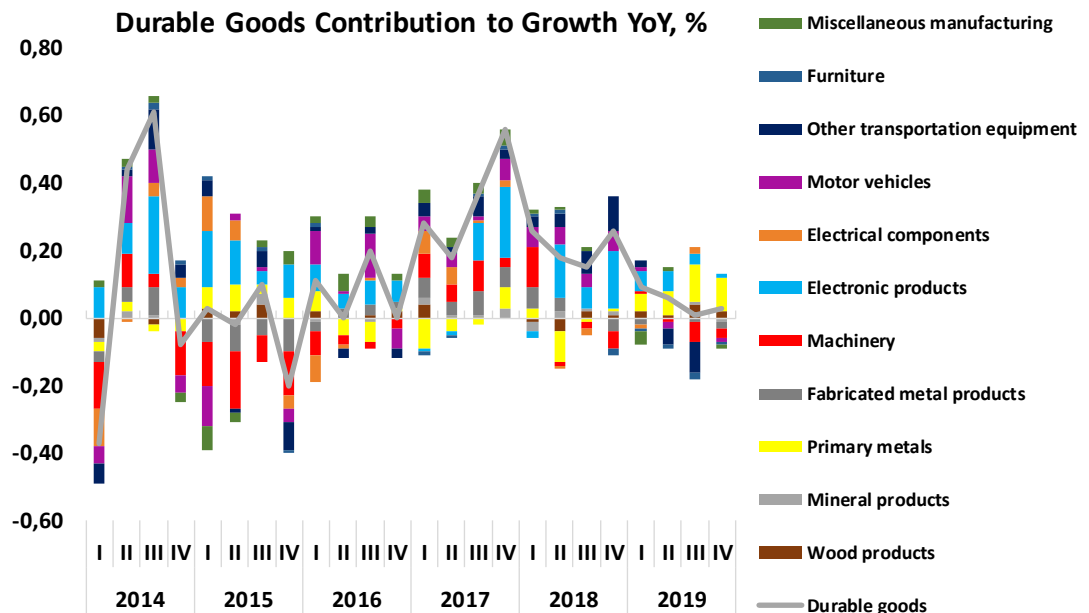
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Contrarily, the production of durable goods has not suffered a sharp contraction in recent years, however, it has been under a decline in the growth rate quarter after quarter since late 2017. It is hard to draw conclusions on what has been the reason of such trend, since the industry is highly segmented, and some products perform well in one quarter to then underperform the next quarter. However, it is visible that electronic products play a major role in the growth of the industry, more recently it has lost steam, which has been compensated by a recent increase in the production of primary metals.

We also underline the impact that the grounding of the Boeing 737 MAX planes has in the Motor vehicles and other transportation equipment. The grounding started on the month of the second incident in March 2019, which coincides with the decline in production in the first quarter of 2019. The segment was also largely affected by the strikes at GM (involving 48,000 workers) which started in September 15th and prolonged until October 25th.



Source: Bureau of Economic Analysis

1.2.2 Mining

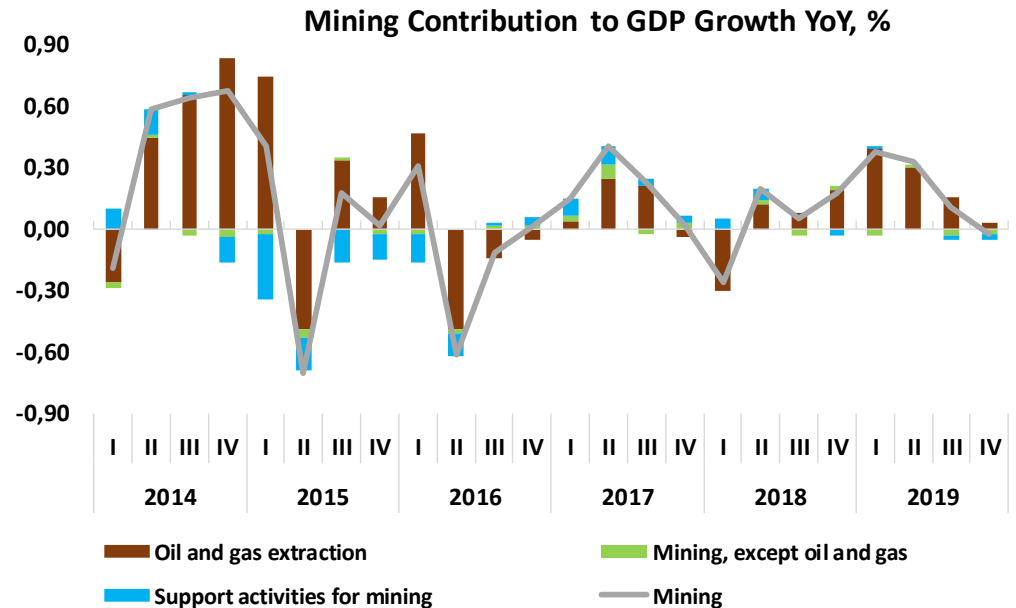
The U.S. for the last decade has become a central player in the supply of oil, becoming the top oil-producing country in the world, with an average of 17.88 million barrels per day (18% of world's production). This increase is attributed to exploration of shale in Texas and North Dakota. The US has been a net exporter of oil since early 2011.

Looking at the graph below, it is visible that the growth rate of oil and gas extraction has been increasing at high pace since early 2014, only to contract in 5 distinct quarters.

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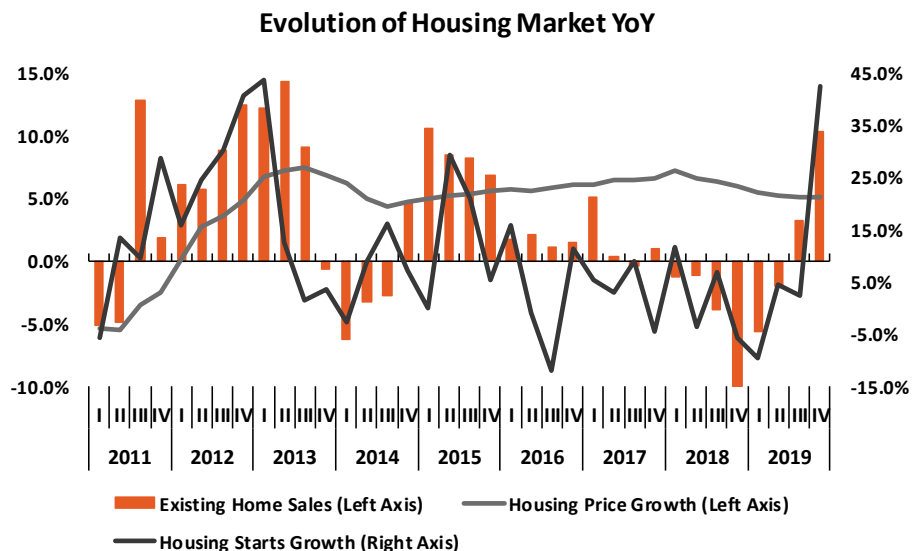
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Source: Bureau of Economic Analysis

1.3 Construction

The housing market is very cyclical, and the United States is no exception. Take for instance the growth rate of housing starts in the graph below. From the second quarter of 2011 until the second quarter of 2013 housing construction boomed, and so the market was flooded with new houses, which led to the sharp decline in housing starts in the subsequent years. When the supply becomes insufficient to satisfy demand the housing starts increase again, which happened during 2015, and we start to see the same pattern since mid-2019.



Source: Bureau of Economic Analysis

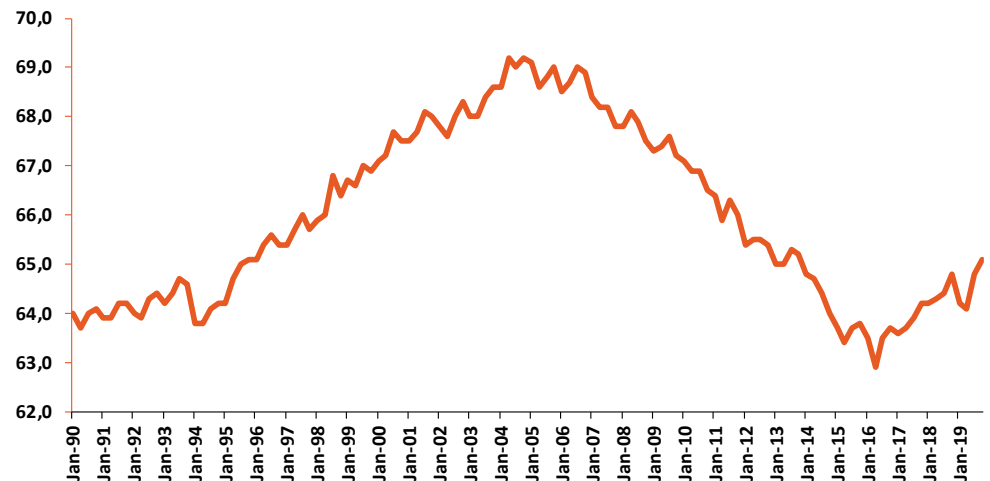
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From the early 90s until the financial crisis of 2007/08 the percentage of Americans that owned a house increased from 64% to a historic record high of 69%. However, since the financial crisis that originated in the subprime niche of the housing market, many American lost their homes and many others became reluctant to purchase a house. So, in the years following the crisis, homeownership rate declines to a value pre-90s. Since 2016 the rate has been on a positive trend and is at 65.1% as of October 2019.

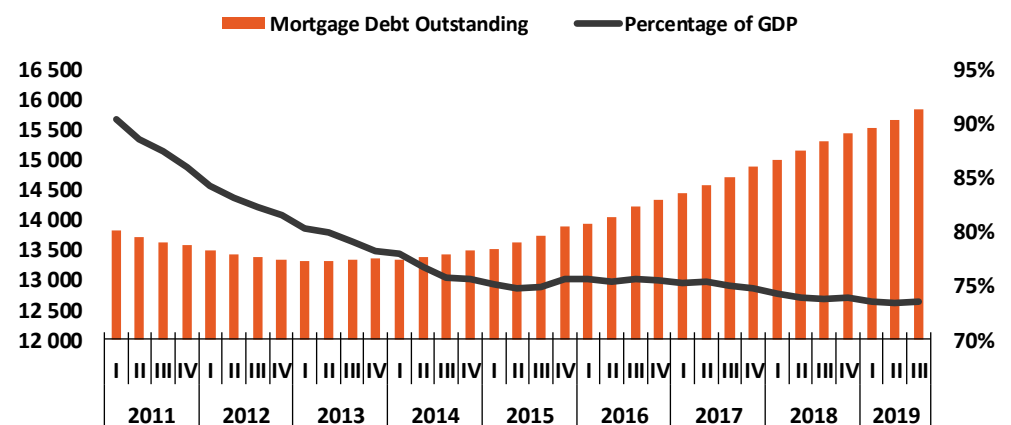
Homeownership in the United States, %



Source: Federal Reserve Economic Data

The increasing number of homeowners adding to a higher average housing price resulted in a significant increase in outstanding mortgage debt. However, when we analyze the level of mortgage debt to the country's production the figure is completely different. The rate decreased throughout the analyzed period from 90% in 1Q2011 to 74% in 3Q2019.

Mortgage Debt Outstanding, USD million



Source: Federal Reserve Economic Data

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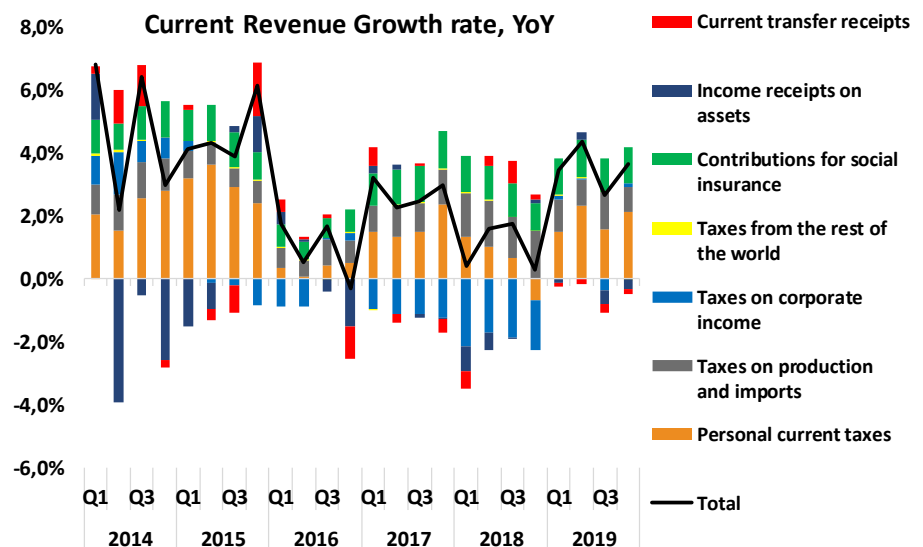
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Government Revenue

In the last 6 years, the current revenues grew at an average rate of 2.9% YoY.

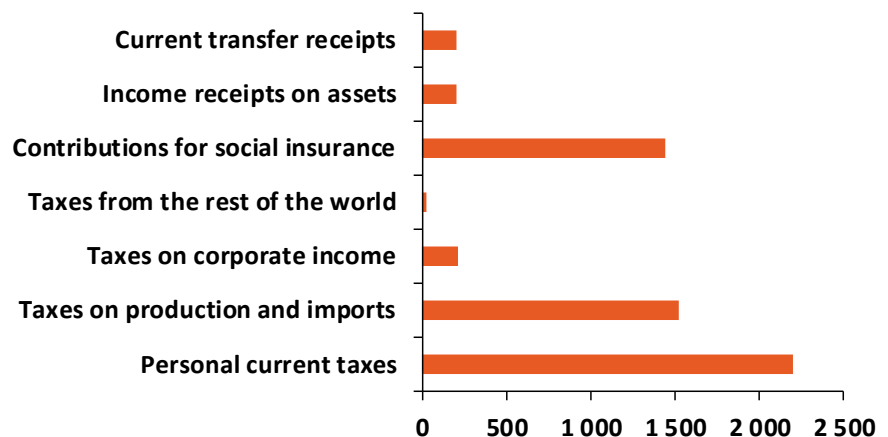
One of Donald Trump's campaign policy was to reduce the tax burden on American companies, in order to encourage them to return their fiscal residence back to the U.S. So, on November 2017, Donald Trump's Administration reduced the U.S. federal corporation income tax rate from 35% to 21%. This reduction is visible in the government's fiscal account. In 2017 the revenue from corporate income tax was USD 292 bn while in the fiscal year of 2018 corporate taxes yielded USD 204 bn.

The largest chunk of current revenues comes from personal current taxes, which amounted to USD 2.196 tn in 2019, and has been growing at an average rate of 1.6% YoY. The total government current revenue in 2019 was USD 5.78 tn, which is more or less equal to 26% of 2019 GDP.



Source: Bureau of Economic Analysis

Government Current Revenue 2019, USD Bn



Source: Bureau of Economic Analysis

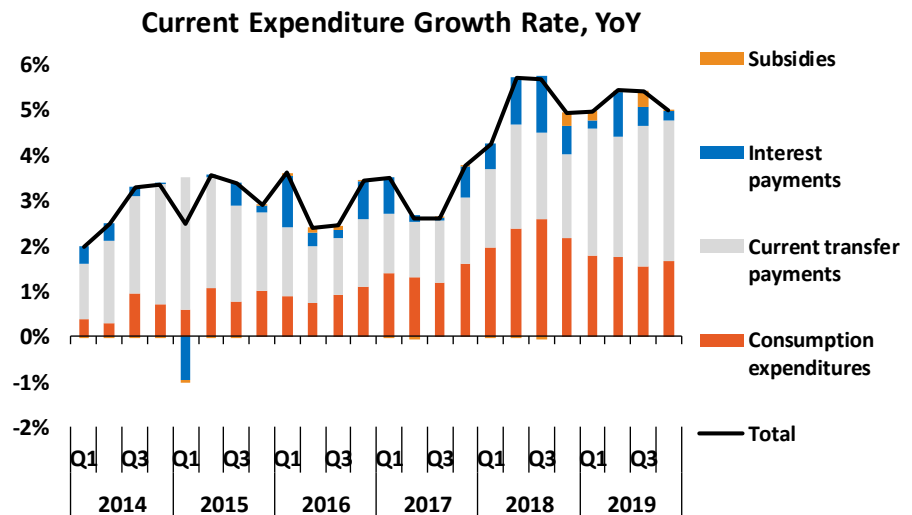
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Government Expenditure

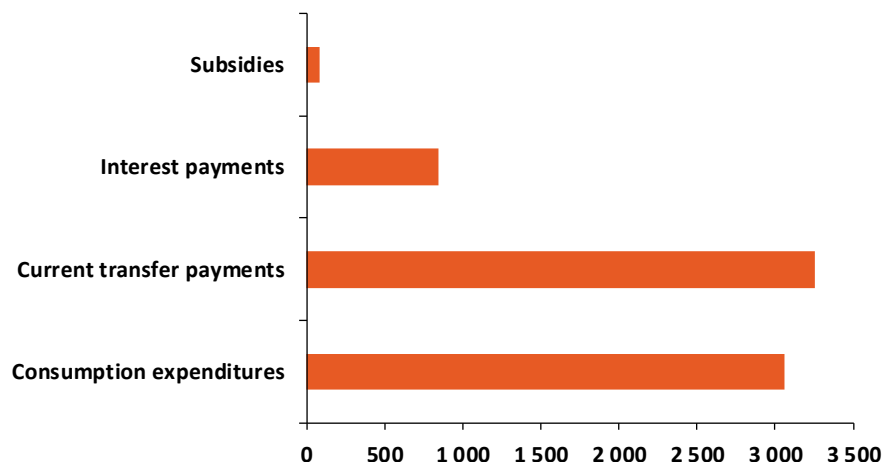
While the government revenues grew at an average rate of 2.9% YoY since 1Q2014, the current expenditure grew at a much higher pace of 4% YoY. The government expenditure is not only higher than the revenue – for the last 20 years – but both functions are diverging, meaning that if the trend persists the country's debt level will worsen.



Source: Bureau of Economic Analysis

The major contributor for the government spending is the transfer payments, which represents roughly 45% (USD 3.251 tn) of total current spending in 2019. Consumption expenditures also take a great deal of the public finances, in 2019, it amounted to USD 3.63 tn, which represent 42.3% of total spending. The total current expenditure in 2019 was USD 7.245 tn, or, 33.4% of 2019 GDP.

Government Current Expenditure 2019, USD Bn



Source: Bureau of Economic Analysis

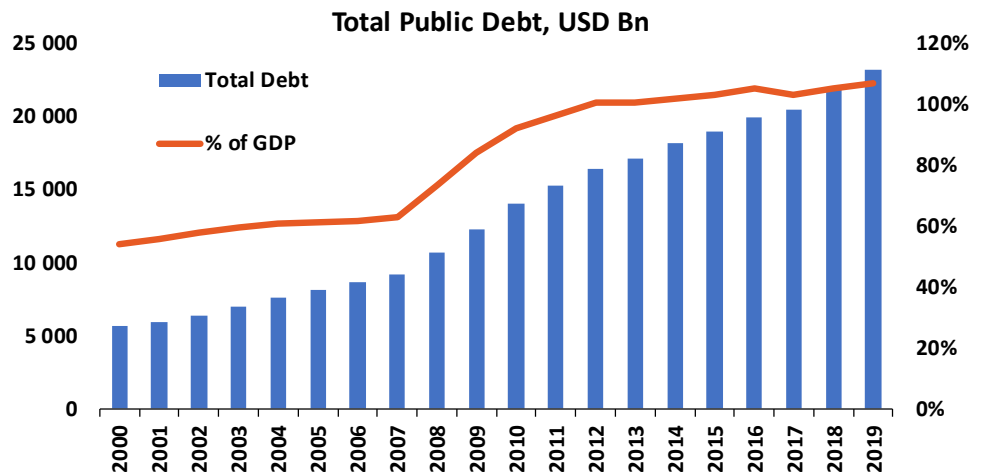
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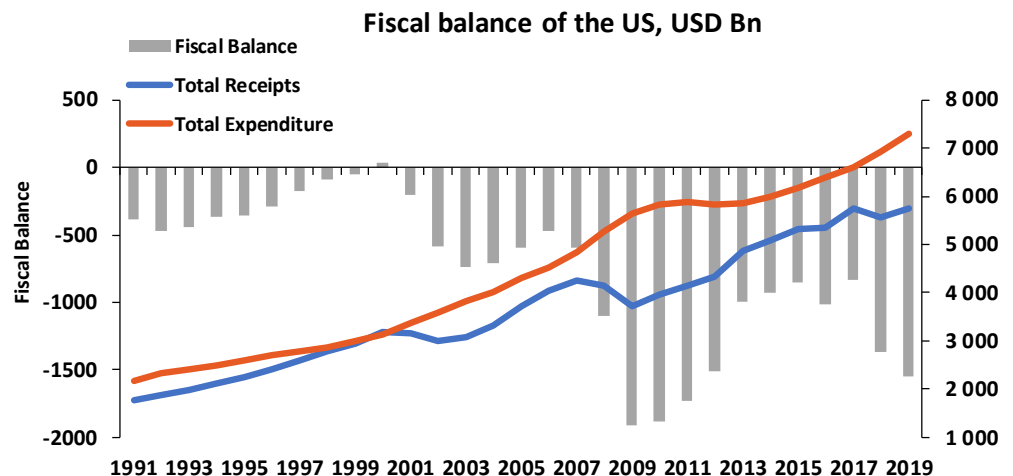
Government Debt

In the early 2000s the U.S. government kept its debt level near the 60% threshold, but in 2008 the combination of lower economic production and higher debt level as a result of the Global Financial Crisis led to a significant increase in the debt ratio. It went from 63% of GDP in 2007 to 92% of GDP in a matter of 3 years, and has been steadily increasing since then, and at the end of 2019 the debt level reached a record high of 107% of GDP.



Source: Federal Reserve Economic Data

The last decade saw the longest economic expansion in the U.S. economy, starting in June of 2009, breaking the record of 120 months of economic growth from March 1991 to March 2001, with unemployment rate dropping to 3,5% (considering data of February, pre-Covid 19), the lowest since 1969. However, the debt-to-GDP ratio kept increasing, not due to lack of economic growth, but due to a significant increase in the total debt level, driven by a divergence trend between government revenue and expenditure, that initiated during the Financial Crisis. In 2019, the fiscal balance was equal to USD 1.55 tn, or roughly 7% of GDP.



Source: Federal Reserve Economic Data

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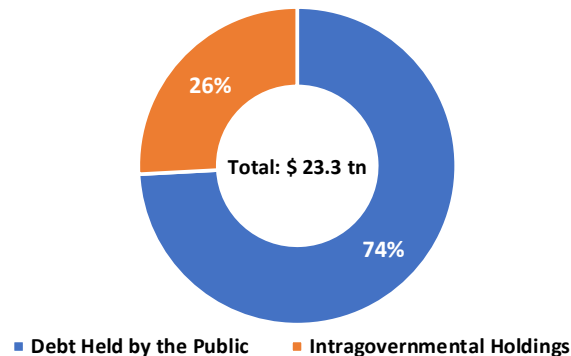
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Ownership of U.S. government debt

As of February 2020, the U.S. debt was around USD 23.3 tn. Most of the national debt is held by the Social Security Trust Fund, also known as the Americans' retirement money. So, the biggest single owner is but U.S. taxpayers.

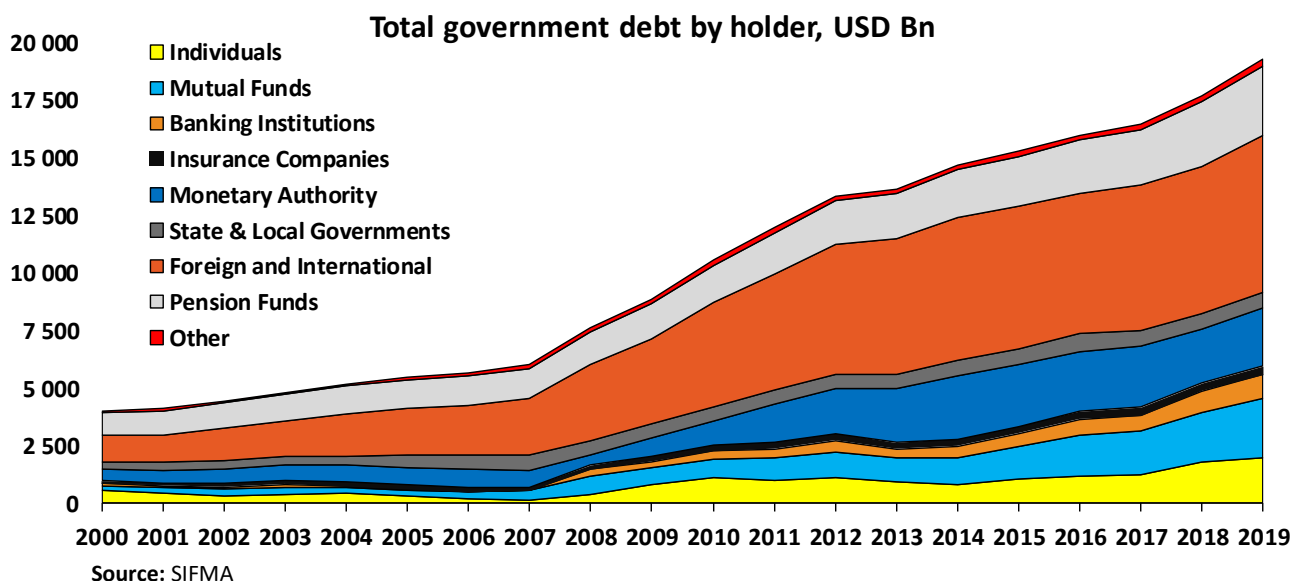
The debt falls into two categories: **Intragovernmental holdings** and **debt held by the public**.

Total U.S. National Debt, February 2020



Source: U.S. Department of the Treasury

The intragovernmental debt is what the Treasury owes to other federal agencies. In February 2020 the intragovernmental holdings amounted to USD 6 tn, that is 26% of total debt. The reason why the government owes money to itself is because some agencies like the Social Security Trust Fund has a surplus from tax revenues minus expenditure, and so these agencies use those reserves to invest in U.S. Treasuries. Social Security is the agency that own the most debt, together with the Federal Disability Insurance Trust Fund these agencies hold USD 2.89 tn. Then comes the Office of Personnel Management Retirement and the Military Retirement Fund with USD 927.9 bn and USD 924.5 bn respectively.



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Foreign holders of Treasuries, USD Bn

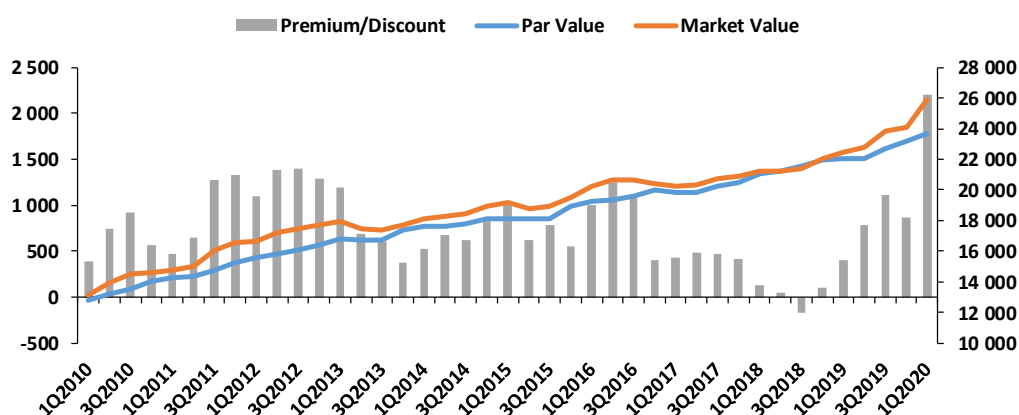
Country	February 2020
Japan	1268.3
China. Mainland	1092.3
United Kingdom	403.2
Brazil	285.9
Ireland	282.7
Luxembourg	260.8
Hong Kong	249.8
Switzerland	243.7
Cayman Islands	219.4
Belgium	219
Taiwan	201.9
Saudi Arabia	184.4
India	177.5
Singapore	165.4
France	147.4
Korea	116.1
Canada	113.9
Norway	103.3
Thailand	91.3
Germany	85.7
Bermuda	65.9
Netherlands	52.8
Mexico	47.5
Italy	46.8
Sweden	45.4
Spain	45.1
Israel	45.1
Kuwait	43.6
Philippines	41.8
Australia	40.1
Poland	38.8
United Arab Emirates	37.3
Chile	32
Vietnam	31
Iraq	30.9
Colombia	30.8
All Other	480.8
Grand Total	7066.7

Source: U.S. Department of the Treasury

The debt held by the public represents 74% (USD 17.3 tn) of total debt. That debt is held by individuals, corporations, state or local government, Federal Reserve Banks, foreign governments, and other entities outside the United States Government. Foreign governments hold about a third of the debt held by the public.

As of February 2020, Japan is the largest foreign holder of U.S. Treasuries, owning around USD 1.27 tn. The second-largest holder is China, with a total amount of USD 1.08 tn of U.S. Treasuries. Both China and Japan want to keep the value of the dollar higher than the value of their currencies in order to benefit from their exports to the United States, therefore, despite China's threats to sell its holdings, both countries have an incentive to maintain their positions.

Par and Market value of U.S. Government Debt, USD Bn



Source: Federal Reserve Bank of Dallas

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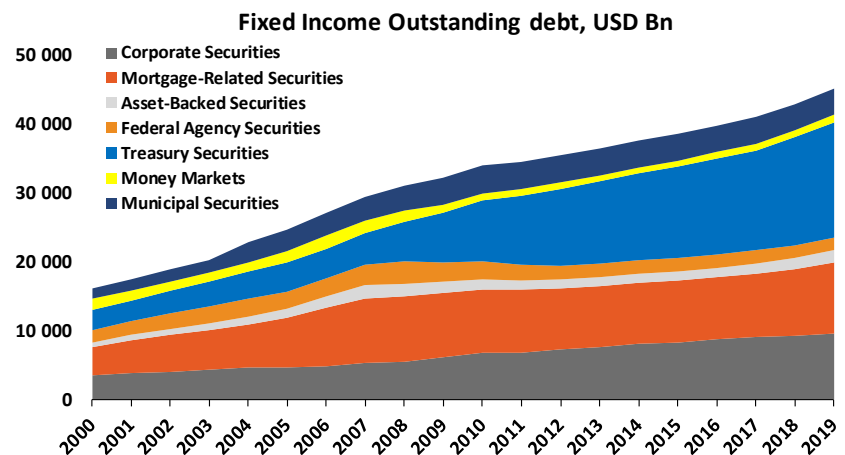
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U.S. total issued debt by security

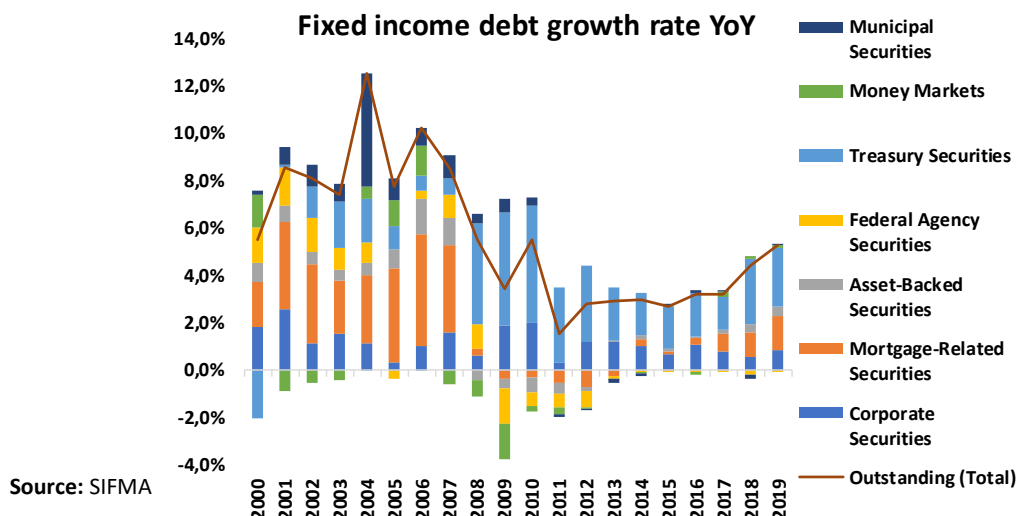
The amount of fixed income outstanding debt has been rising at a high pace in the last 20 years. In the year 2000, there were USD 11.7 tn of issued debt, two decades later and that number quadrupled to USD 45 tn by the end of 2019, that is, 208% of 2019 GDP.

Most of the outstanding fixed income debt comes from Treasury Securities, amounting to USD 16.7 tn, or 37% of the total. Then we have Mortgage-Related Securities and Corporate Securities amounting to USD 10.3 tn and USD 9.6 tn, respectively.



Source: SIFMA

Before the financial crisis of 2008 the amount of fixed income debt grew substantially at a very high pace, reaching an average growth rate of 8.6% per year between 2000 and 2007. This pre-crisis growth was driven by the housing boom which resulted in the accumulative growth of USD 5.5 tn in Mortgage-Related Securities debt in that same period. After the bust of the housing market bubble, those debt securities started to shrink and because of the crisis, the Treasury securities started to dominate the fixed income market, growing at an average rate of 2.9% per year for the following 12 years.



Source: SIFMA

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U.S. Tax System

The U.S. tax system is set up on both a federal and state level. Federal and state taxes are completely separate, and each has its own authority to charge taxes. Each state has its own tax system that is separate from the other states. Thus, since there are 50 U.S. states, there are 50 different taxing authorities and, therefore, 50 different tax policies.

Income Tax

Federal Income Tax for single person (Progressive)	
Tax rate	Income
10%	\$0 to \$9,875
12%	\$9,876 to \$ 40,125
22%	\$40,126 to \$85,525
24%	\$85,525 to 163,300
32%	\$163,300 to \$207,350
35%	\$207,350 to \$518,400
37%	\$518,401 or more

Source: IRS

Every person who earns income in the U.S. will pay income tax on both the federal and state level. Both the federal and state taxes must be filed before April 15 of each year.

The table shows the 2020 federal tax bracket (for taxes due April 15, 2021) and each years the brackets are adjusted to inflation.

The income tax system in the U.S. is progressive, meaning that a person that earns, say, USD 80,000 would pay 10% on the first USD 9,875 of his earnings, then 12% on the chunk of earnings from USD 9,875 to USD 40,125 and then 22% on the remaining income, up to USD 80,000. Given than the total tax bill would be USD 13,390, which divided by the earnings of USD 80,000 the effective tax rate is 16.7%.

Social security contributions

In the U.S. the Social Security is named as the federal Old Age, Survivors, and Disability insurance (OASDI) program and is administered by the Social Security Administration.

Social Security is funded primarily through payroll taxes called Federal Insurance Contributions Act tax (FICA) or Self-Employed Contributions Act Tax (SECA), which are both collected by the Internal Revenue Service (IRS).

The OASDI program limits the amount of earnings subject to taxation for a given year. This limit changes each year with changes in the national average wage index. The taxable maximum for earnings in 2020 is USD 137,700.

The OASDI tax rate for wages paid in 2020 is set by statute at 6.2% for employees and employers. Therefore, an individual with wages equal or larger than USD 137,700 would contribute USD 8,537.40 to the OASDI program, and so would his or her employer. The tax rate for self-employment income in 2020 is 12.4%.

Social Security Contributions		
Employer Contribution	Employee Contribution	Self-employed Contribution
6.2%	6.2%	12.4%
Benefit Base 2020		
USD 137,700		

Source: Social Security Administration

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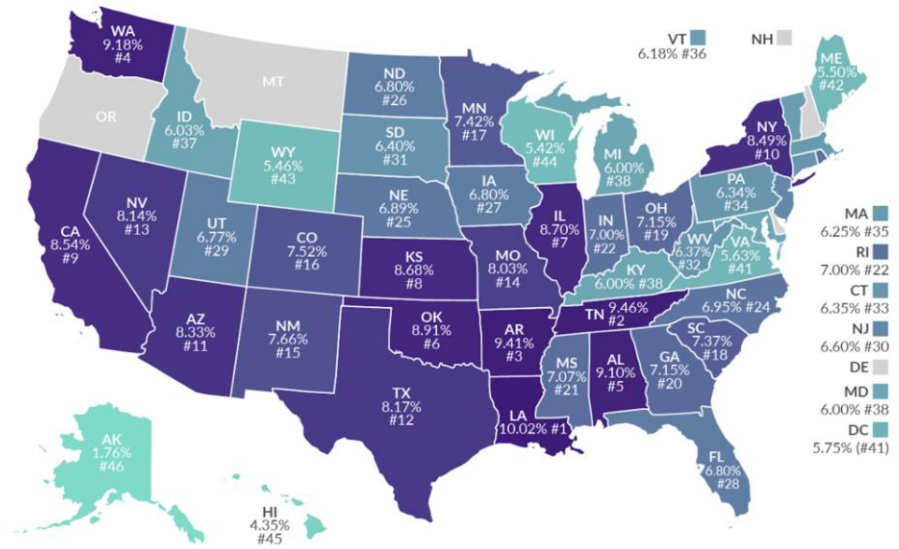
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Sales Tax

Contrarily to other countries, the U.S. does not have a Value-Added Tax (VAT) at national level. The U.S.'s national government does not levy a national sales tax, instead, each state elects its own tax policies. Thus, sale tax is a state tax and varies from state to state as well as within the state, as local sales taxes are sometimes charged by county and city governments.

How High Are Sales Taxes in Your State?

Combined State & Average Local Sales Tax Rates, Jan. 1 2018



Note: City, county, and municipal rates vary. These rates are weighted by population to compute an average local tax rate. Three states levy mandatory, statewide, local add-on sales taxes at the state level: California (1.25%), Utah (1.25%), and Virginia (1%); we include these in their state sales tax. The sales taxes in Hawaii, New Mexico, North Dakota, and South Dakota have broad bases that include many services. This map does not include sales taxes in local resort areas in Montana. Salem County is not subject to the statewide sales tax rate and collects a local rate of 3.3125%. New Jersey's average local score is represented as a negative.

Source: Sales Tax Clearinghouse, Tax Foundation calculations, State Revenue Department websites

This map shows average sales tax (VAT) rates in each U.S. state. A state's sales tax rate is fixed throughout the state. What fluctuate are local sales tax rates, which are levied by individual cities and counties. Particularly noteworthy on this map are New Hampshire, Delaware, Montana, and Oregon, which charge zero sales tax. (Map courtesy of: taxfoundation.org/maps).

Source: taxfoundation.org/maps

Corporate Tax

Federal corporate income tax rate is 21%, subject to potential reduction for foreign-derived intangible income (FDII) of domestic corporations. Branch profits tax imposes additional 30% tax on certain earnings of foreign corporations engaged in U.S. trade or business. Separate taxes levied at state and municipal levels.

The Tax Cuts and Jobs Act (TCJA) implemented by Donald Trump's Administration on the second of November 2017, reduced the U.S. federal corporation income tax rate from 35% to 21%. However, corporations operating in the U.S. face another layer of corporate income tax levied by states. Therefore, the average corporate income tax in the U.S. is around 25.7%.

Corporate Tax		
National Rate	Local Rate	Branch Rate
21%	Varies	21%, 30%

Source: IRS

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Population

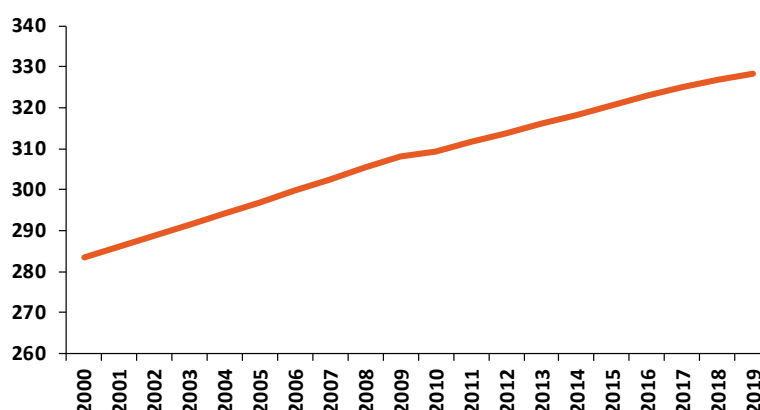
Population Indicator	
Population	330,648,384
Pop growth rate, %	0.59
Pop density, per Km2	36
Urban population, %	82.8
Median age	38.3
Fertility rate	1.78
Migrants (net)	954,806

Population by race	2018
White	236 173 020
Black	41 617 764
American Native	2 801 587
Asian	18 415 198
Native Hawaiian	626 054
Some other race	16 253 785
Two or more races	11 280 031

The United States population is currently around 330 million people according to the latest population estimates. The estimated population is calculated using a component of change model that incorporates information on natural increase (births, deaths) and net migration (net domestic migration, net international migration) that has occurred in the country.

The U.S. population has been growing at an average of 0.8% per year in the last 2 decades, driven by the immigration component of the population growth (the fertility rate is 1.78, which is below the 2.1 necessary to keep the current population level).

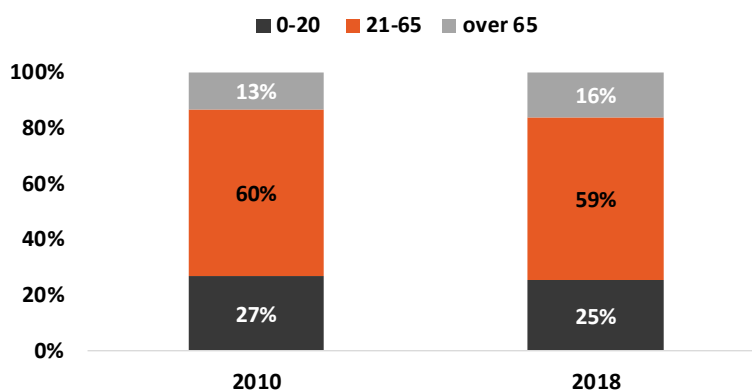
U.S. Population Estimates, Million People



Source: Census Bureau

Although the population is increasing, it is getting older and from 2010 to 2018 we see a substantial change in the distribution of the population. In a matter of 8 years, the senior population went from 13% of the total to 16%. As of 2018 the ratio of potential workers (ages 16 to 64) relative to those of retirement age (65 and over) was 3.8 workers per retiree, however, the Census Bureau estimates that by 2060 the ratio will be 2.5 workers per retiree.

Distribution of Population by Age



Source: Census Bureau

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Impact of Immigration on the U.S. Population

The United States Census Bureau projects that future net immigration will total 46 million by 2060 and the total U.S. population will reach 404 million.

According to a study performed by Steven A. Camarota and Karen Zeigler from the Center for Immigration Studies, found that it is possible for immigration to maintain the current working-age share or ratio of workers to retirees, but for that it would be necessary a net immigration five times the level projected by the Census Bureau through 2060. This would lead to a total population of 706 million, which is more than double the current level.

The authors found that it is possible to achieve that same level on the ratio of workers to retirees predicted by the Census Bureau for 2060 by raising the retirement age two years (assuming zero net immigration).

The study also concluded that another way to deal with the decline in working-age population could be through the increase in the share of working-age population employed. Currently, the employment rate for those aged 16 to 64 is 70%, which is low when comparing to historic standards. Hence, increasing the rate to 75% by increasing the retirement age would have the same impact as would immigration level projected by the Census Bureau.

Immigration Scenarios	Projected U.S. Population					Total Increase	Total Net Immigration
	2020	2030	2040	2050	2060	From 2017-2060	From 2017-2060
Zero Net Migration	329.2	337.8	339.3	335.5	329.2	3.72	0
50% of Census Level	330.8	346.1	356.1	362	366.8	41.36	23.2
Census Level	332.6	355.1	373.5	388.9	404.5	78.99	46.4
2x Census Level	335.7	371.2	406.5	441.6	479.8	154.27	92.9

Immigration Levels		2017	2020	2030	2040	2050	2060
Zero Net Migration	Share of Population 16 to 64	64.3	63.3	60.2	59.4	58.6	56.7
	Ratio workers (16 to 65) to Retirees	4.1	3.7	2.8	2.5	2.3	2.1
Census Level	Share of Population 16 to 64	64.3	63.4	60.4	60.1	60.1	59.0
	Ratio workers (16 to 65) to Retirees	4.1	3.8	2.9	2.8	2.7	2.5
2x Census Level	Share of Population 16 to 64	64.3	63.6	61.0	60.9	61.5	60.8
	Ratio workers (16 to 65) to Retirees	4.1	3.8	3.1	3.1	3.2	3.0

Source: Census Bureau, Center for Immigration Studies, BiG Research

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▲ Labor Force

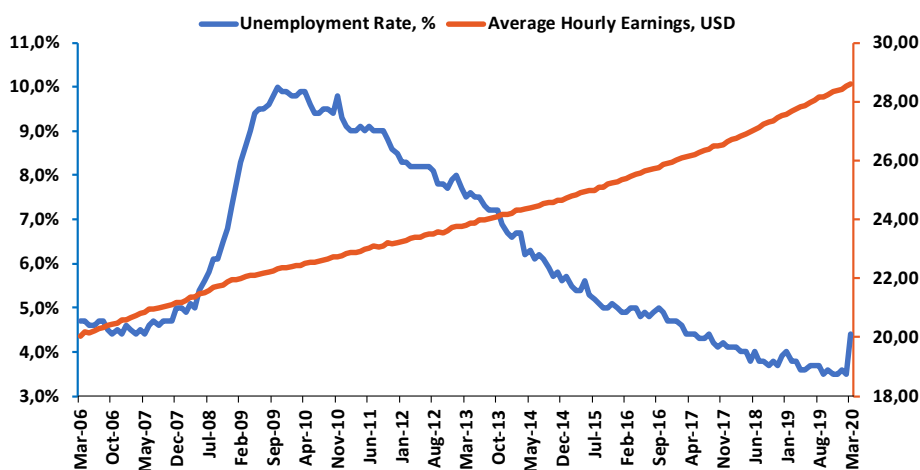
Employment status	
Population 16 years and over	262 185 951
In labor force	165 907 527
Civilian labor force	164 898 275
Employed	156 783 165
Unemployed	8 115 110
Armed Forces	1 009 252
Not in labor force	96 278 424

Class of worker	
Civilian employed population	156 783 165
Private wage and salary workers	126 193 536
Government workers	20 984 189
Self-employed	9 320 135
Unpaid family workers	285 305

The United States labor force has seen one decade of incredible recovery from the 2008/09 financial crisis – when the unemployment rate soared from 4.7% at the end of 2007 to 10% at its highest in October 2009. Since the end of the 2009 when the economy started to recover, the unemployment rate has followed a constant descendent path and by September 2019 it reached an historical minimum of the last 50 years with an unemployment rate of 3.5%. Currently the country is already suffering the repercussions of the response to the coronavirus health crisis, which led the unemployment rate to increase in March from 3.5% in the previous month to 4.4%. However, given the exponential increase in jobless claims it is expected that the unemployment rate might jump to values around 15/20% at its peak.

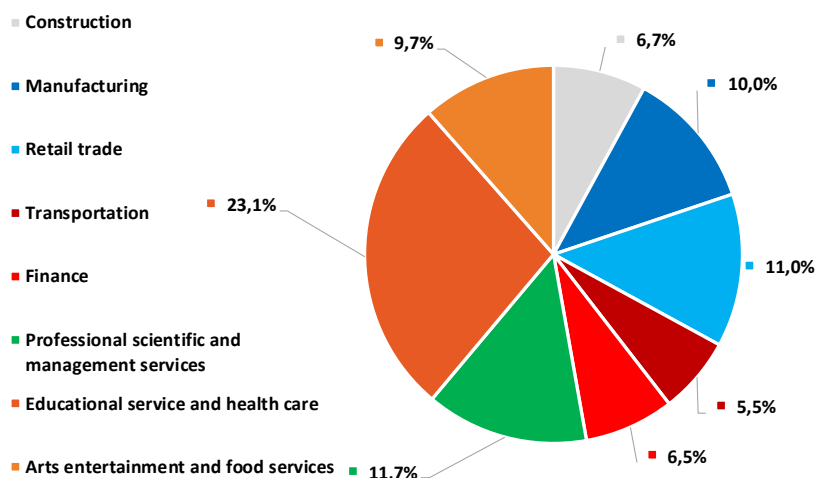
The strong labor force in the past few years has led to a substantial increase in the average hourly earnings. This reflects the enhanced purchasing power of American households, and therefore, their capacity to drive economic growth through private consumption.

U.S. Labor Market



Source: Bureau of Labor Statistics

U.S. employment by Industry, % of total employment, 2018



Source: Census Bureau

When we look at the constituency of the American labor force by industry, we find that the largest proportion is occupied by people employed in Educational service and health care with around 36 million people employed. It follows the professional scientific and management services, retail trade, and manufacturing - with 18, 17 and 16 million workers respectively.

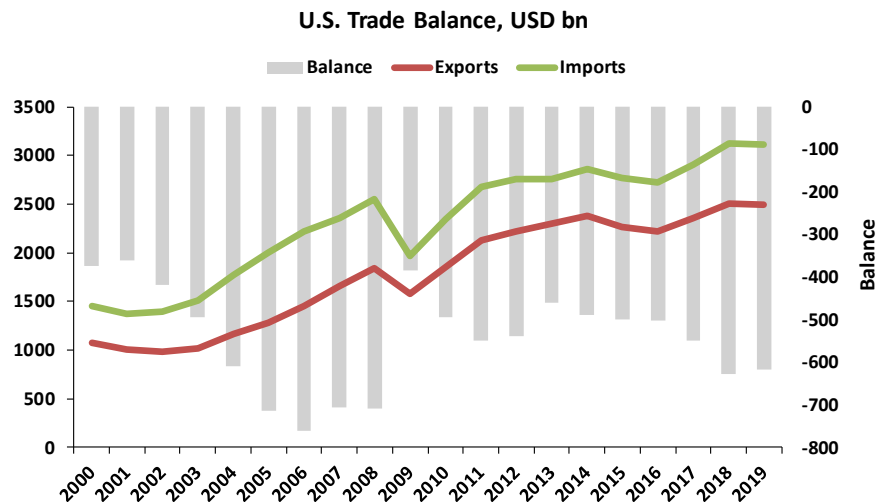
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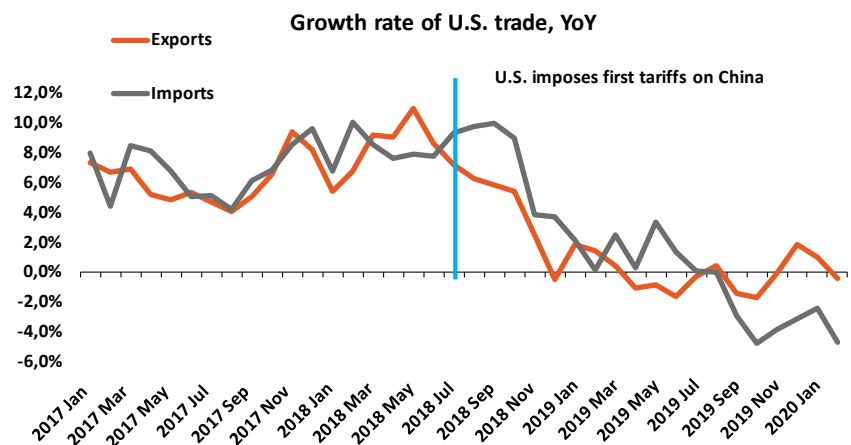
External Trade

The United States is a net importer since the 80s and if we analyze the last 20 years, its exports increase from around USD 1.1 tn in 2000 to USD 2.5 tn in 2019. Its imports followed the same path and went from USD 1.45 tn in 2000 to USD 3.1 tn in 2019. Although its imports are larger than it exports, they both follow a similar path, so the trade balance has seen periods of slight improve and others where the difference was becoming more accentuated. The average value for the trade deficit in the last 20 years is USD 543 bn. In 2019 it was equal to USD 616 bn.



Source: Bureau of Economic Analysis

With the escalation of the trade war, mainly with China, but also with other trading partners, the United States' trade slowed down after 3 years of constant growth. However, since mid-19 the imports contracted at a faster rate than exports – which started to grow at a positive rate in December 2019 and January 2020 as a result of the phase one of the trade deal with China. This might signal that the goal of Donald Trump's Administration is showing some progress by reducing imports and consequently the country's dependency of foreign production.



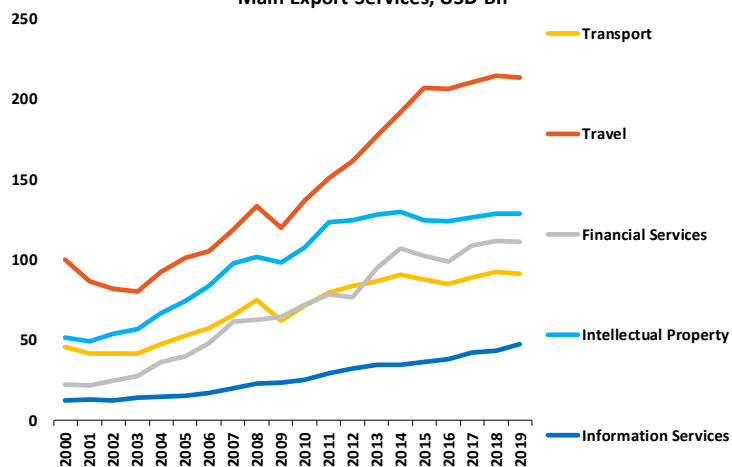
Source: Bureau of Economic Analysis

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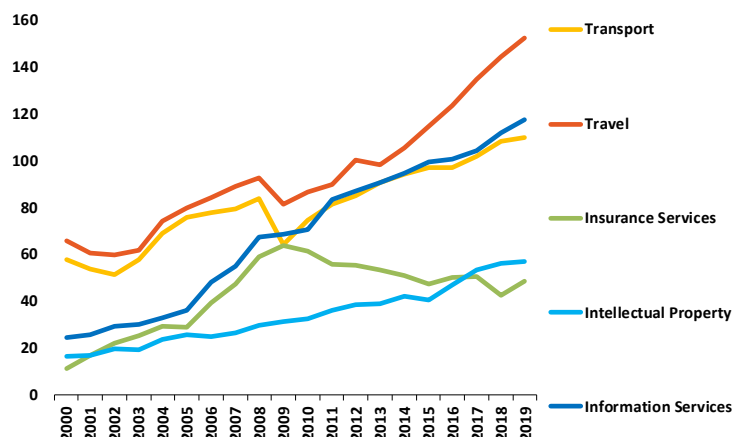
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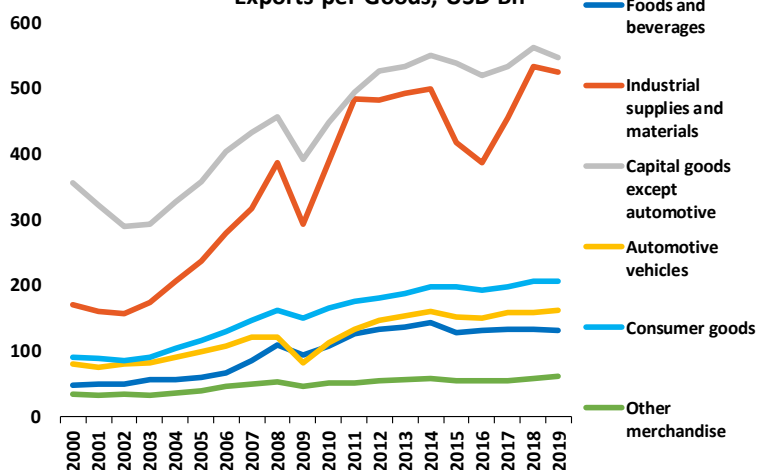
Main Export Services, USD Bn



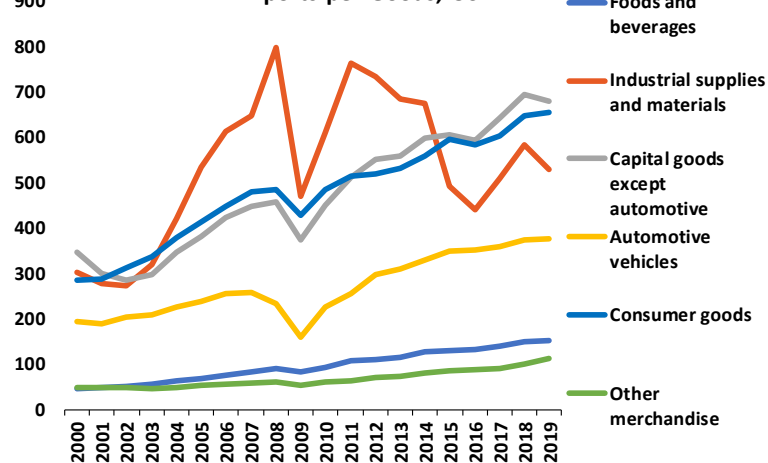
Main Import Services, USD Bn



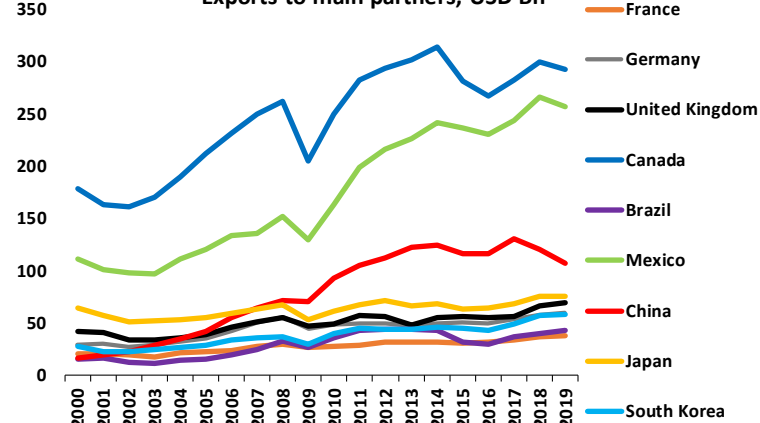
Exports per Goods, USD Bn



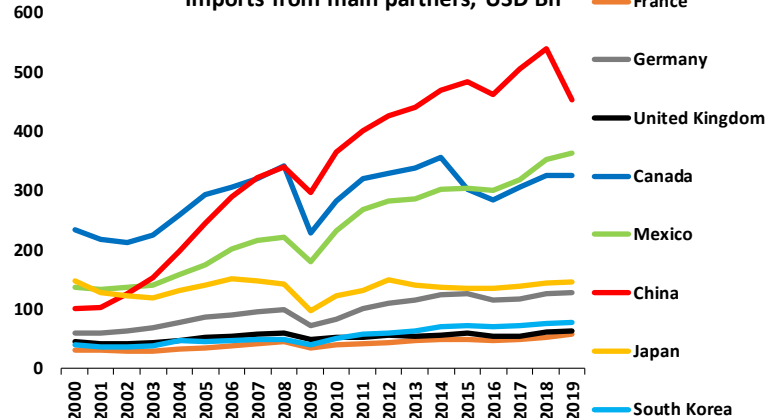
Imports per Goods, USD Bn



Exports to main partners, USD Bn



Imports from main partners, USD Bn



Source: Bureau of Economic Analysis

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Government

The country is ruled under a constitutional federal republic, which is divided in 3 branches:

Executive

The current chief of state and head of government is Donald J. Trump. The President is elected for a 4-year mandate and is eligible for a second one. Last elections were held in November 2016, the next ones being in November 2020. The President can approve or veto laws (unless 2/3 of congress votes to override the veto) and sign unilateral treaties with foreign nations (ratification by 2/3 of Senate). The President is subject to impeachment when a majority in congress is achieved and removed from office with a 2/3 majority in the senate.

President: Donald Trump is the 45th and current President of the US. He was born and raised in New York City, where he enrolled at the New York Military Academy, graduating in 1964. He then went to Wharton School of Finance at the University of Pennsylvania where he graduated with a degree in economics in 1968. He then entered his father's real estate business in 1971, which he renamed to The Trump Organization. He was responsible for expanding the business from Queens and Brooklyn to Manhattan. In 1987 he published a book called The Art of a Deal, focused on his successfulness in doing business deals, which eventually made the New York Times best-seller list. Between 2003 and 2015 he produced and hosted "The Apprentice", a reality show related to evaluating business skills of a group of participants. In November 8, 2016 he won the presidential elections for the Republican party against Hillary Clinton, with a total of 306 electoral college votes compared to Hillary's 232.

Legislative

The bicameral congress is composed of two chambers, which combined form the United States Congress. The Constitution grants Congress the sole authority to enact legislation and declare war, the right to confirm or reject many Presidential appointments, and substantial investigative power.

House of Representatives: Consists of 435 voting members serving a 2-year term, each representing a congressional district, being the number of representatives, each state has, proportional to the population of the state. The House is responsible for making and passing federal laws (Bills). Currently Democrats have 234 seats and Republicans 200.

Senate: The Senate, opposed to the House is composed of 2 senators from each state regardless of the population. So, a total of 100 senators compose the senate, each serving a 6-year term. The senate has the power to conduct impeachment trials, serving as jury and judge; decide on Ambassadors, other public Ministers and Consuls, Judges of the Supreme Court, and all other Officers of the United States nominated by the president and ratify international treaties signed by the President. The republican party has 53 senators, the democrats have 45, the remaining 2 are independent.

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United States House of Representatives	
Majority	
Democratic	233
Minority	
Republican	196
Other	
Libertarian	1
Vacant	5

United States Senate	
Majority	
Republican	53
Minority	
Democratic	45
Independent	2

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Judicial

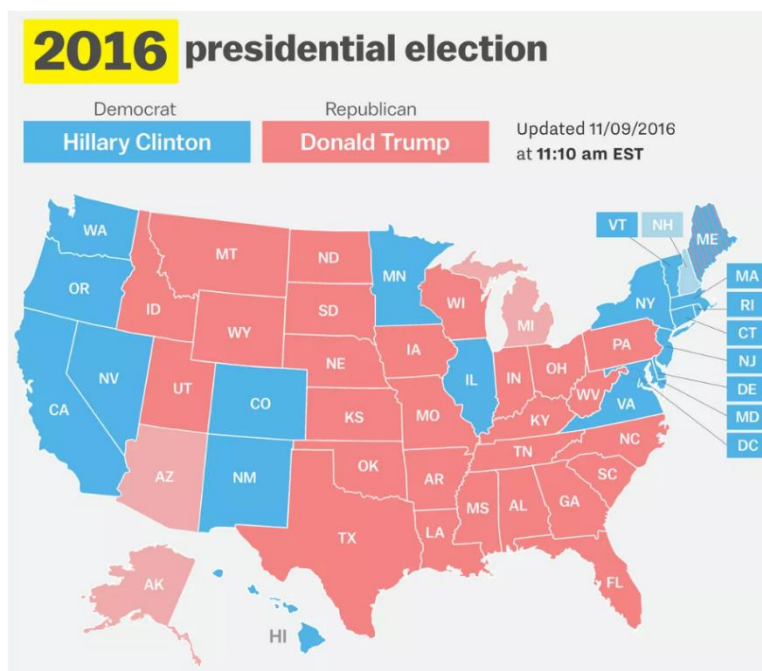
The judicial system is composed of one supreme court, composed of 1 chief justice and 8 associate justices, elected by the president and approved by senate (the mandate is for life); and subordinate courts, that are composed by courts of appeal (including the US court of appeal for the federal district and 12 regional appeal courts) and 94 federal district courts in 50 states and territories.

Supreme Court: The Supreme Court is the highest court in the United States. The justices of the Supreme Court are nominated by the president and must be approved by the Senate with at least 51 voters.

Other Federal Courts: The Constitution grants Congress the authority to establish other federal courts.

Elections

The country has 3 separate elections, one for the presidency, one to elect the representatives of the House of Representatives and other for the Senate. For the House of Representatives, each state is divided by districts according to their population and each district votes for one representative, which ends up being the one with most votes for the district. For the Senate, each state is represented by two senators, regardless of their population, and again, the candidates with the most votes wins. For the Presidency, the two main parties, the Republicans and the Democrats, choose their presidential candidate, which will then choose the candidate for the Vice Presidency, or his running mate, then the public will vote. However, the president isn't elected directly, instead an electoral college is formed for each state, composed of the same number as the ones of senators and representatives, which will then vote for the Presidency spot (Usually they vote for the one with the most votes for that state).

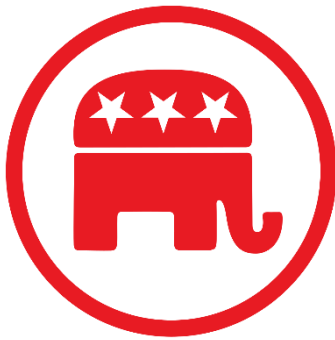


Source: Vox

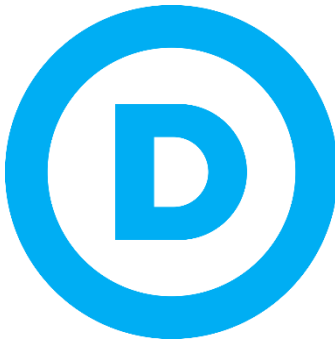
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Political Parties

Republican Party: The Republican Party was founded in 1854, by the main opponents to the Kansa-Nebraska Act which allowed for the expansion of slavery into some U.S. states. Abraham Lincoln was the first Republican president, which was responsible for abolishing slavery in the country in 1865. In 1912, the party shifted towards the right of the political spectrum. The current ideologies of the party are Conservatism, supporting lower taxes, free market capitalism, deregulation, pro-life, gun rights and restrictions on labor unions. The current President is Donald Trump and currently controls a majority in the Senate. Historically it's support comes from the regions of the South, the Great Plains, the Mountain States and the rural areas in the Midwest.



Democratic Party: The party was founded in 1828, by the supporters of Andrew Jackson. It was responsible for drafting the New Deal Coalition by Franklin D. Roosevelt in the 1930's, which promoted a framework for international cooperation after WWI. The party currently supports modern liberalism, believing in social and economic equality, as well as the Welfare State, defending the State's intervention in the regulation of the economy. There have been 15 Democrats in the Presidency of the country, including Andrew Jackson, Barack Obama, Jonh F. Kennedy and Bill Clinton.

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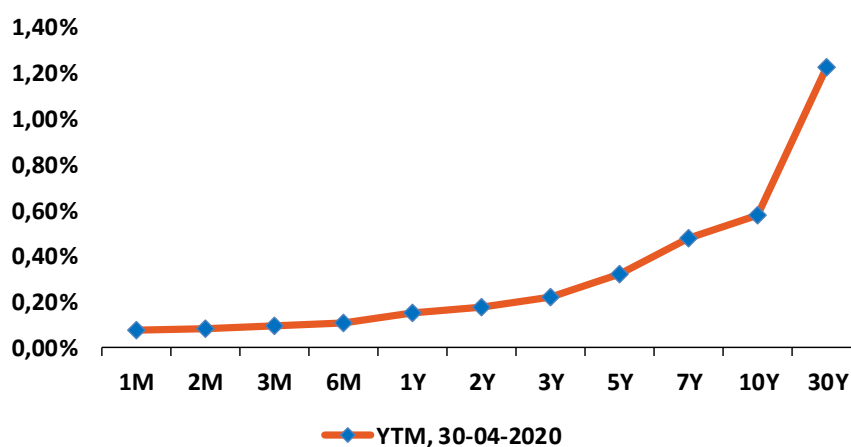
Market Information

1. Public Debt

Maturity	Bonds
1M	B 0 05/26/20 Govt
2M	B 0 06/23/20 Govt
3M	B 0 07/30/20 Govt
6M	B 0 10/29/20 Govt
1Y	B 0 04/22/21 Govt
2Y	T 0 ⅛ 04/30/22 Govt
3Y	T 0 ¼ 04/15/23 Govt
5Y	T 0 ⅜ 04/30/25 Govt
7Y	T 0 ½ 04/30/27 Govt
10Y	T 1 ½ 02/15/30 Govt
30Y	T 2 02/15/50 Govt

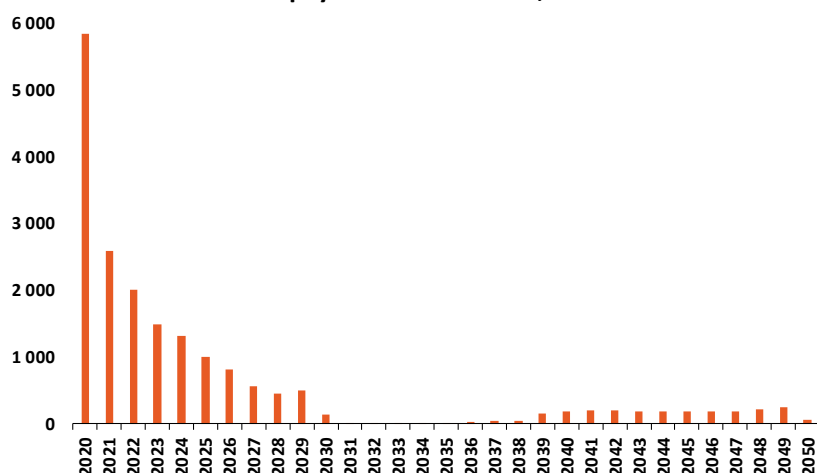
Below is presented the yield curve for the United States government debt. Each dot corresponds to the yield to maturity received for the bonds of each different maturity. U.S. debt is perceived as one of the safest financial assets in the world, referred to many as the risk-free rate. The 10-year Treasury yield broke below 1% for the first time ever in the wake of an emergency rate cut by the Federal Reserve in on March 3, twelve days later and the Fed cut its reference rate once again leaving its target at 0%-0.25%. Since then, the interest rate on the U.S. government debt for all maturities has been historically low.

YTM per Bond Maturity



Source: BiG Research

Debt Repayment Distribution, USD Bn



Source: BiG Research

The U.S. debt is spread almost entirely for the next decade. Until 2022 the U.S. government will have to roll over around USD 10 tn of debt, which corresponds roughly to 54% of the total emitted debt.

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2. Stock Market

Dow Jones

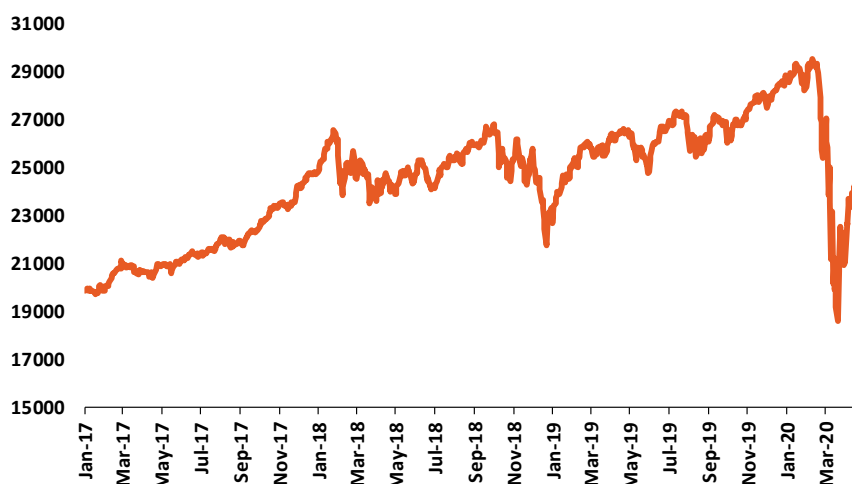
Trading Hours	14:30 - 21:15
Points (07 May 2020)	23,664.64
Market Cap (USD Tn)	7.45
Volume (06 May 2020)	82.97 MLN
YTD Return	-17.08%
P/E	17.47
P/CF	11.84
P/Book	3.65
Debt/Equity	270.07
Dividend Yield, %	2.74

The United States oldest index is the Dow Jones Industrial Average (DJIA), or simply the Dow, which measures the stock performance of 30 large companies listed on stock exchanges in the United States. The index has a current total capitalization of USD 7.45 tn, with a price over earnings of 17.47 and a dividend yield of 2.74%.

The index is currently at 23,664 points, which is well below its early-2020 value of around 29,500 points. As any other stock index, the Dow was not spared from the sell-off on equity that the markets assisted after the coronavirus crisis became a global threat. The index lost around 37% of its value in a matter of 7 weeks, eliminating the gains accumulated since Trump's election. Since then, the index has been recovering, soaring 30.6% since market low in the last 5 weeks. However, the total loss from market high is still at minus 17.9%.

DOW Companies per sector	Weight	Dividend Yield	P/E
Communication Services	4.74	2.47	17.28
VERIZON COMMUNICATIONS INC	1.62	4.21	10.76
WALT DISNEY CO/THE	3.13	1.57	25.19
Consumer Discretionary	13.86	2.28	23.79
HOME DEPOT INC	6.18	2.52	21.64
MCDONALD'S CORP	5.23	2.57	24.19
NIKE INC -CL B	2.45	1.06	30.28
Consumer Staples	9.28	2.58	20.13
COCA-COLA CO/THE	1.31	3.42	21.71
PROCTER & GAMBLE CO/THE	3.26	2.59	23.41
WALGREENS BOOTS ALLIANCE INC	1.26	4.00	10.22
WALMART INC	3.44	1.72	24.99
Energy	3.96	5.87	16.72
CHEVRON CORP	2.63	5.14	15.76
EXXON MOBIL CORP	1.32	7.33	19.04
Financials	13.64	2.67	10.62
AMERICAN EXPRESS CO	2.68	1.75	14.59
GOLDMAN SACHS GROUP INC	5.29	2.42	8.89
JPMORGAN CHASE & CO	2.72	3.58	11.19
TRAVELERS COS INC/THE	2.95	3.09	11.27
Health Care	15.5	2.14	19.45
JOHNSON & JOHNSON	4.18	2.53	23.06
MERCK & CO. INC.	2.25	2.87	14.75
PFIZER INC	1.06	3.83	16.19
UNITEDHEALTH GROUP INC	8.01	1.5	20.13
Industrials	13.45	3.94	25.74
3M CO	4.35	3.71	16.85
BOEING CO/THE	3.87	4.44	-
CATERPILLAR INC	3.34	3.43	12.04
RAYTHEON TECHNOLOGIES CORP	1.89	4.33	8.4
Information Technology	24.52	1.74	19.39
APPLE INC	8.01	1.07	22.74
CISCO SYSTEMS INC	1.21	3.25	15.28
INTEL CORP	1.72	2.06	12.41
INTL BUSINESS MACHINES CORP	3.58	5.04	9.34
MICROSOFT CORP	4.94	1.09	31.32
VISA INC-CLASS A SHARES	5.06	0.61	32.99
Materials	1.04	7.47	9.47
DOW INC	1.04	7.47	9.47

Stock Index (Dow Jones)



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- There isn't a predefined coverage policy in regards to the selection of stocks that are subject to investment recommendations.
- Clarification of the qualitative terms implied in the recommendations:
 - Buy, expected absolute return above 15%;
 - Accumulate, expected absolute return between +5% and +15%;
 - Hold/Neutral, expected absolute return between -5% and +5%;
 - Reduce, expected absolute return between -5% and -15%;
 - Sell, expected absolute return below -15%;The investment framework aforementioned is merely indicative and not globally strict.
- Unless otherwise specified, the price-targets of the investment recommendations issued by BiG's Research Team are valid for 12 months.
- The update of the investment recommendations models and respective price-targets will occur, usually, in a period of 6 to 12 months.
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