Overview of the U.S. Economy

- Remains as the world's reserve currency and a major powerhouse
- Main Trading partners: China, Canada, Mexico
- Stock Index: S&P 500, Dow Jones Industrial Average, Nasdaq Composite
- Currency: USD
- Reached a record-high trade deficit of $73.3 billion in Aug 2021 with imports up to a new all-time high of $287 billion

	Annual Change (2020-2021)	2020 Figures	2021 Figures
Real GDP (Q3)	4.87%	18,561B	19,465B
Nominal GDP (Q3)	9.63%	21,139B	23,173B
M2 (M2SL) (Sep)	12.80%	18,602B	20,983B
CPI (Sep)	5.38%	260	274
Core CPI (Sep)	4.04%	269	280
PPI (Sep)	11.68%	203	227
PCE (Sep)	10.90%	14,482B	16,060B
Core PCE (Sep)	10.32%	12,826B	14,150B
Consumer Sentiment (Sep)	-9.45%	80.4	72.8
Building Permits (Sep)	-0.19%	1.589M	1.586M

Summary of major events in the past 6 months

Monetary Policy:

September 2021: CPI climbed 5.4% YoY, Core CPI climbed 4% YoY; Federal Reserve officials signals possibility of tapering to begin as early as mid-November or mid-December; Rate hikes could begin as soon as 2022

Fiscal Policy:

April 2021: Biden discusses American Jobs Plan (AJP) with members of the Congress; American Families Plan (AFP) revealed

May 2021: Biden proposes a 6 trillion budget plan

June 2021: The administration reached a compromise deal for the American Jobs Plan to focus $1.2 trillion on physical infrastructure

July 2021: The bulk of AFP's provisions are included in the Build Back Better plan, carried alongside the Bipartisan Infrastructure Framework (BIF). The BIF remains unlikely to pass until the House passes a separate "human infrastructure" package via reconciliation

August 2021: BIF passed the Senate as 'Infrastructure Investment and Jobs Act'

Geopolitical Landscape:

May 2021: Election debate and insurrection votes resume. Biden waves sanctions on Russia pipeline.

August 2021: US launches strategic dialogue with Indonesia to work on issues such as defending the freedom of navigation in the South China Sea. Biden withdrew the U.S. military from Afghanistan, ending its 20 years of involvement in the Afghanistan War.

September 2021: US, UK and Australia formed the AUKUS pact. The first in-person summit of the four-nation Quad group (US, Australia, Japan, India) was hosted in Washington. The 2nd round of high-level defence discussions between US and China was conducted.

October 2021: US State Department announced the launch of a new bureau for cyberspace and digital policy and form a "united front" with its allies

Monetary Policy

Inflation

Inflation refers to the rate at which the purchasing power of a currency decreases over a period of time. During periods of high inflation, the price level of goods and services increases drastically, resulting in lower purchasing power of every dollar. On the other hand, during periods of low inflation, a level of inflation that is too low usually signals lower demand for goods and services, which would mean lower economic growth and possibly lead to lower wages. If low inflation persists and GDP falls in two successive quarters, a recession will increase unemployment.

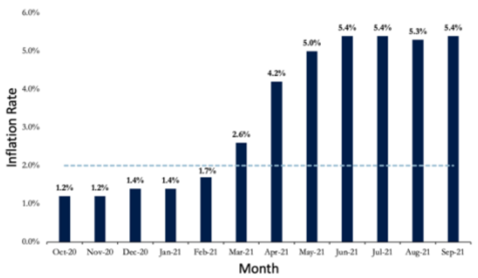
The Federal Reserve has a target inflation rate of 2% over the long run. Starting from March 2021, annual inflation in the US was well above the Fed's target inflation rate. As seen in Figure 1, CPI inflation for the past 12 months was more than twice the Fed's target rate at 5.4% in September 2021, reaching a 13-year high that was driven by rising price levels for food, shelter and gasoline. The core CPI excludes food and energy with high price volatility, providing a more accurate inflation trend. The core CPI rate was also twice the Fed's target rate at 4% in September 2021, as shown in Figure 2.

While Fed Chairman Jerome Powell foresees current inflationary pressures to stretch into 2022, he expects inflation to ease eventually as supply chain bottlenecks ease and demand returns to pre-pandemic levels. The Fed speculates that 2022 would be "quite a strong year" for economic growth.

Although inflation is likely to be transitory, it should still be a concern to investors when constructing their portfolios. "Wednesday's still elevated Consumer Price Index marks about six months' worth of hot inflation data, suggesting that inflation is not as transitory as many investors previously expected," quoted Nancy Davis, founder of Quadratic Capital Management.

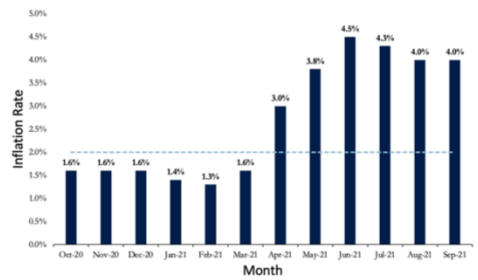
With the ultra-low interest rate environment, the real rate of return for money market funds and bonds will be lower after accounting for inflation. However, low interest rates prove to be a boon for the US stock market which closed at a new high as of October 2021. Therefore, investors and portfolio managers should still look at hedging instruments against inflation, transitory or not.

Figure 1: US Inflation Rate



Source: Trading Economics (2021)

Figure 2: US Core Inflation Rate

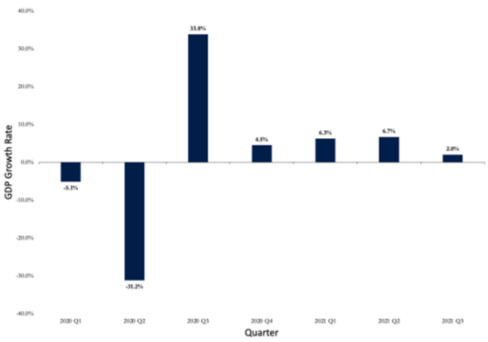


Source: Trading Economics (2021)

Tapering

At the height of the COVID-19 pandemic in March 2020, the Federal Reserve cut short-term interest rates to zero to stimulate the economy. However, this was insufficient and more support was needed as the pandemic severely disrupted the US economy. Referring to Figure 3, its GDP in Q2 2020 contracted by 31.2%.

Figure 3: US GDP Growth Rate



Source: Trading Economics (2021)

Hence, in June 2020, the Federal Reserve resumed its purchase of large-scale assets, also known as quantitative easing (QE), to further support the economy despite short-term interest rates being near zero. Since then, the Federal Reserve has been buying $80 billion of Treasury securities and $40 billion of agency mortgage-backed securities (MBS) each month. By buying US government debt and MBS, the Federal Reserve reduces the supply of these bonds in the market. Investors that desire to own these securities will bid up their prices and hence lower their yield, ceteris paribus. Companies and individuals will thus be able to borrow at lower rates, as the treasury yield is used as the benchmark to determine the interest rates of bonds and loans. This also increases the money supply and encourages more spending to support the economy.

The support that QE provided to the US economy is undeniable as seen in Figure 3, where the US GDP growth rate bounced 33.8% in Q3 2020, with smaller but positive GDP growth rates in the subsequent quarters.

As QE increases the money supply, in the case that the increase outstrips the growth in GDP, inflation inevitably occurs. In the 12 months ending September 2021, the core CPI rose 4%, well above the Federal Reserve inflation target of 2%.

The Federal Reserve Board members have expressed that necessary actions will be taken if inflation remains above the target rate. The proposed tapering process starts by reducing asset purchases by $15 billion a month, specifically $10 billion from treasury securities and $5 billion from MBS. Monthly asset purchases will be gradually lowered to zero over 8 months.

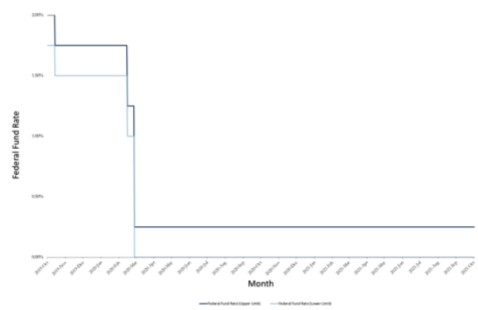
Interest Rates

The Federal Reserve is responsible for controlling the money supply, deciding and implementing the monetary policy in the United States. One primary tool used by the Federal Reserve to control the money supply is by raising or lowering the federal fund rate.

When the Fed cuts the federal fund rate, the cost of borrowing decreases, encouraging greater spending and investments. Consequently, this can help to boost asset prices.

On the contrary, when the Federal Reserve increases the federal fund rate, the cost of borrowing increases, encouraging consumers and businesses to save and spend less. This would typically reduce economic activities and can cause assets to depreciate. Rate hikes typically happen during economic booms to slow down the pace of economic growth to curb the high inflation that comes along with it.

Figure 4: US Federal Fund Rate (Upper and Lower Limit)



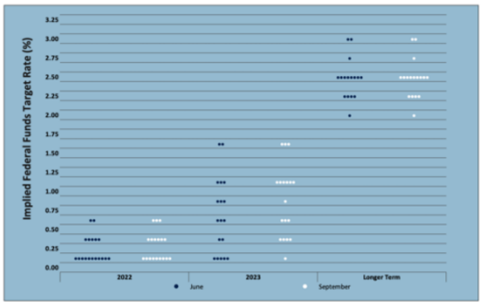
Source: Fred Economic Data (2021)

Before the Covid-19 pandemic, the target range for the federal fund rate was 1.50%-1.75%, as shown in Figure 4. Since the pandemic, the Federal Reserve has reduced the target rate twice, the first on 3 March 2020 with the rate set at 1.00%-1.25%, and the second on 15 March 2020, with the target rate set at 0.00%-0.25% that continues to remain as of October 2021. The rates were reduced to make borrowing costs cheaper for households and businesses, to encourage spending and investments that will support the recovery of the economy and re-emerge from the depths of the crisis.

The Federal Reserve Open Market Committee (FOMC) members have expressed that the federal fund rate will be kept at its current level of between 0.00%-0.25% until the economy has fully weathered the pandemic shock and is back on track to meet the Fed's dual mandate of price stability and maximum sustainable employment. With the current rates near zero leading to inflationary concerns, pressure has been placed on the Federal Reserve to hike interest rates to curb the rising inflation.

Figure 5 is the Federal Reserve's dot plot which is used by FOMC members to denote their projections for future federal fund rates in subsequent years. The Federal Reserve dot plot is closely watched by investors and economists for indications of the future trajectory of interest rates. Each dot on the chart represents a member's view on what the federal fund rate should be, at the end of that particular year.

Figure 5: Federal Reserve Dot Plot (June & September 2021)



Source: Bloomberg (2021)

Comparing 2 dot plots in June 2021 and September 2021, there has been an increase in the number of FOMC members expressing the view that the federal fund rate should be raised. However, the dot plot may not be an accurate tool in predicting future rates and the projections should be taken with a pinch of salt. As quoted by Jerome Powell, "The dots are not a great forecaster of future rate moves and it's just because it's so highly uncertain". This highlights that the dot plots should not be analysed by themselves but as one of the myriad indicators that would predict the Federal Reserve's decision on the federal fund rate.

We are of the view that the Federal Reserve will hike interest rates to curb inflation, raising the cost of borrowing for consumers and businesses. As the US economy is currently in the expansionary phase given the ultra-low interest rate environment, it is likely to move to the slowdown phase once interest rate hikes are implemented, with a slowdown in economic growth.

With rising inflation, slowing economic growth and the Delta variant concerns weighing on investors, Bank of America's chief quantitative and equity strategist Savita Subramanian spoke out on moving forward with caution. With returns heavily tied to the Fed's balance sheet, investors could see poorer returns from the market. However, that's not to say that all will be negative.

Fiscal Policy

Build Back Better Plan - Restoring the Economy

Since President Biden's inauguration into the White House in January 2021, he has been committed to passing another round of fiscal stimulus and opening doors for millions of Americans to get vaccinated.

During Biden's joint session of Congress, he introduced three major spendings: a $1.9 trillion COVID-19 relief bill, a $2.3 trillion infrastructure bill, and a $1.8 trillion investment aimed towards expanding and bettering education alongside tax breaks for families. Biden's big 3 - known as the Build Back Better Plan, aims to lift America's goals through investment in human and physical capital - in total will cost the nation approximately $6 trillion, and to no surprise is met with opposition from the Republicans.

Despite the passing of the American Rescue Plan - the aforementioned COVID-19 relief bill which follows in wake of the Coronavirus Aid, Relief, and Economic Security (CARES) Act in 2020 - none of the Republican members in the chambers of congress are accepting of the President's ambitious plans.

Regardless, Biden and the Democratic party are continuously pushing for this agenda to work - while expressing readiness to work alongside their opposition party.

With much perseverance from Biden and the Democratic leadership to pass these plans into law, we shall look into how these stimulus bills with a hefty price tag will impact the nation's economy - both now and in the long run. A summary of Biden's Big 3: Targeted outcome and costs, can be found in Table 1.

Table 1: The cost and targeted outcome of the plans under the Build Back Better Plan

Plan (Focus)	Cost (in trillions)	Goals
ARP (Providing local aid)	$1.9	Adds onto CARES Act 2020 to keep businesses and individuals afloat through tax relief and grants
AJP (Improving America's infrastructure)	$2.3	Create high-quality jobs, address climate change
AFP (Supporting disadvantaged families)	$1.8	Investing in education, healthcare, and childcare to maximize the nation's competency

Stimulus 1: American Rescue Plan

Having been passed by the US House of Representatives on March 10, 2021, the American Rescue Plan (ARP) aims to provide $1.9 Trillion in additional relief as a response to the Covid-19 Pandemic. Within the parameters of the ARP, industries that are deemed essential, such as Agriculture, Healthcare as well as Education would receive financial assistance to enable businesses to remain in operation and to adapt as necessary in response to the pandemic. To alleviate the financial stress associated with adapting to the pandemic, tax reliefs and grants are available to individuals.

A follow-up of nearly $4 Trillion in Covid-19 relief in 2020, the ARP aims to provide support to individuals and businesses facing adversity during the pandemic, as well as to support the aims of the Biden Administration and Congress.

This plan finishes the job of providing a total of $2,000 direct relief to Americans by building onto the CARES Act 2020 with an additional payment of $1,400. Paid leaves are provided where necessary and the Pandemic Unemployment Assistance (PUA) benefits are extended, increasing the total benefits weeks by 20, as well as the full subsidy of the Consolidated Omnibus Reconciliation Act (COBRA) health insurance. Federal Unemployment Compensation (FPUC) benefits are also extended till September 2021.

Reimbursements are also for food aid and emergency shelters and additional supports are added on for programs such as the Supplemental Nutrition Assistance Program (SNAP) and Women, Infants and Children (WIC) program. The Child Tax Credit benefits are also increased for taxpayers to support their families, and the Payback Protection Program (PPP), as well as the recently established Restaurant Revitalization Act, will see an additional allocation of capital to assist local businesses and restaurants for pandemic assistance.

More non-profits can apply for forgivable loans so they can cover operating expenses and paychecks. Most importantly, a whopping amount of $50 billion is used for additional COVID-19 testing and contract tracing funding, of which $7.66 billion is used to increase the size of the healthcare workforce and $16 billion is used to fund the shipment and distribution of vaccines.

Stimulus 2: American Jobs Plan

Also known as the Infrastructure Bill, the plan outlined a spending proposal of $2 trillion on US infrastructure over eight years. By repairing the transit, rail service, and damaged roads and bridges of the nation, America will be shifting towards modernizing its highways and main streets. This funding would improve air quality, limit greenhouse gas emissions, while also creating critical connections for rural and tribal communities.

This bill is aimed towards not just physical infrastructure - rebuilding and transforming roads, buildings, and rail lines, but also human infrastructure - eliminating lead pipes to ensure clean drinking water, linking broadband internet whilst creating high-quality jobs with prevailing wages in ideal environments for the workers. Around 56% of this bill is aimed at addressing and investing in climate-change-related priorities - of which 30% is focused on emissions mitigation, compared to 12% of the American Recovery and Reinvestment Act (ARRA) 2009. The AJP is around 3 times heavier than the ARRA, but about 10 times more on climate spending.

The plan was for these jobs to not require a high level of education - specifically a degree that is not accessible to everyone, as well as to create high-quality jobs for the workers who can voice out their choices. How would this plan be funded? President Biden planned on billing this straight from company tax for the “Made in America Tax Plan”.

The Tax Plan partially reverses the Tax Cut and Jobs Act 2017 by raising the corporate tax to 28%, as well as discouraging companies from seeking tax havens through offshoring of headquarters and jobs. This minimum tax rate is imposed on US multinational companies and eliminates the rule of allowing zero taxes paid on the first 10% of return when investments are located in foreign countries. This shift in tax rate creates higher incentives for companies to invest in the US economy, thus creating a better level playing field as well as competition for companies to stay efficient and competent.

Stimulus 3: American Families Plan

Aimed at strengthening the middle class, the American Families Plan would provide for education, healthcare and childcare by investing in its people to enable them to be able to compete with other countries globally. Totalling $1 trillion in government spending and $800 billion in tax credits over 10 years, the plan would involve subsidizing early childhood education, subsidized healthcare and free tertiary education (community college) for its citizens, including at Historically Black Colleges and Universities (HBCUs), Tribal Colleges and Universities (TCUs), and Minority-serving Institutions (MSIs).

Part of this plan also addresses the growing shortage of teachers, whereby an estimate of 100,000 certified teachers is needed to fill this position. The shortage of certified teachers means that unprepared teachers within schools with many students of colour will aggravate the current racial disparities in education. $9 billion from this fund will be used to tackle the issue of teacher shortages, lack of teacher preparedness and to strengthen a channel for teachers of colour to join the teacher workforce. Incentives added on include doubling scholarships of future teachers to $8,000 per year while earning their degree, strengthening the program while expanding out to include early childhood educators.

This plan also supports paid family and medical leave for working families with the intended effect of increasing women's labour force participation and employee retention while reducing racial disparities and employee turnover.

To pay for the initiative, a proposed tax reform would reverse giveaways from the 2017 tax law while ensuring that wealthier Americans pay their fair share towards nation building. Tax measures include a 39.6% rate on income for higher-income residents, doubling capital gains tax for those who earn more than $1 million, and eliminating a provision in the tax code that reduces capital gains tax for inheritable assets. Over the next decade, the Internal Revenue Service's budget would also be boosted by $80 Billion in staffing and technology to crack down on tax evasion. This increase in spending would result in an additional $700 billion in revenue over the next decade.

Economic Rebound

One noticeable effect of the stimulus would be the greater level of debt that the US government would undertake. The ARP is expected to add $1.8 Trillion to the national deficit from the period 2021 to 2031, and the AJP is expected to add $256 Billion to the national deficit from the period of 2021 to 2031.

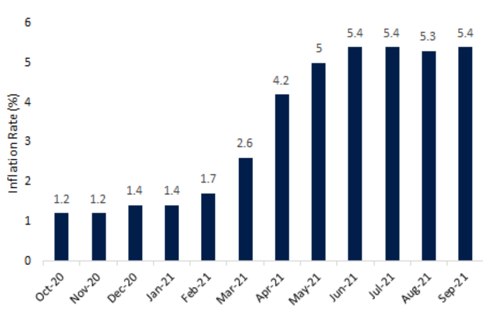
When the 2020 CARES Act stimulus was disbursed in March 2020, this meant that $2 Trillion in stimulus was disbursed to families and individuals whose livelihoods were upended by the Covid-19 Pandemic. 58% of Households who were surveyed on their use of the stimulus used the stimulus to pay off their debt or save the stimulus. The remaining 42% spent the stimulus on consumer goods or healthcare. Compared with the 2008 stimulus program, 49% of stimulus recipients paid off their debts with the rebate, while 30% and 18% spent and saved most of the rebate. Only 3% did not respond.

This meant that any stimulus being disbursed to eligible recipients would likely be spent in a different manner as compared to previous rounds of stimulus, where consumer spending is reduced amid the restrictions in movement and that recipients are less inclined to spend money in uncertain economic times.

Expansionary Fiscal Policy

Despite a decrease in net exports, there is a noticeable increase in GDP due to the increase in investments, government spending, and consumption amid the Covid-19 measures. A key contributing factor revolves around the US government's expansionary fiscal policy, with the passing of the CARES Act in March of 2020 providing $2 Trillion in stimulus under the previous administration. The injection of government funding towards supporting the economy creates an incentive for spending and this increase in spending increased the GDP. Referring to figure 6, the injection of government funds has led to an increase in concerns on inflation, with October 2021 inflation being reported at 5.4%

Figure 6: Inflation Rate for 2021



Source: Trading Economics

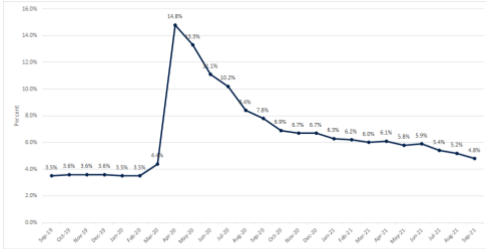
Easing of Safety Measures

Another contributing factor for the increase in economic activity which led to the increase in GDP would be the easing of Covid-19 safety measures as economies began to open up. The availability of the Covid-19 Vaccines and the discovery of new Covid-19 treatments aimed at curbing the spread of the virus, has led to the gradual easing of movement restrictions such as travel bans. The easing of restrictions, in turn, allows for people to travel across the US, leading to increased movement and translates to an increase in spending both domestically and internationally.

Unemployment Rate

Figure 7 shows the effect of the pandemic that hit the US worst in April 2020, where the economy experienced the highest unemployment rate of 14.8% that decreased steeply over the next few months. Till September 2021, the unemployment rate continued seeing a decline as the American Rescue Plan was put into action, which considerably showed an improvement in employment. In July 2021, the US economy saw an increase of 943,000 jobs, which include 230,000 government jobs. This hike in employment was the highest in almost an entire year, made possible due to the American Rescue Plan. Part of this hefty plan included a $350 billion funding towards states, cities, towns and schools - an investment in public services which put many people back in work to revive the economy. As much as the unemployment rate has decreased overall throughout this year, the US has yet to achieve their pre-pandemic rate, which may be an achievable goal in its sight in the next year.

Figure 7: US Unemployment Rate, Seasonally Adjusted, September 2019 to September 2021



Source: U.S. Bureau of Labor Statistics

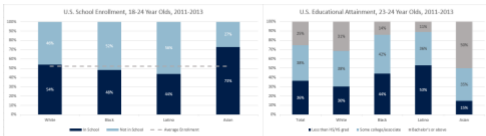
Wider Education Outreach

Education is important and proven to be essential in one’s development, having the privilege to attain higher education is unavailable for many, namely due to high tuition costs or lack of access to more affordable options.

From Figure 8, it is observed that Black and Latinos face a lower percentage of education enrolment, at 48% and 44% respectively, lower than the average enrolment of 52%. The poverty that poor Blacks and Hispanics experience is more 'isolating and concentrated', extending to the entire neighbourhood including schools and adding on to the difficulty for them to break out of the poverty cycle and for the generations to come. Referring to Figure 9, the poverty rates of Black and Hispanics are significantly higher at 19.5% and 17% respectively, compared to other ethnic groups whose poverty rates stand around 8% and 11%.

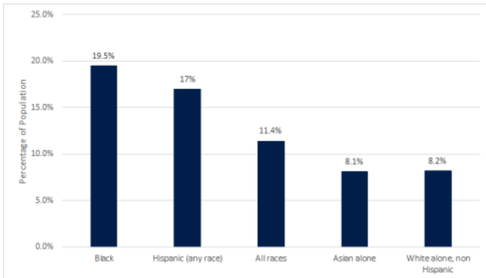
These ethnic groups will stand to benefit significantly from the American Families Plan arrangement in gaining access to education and care for a better future.

Figure 8: Disparities in education



Source: Brookings

Figure 9: Poverty rate in the United States in 2020, by ethnic group



Source: Statista

Winning Industries

Industries reported to benefit from the American Jobs Plan include the Green Technology (Green Tech) and Electric Vehicle (EV) industries.

With a global concern to reduce greenhouse gas emissions, the market growth is attributed to heightening motivation to combat excessive harmful gas and pollution. Major companies such as Ford are also beginning to roll out their contributions towards clean and green technology, like having rolled out an $11.5 billion electric car plant that provides the US with the biggest electric vehicle charging network. In 2020, the global Green Tech market was valued at $9.57 billion, and is expected to reach $41.62 billion by 2028 with a market compound annual growth rate (CAGR) of 20.3% between the next 7 years, with North America expected to be the largest player throughout the forecasted period.

The EV market is not a niche market compared to a few years back, with it rapidly taking off and demand felt across the world through new to established brands on the market. Currently, US’s EV market sales are about one-third as compared to the size of the Chinese EV market. Part of the American Jobs Plan is to spur domestic production to give consumers point-of-sales rebates and incentives to purchase locally made EVs with affordable prices and assurance that their vehicles are produced ethically. Part of the bill will go towards developing the infrastructure necessary to accommodate EVs such as charging points and power infrastructure, which increases the likelihood of creating more jobs within these industries as well as the demand for raw materials and commodities needed to build the necessary infrastructure for US manufacturers.

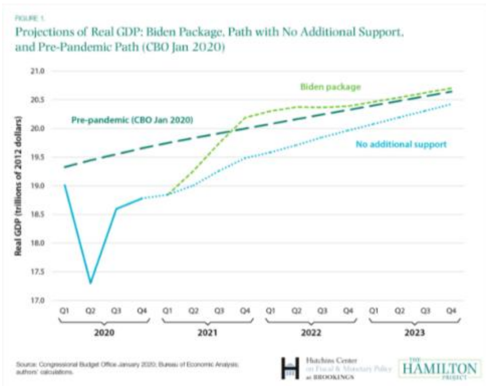
In 2019, the dollar market value of the EV market stands at $162.34 billion and is projected to reach $802.81 billion by 2027 with a CAGR of 22.6%. For North America, it is projected to reach $194.20 billion by 2027 at a significant CAGR of 27.5%. Global sales of EVs are also forecasted to reach $10.7 million by 2025 and then 28.2 million by 2030.

<u>What to Expect</u>

<u>Macroeconomic Implications</u>

The $1.9 trillion American Rescue Plan is estimated to boost the US economy's real gross domestic product (GDP) by 4% at the end of 2021 and by 2% at the end of 2022 compared to having no fiscal support. Without additional fiscal support, real GDP is estimated to stay below the pre-pandemic level for the next few years. The distribution of vaccines is a major part of the federal effort to contain any possible renewal of the pandemic - and with additional fiscal support - prepares millions of households financially and health-wise. If fully implemented, real GDP would hit the Congressional Budget's Office pre-pandemic GDP levels after the third quarter this year and exceed by 1% in the fourth quarter. In mid-2022, cumulative real GDP is estimated to experience a temporary shallow decline before settling to grow at an annual rate of 1.5% up till 2023. In late 2021, the US economy is predicted to exceed the maximum sustainable level which might result in inflation that may create a rough period for the nation. Moreover, estimates show a cushion-landing but could be more painful than projected.

Figure 10: Effects of Real GDP: Biden Package, Path with no Additional Support and Pre-Pandemic Path (CBO Jan 2020)



Source: The Hamilton Project

From Figure 10, we can see the illustration of the difference the US economy will experience with and without an additional fiscal policy. With the American Rescue Plan enacted, the US economy will see chances of the economy recovering and operating at the pre-pandemic level. With financial aid provided to financially vulnerable families, businesses and households, production will heighten, and spending will increase, leading to an increase in real GDP and upward pressure on prices.

<u>Shift in Employment: What happens now?</u>

When the country shifts to electric vehicles, workers in parts of the internal combustion engine would not be needed. The transition from traditional vehicles to electric vehicles will be felt beyond states, as workers at repair shops, gas stations, oil fields and farms find their jobs affected by an economic dislocation of historic proportions. The United Auto Workers estimated a loss of 35,000 union jobs could result from this shift and will be taking a realistic approach to promote and push protection for their workers. This raised the question: will traditional auto manufacturers and repairmen be left behind?

As long as the transition from auto jobs to electric vehicles are reliable to create quality union-wage jobs that suit market demand, workers would not suffer disproportionately. While traditional automotive manufacturing jobs are likely to decrease, new jobs are created from installing and maintaining EV chargers to the equipment needed for battery production. There would be an increased demand for workers to mine and refine lithium and other raw materials needed for EVs, and the energy sector will have to expand to supply power for charging all those batteries, whether from renewable or conventional plants.

In the long run, the number of jobs is likely to decrease as many infrastructure jobs are temporary but going against the shift to EV will result in more jobs being lost as well as the US falling behind other countries.

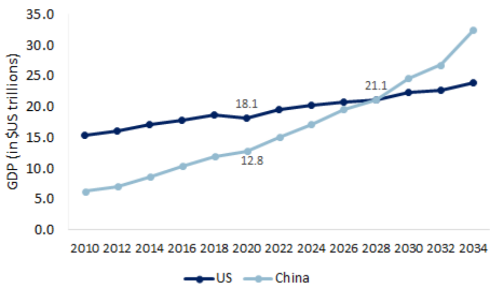
Geopolitical Events

Introduction

The global economy is increasingly being polarised in the hands of two competing powers - US and China.

This power struggle between the two dominant world leaders has heightened amidst the coronavirus pandemic, with both countries experiencing different extents of the effects of the pandemic. China's competence in managing the pandemic has enabled it to avoid an economic recession. In 2020, China's GDP grew by 2.3%, in contrast to the US whose GDP fell by 3.5%. According to the UK-based Centre for Economics and Business Research (CEBR), China's GDP is forecasted to overtake the US by 2028, five years earlier than expected, emerging as the world's largest economy (Figure 11). As China appears to be an expedited threat to the US economy, it is crucial to look into the relations between the US and China in the various aspects - trade, tech and defence, to better understand the diplomatic relations between the two intertwined economies.

Figure 11: GDP of US and China between 2010-2034



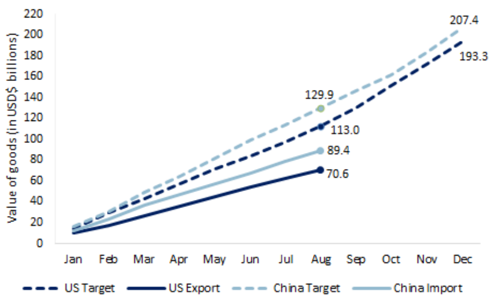
Source: CEBR (2021)

Trade

Commitment to the 'Phase One' Trade Deal

The 'Phase One' trade deal between the US and China in 2020 was significant progress after both countries entered a trade war in 2018. The trade deal involved a relaxation of some US tariffs on Chinese imported goods and a commitment by China to purchase an additional $200 billion worth of American goods. Through August 2021, US goods exported to China amounted to $70.6 billion, below its target of $113.0 billion (Figure 12). As of August 2021, China hit 62% of its target. While this appears to be an improvement in China's purchase commitment from 59% in December 2020, this marginal improvement is in fact no cause for celebration (Figure 12).

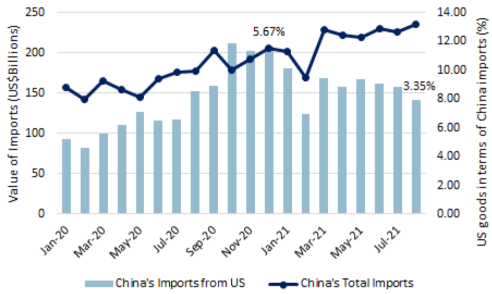
Figure 12: US exports and China's imports of all covered goods in 2021



Source: PIIE (2021)

An increase in imports from the US in tandem with China's increasing imports since January 2020 was expected. However, despite China's imports increasing by 14.6% between December 2020 and August 2021, the proportion of US goods constituting China's imports fell from 5.7% to 3.4% in that period (Figure 13). As China's performance falls well short of its targets, it is unlikely to fulfil its Phase One commitment by 2022 and we expect the imposed tariffs on Chinese goods to remain.

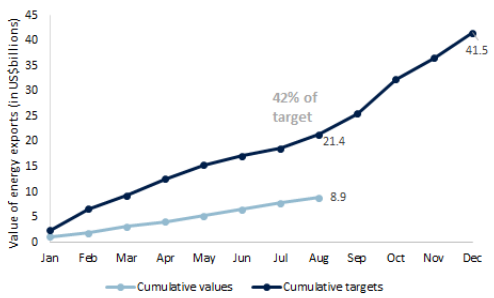
Figure 13: % of US goods that make up China's imports



Source: China Customs, Team Analysis

US has an abundance of energy and China is one of the world's biggest energy importers. However, this relationship did not manifest under the 'Phase One' deal, with energy falling the furthest from China's purchasing target, at 42% in December 2020 (Figure 14). This could be attributed to China's plan of improving its energy security as indicated in its Five-Year-Plan (FYP-14) laid out in 2021. We expect future exports of US energy into China to reduce as China seeks to be self-sufficient in oil and gas.

Figure 14: Energy exported by US to China

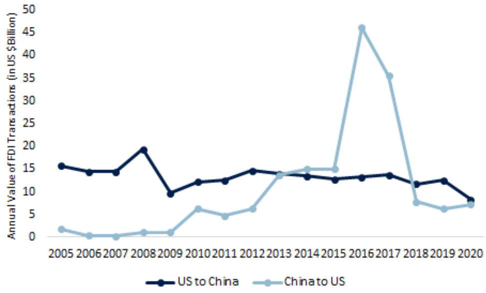


Source: PIIE (2021)

Effects on FDI

The Biden administration has not budged on its predecessor's stance on tariffs. Tariffs on Chinese imports were maintained at 19.3% since the 'Phase One' agreement in 2020. As it is unlikely that the US will remove its tariffs on Chinese imports in the near term, Chinese companies are increasing their greenfield investments in the US market to circumvent existing trade barriers. To avoid getting caught in the crosshairs of (US-China) disputes, foreign investors from US and China may redirect their investments away from China and US respectively. In 2020, the annual FDI between the US and China amounted to $15.9 billion. As seen in Figure 15, this dip in FDI is the lowest since the 2009 global financial crisis and could be translated to investors' pessimistic outlook of US-China relations in the long term.

Figure 15: Annual Value of FDI Transactions between the US and China



Source: Rhodium Group (2021)

Tech

What Led to the Tech War?

In the initial stages of the US-China trade conflict, stricter restrictions on the exports of ICT products to the Chinese market were imposed to better protect the intellectual property rights of US innovation. In addition to export controls, tariffs were raised on imported Chinese tech goods, which were revealed to be key beneficiaries of China's industrial policies (e.g., Made in China 2025). While tariffs are supposed to benefit American workers and the US economy, this has backfired as the tariffs are borne by US consumers. As such, concerns were raised by some sections of the US community regarding the effectiveness of tariffs in this two-pronged approach.

"Made in China 2025" Blueprint

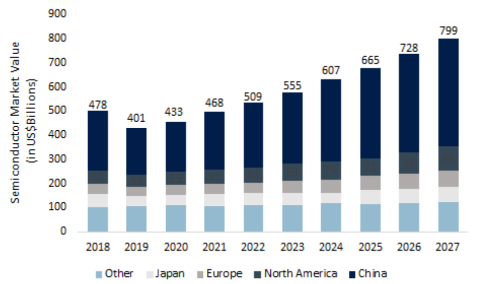
In a further effort to develop China's manufacturing industry, the Chinese government laid out the "Made in China 2025" plan in 2015. The 10-year blueprint seeks to rapidly develop high-tech industries (e.g., EVs, 5G, AI, big data, robotics, semiconductors) that are central to Industry 4.0. These industries are crucial as they bridge the physical world and digital landscape to further increase the efficiencies of industrial capacities. Given the current geopolitical climate, it would be a long way ahead for China to transform its industries to produce more sophisticated goods.

To achieve its goals, the Chinese government has been setting explicit targets for local manufacturing content, offering financial incentives to companies operating in key industries, heavy investments into R&D, and intensifying joint venture arrangements for foreign companies seeking access into the lucrative Chinese market. As these were seen as direct threats to the economic interest of the US, US ICT exports to China were restricted. This is followed by a series of sanctions and blacklisting of Chinese tech companies, which are being accused of human rights violations and over national security concerns. Therefore, morphing the initial trade restriction on ICT products into a large-scale tech war.

Semiconductors

Semiconductors are essential components in most modern electronic devices, and they are the main driver of advancement in communications and various smart applications (e.g., big data, cloud computing, AI) that are vital to the practices of Industry 4.0. In 2019, China alone accounted for 50% of the global demand for semiconductors (Figure 16). With ICT infrastructure and 5G smartphone production expected to further expand in the medium term, China's demand for semiconductors is expected to grow rapidly into 2027, by approximately 100 per cent.

Figure 16: Semiconductors Consumption by China



Source: IBS (2020)

As China is worried about possible vulnerabilities in western semiconductors, it actively seeks to pursue self-sufficiency in semiconductors. This has led to massive investments into its domestic semiconductor industry. Moreover, the impact of the US-China tech war has led to China's introduction of further favourable policies for its domestic semiconductor industry to intensify R&D and production capacities to meet its growing demand.

Despite this, China's domestic semiconductor industry still faces difficulties in their development of modern semiconductors which are competitive to global standards. As such, it still lags in semiconductor sales (Figure 17).

Defence and Security Cooperation

Is Open Communication in Defence Talks merely a Show?

Since Biden's term, there has been increased communication between the US and China, with the US already having two rounds of high-level defence discussions with China. The defence discussions by the US were in a bid to manage the US-China competition. Arguments ensued in the first major talks between US and China held in March 2021. The agenda was for both sides to assess issues over trade, the pandemic, the contentiousness of the South China Sea heavily dominated by China's presence, and Chinese human rights abuses, yet both parties had not come to any consensus at the end of the talks. Instead, the Biden administration has reaffirmed its predecessor's stance on China as its main adversary, with stiff competition expected to continue between the two.

A competition between the Democratic and Autocratic

The stiff competition between US and China extends to the areas of defence and security as well. US military expenditure increased from US$683 billion in 2018 to US$778.2 billion in 2020, and 3.3% to 3.7% in terms of its GDP (Figure 18). In August 2021, the Biden Administration approved a US$750 million arms sales package to Taiwan which would help it maintain rock-solid self-defence against China. Additionally, Biden has vowed to defend Taiwan from China's military pressure despite contradicting its policy of strategic ambiguity in providing military support.

Another indirect confrontation is evident in the trilateral partnership that the US has formed with the UK and Australia, also known as AUKUS. The Australia-China relations were strained since April 2020 when Australia called for an investigation into the origin of COVID-19, and has since suffered trade bans and tariffs on its trade with China. Under AUKUS, the US and UK would assist Canberra to acquire a fleet of US nuclear-powered submarines to defend the countries' shared interest in the Indo-Pacific, giving rise to the militaristic nature of this partnership.

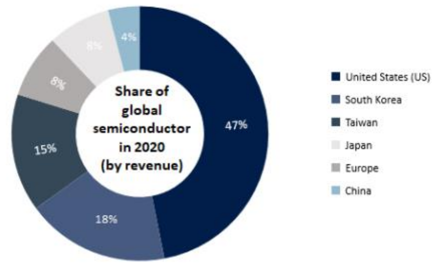
In turn, the AUKUS complements the QUAD grouping as both espouse a free and open Indo-Pacific region. While the QUAD is not a military alliance, with more countries in the region endorsing a central purpose of countering China, this in turn restores the balance of power in the contentious Indo-Pacific region. With US support in restoring and achieving a balance of power in the region, it would likely benefit from increased partnerships on other issues. Notably, some of the issues of priority at the QUAD meeting relate to digital infrastructure and critical technology, an area in which the US is head-to-head with China.

By extending help to smaller countries to defend against China, the US is taking a backhanded approach in confronting China while garnering the support of the other countries. This shows that the US continues to view China as an imminent threat and while the Biden-era appears to be less hostile towards China, it will remain guarded and tough on it.

Re-engaging the ASEAN Bloc

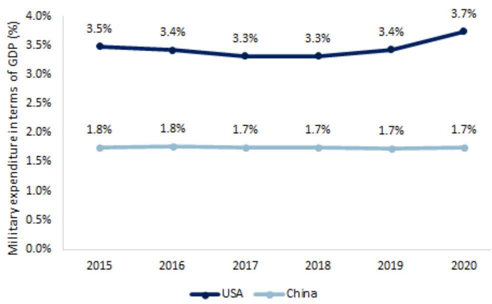
After the second world war, the US has maintained a significant presence in South East Asia. In this period of decolonisation and the cold war, its reassuring and stabilising presence has helped contain regional rivalry and tension, and the spread of communism. During the Trump administration, engagement with ASEAN on the political level had been disappointing with the withdrawal of US from the Trans-Pacific Partnership and skipping of both 2018 and 2019 ASEAN-US summits.

Figure 17: Share of Global Semiconductor Revenue in 2020 by Country



Source: IC Insights (2020)

Figure 18: Military expenditure of US and China as a percentage of gross domestic product (GDP)



Source: World Bank Data (2021)

Despite this, the US has remained influential on the economic level. For instance, the US has been the top 5 investors in ASEAN since 2011 (except in 2018) (Table 2 and Figure 19). In 2020, the US was the top investor in the ASEAN region, accounting for approximately 25% of the region's total inflows in terms of inward FDI. US investments in the region are broad-based and they include manufacturing, financial and insurance activities, and professional, scientific and technical activities.

Over the years, China has been making significant inroads in its influence in Southeast Asia and this has subsequently weakened US influence in the region. In 2020, ASEAN has become China's largest trading partner with bilateral trade reaching $684.6 billion, overtaking the EU in the process. With further deepening economic cooperation between China and the ASEAN bloc, this might lead to a further weakening of US influence in the region. Given that South East Asia is located between the Indian and the Pacific Ocean, re-engaging the ASEAN bloc is of strategic interest to the US as they seek better military access into the region and contain a more assertive China. However, whether a healthy and robust relationship can be maintained between both parties will be highly dependent on US commitment to regional organisations and their shared values of democracy and fundamental human rights.

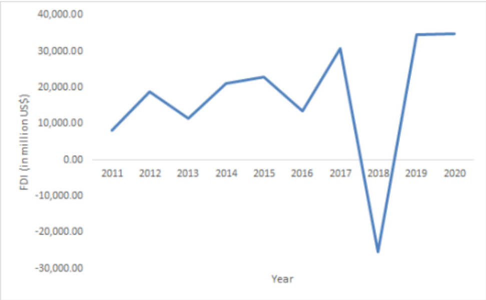
Relations have certainly evolved over time and this has led to a shift in the geopolitical and economic landscape in the region. With deteriorating US-China relations, most ASEAN member states would hope to avoid taking a side. In such a crucial period, ASEAN unity remains to be tested.

Table 2: Flows of Inward Foreign Direct Investment (FDI) into ASEAN by Source Country (in million US$)

Country (2011)		Country (2020)	
EU-27 (excl. UK)	14624	US	34750
Singapore	12717	Singapore	14014
UK	9795	HK	11982
US	8197	EU-27 (excl. UK)	10487
Japan	7798	Japan	8500
China	7194	China	7620

Source: ASEANstats

Figure 19: Flows of Inward Foreign Direct Investment (FDI) into ASEAN by USA (in million US$)



Source: ASEANstats

Conclusion

Since the Trump administration, US-China relations have become increasingly tense. The competition for advancement in science and technology has become a new frontier, pitting the US against China. Considering the magnitude of the competition, the ongoing tech war is expected to have a spillover effect on the existing global supply chain.

A more assertive China is also seen as a potential threat to US national security, economic prosperity and global influence. As such, this has led to the US strengthening and reaffirming its existing alliance, and re-engaging its commitments to regional organisations in the Indo-Pacific. With the US partnering various countries in defending the Indo-Pacific region, this helps US to garner support in the area of technology where the US faces stiff competition with China.

Despite their differences, there are certainly areas for cooperation such as climate change and counterterrorism, which are overlapping interests between the two giants. Supposing these yield positive results, these areas for cooperation can provide stability and a platform for them to further work on other contested issues.

Trade Ideas

TIPS

To hedge against the inflationary pressures the US is facing currently, we propose to include iShares TIPS Bond ETF in the portfolio. Research from Vanguard has shown that commodities are a good hedge against unexpected inflation. However, referring to Figure 21, it can be seen that TIPS is a better hedge against commodities as the returns and risk profile as shown by the Sharpe ratio is higher than commodities.

TIPS are designed to protect investors from the risk of higher-than-expected inflation. TIPS will adjust their principal based on US CPI and pay out a fixed coupon rate on the principal. As the size of the principal is adjusted, the coupon will also change, increasing and decreasing with changes in CPI. Referring to Figure 22, the YTD return of 4.57% is higher than the core CPI increase of 4%.

We recommend the iShares TIPS Bond ETF because of its diversification with 49 holdings of different maturity TIPS as longer term TIPS will be more sensitive to changes in inflation while a shorter term TIPS will be less sensitive to changes in inflation. Therefore, holding a portfolio of TIPS with different terms will average out the sensitivity and smoothen the returns curve. TIPS also have low credit risk as it is backed by the US government. Furthermore, TIPS is a low volatility inflation hedge instrument that has a low correlation with other financial assets such as equities, money market funds and bonds, therefore, further diversifying an investment portfolio while reducing the overall volatility of the portfolio.

In the case of a high inflation rate, it will translate to pressure on the earnings of companies which is likely to lead to a devaluation of equity assets. In addition, the higher inflation rate will result in the prices of current bond and money market funds assets dropping in price to push the yield up to compensate for the inflation rate. Moreover, TIPS will rise in price when inflation is high as the principal is tied to the rate of inflation. Hence, this hedges the portfolio against the risk of loss of purchasing power that could result from high inflation rates.

With reference to Figure 22, the ETF has an expense ratio of 0.19%, YTD return of 4.57%, AUM of $35.7B and an average daily volume of $581.6M. It has the largest AUM and average daily volume compared to other competing ETFs, providing sufficient liquidity in the case the holders have to liquidate their holdings.

EV and Tech ETF

The iShares Self-Driving EV and Technology (IDRV) ETF seeks to track the investment results of an index composed of developed and emerging market companies that may benefit from growth and innovation in and around electric vehicles, battery technologies and autonomous driving technologies.

As the demand, capital inflow and international focus on EVs grow alongside the American Jobs Plan's goal of expanding EVs across the nation, this ETF presents a long-term opportunity for investors to benefit.

Defence ETF

The iShares U.S. Aerospace & Defense (ITA) ETF seeks to track the investment results of an index composed of U.S. equities in the aerospace and defence sector. As the US steps up on extending its support to countries that have been targeted by China, specifically in its provision of military aircraft and defence equipment, defence ETF would likely benefit from this.

Figure 20: Performance comparison between TIPS and Commodities (S&P GSCI)

Asset Class	Annualised Return (%)	Standard Deviation (%)	Sharpe Ratio
TIPS (1-10 year)	2.58	3.17	0.63
TIPS (Full Duration)	3.40	4.33	0.66
Commodities	-6.48	3.01	-0.22

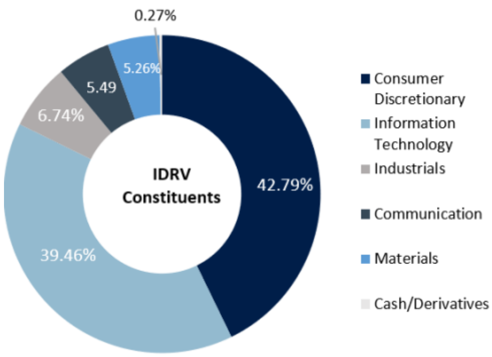
Source: NUVEEN

Figure 21: Performance and details of iShares TIPS Bond ETF

Expense Ratio	0.19%
YTD Return	4.57%
AUM	$35.7B
No. of Holdings	49
Average Daily Volume	$581.6M

Source: iShares

Figure 22: Constituents of iShares Self-Driving EV and Tech ETF



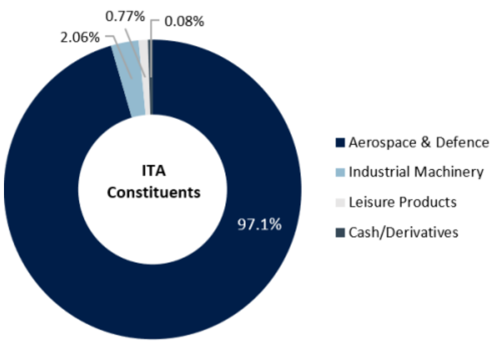
Source: iShares

Figure 23: Performance and details of iShares Self-Driving EV and Tech ETF

Expense Ratio	0.47%
YTD Return	22.14%
AUM	$47.0M
No. of Holdings	100
Average Daily Volume	$3.0M

Source: iShares

Figure 24: Constituents of iShares US Aerospace & Defence ETF



Source: iShares

Compared to the other Aerospace & Defence ETFs that are traded on the US markets, ITA is the largest with US$2.61 billion of assets under management. Its expense ratio of 0.42% is also lower than the average of the Aerospace and Defence ETFs at 0.59%.

Figure 26: Performance and details of iShares US Aerospace & Defence ETF

Expense Ratio	0.42%
YTD Return	11.06%
AUM	$2.61B
No. of Holdings	35
Average Daily Volume	$20.11M

Source: iShares