SIFMA Insights

The (Virtual) Capital Markets Conference Debrief

Perspectives & Key Themes from Executives, Economists & Market Participants

October 2020

Recently, SIFMA hosted its Annual Meeting, The Capital Markets Conference. With two days of presentations and events and thousands of virtual participants, we gained insights into top-of-mind topics for market participants. Inside this note, we recap just some of what was seen and heard, including:

- Executive View – market resiliency during COVID-19; investing in uncertainty; transacting virtually; ESG
- Economist Outlook – post COVID-19 growth; debt levels; productivity; inflation
- Audience Perspective – results from audience polling on economy, macro events and markets
- And more on key industry themes

To see details from topics SIFMA has covered throughout the year, please see SIFMA Insights at (list of Insights reports in the Appendix of this note): www.sifma.org/insights

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The Executive View

Below we recap key themes from fireside chats with industry executives.[1]

Markets Remained Open & Functioning

As the global pandemic COVID-19 emerged, in a matter of days, capital markets went from working in offices to almost all virtual. In March, capital markets firms had only 2%-5% of people going into physical offices (firms never fully closed and put in appropriate health protocols to ensure the safety of essential workers in the office). As March markets experienced severe dislocations in many areas, employees had to adjust to managing this turmoil while working from home.

Market participants stepped up to keep markets open and functioning. The operational resiliency was labelled extraordinary by one speaker. Volumes were +60% to previous record levels, yet there were no operational breakdowns of any size. If you had asked managers prior to COVID if it would have been possible to go all virtual without incident, the answer would have been it is not possible. Yet it was done, in large part due to continued investments in technology and business continuity planning (BCP). While this crisis is nothing like past ones (Savings & Loan, 9/11, global financial crisis), operationally firms learned from each one and invested in processes and systems accordingly. Technology advances in systems across market participants have been significant since the global financial crisis. And BCP investments paid off during this crisis. One example was moving from providing laptops to only the 20% of staff who travelled frequently to all employees, which eliminated frictions in the transition to work from home. These investments were coupled with warp speed technology upgrades and stipends for home offices at the start of the COVID crisis.

The success of working from home leads to the question of what the future of work arrangements will be. As lockdowns went away, firms returned more people to the office. Currently firms have: ~40% of employees back in the office in in Asia, ~30% in Europe and ~10-12% in the U.S. (panelist estimates). Firms expect to have around only 25% of employees in physical offices globally by the end of 2020. Since executives found most employees could efficiently work from home, many firms expect more flexible work arrangements going forward. Managers foresee hybrid models but note it is too early to determine permanent long-term changes in office footprints. After all, looking past 2021, it is unclear how many suburban relocations will be permanent, and fear of public transportation should subside with a vaccine.

The debate goes on as to the final number of employees working in the office full time. People have found that communications and meetings can be done virtually/electronically, but some point out that the office remains the primary place for creativity, brainstorming and collaboration for some business areas. An area that remains a key area of focus is culture, the bedrock of many firms. Firms have found that it is hard to maintain their culture with current employees or instill its values with new permanent hires or interns. They are missing the apprenticeship model, where employees learn by seeing and asking questions. This is still performed better in person in the office.

[1] James Gorman, Chairman & CEO Morgan Stanley; Dana Morton Emery, CEO & President Dodge & Cox; John Ettelson, President & CEO William Blair; Kristin Lemkau, US Wealth Management CEO JPMorgan; Roger Ferguson, Pres. & CEO TIAA; Beth Hammack, Global Treasurer Goldman Sachs

The last hurdle in determining the future of work involves regulatory considerations. Managers indicate they have had good conversations with regulators, who are open to discussing changes to existing or developing new rules regarding more permanent work from home arrangements. SEC Chairman Jay Clayton confirmed they are open to discussions in this area, as they continue to gather data and learn more about future work-from-anywhere plans. His openness to study, but hesitancy to commit, was echoed by Securities and Futures Commission CEO and IOSCO Chairman Ashley Ian Alder. Alder noted regulators spent many years designing the current structure. As such, his current preference is for few permanent changes, while also expressing the need to assess what temporary changes should become permanent. The focus in the assessment will be on operational risk.

Investing Among Uncertainty

COVID-19. U.S. elections. Stimulus. Brexit. There is no shortage of uncertainties for investors and market participants today. And the path forward is not expected to be a straight line as the uncertainty continues. The election could drag on past November 3, given the substantial increase in mail-in/absentee balloting and a potential for contested results. Some estimate a COVID-19 vaccine may not be available for distribution en masse until mid-2021. The economy is recovering "very strongly" but from the very low base set this spring and uneven in its rebound. Markets are very strong but showing the same dichotomy as the economy – technology companies are soaring, while travel/leisure/hospitality stocks struggle and banks trade at book value (BV; a "ridiculous" valuation according to one speaker). The turnaround may not be possible for many sectors until we have a vaccine.

Uncertainty may continue for other sectors as we assess more permanent changes – brick and mortar retailers with limited or inefficient online strategies (a pre COVID trend, accelerated by the pandemic), commercial REITs depending on whether people return to offices at the same level as before COVID-19, etc. In this uncertain environment, firms remain cautious, even if it means leaving some revenue on the table. And they are seeing high levels of client cash on the sidelines, indicating ongoing concerns around the future. Retail and institutional clients are aligned in this uncertainty. The activity on the institutional side is seen in big portfolio moves across FX, rates and equities. On the retail side, firms have seen "unbelievable" account inflows and new account openings. (The democratization of markets continues.) However, this is not the 2000 dot.com boom – then banks traded at 6x BV versus 1x now – as these are better companies which are performing well.

On the institutional side, the story of lower revenue and returns continues. Clients demands have changed and firms have responded by creating and offering new products and services (semi-transparent ETFs, technology advances, ESG overlays, etc.). One speaker said "reports of active managers demise are greatly exaggerated", noting active and passive can co-exist, especially in times of market turmoil when clients need expertise, research and valuation discipline. Asset managers offer a wide variety of strategies and price points, where all are not all created equal and clients have choice. That said, the difficult cost environment and search for scale to gain efficiencies indicates consolidation is expected to continue.

Additionally, the exchanges are helping corporations navigate the market environment by providing innovation in products for going public. Firms can now choose from traditional IPOs, direct listings or special purpose acquisition companies (SPAC; see SIFMA Insights Spotlight: 2020, the Year of the SPAC). SEC Chairman Jay Clayton noted he was "happy" to see the competition, as the SEC has always encouraged firms to go public. He did note investors need to be aware of the differences in disclosures and risks with SPACS versus other listing methods.

Transacting In A Virtual World

Markets entered 2020 with a robust deal flow. Come March, markets changed overnight and 80-90% of deals paused almost immediately. Equity markets bounced back quickly, with companies in the healthcare and technology sectors, those tailored to a COVID world, coming back to life first. It is interesting to note that these were already the two hottest sectors over the last few years. The world was going digital prior to COVID-19, with the pandemic accelerating the pace of adoption (although speakers were unsure if we moved five years in five months as some companies have stated). Biotech trends are a continuation of prior research, and the research stage does not drive revenue, meaning the business model was not disrupted by the pandemic. By mid- to late-June, greater confidence returned, as the economy started its recovery. As markets soared, valuations became attractive, enticing sellers back to the market. Backlogs are now higher than pre COVID-19.

Life must go on, and it has in the transaction world. Preexisting relationships were considered easy to maintain virtually. Early on, firms found it difficult to form new client relationships, which are built on trust and building depth in the relationship. As time moved on, people on both sides of the table adopted technology and virtual relationships began to grow. The itch is now growing for deal teams and sales staff to visit clients in person, and we have heard some equity analysts are beginning to travel to see companies again, particularly in troubled sectors like airlines. The shift in willingness to travel is there versus in the spring, but it is still a small shift. And preferences vary across regions – some Zurich and Frankfurt staff began seeing clients over the summer, yet staff in the U.S. remain relatively unwilling to travel, with London a hybrid of the two regions. Further, some firm policies make it very difficult to get approval for in person meetings.

Regardless of travel status, the day-to-day for M&A or IPOs has changed, turning 100% virtual this spring. Firms are completing transactions from start to finish where the parties never meet each other. The due diligence process has changed, focusing on the financial side and foregoing physical walkthroughs for properties and plants. While these in-person elements were not able to happen under COVID-19 conditions, firms do not see an overall decline in due diligence. The virtual world enables firms to forgo travel to meetings. As such, deal timeframes have compressed. The IPO prep time remains about the same (if not lengthened “a bit”), but roadshows are occurring faster, shrinking from historically two weeks to three to five days. Investors and M&A deal makers are reaching decisions faster. When asked if this shortened timeframe increases risk, one speaker indicated it was not a reason for concern now, given due diligence is still being done, but it could bring potential risk down the road.

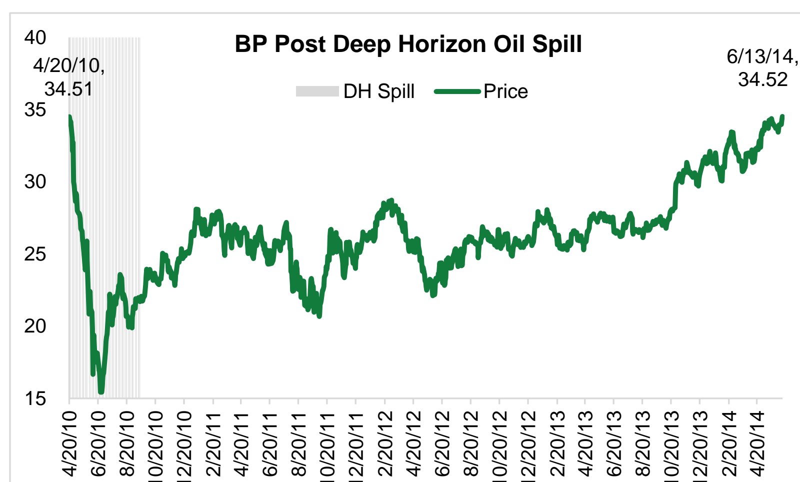
This concern could be linked to the uncertainty surrounding forecasting future corporate earnings. The U.S. economy is definitely coming back, but the debate continues on whether it is a V or K shaped recovery. Markets roared back faster than the economy, with both the decline and the recovery far outpacing expectations. Speakers indicate it is hard to say whether market valuations are frothy or just right. The rebound was sharp, but we remain in a backdrop of very low interest rates and a benign financing environment, all backed by the Fed. Predicting the future for the economy, markets or company earnings remains uncertain, as is the case with everything related to this virus.

Special Topic: ESG Investing

Whether a sell side or buy side executive, all agreed Environmental, Social & Corporate Governance (ESG) investing is not a fad. Capital markets firms are concerned about environmental and social issues, they are just looking for the right mix of ESG and the business. ESG investing takes the way people invest today and adds an overlay. Some people will want full ESG, others will prefer a mix. The growth in this market will be driven by client demand, as with everything in capital markets.

The trend has been "exploding", with speakers indicating most if not all asset managers are focused on it. Others noted it is an important if not the most important part of the investment portfolio for many institutional clients. It is now commonplace for asset managers to have ESG screened funds. Yet, it is still a "tiny" low single digit portion of total business, meaning there is lot of room to grow.

ESG is a complex subject. The investment thesis is that companies with a poor environmental record or not paying attention to social issues impacting their employees will not provide long-term value. Investors and portfolio managers must learn to analyze these risks and try to put data around it. In some instances on the environmental side, this is possible. Take the BP Deep Horizon oil spill (April 20-September 19, 2010). BP stock dropped over 55% at its trough, taking over four years to recover to the pre spill price:



Source: Bloomberg

Unfortunately, this is where the data ends. There are no global standards (albeit the index firms are working on this). There are no GAAP or IFRS equivalent accounting standards for analysts to follow. And some of these risk measurements will always be subjective. There is not even uniformity across countries in the same region. For example, Germany and Scandinavian countries are much further ahead in client engagement on ESG than other European pers, let alone the U.S.

As disclosures improve and data collection become more standardized, we can move from the "squishy" to more concrete. Databases can be built based around material factors to measure adherence to ESG policies, and global standards can be formed. Firms can use (and are already using) fintech applications such as artificial intelligence to screen investor calls and financial statements for ESG factors. With this, ESG investing can grow further.

The Economist Outlook

The emergence of the global pandemic COVID-19 sent economies across the globe into deep contractions. Original World Bank forecasts indicated the global economy will shrink by 5.2% this year, representing the deepest recession since World War II, more than two times as deep as the recession associated with the global financial crisis (GFC). It is the first recession caused solely by a pandemic (the 1918 Spanish flu occurred at the same time as World War I). It is the fourth deepest out of the 14 global recessions recorded since 1870. It is also affecting more countries than any recession since that time, particularly hard hitting for emerging market and developing economies (EMDE).

How will economies recover and what will be the lasting affects? Below we recap key themes from our panel of economists.[2] (Please see a copy of the presentation slides in the Appendix.)

Post COVID-19 Economic Growth

Global Outlook

Optimistically, for most economies, the outlook for 2020 has improved marginally. Consensus estimates moving from June to the latest estimates as of this presentation include: world -5.2% to -4.7%, +0.5 pps; advanced economies -7.0% to -5.8%, +1.2 pps; yet EMDEs -2.5% to -2.7%, -0.2 pps. The outlook for advanced economies and therefore the world have improved, while EMDE forecasts declined somewhat. The outlier in EMDEs is China, which continues to bounce back in a better performance than other economies globally, with Y/Y GDP growth of: 1Q20 -6.8%; 2Q20 +3.2%; 3Q20 +4.9%, albeit missing expectations of +5.2%).

A global economic rebound is expected in 2021. Looking at consensus estimates moving from June to the latest estimates as of this presentation: world +4.2% to +5.0%, 0.8 pps; advanced economies +3.9% to +4.3%, +0.4 pps; and EMDEs +4.6% to +6.2%, +1.6 pps. However, the level of improvement and path across global economies remains uncertain. This matches the uncertainty of the virus in general, from the spread of the disease to the timing of a vaccine. And downside risks dominate the outlook; for example, when will we get a vaccine in order to return to more normalized economic activities. This is why economic forecasts has a wide range – world GDP growth forecasts span from +3% to +8% – keeping economist forecasts conservative and even pessimistic for some.

Beyond 2021, structural headwinds persist (ex: demographic pressures). Global growth had already come down over the decades, and prospects are worsened with pandemic caused declines in investment and labor productivity. To put it in context, global GDP growth rates were: +3.5% from 1960-2019; +3.1% form 1970-2019; and +2.9% from 1980-2019. The declining trend in global growth is expected to continue, with long-term growth forecasts coming down as well. Looking at 10-year ahead GDP growth forecasts: world from +3.5% in 2000 to +2.4% in 2020, -1.1 pps; EMDEs from +5.8% in 2000 to +3.9% in 2020, -1.9 pps.

[2] Lewis Alexander, Nomura; Julia Coronado, MacroPolicy Perspectives; Ayhan Kose, World Bank Group; Ellen Zentner, Morgan Stanley (moderator)

US Outlook

Looking specifically at U.S. economic growth, the recovery since the lockdowns has been strong. The swoosh recovery continues, as one economist put it. The recovery rates have shot past that of the GFC – COVID trough >-10%, rebounding rapidly to >-3%; GFC trough >-6%, rebounding at a slow and steady pace – nudging some economists to raise recovery forecasts. However, normalization will depend on how the pandemic evolves, a vaccine and fiscal policy. There is a high level of confidence in continued monetary policy since Chair of the Federal Reserve Jerome Powell has committed several times to doing whatever it takes to support the recovery, yet economists wonder how much more upside exists in the potency of Quantitative Easing, etc.

The original fiscal stimulus was a significant contributor to 2Q20 GDP, contributing in 3Q20 to a lessor extent (stimulus estimated at >4% impact on growth). The numbers were large and well targeted, creating a bridge for lost personal income due to high unemployment. As stimulus fades, fiscal policy will remain a drag on growth over the medium term (at the time of writing this report no deal had been reached on another round of stimulus, implying there might not be another deal before the election).

Consumption shocks during the pandemic have been uneven, the classic Dickensian tale of two cities. There are the COVID-19 affected sectors, related to service areas affected by social distancing (whether forced by lockdowns or driven by fear of the virus): travel, entertainment, hospitality, etc. These areas continue to struggle. Then there are the other goods and service sectors, these are the physical, mostly delivered goods areas, as well as the migration form urban areas plays: online retail, grocery, used cars, home sales, etc. The COVID affected sectors peaked at almost 50% off trend, versus only around 5% off trend for other goods and services. This compares to standard deviations of cyclical variations from 1985-2019 of 1.04 for COVID sectors and 1.55 for other. The 2020 trends have reversed from historical patterns.

This shows the uneven recovery across COVID affected versus other sectors of the economy. Employment has not returned to trend either, with the pace of the growth slowing. The longer social distancing trends remain (again, whether forced or from fear), we could see a rise in permanent layoffs. The tug of war between health and safety and economic recovery continues, and trends could worsen as fiscal stimulus fades.

Debt Levels across the Globe

Even prior to COVID-19, debt levels across the globe had experienced the broadest, fastest increase, especially in EMDEs. This year debt levels exploded as governments responded to the pandemic: advanced economies Debt/GDP is expected to move from 104.3% in 2019 to estimates of 124.2% in 2020 and 124.3% in 2021; EMDEs from 52.1% to estimates of 60.8% and 63.2%. Historically, 50.9% of rapid debt accumulation episodes[3] for government debt and 38.6% for private debt end in a financial crisis. This is particularly concerning for EMDEs, which are new to capital markets and rapidly incorporated debt into their economies.

[3] Episode = a period during which Debt/GDP rises from trough to peak by more than one (country-specific) ten-year rolling standard deviation; government debt 267 episodes, private 280 from 1970-2019

There is a difference between substantial increases in sovereign versus private debt levels. Sovereign debt increases to solve demand ruts during crises are not viewed as a threat, as long as countries return to solid management of their fiscal framework. It was noted that this is not the same case for EMDEs, which do not have the balance sheets or monetary and fiscal tools of advanced economies, and EMDEs are the engine for global growth going forward. Results could be worse if governments did not build bridges to stimulate economic growth during crises. For example, in the U.S. the Fed raised rates to 2%, with room to go up to 4%. This reflects a secular trend of stagnation, i.e. no sovereign constraint.

However, significant increases in private debt could create problems. Corporations need to pay their debt back, lacking the printing press of federal governments. Therefore, an area to watch for is corporate bankruptcies and insolvencies. To date, this crisis has been a liquidity one versus a solvency issue as seen in the GFC. However, not only was the magnitude of this economic shock extensive, it came on top of a period of sustained normalcy or benign corporate environment. As such, companies did not have balance sheets built for this degree of shock to exist for an extended period. Companies in highly impacted sectors could have solvency events as time drags on, unless there is additional fiscal support.

Additionally, the more deleveraging companies need to undertake in the future, the longer the drag on the economic recovery.

Additional Thoughts

- **Productivity** – drivers of productivity include innovation, investment and human capital. While we have technology innovation occurring during the crisis, the pandemic has created the risk of moving away from global supply chains and less foreign direct investment. Health crises are typically associated with lower investment, yet fiscal support helps. Human capital development could also be at risk, with prolonged school closures and permanent unemployment, offset somewhat by online learning. This is all pessimistic for long-term growth prospects. On the flip side, a pandemic surprise to the upside was how well employees were able to work from home. This experience created knowledge that we might not have come up with before the crisis. Pandemics could provide upside as well. As one economist mentioned, high U.S. productivity growth began after the World War I, Spanish flu and the Great Depression ladened 1920s. (Perhaps the growth was fueled by the great 1927 New York Yankees Murderers' Row lineup!)
- **Inflation** – In the near term, there are several noticeable inflation trends with offsetting effects. Grocery prices have increased, driven by supply issues. Used car prices have increased >10% YTD according the Department of Labor, accounting for >40% of the 0.6% increase in the Consumer Price Index for All Urban Consumers in June/July (versus new car prices +1% YTD). Conversely, travel prices are down. A Dollar Flight Club report noted U.S. domestic flights are -41% on average, with international flights -35% Y/Y (versus -18% after 9/11 and -21% in the GFC). However, these are unsustainable trends. There is typically rent disinflation after recessions. Rent is a major contributing factor to inflation, and deflation trends could be exacerbated by the migration to the suburbs (vacancy rates typically have an inverse correlation with rent/rent increases). And sustained inflation does not happen without purchasing power. For the medium term, unemployment will continue to drag on purchasing capabilities, keeping inflation at bay.

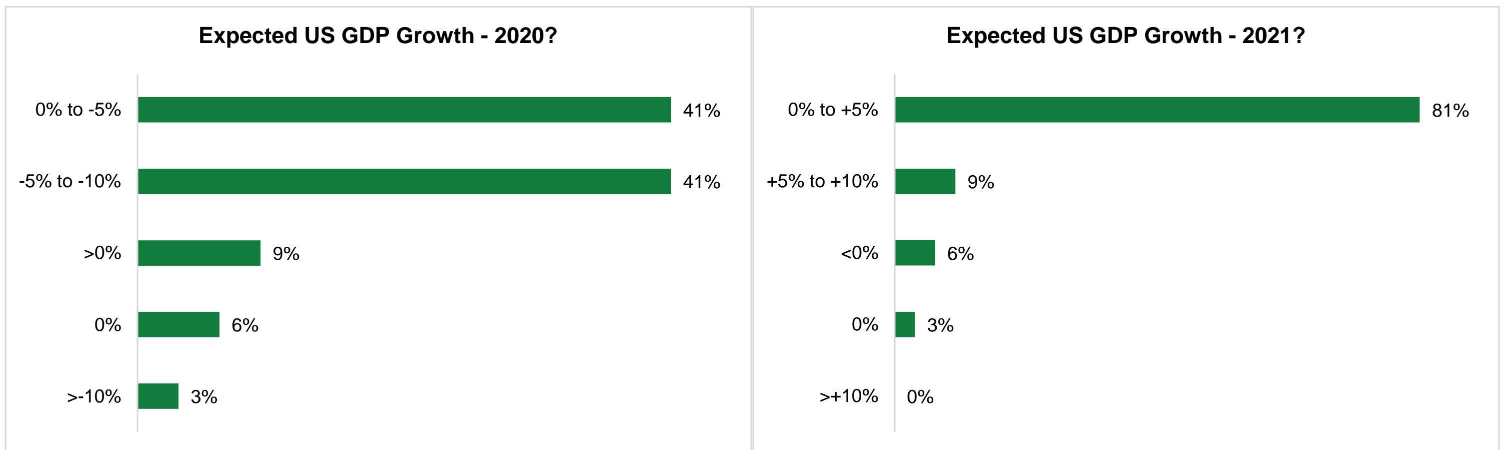
The Audience Perspective

We polled the conference audience to gain their insights on macro factors influencing the economy and market sentiment. Of no surprise, returning economies to pre COVID-19 levels is top of mind. This means market participants are focused on the emergence of a vaccine. Otherwise, people are following closely the recovery in unemployment and the passing of additional fiscal stimulus (at the time of this report, no deal for the next round of stimulus had been finalized).

Economic Environment[4]

Q: Where do you expect U.S. GDP growth to end (Y/Y): (a) 2020?; (b) 2021?

A: For 2020, respondents were split, with 41% for each answer of 0% to -5% growth and -5% to -10% growth. Respondents overwhelmingly expect a recovery in 2021, with 81% expecting 0% to +5% growth and 9% expecting +5% to +10% growth.

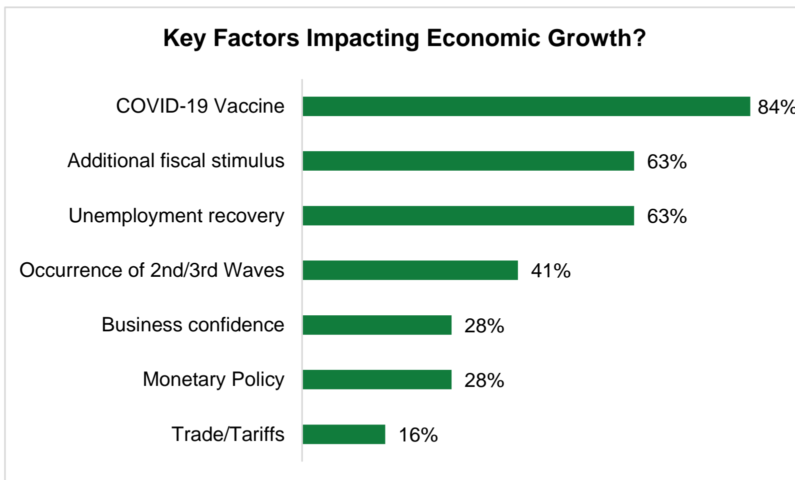


Note: May not sum to 100% due to rounding

[4] Dec. 8, SIFMA Research releases its end-year economic outlook report, with results from a survey of >20 chief economists: www.sifma.org/research

Q: What are the most important factors for economic growth?

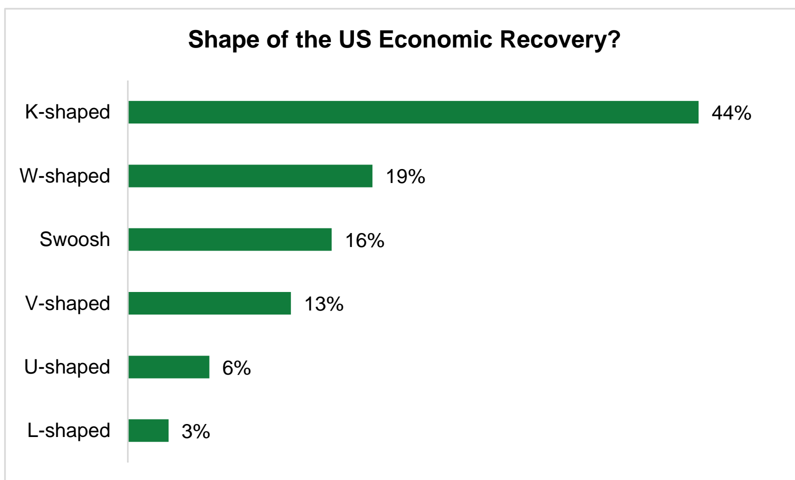
A: 84% responded a vaccine was key to growth (we are surprised this was not 100%). There was a 63% response rate for both unemployment recovery and additional fiscal stimulus.



Note: Respondents were asked to choose all that apply, does not sum to 100%

Q: What type of recovery do you believe the U.S. is experiencing?

A: 44% of respondents indicated a K-shaped recovery, followed by 19% W-shaped.

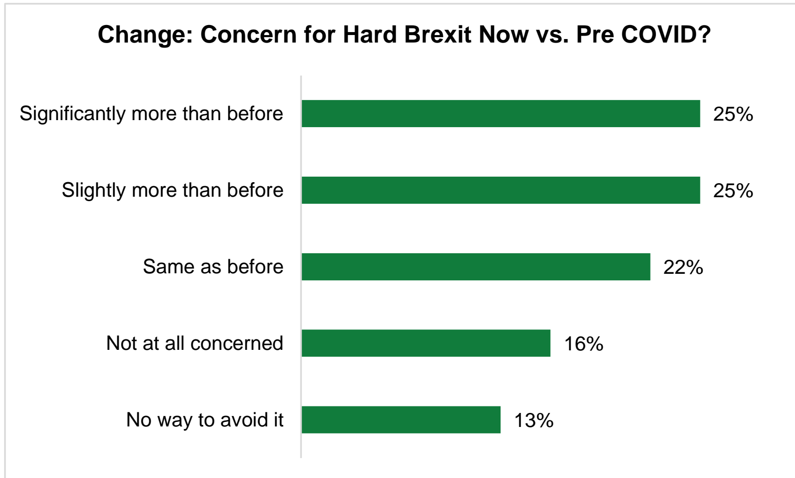


Note: May not sum to 100% due to rounding

Macro Events

Q: How much more concerned are you now than pre COVID-19 that financial services will experience a hard Brexit?

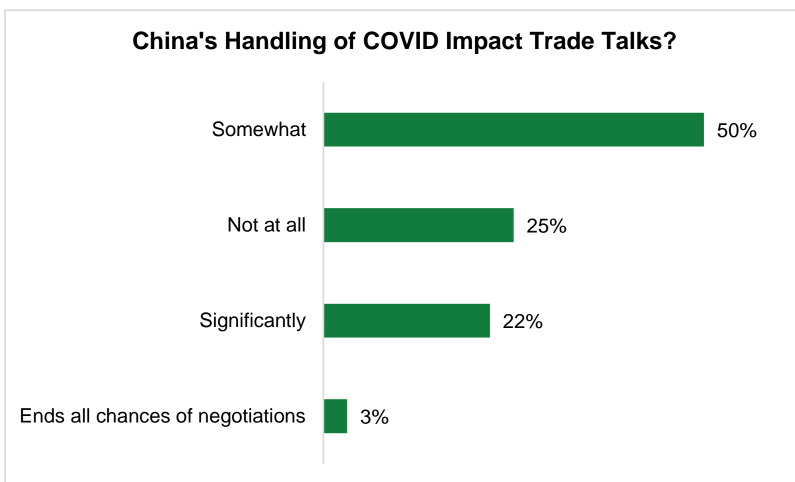
A: Respondents were tied at 25% each for significantly more concerned and slightly more concerned than before. 13% responded there is no way to avoid a hard Brexit.



Note: May not sum to 100% due to rounding

Q: Do you believe the negative sentiments around China's handling of COVID-19 will impact future trade negotiations?

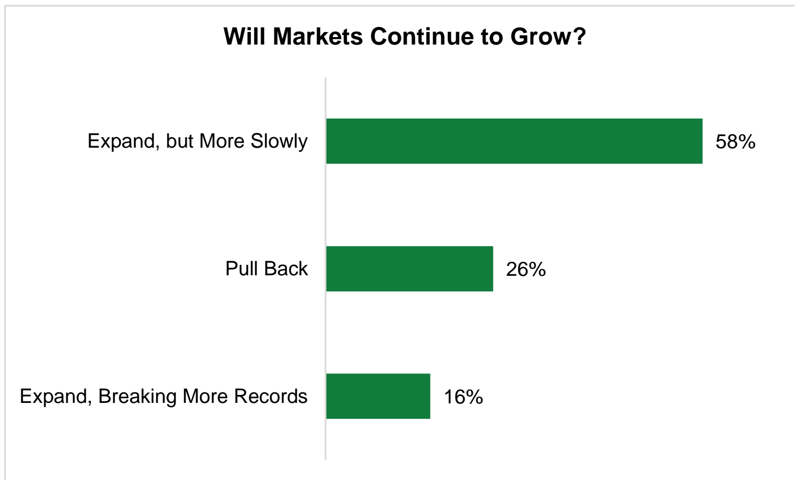
A: 50% of respondents believe it will somewhat impact trade negotiations, with 25% indicating not at all.



Putting It All Together

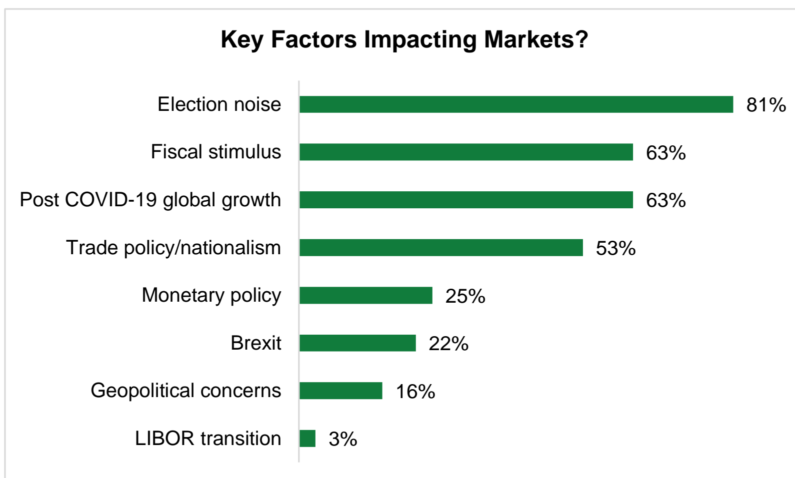
Q: What does this all mean for market sentiment? Using the three major indices as a proxy - the S&P 500, Nasdaq and Dow – how do you expect markets to continue to grow?

A: 58% of respondents expect markets to continue to expand but more slowly, with 26% expecting a pull back.



Q: Which factors will have the greatest impact on markets to finish off 2020 and into next year?

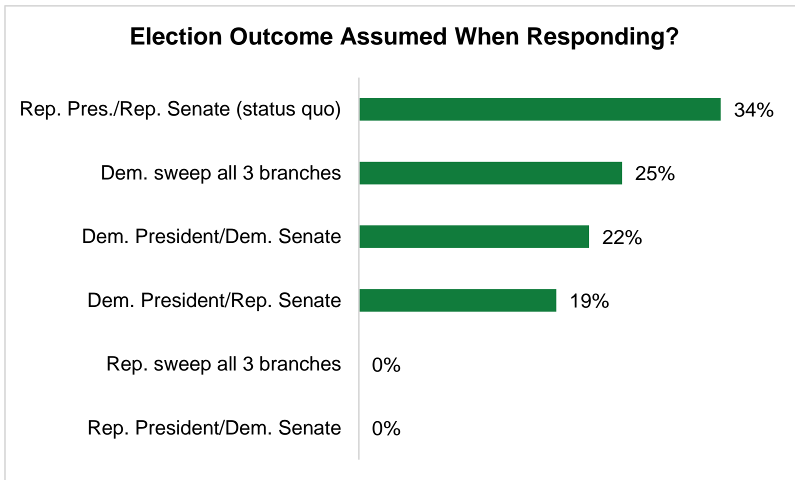
A: 81% responded election noise, followed by a 63% response rate for both post COVID-19 global growth and fiscal stimulus.



Note: Respondents were asked to choose all that apply, does not sum to 100%

Q: Finally, what 2020 election outcome were you assuming when answering these questions?

A: Trying to get a glimpse into the mid of respondents when answering their forecasts and other responses, we asked what election result, essentially what composition of the government, did they assume when filling out the survey. 34% expect a status quo, Republican President/Republican senate.



More on Market Themes

In this section, we look back at a few key themes for the year.

Accelerating Technology Adoption

It is "prime time" for technology's role in transforming how the industry works. The industry's remaining reliance on paper and physical securities came to the forefront during this pandemic forced work from home environment. As the COVID world came in overnight, firms have accelerated already evident trends and increased demand for the next level of digitization. Fintech can assist with not just paper removal but sorting/streamlining digital communication tools (emails over paper, e-delivery as default communications). Fintech applications are assisting the increase in retail investor volumes. Fintech can drive the search for scale and operational efficiencies (increase flexibility, decrease costs, reduce systems latency). Panelists expect market participants to continue focusing on multiple uses of artificial intelligence (AI) and cloud computing. Additionally, data, the fuel of these transformations, remains very important.

A panelist indicated two thirds of its one thousand person survey respondents noted a major acceleration in their digital journey during COVID. All firms utilized technology to connect employees and clients in the shift to virtual work. Yet, the journey to scale is not an easy one – the industry is highly regulated, workflows are complicated and firms have legacy systems which cannot be fully replaced in some cases.

A major area of focus making progress is cloud computing. The thinking around cloud has now moved past just a way to access computing and storage. Cloud providers now offer a "richer" set of capabilities, particularly around machine learning: improve response rates for inbound requests; eliminate capacity constraints at call centers; add flexibility for risk managers; etc. One example from panelists was the benefits FINRA saw from its (pre COVID) shift to the cloud. During the market turmoil this regulator was processing transactions at 2-3x peak levels (~400 billion transactions to monitor). The use of cloud services provided scale and flexibility, enhancing supervisory capabilities.

Panelists indicated a unanimous preference for a hybrid cloud approach. Hybrid systems enable firms to maintain private data centers but use public clouds for scale and flexibility of deployment. One of the main legal and compliance questions around cloud usage has been around data security. Ensuring appropriate security and controls is the key to de risking the journey of the industry adopting cloud computing on a large scale. Firms need to keep systems up to code with changing regulations, and regulators need to increase their sense of comfort of system security as institutions move to the next generation of processes. Panelists indicated vendors have come a long way in working with market participants to deliver value while meeting compliance requirements.

Cyber security has always been top of mind, and COVID reinforces these concerns as firms increase digitization. Digitization further enhances the need for secure mainframes, not just clouds. In this industry, security is only as strong as the weakest link in the ecosystem. All market participants (including fintech vendors) are focused on this. Security protocols will continue to evolve, and model management and governance will remain a focus.

Enhancing Future Work Arrangements

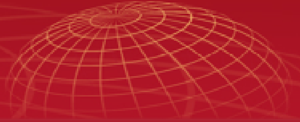
COVID-19 created a new paradigm for all of capital markets. Risk curves have shifted, with clients looking for more digital and virtual touchpoints to gain advice. For example, a panelist indicated they saw a 2-3x increase in texting with financial advisors versus pre COVID. The structure of capital markets businesses has changed – as demanded by clients and employees – and, with this, the old debate on the value of technology has shifted to one of how to best adopt fintech to get speed and scale for the client experience. Choice remains key in a digital world, as different clients will choose different engagement options.

The crisis opened eyes and forced people to see what the future of work could be – what a trading floor looks like, mobility of resources, communication tools, etc. Technology overlays will enable firms to focus on what differentiates them to clients, outsourcing non-essential services and deploying capital most effectively. For example, firms can move away from performing basic processing themselves to outsourcing to specialists who can do it for them at a lower cost (both monetary and employee time).

While the organizational structure going forward is still up in the air, one area of concern remains the maintenance of a firm's culture (and instilling that culture on new hires). Financial services is built on trust, collaboration and relationships. Culture is the bedrock of this. While firms have used digital tools to replicate some in-person interactions, for example virtual town halls (though this is not a new event to anyone who's worked at a global firm), they will need to get more creative the longer remote work lasts. Perhaps there is a fintech solution in our future to replicate spontaneous water cooler chats? Or will there never be a solution for good old human connections? We look forward to watching the story unfold.

Appendix: Economic Outlook Panel Slides

Global
Economic
Prospects



Global Economic Prospects

M. Ayhan Kose

World Bank Group – EFI Prospects Group

October 2020

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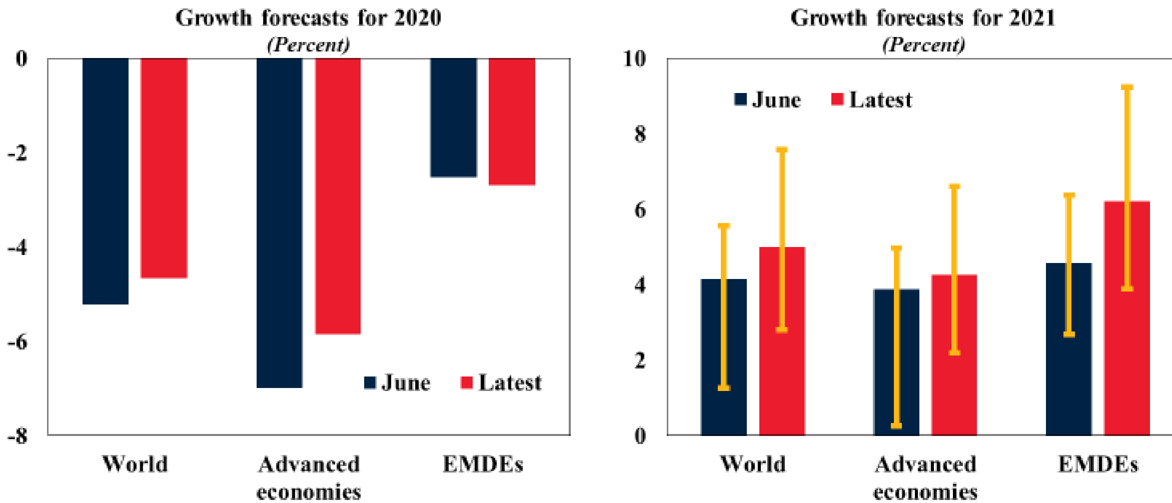
Short-Term Growth Prospects

Deep Contraction in 2020; Uncertain Rebound in 2021

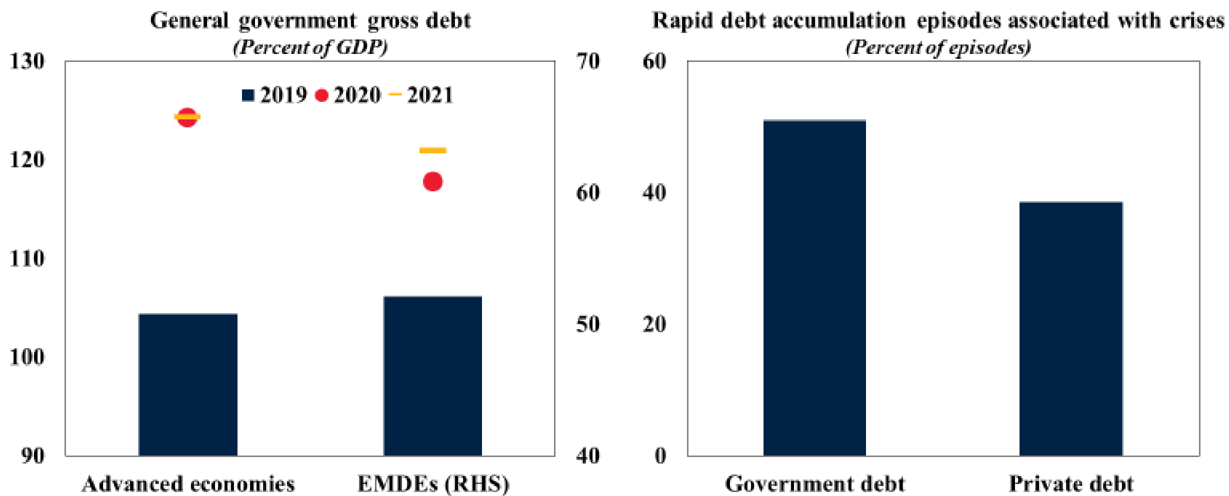


Source: Consensus Economics, World Bank.
Note: Growth forecasts for 2020 and 2021, as reported in June 2020 *Global Economic Prospects* ("June") and computed with the latest monthly consensus forecasts (as of September; "Latest"). Aggregate growth calculated using GDP at 2010 prices and market exchange rates as weights. Right Panel. Vertical yellow lines for "June" refer to the ranges of growth forecasts based on the upside and downside scenarios in June 2020 *Global Economic Prospects*. The lines for "Latest" show the minimum and maximum ranges of growth forecasts based on the latest consensus forecasts.

4

Debt

Record Debt Levels; Higher Likelihood of Financial Stress

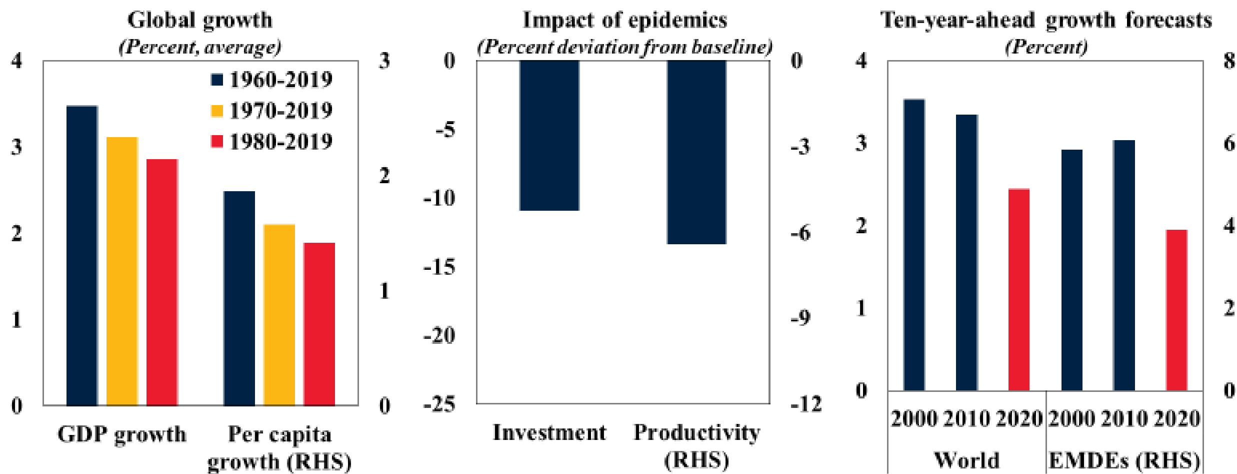


Source: International Monetary Fund; Kose et al. (2017, 2020); Laeven and Valencia (2020); World Bank.
Left Panel. Aggregates weighted by current GDP in U.S. dollars. Right Panel. The share of rapid debt accumulation episodes that are associated with financial crises, as defined by Laeven and Valencia (2020). An episode of rapid debt accumulation is defined as a period during which the debt-to-GDP ratio rises from trough to peak by more than one (country-specific) ten-year rolling standard deviation. The trough-peak years are identified with the algorism in Harding and Pagan (2002). There are a total of 267 episodes on government debt and 280 episodes of private debt in 100 EMDEs over 1970-2019.

5

Long-Term Growth Prospects

Lasting Effects of the Pandemic; Weakening Growth Expectations



Source: Consensus Economics, World Bank.
Left Panel. Average global growth of GDP and per capita GDP over respective periods. Center Panel. Bars show the estimated impacts of the four most severe epidemics (SARS 2002-03, MERS 2012, Ebola 2014-15, Zika 2015-16), after five years, on investment and labor productivity levels relative to non-affected EMDEs. H1N1 (2009), which coincided with the 2008-09 global financial crisis, is excluded to limit possible confounding effects. The sample includes 116 economies, consisting of 30 advanced economies and 86 EMDEs. Right Panel. Sample includes 72 countries, consisting of 25 advanced economies and 47 EMDEs, while the sample size varies by year. Results from the latest available survey in each year are presented, and data for 2020 are July. Aggregate growth is computed with real GDP in constant 2010 U.S. dollars as a weight. The horizontal axis refers to the year of consensus forecast surveys.

6

Select Publications by Prospects Group

- *Global Economic Prospects* – *January 2021*
  (January and June)

- *Commodity Markets Outlook* – *October 2020*
  (April and October)

- *Global Monthly*

- *Global Productivity* (July 2020)
- *Lasting Scars of the COVID-19 Pandemic* (June 2020)
- *Global Waves of Debt* (December 2019)
- *A Decade After the Global Recession* (November 2019)
- *Inflation in Emerging and Developing Economies* (November 2018)

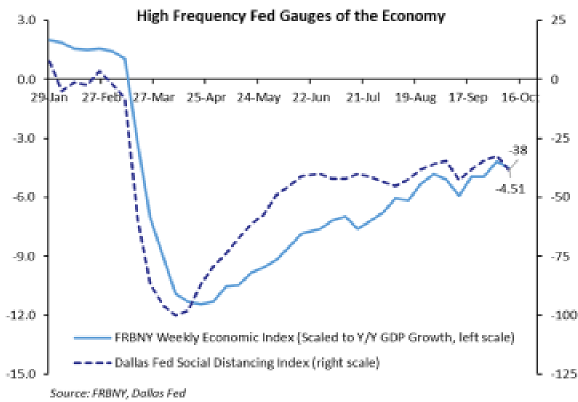
7

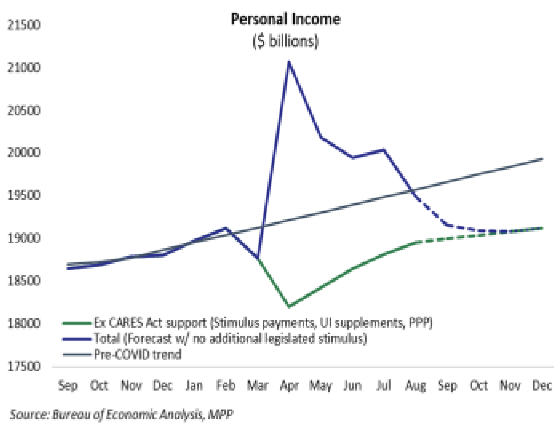
Reflation Nation?

Julia Coronado
President and Founder of MacroPolicy Perspectives

October, 2020

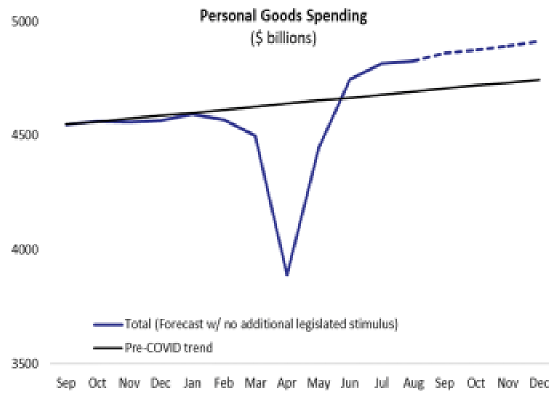
The CARES Act Supported a Robust Early Recovery but Fiscal Support is Fading



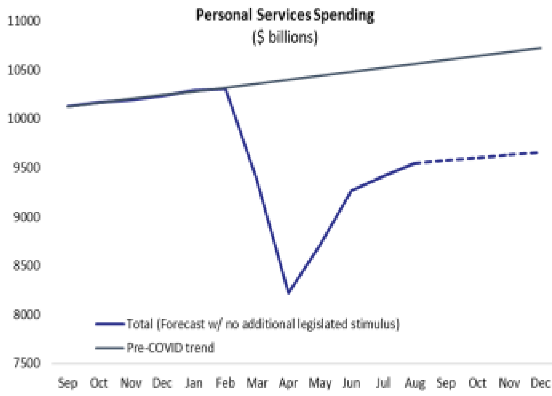


9

The Recovery Has Favored Goods Producing Sectors While Services Are Stuck in Social Distancing Mud



Source: Bureau of Economic Analysis, MPP

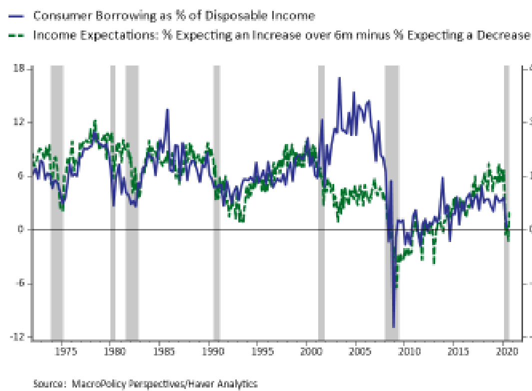


Source: Bureau of Economic Analysis, MPP

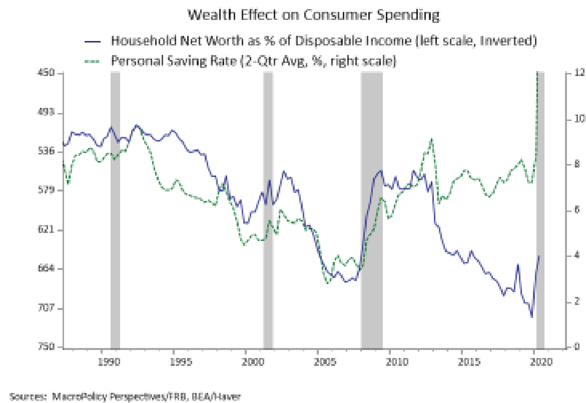
10

Monetary policy has lost potency to engineer sustained inflation.

The credit channel is constrained by an older, indebted population less interested in borrowing and tighter regulatory constraints post global financial crisis. Balance sheet tools mostly work through asset price which have almost no pass through to consumer spending anymore given wealth concentration (and aging again).



Source: MacroPolicy Perspectives/Haver Analytics



Sources: MacroPolicy Perspectives/FRB, BEA/Haver

11

NOMURA
Connecting Markets East & West

Fixed Income Research

Key issues for the US economy in the fall of 2020

US Economics

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See Appendix A-1 for analyst certification, important disclosures and the status of non-US analysts.

Any authors named on this report are research analysts unless otherwise indicated.

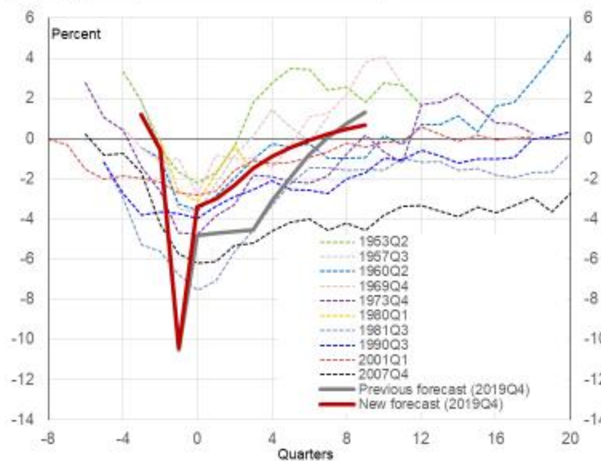
October 2020

The US recovery: where do we go from here?

NOMURA

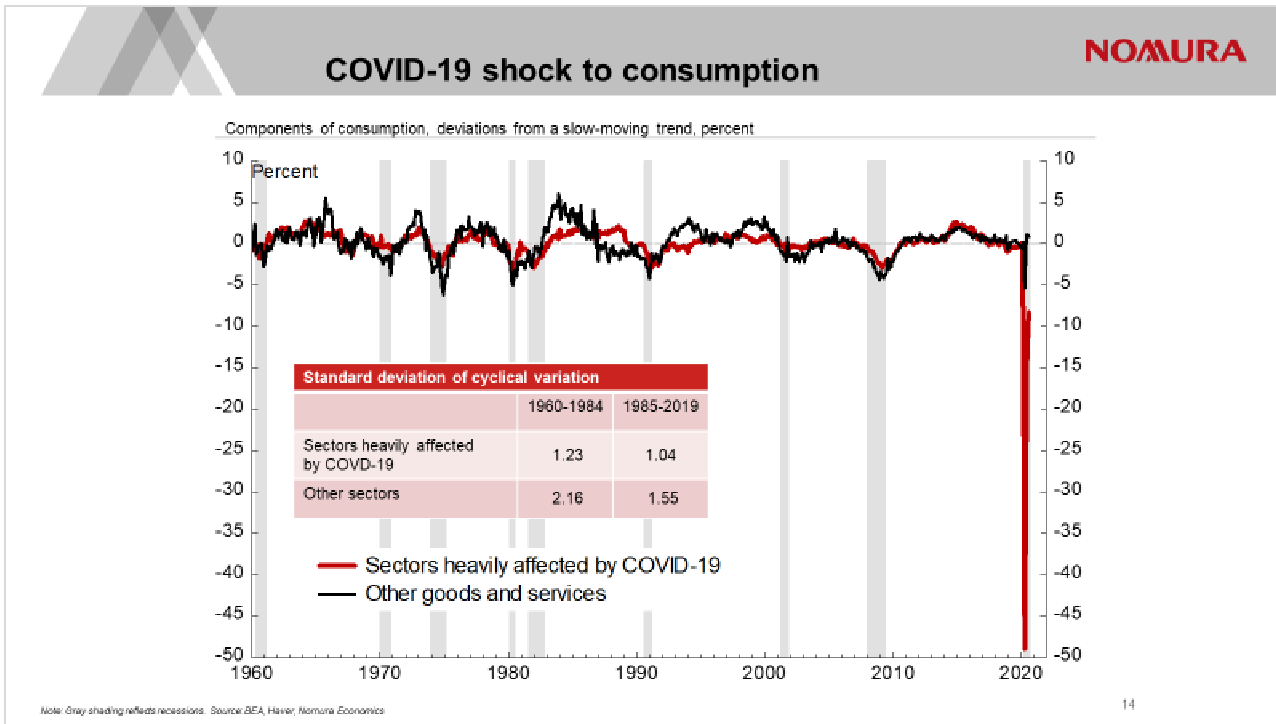
- The recovery since the spring lockdowns has been very strong
- "Normalization" has the potential to boost growth further, depending on how the pandemic evolves
- Policy, particularly fiscal, will remain important

Output gap over previous and current business cycles

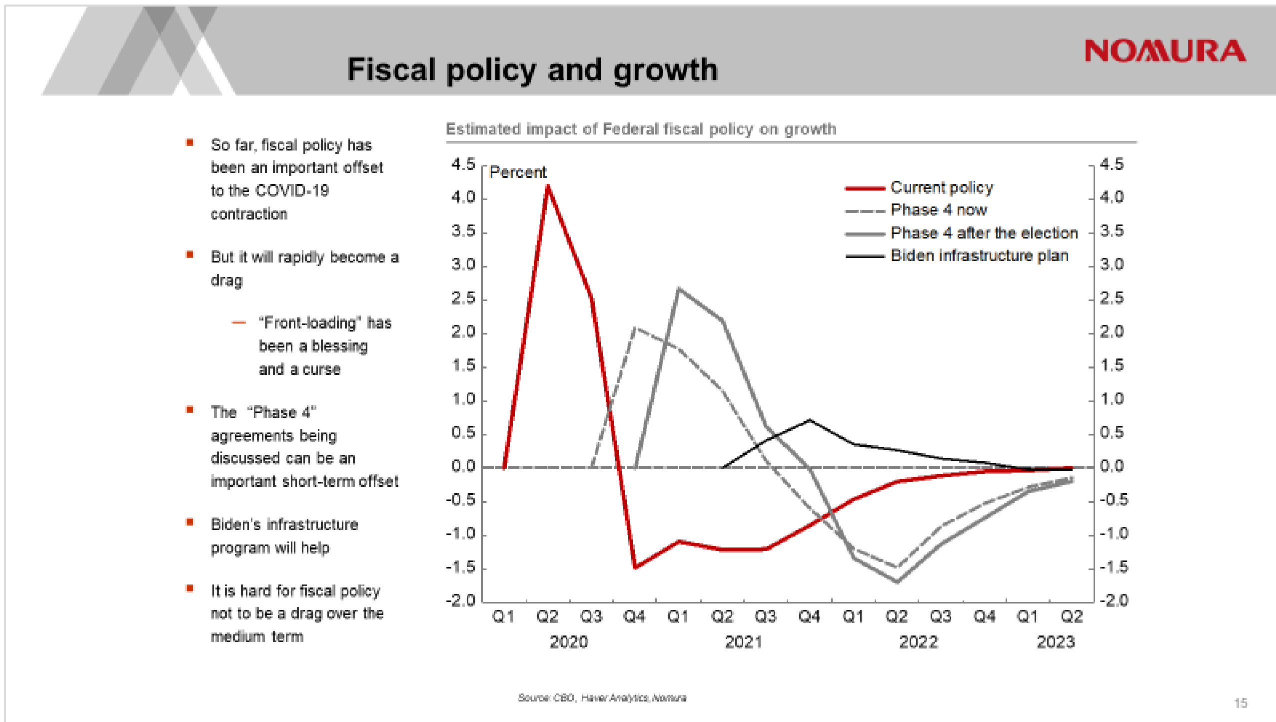


Note: Historical business cycles are as defined by NBER. The name of each line indicates the peak of the cycle prior to the onset of a respective NBER recession. Each cycle is aligned at its trough. The current cycle is aligned at Q3 2020. We used CBO's latest estimates for potential GDP.
Source: BEA, CBO, Nomura

13



COVID-19 shock to consumption
NOMURA
Components of consumption, deviations from a slow-moving trend, percent
Percent
Standard deviation of cyclical variation
1960-1984
1985-2019
Sectors heavily affected by COVD-19
1.23
1.04
Other sectors
2.16
1.55
Sectors heavily affected by COVID-19
Other goods and services
1960
1970
1980
1990
2000
2010
2020
Note: Gray shading reflects recessions. Source: BEA, Haver, Nomura Economics
14



Fiscal policy and growth
NOMURA
So far, fiscal policy has been an important offset to the COVID-19 contraction
But it will rapidly become a drag
"Front-loading" has been a blessing and a curse
The "Phase 4" agreements being discussed can be an important short-term offset
Biden's infrastructure program will help
It is hard for fiscal policy not to be a drag over the medium term
Estimated impact of Federal fiscal policy on growth
Percent
Current policy
Phase 4 now
Phase 4 after the election
Biden infrastructure plan
Q1
Q2
Q3
Q4
2020
2021
2022
2023
Source: CBO, Haver Analytics, Nomura
15

Appendix A-1

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Appendix: Terms to Know

CFTC	Commodity Futures Trading Commission
Fed	Federal Reserve System
FINRA	Financial Industry Regulatory Authority
SEC	Securities and Exchange Commission
SFC	Securities and Futures Commission (Hong Kong)
IOSCO	International Organization of Securities Commissions
bps	Basis Points
CAGR	Compound Annual Growth Rate
Reg BI	Regulation Best Interest
BCP	Business Continuity Planning
WFH	Work from Home
WFA	Work from Anywhere
ESG	Environmental, Social & Corporate Governance

Fintech	Financial Technology
AI	Artificial Intelligence
API	Application Programming Interface
Cloud	Cloud Computing
Cyber	Cyber Security
DLT	Distributed Ledger Technology*
PII	Personally Identifiable Information
Regtech	Regulatory Technology
RPA	Robotic Process Automation
SAS	

* Blockchain is one type of DLT

EMS	Equity Market Structure
ADV	Average Daily Trading Volume
AUM	Assets Under Management
CAT	Consolidated Audit Trail
ECM	Equity Capital Markets
ETF	Exchange-Traded Fund
IPO	Initial Public Offering
NMS	National Market System
Reg NMS	Regulation National Market System
SIP	Security Information Processor
SRO	Self-Regulatory Organization
VIX	Cboe Volatility Index

FIMS	Fixed Income Market Structure
FI	Fixed Income
FICC	Fixed Income, Currencies & Commodities
DCM	Debt Capital Markets
ABS	Asset-Backed Securities
Agency	Federal Agency Securities
ARRC	Alternative Reference Rates Committee
Corporates	Corporate Bonds
CUSIP	Committee on Uniform Securities Identification Procedures
FIMSAC	Fixed Income Market Structure Advisory Committee
LIBOR	London Interbank Offered Rate
MBS	Mortgage-Backed Securities
MM	Money Markets
Munis	Municipal Securities
Repo	Repurchase Agreement
SOFR	Secured Overnight Financing Rate
TMPG	Treasury Market Practices Group
UST	U.S. Treasury Securities

Appendix: SIFMA Insights Research Reports

SIFMA Insights Market Structure Primers: www.sifma.org/primers

- Global Capital Markets & Financial Institutions
- Electronic Trading
- US Capital Formation & Listings Exchanges
- US Equity
- US Multi-Listed Options
- US ETF
- US Fixed Income
- SOFR: The Transition from LIBOR
- The Evolution of the Fintech Narrative

SIFMA Insights: www.sifma.org/insights

- Market Structure Download
- A Deeper Look at US Listed Options Volumes
- The Cboe Trading Floor Reopened – Revisiting Volume Data
- NYSE Goes All Electronic – What Does It Mean?
- The NYSE Trading Floor Reopened – Revisiting Market Share Data
- COVID-19 Related Market Turmoil Recap: Part I (Equities, ETFs, Listed Options & Capital Formation)
- 2020, the Year of the SPAC
- The 2020 Market Madness
- The VIX's Wild Ride
- The 10th Anniversary of the Flash Crash
- DTCC's Important Role in US Capital Markets

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