

SIFMA Research: 2021 End-Year US Economic Survey

Forecasts from the SIFMA Economic Advisory Roundtable

December 2021

SIFMA Economic Advisory Roundtable

The SIFMA Economic Advisory Roundtable brings together Chief U.S. Economists of 27 global and regional financial institutions. This semiannual survey compiles the median economic forecast of Roundtable members, published prior to the upcoming Federal Open Market Committee (FOMC) meeting. We analyze Roundtable economists' expectations for: GDP, unemployment, inflation, interest rates, etc. We also review expectations for policy moves at the upcoming FOMC meeting and discuss key macroeconomic topics and how these factors impact monetary policy.

Note: The survey was populated between November 15 and December 3.

Key Takeaways

- 2021 GDP growth est. +5.2%, vs. -2.3% in 2020 (median forecast, 4Q/4Q)
- 2021 unemployment rate est. +4.5%, vs. +6.8% in 2020 (4Q average)
- 2021 inflation estimate +4.9%, vs. +1.6% in 2020 (Core CPI, 4Q/4Q)

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Survey Disclaimers: Since the survey launched, there could have been changes in monetary or fiscal policy actions which are not accounted for in this report. Charts may not add to 100% due to rounding.

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Setting the Scene

A Message from Our Chair

There's no doubt that the recovery has been much more rapid and much more robust than most, maybe even than anyone anticipated. Certainly, at the start of the year the U.S. economy was nothing short of fantastic, with absolutely stellar GDP growth at 6.5% and 12% growth in consumption. As we turned into the third quarter, however, and fiscal stimulus began to wane, topline activity fell as expected. The question remains will growth, particularly consumer activity, moderate from here or continue to lose momentum? There were early signs of the consumer losing momentum but, smoothing out month-to-month volatility, the consumer very clearly remains on positive footing with a stellar performance in October.

As we think about the many factors impacting our economy going forward, we look at the uncertainties out there. First, we continue to navigate through the COVID crisis. The virus itself, the polices implemented to stem the spread of the virus, and the latest variants all remain considerable sources of uncertainty. This includes not just U.S. COVID policies but also those overseas which will impact us here at home. As access to global parts and materials are limited, this leads to extremely extended wait times on what many of us consider ordinary products, particularly as we head into the holiday shopping season – not to mention higher prices and costs.

So first and foremost the virus remains the key source of uncertainty, followed by extended inflation and of course supply chain disruptions. We at Stifel think that some of the inflationary pressures that we are seeing in the economy are transitory. Some, however – namely wage pressures – are likely not. Labor costs are edging higher with firms across a variety of sectors offering higher wages – and also bonuses and other incentives to try and entice employees back to work – to fill that labor supply gap. Wage pressures are often "stickier" or longer lasting than price hikes due to short-lived disruptions in production materials. This means that after months of businesses offering incentives, going forward, incoming hires are likely to maintain expectations for elevated compensation, even though the government benefits program has ended. Wage pressures have largely resulted from artificial policy measures disrupting the structural balance of the labor market, the effects of which have not only proven larger than expected but will likely be more permanent in nature.

Conversely, while production costs moved up quickly due to supply chain disruptions, they will likely ease in the near to medium-term as balance is restored to the marketplace. This is the transitory component the Fed is focused on. This is less an economics question and more a health question. Supply chain disruptions will ease when countries around the world are able to control the virus or feel comfortable with returning to ordinary life despite the virus. We are very much a globally intertwined marketplace. A U.S. manufacturing facility, for example, may be producing a widget for American consumption, but a specialized screw or particular heat treated metal for that widget production might come from Sri Lanka or Indonesia. With much of the developing world one, two, or even three stages behind the U.S. in terms of recovery, this will significantly negatively impact U.S. producers' ability to ramp up production for their domestic base, resulting in price pressures along the way – particularly the case as energy costs surge – as demand continues to outpace available product supply.

Given we are likely to see a number of additional variants going forward – meaning the Omicron variant is unlikely the last strain – we are likely to be dealing with the virus for the next couple of years, indicating supply chain disruptions may last for just as long. We think we are already seeing structural inflation pressures, with only a portion of the supply chain disruptions resulting in transitory or temporary price momentum. In part, this is why the Federal Reserve Chairman recently removed his "transitory" characterization of inflation. In part we think it was simply a fatigue factor – Powell was tired of explaining exactly what transitory meant or was meant to imply from a policy standpoint – but we also believe this was in part why we saw the Fed drop its "transitory" assessment of inflation. The Fed still contends that as the economy recalibrates to a new equilibrium – producers are able to ramp up production and satisfy consumers' pent-up demand and international supply chain bottlenecks are smoothed – price pressure will expectedly slow back down to a more palatable 2%. In the interim, after a year of elevated costs, Fed officials finally agree that inflation is proving longer lasting or more structural in nature.

Therefore, inflation is complicating the economic picture, even as savings and higher wages have helped to offset the decline in fiscal support. Shoppers are spending more, helping to support topline growth, but they are taking home less. And with inflation expectations on the rise, many are adopting a "buy now" mentality, meaning we better buy what we can today because tomorrow it will cost more if the product is available at all. That is not to say the consumer will fall off the cliff by year end, but there are several factors pulling forward traditional end-of the year winter spending. That being said, we do expect the consumer to remain in positive territory but nearer 2% as opposed to the 12% at the start of the year. We expect a positive but much more muted winter quarter.

It will also take some time to entice millions of workers back into the labor force, with no quick fix, although no doubt the plethora of businesses reporting over 10 million job vacancies would like to see a quick fix. First, we have to remember that this was a health crisis and not a market crisis, thus it is understandable that there are lingering health concerns, and lingering health impacts resulting from the virus – the so called " long haulers". According to the Bureau of Labor Statistics, as of October, 1.5 million Americans report they are prevented from looking for work due to the pandemic with more than 2 million reporting they remained sidelined due specially to "worries about getting or spreading the virus."

There are also lingering childcare or elder care issues impacting families and, in particular, women. With most schools now fully reopen, this has or will soon alleviate a good amount of pressure for working families, or at least for those with school aged children. For those caring for elderly family members or small children not yet of school age, daycare and nursing home facilities in many cases are still acting at reduced capacity with many reportedly facing staffing issues themselves. As of October, The Census Bureau reports nearly 5 million people are out of work because they were "caring for children not in school or daycare."

Additionally, there have been numerous reports indicating fiscal policy measures were, and in some cases still are, a barrier to growing the pool of potential labor by essentially creating an incentive to remain outside of the labor force. Enhanced unemployment benefits, for example, offered unemployed workers an additional \$300 a week, which in some instances equaled or exceed their earnings potential in the jobs market. This not only created an immediate incentive to remain outside of the labor force but also a lingering impact as savings accumulated.

Going forward, as schools have reopened, enhanced unemployment benefits have now expired, and vaccination rates continue to increase, we would expect labor force participation to improve but likely very slowly. According to our survey respondents, they were about split on the timeline for a return to pre-virus participation: 46% responding after 2022; and 46% less optimistic, responding never. We at Stifel would tend to side with the former. We do think it will take some time, but we also think we could eventually achieve those pre-pandemic rates.

With that, we invite you to dive into the results from our end-year U.S. economic survey.

-- Dr. Lindsey Piegza, Ph.D., Chief Economist and Managing Director at Stifel Financial Corporation and Chair of SIFMA's Economic Advisory Roundtable

Status of the Economic Environment

Inflation¹, inflation, inflation, and supply chain. Almost every conversation today involves discussing these topics. Even Fed Chair Jerome Powell said in his recent testimony to the Senate Banking Committee that it is time to retire the term transitory around inflation. As new COVID concerns and ongoing supply chain issues continue to drive inflation higher, price pressures are coming from both ends. On one hand, we are seeing demand-pull inflation, where strong demand from consumers drives up prices. We are also experiencing cost-push inflation, where supply costs – in this case driven by supply chain constraints – force prices higher.

In light of this, we thought it would be interesting to look at inflation from these different viewpoints, that of consumers as well as producers. To do so, in the next sections we analyze:

- **Consumers** The Consumer Price Index (CPI) measures the change in direct expenditures for all urban households for a defined basket of goods and services, referred to as headline inflation. Core CPI removes food and energy, items associated as a source of the noise in the price data in headline inflation.
- Producers The Producer Price Index (PPI) measures the average change over time in the selling prices received by domestic producers for their output. As PPI measures the costs of producing consumer goods, and commodity and food prices directly affect retail pricing, PPI is seen as a good pre-indicator of inflationary pressures.

¹ Please see SIFMA Insights <u>Spotlight</u>: Inflation 101 for a deeper look into inflation terminology, measurement, and historical trends

Inflation - to the Consumer

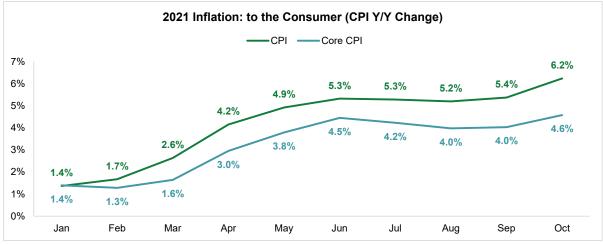
While over the summer months it looked like inflation had stabilized – in terms of growth rates remaining stable, albeit from elevated levels versus historical data – inflation spiked in October:

- **Headline CPI**: +6.2% Y/Y change in October, +0.8 pps from the prior month rate
- Core CPI: +4.6% Y/Y change in October, +0.6 pps from the prior month rate

To put this elevation in context, we compare to inflation trends:

- Pre COVID three-year trend (for the years 2017 to 2019)
 - Headline CPI: average increase +2.13%, maximum increase during time period +2.9%
 - Core CPI: average increase +2.06%, maximum increase during time period +2.4%
- Trends since 1990 (excluding this year)
 - Headline CPI Y/Y increase has never been above 6%, although it came close in the early 1990s
 - Core CPI was greater than 4% only in the early 1990s (for 13 months)
 - Neither of the measures surpassed 3% that frequently
 - Both headline and core CPI were in the early 1990s
 - Headline CPI was in the early-mid 2000s and again in 2011

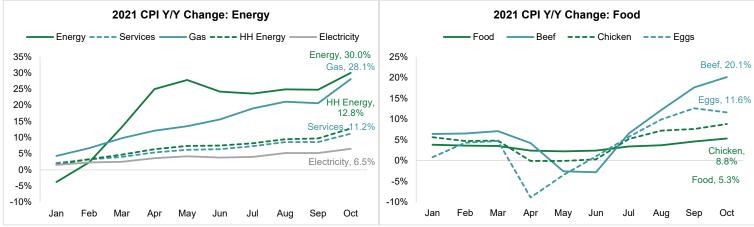
The jump to current levels is certainly not the trend consumers were looking for heading into the holiday season.



Source: Bloomberg, SIFMA estimates

Looking deeper at select categories – ones we believe are of interest to many consumers – we note the following trends:

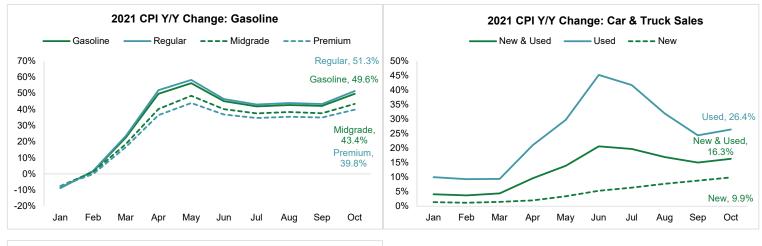
- Energy Overall, the October Y/Y increase was +30.0%; utility (piped) gas was +28.1%, household (HH) energy was +12.8%, energy services were +11.2%, and electricity was +6.5% (not a large rise when compared to the others, but still a significant jump from historical rates as it averaged +0.2% in 2019)
- Food Overall, the October Y/Y increase was +5.3%; but common dining room table items are up significantly beef +20.1%, eggs +11.6%, chicken +8.8%

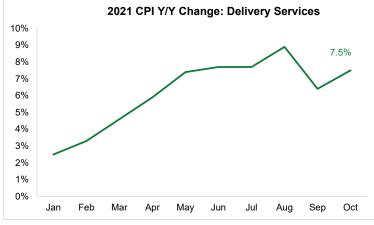


Source: Bureau of Labor Statistics, SIFMA estimates

Note: Gas = utility (piped) gas service; HH = household energy; services = energy services; beef = beef and veal

- Gasoline Overall, the October Y/Y increase was +49.6%; if consumers think they can go "cheap" putting regular leaded gas in their cars, they are wrong as this was up +51.3%, versus +43.4% for midgrade and +39.8% for premium
- **Car and Truck Sales** Overall, the October Y/Y increase was +16.3%; much has been written about the increase in used cars and trucks, which had started to come down but ticked up again in October (+26.4%), but new car and truck prices have increased as well (+9.9% in October)
- **Delivery Services** Does anyone pick anything up in person anymore? Well, this cost is continuing to increase, as the delivery services Y/Y increase was 7.5% in October





Source: Bureau of Labor Statistics, SIFMA estimates

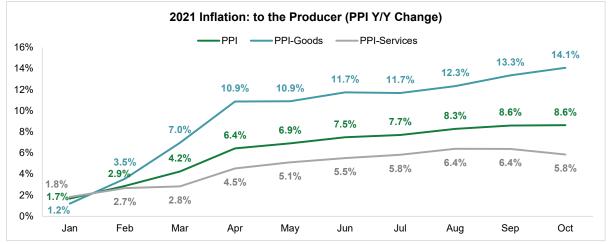
Inflation – to the Producer

While PPI is a lessor discussed inflationary measure (at least among non economists), as we mentioned above it can be a pre-indicator of inflationary pressure. Or in this case, perhaps an indicator that inflation relief is not in sight in the near term. October Y/Y PPI trends in October showed:

- **PPI**: +8.6% Y/Y change in October, flat to the prior month rate; headline PPI continues to be driven by final demand for goods
- **PPI-Goods**: +14.1% Y/Y change in October, +0.8 pps from the prior month rate; costs for goods production continues to increase with no signs of slowing
- **PPI-Services**: +5.8% Y/Y change in October, -0.6 pps from the prior month rate; costs for services started to decline, perhaps driven by the Delta variant driving people back into their homes

To put this elevation in context, we compare to inflation trends:

- Pre COVID three-year trend (for the years 2017 to 2019)
 - PPI: average increase +2.3%, maximum increase during time period +3.4%
 - PPI-Goods: average increase +2.4%, maximum increase during time period +4.4%
 - PPI-Services: average increase +2.2%, maximum increase during time period +3.1%
- Trends since 2010 (excluding this year)
 - None of the three measures have been above current levels prior to this year; using the services
 "low" rate of 5%, only PPI-Goods were >5% in 2011
 - Neither of the measures exceeded 3% that frequently
 - Both PPI and PPI-Goods in the early 2010s
 - PPI-Goods in 2017/2018 and PPI in 2018 (PPI-Services only one month in 2018)



Source: Bloomberg, SIFMA estimates

Supply Chain

The current supply chain constraints are key drivers of inflation. There are multiple levers to be fixed across the supply chain, with some taking longer to work through, such as labor shortages. Key among the supply chain issues are the delays at the Ports of Los Angeles/Long Beach (LA/LB). These ports represent nearly 40% of all containers coming in/out of the US, with volumes roughly equally split across the two. Volume at the Port of LA is holding steady: dwell time for the last 30 days for freight that is moving locally has averaged 11 days, remaining even with peak levels; on-dock rail dwell currently averages 3.5 days, well below its 13.4 day peak.

While the number of ships in the bay surrounding the Ports of LA/LB dropped last week to 61 from 81 two weeks ago (-25%), this may be an optical illusion. New rules now have some ships holding in international waters (100-150 miles offshore), meaning they are not eligible to be counted in waiting in Bay totals. Additionally, the Ports LA/LB management created a queue system from the time vessels depart Asia, allowing ships to slow steam across the ocean to slow their arrival ahead of slot availability.

The log jam of ships at the ports is just one factor in the supply chain ecosystem that is facing challenges. Other supply chain pressure points include (among others):

- Labor shortages at the ports related to COVID and vaccinations (like other sectors of the economy)
- Delays in offloading from ships to trucks and rails solution dependent on labor shortages (both at the ports themselves and truck drivers), but also constrained by lack of space to spread out and add more trucks to load at the same time
- Container shortages port staff and companies working to decrease the time between turning around empty containers
- Truck driver shortages this has been an ongoing issue; the number of drivers has remained essentially stable over the last five years, despite the significant increase in e-commerce even prior to COVID
- Delays/bottlenecks inland at key rail hubs (ex: Chicago) was more of an issue over the summer, and has since improved
- Labor shortages at warehouses inland lack of people available to load and unload containers/trailers
 represents one of the biggest pinch points in labor shortages; ports can stay open 24/7 and drivers can be
 available at 3:00 AM (if you can get drivers to do the 3:00-8:00 AM shift), but if no one is available to
 load/unload at the shipper there will be no undoing the backlogs at the warehouses

As one can see from this (not comprehensive) list, this is an intricate puzzle to be solved. An equity research analyst covering the transportation industry² noted that the "tightness will begin to structurally ease a bit as we move past peak shipping season, but given low inventory levels, will remain fairly tight well into 2022". Our Roundtable economists estimated an easing of supply chain issues by 2Q22 (47% of responses).

² Source: Ken Hoexter, BofA Securities; #1 ranked Capital Goods/Industrials - Shipping analyst and #2 ranked Capital Goods/Industrials - Airfreight & Surface Transportation analyst, according to Institutional Investor

Recapping Prior Survey Forecasts

Before digging into this year's survey results, we recap highlights from our June 2021 survey (populated between May 17 and June 3):

https://www.sifma.org/wp-content/uploads/2021/06/SIFMA-US-Economic-Survey-1H21.pdf

- Economic Forecasts
 - o 2021 GDP growth expected at +7.5% (median forecast, 4Q/4Q); 2022 expected at +3.1%
 - On a quarterly basis, GDP growth expected at +10.0% in 2Q21, +7.9% in 3Q21 and +5.6% in 4Q21 (Q/Q, SAAR)
 - Unemployment rate forecasted to end 2021 at +5.2%, moving to +4.0% in 2022 (4Q average)
 - When building their forecasts, 65% assumed a vaccine would begin to be disseminated to the broad population by 1H21
 - 94% of economists expect the long-term potential GDP growth rate of over 2%, with 82% stating this is unchanged compared with pre COVID estimates
 - The main factors impacting economic growth include: economic reopening post COVID, U.S. fiscal policy/budget, and US monetary policy
 - Key risks to forecasts include:
 - Upside Additional fiscal stimulus, faster reopening of the U.S. economy, and larger consumer spending
 - Downside Lingering COVID pandemic, labor supply constraints, and higher inflation
- Inflation Forecasts
 - o 2021 CPI expectation +3.8% (2020 actual +1.2%)
 - o 2021 Core CPI expectation +2.9% (2020 actual +1.6%)
 - o 88% of respondents believe current inflation pressures are transient/transitory
 - 38% of respondents expect a 15% to 25% probability the U.S. will experience structurally higher inflation over the long run, followed by 25% responding 25% to 50% and 0% to 15% each
 - Top factors to push inflation higher include: sustained breakdown of supply chains, sustained higher deficits and reversal of globalization
 - Given the significant amount of government spending looking at both approved and proposed packages – 87% of Roundtable economists view stagflation as the bigger risk to the economy
- Life after COVID
 - 65% of respondents expect the labor force participation rate not to return to the ~63% pre-COVID average until beyond the end of 2022
 - In terms of stimulus checks and enhanced unemployment benefits impacting the ability for companies to hire staff, 94% of respondents indicate that it is one of several factors
 - o 69% of respondents expect employees never to return to the office at pre-COVID levels
 - Factors limiting a large-scale return to office include: lack of childcare/schools closed, employees choosing to continue working at home, and lingering health concerns of contracting COVID

- Once a vaccine is distributed en masse, 44% of Roundtable economists expect consumers to approach high-density activities at increased but nowhere near pre-COVID levels while another 44% expect the activities to return to pre-COVID levels
- When gauging long lasting or permanent negative impacts from changed behaviors on the heavily COVID-impacted activities, public transportation and airline travel came in at the top (71% of respondents for each)
- 75% of respondents believe proof of vaccination should be required for airline travel and 63% for return to offices
- Looking at COVID safety measures as a hurdle to returning to normal, 44% of respondents replied they view all requirements in aggregate as the biggest hurdle
- 63% of respondents expect us to be required to continue wearing masks through 2H21, 38% responded 1H22
- Fed Actions
 - Respondents indicated that should the Fed need to provide more policy accommodation, the top tool will be communication (100% of respondents), followed by asset purchases/balance sheet (75%)
 - As to the efficiency of the Fed's communication with markets around its timeline for shifting monetary policy, 47% of respondents indicated it's murky but decipherable, while 35% said excellent/very clear
 - 68% of Roundtable economists expect the Fed will begin to lift its target range for the federal funds rate in 2023, followed by 21% beyond 2023
 - The factors listed as most important to the Fed's rate decision were: inflation pressure/expectations, COVID impact on labor conditions, and financial conditions
- Fiscal Stimulus and Tax Policy
 - 35% of Roundtable economists estimate the total amount of additional stimulus in 2021 will be below
 \$1 trillion and 35% indicated \$1-2 trillion
 - 87% of respondents expect the American Jobs Plan to pass at a much lower price tag
 - 73% of respondents expect the American Families Plan to pass at a much lower price tag
 - 53% of respondents view the bigger risk to the economy is the government doing too much, therefore the economy overheats
 - When considering additional stimulus, 38% respondents indicated government should not be considering the debt level (debt/GDP currently over 100%), noting it needs to focus on stimulating the economy now
 - Expectations for tax rates to increase to
 - Corporations 25%
 - Individual (top bracket) 39.6%
 - Capital gains 23.8-43.4%
 - Looking at the potential negative impacts of raising taxes, respondents ranked reduced investment by corporations as the top concern with reduced long-term productivity growth and reduced corporate hiring tying for the second highest concern.

- Trade Policy
 - 29% of Roundtable economists expect the U.S. to renew suspensions on tariffs with the EU and expand the list of goods and 29% indicated it's too early to tell
 - 57% of Roundtable economists expect the U.S. to address perceived unfair trade practices by China by only monitoring the situation, with 29% expecting the tariffs to be removed on some goods
 - When asked if the negative sentiments around China's handling of COVID will have a lasting impact on trade relations with China, 57% responded yes
 - In light of this, 36% of respondents expect a meaningful shift to domestic production, thereby reducing U.S. reliance on overseas production

2H21 Survey Results Highlights

As we close out the year and head closer to the second anniversary of the COVID pandemic, some old questions linger while new ones arose in the latter half of the year. This leaves us with two main questions around the economy:

- Delta variant. Omicron variant. When will we get back to normal?
- Supply chain crunch. Strong consumer demand given the economic reopening. How long will inflation stick around and how much higher can it go?

Therefore, we asked our Roundtable of economists to provide their best assessment of the current environment and when we can approach a new normal. We also compare answers to our June survey to gauge changes in estimates of the economic outlook. We highlight the following from the survey (populated between November 15 and December 3):

• Economic Forecasts

- Unemployment rate forecasted to end 2021 at +4.5%, moving to +3.8% in 2022 (4Q average)
- o 2021 GDP growth expected at +5.2% (median forecast, 4Q/4Q); 2022 expected at +3.5%
- 81% of economists expect the long-term potential GDP growth rate of 1.5-2%, with 53% stating this is lower compared with pre COVID estimates
- When building their forecasts, 43% assumed a vaccine would begin to be disseminated to the broad population by 2H22
- The main factors impacting economic growth include:
 - For 2021, U.S. fiscal policy/budget, economic reopening post COVID, and U.S. monetary policy
 - For 2022, economic reopening post COVID, U.S. monetary policy, and U.S. fiscal policy/budget
- Key risks to forecasts include:
 - Upside Faster opening of U.S. economy/End of the pandemic, larger consumer spending, and supply chain recovery
 - Downside Lingering COVID restrictions and lockdowns, higher inflation, and supply chain issues

• Inflation Forecasts

- o 2021 CPI expectation +6.5% (2020 actual +1.1%)
- 2021 Core CPI expectation +4.9% (2020 actual +1.6%)
- o 67% of respondents believe current inflation pressures are transitory

- 47% of Roundtable economists expect a resolution to the supply chain constraints by 2Q22
- o 60% of respondents would start to view inflation as structural versus transitory if it lasts into 2023
- 47% of respondents expect a 15% to 25% probability the U.S. will experience structurally higher inflation over the long run, followed by 27% responding 0% to 15% and 25% to 50% probability each
- Top factors to push inflation higher include: sustained breakdown of supply chains, reversal of globalization and cost increases as supply chains move back to the U.S.
- 64% of respondents believe the recently passed \$1 trillion infrastructure package pose no risk to inflation
- 80% of Roundtable economists see the greater long-term risk to the economy as stagflation, given ongoing discussions around additional fiscal spending (ex: \$1.75 trillion "human" infrastructure)

Life after COVID

- 46% of respondents expect the labor force participation rate not to return to the ~63% pre-COVID average until beyond the end of 2022 and another 46% expect it to never reach pre-COVID average
- In terms of stimulus checks and enhanced unemployment benefits impacting the ability for companies to hire staff, 73% of respondents indicate that it is one of several factors
- No Roundtable economists expect another round of enhanced benefits if millions remain outside of the labor force
- o 71% of respondents expect employees never to return to the office at pre-COVID levels
- The key factors listed by respondents limiting a large-scale return to office include: lingering health concerns of contracting COVID, employees choosing to continue working at home, and lack of childcare/schools closed
- Once a vaccine is distributed en masse, 47% of Roundtable economists expect consumers to approach high-density activities at increased but nowhere near pre-COVID levels while another 40% expect the activities to return to pre-COVID levels
- When gauging long lasting or permanent negative impacts from changed behaviors on the heavily COVID-impacted activities, hotels came in at the top (92% of respondents), followed by airline travel (83%) and public (67%)
- 86% of respondents believe proof of vaccination should be required for airline travel, return to office and crowded events
- Looking at COVID safety measures as a hurdle to returning to normal, 43% of respondents replied they view all requirements in aggregate as the biggest hurdle
- 58% of respondents expect us to be required to continue wearing masks through 2H22, 33% responded 1H22
- 87% believe the development of the Merck and Pfizer antiviral pills will somewhat accelerate the return to normal

- Fed Actions
 - Respondents indicated that should we see a reversal in the COVID recovery and therefore declining economic factors, the top tool the Fed will use will be asset purchases/balance sheet (93% of respondents) followed by communication (87%)
 - As to the efficiency of the Fed's communication with markets around its timeline for shifting monetary policy, 67% of respondents indicated it is excellent/very clear, while 33% said murky but decipherable
 - Roundtable economists remain divided on when the Fed will begin to lift its target range for the federal funds rate with 29% each responding 2Q22, 3Q22, and 4Q22
 - The factors listed as most important to the Fed's rate decision were: inflation pressure/expectations, resumption of real economic activity, and COVID impact on labor conditions

• Fiscal Stimulus and Tax Policy

- 33% of respondents expect the President's \$1 trillion hard infrastructure package to increase 2022
 GDP estimates by 0-10 bps
- 100% of Roundtable economists expect the proposed human infrastructure plan will be passed; all believe the final package will be \$1-2 trillion
- 30% of respondents expect the President's \$1.75 trillion human infrastructure package to increase
 2022 GDP estimates by 10-20 bps and another 30% expect increase of 20-30 bps
- 85% of respondents view the bigger risk to the economy is the government doing too much, therefore the economy overheats
- When considering additional stimulus, 54% respondents indicated government should consider the debt burden as a further rise could impeded long-term growth or incite inflation

• Trade Policy

- 62% of Roundtable economists expect the U.S. to keep the status quo after lowering steel and aluminum tariffs with the EU
- 46% of Roundtable economists expect the U.S. to address perceived unfair trade practices by China by only monitoring the situation, with 31% expecting increased trade pressures
- When asked if the negative sentiments around China's handling of COVID will have a lasting impact on trade relations with China, 58% responded yes
- In light of this, 36% of respondents expect a meaningful shift to domestic production, thereby reducing U.S. reliance on overseas production

Comparing the Current and Prior Surveys

In this section, we compare results from the June and December surveys. For questions where responses were ranked, we show the top answer for each survey.

ECONOMIC FACTORS	2H21 Survey	1H21 Survey
GDP growth estimate: 2021/2022	5.2%/3.5%	7.5%/3.1%
Unemployment rate estimate: 2021/2022	4.5%/3.8%	5.2%/4.0%
What is your estimate of the long-term potential growth rate of the U.S. economy	>1.5-2% (81% of respondents)	>2% (94% of respondents)
Has your estimate of the long-term potential growth rate of the US economy changed post-COVID	No, temporary impact (53% of respondents)	No, temporary impact (82% of respondents)
How has COVID's impact evolved in your economic outlook	Lessened (53% of respondents)	Lessened (56% of respondents)
What assumptions around dissemination of a COVID vaccine is built into your forecasts	2H21 (43% of respondents)	1H21 (65% of respondents)
What factors will have the greatest impact on U.S. economic growth in full year 2021	Fiscal policy/budget, economic reopening, monetary policy	Economic reopening, fiscal policy/budget, monetary policy
What factors will have the greatest impact on U.S. economic growth in full year 2022	Economic reopening, monetary policy, fiscal policy/budget	Fiscal policy/budget, economic reopening, monetary policy
Top risks to economic forecasts - upside	Faster opening of economy/end of the pandemic, larger consumer spending, supply chain recovery	Additional fiscal stimulus, faster opening of economy, larger consumer spending
Top risks to economic forecasts - downside	Lingering COVID restrictions and lockdowns, higher inflation, supply chain issues	Lingering COVID restrictions and lockdowns, labor supply constraints, higher inflation

Setting the Scene

INFLATION	2H21 Survey	1H21 Survey
End 2021 CPI/Core CPI	6.5%/4.9%	3.8%/2.9%
End 2021 PCE/Core PCE	5.3%/4.3%	3.2%/2.8%
What are the most important factors in your outlook for core inflation	Economic slack/unemployment, inflation expectations, COVID recovery time	Inflation expectations, economic slack/unemployment, COVID recovery time
Do you believe the current inflation pressure is transitory	Yes (67% of respondents)	Yes (88% of respondents)
Under the current policy stance, how confident are you can the Fed can achieve its 2% goal in a sustainable way	Somewhat confident (43% of respondents)	Somewhat confident (53% of respondents)
Looking further out, what probability would you place on the US experiencing structurally higher inflation over the longer-run	15-25% (47% of respondents)	15-25% (38% of respondents)
What factors do you believe could push long- term inflation higher	Sustained breakdown of supply chains, reversal of globalization, cost increase as supply chains move back to U.S.	Sustained breakdown of supply chains, reversal of globalization, sustained higher deficits
What probability would you place on the US experiencing a period of disinflation in core measures over the next two years	>50% (57% of respondents)	0-15% (71% of respondents)
Given the significant amount of government spending, what is the bigger risk for the economy	Stagflation (80% of respondents)	Stagflation (87% of respondents)

Setting the Scene

LIFE AFTER COVID	2H21 Survey	1H21 Survey
When do you expect the labor force participation rate to return to the ~63% pre- COVID average	Beyond 2022 and never (each 46% of respondents)	Beyond 2022 (65% of respondents)
How much of a factor do you believe stimulus checks and enhanced unemployment benefits are on companies' ability to hire	One of several (73% of respondents)	One of several (94% of respondents)
When do you expect work-from-office to return to pre-COVID norms	Never (71% of respondents)	Never (69% of respondents)
Which factors do you believe are limiting a large-scale return to offices	Lingering health concerns of contracting COVID, employees choosing to work at home, and lack of childcare/closed schools	Lack of childcare/closed schools, employees choose to work at home, lingering health concerns of contracting COVID
Even after a vaccine is distributed en masse, how do you expect consumers to approach high-density activities	Increase, but nowhere near pre-COVID norms (47% of respondents)	Increase, but nowhere near pre-COVID norms & return to pre-COVID norms (each 44% of respondents)
Do you expect to see a lasting or even permanent negative impact of changed behaviors on the sectors most impacted by COVID	Travel, hotels (92% of respondents, Travel, airlines moved to 83% of respondents)	Travel, public transportation & Travel, airlines (each 71% of respondents)
Should proof of vaccination be required for:	Travel, airlines; return to offices; crowded events, movie/play/concert/sports (each 86% of respondents)	Travel, airlines (75% of respondents)
Do you view the continuation of full COVID safety measure, such as social distancing and in particular face mask requirements, to remain a drag on the ability to fully return to normal	Yes, all (43% of respondents)	Yes, all (44% of respondents)
Following the CDC guidance reducing mask requirements for vaccinated Americans, do you expect the federal and state governments to uphold mandatory mask requirements on a larger scale through:	2H22 (58% of respondents)	2H21 (63% of respondents)

MONETARY POLICY	2H21 Survey	1H21 Survey
In general, should the Fed need to provide more policy accommodation, what tools will it use	Asset purchases/balance sheet (93% of respondentscommunication fell to 87%)	Communication (100% of respondents)
In general, how do you rate the efficiency of the Fed's communication with markets around its timeline for shifting monetary policy	Excellent (67% of respondents)	OK, somewhat murky but decipherable (47% of respondents)
Does the Fed's new framework, including a "broad-based and inclusive" approach to full employment and an average 2% inflation target suggest the committee will hold rates lower than they would historically under the old framework	Yes (100% of respondents)	Yes (100% of respondents)
When do you think the Fed will begin to lift its target range for the federal funds rate	2Q22, 3Q22, and 4Q22 (each 29% of respondents)	2023 (68% of respondents)
Which of the following factors do you think are the most important to the Fed's decision making	Inflation pressure/inflation expectations, resumption of real economic activity, COVID impact on labor conditions	Inflation pressure/inflation expectations, COVID impact on labor conditions, financial conditions
What is the expected end size of the Fed's balance sheet (note: the ranges became more granular in the 2H21 survey)	\$8-\$9T (57% of respondents)	\$8T-\$10T (93% of respondents)

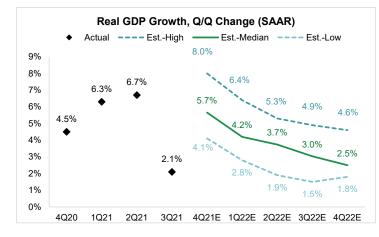
The Economy

GDP Growth Expectations

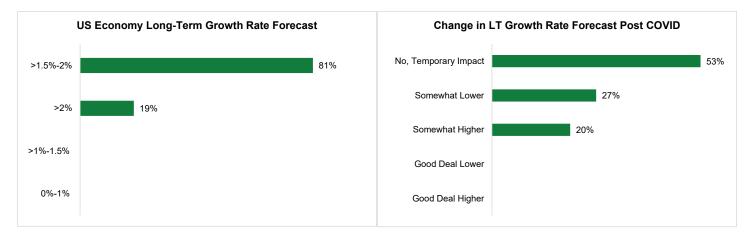
Our Roundtable economists expect GDP growth to finish 2021 at +5.2% (median forecast, 4Q/4Q). For 2022, the median forecast sees GDP increasing by +3.5% (4Q/4Q). On a quarterly basis, respondents forecast +5.7% GDP growth in 4Q21, lowering to +4.2% in 1Q22 and gradually declining to +2.5% in 4Q22.

(Last survey: 2021 GDP growth +7.5%; median forecast, 4Q/4Q)





Source: Bureau of Economic Analysis, SIFMA Economic Advisory Roundtable Note: SAAR = seasonally adjusted annual rate 81% of Roundtable economists expect the long-term potential growth rate between +1.5% and +2%, with 53% stating this is unchanged from pre-COVID estimates.



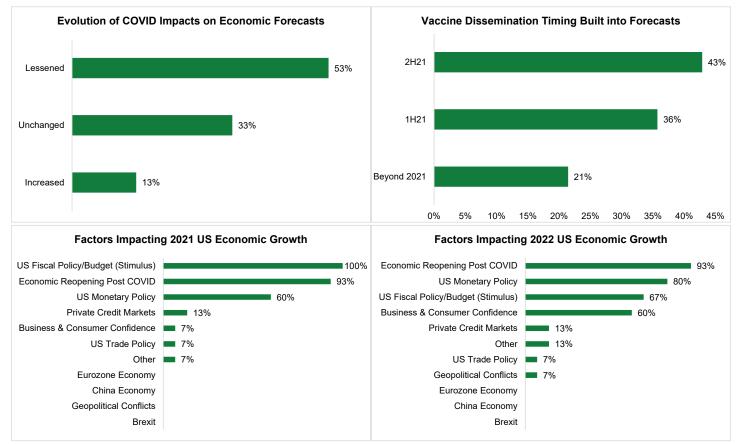
Full Question: What is your estimate of the long-term potential growth rate of the U.S. economy?

Full Question: Has your estimate of the long-term potential growth rate of the US economy changed post-COVID?

COVID Impact on Economic Forecasts

As the economy continues to reopen post-COVID, we polled our Roundtable economists for just how allencompassing COVID is for estimates, despite having so many unknown moving parts.

- When asked how COVID's impact has evolved in economic forecasts, 53% responded it has lessened, i.e. it is a near-term phenomenon not a structural shift
- When building forecasts, 43% of respondents assumed a vaccine would be disseminated to the broad population by 2H21
- Key factors impacting U.S. economic growth, as ranked by our economists, include:
 - o 2021 U.S. fiscal policy/budget, economic reopening post COVID, and U.S. monetary policy
 - o 2022 Economic reopening post COVID, U.S. monetary policy, and U.S. fiscal policy/budget



Full Question: How has COVID's impact evolved in your economic outlook?

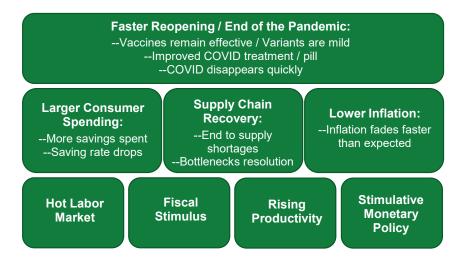
Full Question: What assumptions around dissemination of a COVID vaccine is built into your forecasts?

Full Question: What factors will have the greatest impact on U.S. economic growth in full year 2021/2022? (Ranked by percentage of economists that listed a factor). Other = (2021) vaccines/immunity; (2022) inflation outlook, new lockdowns due to virus outbreaks

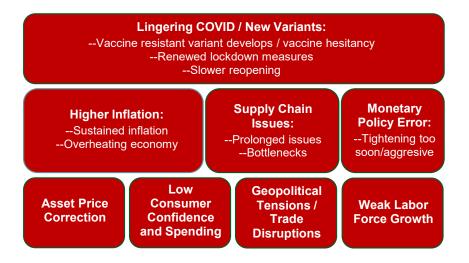
Risks to Economic Forecasts

We asked our Roundtable economists to list their top risks to their economic forecasts, highlighting the following:

• **Upside** – Faster opening of U.S. economy/End of the pandemic, larger consumer spending, and supply chain recovery



• **Downside** – Lingering COVID restrictions and lockdowns, higher inflation, and supply chain issues



Note: Ranked by percentage of economists that listed a factor

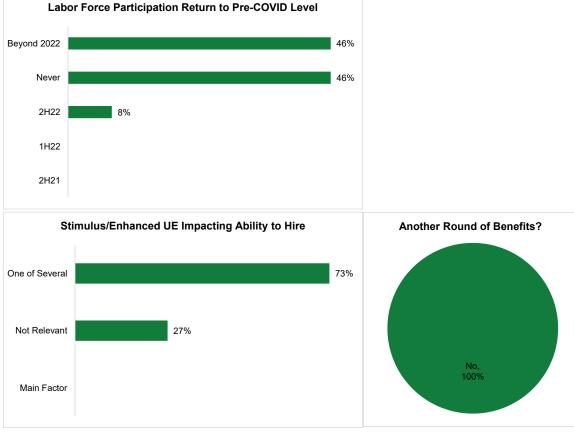
The Economy

Life after COVID

Important factors in economic forecasts are when businesses and consumers can return to pre-COVID life and what the new normal might look like. As such, we polled Roundtable economists on a few areas in search of normalcy.

Employment Situation

- 46% of respondents expect the labor force participation rate to return to the ~63% pre-COVID average beyond 2022, with another 46% responding never
- In terms of stimulus checks and enhanced unemployment benefits impacting the ability for companies to hire staff, 73% of respondents indicate that it is one of several factors
- All respondents indicated they do not expect another round of enhanced benefits if millions remain outside of the labor force.



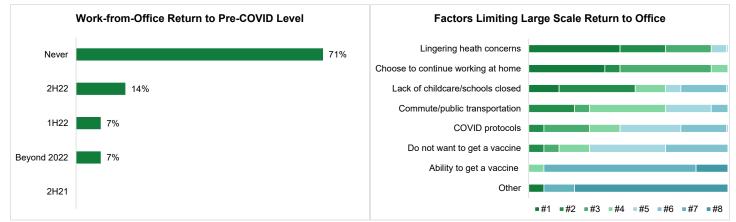
Full Question: When do you expect the labor force participation rate to return to the ~63% pre-COVID average?

Full Question: Despite having run out, how much of a factor do you believe stimulus checks and enhanced unemployment benefits are still having on companies' ability to hire?

Full Question: Do you expect another round of enhanced benefits if millions remain outside of the labor force?

Return to the Office

- 71% of respondents expect employees never to return to the office at pre-COVID levels, followed by 14% expecting that in 2H22
- The key factors listed by respondents limiting a large-scale return to office include: lingering health concerns of contracting COVID, employees choosing to work at home, and lack of childcare and closed schools

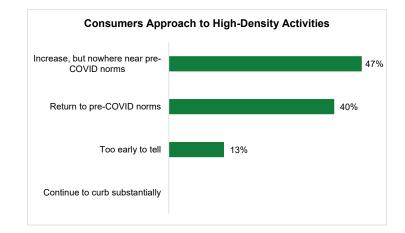


Full Question: When do you expect work-from-office to return to pre-COVID norms?

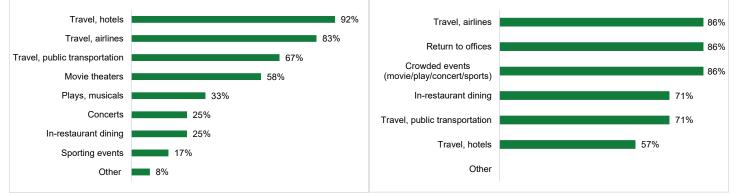
Full Question: Which factors do you believe are limiting a large-scale return to offices? (Factors listed in order of average rank). Other = cost & convenience, lack of motivation the longer COVID continues

High-Density Activities

- Once a vaccine is distributed en masse, 47% of Roundtable economists expect consumers to approach high-density activities at increased but nowhere near pre-COVID levels while 40% expect it to return to pre-COVID norms
- When gauging long lasting or permanent negative impacts from changed behaviors on the heavily COVIDimpacted activities, 92% of respondents selected hotels, followed by 83% indicating airlines and 67% public transportation
- 86% of respondents believe proof of vaccination should be required for airline travel, return to offices, and crowded events



Expect a Permanent Negative Impact on:



Should Proof of Vaccination Be Required for:

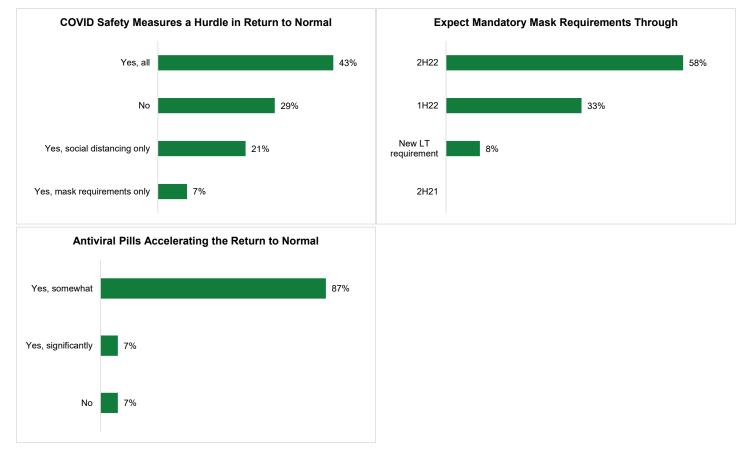
Full Question: Even after a vaccine is distributed en masse, how do you expect consumers to approach high-density activities?

Full Question: Do you expect to see a lasting or even permanent negative impact of changed behaviors on the sectors most impacted by COVID? Other = conferences

Full Question: Should proof of vaccination be required for (select activities)?

Returning to Normal

- Looking at COVID safety measures as a hurdle to returning to normal, 43% of respondents expecting all
 requirements to be a hurdle, followed by 29% not expecting the measures to be a hurdle
- 58% of respondents expect us to be required to continue wearing masks through 2H22, with 33% replying 1H22
- 87% of Roundtable economists believe the development of the Merck and Pfizer antiviral pills will somewhat help accelerate the return to normal

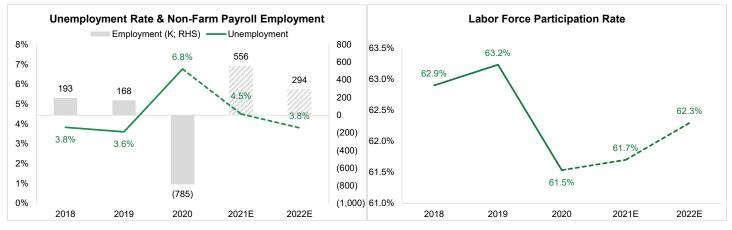


Full Question: Do you view the lingering COVID safety measure in some regions/areas (ex: Washington DC still requires masks indoors, regardless of vaccination status), such as social distancing and in particular face mask requirements, to remain a drag on the ability to fully return to normal? Full Question: Following the CDC guidance reducing mask requirements for vaccinated Americans, do you expect the federal and state governments to uphold mandatory mask requirements on a larger scale (planes and public transportation excluded from the CDC announcement; many states continue to have mandatory mask laws) through?

Full Question: Do you believe the development of the Merck and Pfizer antiviral pills will help accelerate the return to normal?

Employment and the Consumer

As of November 2021, the U.S. unemployment rate remained slightly elevated at 4.2%, down from the April 2020 peak of 14.7% but still higher than historical levels averaging around 3.7% (2019 monthly average). Roundtable economists expect the unemployment rate to end 2021 at 4.5%, falling in 2022 to 3.8% (4Q average). Employment growth (average monthly change in non-farm payroll employment) is expected to average 555,500 in 2021 and 293,520 in 2022. Respondents expect the labor force participation rate to increase to 61.7% in 2021 and 62.3% in 2022, versus around 63% historically.

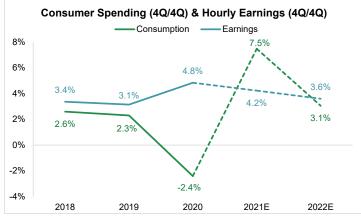


(Last survey: 2021 unemployment rate 5.2%; 552,300 for 2021)

Source: Bureau of Labor Statistics, SIFMA Economic Advisory Roundtable Note: Average monthly change for non-farm payroll employment, 4Q average for unemployment rate

In light of these unemployment expectations, Roundtable economists expect real personal consumption growth to end 2021 at 7.5% and 3.1% in 2022 (4Q/4Q). There is an expected decrease in average hourly earnings growth to 4.2% in 2021 and 3.6% in 2022 (4Q/4Q).

(Last survey, 2021: 8.4% real personal consumption growth; 3.0% average hourly earnings)



Source: Bureau of Economic Analysis, SIFMA Economic Advisory Roundtable

Monetary Policy

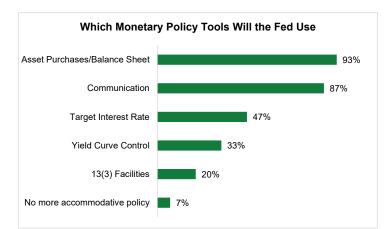
Fed Policy Tools and Moves

During his testimony to the Committee on Banking, Housing, and Urban Affairs on November 30, Fed Chair Powell noted that "The economy has continued to strengthen...and conditions in the labor market have continued to improve. There is still ground to cover to reach maximum employment for both employment and labor force participation, and we expect progress to continue. It is difficult to predict the persistence and effects of supply constraints, but it now appears that factors pushing inflation upward will linger well into next year. In addition, with the rapid improvement in the labor market, slack is diminishing, and wages are rising at a brisk pace. The recent rise in COVID cases and the emergence of the Omicron variant pose downside risks to employment and economic activity and increased uncertainty for inflation. Greater concerns about the virus could reduce people's willingness to work in person, which would slow progress in the labor market and intensify supply-chain disruptions. The Fed will do everything it can to support a full recovery in employment and achieve our price-stability goal."

During the Q&A portion of the hearing, Powell indicated that he expects policymakers in December to discuss accelerating the timeline for tapering of monthly bond purchases (greater than the \$15 billion a month currently). "At this point, the economy is very strong and inflationary pressures are higher, and it is therefore appropriate in my view to consider wrapping up the taper of our asset purchases, which we actually announced at the November meeting, perhaps a few months sooner." If tapering is accelerated, bond purchases could wrap up in the spring – ahead of the June end under the current structure – leaving room for the Fed to raise rates anytime thereafter.

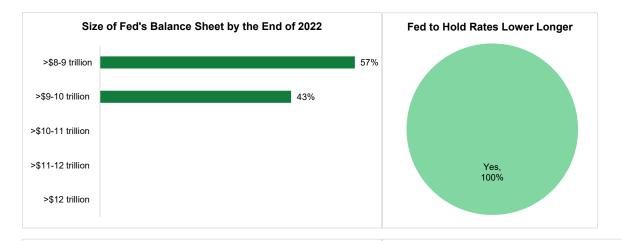
As such, we surveyed our Roundtable economists to what tools the Fed may opt to use and the timing of actions, such as raising interest rates.

• Respondents indicated that should the Fed need to provide more policy accommodation, the top tool will be asset purchases/balance sheet (93%), followed by 87% responding communication

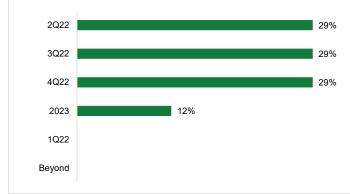


Full Question: Should we see a reversal in the COVID recovery and therefore declining economic factors, what tools would you expect the Fed to use? (Ranked by percentage of economists that listed a factor)

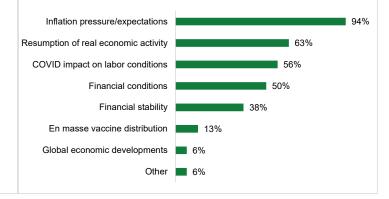
- In light of expected asset reductions, 57% of respondents expect the size of total balance sheet to be between \$8 trillion and \$9 trillion by the end of 2022, and 43% expect between \$9 trillion and \$10 trillion
- Under the Fed's new framework, including a "*broad-based and inclusive*" approach to full employment and an <u>average</u> 2% inflation target, all of respondents (100%) believe the fed will hold rates lower than they would have historically under the old framework
- Roundtable economists remain divided on when the Fed will begin to lift its target range for the federal funds rate with 29% expecting that in each 2Q22, 3Q22, and 4Q22
- The factors listed as most important to the Fed's decision making were: inflation pressure and inflation expectations, resumption of real economic activity, and COVID impact on labor conditions









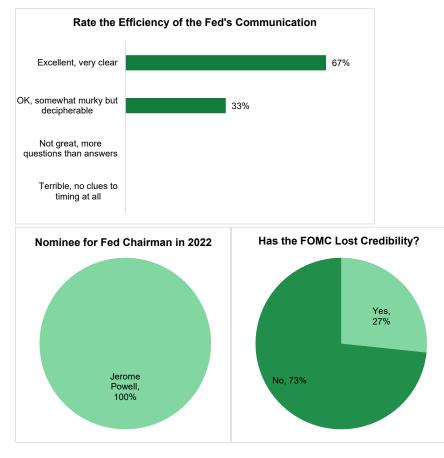


Full Question: Given the proposed pathway for asset reductions, what is the expected end size of the Fed's balance sheet? (currently \$8.6 trillion) Full Question: When do you think the Fed will begin to lift its target range for the federal funds rate?

Full Question: Does the Fed's new framework, including a "broad-based and inclusive" approach to full employment and an *average* 2% inflation target suggest the committee will hold rates lower than they would historically under the old framework?

Full Question: Which of the following factors do you think are the most important to the Fed's decision making? (Ranked by percentage of economists that listed a factor) Other = returning to full employment

- As to the efficiency of the Fed's communication with markets around its timeline for shifting monetary policy, 67% of respondents indicated the communication is very clear, while 33% find it somewhat murky but decipherable
- 100% of respondents (correctly) expected President Biden to nominate Jerome Powell for Fed Chairman in 2022³
- Despite the trading scandals at the Fed leading to the early departure of two Fed officials, 73% of respondents think that the Committee did not lose credibility in the eyes of the American public



Full Question: In general, how do you rate the efficiency of the Fed's communication with markets around its timeline for shifting monetary policy (raising rates, taper asset purchases)?

Full Question: Who do you expect President Biden to nominate for Fed Chairman in 2022?

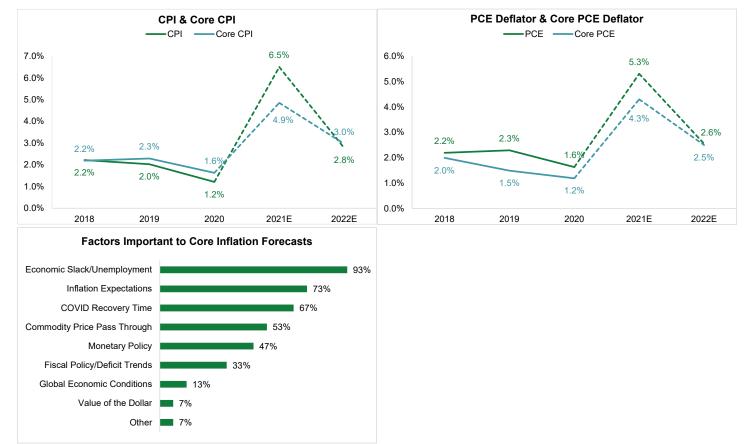
Full Question: Given the trading scandals at the Fed leading to the early departure of two Fed officials, has the Committee lost credibility in the eyes of the American public?

³ The survey was put into the field before President Biden announced Powell's renomination

Inflation Expectations

Try getting through a day lately without discussing inflation! Market participants continue to watch inflation reports, as a key indicator to when the Fed may raise interest rates (a negative for stock valuations). In terms of inflation forecasts to end 2021, we highlight:

- CPI expectation 6.5% (2020 actual 1.2%) (Last survey: 3.8% CPI for 2021)
- Core CPI expectation 4.9% (2020 actual 1.6%) (Last survey: 2.9% core CPI for 2021)
- PCE expectation 5.3% (2020 actual 1.6%) (Last survey: 3.2% PCE deflator for 2021)
- Core PCE expectation 4.3% (2020 actual 1.2%) (Last survey: 2.8% core PCE deflator for 2021)
- The factors listed as most important to core inflation forecasts: economic slack/unemployment, inflation expectations, and COVID recovery time



Source: Bureau of Economic Analysis, SIFMA Economic Advisory Roundtable

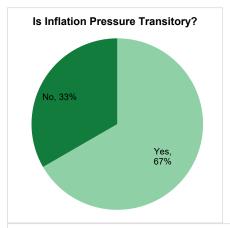
Full Question: What are the most important factors in your outlook for core inflation? (Ranked by % of economists listed a factor). Other = supply chain

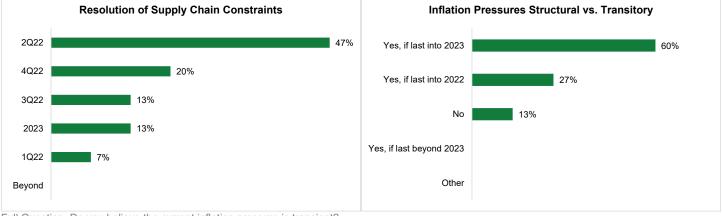
Monetary Policy

During the November 30 Senate Banking Committee hearing, Fed Chair Powell indicated it was "probably a good time to retire that word (transitory) and try to explain more clearly what we mean" when talking about inflation. The concept of transitory has been hotly debated since the April surge (headline CPI +4.2% and Core CPI +3.0%, from 1.4% in January of this year for both). Maybe the debate should have been a yes or no discussion, but rather what does transitory mean? If short term, what is short term – 6 months, 1 year, 2 years, other? And is the transitory discussion an aggregate concept or allowing room to say that different pockets of inflation may last for different time periods? Powell summed this up when he stated that "while the word has different meanings to different people, the Fed tends to use it to mean that it won't leave a permanent mark in the form of higher inflation".

We asked our Roundtable economists the more generic question of transitory, as well as when this could become structural.

- 67% of respondents believe the current inflation pressures are transitory
- Many cite supply chain constraints as a primary driver of inflation. 47% of Roundtable economists expect these constraints to resolve by 2Q22
- 60% of respondents agree that if inflation pressures last into 2023, they should be viewed as structural and not transitory



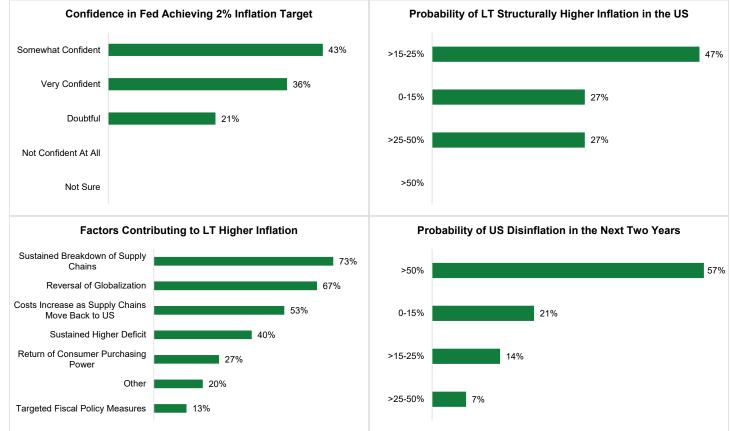


Full Question: Do you believe the current inflation pressure is transient?

Full Question: Many cite supply chain constraints as a primary driver of inflation. When do you expect a resolution?

Full Question: Should these inflation pressures persist past next year, would you start to view inflation as structural vs. transitory?

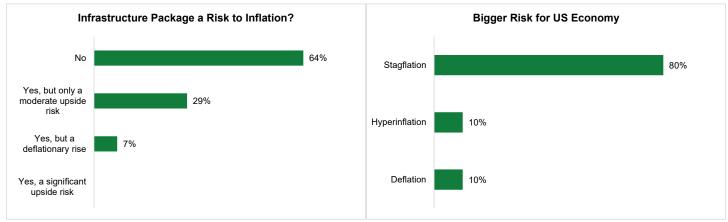
- 43% of Roundtable economists are somewhat confident the Fed can achieve its 2% average inflation target in a sustainable way while 36% are very confident
- 47% of respondents expect a 15% to 25% probability the U.S. will experience structurally higher inflation over the long run, followed by 27% responding 0% to 15% and 25% to 50% probability each
- Top factors to push long-term inflation higher include: sustained breakdown of supply chains, reversal of globalization, and sustained higher deficits
- 57% of respondents expect over 50% probability the U.S. will experience a period of disinflation in core measures over the next two years with another 21% responding between 0% and 15% probability



Full Question: Under the current policy stance, how confident are you can the Fed can achieve its 2% goal in a sustainable way? Full Question: Looking further out, what probability would you place on the US experiencing structurally higher inflation over the longer-run? Full Question: What factors do you believe could push long-term inflation higher? (Ranked by percentage of economists that listed a factor). Other = higher inflation expectations (x3), transition to green energy, de-risking of supply chains

Full Question: What probability would you place on the US experiencing a period of disinflation in core measures over the next two years?

- 64% of respondents do not believe the recently passed \$1 trillion infrastructure package pose a risk to inflation
- In light of the significant amount of government spending for example the \$1.75 trillion "human" infrastructure proposal, which some estimate could be closer to \$3-6 trillion – 80% of Roundtable economists view stagflation – as opposed to hyperinflation or deflation – as the bigger risk to the economy



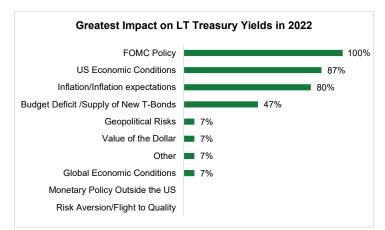
Full Question: Does the recently passed \$1 trillion infrastructure package pose a risk to inflation?

Full Question: With ongoing discussions around additional fiscal spending – for example the \$1.75 trillion "human" infrastructure proposal, which some estimate could be closer to \$3-6 trillion – what is the greater long-term risk to the economy?

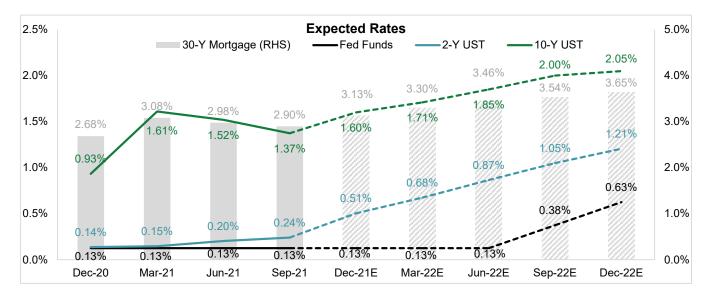
Interest Rates and Credit Markets

Below we rank respondents' factors that have the greatest impact on expectations for long-term Treasury yields in 2022: FOMC policy, US economic conditions, and inflation/inflation expectations and were the top factors.

(Last survey: inflation/inflation expectations and FOMC policy were the top factors for 2021)



Full Question: Which of the following will have the greatest impact on long-term Treasury yields in 2022? (Ranked by percentage of economists that listed a factor). Other = big picture factors (demographics, infrastructure, productivity), low bond yields outside the U.S. and Fed asset purchases



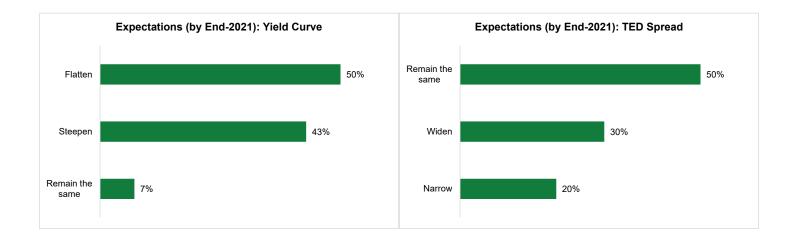
Below and on the following pages, we review our Roundtable economists' forecast for rates and yield curve.

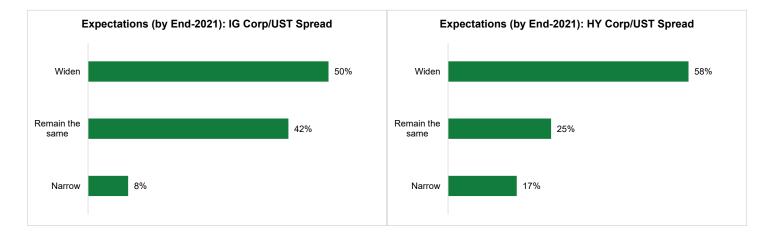
Source: Federal Reserve, Bloomberg, SIFMA Economic Advisory Roundtable

Respondents expect the following movements in key rates:

- Yield curve (Fed funds-to-10-year Treasury yield) = 50% flatten
- TED (Treasury-to-Eurodollar, now LIBOR) = 50% remain the same
- Investment-grade corporate-to-Treasury spreads = 50% widen
- High-yield corporate-to-Treasury spreads = 58% widen

(Last survey: YC 88% steepen; TED 83% remain the same; IG/UST 50% remain the same; HY/UST 38% each remain the same and widen)

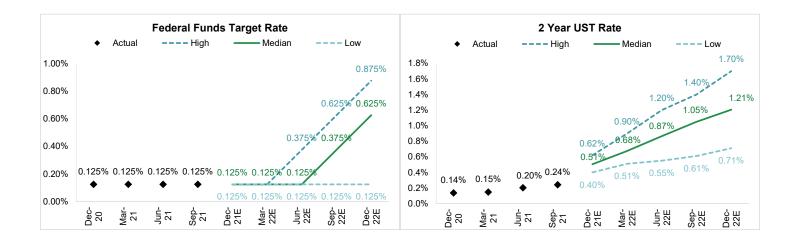




Source: Federal Reserve, Bloomberg, SIFMA Economic Advisory Roundtable Note: Monthly averages. Fed funds = midpoint of target rate range Surveyed Roundtable economists expect the following rates and therefore yield curve:

- Fed Funds = 4Q21 0.125%, 2Q22 0.125%, 4Q22 0.625%
- 2-Year UST = 4Q21 0.51%, 2Q22 0.87%, 4Q22 1.21%
- 10-Year UST = 4Q21 1.60%, 2Q22 1.85%, 4Q22 2.05%
- 30-Year Mortgage = 4Q21 3.13%, 2Q22 3.46%, 4Q22 3.65%

(Last survey, 4Q21: FF 0.125%; 2Y UST 0.28%; 10Y UST 1.95%; 30Y mortgage 3.30%)



	10 Year UST Rate ◆ Actual High —— Median Low						30 Year Fixed Mortgage Rate ◆ Actual High — Median Low							ow					
3.0% 2.5% 2.0% 1.5% 1.0% 0.5% 0.0%	0.93% ◆	1.61%	1.52% ∳	1.37% •	2.00% 1.60% 1.45%	1.89% 1.71% 1.60%	2.19% 1.85% 1.73%	2.30% 2.00% 1.55%	2.50% 2.05% 1.35%	 4.5% 4.0% 3.5% 3.0% 2.5% 2.0% 1.5% 4.0% 	2.68% ♦	3.08% •	2.98% ♦	2.90% •	3.50% 3.13% 1.89%	3.40% 3.30% 2.00%	3.69% 3.46% 2.10%	3.54%	4.10% 3.65% 2.15%
0.0%	Dec- 20	Mar- 21	Jun- 21	Sep- 21	Dec- 21E	Mar- 22E	Jun- 22E	Sep- 22E	Dec- 22E	1.0%	Dec- 20	Mar- 21	Jun- 21	Sep- 21	Dec- 21E	Mar- 22E	Jun- 22E	Sep- 22E	Dec- 22E

Source: Federal Reserve, Bloomberg, SIFMA Economic Advisory Roundtable

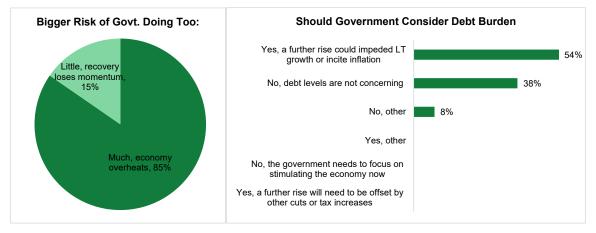
Macro Policy

Fiscal Stimulus

To complement monetary policy tools, there continues to be no shortage of fiscal spending (actual and proposed) to help the U.S. economy recover from COVID. In November, Congress passed the stated \$1 trillion hard infrastructure bill. Still being debated is a proposed stated \$1.75 trillion human infrastructure plan. As such, questions and concerns remain around the long-term impact of overspending.

Therefore, we polled our Roundtable economists on their thoughts on additional fiscal stimulus and the impact on GDP forecasts.

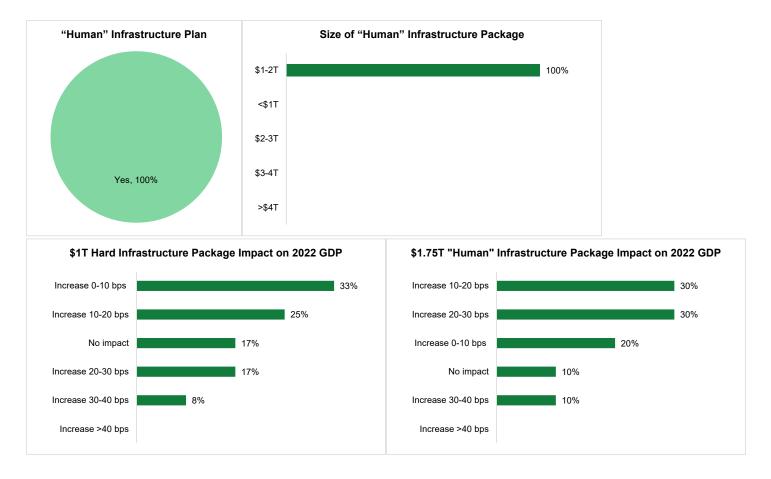
- 85% of respondents view the bigger risk to the economy is the government doing too much, therefore the economy overheats
- When considering additional stimulus, 54% respondents indicated government should consider the debt level as it could impede long-term growth or incite further inflation, followed by 38% saying government should not be considering the debt level (debt/GDP currently over 100%).



Full Question: What do you view is the bigger risk, the government does?

Full Question: With the Debt/GDP ratio already above 100%, should the government be considering the debt burden when proposing additional spending?

- Given the ongoing debate and some opposition from moderate Democrats, all respondents believe the President's "human" infrastructure plan will be passed
- All respondents expect the size of the package to be between \$1 trillion and \$2 trillion
- The impact of the President's \$1 trillion hard infrastructure package on 2022 GDP forecasts is expected to be between 0 -10 bps (33% of respondents)
- The impact of the President's \$1.75 trillion human infrastructure package on 2022 GDP forecasts is expected to be either between 10-20 bps or 20-30 bps (30% of respondents each)

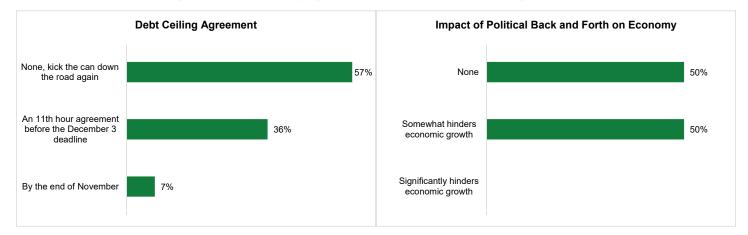


Full Question: Given the ongoing debate and some opposition from moderate Democrats, do you believe the Presidents "human" infrastructure plan will be passed? If yes, how large do you expect the package to be?

Full Question: What impact do you expect the President's \$1 trillion hard infrastructure package to have on 2022 GDP estimates?

Full Question: What impact do you expect the President's \$1.75 trillion human infrastructure package to have on 2022 GDP estimates?

- 57% or respondents expects the debt ceiling agreement to be pushed down the road, while 36% expected the agreement to be reached at the 11th hour before the December 3 deadline⁴
- Respondents were split on what impact the political back and forth on the debt ceiling has on the economy with 50% indicating none and 50% saying it somewhat hinders economic growth



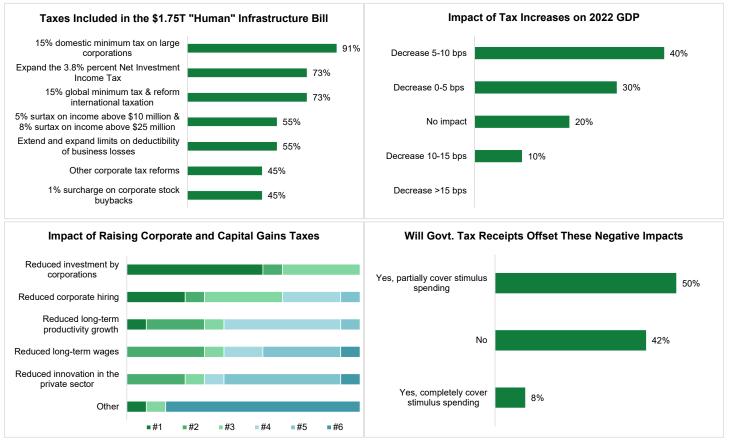
Full Question: What are your expectations for the timeline to reach an agreement on the debt ceiling? Full Question: What impact does the political back and forth on the debt ceiling have on the economy?

⁴ The survey went into the field before the Senate passed the bill to fund government operations until February 18

Tax Policy

The next set of questions on the minds of economists – all market participants really – is how the government will pay for all of the fiscal spending, how high taxes will go, and what will be the impacts on the economy?

- Majority of respondents expect four taxes to be included in the "human" infrastructure bill: 15% domestic minimum tax on large corporations (91%), Expand the 3.8% percent Net Investment Income Tax (73%), and 15% global minimum tax & reform international taxation (73%)
- 40% of respondents expects these taxes to cause a decrease of between 5 bps and 10 bps in 2022 GDP
- Looking at the potential negative impacts of raising taxes, respondents ranked reduced investment by corporations as the top impact, followed by reduced corporate hiring and reduced long-term productivity growth
- As to whether tax receipts can offset these negative impacts, 50% of respondents replied yes, tax receipts will <u>partially</u> cover stimulus spending, followed by 42% saying no



Full Question: Which taxes do you expect to be included in the \$1.75 trillion human infrastructure bill, should it pass?

Full Question: Should the human infrastructure bill pass Congress, how much of an impact do you expect all of the tax increases to have 2022 GDP? Full Question: What could be the impact of raising corporate and capital gains taxes on the economy? (Ranked by percentage of economists that listed a factor) Other = jobs outsourced again, not much of economic impact

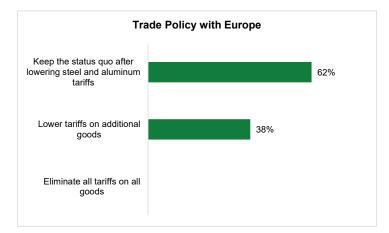
Full Question: Will the increase in government tax receipts offset these negative impacts?

Trade Policy

In the trade policy section of the survey, we focus on relations with both the European Union and China. We also asked Roundtable economists about the impact of COVID as it relates to U.S.-China trade relations.

European Union

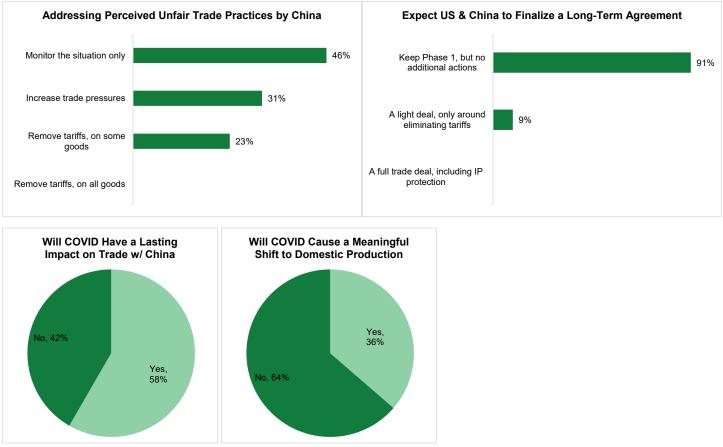
• 62% of Roundtable economists expect U.S. to keep a status quo after lowering steel and aluminum tariffs and 38% expect U.S. to lower tariffs on additional goods



Full Question: Looking at trade policy with Europe, do you expect the U.S. to?

China

- 46% of Roundtable economists expect the U.S. to address perceived unfair trade practices by China by only
 monitoring the situation, with 31% expecting an increase of trade pressures
- 91% of respondents expect that the U.S. and China will eventually agree on a Phase 1 deal but no additional actions
- When asked if the negative sentiments around China's handling of COVID will have a lasting impact on trade relations with China, 58% responded yes
- In light of this, 36% of respondents expect a meaningful shift to domestic production, thereby reducing U.S. reliance on overseas production



Full Question: Looking at trade policy with China, how do you expect the U.S. to proceed with addressing perceived unfair trade practices? Full Question: Looking at trade policy with China, do you expect the U.S. to finalize a long-term agreement? Full Question: Will COVID have a lasting impact on trade relations with China?

Full Question: Will COVID cause a meaningful shift to domestic production, reducing the country's reliance on overseas production in terms of a replacement scenario not a nominal increase?

SIFMA Economic Advisory Roundtable Forecasts

(%, unless indicated)	2018	2019		2020	2021E		2022E
Real GDP (4Q/4Q)	2.3	2.6		-2.3	5.2		3.5
Real Personal Consumption (4Q/4Q)	2.6	2.3		-2.4	7.5		3.1
Nonresidential Fixed Investment (4Q/4Q)	6.1	3.1		-3.8	7.2		4.6
Residential Fixed Investment (4Q/4Q)	-3.9	2.2		15.7	-1.2		3.5
Real Federal Government Spending (4Q/4Q)	3.0	4.3		3.1	0.2		1.5
Real State and Local Government Spending (4Q/4Q)	-0.3	2.5		0.0	1.6		2.0
Non-Farm Payroll Employment (K, avg. monthly change)	193.2	. 167.6	-	784.7	555.5		293.5
Unemployment Rate (4Q average)	3.8	3.6		6.8	4.5		3.8
Labor Force Participation Rate (4Q average)	62.9	63.2		61.5	61.7		62.3
Average Hourly earnings (4Q/4Q)	3.4	3.1		4.8	4.2		3.6
Real Disposable Income (4Q/4Q)	3.7	1.7		4.0	0.0		1.7
Personal Savings Rate (annual average)	7.6	7.7		16.4	11.9		6.5
CPI (4Q/4Q)	2.2	2.0		1.2	6.5		2.8
Core CPI (4Q/4Q)	2.2	2.3		1.6	4.9		3.0
PCE deflator (4Q/4Q)	2.0	1.5		1.2	5.3		2.6
Core PCE deflator (4Q/4Q)	2.0	1.6		1.4	4.3		2.5
Industrial Production Index (annual % change)	3.2	-0.8		-7.2	5.6		4.3
Housing Starts (K, annual average)	1,247	1,292		1,397	1,586	i	1,625
S&P Corelogic Case-Shiller Home Prices (Y/Y)	5.8	3.5		6.1	16.8		9.1
New Home Sales (K, annual average)	614	683		828	793.5		765.0
Motor Vehicle Sales (M, annual average)	17.1	16.9		14.4	15.1		16.0
Federal Budget (\$B, FY)	-779	-984	-	3,132	-2,770)	-1,391
Current Account Deficit (\$B)	-438.2	2 -472.1	-	616.1	-812.3	3	-918.2
conomic Indicators – Quarterly							
-	Q21 2Q	21 3Q21	4Q21E	1Q22E	2Q22E	3Q22E	4Q221
Real GDP (Q/Q, annualized) 6	6.3 6.	7 2.1	5.7	4.2	3.7	3.0	2.5
	1.4 12	.0 1.7	5.2	3.6	3.2	2.8	2.5
	20 0	2 15	51	5.2	16	13	13

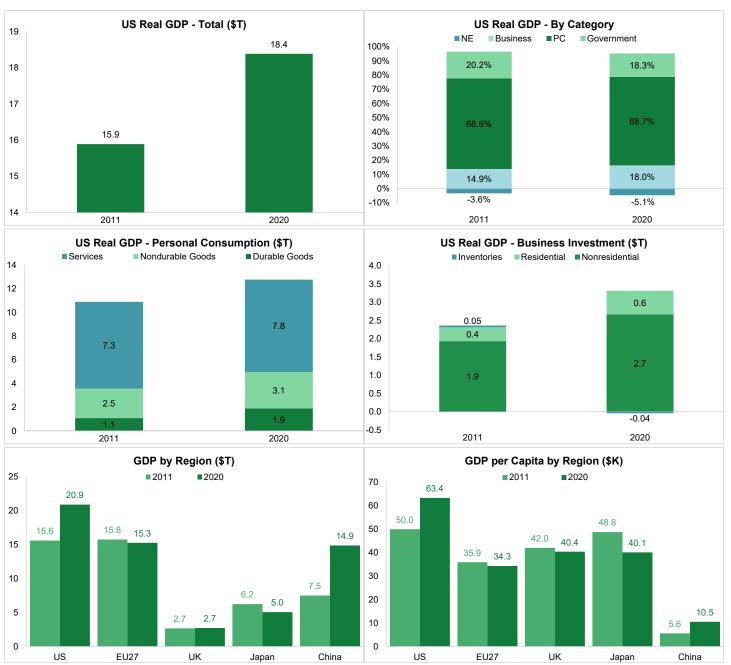
Nonresidential Fixed Investment (Q/Q, annualized)	12.9	9.2	1.5	5.4	5.2	4.6	4.3	4.3
Residential Fixed Investment (Q/Q, annualized)	13.3	-11.7	-8.3	2.9	3.5	3.5	3.1	2.2
Unemployment Rate	6.2	5.9	5.1	4.5	4.2	4.1	3.9	3.8
CPI (Y/Y)	1.9	4.8	5.3	6.5	6.5	5.0	4.0	2.8
Core CPI (Y/Y)	1.4	3.7	4.1	4.9	5.5	4.3	3.8	3.2
PCE Deflator (Y/Y)	1.8	3.9	4.3	5.3	5.1	4.0	3.3	2.5
Core PCE Deflator (Y/Y)	1.7	3.4	3.6	4.4	4.4	3.5	3.0	2.5

Interest Rates (Monthly Average)

(%)	Mar'21	Jun'21	Sep'21	Dec'21E	Mar'22E	Jun'22E	Sep'22E	Dec'22E
Federal Funds Target Rate (midpoint)	0.125	0.125	0.125	0.125	0.125	0.125	0.375	0.625
2-Year UST Yield	0.15	0.20	0.24	0.51	0.68	0.87	1.05	1.21
10-Year UST Yield	1.61	1.52	1.37	1.60	1.71	1.85	2.00	2.05
30-Year Fixed Mortgage Rate	3.08	2.98	2.90	3.13	3.30	3.46	3.54	3.65

Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, Bloomberg, SIFMA Economic Advisory Roundtable

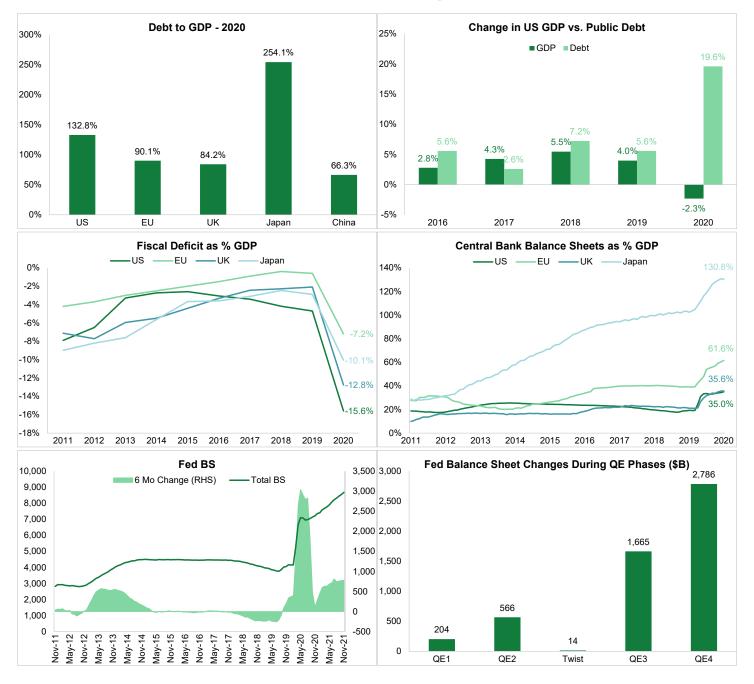
Reference Guide: Economic Landscape



US GDP Growth and Comparison Across Regions

Source: Bureau of Economic Analysis, International Monetary Fund

Note: NE = net exports, Business = business investment, Government =govt consumption & investment, PC = personal consumption expenditure



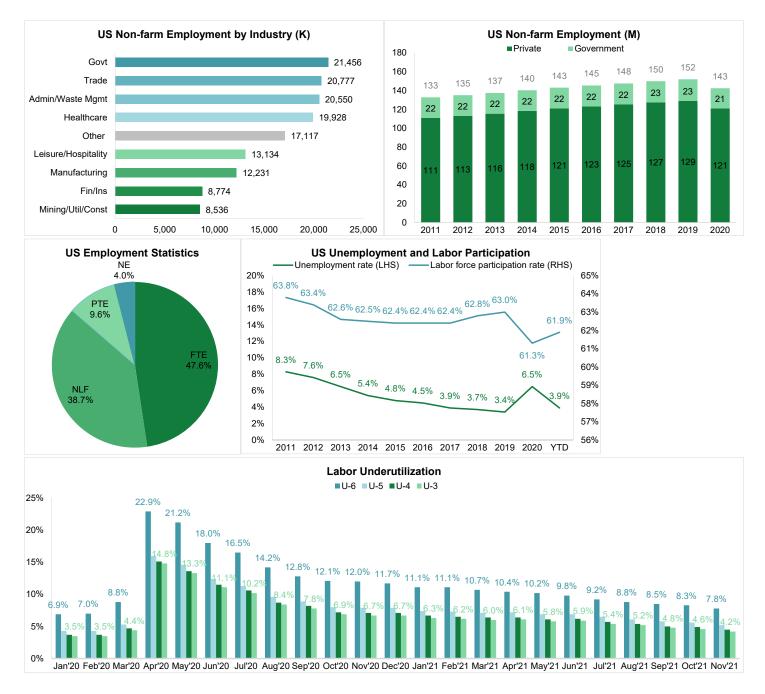
US Debt and Fed Balance Sheet and Comparison Across Regions

Source: Bloomberg, Bureau of Economic Analysis, Eurostat, Statista, US Treasury

Note: QE = Quantitative easing is a monetary policy when a central bank purchases financial assets to inject money into the economy; Twist = monetary policy when a central bank buys long-term and sells short-term bonds to flatten the yield curve without expanding the balance sheet; QE1: Nov'08-Mar'10, QE2: Nov'10-Jun'11, Twist: Sep'11-Jun'12, QE3: Sep'12-Oct'14, QE4: Mar'20-May'20

Reference Guide: Economic Landscape

US Employment Landscape



Source: Bureau of Labor Statistics

Note: NE = not employed (unemployed), FTE = full time employment, NLF = not in labor force, PTE = part time employment. Employment statistics based on civilian population 16 years or over

SIFMA Economic Advisory Roundtable Members

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