SIFMA Research:
2022 Mid-Year US Economic Survey

Forecasts from the SIFMA Economic Advisory Roundtable

June 2022

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 May 9 to 23.

Key Takeaways

- 2022 GDP growth est. +1.5%, vs. +5.5% in 2021 (median forecast, 4Q/4Q)
- 2022 unemployment rate est. +3.5%, vs. +5.4% in 2021 (4Q average)
- 2022 inflation estimate +5.0%, vs. +5.0% in 2021 (Core CPI, 4Q/4Q)

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Setting the Scene

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.

Setting the Scene

A Message from Our Chair

As we head into the second half of the year and put COVID behind us – at least the worst of it – it is fair to say we have been seeing clear signs of improvement, reaching that light at the end of what has been a very long and very painful tunnel. At the same time, many of last year's risks still remain, complicating the outlook for the domestic recovery: policy risks, inflation risks, supply distortions, an ongoing labor supply shortage, and more recently international conflict and more aggressive monetary policy, just to name a few. While we have seemingly made it past one crisis, another lurks around the corner as the Fed presumably raises rates, potentially enough to stall consumers and businesses, and choke off domestic economic growth entirely.

The labor market has been a bright spot for the recovery. It is also a key representation of the unevenness of the recovery. In some cases it has shown clear signs of growth, or by some measures, it has shown a disappointing level of improvement. Top line job creation remains solid, and we see further improvement in the labor market as the unemployment rate continues its retreat under 4%. Yet, there remain millions of workers that have dropped out of the labor force, perpetuating a lingering labor supply gap and tight labor market conditions.

At present, there are more than 11 million job openings – a record high – suggesting producers remain desperate for workers to increase output and meet a still-positive level of demand for goods and services. There just simply are not enough workers. Thus, companies unable to find enough workers are pushing to extend the work weeks of existing employees or raising compensation as an incentive to continue to or come back to work. As a result, and as expected, wage pressures continue to mount.

Longer term, as the cost of labor pushes even higher, some businesses – particularly large firms or those with sizable access to cash – will resort to replacing human labor with technology. Investing in technology where possible will permanently displace some positions, particularly lower-skilled jobs. Businesses on the other end of the spectrum – particularly smaller businesses which face a difficult time absorbing or offsetting rising costs, be that labor, rental, or materials and input costs – may find themselves forced in the longer term to downshift investment, production or close their doors altogether. For now, however, this solid trajectory in labor costs is likely to continue into the second half of the year or at least as long as growth remains positive and workers remain scarce.

From a consumer perspective, seemingly with the worst of COVID behind us and safety protocols and measures greatly reduced – not eliminated, but greatly reduced – life is arguably getting back to normal, or some semblance of. As such, the consumer can – and has been – reengage back out in the marketplace buying goods and services.

While trillions in savings and upward momentum in wages has helped consumers to weather different COVID variants and to offset a loss of fiscal support, inflation is complicating the picture. After all, people are spending – more in some cases – but taking home less. Already some of the largest retailers are reporting customers are cutting back as household budgets are becoming increasingly fragile. Prices continue to push higher – particularly on nondiscretionary items such as food and energy – and the Fed continues to raise rates, increasing the cost of capital and the cost of borrowing. Taking inflation into account, despite an upward trajectory of wages, real income has fallen deep into negative territory, forcing consumers to tapper back on expenditures.

At least for now, spending has been positive on average, maintaining pressure on producers to continue to ramp up output to meet the reduced but still positive level of orders. However, even if businesses can find the workers they need – which remains a big if – there are supply limitations and supply chain bottlenecks and disruptions that continue and, in some cases, appear to be intensifying. In fact, according to some industry insiders, supply chain disconnects are now as bad or worse than during even the lockdowns of 2020.

When will supply chain issues be addressed, or when will dislocations dissipate? First, I would say that they are already easing – or at least there were positive indications of improvement at the start of the year before Russia invaded Ukraine and China implemented a series of additional lockdowns. More broadly, I would say much of the answer will depend on the global policy response to COVID, the latest wave or the next variant. With much of the developing world still enforcing significant safety protocols, such as China's zero COVID policy, attempts to fully restore structural fluidity to the global exchange of goods and services will likely be several years out. Again, that is not to say we will not make incremental progress along the way, but more broadly speaking, returning to the free flow of goods and service of pre-pandemic levels is likely years out.

Turning to the Fed, uncertainty, unevenness in the data, and rising risks to the outlook justified the Committees' extraordinary measures and sideline position for nearly two years. Now, with inflation reaching a four-decade high, the Committee has taken a decisively more hawkish position towards future policy measures, vowing to root out inflation no matter the costs. According to the Chairman, while a 75 bps hike is not something the committee is actively considering at this point, additional 50 bps hikes may be appropriate at the next couple of meetings. In other words, the market should be – and is – increasingly anticipating a series of additional, relatively large hikes.

The question is will the Fed's plan work to rein in inflation? And what are the consequences of such a rapid rate pathway if realized? Typically, the Fed is raising rates at a point when the economy is overheating. As the Fed raises the cost of capital to cool an overheating economy, investment and demand presumably slow, resulting in weaker growth and inflation. This time around, however, the economy is not overheating. The economy is just moderating, arguably already poised to slow further as the recovery struggles to regain its legs after the pandemic.

To complicate the equation for the Fed, the vast majority of the price pressures are stemming not from the demand side – although there are some there as well – but the majority are coming from supply chain disruptions, rendering traditional policy metrics less effective in fighting inflation. Raising the cost of capital will slow consumers and undermine investment, but it does little to alleviate price pressures resulting from supply chain disruptions in the aftermath of COVID or the international conflict. Thus, following through with such an aggressive rate path will all but ensure very minimal growth or, worse, a recession.

Historically, the Fed does not have a great track record of bringing in a soft landing. As such, it is understandable why businesses would be skeptical. As Powell himself admits, monetary policy is a blunt instrument not capable of surgical precision. Nevertheless, the Fed remains optimistic that they will be able to navigate a soft landing this time around. According to the Fed's latest forecast – with five additional rate hikes this year – the Fed sees near 3% growth, down only slightly from an earlier forecast of 4% growth with just three rate hikes prices in. This is, of course, coupled with an expected decline in inflation nearer the Fed's 2% target by the end of 2023.

So either the Fed is departing from reality – expecting "*ongoing*" rate increases while still presuming to maintain roughly 3% growth – or the Fed is simply sending a message that inflation will not be a longstanding issue for the U.S. economy and policy makers will eventually stop short of the implied rate pathway to maintain positive growth.

With that, we invite you to dive into the results from our mid-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

The Path of Inflation

Last year when we wrote this report, the debate was around whether inflation was transitory or not. That ship has sailed. Now, the debate is about identifying the peak for inflation and the slope of the trajectory back down to more normalized levels. While CPI and Core CPI are the metrics commonly looked at by markets and in the media, the Fed follows PCE when setting monetary policy. As such, we show the changes and current state of inflation across multiple measures.

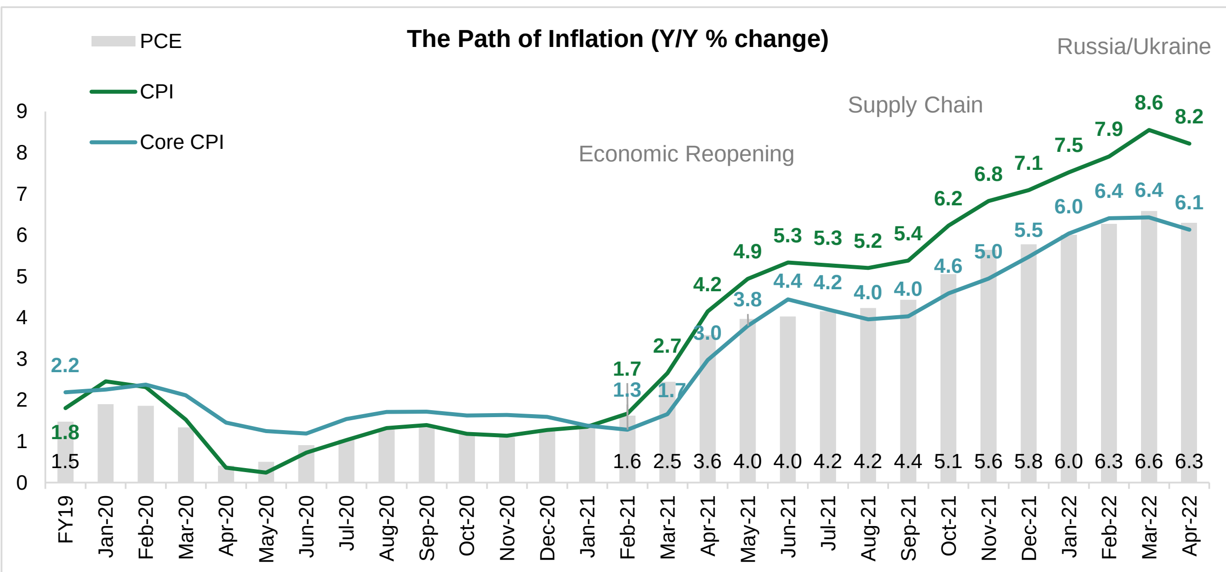
Looking at the table, we note that to return to historical levels inflation would have to come down by (pps change versus three-year pre COVID average): CPI 6.1, Core CPI 4.0, and PCE 4.5. Whatever metric you chose to analyze, the move back to normal will be significant move. Many economists believe that – if we have reached the peak – the move down will be gradual.

(Y/Y % Change)	CPI	Core CPI	PCE
As of April 2022	8.2	6.1	6.3
Historical Averages			
Since 2000	2.3	2.1	2.0
Since 2010	2.1	2.1	1.9
3-Years Pre COVID	2.1	2.1	1.8
COVID Driven Inflation			
2019	1.5	2.2	1.5
2020	1.3	1.7	1.2
2020 Apr-Dec	5.6	4.3	4.5
2020 Low	0.2	1.2	0.4
2021	4.7	3.6	3.9
YTD	8.1	6.3	6.3
Vs. 2019 (pps)			
2020 Apr-Dec	4.1	2.1	3.1
2021	3.2	1.4	2.4
YTD	6.6	4.1	4.8

Source: FRED, SIFMA estimates

How did we get here? The path to the heightened inflation can be broken out into phases:

- **Economic reopening** – In the spring of 2021, as people were vaccinated and began returning to normal social activities, demand outstripped supply.
- **Supply chain issues** – During the summer of 2021, the supply chain issues dominated the inflation headlines, ranging from labor shortages to delays at the Ports of Los Angeles/Long Beach (LA/LB, representing ~40% of all containers coming in/out of the US).
- **Russia/Ukraine conflict** – In February 2022, Russia invaded Ukraine, adding further inflationary pressures, particularly on energy and food.



Source: FRED, SIFMA estimates

Note: 2019 = average of monthly changes

Inflation Definitions:[1]

- **CPI** – headline inflation; measures the change in direct expenditures for all urban households for a defined basket of goods and services (three largest components are housing, transportation, and food/beverages)
- **Core CPI** – makes adjustments to remove the source of the noise in the price data, i.e. food and energy, to get a measure of the underlying component of inflation
- **PCE** – the metric the Fed monitors for monetary policy – measures the change in the prices of goods and services consumed by all households and nonprofit institutions serving households
- **Differences** between CPI and PCE –

[1] Please see SIFMA Insights Spotlight: Inflation 101

- Basket composition – CPI based on household purchases (includes imports) versus PCE based on what businesses are selling (includes capital goods[2])
- Calculation methodologies – expenditure weights assigned to categories of basket items (housing a main difference); accounting for basket changes (PCE allows substitution, CPI always same basket)
- Other – CPI covers only out-of-pocket expenditures, PCE includes expenses paid by employers and federal programs; handling of seasonal adjustments; PCE includes rural and urban consumers, CPI only urban; PCE includes expenditures from non-profit institutions that serve households, CPI households only; etc.

Where are we now? The current state of inflation is now being monitored on three levels. There are multiple drivers for each, with varying upward and downward pressures:

- **Demand** –
  - With excess savings stored up and less sensitivity to rising rates given a heavier reliance on fixed rate debt, the consumer could keep spending. However, with high gas and food prices and broad-based inflation, the consumer could slow down spending.
  - Tight housing supply and rising mortgage rates weigh on housing affordability and could slow down purchases.
  - The buildup in retail inventories could drive future goods markdowns. This is occurring as the consumer has shifted the majority of purchases to services over goods.

- **Supply**[3] –
  - Supply chain issues had been recovering in some areas. The recent BofA Truck Shipper Survey Demand Indicator fell 30% Y/Y, the fourth largest year-year decline in the survey's history (began July 2012) and has fallen in 6 consecutive surveys. The Capacity Indicator (shippers ability to obtain capacity), jumped to 74 from 37 two months ago, its highest level since May 2020 (depths of lockdowns).
  - The Port of LA/LB backlog is down to 41 ships in queue + dock (vs. 46 last week), with 25 in queue (31 last week). This is well off the peak of over 100 ships seen last year.
  - China's zero-COVID policy related lockdowns continue to add to supply chain pressures. At last measure of goods to the U.S., China's volumes were down 1% in total, while Shanghai was down 25%. These unscheduled lockdowns and the corresponding supply chain disruptions will remain a wild card.

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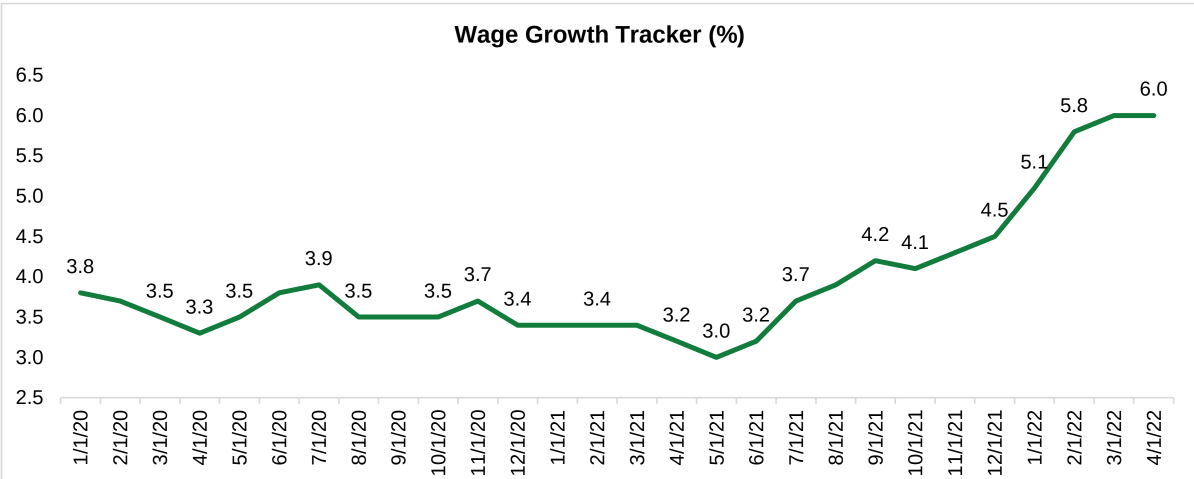
[2] Used in producing other goods rather than being bought directly by consumers
[3] Source: Ken Hoexter, BofA Securities; #1 ranked Capital Goods/Industrials - Shipping analyst and #2 ranked Capital Goods/Industrials - Airfreight & Surface Transportation analyst, according to Institutional Investor

- **Wages** –
    - The sticky wage theory notes that wages respond slowly to labor conditions and changes in the economy or company performance. In other markets, prices are determined by supply and demand. Wages, however, tend to remain above equilibrium as employees resist wage cuts.
    - The labor market remains tight. While the pace of job growth looks to moderate, the labor force participation rate should recover (62.2% in April versus an average of 62.9% for the three years prior to COVID), offsetting the former.
    - Wage growth remains high but the pace could begin to slow (or has based on the tail end of the chart below). The Atlanta Fed wage growth tracker shows it at 6% as of April, versus an average of 3.5% for the three years prior to COVID.



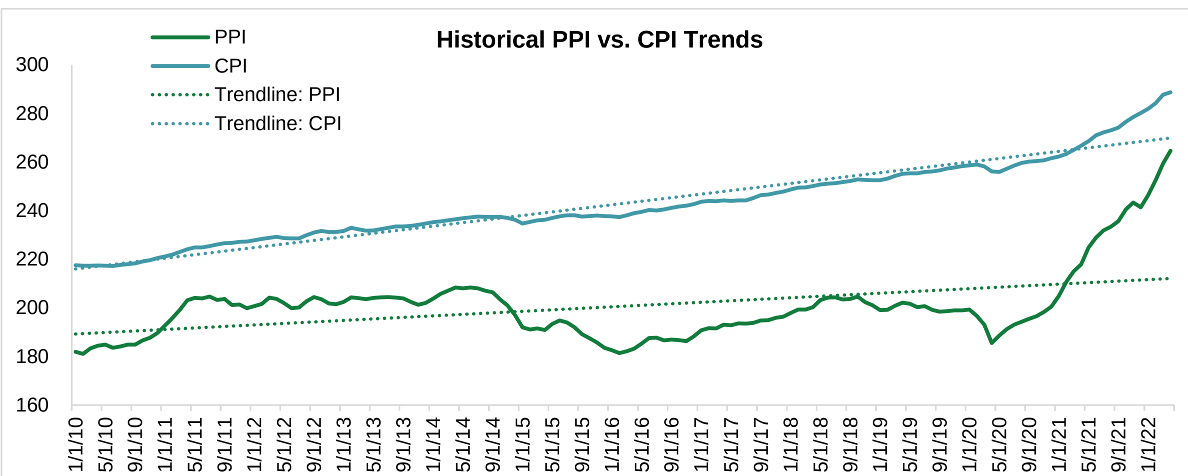
Source: Atlanta Fed's Wage Growth Tracker
Note: Median percent change in the nominal hourly wage of individuals observed 12 months apart; 3-month rolling average

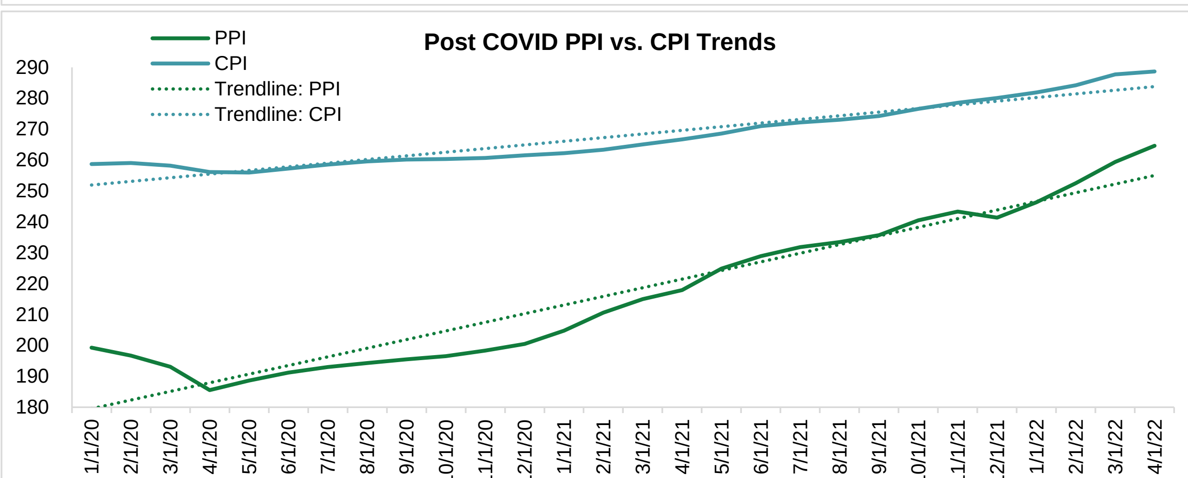
Have We/When Will We Peak: PPI View

While CPI and PCE measure inflationary pricing from the consumer standpoint, the Producer Price Index (PPI) measures inflation from the perspective of producers. PPI measures the average change over time in the selling prices received by domestic producers for their output, constructed from commodity-based producer output price indexes. As PPI measures the costs of producing consumer goods – and commodity and food prices directly affect retail pricing – PPI can be viewed as a good leading indicator of inflationary pressures.

In general, when producers face input inflation, the increases in their production costs are passed on to retailers and then consumers. As such, we analyze the state of PPI, in an attempt to determine whether or not we are at peak inflation from the consumer (CPI) and Fed (PCE) perspectives.

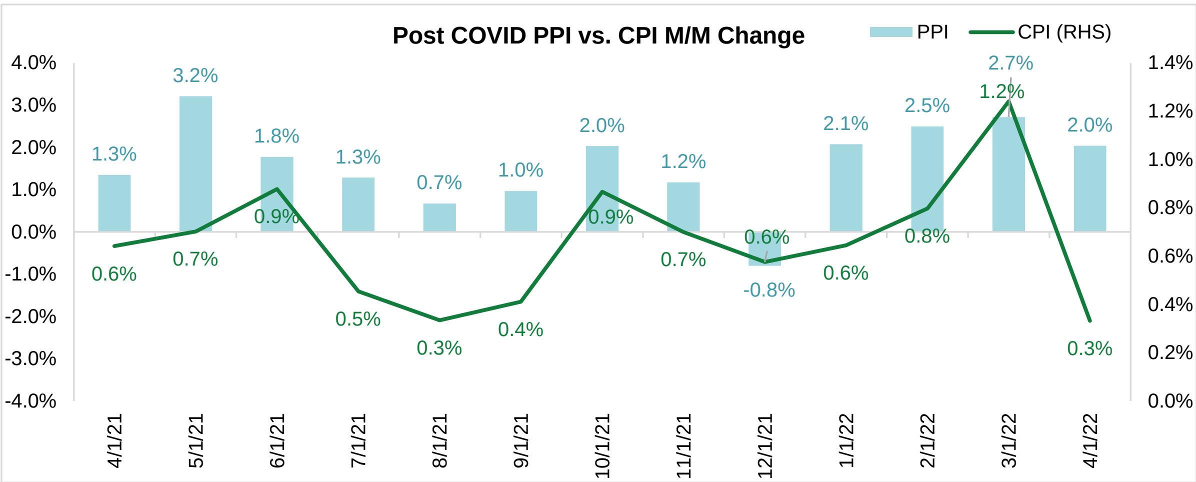
From a historical perspective, since 2010, the slope of the PPI line was 0.4x the slope of CPI. Post COVID, this relationship shifted to PPI being 2.4x CPI for the 2020 to current time period and 2.6x for the December 2021 to current time period. There does appear to be a leading factor of a PPI increase before CPI rises, with a short lag time for catch up. However, when looking at the spike at the end of the graph, from December 2021 to current, PPI rose 9.7% versus 3.0% for CPI. PPI is increasing at a much faster rate than CPI. The passthrough does not appear to be occurring as of yet, but will it?





Source: FRED, SIFMA estimates

Looking at M/M changes, a pattern had appeared where the two factors, PPI and CPI, moved in tandem. Then, a sharp break in the pattern occurred last month. While the PPI M/M change dropped to 2.0% from 2.7%, -0.7 pps, CPI fell to 0.3% from 1.2%, -0.9 pps. Could this indicate that PPI increases will not be passed along to CPI, or at least not in the same scale?



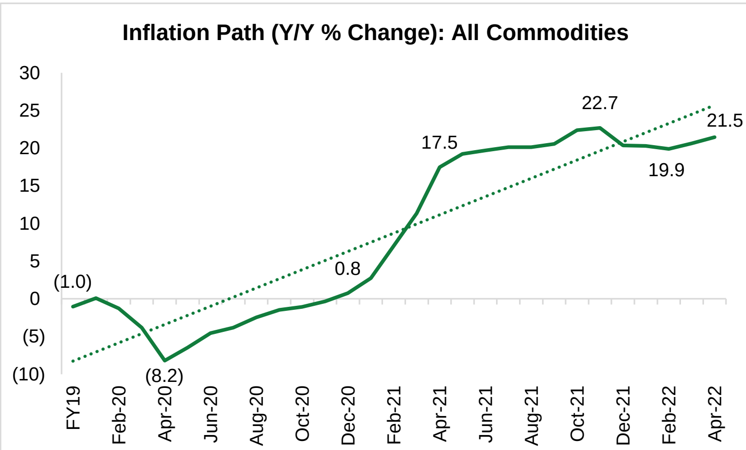
Source: FRED, SIFMA estimates

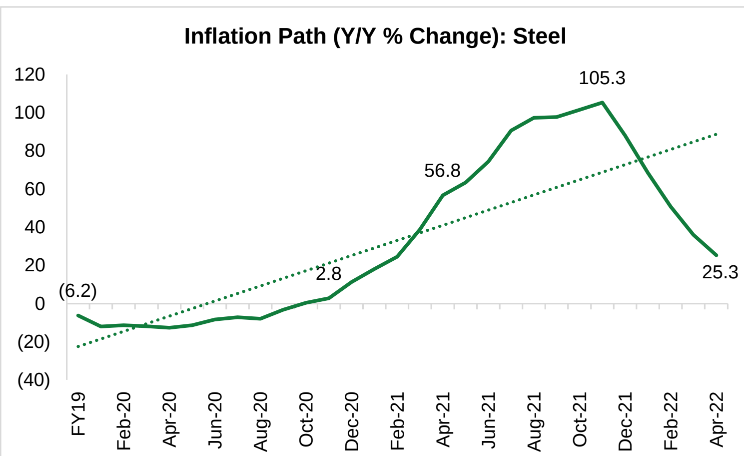
As shown in the table below and the charts on the next page, we analyzed a few specific components within PPI:

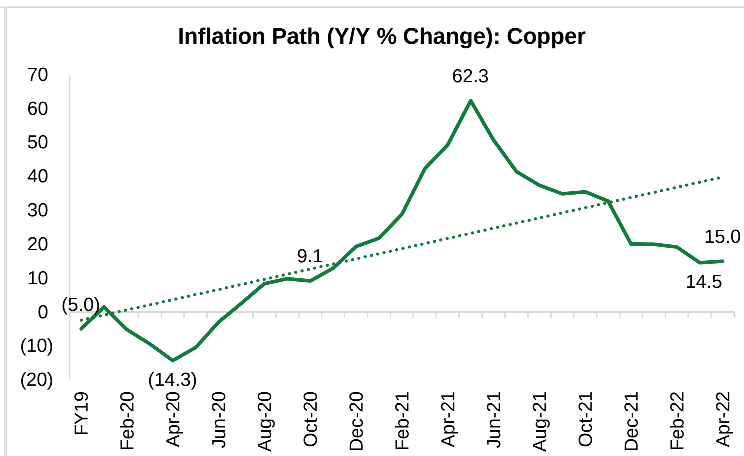
- All components remain elevated to historical levels
- YTD lower than LY = steel, copper, and lumber
- YTD higher than LY = all commodities (total PPI) and semis
- April represented a downtick = steel and lumber
- April represented an uptick = all commodities, copper, and semis
- April lower than YTD = steel, copper, and lumber
- April greater than YTD = all commodities and semis
- Lumber was negative in April, after peaking in May 2021 at +117.9%

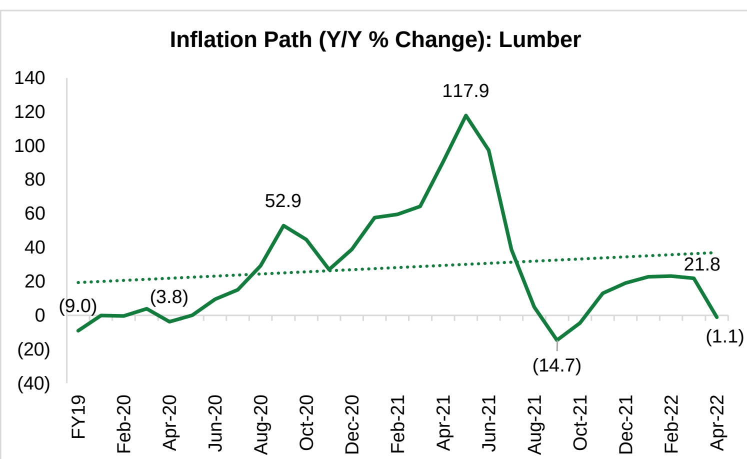
PPI	All Commodities	Steel	Copper	Lumber	Semis
Average (Y/Y % Change)					
2019	(1.0)	(6.2)	(5.0)	(9.0)	(1.1)
2020	(2.7)	(5.9)	1.8	18.1	(1.0)
2020 Apr-Dec	(3.1)	(4.0)	3.8	23.7	(1.6)
2020 Low	(8.2)	(12.6)	(14.3)	(3.8)	(3.1)
2021	17.0	71.4	38.1	45.3	(0.2)
YTD	20.6	45.2	17.2	16.6	4.5
April 2022	21.5	25.3	15.0	(1.1)	5.5

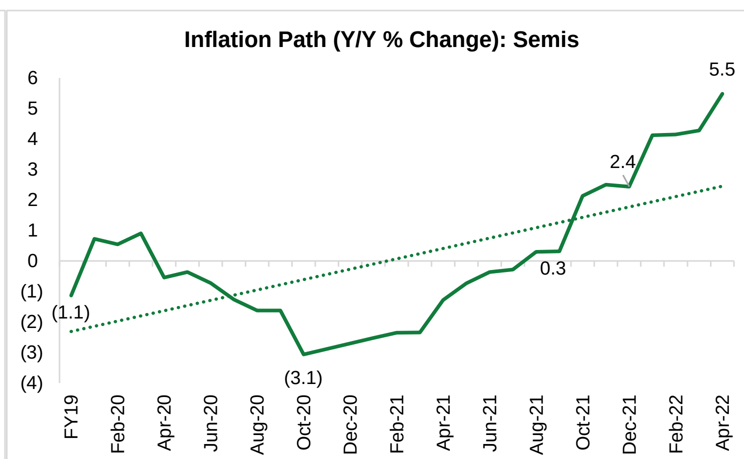
Source: FRED, SIFMA estimates











Source: FRED, SIFMA estimates

Have We/When Will We Peak: CPI View

Going back to analyzing inflation from the consumer standpoint, we break out select categories of CPI. As shown below and on the following pages, the consumer is getting hit from all angles, whether staying home or getting away.

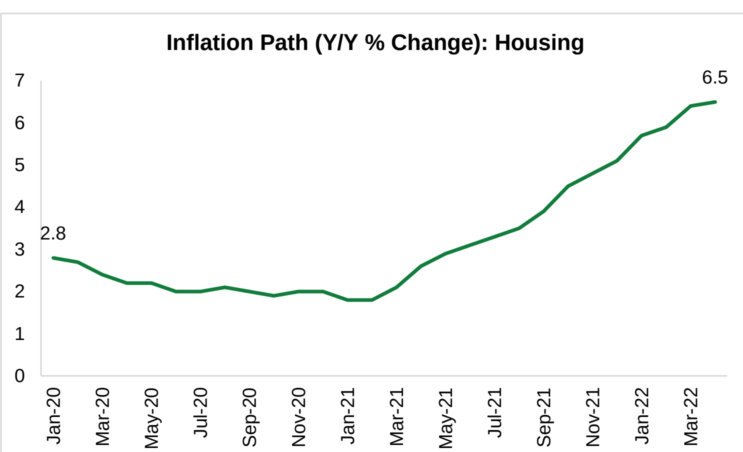
	Staying Home		At the Breakfast Table						At the Dinner Table				
	Housing	Rent	Bacon	Eggs	Milk	Coffee	Fruit	Cereal	Meat	Poultry	Seafood	Veggies	Wine
Average (Y/Y % Change)													
2019	2.9	3.7	2.0	(9.9)	2.7	(0.8)	(1.4)	0.5	1.3	(0.3)	1.6	3.9	1.1
2020	2.2	3.2	2.6	4.5	5.5	0.5	(0.8)	1.3	7.4	5.6	3.3	2.6	0.3
2020 Apr-Dec	2.0	2.9	3.0	7.1	5.5	0.9	0.2	2.1	8.6	7.1	4.3	3.4	0.5
2020 Low	1.9	2.3	(1.7)	(4.6)	4.2	(1.5)	(4.2)	(1.8)	3.4	0.0	0.1	(1.2)	(0.9)
2021	3.3	2.2	13.1	4.8	3.4	2.7	5.5	2.5	7.7	5.1	5.4	1.1	1.1
YTD	6.1	4.3	18.2	14.6	11.5	11.0	9.3	8.5	14.1	12.7	10.7	4.8	1.6
April 2022	6.5	4.8	17.7	22.6	14.7	13.5	8.3	12.1	13.9	15.3	11.9	6.2	1.5
vs. Historical (pps)													
2021	0.4	(1.5)	11.1	14.7	0.7	3.5	6.9	2.0	6.4	5.4	3.8	(2.7)	0.0
YTD	3.2	0.6	16.2	24.5	8.8	11.8	10.7	8.0	12.8	13.0	9.1	1.0	0.5
April 2022	3.6	1.1	15.7	32.5	12.0	14.3	9.7	11.6	12.6	15.6	10.3	2.4	0.4

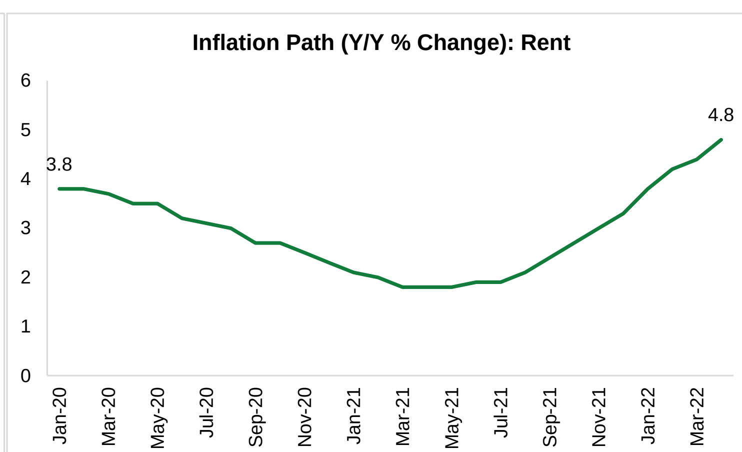
Source: FRED, SIFMA estimates

As shown in the table above and the charts below and on the next pages, we analyzed a few specific components within the staying at home categories of CPI:

- All components remain elevated to historical levels
- YTD lower than LY = (none)
- YTD higher than LY = all categories
- April represented a M/M downtick = bacon, fruit, wine, meat
- April represented a M/M uptick = housing, rent, eggs, milk, coffee, cereal, veggies, seafood, poultry
- April lower than YTD = bacon, fruit, meat, wine
- April greater than YTD = housing, rent, eggs, milk, coffee, cereal, poultry, seafood, veggies

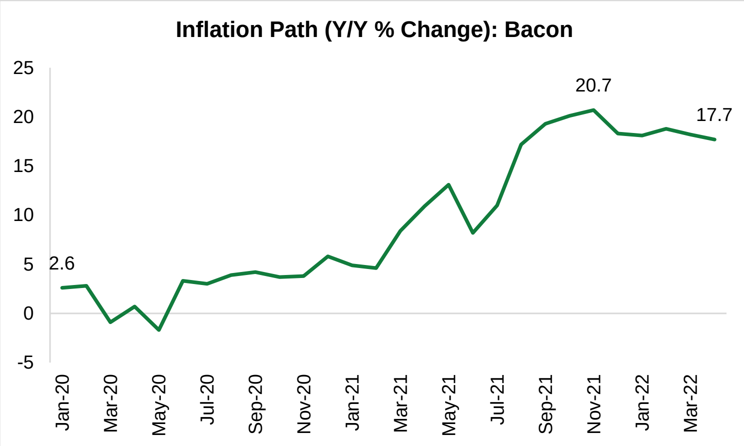
Staying Home

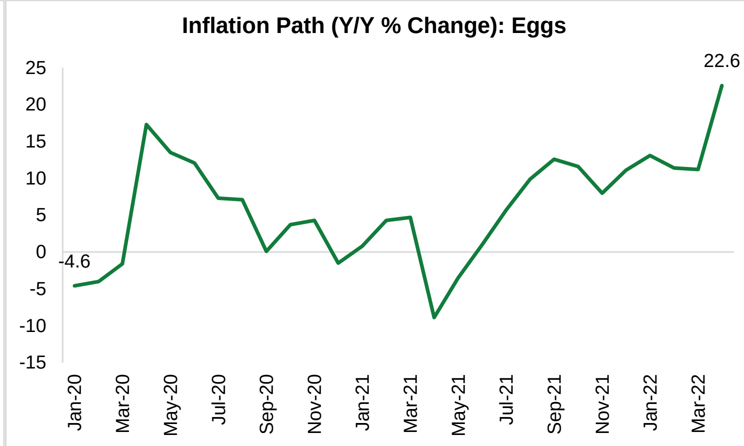


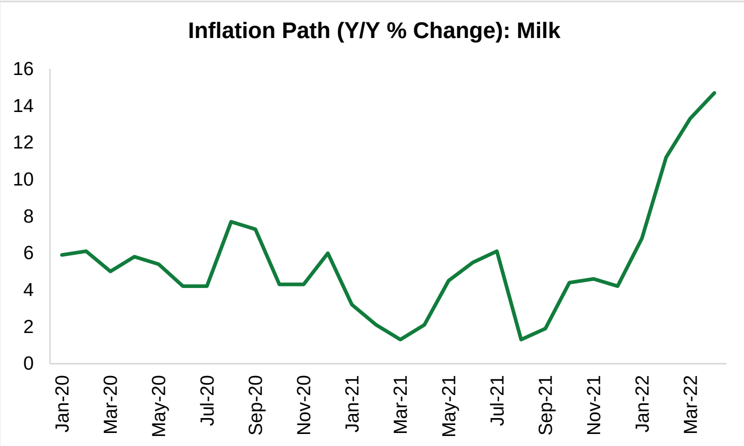


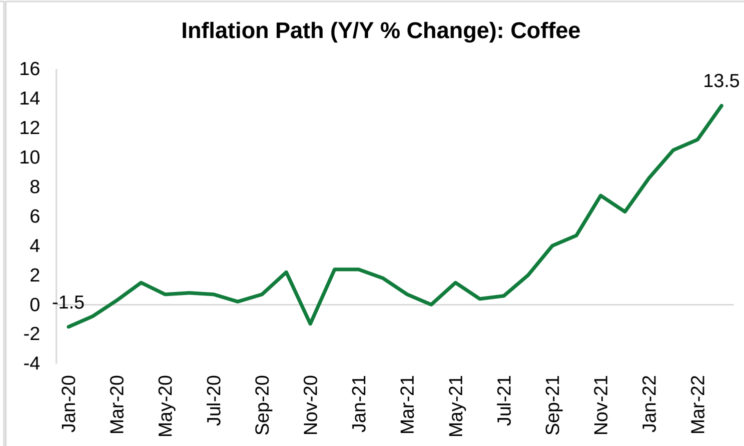
Source: FRED, SIFMA estimates

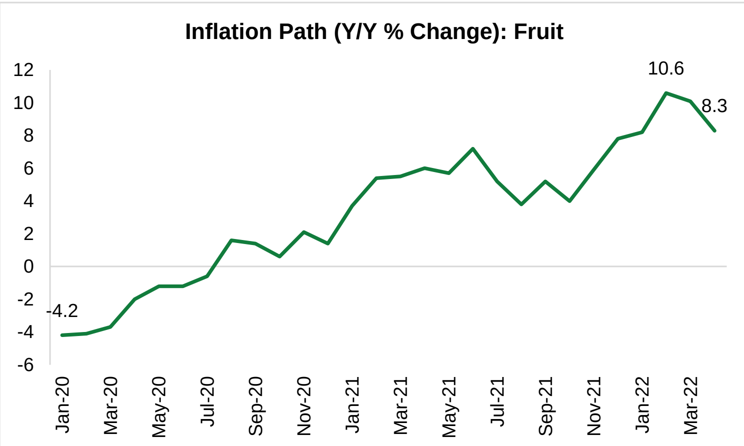
At the Breakfast Table

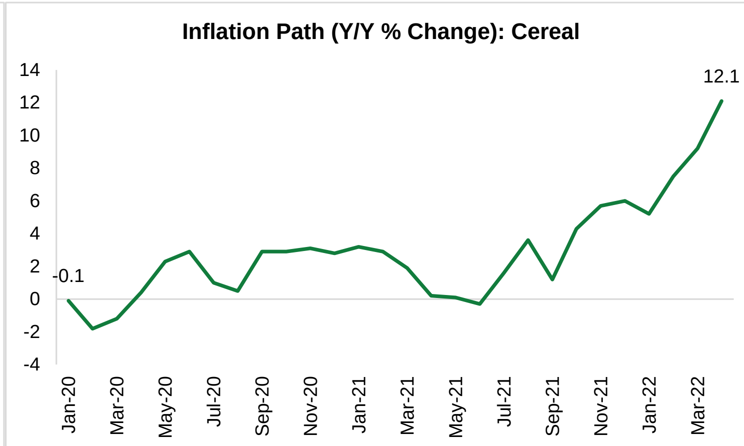






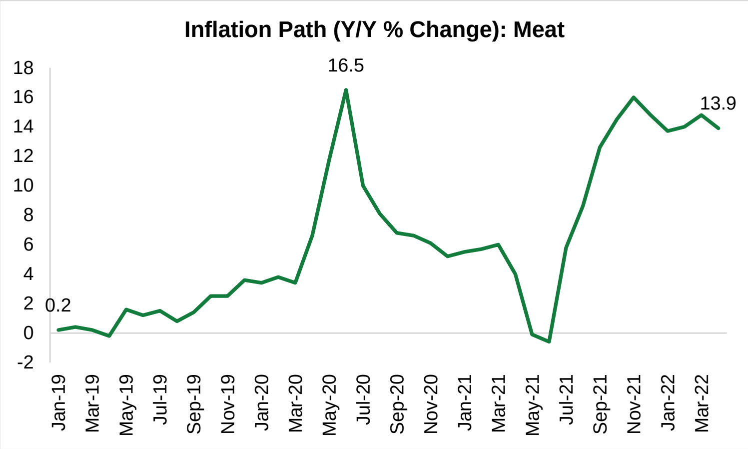


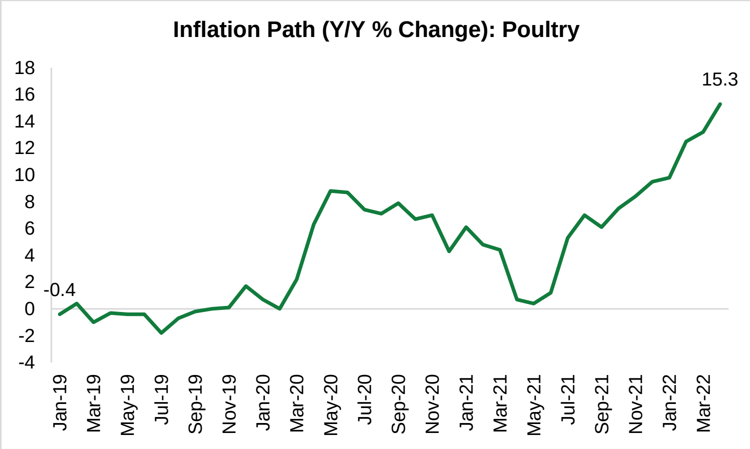


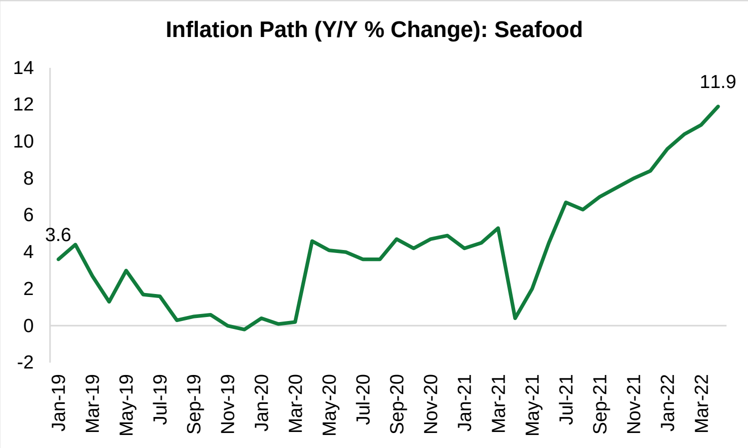


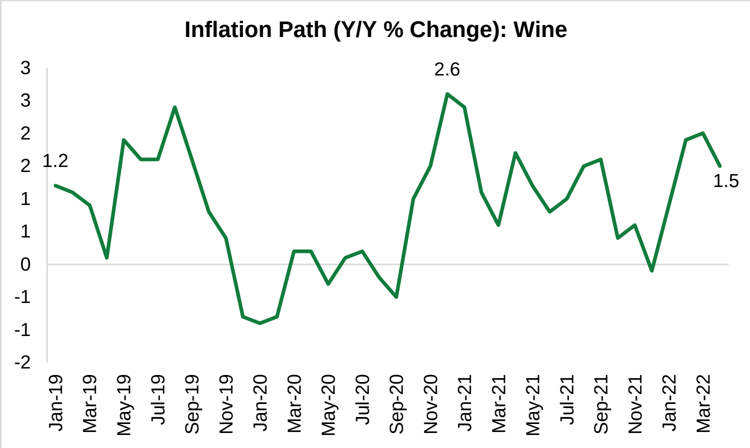
Source: FRED, SIFMA estimates

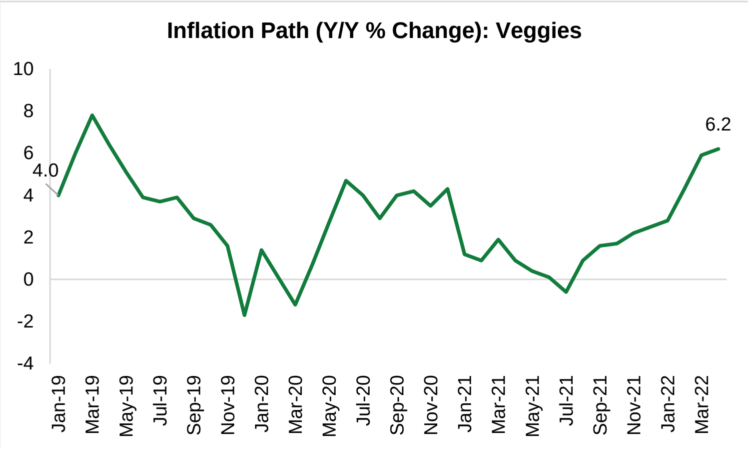
At the Dinner Table











Source: FRED, SIFMA estimates

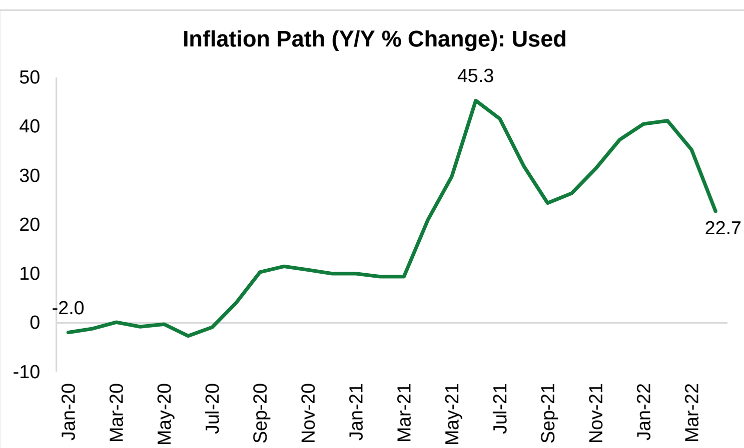
	Getting Around (Vehicles)		At the Pump (Unleaded Gasoline)				Getting Away	
	Used	New	Regular	All	Medium	Premium	Hotels	Airfare
Average (Y/Y % Change)								
2019	1.0	0.4	(3.7)	(3.5)	(2.4)	(1.8)	3.0	0.2
2020	3.2	0.5	(16.0)	(15.5)	(13.1)	(12.4)	(11.7)	(17.8)
2020 Apr-Dec	4.7	0.7	(22.1)	(21.6)	(18.6)	(17.6)	(14.8)	(23.2)
2020 Low	(2.7)	(0.5)	(34.5)	(33.7)	(29.7)	(28.1)	(17.1)	(27.8)
2021	26.5	5.9	38.8	37.5	32.7	29.9	11.6	1.4
YTD	34.9	12.5	43.1	42.4	40.1	37.7	26.1	18.6
April 2022	22.7	12.6	44.2	43.6	41.9	39.7	22.6	33.3
vs. Historical (pps)								
2021	25.5	5.5	42.5	41.0	35.2	31.7	8.6	1.2
YTD	33.9	12.1	46.9	45.9	42.5	39.4	23.0	18.5
April 2022	21.7	12.2	47.9	47.1	44.3	41.5	19.6	33.1

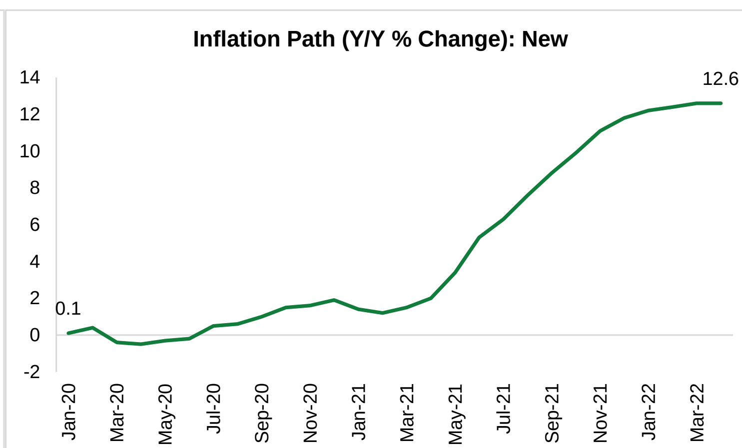
Source: FRED, SIFMA estimates

As shown in the table above and the charts below and on the next page, we analyzed a few specific components within the getting around/away categories of CPI:

- All components remain elevated to historical levels
- YTD lower than LY = (none)
- YTD higher than LY = all categories
- April represented a M/M downtick = used vehicles, hotels, all four gas categories
- April flat M/M = new vehicles
- April represented a M/M uptick = airfare
- April lower than YTD = used vehicles, hotels
- April greater than YTD = new vehicles (slightly higher), all four gas categories, airfare

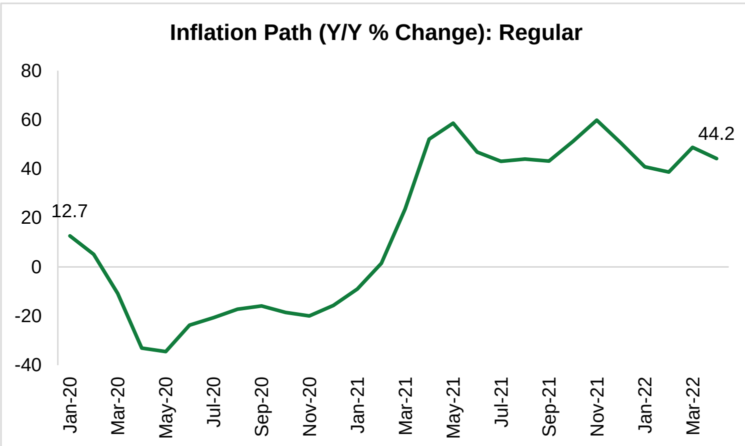
Getting Around

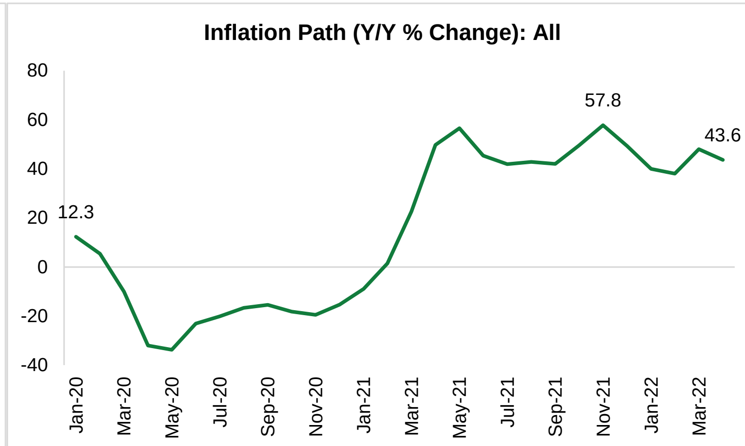


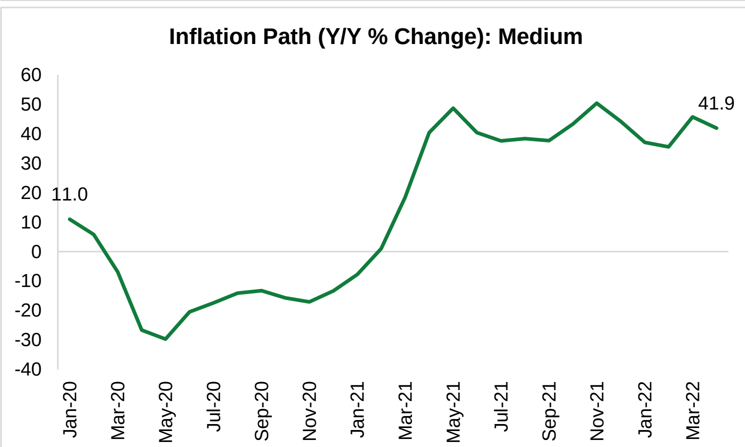


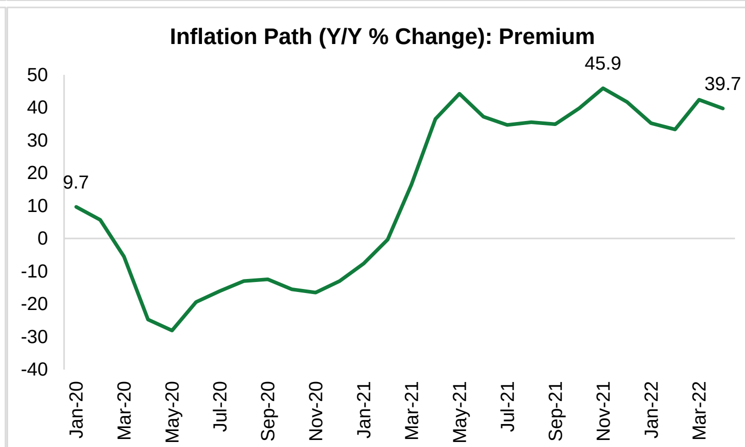
Source: FRED, SIFMA estimates

At the Pump



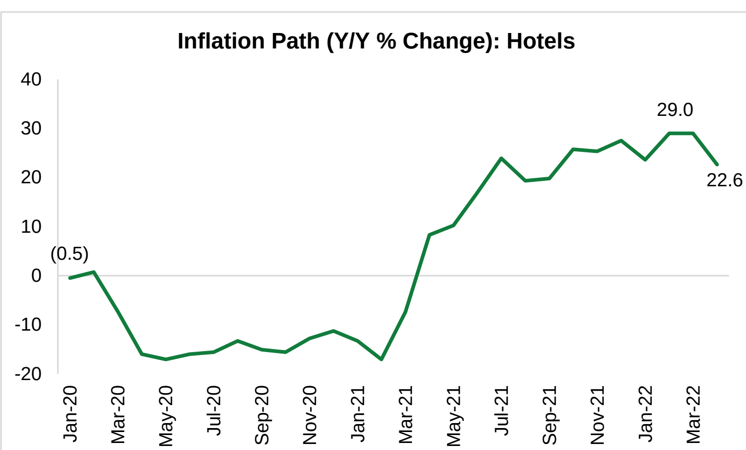


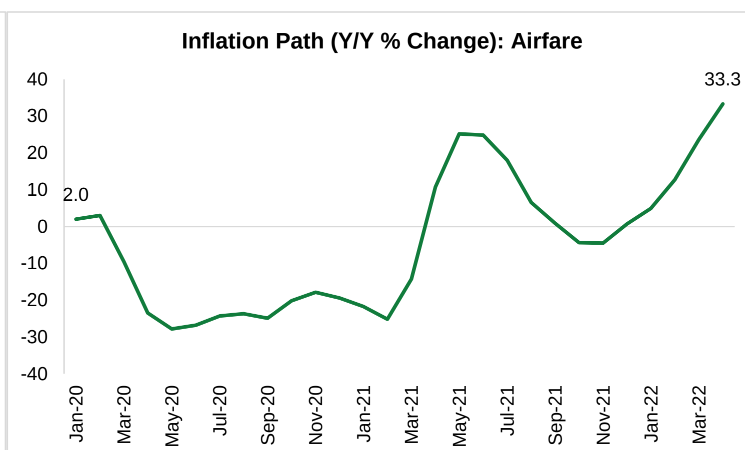




Source: FRED, SIFMA estimates

Getting Away





Source: FRED, SIFMA estimates

Recapping Prior Survey Forecasts

Before digging into this year's survey results, we recap highlights from our December 2021 survey (populated between November 15 and December 3): https://www.sifma.org/wp-content/uploads/2021/12/SIFMA-US-Economic-Survey-2H21.pdf

- **Economic Forecasts**
  - Unemployment rate forecasted to end 2021 at +4.5%, moving to +3.8% in 2022 (4Q average)
  - 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**
  - 2021 CPI – expectation +6.5% (2020 actual +1.1%)
  - 2021 Core CPI – expectation +4.9% (2020 actual +1.6%)
  - 67% of respondents believe current inflation pressures are transitory
  - 47% of Roundtable economists expect a resolution to the supply chain constraints by 2Q22
  - 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
  - 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

1H22 Survey Results Highlights

Over two years past the start of the COVID pandemic, concerns have shifted away from COVID to inflation. As inflation continues to climb – +8.2% for April – we have two main questions for the economy:

- Has inflation peaked?
- How long could it take to get back down to historical levels (~2%)?

We asked our Roundtable of economists to provide their best assessment of the current environment and when we can an end to inflation. We also compare answers to our December 2021 survey to gauge changes in estimates of the economic outlook. We highlight the following from the survey (populated between May 9 to 23):

- **Economic Forecasts**
  - Unemployment rate forecasted to end 2022 at +3.5%, and remaining at +3.5% in 2023 (4Q average)
  - 2022 GDP growth expected at +1.5% (median forecast, 4Q/4Q); 2023 expected at +1.7%
  - 100% of economists expect the long-term potential GDP growth rate of 1.5-2%, with 73% stating this is unchanged from pre-COVID estimates
  - The main factors impacting economic growth include: inflation, U.S. monetary policy, and tight labor market for both 2022 and 2023
  - Key risks to forecasts include:
    - Upside – Increase in consumer spending, resolution of geopolitical tensions, and supply chain recovery
    - Downside – Monetary policy overcorrection, escalation of geopolitical tensions, and higher inflation
  - 40% of respondents are doubtful that the Fed can navigate a soft-landing, followed by 33% replying somewhat confident
  - Roundtable economists are evenly split when it comes to expectation of the U.S. entering a recession. 18% of respondents each believe there will be no recession, recession will come in 2H22, 2H23, 2024, and beyond 2024

- **Inflation Forecasts**
  - 2022 CPI – expectation +6.3% (2021 actual +6.7%)
  - 2022 Core CPI – expectation +5.0% (2021 actual +5.0%)
  - 93% of respondents believe the Fed waited too long to raise rates, allowing inflation to get out of control
  - 93% of respondents believe we are at peak inflation levels (in terms of PCE)

- 33% of respondents expect inflation will begin to noticeably decline back down towards the Fed's preferred 2% target by 1H24, followed by 27% replying 2H23
- 64% of respondents expect a 15-25% probability the U.S. will experience structurally higher inflation over the longer run (defined as longer than three years from now), followed by 14% responding 0-15% and 25-50% each
- 56% of respondents believe inflation is largely a supply driven problem and 44% demand driven
- 50% of respondents expect supply chain disruptions to dissipate by 2H22, followed by 29% replying 1H23
- With international conflict adding an additional layer of pressure to inflation, 47% of respondents expect relief from this pressure by 1H23, followed by 27% replying 2H23
- 87% of respondents agree with the Fed that prices pressures have become more structural or broad-based
- 67% of respondents are somewhat confident that the Fed can achieve its 2% inflation goal in a sustainable way, followed by 13% replying very confident and another 13% replying doubtful
- Top factors in core inflation outlooks include: supply chain issues, monetary policy, and economic slack/unemployment
- Top factors to push long-term inflation higher include: sustained breakdown of supply chains, stickiness of wage increases, and cost increases as supply chains move back to the U.S.
- 40% 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 33% responding between 0% and 15% probability
- 53% of respondents believe the massive expansion of the government's balance sheet (fiscal spending >$7 trillion) poses a significant upside risk to inflation
- 80% of Roundtable economists see the greater long-term risk to the economy as stagflation, followed by 13% replying deflation

- **Life after COVID**
    - 63% of respondents expect the labor force participation rate not to return to the ~63% pre-COVID average until beyond 2023, with another 25% responding never
    - Top factors leading to the labor supply gap include: the Great Retirement (69% of respondents) and childcare issues (50%)
    - All respondents expect employees never to return to the office at pre-COVID levels, indicating hybrid work is here to stay
    - The key factors listed by respondents limiting a large-scale return to office include: choose to continue working at home, not want to commute/time freed up from not commuting, and childcare issues

- Despite the emergence of the latest B2 variant, 56% of Roundtable economists believe consumers are returning to pre-COVID behaviors because of fatigue/frustration with earlier COVID policies while 38% believe the vaccination rates/vaccine availability is the driver
- In terms of approaching high-density activities, 69% of Roundtable economists expect them to return to pre-COVID norms while 25% expect them at increased but nowhere near pre-COVID levels
- When gauging long lasting or permanent negative impacts from changed behaviors on the heavily COVID-impacted activities, 82% of respondents selected movie theatres, followed by 55% indicating public transportation and 36% hotels, airlines and plays/musicals
- 70% of respondents believe proof of vaccination should be required for crowded events followed by return to offices (60% of respondents)
- After states removed their general mask mandates for public spaces, some cities maintain mask requirements for public transportation. 62% of respondents believe the remaining cities will remove the latest safety protocols in 2H22 while 15% believe 1H22
- 93% of respondents believe the Biden administration's appeal of the removal of federal mask requirements on planes and other public transportation will not be successful
- 57% of Roundtable economists believe the development of the Merck and Pfizer antiviral pills will somewhat help accelerate the return to normal

- **Fed Actions**
    - All respondents expect the Fed to raise the target Federal Funds rate by 50 bps in June
    - 54% of respondents expect the Fed to raise the target Federal Funds rate by <200 bps by year end, followed by 38% expecting a 200 bps hike
    - 29% of respondents expect the peak target Federal Funds rate to be 250-300 bps, followed by 24% expecting 300-350 bps and 350-400 bps each
    - 59% of respondents expect the peak rate to be reached by end of 2023, followed by 24% responding end 2022
    - 87% of respondents expect the Fed will not need to accelerate the proposed pace of balance sheet reductions
    - All respondents expect the size of total balance sheet to be over $7 trillion by the end of 2022, and 69% expect it to stay over $7 trillion by the end of 2023
    - As to the efficiency of the Fed's communication with markets around its timeline for monetary policy adjustments, 60% of respondents indicated it is excellent/very clear, while 40% said murky but decipherable
    - The factors listed as most important to the Fed's decision making were: inflation due to supply chain issues, inflation due to tight labor market, and inflation due to Russia/Ukraine conflict

- **Fiscal Stimulus**
    - 71% of respondents believe sustained higher inflation will deter further fiscal spending packages
    - 85% of respondents believe the Russia/Ukraine conflict will not deter further fiscal spending packages
    - 38% of respondents expect the $1 trillion infrastructure package not to impact 2022 GDP estimates while 23% expect an increase by 0-10 bps and 10-20 bps each
    - 58% of respondents believe the government should not be taking more steps to alleviate the burden on consumers (high prices for gasoline and groceries)
    - Steps to alleviate the burden on consumers include: 31% other (stop spending, encourage more energy production, increase food stamps), 15% tax reductions, and 8% gas cards
    - 67% of respondents view the bigger risk to the economy is the government doing too much, therefore the economy overheats
    - When considering additional stimulus, 62% respondents indicated government should consider the debt level as it could impede long-term growth or incite further inflation, followed by 23% saying government should not be considering the debt level (debt/GDP currently over 100%)

Comparing the Current and Prior Surveys

In this section, we compare results from the June and December surveys, for questions that were repeated in each survey (not all questions are, as we adapt the survey to the current economic environment). For questions where responses were ranked, we show the top answer for each survey.

ECONOMIC FACTORS	1H22 Survey (current)	2H21 Survey
GDP growth estimate: TY/NY	1.5%/1.7%	5.2%/3.5%
Unemployment rate estimate: TY/NY	3.5%/3.5%	4.5%/3.8%
What is your estimate of the long-term potential growth rate of the U.S. economy	>1.5-2% (100% of respondents)	>1.5-2% (81% of respondents)
Has your estimate of the long-term potential growth rate of the US economy changed post-COVID	No, temporary impact (73% of respondents)	No, temporary impact (53% of respondents)
How has COVID's impact evolved in your economic outlook	Lessened (60% of respondents)	Lessened (53% of respondents)
What factors will have the greatest impact on U.S. economic growth this year	Inflation, monetary policy, tight labor market	Fiscal policy/budget, economic reopening, monetary policy
What factors will have the greatest impact on U.S. economic growth next year	Inflation, monetary policy, tight labor market	Economic reopening, monetary policy, fiscal policy/budget
Top risks to economic forecasts - upside	Increase in consumer spending, resolution of geopolitical tensions, and supply chain recovery	Faster opening of economy/end of the pandemic, larger consumer spending, supply chain recovery
Top risks to economic forecasts - downside	Monetary policy overcorrection, escalation of geopolitical tensions, and higher inflation	Lingering COVID restrictions and lockdowns, higher inflation, supply chain issues

Note: TY = this year, NY = next year

INFLATION	1H22 Survey (current)	2H21 Survey
End 2022 CPI/Core CPI	6.3%/5.0%	6.5%/4.9%
End 2022 PCE/Core PCE	5.1%/4.2%	5.3%/4.3%
What are the most important factors in your outlook for core inflation	Supply chain issues, monetary policy, economic slack/unemployment	Economic slack/unemployment, inflation expectations, COVID recovery time
Under the current policy stance, how confident are you can the Fed can achieve its 2% goal in a sustainable way	Somewhat confident (67% of respondents)	Somewhat confident (43% of respondents)
Looking further out, what probability would you place on the US experiencing structurally higher inflation over the longer-run	15-25% (64% of respondents)	15-25% (47% of respondents)
What factors do you believe could push long-term inflation higher	Sustained breakdown of supply chains, stickiness of wage increases, cost increase as supply chains move back to U.S.	Sustained breakdown of supply chains, reversal of globalization, cost increase as supply chains move back to U.S.
What probability would you place on the US experiencing a period of disinflation in core measures over the next two years	>50% (40% of respondents)	>50% (57% of respondents)
Given the significant amount of government spending, what is the bigger risk for the economy	Stagflation (80% of respondents)	Stagflation (80% of respondents)

LIFE AFTER COVID	1H22 Survey (current)	2H21 Survey
When do you expect the labor force participation rate to return to the ~63% pre-COVID average	Beyond 2023 (63% of respondents)	Beyond 2022 and never (each 46% of respondents)
When do you expect work-from-office to return to pre-COVID norms	Never (100% of respondents)	Never (71% of respondents)
Which factors do you believe are limiting a large-scale return to offices	Employees choosing to work at home, unwillingness to commute, and lack of childcare/closed schools	Lingering health concerns of contracting COVID, employees choosing to work at home, and lack of childcare/closed schools
How do you expect consumers to approach high-density activities	Return to pre-COVID norms (69% of respondents)	Increase, but nowhere near pre-COVID norms (47% of respondents)
Do you expect to see a lasting or even permanent negative impact of changed behaviors on the sectors most impacted by COVID	Movie theatres (82% of respondents), Travel, public transportation (55% of respondents)	Travel, hotels (92% of respondents), Travel, airlines (83% of respondents)
Should proof of vaccination be required for:	Crowded events (70% of respondents), return to offices (60% of respondents)	Travel, airlines; return to offices; crowded events, movie/play/concert/sports (each 86% of respondents)
Do you believe the development of the Merck and Pfizer antiviral pills will help accelerate the return to normal	Yes, somewhat (57% of respondents)	Yes, somewhat (87% of respondents)

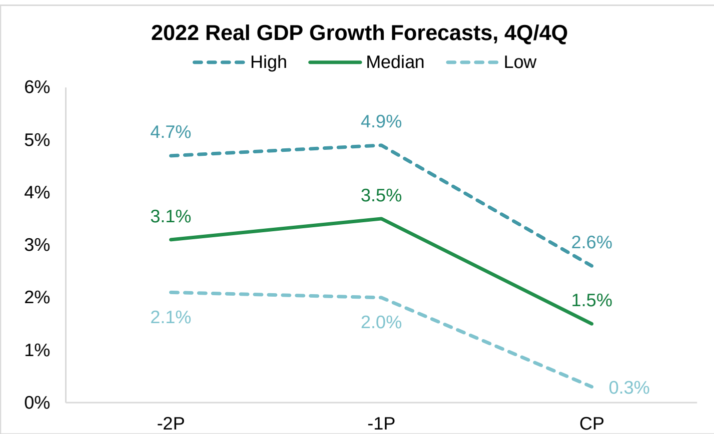
MONETARY POLICY	1H22 Survey (current)	2H21 Survey
What is the expected end size of the Fed's balance sheet by year end (note: the ranges may change survey to survey)	>$7T (100% of respondents)	$8-$9T (57% of respondents)
Which of the following factors do you think are the most important to the Fed's decision making	Inflation – supply chain issues, inflation – tight labor market, inflation – Russia/Ukraine conflict	Inflation pressure/inflation expectations, resumption of real economic activity, COVID impact on labor conditions
In general, how do you rate the efficiency of the Fed's communication with markets around its timeline for shifting monetary policy	Excellent (60% of respondents)	Excellent (67% of respondents)

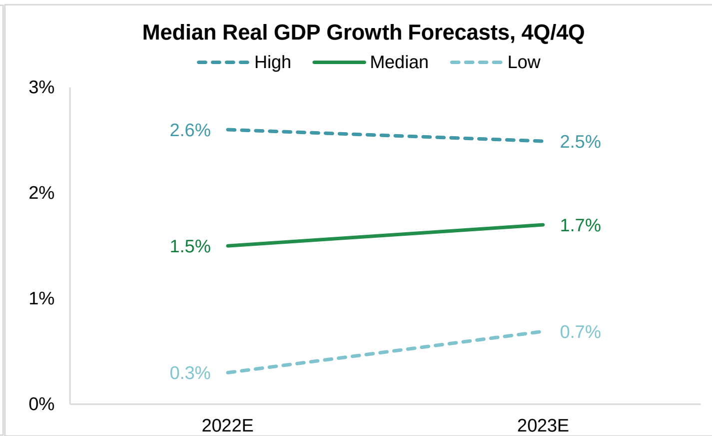
The Economy

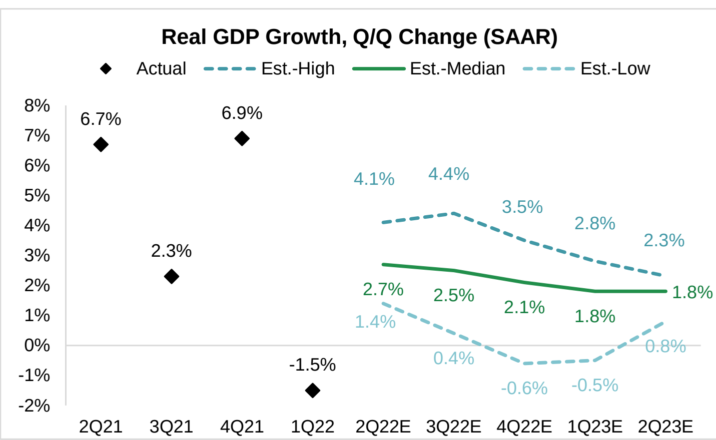
GDP Growth Expectations

Our Roundtable economists expect GDP growth to finish 2022 at +1.5% (median forecast, 4Q/4Q). For 2023, the median forecast sees GDP increasing by +1.7% (4Q/4Q). On a quarterly basis, respondents forecast +2.7% GDP growth in 2Q22, lowering to +2.5% in 3Q22 and gradually declining to +1.8% in 2Q23.

(Last survey: 2022 GDP growth +3.5%; median forecast, 4Q/4Q)



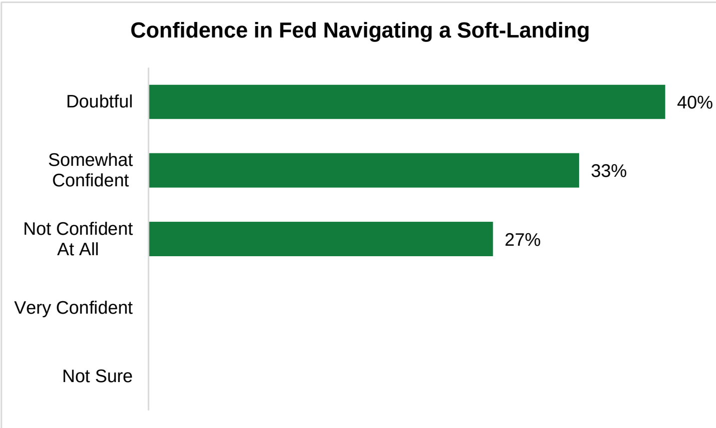


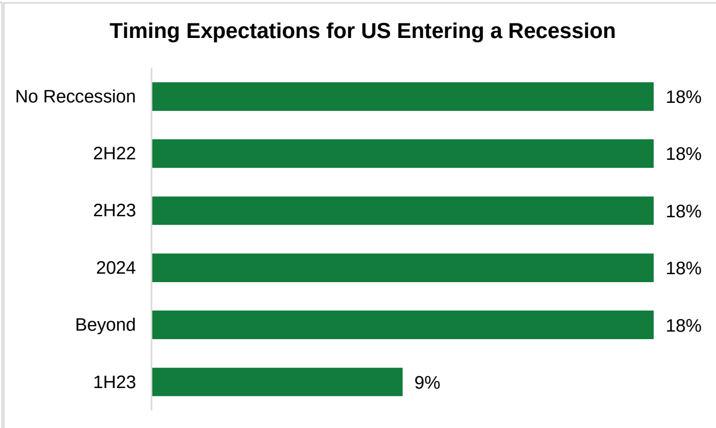


Source: Bureau of Economic Analysis, SIFMA Economic Advisory Roundtable
Note: SAAR = seasonally adjusted annual rate

In light of the expected path of monetary policy, key questions for economists are around the Fed's ability to perform a soft landing and, depending upon the answer, if/when the U.S. will enter a recession.

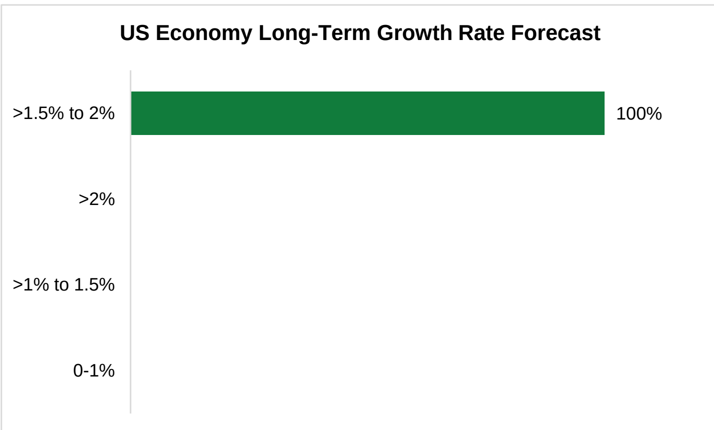
- 40% of respondents are doubtful the Fed can navigate a soft-landing (achieve its inflation goal without causing a recession), followed by 33% that are somewhat confident
- There is no consensus among the Roundtable economists regarding the U.S. entering a recession with 18% of respondents indicating no recession, recession in 2H22, 2H23, 2024 and beyond 2024 each

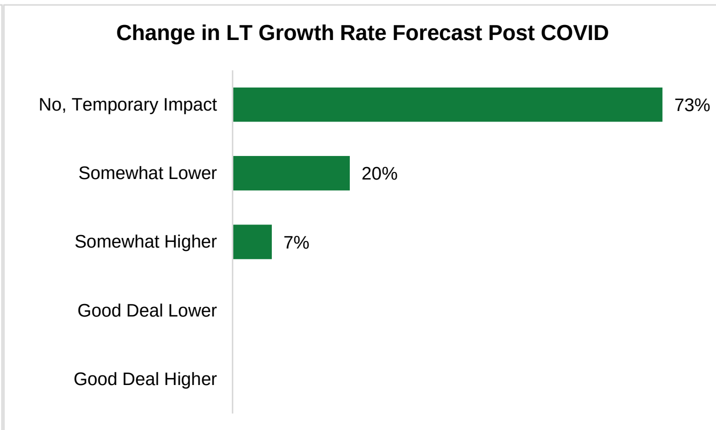




Full Question: How confident are you that the Fed can navigate a soft-landing, meaning achieve its inflation goal without causing a recession?
Full Question: If you expect the US to enter a recession, when?

The Roundtable economists are unanimous in expecting the long-term potential growth rate between +1.5% and +2%, with 73% stating this is unchanged from pre-COVID estimates.



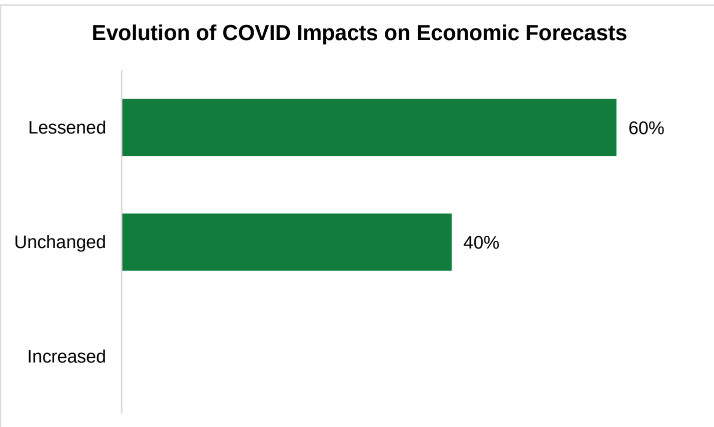


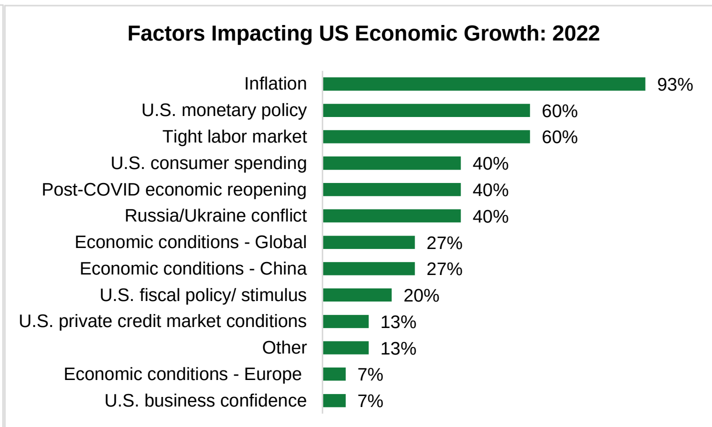
Full Question: What is your estimate of the long-term potential growth rate of the US economy?
Full Question: Has your estimate of the long-term potential growth rate of the US economy changed post-COVID?

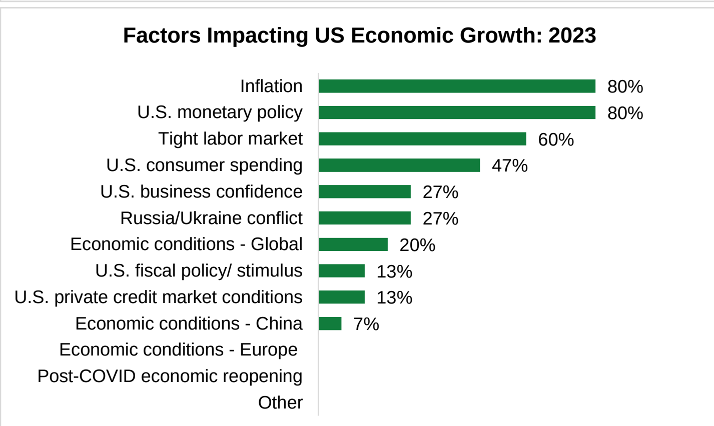
COVID Impact on Economic Forecasts

As we put COVID behind us – at least the worst of it – and life returns to normal, we polled our Roundtable economists for just how all-encompassing COVID is for estimates, despite having so many unknown moving parts.

- When asked how COVID's impact has evolved in economic forecasts, 60% responded it has lessened, i.e. it is a near-term phenomenon not a structural shift
- Key factors impacting U.S. economic growth, as ranked by our economists, include: inflation, U.S. monetary policy, and tight labor market for both 2022 and 2023
    - 2022 Other = China zero COVID policy; commodities prices





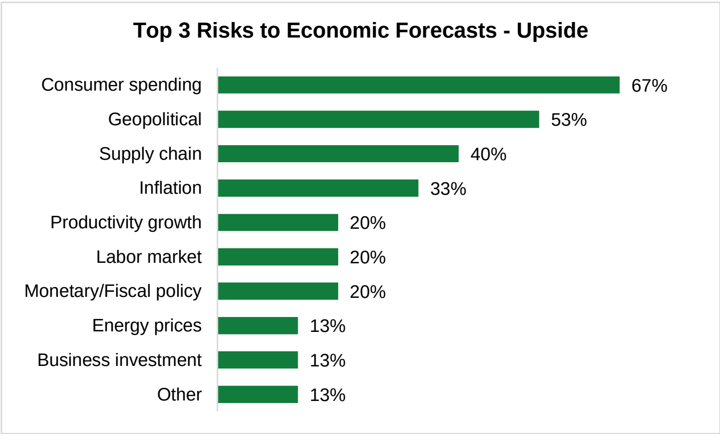


Full Question: How has the latest variant of COVID impacted your economic outlook?
Full Question: What factors will have – or at this point, have already had – the greatest impact on US economic growth in full year 2022/2023? (Ranked by percentage of economists that listed a factor).

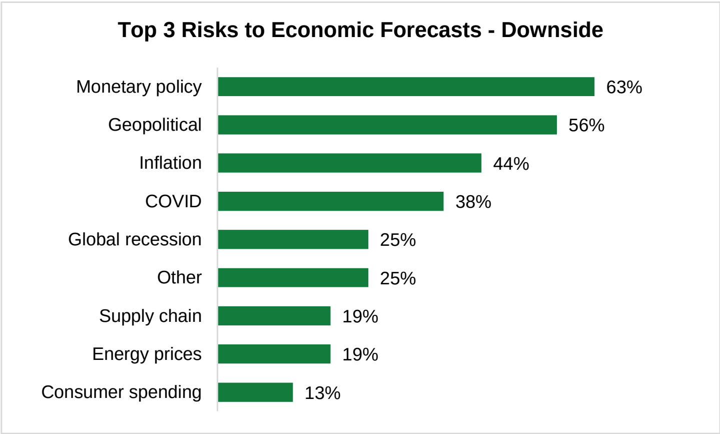
Risks to Economic Forecasts

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

- **Upside** – Increase in consumer spending, resolution of geopolitical tensions, and supply chain recovery
  - Other = export resurgence; new business formation grows



- **Downside** – Monetary policy overcorrection, escalation of geopolitical tensions, and higher inflation
  - Other = business investment; slower return of workers; stagflation; weakening in equities

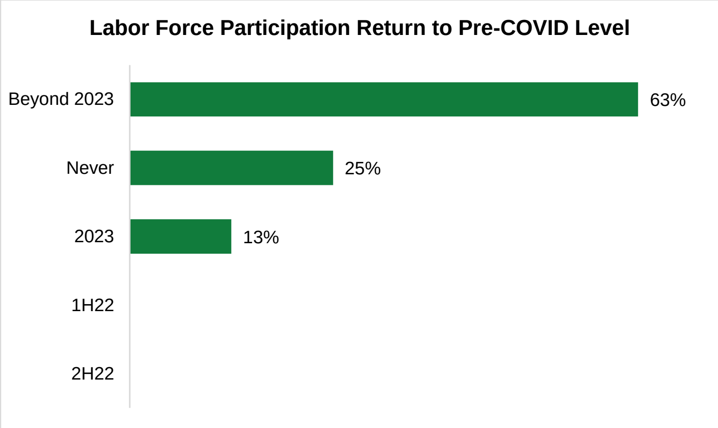


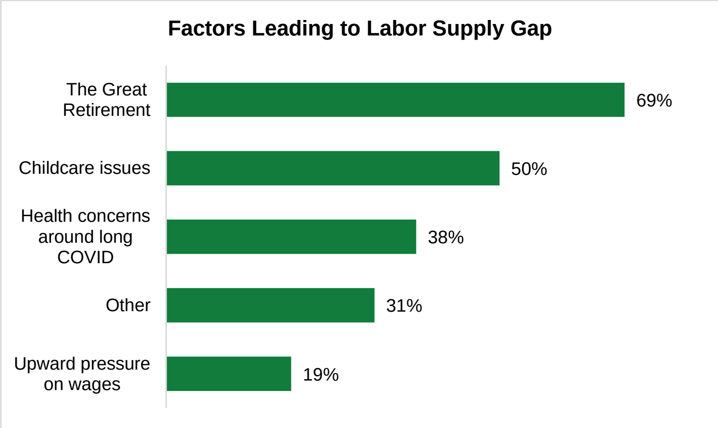
Life after COVID

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

- 63% of respondents expect the labor force participation rate to return to the ~63% pre-COVID average beyond 2023, with another 25% responding never
- Primary factors leading to the labor gap supply include: the Great Retirement (69% of respondents) and childcare issues (50%)
    - Other = demographics, reduced (legal) immigration, 2 million less (legal) foreign workers relative to pre-COVID trend; strong household finances; change in tastes/preferences surrounding work-life balance; too rapid growth

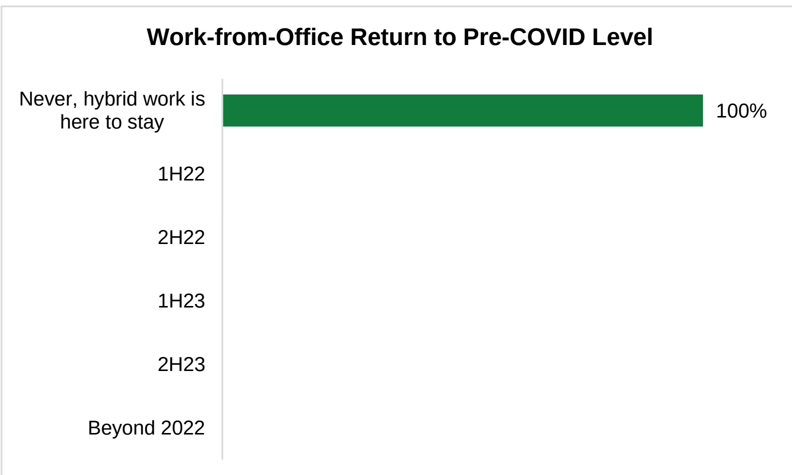


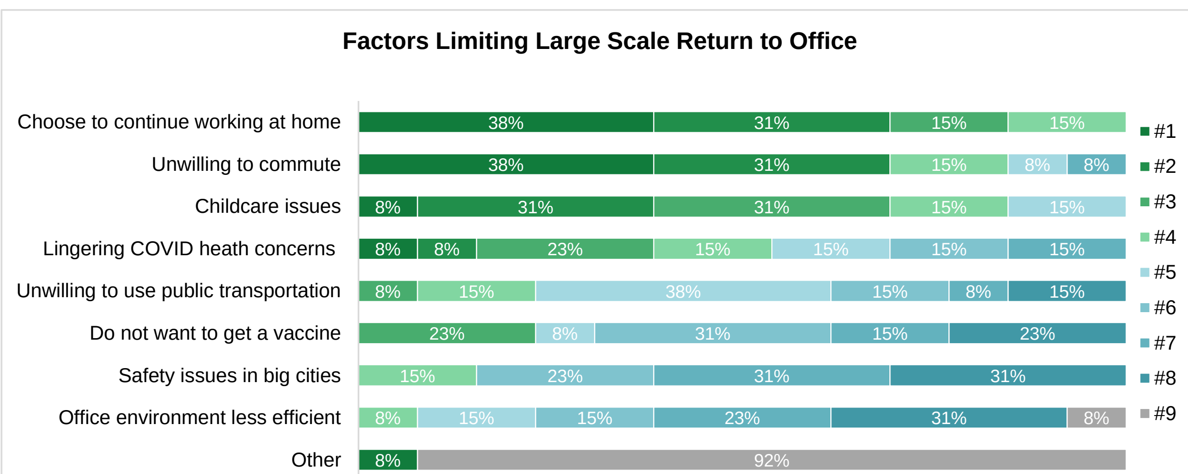


Full Question: When do you expect the labor force participation rate to return to the ~63% pre-COVID average?
Full Question: With 11 million job vacancies and 6 million Americans reporting a position of unemployment, what are the primary factors leading to the labor supply gap?

Return to the Office

- All respondents expect employees never to return to the office at pre-COVID levels, indicating hybrid work is here to stay
- The key factors listed by respondents limiting a large-scale return to office include: choose to continue working at home, not want to commute/time freed up from not commuting, and childcare issues
    - Other = worker bargaining power enabling people to not to accept the economic and non-economic costs of returning to offices without a compensating differential

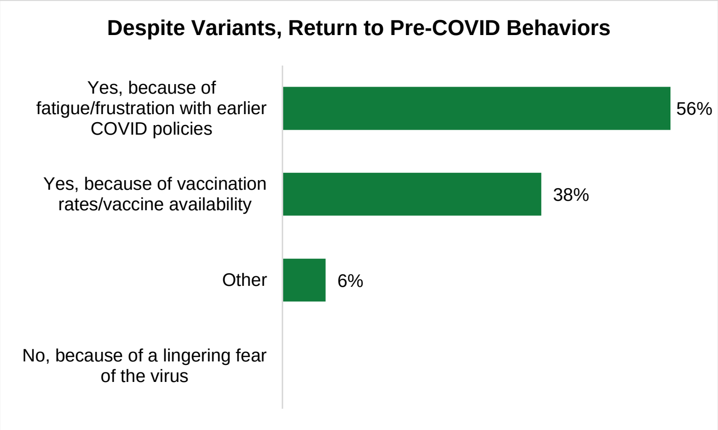


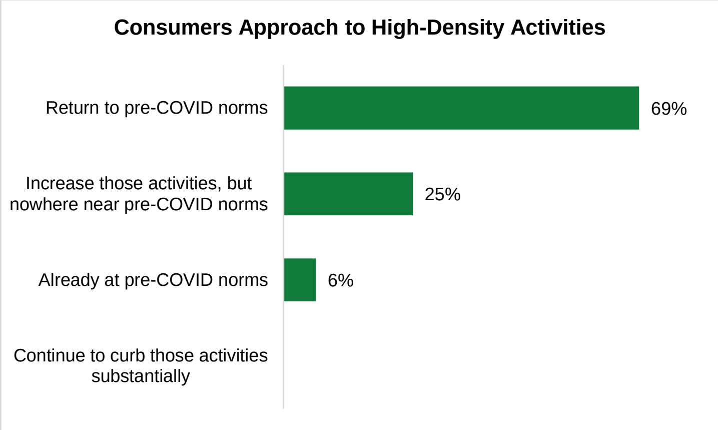


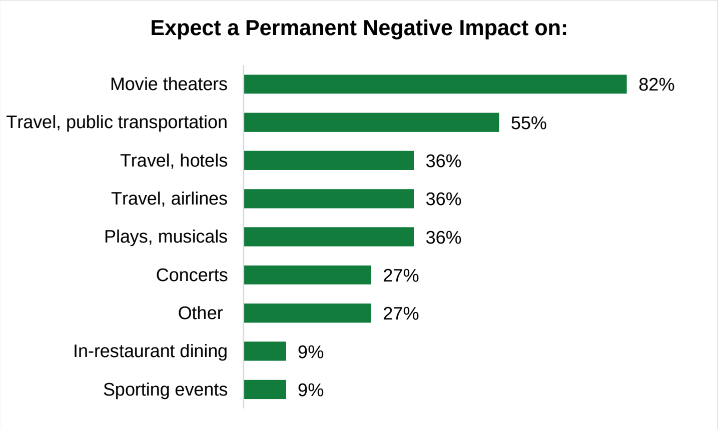
Full Question: When do you expect work-from-office to return to pre-COVID norms?
Full Question: Which factors do you believe are limiting a large-scale return to offices? (Factors listed in order of average rank)

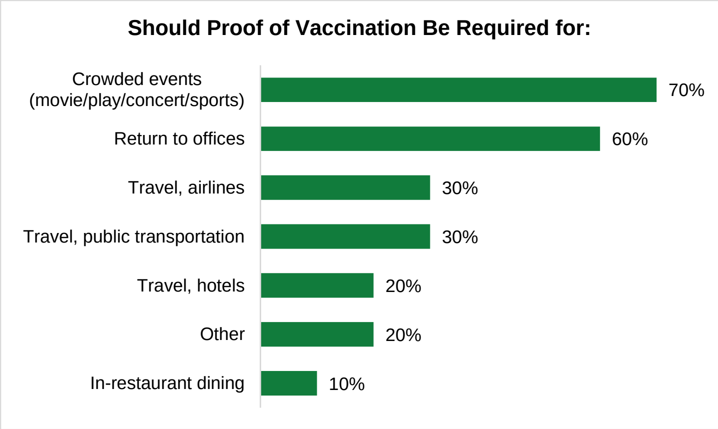
High-Density Activities

- Despite the emergence of the latest B2 variant, 56% of Roundtable economists believe consumers are returning to pre-COVID behaviors because of fatigue/frustration with earlier COVID policies while 38% believe the vaccination rates/vaccine availability is the driver
- In terms of approaching high-density activities, 69% of Roundtable economists expect them to return to pre-COVID norms while 25% expect them at increased but nowhere near pre-COVID levels
- When gauging long lasting or permanent negative impacts from changed behaviors on the heavily COVID-impacted activities, 82% of respondents selected movie theatres, followed by 55% indicating public transportation and 36% hotels, airlines and plays/musicals each
    - Other = conferences
- 70% of respondents believe proof of vaccination should be required for crowded events followed by return to offices (60% of respondents)
    - Other = none; COVID fatigue will lead to a fade of requiring vaccinations





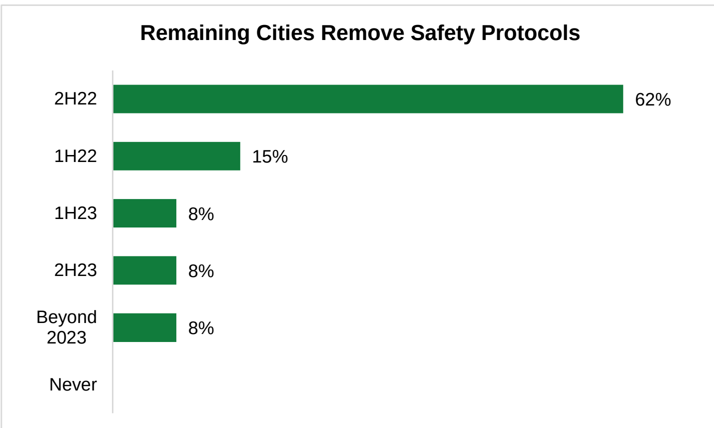


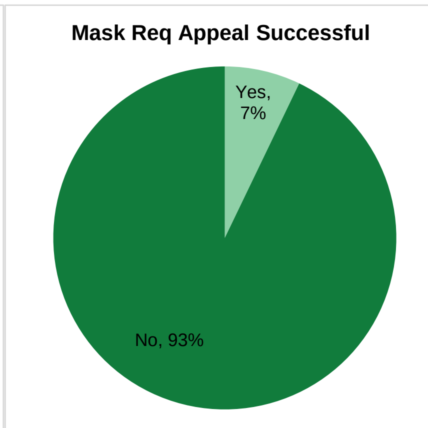


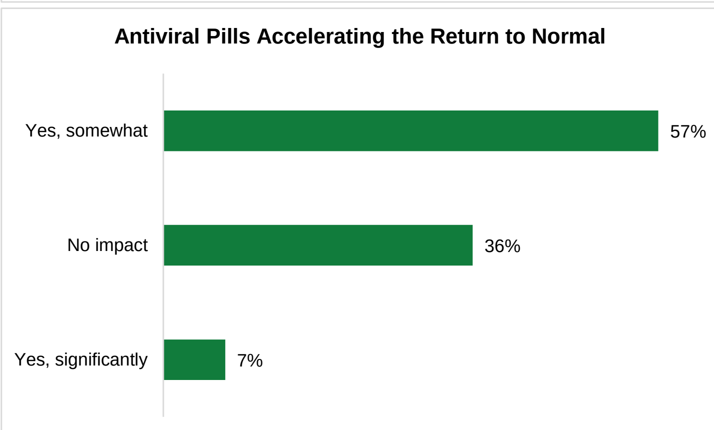
Full Question: Despite the emergence of the latest B2 variant, are consumers returning to pre-COVID behaviors?
Full Question: How do you expect consumers to approach high-density activities?
Full Question: Do you expect to see a lasting or even permanent negative impact of changed behaviors on the sectors most impacted by COVID?
Full Question: Should proof of vaccination be still required for (select activities)?

Returning to Normal

- After states removed their general mask mandates for public spaces, some cities maintain mask requirements for public transportation. 62% of respondents believe the remaining cities will remove the latest safety protocols in 2H22 while 15% believe 1H22
- 93% of respondents believe the Biden administration's appeal of the removal of federal mask requirements on planes and other public transportation will not be successful
- 57% of Roundtable economists believe the development of the Merck and Pfizer antiviral pills will somewhat help accelerate the return to normal





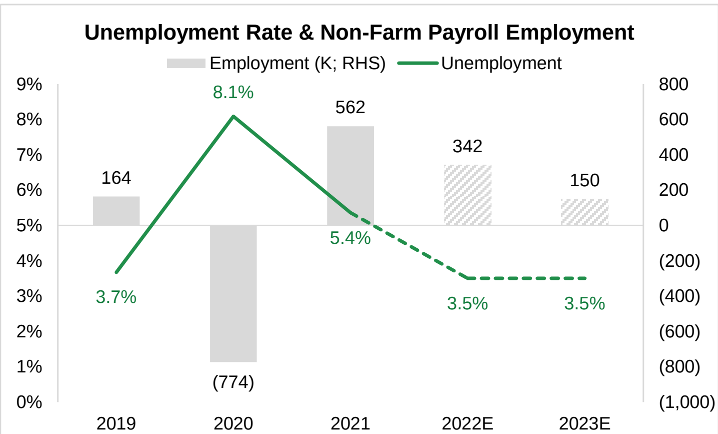


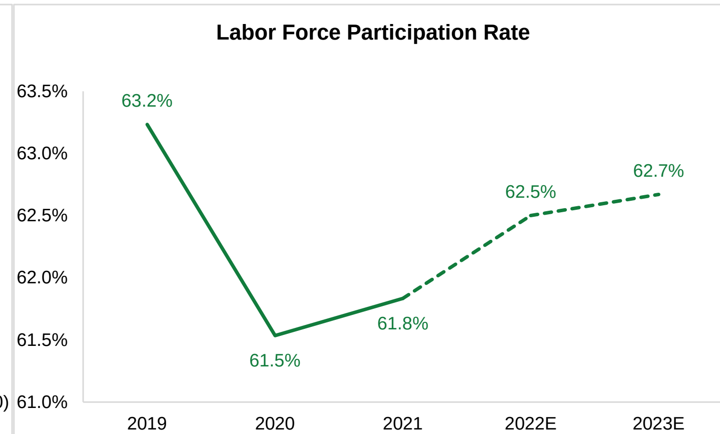
Note: Mask Req = mask requirement
Full Question: While states have removed their general mask mandates for public spaces – and a federal judge struck down a federal mask mandate on planes and other forms of public transportation on April 19 (albeit the Justice Department has appealed) – some cities maintain mask requirements for public transportation. When do you believe the remaining cities will remove the latest safety protocols?
Full Question: Do you believe the Biden administration's appeal of the federal court ruling striking down the mask requirement for passengers on planes, trains, buses and other public transportation will be successful?
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 April 2022, the U.S. unemployment rate returned to pre-COVID level at 3.6%, down from the April 2020 peak of 14.7%. Roundtable economists expect the unemployment rate to end 2022 at 3.5% and to remain at 3.5% in 2023 (4Q average). Employment growth (average monthly change in non-farm payroll employment) is expected to average 342,200 in 2022 and 150,000 in 2023. Respondents expect the labor force participation rate to increase to 62.5% in 2022 and 62.7% in 2023, in line with 63% historically.

(Last survey: 2022 unemployment rate 3.8%; 293,500 for 2022)

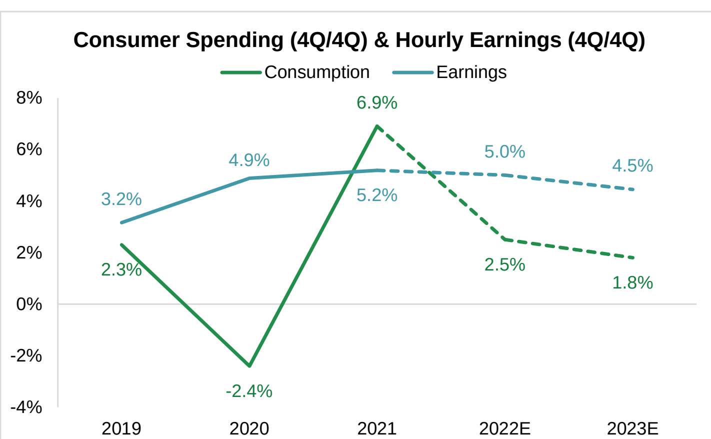




Source: Bureau of Labor Statistics, SIFMA Economic Advisory Roundtable
Note: Average monthly change for non-farm payroll employment, 4Q average for unemployment rate

In light of these unemployment expectations, Roundtable economists expect real personal consumption growth to end 2022 at 2.5% and 1.8% in 2023 (4Q/4Q). There is an expected decrease in average hourly earnings growth to 5.0% in 2022 and 4.5% in 2023 (4Q/4Q).

(Last survey, 2022: 3.1% real personal consumption growth; 3.6% average hourly earnings)



Source: Bureau of Economic Analysis, SIFMA Economic Advisory Roundtable

Monetary Policy

Fed Actions

as Chairman Powell said earlier this month, while overall economic slowed to start the year, household spending and business fixed investment remained strong. Job gains have been robust, with the unemployment rate declining significantly. Implications for the economy from the Russia/Ukraine conflict remain highly uncertain, adding additional inflation pressures. As such, inflation remains top of mind for the Fed.

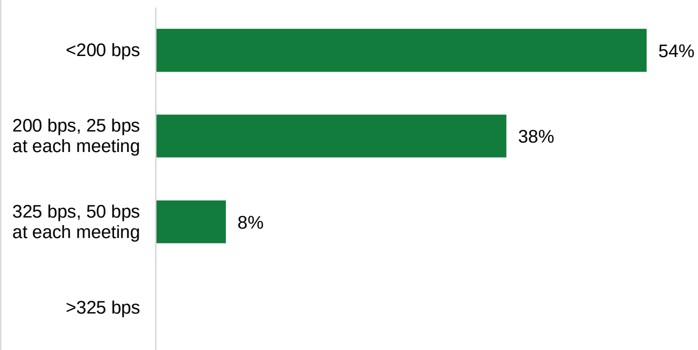
"The Committee seeks to achieve maximum employment and inflation at the rate of 2% over the longer run. With appropriate firming in the stance of monetary policy, the Committee expects inflation to return to its 2% objective and the labor market to remain strong." In support of these goals, the Fed is expected to continue on its path of rate hikes and balance sheet reduction, monitoring the situation and adjusting accordingly for necessary policy shifts.

We asked our Roundtable economists about their expectations for Fed actions:

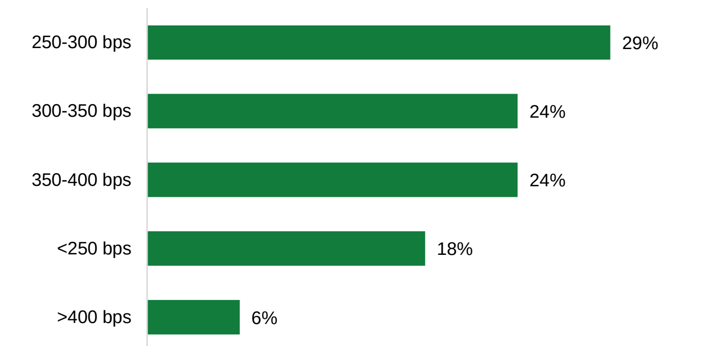
- All respondents expect the Fed to raise the target Federal Funds rate by 50 bps in June
- On top of the earlier 75 bps (25 bps in March + 50 bps in May), 54% of respondents expect the Fed to raise the target Federal Funds rate by <200 bps by year end, followed by 38% expecting a 200 bps hike
- 29% of respondents expect the peak target Federal Funds rate to be 250-300 bps, followed by 24% expecting 300-350 bps and 350-400 bps each
- As far as timing of the peak target Federal Funds rate, 59% of Roundtable economists expect it to be achieved by the end of 2023, followed by 24% responding end 2022
    - Other = 2Q23 (three different respondents)

Expected Fed Rate Action at June FOMC Meeting

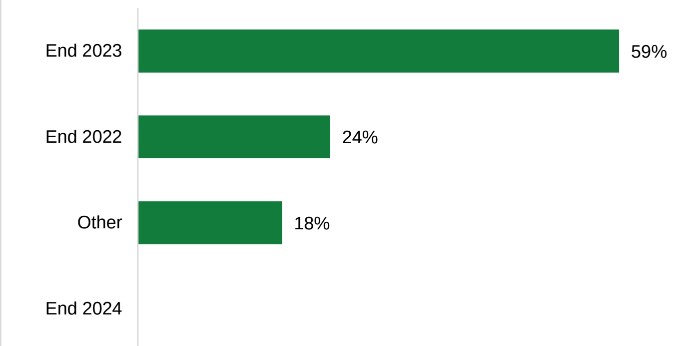
Expected Total Rate Hike for 2022



Expectations for Peak Federal Funds Rate: Level



Expectations for Peak Federal Funds Rate: Timing

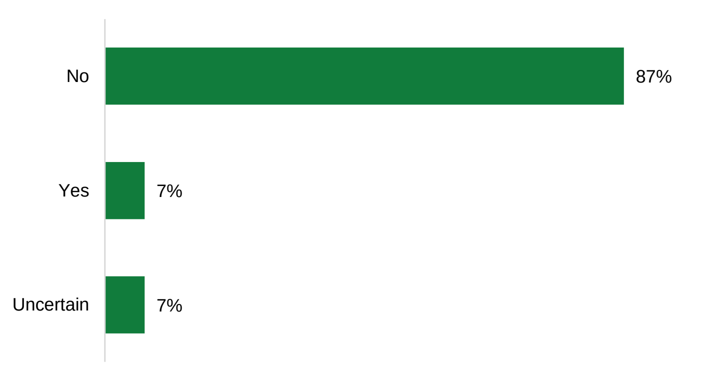


Full Question: After a 25 bps hike in March and a 50 bps increase in May, what action do you expect the Fed to take in June?
Full Question: On top of the earlier 75 bps (25 bps in March + 50 bps in May) how much higher do you expect the Fed to raise the target Federal Funds rate by year end? (Total rate hike for the year)
Full Question: What do you believe will be the peak Federal Funds rate?
Full Question: When you expect the peak Federal Funds rate will be achieved?

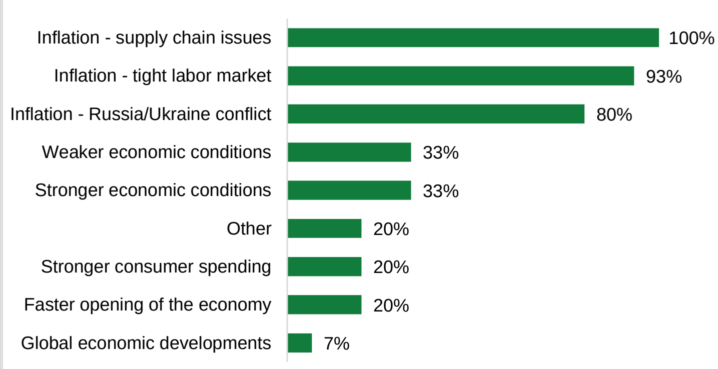
The Fed announced an inaugural drawdown of the balance sheet to begin in June, ramping up to $95 billion a month by September, including a $60 billion reduction of UST and a $35 billion reduction of MBS. The first three months will begin at a slower pace of $47.5 billion, comprised of $30 billion UST and $17.5 billion MBS.

- 87% of respondents expect the Fed will not need to accelerate the proposed pace of balance sheet reductions
- The factors listed as most important to the Fed's decision making were: inflation due to supply chain issues, inflation due to tight labor market, and inflation due to Russia/Ukraine conflict
  - Other = all about inflation; Fed cannot control supply chain/commodity prices but will take into account to ensure inflation expectations remain anchored; financial conditions; persistently high inflation due to excessive fiscal stimulus
- At the writing of this report, the Fed's balance sheet (BS) was $9.0 trillion, up from $4.2 trillion in February 2022. All respondents expect the balance sheet to be over $7 trillion by the end of 2022 (-22%), and 69% expect it to stay over $7 trillion by the end of 2023 (31% responding $6-7 trillion, -28%)

Will the Fed Need to Accelerate BS Reduction Pace

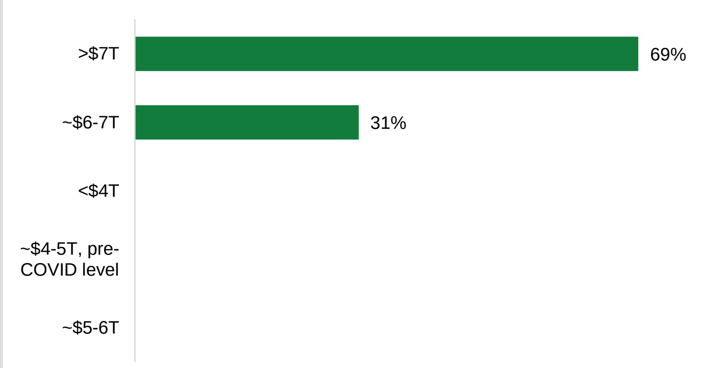


Factors Important to Fed's Decision Making



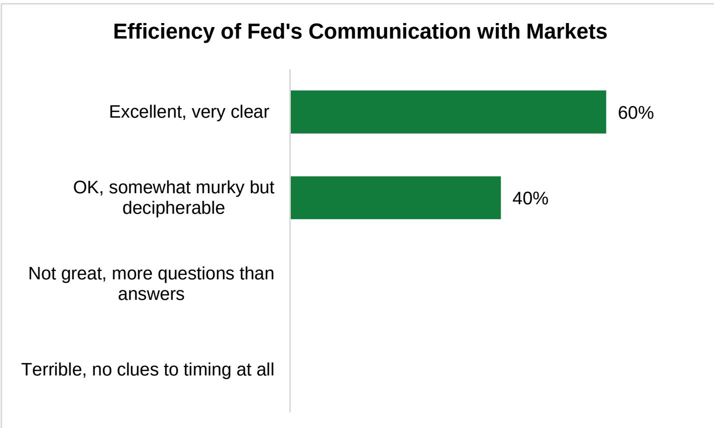
Expected Balance Sheet Size by Year End: 2022

Expected Balance Sheet Size by Year End: 2023



Full Questions: (1) The Fed announced an inaugural drawdown of the balance sheet to begin in June, ramping up to $95 billion a month by September, including a $60 billion reduction of UST and a $35 billion reduction of MBS. The first three months will begin at a slower pace of $47.5 billion, comprised of $30 billion UST and $17.5 billion MBS. Given this outline, do you expect the Fed to accelerate the proposed pace of reductions? (2) Which of the following factors do you think are the most important to the Fed's decision making? (3, 4) Given your earlier expectations, what do you expect the size of the balance sheet to be at the end of 2022/2023? (currently $9.0 trillion, up from $4.2 trillion in February 2022)

- As to the efficiency of the Fed's communication with markets around its timeline for shifting monetary policy, 60% of respondents indicated the communication is very clear, while 40% find it somewhat murky but decipherable

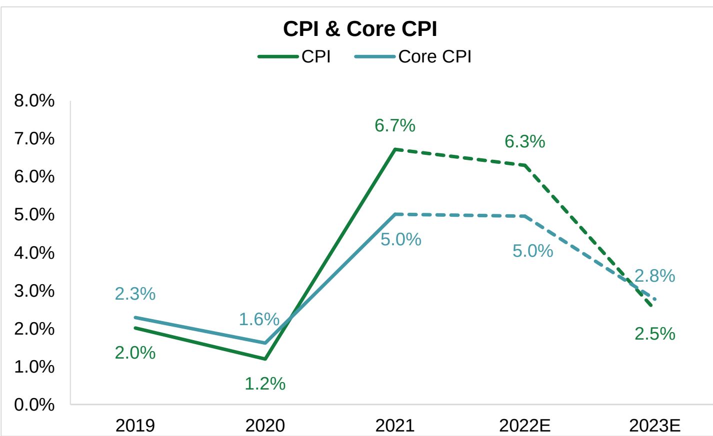


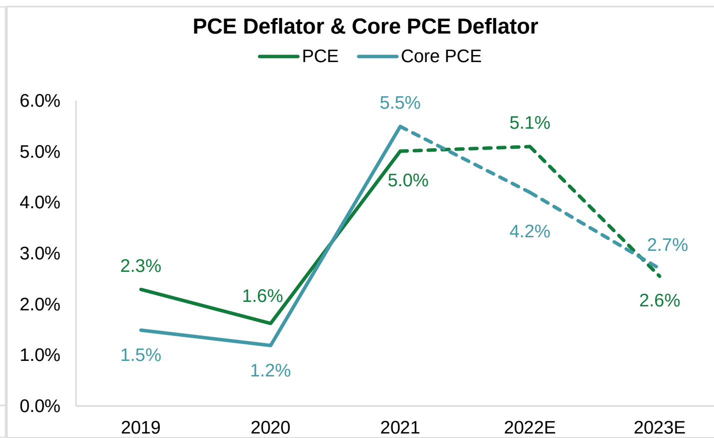
Full Question: In general, how do you rate the efficiency of the Fed's communication with markets around its timeline for monetary policy adjustments (raising rates, size of rate increases, selling assets)?

Inflation Expectations

Economists and market participants continue to watch inflation reports, as a key indicator to how the Fed may have to adjust its currently stated policy actions. In terms of inflation forecasts to end 2022, we highlight:

- CPI – expectation 6.3% (2021 actual 6.7%)
  (Last survey: 2.8% CPI for 2022)
- Core CPI – expectation 5.0% (2021 actual 5.0%)
  (Last survey: 3.0% core CPI for 2022)
- PCE – expectation 5.1% (2021 actual 5.5%)
  (Last survey: 2.6% PCE deflator for 2022)
- Core PCE – expectation 4.2% (2021 actual 4.6%)
  (Last survey: 2.5% core PCE deflator for 2022)



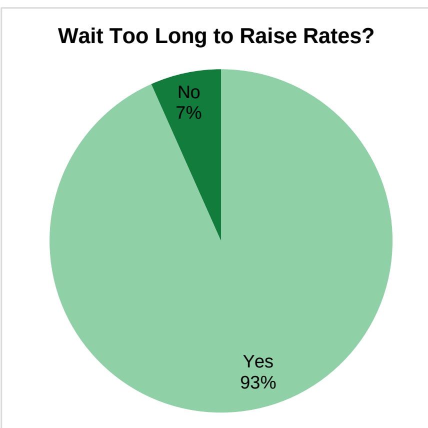


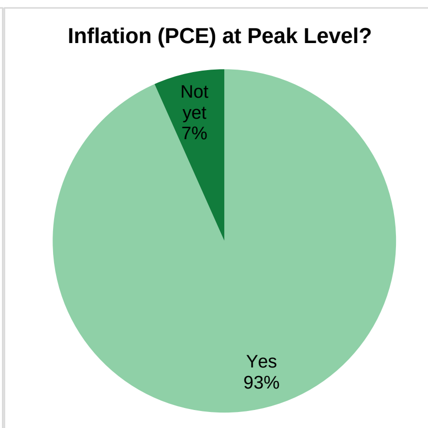
Source: Bureau of Economic Analysis, SIFMA Economic Advisory Roundtable

Last year, the debate was around whether inflation was transitory or not. This conversation has shifted to if/when we will hit peak inflation and the slope of the trajectory back down to more normalized levels (~2%). Fed Chairman Powell has said, “Inflation remains elevated, reflecting supply and demand imbalances related to the pandemic, higher energy prices, and broader price pressures.”

Economists are also wondering if the Fed can control inflation under its currently stated monetary policy actions and still manage a soft landing for the economy (40% of our survey respondents say it is doubtful). Powell has said, “What we can control is demand, we can’t really affect supply with our policies…and supply is a big part of the story here. But more than that, there are huge events, geopolitical events going on around the world, that are going to play a very important role in the economy in the next year or so. So the question whether we can execute a soft landing or not, it may actually depend on factors that we don’t control.”

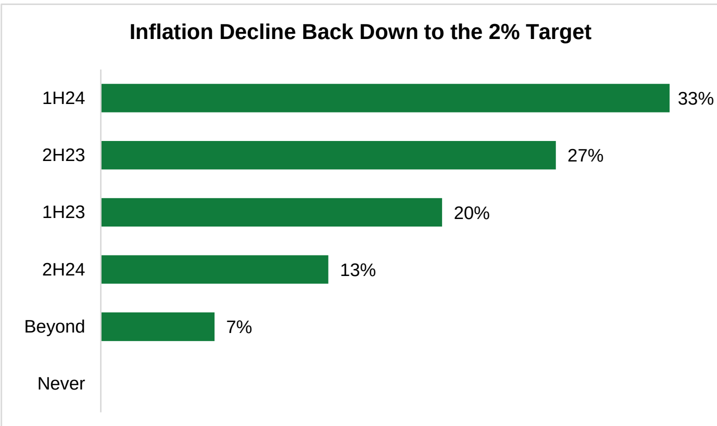
- 93% of respondents believe the Fed waited too long to raise rates, allowing inflation to get out of control
- With the PCE at 6.3% as of April (following the highest level since 1982 of 6.6% in March), 93% believe the price pressures are at their peak

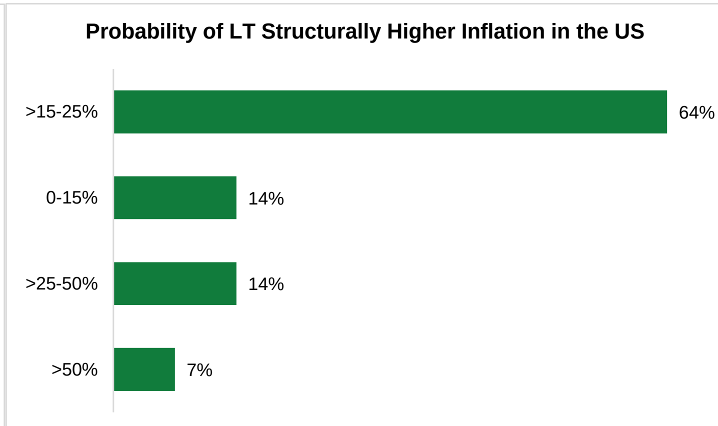




Full Question: Did the Fed wait too long to raise rates and “allow” inflation to get out of control?
Full Question: With the PCE reaching 6.6% as of March, the highest level since 1982, how do you asses price pressures?

- 33% of respondents expect inflation will begin to noticeably decline back down towards the Fed's preferred 2% target by 1H24, followed by 27% replying 2H23
- 64% of respondents expect a 15% to 25% probability the U.S. will experience structurally higher inflation over the longer run (defined as longer than three years from now), followed by 14% responding 0% to 15% and 25% to 50% each

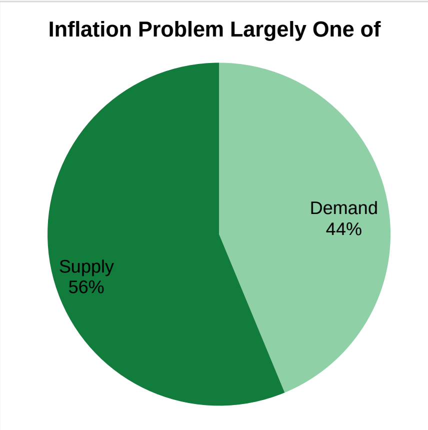


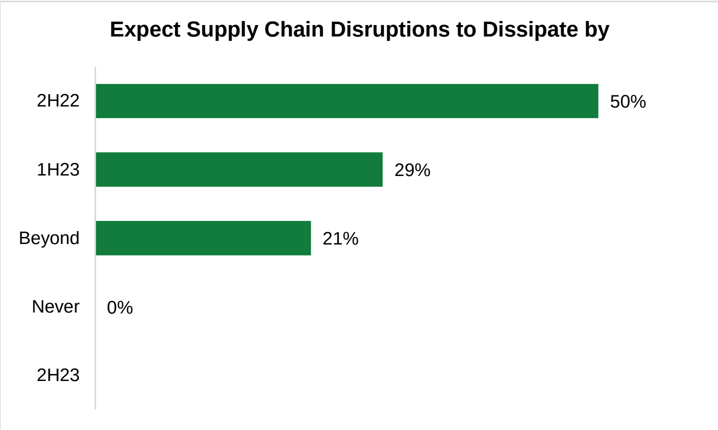


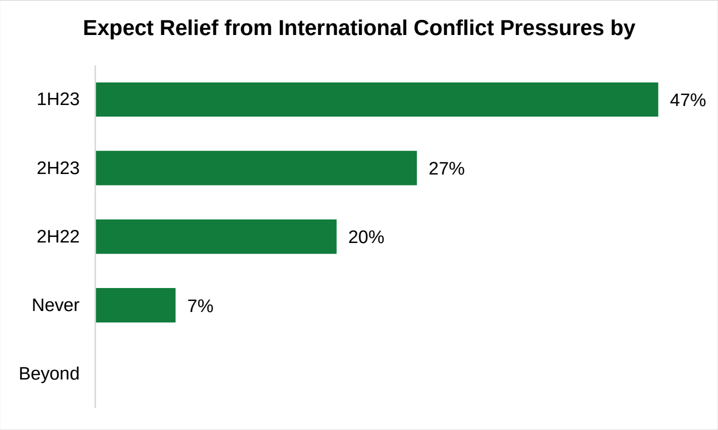
Full Question: Given your assessment above, when do you expect inflation will begin to noticeably decline back down towards the Fed's preferred 2% target?
Full Question: Looking further out, what probability would you place on the U.S. experiencing structurally higher inflation over the longer-run (defined as longer than three years from now)?

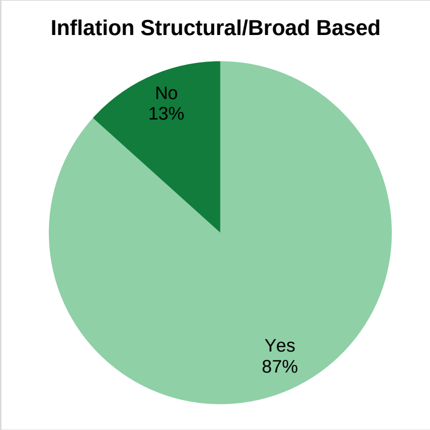
Monetary Policy

- 56% of respondents believe inflation is largely a supply driven problem, followed by 44% demand driven
- 50% of respondents expect supply chain disruptions to dissipate by 2H22, followed by 29% replying 1H23
- With international conflict adding an additional layer of pressure to inflation, 47% of respondents expect relief from this pressure by 1H23, followed by 27% replying 2H23
- 87% of respondents agree with the Fed that prices pressures have become more structural or broad-based







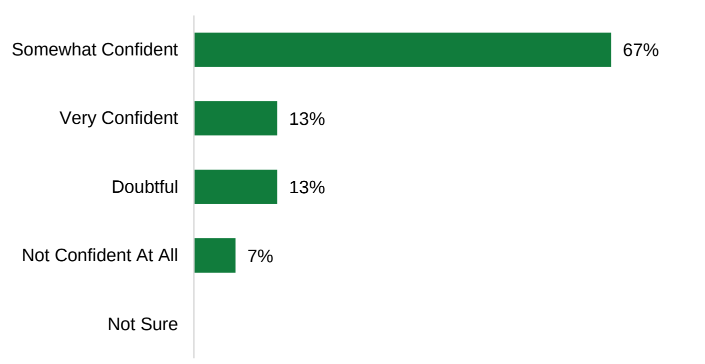


Full Question: Do you believe inflation is largely a demand or supply driven problem?
Full Question: Inflation was already elevated in the aftermath of the COVID crisis. Now international conflict is adding an additional layer of pressure to inflation. When do you expect relief from these latter pressures?
Full Question: With inflation pressures at a near four-decade high, the Fed is concerned prices pressures have become more structural or broad-based throughout the economy. Do you agree?
Full Question: When do you expect supply chain disruptions to dissipate?

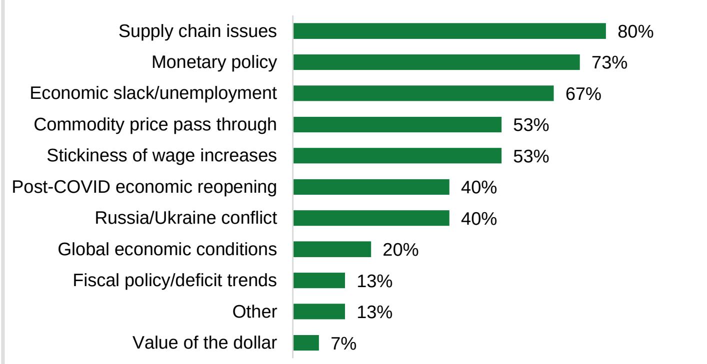
Monetary Policy

- 67% of Roundtable economists are somewhat confident the Fed can achieve its 2% average inflation target in a sustainable way while 13% are very confident and another 13% doubtful
- The factors listed as most important to core inflation forecasts: supply chain issues, monetary policy, and economic slack/unemployment
    - Other = deglobalization; demand
- Top factors to push long-term inflation higher include: sustained breakdown of supply chains, stickiness of wage increases, and increased costs as we move supply chain back to the U.S.
    - Other = demographics; de-risking of supply chains, such as holding higher inventories; mass revival of unionization
- 40% 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 33% responding between 0% and 15% probability

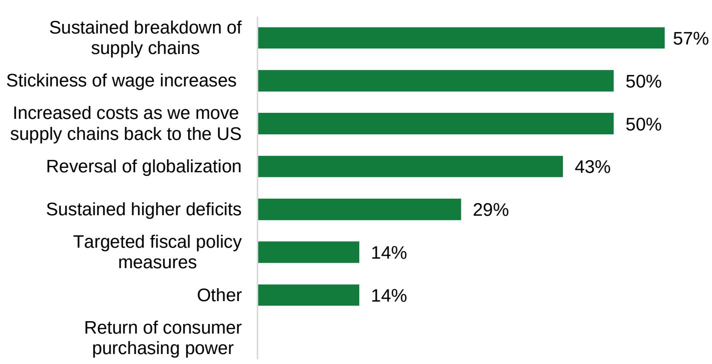
Confidence in Fed Achieving 2% Inflation Target



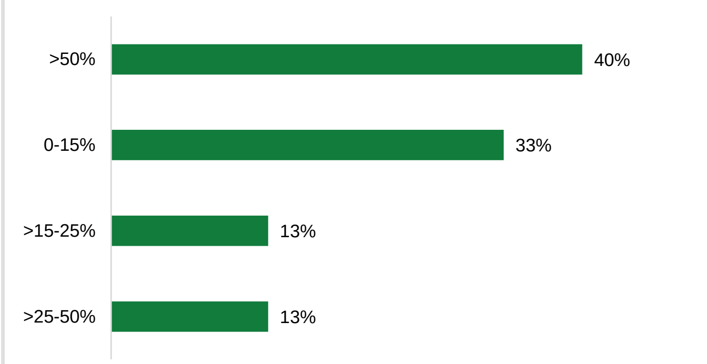
Factors Important to Core Inflation Forecasts



Factors Contributing to LT Higher Inflation

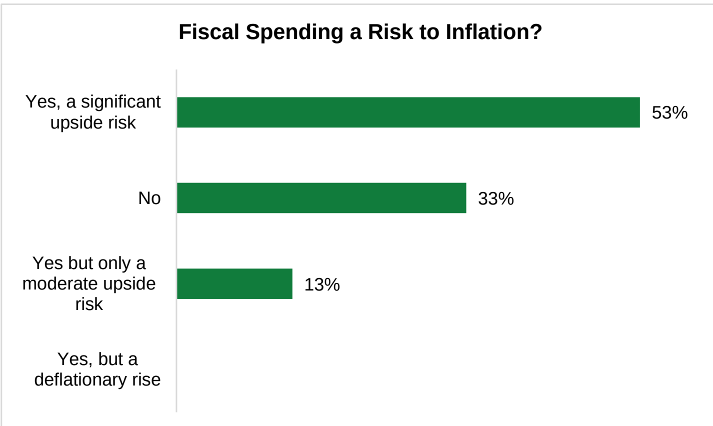


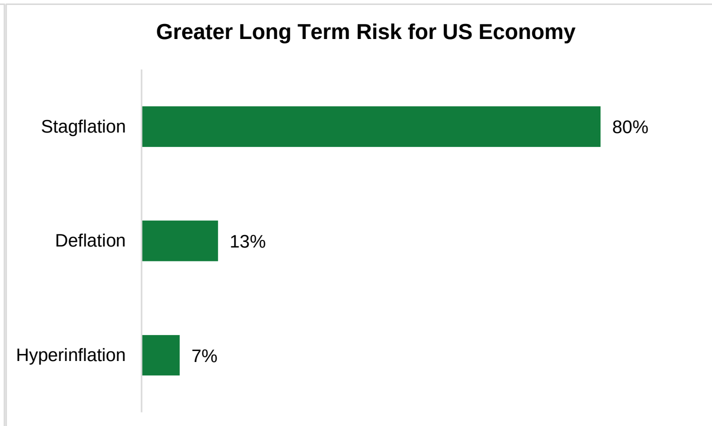
Probability of Disinflation in Next Two Years



Full Question: The Fed has vowed to do whatever it takes to rein in inflation. How confident are you the Fed can achieve its 2% goal in a sustainable way?
Full Question: What are the most important factors in your outlook for core inflation?
Full Question: What factors do you believe could push long-term inflation higher? (Ranked by percentage of economists that listed a factor)
Full Question: What probability would you place on the US experiencing a period of disinflation in core measures over the next two years?

- 53% of respondents believe the massive expansion of the government's balance sheet (fiscal spending: a $1 trillion infrastructure package in November 2021, on top of the $6 trillion spent during COVID) poses a significant upside risk to inflation
- 80% of Roundtable economists see the greater long-term risk to the economy as stagflation, followed by 13% replying deflation





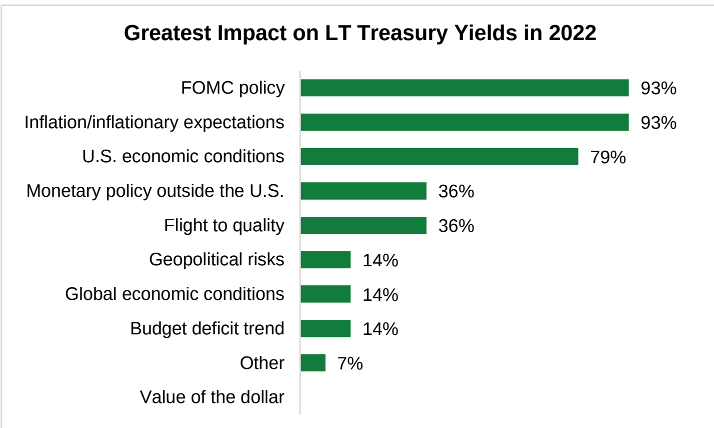
Full Question: Does the massive expansion of the government's balance sheet – a $1 trillion infrastructure package in November 2021, on top of the $6 trillion spent during COVID – pose a risk to inflation?
Full Question: What is the greater long-term risk to the economy?

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, inflation/inflation expectations, and U.S. economic conditions were the top factors.

- Other = pension demand for UST

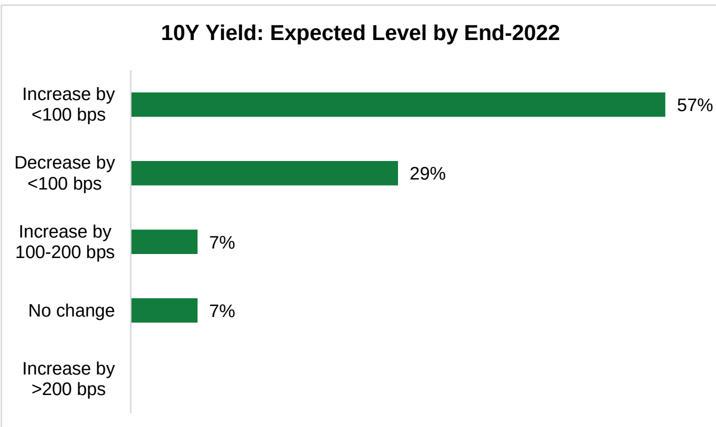
(Last survey: FOMC policy, U.S. economic conditions, and inflation/inflation expectations were the top factors)

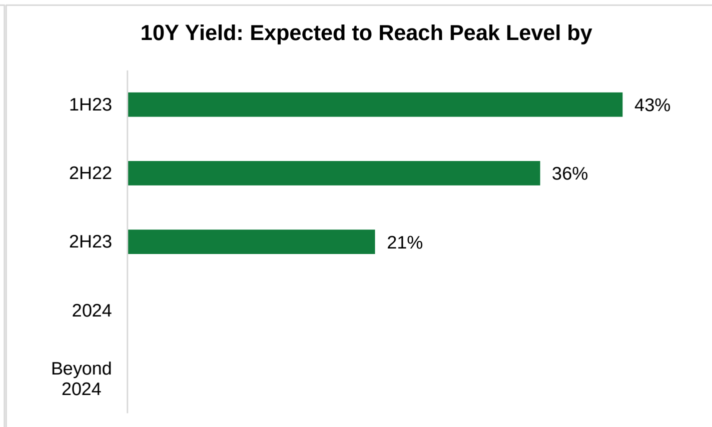


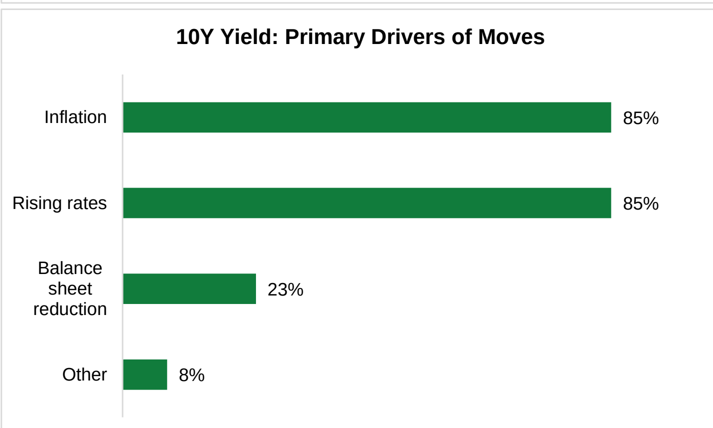
Full Question: Which of the following will have the greatest impact on long-term Treasury yields in 2022? (Ranked by percentage of economists that listed a factor)

The ten year Treasury has moved up substantially in the last few months, nearly 300 bps as of the writing of the survey. As such, we polled our economists on their expectations for yields by the end of this year and peak levels.

- 57% of respondents expect the 10Y yield to increase by less than 100 bps by the end of 2022, followed by 29% expecting the yield to decrease by less than 100 bps
- 43% of Roundtable economists expect the peak of 10Y yield to peak in 1H23, while 36% in 2H22
- The primary drivers of the expected moves were inflation and rising rates (85% of respondents each)
    - Other = Treasury yields to peak and decline in 2H22 as growth slows and inflation begins to decline





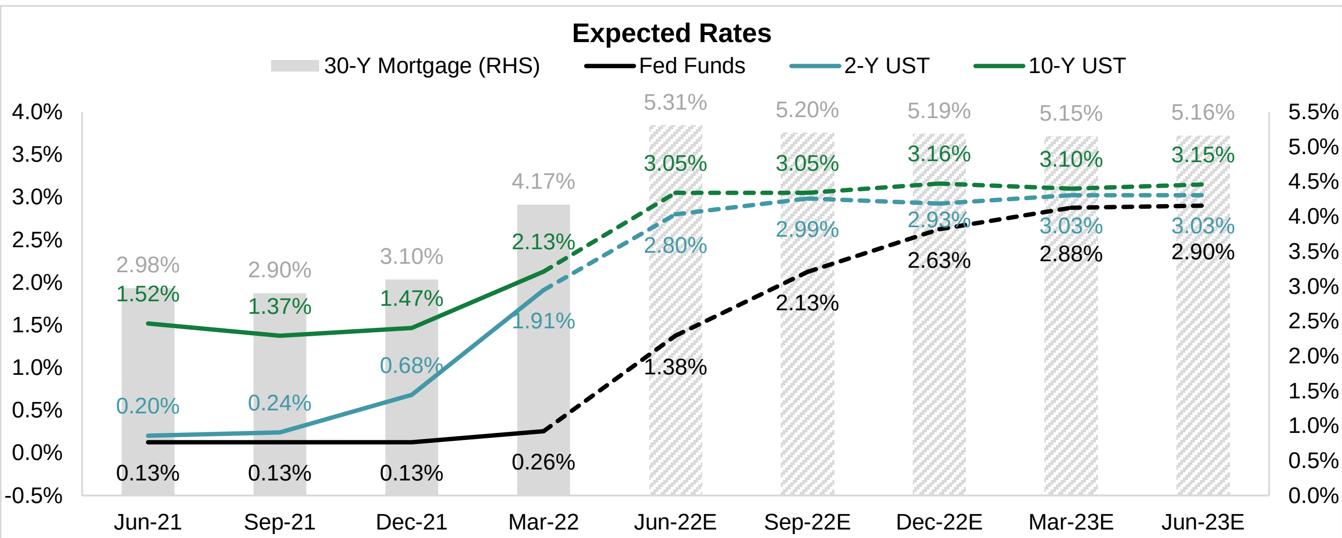


Full Question: The ten year has moved up substantially in the last few months, nearly 300 bps as of the writing of the survey. Where do you expect the ten year to end the year?
Full Question: When do you expect rates to peak?
Full Question: What are the primary drivers of the expected move?

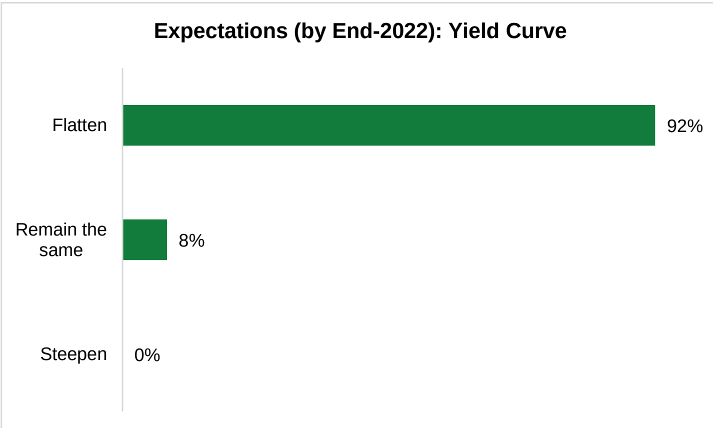
Below and on the following pages, we review our Roundtable economists' forecast for rates and yield curve. Respondents expect the following movements in key rates:

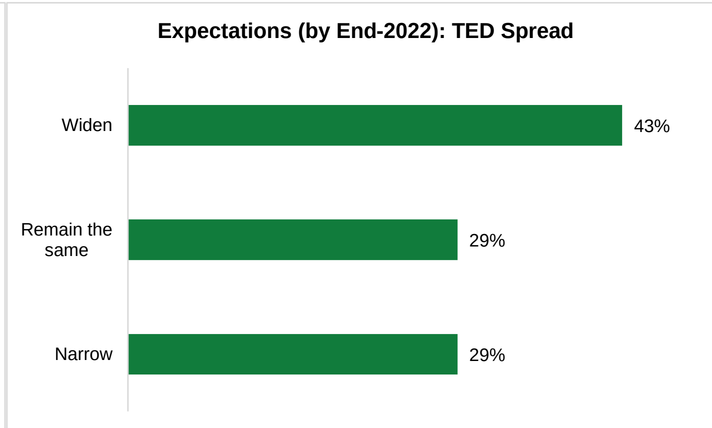
- Yield curve (Fed funds-to-10-year Treasury yield) = 92% flatten
- TED (Treasury-to-Eurodollar, now LIBOR) = 43% widen
- Investment-grade corporate-to-Treasury spreads = 80% widen
- High-yield corporate-to-Treasury spreads = 80% widen

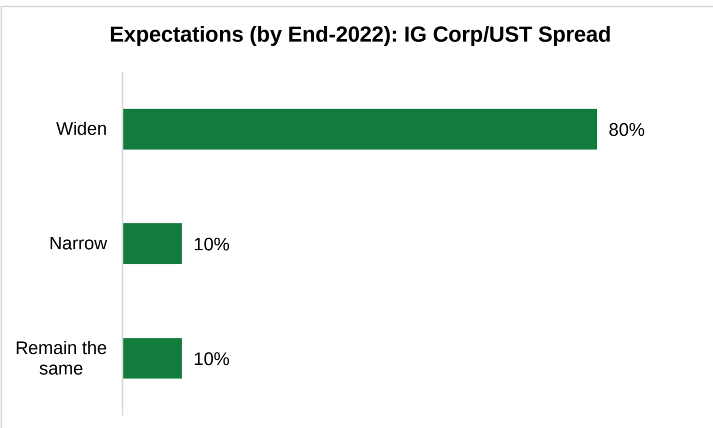
(Last survey: by end-2021 - YC 50% flatten; TED 50% remain the same; IG/UST 50% widen; HY/UST 58% widen)

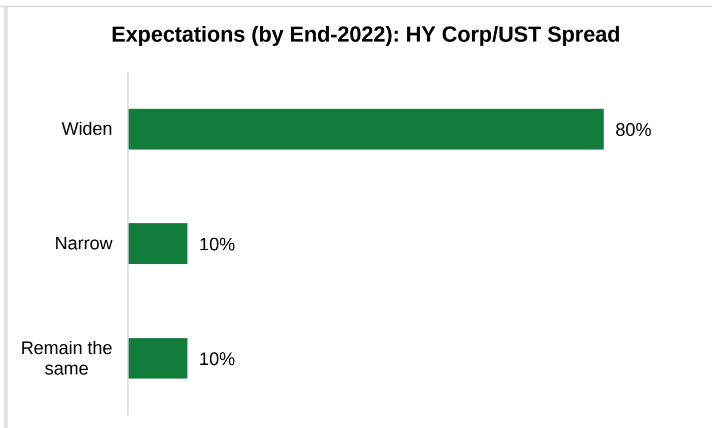


Source: Federal Reserve, Bloomberg, SIFMA Economic Advisory Roundtable







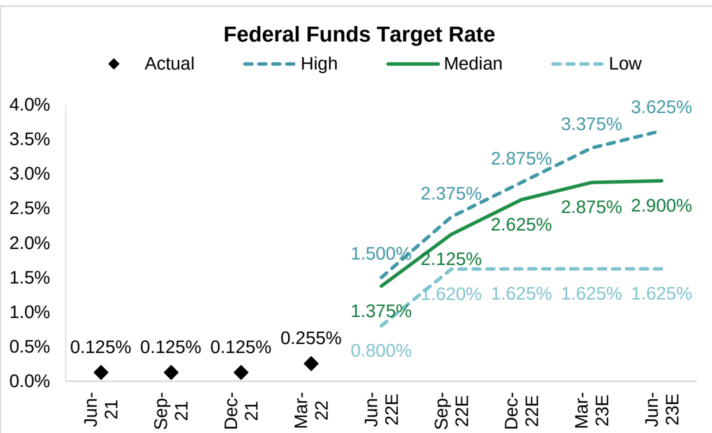


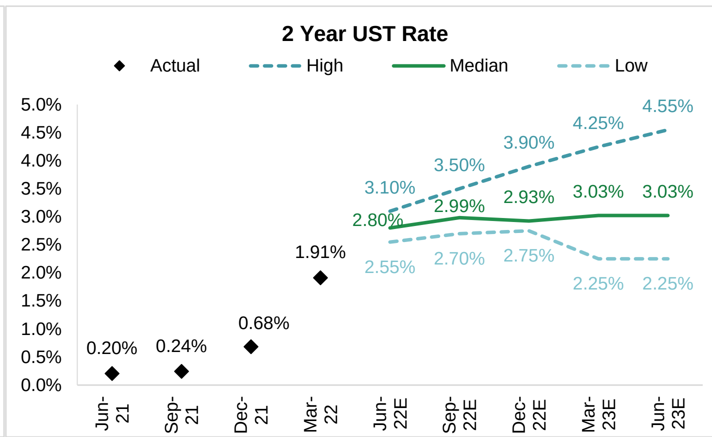
Source: Federal Reserve, Bloomberg, SIFMA Economic Advisory Roundtable
Note: Monthly averages. Fed funds = midpoint of target rate range

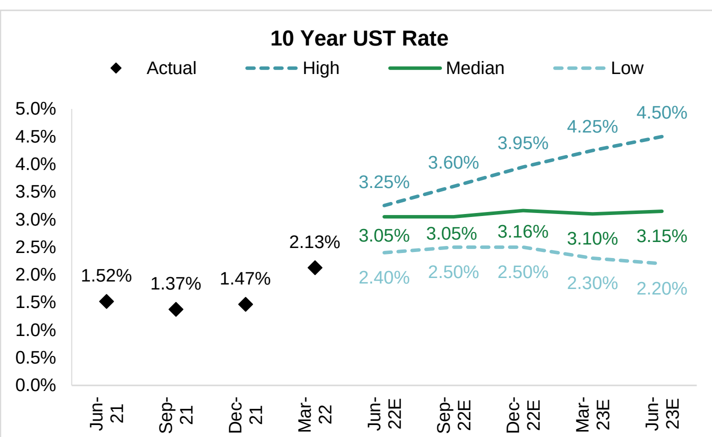
Surveyed Roundtable economists expect the following rates and therefore yield curve:

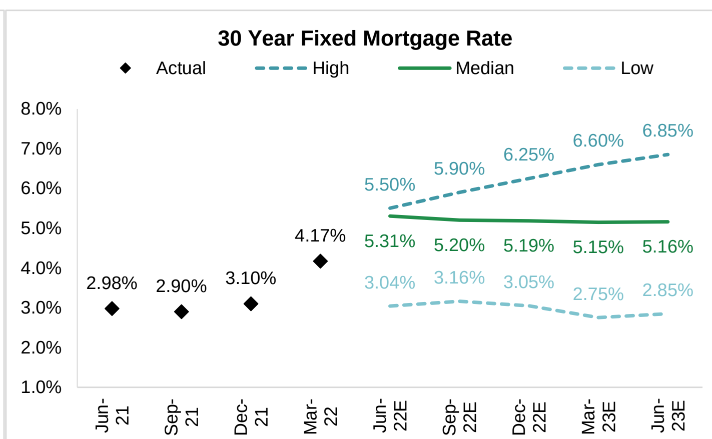
- Fed Funds = 2Q22 1.375 %, 4Q22 2.625%, 2Q23 2.900%
- 2-Year UST = 2Q22 2.80%, 4Q22 2.93%, 2Q23 3.03%
- 10-Year UST = 2Q22 3.05%, 4Q22 3.16%, 2Q23 3.15%
- 30-Year Mortgage = 2Q22 5.31%, 4Q22 5.19%, 2Q23 5.16%

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









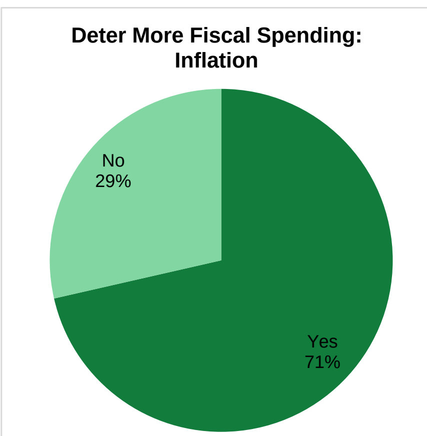
Source: Federal Reserve, Bloomberg, SIFMA Economic Advisory Roundtable

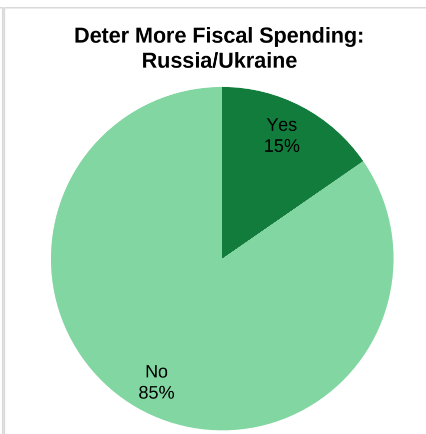
Macro Policy

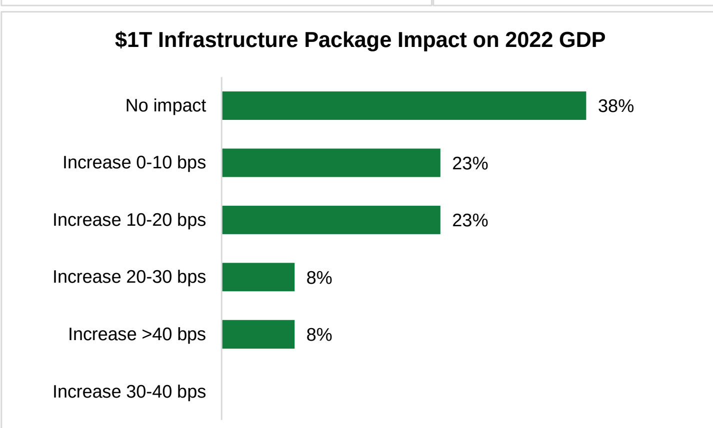
Fiscal Stimulus

Originally to help the U.S. economy recover from COVID, monetary policy tools were complemented by substantial fiscal spending. And the spending continues. In November 2021, Congress passed a $1 trillion infrastructure bill, adding to the $6 trillion in spending more directly aligned with COVID recovery over the past few years. As such, questions and concerns remain around the long-term impact of overspending.

- 71% of respondents believe sustained higher inflation will deter further fiscal spending
- 85% of respondents believe the Russia/Ukraine conflict will not deter further fiscal spending packages
- 38% of respondents expect the $1 trillion infrastructure package not to have impact on 2022 GDP estimates while 23% expect an increase of 0-10 bps and 10-20 bps each

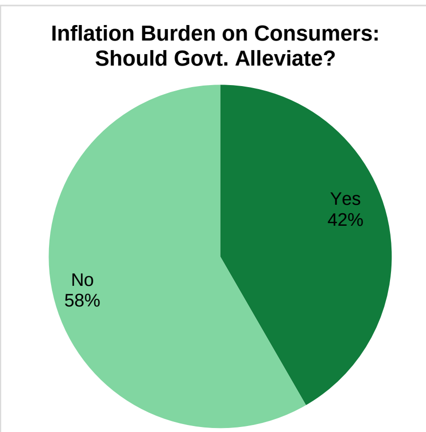


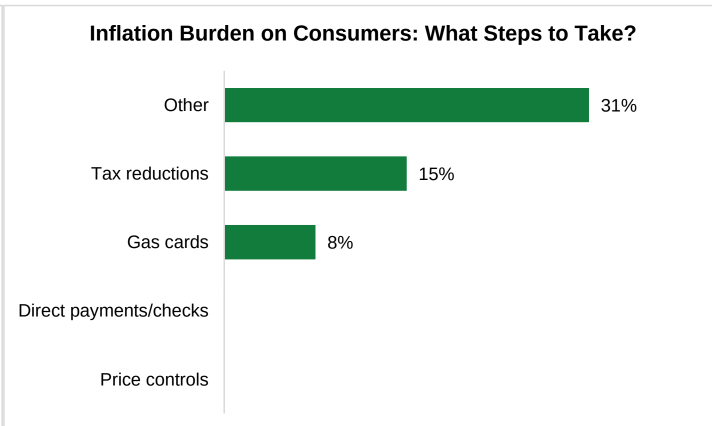


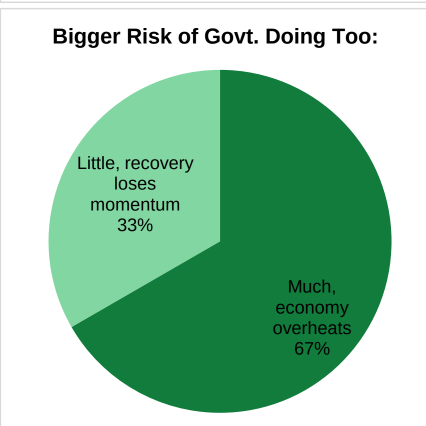


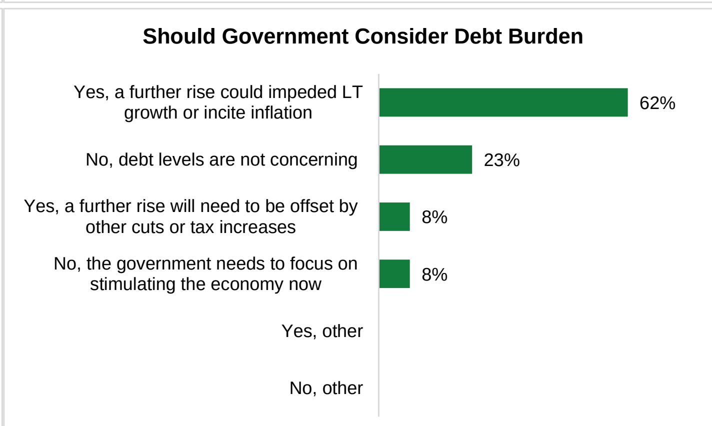
Full Question: Do you believe sustained higher inflation will deter further fiscal spending packages?
Full Question: Do you believe the Russia/Ukraine conflict will deter further fiscal spending packages?
Full Question: What impact do you expect the $1 trillion infrastructure package to have on 2022 GDP estimates?

- 58% of respondents believe the government should not be taking more steps to alleviate the burden on consumers (high prices for gasoline and groceries)
- Steps to alleviate the burden on consumers include: 31% other, 15% tax reductions, and 8% gas cards
    - Other = stop spending (no further fiscal stimulus), government restraint; encourage more energy production; increase food stamps)
- 67% of respondents view the bigger risk to the economy is the government doing too much, therefore the economy overheats
- When considering additional stimulus, 62% respondents indicated government should consider the debt level as it could impede long-term growth or incite further inflation, followed by 23% saying government should not be considering the debt level (debt/GDP currently over 100%)



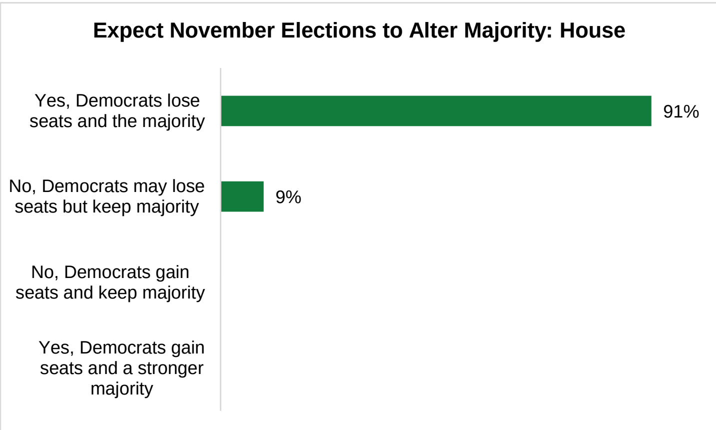


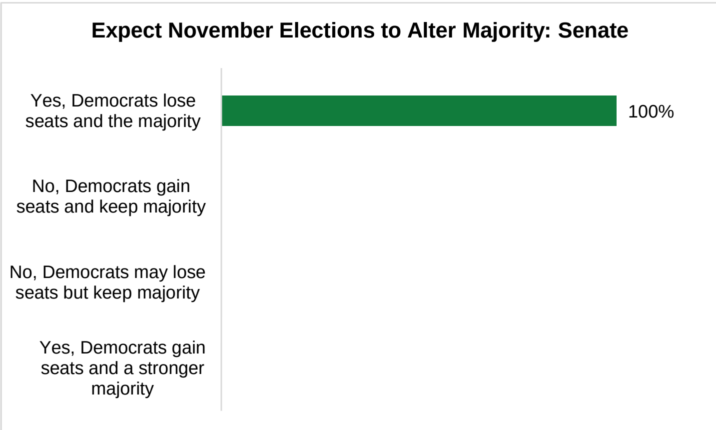




Full Question: Given the rising cost of nondiscretionary goods, including gasoline and groceries, do you feel the government should be taking more steps to alleviate the burden on consumers?
Full Question: If yes, what steps would you prefer?
Full Question: What do you view is the bigger risk, the government does?
Full Question: With the Debt/GDP ratio already above 100%, should the government be considering the debt burden when proposing additional spending?

- 91% of respondents expect the Democrats to lose seats and the majority in the House in the November election
- All of respondents expect the Democrats to lose seats and the majority in the Senate in the November election



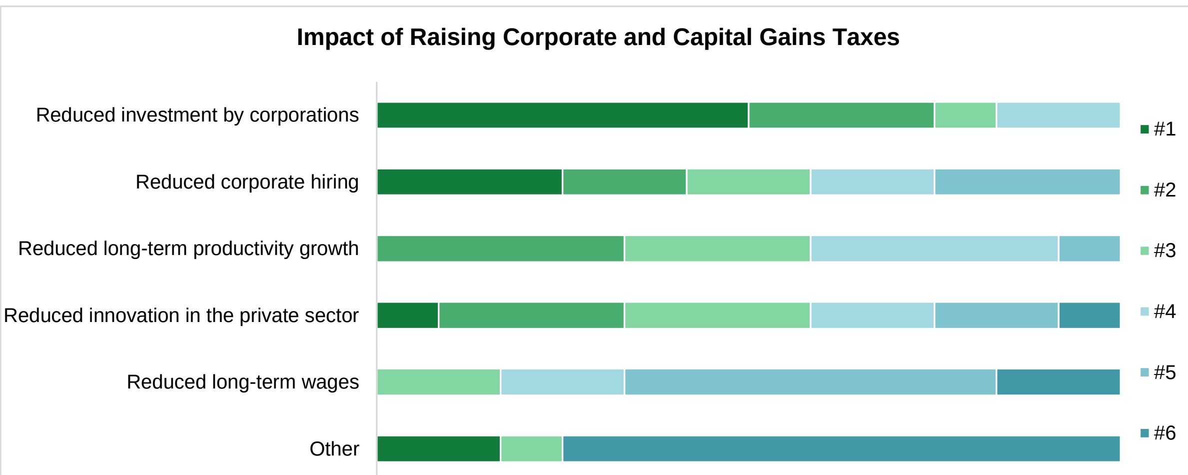


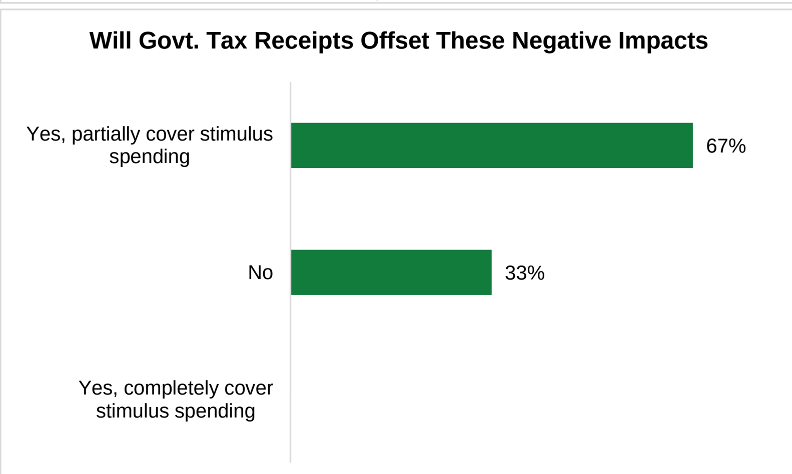
Full Question: At present the House is dominated by the Democratic party 221 to 209, do you expect the November elections to alter that majority?
Full Question: At present the Senate is dominated by the Democratic party 50 to 50 (tie breaking vote goes to the Democratic Vice President), do you expect the November elections to alter that majority?

Tax Policy

While tax policy was not as top of conversation as last year, the government does have to pay for all of the fiscal spending discussed above, which is often done with taxes. As such, taxes and their impact on the economic outlook remain important questions.

- 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
    - Other = none; downward pressure on stock markets; contribute to inflation
- As to whether tax receipts can offset these negative impacts, 67% of respondents replied yes, tax receipts will partially cover stimulus spending, with remaining 33% saying no





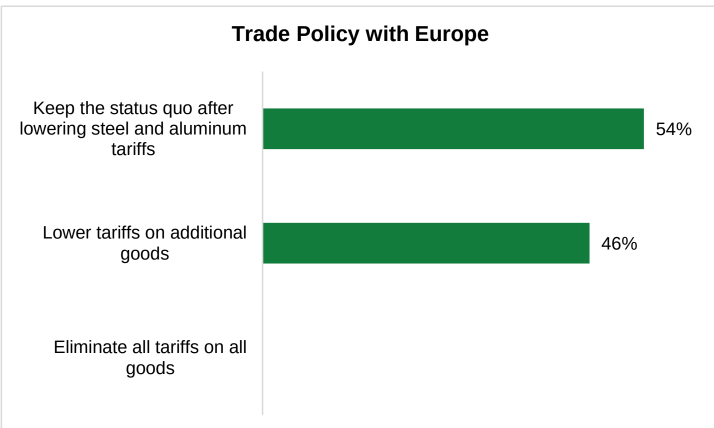
Full Question: What could be the impact of raising corporate and capital gains taxes on the economy? (Ranked by percentage of economists that listed a factor)
Full Question: Will the increase in government tax receipts offset these negative impacts?

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

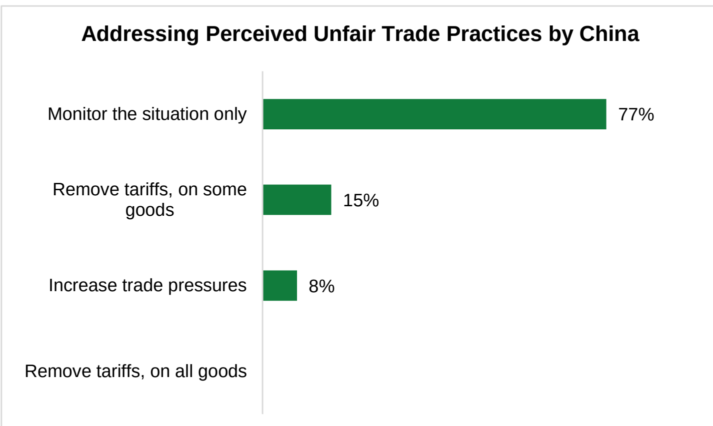
- 54% of Roundtable economists expect U.S. to keep a status quo after lowering steel and aluminum tariffs and 46% expect U.S. to lower tariffs on additional goods

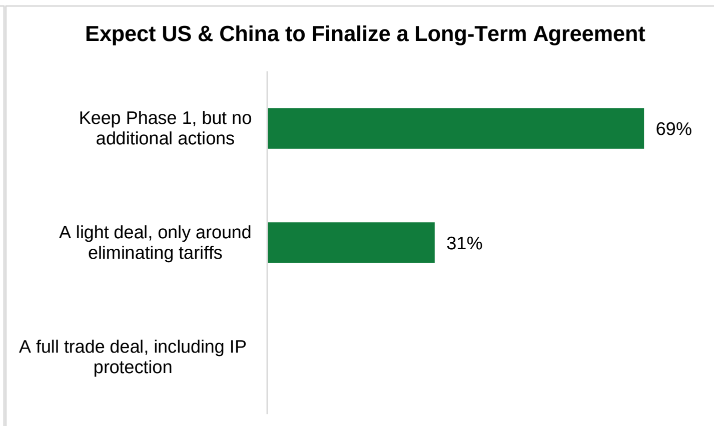


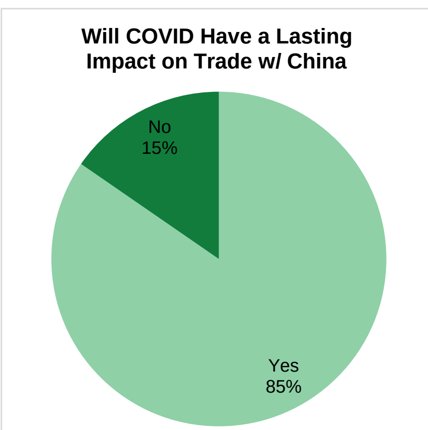
Full Question: Looking at trade policy with Europe, do you expect the US to?

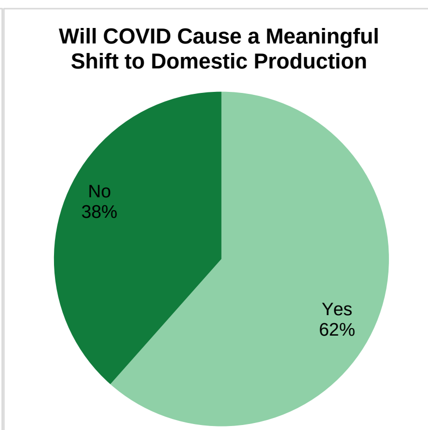
China

- 77% of Roundtable economists expect the U.S. to address perceived unfair trade practices by China by only monitoring the situation, with 15% expecting removal of tariffs on some goods
- 69% 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, 85% responded yes
- In light of this, 62% 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 US to proceed with addressing perceived unfair trade practices?
Full Question: Looking at trade policy with China, how do you expect the US 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

Economic Indicators – Annual

(%, unless indicated)	2019	2020	2021	2022E	2023E
Real GDP (4Q/4Q)	2.6	-2.3	5.5	1.5	1.7
Real Personal Consumption (4Q/4Q)	2.3	-2.4	6.9	2.5	1.8
Nonresidential Fixed Investment (4Q/4Q)	3.1	-3.8	6.6	5.9	2.7
Residential Fixed Investment (4Q/4Q)	2.2	15.7	-1.5	0.6	0.5
Real Federal Government Spending (4Q/4Q)	4.3	3.1	-1.1	-0.3	1.0
Real State and Local Government Spending (4Q/4Q)	2.5	0.0	0.8	1.1	1.5
Non-Farm Payroll Employment (K, avg. monthly change)	164.0	-774.3	561.9	342.2	150.0
Unemployment Rate (4Q average)	3.7	8.1	5.4	3.5	3.5
Labor Force Participation Rate (4Q average)	63.2	61.5	61.8	62.5	62.7
Average Hourly earnings (4Q/4Q)	3.2	4.9	5.2	5.0	4.5
Real Disposable Income (4Q/4Q)	1.7	4.0	0.1	-0.1	1.9
Personal Savings Rate (annual average)	7.7	16.4	12.2	6.0	6.2
CPI (4Q/4Q)	2.0	1.2	6.7	6.3	2.5
Core CPI (4Q/4Q)	2.3	1.6	5.0	5.0	2.8
PCE deflator (4Q/4Q)	1.5	1.2	5.5	5.1	2.6
Core PCE deflator (4Q/4Q)	1.6	1.4	4.6	4.2	2.7
Industrial Production Index (annual % change)	-0.8	-7.2	5.5	5.1	2.0
Housing Starts (K, annual average)	1,292	1,397	1,605	1,673	1,587
S&P Corelogic Case-Shiller Home Prices (Y/Y)	3.5	6.0	17.1	12.3	3.0
New Home Sales (K, annual average)	683	828	774	780.0	740.0
Motor Vehicle Sales (M, annual average)	16.9	14.4	14.9	15.3	16.5
Federal Budget ($B, FY)	-984	-3,132	-2,770	-1,050	-1,008
Current Account Deficit ($B)	-472.1	-616.1	-821.6	-1,044.0	-1,046.0

Economic Indicators – Quarterly

(%)	3Q21	4Q21	1Q22	2Q22E	3Q22E	4Q22E	1Q23E	2Q23E
Real GDP (Q/Q, annualized)	2.3	6.9	-1.5	2.7	2.5	2.1	1.8	1.8
Real Personal Consumption (Q/Q, annualized)	2.0	2.5	3.1	2.6	2.2	2.1	2.1	1.9
Nonresidential Fixed Investment (Q/Q, annualized)	1.7	2.9	9.2	5.0	4.6	4.4	3.2	2.8
Residential Fixed Investment (Q/Q, annualized)	-7.7	2.2	0.4	1.0	1.0	1.7	1.0	1.5
Unemployment Rate	5.1	4.2	3.8	3.5	3.4	3.4	3.4	3.4
CPI (Y/Y)	5.3	6.7	8.0	8.0	7.7	6.4	4.9	3.6
Core CPI (Y/Y)	4.1	5.0	6.3	5.8	5.6	5.1	4.4	3.6
PCE Deflator (Y/Y)	4.3	5.5	6.3	6.2	5.9	5.1	4.1	3.4
Core PCE Deflator (Y/Y)	3.6	4.6	5.2	4.7	4.5	4.1	3.6	3.3

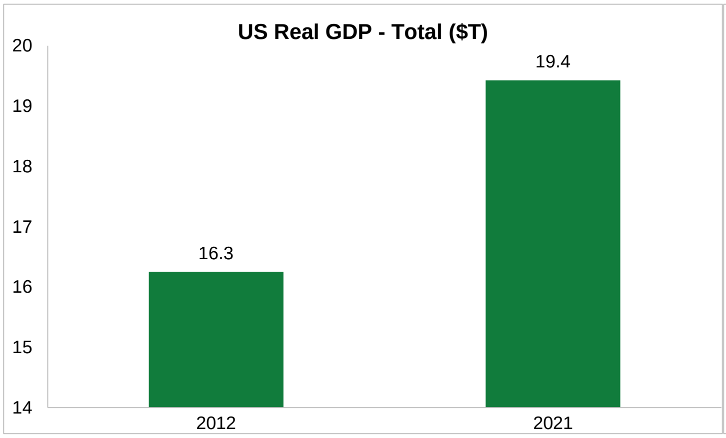
Interest Rates (Monthly Average)

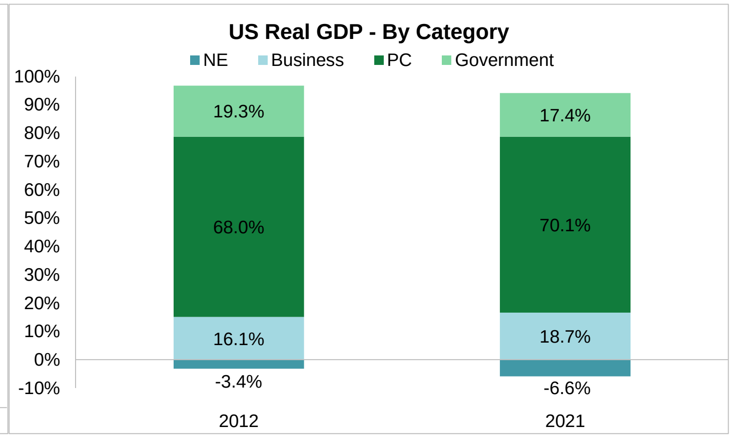
(%)	Sep'21	Dec'21	Mar'22	Jun'22E	Sep'22E	Dec'22E	Mar'23E	Jun'23E
Federal Funds Target Rate (midpoint)	0.125	0.125	0.255	1.375	2.125	2.625	2.875	2.900
2-Year UST Yield	0.24	0.68	1.91	2.80	2.99	2.93	3.03	3.03
10-Year UST Yield	1.37	1.47	2.13	3.05	3.05	3.16	3.10	3.15
30-Year Fixed Mortgage Rate	2.90	3.10	4.17	5.31	5.20	5.19	5.15	5.16

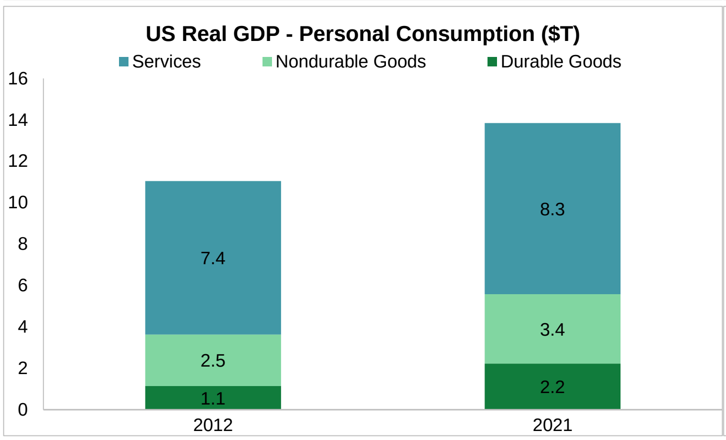
Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, Bloomberg, SIFMA Economic Advisory Roundtable

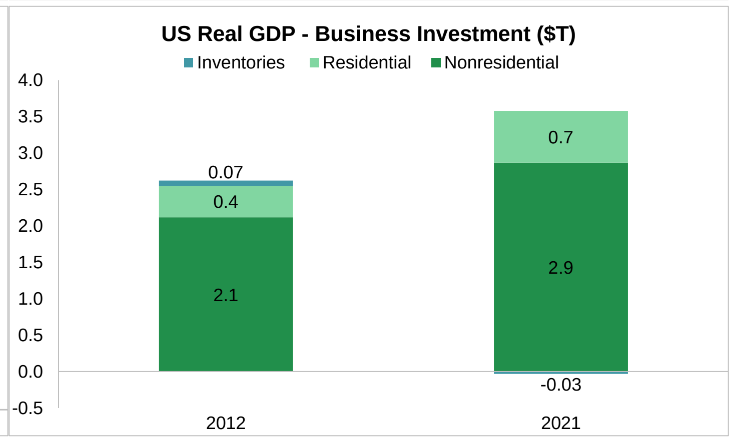
Reference Guide: Economic Landscape

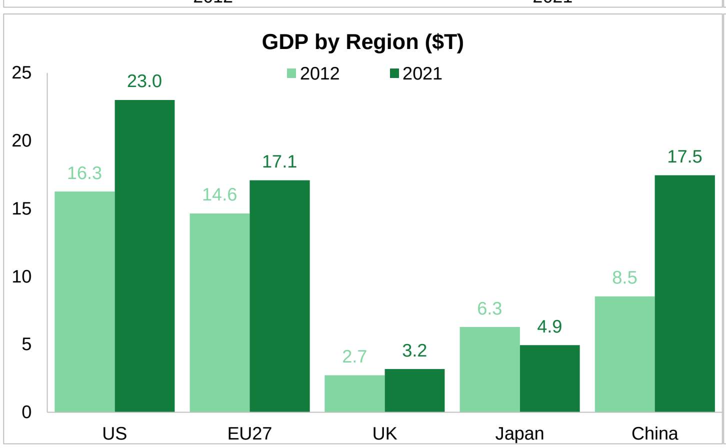
US GDP Growth and Comparison Across Regions

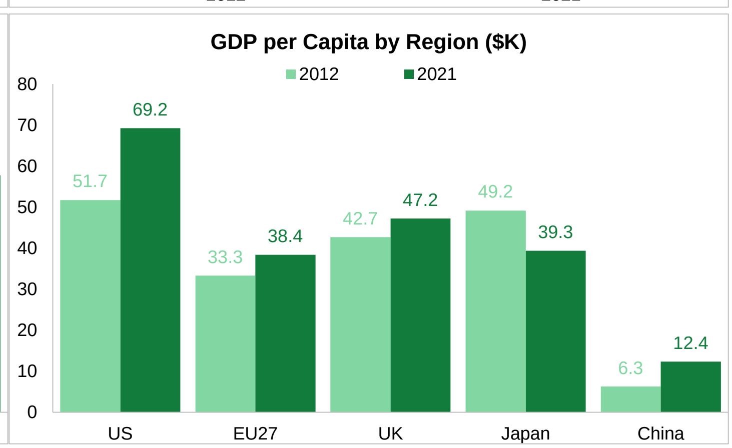








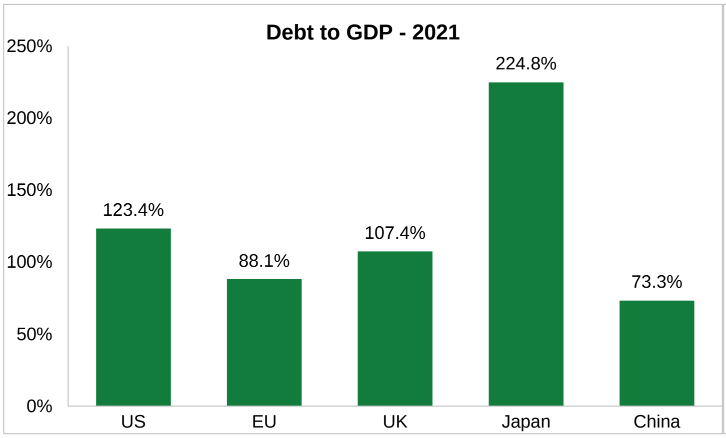


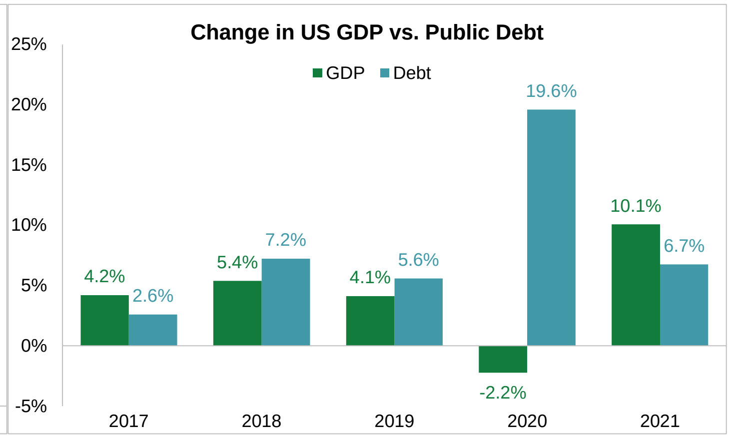


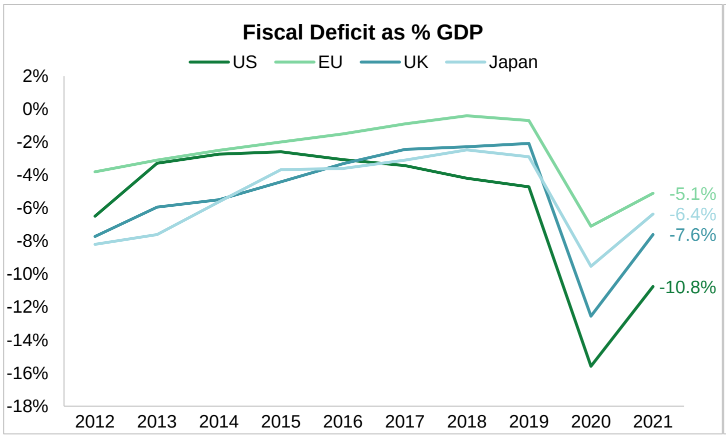
Source: Bureau of Economic Analysis, International Monetary Fund

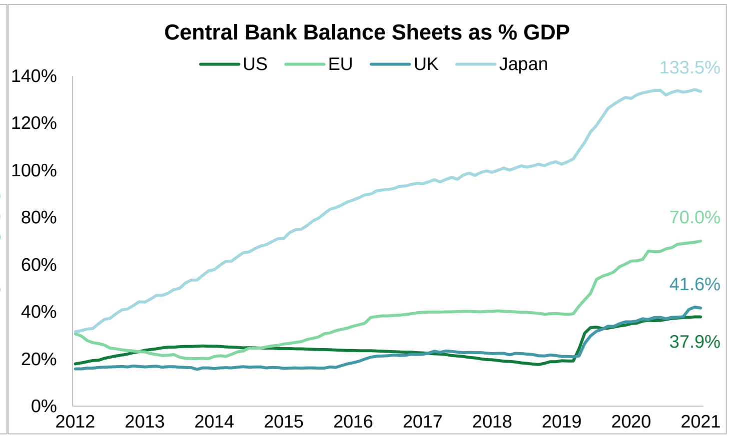
Note: NE = net exports, Business = business investment, Government = govt consumption & investment, PC = personal consumption expenditure

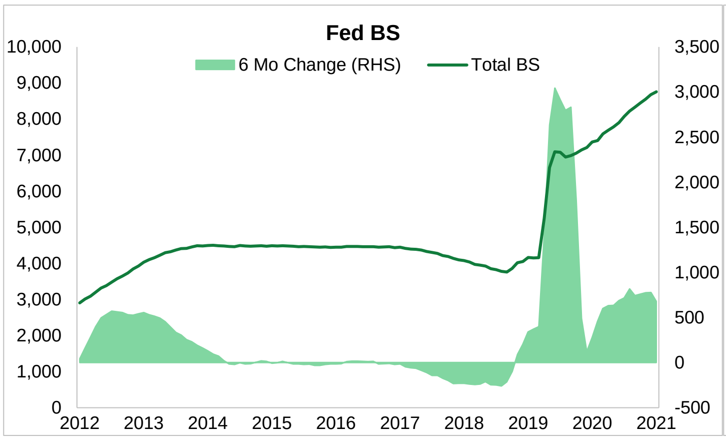
US Debt and Fed Balance Sheet and Comparison Across Regions

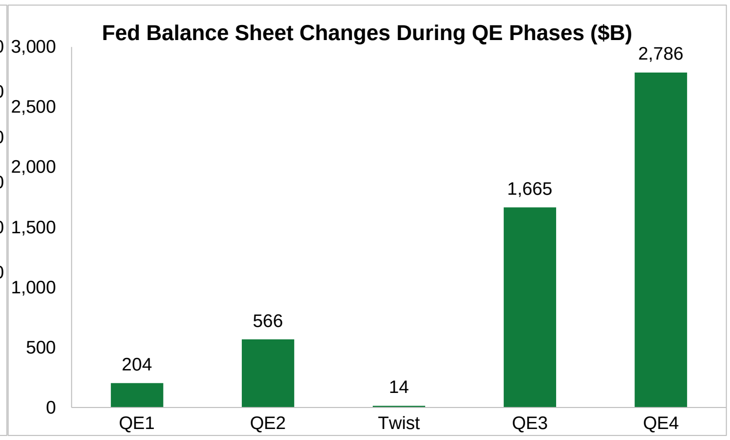








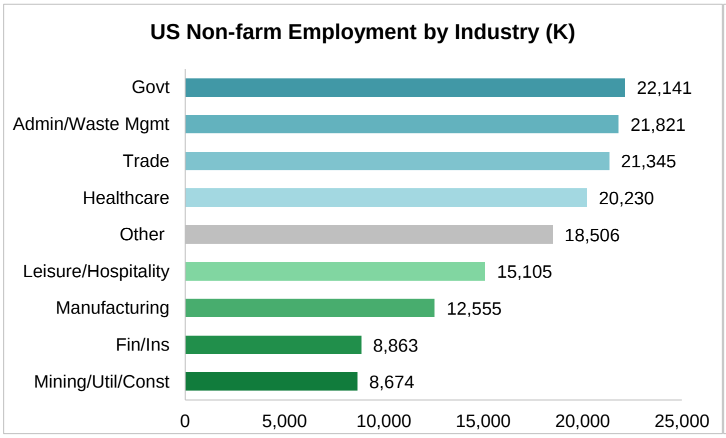


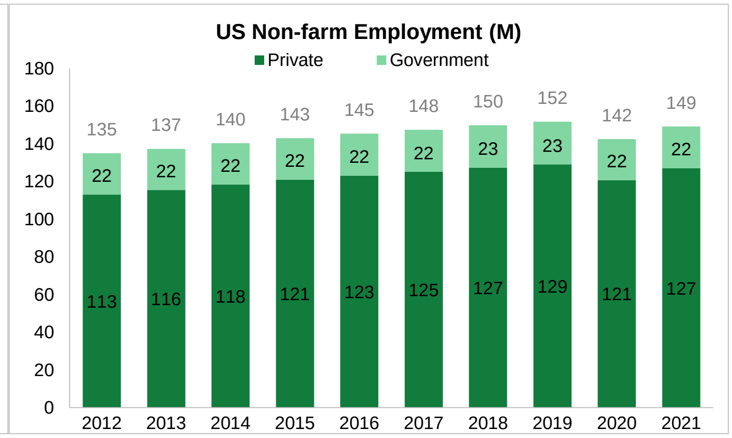


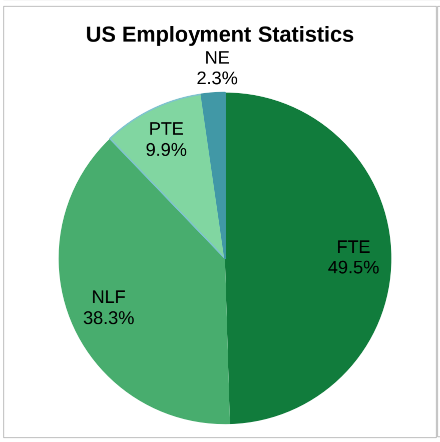
Source: Bloomberg, Bureau of Economic Analysis, Eurostat, Statista, US Treasury

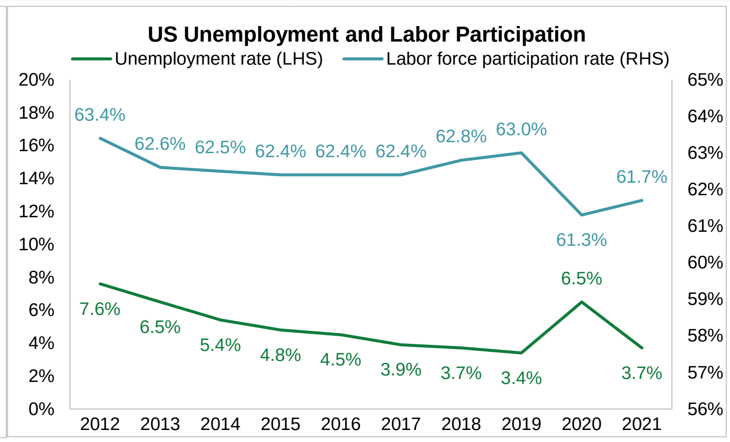
Note: QE = Quantitative easing is a monetary policy when a central bank purchases financial assets to inject money into the economy; Twist = monetary policy when a central bank buys long-term and sells short-term bonds to flatten the yield curve without expanding the balance sheet; QE1: Nov'08-Mar'10,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

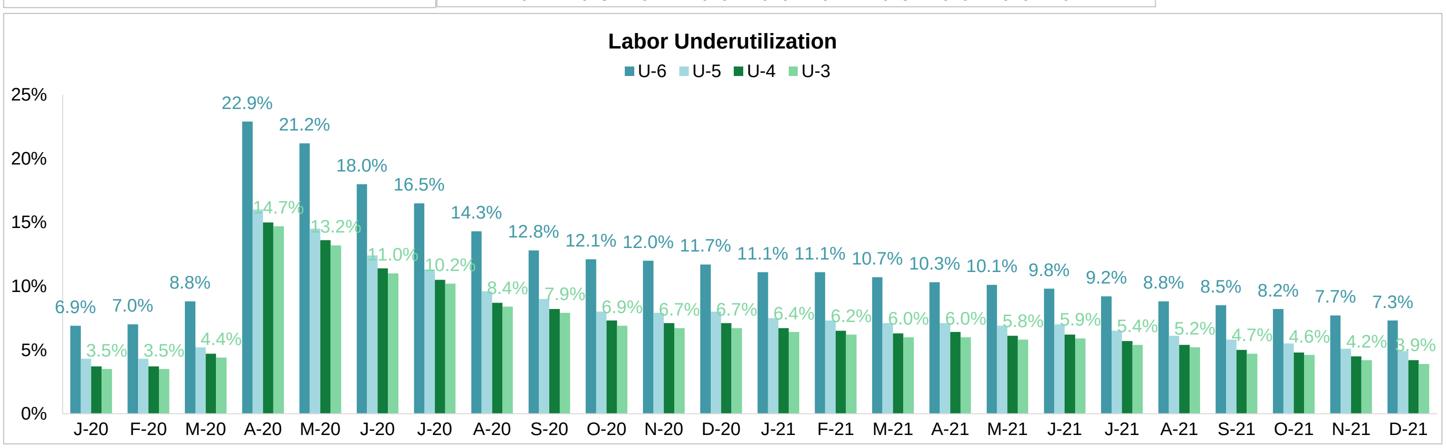
US Employment Landscape











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

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Ethan Harris
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Michael Gapen
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