STATE STREET GLOBAL ADVISORS

June 2020
Commentary

Global Macro Policy Quarterly

Contents

02 The Big Picture

03 Global Macro Highlights

06 Politics and Geopolitics

08 Demographics and Pensions

10 Country Macro Highlights

19 Data Calendars

21 Economic Indicators

Contact

Amlan Roy
Head, Global Macro & Policy Research
amlan_roy@ssga.com

Kaushik Baidya
Economist
kaushik_baidya@ssga.com

Simona Mocuta
Senior Economist
simona_mocuta@ssga.com

Amy Le, CFA
Macro-Investment Strategist
amy_le@ssga.com

Elliot Hentov, PhD
Head, Policy Research
elliot_hentov@ssga.com

Jennifer Ale
Analyst
Jennifer_Ale@ssga.com

The Big Picture

Economic Progress Scrutinized As Covid Crisis Exposes Inequalities

Whew…what a half-year! The COVID Crisis has exposed underlying inequalities and revealed insecurities, despite emerging after the **longest expansionary business cycle** of 128 months. Unprecedented GDP declines, locked in consumers and locked out workers, sectoral shutdowns (travel, hospitality, recreation, transportation etc.), and high unemployment have characterized the past quarter. The geopolitics of oil (OPEC+ disagreements) and the re-ignited US-China trade war drove global aggregate uncertainty higher than ever before. Economic inequality and racial discrimination were headlined after the tragic death of George Floyd that galvanized many to global protests.

The COVID crisis has highlighted the importance of public health and health infrastructure which has proved to be inadequate even in the affluent financial centers of the world—The Big Apple, London, and Hong Kong. In combating this virus, the world's scientific experts recommended lockdowns and social distancing measures to slow the spread of infection and limit fatalities. The timing and nature of these lockdown measures has varied across countries with mixed results and intriguing contrasts thus far—Sweden vs. Denmark, Vietnam vs. Thailand, Italy vs. Germany, Brazil vs. China, etc. The theories of herd immunity, duration of infectability, tracing procedures, drug development, vaccine trials are still not definitive with second waves of infection threatening to disrupt the recovery underway. Health experts and policymakers alike are learning on the go.

Huge economic costs have been paid by countries and it has been particularly costly to EM countries where workers have been forced off the survival breadline into imposed lockdowns in often cramped shelters. With no certainty regarding a well-trialed vaccine's quick release, treading cautiously to balance the economics against potential overall total lockdown requires better test and tracing, quarantine and self-isolation of potential positive cases with preparation for selective lockdowns.

Heroic unprecedented timely monetary policy by advanced economy (AE) central banks (CBs) following the earlier prepared GFC playbook of relief programs has been successful in providing liquidity, business support to SMEs and bolstering market confidence. However, the tools at the ready disposal of CBs are reaching the limits of effectiveness. Affected economies also require effective fiscal policy to provide additional support to displaced (from workplace) workers and households. Monetary-Fiscal policy coordination has increased in fighting this crisis but it has somewhat undermined central bank independence across both developed and developing economies.

The operations and remits of CBs and Monetary policy have been challenged by the highest of executive and legal authorities in the US and EU. One of the reasons is the limited effectiveness of monetary policy (close to zero lower bound) including Quantitative Easing (QE) and unconventional monetary policy (UMP). CBs are now examining the merits of Japanese style Yield Curve Control (YCC) and Negative interest rates while conducting reviews of their monetary policy. The catch-all phrase of "Japanification of Europe and US" masks important differences in terms of labor markets, financial market microstructure, credit and housing markets, institutional structure and consumption patterns. We hope for a strong and quick broad-based recovery with lower than expected job losses and no second waves of outbreaks.

By Amlan Roy

Global Macro Highlights

Covid-19 Kills Global Growth

We last released our GMPR Quarterly publication in March, at the height of uncertainty about both the path of the Covid-19 outbreak and the path of economic activity. Since then, we learned a lot both about the intensity of this shock and about our ability to cope with it. One thing was clear then and is even clearer now: this is a crisis like no other! There is no genuine basis of comparison for the utter collapse in economic activity that unfolded seemingly in the blink of an eye…but neither have we ever seen a policy response so fast, so powerful, and so well coordinated not just across monetary and fiscal authorities but also around the world.

Still, it is just not enough to prevent an outright contraction in **global GDP** this year. We were already projecting recessions in Japan and across European economies in our last update but that bleak reality has since become the unavoidable conclusion almost across the board. As the virus spread globally, even emerging markets that at one point were viewed as unlikely to resort to large lockdowns have since been forced to adopt them, India being a case in point. The result is fewer deaths but at an enormous economic cost. Indeed, the reason global economic performance is decidedly worse this year than even during the Global Financial crisis has a lot to do with the lack of resilience in emerging markets. China had been a growth anchor for the world economy in the last global recession but it cannot play that role today. Still, it is one of the very few economies likely to squeeze in a modest positive growth this year.

How are we going to dig ourselves out of this hole? Three things are needed. Given the nature of this crisis, a lot of policy support is required merely to compensate for forced/mandated loss of economic activity. In the Global Financial Crisis, monetary policy played a tremendous role in supporting the economy with the resulting “lower for longer” tagline. With less room for traditional monetary stimulus remaining, fiscal support has been impressively forthcoming. If we were to hazard a guess, we’d say that the Covid-19 tag line will reference fiscal stimulus injections that will turn out to be “larger for longer”.

Indeed, the amount of **policy stimulus** unleashed to fight the pandemic-induced recession has been staggering. The response has been remarkably uniform across countries, with less of the typical differentiation between the developed and emerging market policy script. Practically every central bank cut rates aggressively, many have boosted or started QE operations (even among EM central banks) and every government boosted spending. A crisis requires a crisis-type response and policymakers have (rightly) concluded that now is not the time to worry about all that debt. And yet, not all countries have the same degree of room for fiscal and monetary stimulus and it seems only a matter of time until investors become more differentiating across issuers once again. Some defaults are unavoidable. And while they might have been triggered by a genuine black swan event, they will be defaults nonetheless. The IMF and World Bank have an important role to play in minimizing precisely this sort of second-round effect at the global level. Unfortunately, they seem to lack both the necessary resources and the political backing to enhance their effectiveness.

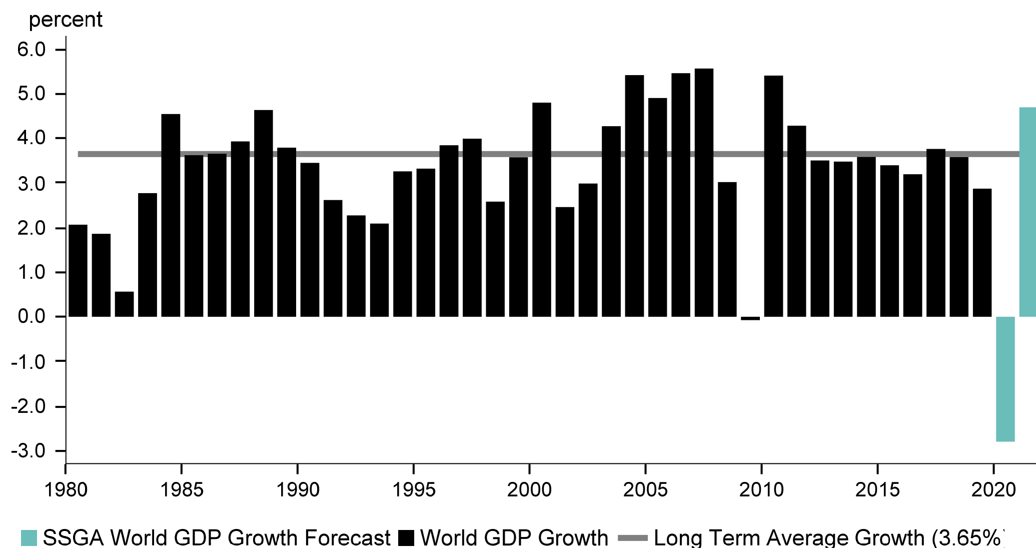
One key test of the viability of the macro policy response to this crisis will be inflation. It had been a very long time since policymakers in developed markets (and even in many emerging markets) needed to worry about inflation being too high. Interestingly, while our growth forecasts have changed meaningfully since last quarter, **global inflation forecasts** have not. One key reason for this is that the dramatic decline in global oil

prices—always a big determinant of global inflation—had already been incorporated in our projections, as had been slower global growth. But it is interesting to note that while Covid-19 has proven a net deflationary shock globally, the intensity of that deflationary shock will vary globally. One area where we are actually seeing inflation is in food prices. A combination of shortages amid hoarding and the inability to deploy seasonal workers for crop collection will lead to crop losses in some developed economies, impacting the global food balance and possibly driving food prices up globally. To the extent that emerging markets CPI baskets remain more heavily skewed towards food, this may suggest somewhat higher inflationary pressures in emerging than in developed markets, further exacerbated in some cases by currency depreciation.

Ultimately, however, no amount of policy stimulus can compensate for the lack of underlying economic activity. Unless reopen and *stay open*, the GDP contraction will get deeper and deeper despite all efforts at compensatory stimulus. Resuming economic activity is therefore the second "must have" for emerging from the crisis. We firmly believe that the right policy response going forward, even in the event of a second-wave outbreak is one of targeted containment rather than broad lockdowns.

And thirdly, a full, broad, and genuine resolution to the crisis must by necessity involve a remedial medical solution that will not only provide immunity to the virus but also eliminate the stigma and fear currently associated with travel, mass gatherings, and normal human interaction. The increased share of services in GDP is typically a sign of a nation's economic development. Today, it is also a big vulnerability.

Figure 1: Covid-19 Kills Global Growth



Sources: SSGA Economics, IMF WEO
Updated as of 6/18/2020

Summary of World Output[1] and Inflation[2]

(Annual percent change)

	Weight	History					Forecast	
	(2018)	2015	2016	2017	2018	2019	2020	2021
World Growth	100.0	3.5	3.3	3.8	3.6	3.0	-2.8	4.7
Advanced Economies	40.8	2.3	1.7	2.5	2.3	1.7	-4.3	3.9
US	15.2	2.9	1.6	2.4	2.9	2.3	-3.4	3.9
Euro area	11.4	2.0	1.9	2.7	1.9	1.2	-6.6	5.0
Germany	3.2	1.7	2.2	2.5	1.5	0.6	-5.0	5.2
France	2.2	1.0	1.0	2.4	1.8	1.5	-6.9	5.0
Italy	1.8	0.8	1.3	1.7	0.8	0.3	-8.5	5.0
Japan	4.2	1.3	0.5	2.2	0.3	0.7	-4.2	2.5
UK	2.2	2.4	1.9	1.9	1.3	1.4	-6.7	4.4
Canada	1.4	0.7	1.0	3.2	2.0	1.7	-5.6	5.7
Australia	1.0	2.3	2.8	2.5	2.7	1.8	-2.2	3.9
Developing Economies	59.2	4.3	4.6	4.8	4.5	3.9	-1.8	5.3
Advanced Economy Inflation	40.8	0.3	0.8	1.7	2.0	1.5	0.7	1.5
US	15.2	0.1	1.3	2.1	2.4	1.8	0.6	1.7
Euro area	11.4	0.2	0.2	1.5	1.8	1.2	0.4	1.2
Germany	3.2	0.0	0.5	1.5	1.7	1.4	0.6	1.2
France	2.2	0.0	0.2	1.0	1.9	1.1	0.4	1.4
Italy	1.8	0.0	-0.1	1.2	1.1	0.6	-0.5	1.0
Japan	4.2	0.8	-0.1	0.5	1.0	0.6	-0.3	-0.2
UK	2.2	0.1	0.6	2.7	2.5	1.8	0.8	1.7
Canada	1.4	1.1	1.4	1.6	2.2	1.9	0.9	1.5
Australia	1.0	1.5	1.3	1.9	1.9	1.6	0.6	1.3
Developing Economies	59.2	4.7	4.2	4.3	5.0	4.8	3.0	4.0
Value of World Output ($ trl)								
At Market Exchange Rates		74.8	75.8	80.3	84.9	86.6	84.1	88.1
At Purchasing Power Parities		115.8	120.8	127.7	135.4	141.9	137.9	144.4

[1] Real GDP; [2] Consumer Price Inflation

Weight represents the share of world GDP on a purchasing power parity basis. IMF: *World Economic Outlook*

Source for historical data: Oxford Economicsnational sources, and IMF. Forecast: SSGA Global Macro and Policy Research

Politics and Geopolitics

US 2020 – The Covid Election

We had been concerned about the US presidential elections coming into this year, describing them as an "EM election with a reserve currency". From past research, we understand how narrow, polarized and disputed elections in EM reverberate in asset prices. However, we have no past experience with similar events in an economy with a reserve currency and the deepest of capital markets. In short, the downside risks are far more numerous than any possible upside policy surprises.

Recent social unrest in the US illustrates the potential for tail risk outcomes. Investors are rightly beginning to re-examine the impact of the upcoming election. Pre-pandemic surveys of international investors had showed majorities in excess of 80% believed President Trump was sailing toward re-election while betting markets had ranked his odds around 60%. Our own fundamental analysis had put it closer to a coin toss back in February. The economic shock now lowers those re-election prospects dramatically. Table 1 draws on the strongest correlations of indicators in post-war US presidential elections (admittedly a very small data sample), using the 6-month average preceding the election. The second column highlights the lowest threshold that an incumbent party enjoyed during a re-election, while the others give recent point-in-time accounts. Only consumer confidence still hovers above the minimum threshold, though that is an arithmetic function given that we have only had three post-Covid survey results.

Table 1: National Macro Indicators and US Presidential Re-Election Correlation

Indicator	*Minimum Threshold*	*2016 Comp*	*Pre-Covid*	*Current*	*Yes/No*
Real Disposable Income Growth	1.3%	0.7%	2.2 %	1.05%	X
Nonfarm Payrolls	127k	208k	176k	-3.15m	X
Real Personal Consumption	2.4%	2.7%	3.9%	-2.9%	X
Real GDP	1.1%	2.05%	2.05%	-1.35%	X
Consumer Confidence	84.8	107.9	109.8	100.8	√
Presidential Job Approval Rating	47%	51%	44%	45%	X

Source: SSGA Global Macro Policy Research; Macrobond; Federal Reserve; Bureau of Labor Statistics; U. Michigan

Even more ominous given electoral college dynamics, the handful of swing states that are truly relevant in this election have suffered disproportionately from the public health and economic crisis. President Trump's approval ratings in swing states yields an average of 41%; all recent direct head-to-head surveys against Joe Biden are now below levels needed for re-election, though still conceivably close. The President's strategy now relies on risky gambles to generate a comeback, many of which may challenge existing legal or constitutional norms.

These shifting dynamics are introducing ‘election uncertainty premia’ earlier than in typical presidential election years. Moreover, given the wider range of policy outcomes (on top of various Democratic proposals, there is not even clarity about policy priorities in a Trump II administration), this premium will necessarily be wider than in regular election cycles.

In the post-WWII era, presidential election years generated an average 11.6% gain in the S&P 500, a large chunk of which materializes in the second half of the year once markets can forecast the election outcome. The drawdown in the first quarter means such returns are fanciful, but more concerning is whether US polarization makes these elections a high-stakes drama similar to EM elections. Moreover, there is a considerable risk we see the effects of long-term erosion of US institutions, notably those that govern the propriety and credibility of its election process. Already today, there are a number of significant legal disputes in key swing states in anticipation of the November vote (e.g. felon re-enfranchisement in Florida; voter rolls removal in Wisconsin; voter ID requirements in North Carolina; ranked-choice voting in Maine) that may not be resolved by then. Any election victory that relies on the outcome in just one or two states is liable to be challenged by the losing party in a drawn-out legal process. In any event, Covid-19 means that the share of mail-in ballots will reach an all-time high, preventing the declaration of a winner on election night unless it’s a landslide.

From a markets perspective, the worst outcome would be a narrow loss for President Trump that he refuses to accept, plunging the US into a constitutional crisis far worse than the 2000 Florida recount. It is not clear how many weeks would pass before weak sentiment could further damage real-world capex and consumer confidence suffering from Covid overhang.

In comparable EM elections, asset price movements follow a conventional pattern: higher volatility, sharp currency depreciation and depressed equity markets as foreign investors head for the exit. But how would this play out with the world’s reserve currency, the largest equity market and the quintessential risk-free asset? The 2008 financial crisis originated in the US, but US assets still operated as the safe haven vehicle in the actual crisis nonetheless. Would a home-made political crisis alter that safe-haven perception? There remain few alternatives to USD instruments that offer the same safety and liquidity characteristics, but we would nonetheless expect some capital outflows. This would not only mean classic safe havens like the Yen, Swissie and Gold would benefit, but there would be capital flows driven by home bias and safety parameters, benefiting most counterparts to the dollar. In short, the US election could provide the trigger for the long-awaited end of the strong dollar cycle with big implications for the coming decade.

Demographics and Pensions

Fiscal issues, Debt, Growth, Health and Inequality

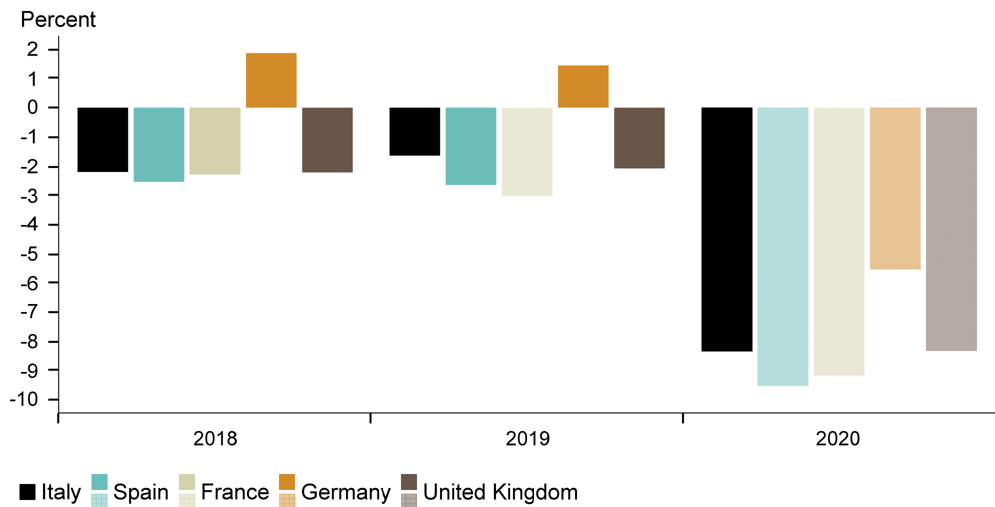
In this section, we review EU fiscal policies and US COVID-outcomes by state, highlighting divergences along the income-health-inequality nexus.

European Fiscal Policies: Fiscal rescue packages over the last few months have been crucial in supporting the EU27 recovery by mitigating unemployment and supporting households and firms. But these actions led to higher public debt, contributing to increased financial stability risks. As economic recovery in Europe is still fragile and the uncertainty around this recovery will likely persist in to the medium-term, questions about how debt can be managed are top of mind.

Since the crisis onset, lockdowns to contain the spread of the virus have resulted in massive economic disruption, job losses, falling consumer demand and confidence as well as tighter financial conditions. As highlighted in our report "COVID-19 Requires Coordinated Global Policy Response"[1], the global economy is now facing much deeper recessions across many more countries compared to the GFC. Shutdowns have led to declines of more than 20% of GDP in many countries.

Net government borrowing has widened globally, particularly in European countries due to lower tax revenue and large increase in spending. As in Figure 2, general government net borrowing in terms of GDP is forecasted to at least triple across four selected European countries Italy, Spain, France and the UK. Germany's general government net lending of 1.5% in 2019 is also expected to turn to net borrowing at -5.5% of GDP in 2020.

Figure 2: General Government Net Lending/Borrowing, % of GDP



Sources: International Monetary Fund (IMF)

European public finances are expected to improve in 2021, yet budget deficits and debts will likely remain very elevated compared to 2019. As per IMF's WEO April 2020, government debt as a share of GDP in the Euro Area is expected to increase from 84.1% in 2019 to 97.4% in 2020 with fiscal balance widening from

[1] https://www.ssga.com/uk/en_gb/institutional/ic/insights/requires-coordinated-global-policy-response

-0.7% of GDP in 2019 to -7.5% of GDP in 2020. While fiscal stimulus is important for the economic recovery, fiscal packages need to be structured in a way such that short to medium-term risks to financial stability is minimized. Medium to long-term debt sustainability concerns will necessarily require renegotiation of age-related pensions, health and social care promises in a low growth, low rates world.

Covid-19 Perspectives from the Lenses of Demographics, Economics and Health: US States in Focus

Research on the COVID-19 transmission and adverse effects has attempted to analyze the relationship between Covid-19 and socio-economic and demographic factors. H. Clarke and P. Whiteley (2020) show that population size, population density, inequality and health care can help predict the Covid-19 deaths in the US. E.M. Harrison et al. (2020) found that South Asian ethnic minorities in UK are at greater risk of dying from Covid-19, partly due to their pre-existing diabetes. U.V. Mahajan and M. Larkins-Pettigrew (2020) confirmed a weak, but very significant, positive relationship exists between the percentage of African–Americans living in a county and the percentage of COVID-19 confirmed cases, confirmed deaths and case mortality in the county in US.

We present in table 2 the variables that positively correlate with the Covid-19 cases and deaths. Using Spearman-rank correlation test, a non-parametric test on the ranking correlation, we note that there is a strong positive relationship between each of the variables (real personal income, population density, income inequality, race and ethnic minorities population, elderly support ratio) and confirmed COVID cases and COVID deaths. We concur with current ongoing recent studies that there should be greater emphasis on income and health equality. This will allow for greater resilience to health shocks like COVID or SARS in the future.

Table 2: US State-Level Covid-19 Cases & Deaths, Demographic and Economic Indicators: Top 5 & Bottom 5 states

	Cases/100k		Pop Density (pop/mi^2)		Gini Inequ Coef 2013/17		Race&Ethnic Minority (%), 2018		Elderly Support Ratio, 2018		Real Personal Income, 2019	
Top 5	1,968	NY	11,815	DC	53.1	DC	78.2	HI	2.9	FL	84,538	DC
	1,879	NJ	1,215	NJ	51.3	NY	63.2	CA	2.9	ME	79,087	CT
	1,534	MA	1,021	RI	49.5	CT	62.9	DC	3	WV	74,967	MA
	1,529	RI	894	MA	49.1	LA	62.9	NM	3.2	DE	71,440	NY
	1,398	DC	736	CT	48.9	CA	58.5	TX	3.2	MT	70,979	NJ
Bottom 5	146	OR	12	SD	44.0	HI	14.1	MT	4.5	GA	44,017	KY
	130	WV	11	ND	43.5	NH	10.0	NH	4.9	TX	43,984	NM
	92	AK	7	MT	42.9	WY	7.9	WV	5.4	AK	43,880	AL
	58	MT	6	WY	42.6	UT	7.5	VT	5.4	UT	42,336	WV
	52	HI	1	AK	41.8	AK	6.9	ME	5.7	DC	39,368	MS

Sources: WHO, US Census, PRB, BEA, Global Macro Policy Research.

Country Macro Highlights

A country by country look at the Covid-19 impact and policy response. Well-coordinated fiscal and monetary policy stimulus, alongside abundant health system capacity are key to an effective response. The ultimate resolution comes via a vaccine, however.

US: Fighting Back

There is perhaps no better illustration of the extent of economic damage caused by Covid-19 than to say that a decade worth of job creation in the longest ever US expansion was wiped out in just two months during March and April. The short term economic impact has indeed been greater than we anticipated back in March, largely on account of longer and more severe restrictions on movement and a more cautious re-opening process than we had originally assumed. But the re-opening process now afoot seems to validate the core tenet of our macro narrative of the past few months: the idea that the acute phase of the Covid crisis is a three- rather than a six-month scenario. This core view was the basis of our more positive than consensus view of US economic performance on day one and is partly why we remain more positive than consensus today. Admittedly, fears of a second-wave outbreak have escalated just as we are going to press amid a pick-up in cases in several states, mostly in the South. But we are of the view that there are plenty of good options in between the extremes of lockdowns, on one hand, and unbridled freedom of movement on the other; we hope that states will chose wisely and go for those options that will both allow their economies to stay open while also minimizing the virus spread. Face masks look like a small price to pay given how much is at stake!

And so, the United States is officially in recession, the National Bureau of Economic Research (NBER) having declared it so a couple of weeks ago when it determined that economic activity peaked in February. The NBER noted that “the usual definition of a recession involves a decline in economic activity that lasts more than a few months”. However, other considerations such as intensity and breadth matter and these warranted “the designation of this episode as a recession, even if it turns out to be briefer than earlier contractions.”

It could be not just briefer, but *much* briefer. Throughout this episode, we’ve been highlighting many data incongruities that illustrate the unusual nature of this economic contraction and suggest that the recovery could be unprecedentedly swift as well. Extraordinary monetary and fiscal stimulus play a key role here. The Fed moved quickly and decisively with a “whatever it takes” approach to unfreeze financial markets and restore confidence. For a sense of magnitude, suffice to note that the Fed’s balance sheet was a little over $4 trillion in February. By May, it had swelled to $7 trillion! It seems poised to grow further before topping off; based on Chair Powell’s testimony in Congress this week, it will be a really long time before it starts shrinking again. And, having cut the Fed Funds rate to 0.25%, the FOMC is “not even thinking about thinking” about raising interest rates. So, monetary accommodation is here to stay. Fiscal stimulus has been equally swift and large. The $3 trillion CARES act with its stimulus checks and supplemental unemployment insurance benefits allowed personal income to spike 10% in April despite a 15% unemployment rate. The personal savings rate has therefore shot up to a never-before-seen 33%, implying a decent financial cushion for consumers.

Not that surprisingly, then, retail sales jumped by a record 17.7% in May; mortgage applications for home purchases are at an 11-year high. Clearly, this is not your typical recession! And while the recovery will vary across sectors, with areas like travel, hospitality, events, etc. likely under pressure for some time, the seeds of improvement are here.

It is because of this that we continue to lean more positive than consensus on US growth. The Bloomberg consensus right now is for a 5.7% GDP contraction this year. We expect a smaller 3.4% decline. And we see a sharper rebound in 2021 on expectations that the policy response to a second wave outbreak will not consist of broad lockdowns, and that there will be some measurable progress on remedial medical solutions to the virus such that the most vulnerable groups can benefit by late 2020/early 2021.

Do not take this to mean that even in a best case scenario, we will have fully overcome the Covid-19 crisis by the end of 2021. There will be lasting scars. It may take several years, not just one or two, for the unemployment rate to go back down to 3.5%. And when it does, it will be partly due to people falling out of the labor force altogether—an unfortunate trend towards lower labor force participation that we had just recently began to meaningfully overcome. Chair Powell warned that there may be “well into the millions” of people who might not only not have their old jobs to go back to but not even other jobs in the same sector. That estimate does not seem like unwarranted gloom, but rather acknowledgement that Covid-19 will have not just short term impact but will also drive long-lasting shifts in consumer and business preferences. Even if only one thing were to change—say, wider adoption of work from home arrangements—that in and of itself will have wide-ranging implications for commercial real estate, for inner city demand for restaurants and leisure, and even for internal migration within the United States. Not all changes need be detrimental, however. To the extent that Covid-19 may also prove to be a catalyst for technology adoption not just in professional services but also medical care and education, efficiency and productivity could improve. Still, that process of creative destruction involves a destruction element that may be painful to go through and might take some time to complete.

What of shorter-term risks? Undoubtedly, the biggest risk to the short term outlook comes from a severe second-wave outbreak that force renewed and widespread lockdowns. There are then electoral uncertainties to contend with, and given the divergent policy agendas of the two parties, the impact on the economy could be substantial. Even without a policy change per se, there might be a “fiscal cliff” element to contend with at some point in 2021. For now—and probably for a while longer—policy makers are committed to “whatever it takes” stimulus. But there will come a time, likely after the elections, that every additional dollar in stimulus may be weighed much more carefully. And at some point, after the flood of stimulus slows to a trickle, it will eventually stop altogether. We will have to see whether the economy is healthy enough to not stumble when the stimulus crutch is removed.

Inflation is not an issue, at least not in the near term. However, inflation uncertainty has sharply increased in the last few months. Investors are looking at the recent wall of debt issuance and wonder whether this might not finally ignite inflation. Consumers are looking at shortage-induced higher food prices and wonder whether this does not signal a new trend. Both are looking at the rising likelihood of

supply chain relocation towards higher cost location and wonder if those higher costs of production would ultimately be passed on to the end buyers. These are all things to watch, but we aren't overly concerned for two main reasons. One has to do with the technology adoption process discussed above. To the extent that technology adoption manages to bring down costs in healthcare and education—two of the sectors experiencing above average inflation in the US—that may compensate for inflationary pressures originating elsewhere. The other reason also has to do with lasting Covid-19 impact. To the extent that remote working reduces demand for and the price of office and housing space in high-price metropolitan areas, it could also put a cap on housing inflation. So while we are watching, we aren't necessarily watching with too much alarm. .

Canada: Solid Rebound Expected In 2021

2020 is shaping up to be a difficult year for Canada. Even before the year started, activity in the fourth quarter faced quite a lot of distractions— including pipeline shutdowns, rail transportation strikes, strikes disrupting motor vehicle and parts manufacturing, and continued global trade tensions and market uncertainty. Most of these were carried forward to 2020, and then COVID-19 struck. GDP is most likely to return to its pre-crisis level only in 2022, later than in the US. This reflects Canada's larger drag from oil, smaller fiscal response, and its private sector financial deficit.

The first quarter GDP contracted by 8.2% on a seasonally adjusted annual rate (saar). The decline reflected several issues plaguing the economy since the end of 2019—the GM strike in US which disrupted auto production, the Ontario teachers' strike and rail blockades in February, and then the measures imposed to contain the pandemic, closure of non-essential businesses and travel, and restrictions on travel and tourism. Domestic demand shrank by 1.5% over the quarter, the most since GFC, led by the sharpest fall on record in household consumption expenditure. The second quarter will be much worse, given the lockdowns led to an almost complete halt of activity. Fiscal easing is unlikely to fully offset the hit to disposable income, triggering some second-round effects. Secondly, oil prices, though double the April low, are still low and just about enough to cover cash costs of the average oil producer. The oil rent to GDP ratio has increased since 2015, signifying a meaningful drag on growth. We have updated our GDP forecasts to reflect these factors, and now expect a 5.6% contraction in 2020 from -0.7% earlier. However, with the resuming of activity, the strain will be much smaller than the direct effect of lockdowns. Oil prices should also recover further as demand picks up. Significant depreciation pressures on the CAD should help cushion some of the blow and we see a recovery in exports in the fourth quarter of 2020.

We expect a solid rebound in 2021. The Covid-19 shock is expected to be a temporary one, and unlikely to persist beyond 2020. The USMCA tri-partite deal signed earlier will be a big positive for trade, and also help boost investor sentiment. Our expectation is for GDP to grow by 5.7% in 2021.

Lower gasoline prices pulled headline consumer price inflation further down in May to a negative 0.4% y/y, following a 0.2% decline in April. Overall energy inflation picked up, but is still down 19.0% compared to last year. Transportation services costs also declined by 3.0% due to weakening travel demand. Food prices are still

high, as people stay and home and prefer cooking to eating out. We expect food inflation to normalize in coming months, while energy prices and transportation continue to be drag on inflation. The output gap—the main driver of the BoC's inflation projections—still remains considerable, while lower CAD will lead to a decline in terms of trade. Consequently we see inflation at 0.9% in 2020, down six tenths from our earlier estimate, before climbing to 1.5% in 2021.

The Bank of Canada believes that the economy has avoided the worst-case scenario from the April Monetary Policy Report. We don't expect significant changes from incoming Governor Tiff Macklem in the near-term and expect the BoC to remain focused on closing the very large output gap. We still expect additional asset purchases and qualitative forward guidance but believe that negative rates are unlikely. The Bank of Canada will continue with the current accommodative policy stance until the economy is roughly at full employment and inflation at 2%. A comprehensive reassessment of the BoC policy response is likely at the July 15 meeting as the focus under the new Governor shifts from market functioning to supporting aggregate demand. We expect the announcement in coming months of forward guidance, likely tied to inflation and plausibly reinforced with short-end yield curve control, and possibly additional credit easing.

UK: A Series of Unfortunate Events

It used to be that the biggest threat to UK's economic outlook was Brexit. Ah, the good old days…Well, everything is relative, and now the UK, alongside the entire world, has a much bigger problem on its hands. Unfortunately, several unfavorable factors will exacerbate the near-term economic hit. The country has gone back and forth on its approach to the outbreak, initially going for limited restrictions of movement in a bid to achieve herd immunity. Before long, as cases mounted, it jolted to the other extreme of severe and extended lockdowns. Confusion added to the natural uncertainty associated with this crisis, hurting already soft consumer and business sentiment. In fact, this is the main differentiating factor between the UK and most other developed economies as it entered the Covid crisis: it started from a weak point. Brexit uncertainty had been eroding confidence for years, such that despite a strong labor market, consumer spending had grown a meager 1.1% in 2019 while fixed investment has been practically flat for the past two years. And then there is the unfortunate sequence of events: the acute Covid hit to eurozone economies occurred in Q1, causing UK exports to collapse 10% in the first quarter. And now the UK is lagging in the reopening process, delaying the recovery.

The impressive coordination of monetary and fiscal policy, so evidently displayed and so swiftly delivered by UK authorities, was helpful. The Bank of England cut the Bank Rate by 65 basis points to 0.1% and it increased the QE program from £435 billion to £745 billion, engaging in various liquidity operations and extending real-economy lending incentives The government has also sharply scaled up fiscal stimulus given the rapidly deteriorating outbreak situation. It was notable that in the midst of this crisis the policy response has been so smooth that the change of leadership at the Bank of England passed nearly unnoticed. Andrew Bailey took over as BoE governor on March 16.

Just as practically everywhere else, this policy support will not be enough to prevent a recession. Back in March, we anticipated a modest contraction in 2020

GDP. Now, we expect a large one, due partly to weaker global growth and partly to the UK specific challenges noted above. GDP looks poised to shrink by more than 6.0% this year, having already contracted by 2.0% q/q during the first quarter. And Brexit related uncertainty will likely hinder the 2021 recovery, even though the Covid-19 crisis does appear to have "focused the mind" a little in respect to negotiations. Still, in line with our core assumption that a second wave outbreak will not result in broad lockdowns and that by late 2020/early 2021 the most vulnerable groups would have access to some remedial medical solutions to the disease, the economy should rebound by around 4.5%. There is already some evidence that, in line with the US experience, a degree of pent-up demand will materialized once the economy reopens. Retail sales, which had plunged 18% in April, rebounded 12% in May.

Inflation had moderated quite noticeably at the end of 2019 and while that was starting to turn around, Covid-19 has squished that resurgence in the bud. Indeed, CPI inflation decelerated to just 0.5% y/y in May, the lowest level since mid-2016 as energy prices collapsed. As demand rebounds and energy prices strengthen, overall inflation will pick up but in a non-problematic fashion in 2021.

Eurozone: The Crisis That (Finally) Unites?

The eurozone presents an interesting case in the current Covid-19 drama. Cyclically, it will be one of the worst affected regions, its vulnerabilities stemming from high levels of economic openness, dependence on global tourism and luxury good demand, elderly populations, and macro policy constraints related to institutional rigidities in the eurozone and EU constructs. And yet, this is also the region that may emerge out of this crisis in a much better shape from a structural standpoint as the intensity of this shock is finally energizing transformative integrational efforts to a larger extent than either the GFC or the euro crisis were able to do.

After years when ECB rate cuts and QE seemed to mark the extent of macro policy support available to the region's economy, we are now finally witnessing a meaningful fiscal policy response, not just at the national level (including in traditionally austere countries like Germany) but—most importantly—at the supranational level. While final agreement is still months away, with the support of core allies Germany and France, a sizable increase in the EU budget is currently being debated and will likely be approved. Meanwhile, the ECB is also stepping on the stimulus gas pedal, having nearly doubled the size of its Pandemic Emergency Purchase Program to €1,350 billion. So despite legal controversies surrounding the terms of its QE program, the ECB appears entirely undeterred.

We expect the eurozone economy to contract by about 6.5% in 2020 before rebounding by about 5.0% in 2021. Unsurprisingly, Germany outperforms that trajectory given sizable counter-cyclical stimulus, stronger consumer finances, and lesser dependence on tourism. Also unsurprisingly, Italy underperforms this year, though a normalization in tourism flows and favorable base comparisons should allow it to keep up with the rest of the region in 2021. France falls in between.

Inflation continues to undershoot targets but this is hardly anything new. And, in the big scheme of things, it is also the least of everyone's worry at the moment. If

anything, it's probably is a bit of a blessing as it helps erode opposition to increased fiscal stimulus from would-be inflation hawks, thereby facilitating fiscal stimulus passage.

Japan: Huge Stimulus, But Will It Stimulate Spending?

Japan has been perceived to be lax in its response to the crisis, both in terms of imposing the lockdown, as well as announcing fiscal measures, which has cost Prime Minister Abe his popularity. However, observers underestimate Japan's success in managing the pandemic. Japan has fared much better than countries with similar demographics, such as Italy. Having declared a state of Emergency on 7th April, parts of the economy have been successfully reopened since mid-May,. The fiscal measures undertaken by the government are the most expansive globally, with the total size of stimulus announced so far topping 40% of GDP. Even if just the amount budgeted to finance direct expenditure is considered, the size is extraordinary at ¥121 trillion (or 22% of GDP). The difference is made up of loan programs or equivalent programs, as the government can leverage a fraction of the cost to create a larger loan program. This crisis is also an opportunity to implement structural reforms and revive growth, which had stalled over the past several decades.

However, there are some challenges. Japan was already struggling before the coronavirus outbreak. Natural disasters, and more recently, the hike in consumption tax had slowed the economy down considerably. The decline in first quarter GDP was broad-based, with all but government consumption recording a contraction. Consumer confidence and retail sales data had been showing only modest signs of recovery when social distancing measures began hurting spending again. The hit to growth is bound to intensify in the second quarter. Taking into account the poor first half, we expect a 4.2% drop in GDP in 2020, as tweak household spending is exacerbated by declines in exports and capex.

It is likely that the worst of the shock is behind us, and consumption should improve from May onwards. However, it will take a considerable amount of time for activity to reach pre-COVID levels. Households will stay cautious and parts of consumption (i.e. restaurants, recreational services) will remain lukewarm for some time. This is consistent with the Japanese culture of Jishuku (self-restraint) which followed the Fukushima disaster. Business investments should also remain weak, reflecting the lagged effects of hits to corporate profits as well as uncertainties around the economic outlook. We must also consider the second round effects on household and corporate incomes from layoffs and bankruptcies. The evolution of exports are also susceptible to unexpected drop in global demand. Consequently, we anticipate only a moderate rise of 2.5% in output in 2021.

The labor market has been resolute. Along with long-term employment practices, the (still) high jobs-to-openings ratio indicates labor shortages which prevented firms from firing workers, limiting the immediate rise in unemployment. However, the job market is at greater risk than in the past, as the share of irregular workers has risen significantly over the past decades, especially in the most vulnerable segments, such as tourism, dining, and other personal services. An extension of the Employment Adjustment Subsidy, the government subsidy program to support firms in retaining workers, will help reduce the risk of a sharp rise in unemployment

in the near term, but pushes labor costs to the future. As the recovery takes hold, the fading of emergency labor market supports will leave employers with high labor costs, requiring permanent downsizing in some sectors. This poses medium-term challenges, dragging on the pace of recovery, and leaving output well below the pre-COVID level for some time.

Inflation has deviated considerably from target, with core CPI in April falling 0.2% y/y, at the lowest since December 2016. We expect underlying inflation momentum to weaken further, reflecting weak economic growth and the decline in crude oil prices. Some components, like prices for hotels and package tours to overseas are expected to decline, directly affected by the curb on inbound tourism, and items such as dining-out and recreational activities, are likely to become somewhat weak. The temporary boost to items associated with staying at home, like non-perishable food and household durables will also wane in the medium to long-term, with the deceleration in inflation extending well into the 2021. We revise our forecast for inflation downward to -0.3% y/y in 2020, before picking up marginally to -0.2% y/y in 2021.

The Bank of Japan is now effectively the largest institutional buyer of JGBs, corporate bonds and corporate papers. The move earlier to eliminate the ¥80 trillion reference for its JGB purchases was largely symbolic, and brings the BoJ at par with the Fed and ECB who have committed to unlimited bond purchases. The purchase of JGBs might need to be stepped up, to absorb additional issuance by the government, thereby keeping the yield curve low and stable. While the government takes on credit risk as it supports corporate financing, the BOJ will continue to provide liquidity to try and ease strains in the financial system. Governor Kuroda recently emphasized that the BoJ will not hesitate to step in with additional easing as necessary, and said there are still various means at its disposal, including lowering short- and long-term policy rates. However, it is unlikely for the BoJ to act unless the situation worsens considerably, or a rapid appreciation of Yen occurs. It appears that options for additional easing that could prove effective from a cost-benefit perspective have been almost exhausted, hence we expect the BoJ to maintain its current stance through to 2021.

Australia: Recession—A Short Scare!

Our assessment that the pandemic will be a three month peak event appears to have been borne out as Australia seems to be already on the way to recovery. Still, the Covid crisis has dinged Australia's record of uninterrupted growth over the last three decades, ushering in a technical recession. And the outlook remains highly uncertain. This is what the Reserve Bank of Australia noted in its May Statement on Monetary Policy—"The Australian economy is expected to record a contraction in GDP of around 10 per cent over the first half of 2020; total hours worked are expected to decline by around 20 per cent and the unemployment rate is forecast to rise to around 10 per cent in the June quarter. Headline inflation is expected to be negative in the June quarter largely as a result of lower fuel prices and free child care; underlying inflation is expected to decline notably."

We have been more bullish than consensus regarding the pace of recovery, and recent unfolding of events indicate that we were possibly right in thinking so. Let's start with the first quarter GDP, which contracted by only 0.3% q/q. Considering the

impact of bushfires early in the year, and then the supply chain disruptions and hit to tourism from China (the largest source of inbound tourists), it does not look too bad. Admittedly, domestic demand was very weak, dampened by a 1.1% fall in household consumption. No doubt spending will drop further in the second quarter, but the most impacted sectors, like restaurants, transportation and apparels will pick up as the economy normalizes. As a matter of fact, most states have allowed pubs and restaurants to re-open, with New South Wales recently lifting restrictions on the number of customers allowed from ten at a time to 50. Consumer sentiment rose 6.3% in June, returning to pre-virus levels, driven by rising perceptions of economic conditions over the next year and an increase in the 'time to buy a major household item'. The outlook around the labor market has also improved, consistent with Australia's ongoing progress in suppressing the virus and restarting economic activity.

Business investment was lower by 0.8% in the first quarter—led by falling housing construction (-1.7%, seventh consecutive fall) as well as non-housing construction (-2.3%). Housing remains one of the key pieces of the puzzle. A gradual recovery in prices will go a long way in helping revive consumer sentiment, as well as support home building. Adding to the fiscal stimulus already undertaken, the government announced a A$680 million HomeBuilder package in June, which grants A$25,000 for owner-occupiers who are building a new home or doing a renovation. This is a substantial grant, and will provide some support to the residential construction sector. The limited time frame of the program implies that it will bring forward additional private spending on residential construction in the short term, and go some way to plugging the hole in construction activity. Public sector spending has been a mainstay of growth, which added 0.3 percentage points to Q1 GDP growth. Unprecedented fiscal stimulus measures ensure that it will remain so, with further concessions down the line. The government may consider bringing forward the personal tax cuts due in 2022, although this has a bigger fiscal cost and may carry credit-rating implications. Media reports also suggest that an additional A$1 billion will be committed for infrastructure spending.

Thus, we concur to RBA Governor Lowe’s assessment that “it is possible that the depth of the downturn will be less than earlier expected”. Contrary to official forecasts, we expect a contraction of around 6% the first half of 2020, followed by a swift revival in the second half. However, it will not be enough to prevent growth declining by 2.2% for full year 2020. Government support payments in 2020 is expected to result in further strong gains in overall household income, helping in a rebound of 3.9% in 2021.

The economy has begun to recovery from pandemic-related lockdowns, but the labor market remains very weak. We expect the policy stimulus measures to be expanded for job market to heal rapidly, with implications for wages and inflation. The policy process will also be occupied by more structural choices. Much of the recently revealed savings from the JobKeeper program can be directed to other programs, such as a targeted extension of JobKeeper and support for residential construction. There could also be funds directed at business investment incentives, among other possible choices. This should put a floor on jobs lost, with the unemployment rate peaking around 7%.

Underlying inflation has run at a soft 1.7-2.0% over the past couple of years as a

result of an increasingly competitive retail environment, smaller administered price increases and, of course, slow wage growth. Low oil prices combined with lack of domestic activity should keep inflation suppressed. Our baseline expectation is for inflation to come in at 0.6% in 2020, revised substantially down from our earlier estimate, before rising to a modest 1.3% in 2021.

While fiscal policy has taken a front seat, monetary policy will continue to support liquidity operations. We do not expect any reductions in the cash rate, given the Reserve Bank of Australia' famous reservations against negative interest rates. On the flipside, Governor Lowe has also noted that RBA is "not going to be raising interest rates until full employment is achieved and we're sustainably within the two per cent to three per cent target range [for inflation]". The government bond markets are operating effectively and the yield on 3-year Australian Government Securities is at the target of around 25 basis points. The RBA appears satisfied with the proceedings, having purchased government bonds on only one occasion since the Board meeting in May, with total purchases to date of around $50 billion. The Bank is prepared to scale-up its bond purchases again and will do whatever is necessary to ensure bond markets remain functional and to achieve the yield target. Further policy measures seem unlikely at least till end 2021, unless markets become dysfunctional and the labor market recovery does not go as expected.

Data Calendar

Week in Review (June 15–June 19)

Country	Release (Date, format)	Consensus	Actual	Last	Comments
Monday, June 15					
US	Empire Manufacturing (Jun, m/m)	-29.6	-0.2	-48.5	Sizable positive surprise.
CA	Manufacturing Sales (Apr, m/m)	-20.0%	-28.5%	-9.8%(↓)	Record drop, the worst is over though.
CA	Existing Home Sales (May, m/m)	na	56.9%	-56.8%	Up noticeably, though still low historically.
JN	Tertiary Industry Index (Apr, m/m)	-7.7%	-6.0%	-3.8%(↑)	The worst is over.
Tuesday, June 16					
US	Retail Sales Advance (May, m/m)	8.4%	17.7%	-14.7%(↑)	Pent-up demand after easing lockdown.
US	Industrial Production (May, m/m)	3.0%	1.4%	-12.5%(↓)	Slow ramp-up after lockdowns.
US	Business Inventories (Apr, m/m)	-1.0%	-1.3%	-0.3%(↓)	Auto inventories down sharply.
US	NAHB Housing Market Index (Jun)	45	58	37	Impressive rebound.
UK	ILO Unemployment Rate (Apr)	4.7%	3.9%	3.9%	Claimant count rate jumped to 7.8%.
UK	Average Weekly Earnings (Apr, 3m y/y)	1.3%	1.0%	2.3%(↓)	Pay declined, as did hours worked.
GE	ZEW Investor Expectations (Jun)	60.0	63.4	51.0	Future expectations continued to improve.
JN	BoJ Monetary Policy Decision	-0.10%	-0.10%	-0.10%	No new policy measures announced.
AU	RBA Meeting Minutes				Accommodative stance reaffirmed.
AU	House Price Index (Q1, q/q)	2.5%	1.6%	3.9%	Housing strong going into the crisis.
Wednesday, June 17					
US	Housing Starts (May, thous)	1100	974	934(↑)	Delays due to social distancing rules…
US	Building Permits (May, thous)	1245	1220	1066(↓)	…but outlook improving.
CA	Teranet/National Bank HPI (May, y/y)	na	6.0%	5.3%	Underlying data shows signs of a slowdown.
CA	CPI (May, y/y)	0.0%	-0.4%	-0.2%	Transportation costs a significant drag.
IT	Industrial Orders (Apr, m/m)	na	-32.2%	-26.4%(↑)	Renewed worries for Italy.
JN	Trade Balance Adjusted (May, ¥ bil.)	na	-601.0	-996.3	Exports still struggling.
Thursday, June 18					
US	Initial Jobless claims (Jun 13, thous)	1290	1508	1566(↑)	Disappointing and perplexing
US	Continuing Claims (Jun 6, thous)	19850	20544	20606(↑)	Disappointing and perplexing given reopening.
US	Philadelphia Fed Business Outlook (Jun)	-21.4	27.5	-43.1	Big upside surprise, shipments sharply higher.
US	Leading Index (May, m/m)	2.4%	2.8%	-6.1%(↓)	A sharp acceleration.
UK	BoE Monetary Policy Decision	0.10%	0.10%	0.10%	BoE expands bond purchase by £100 billion.
AU	Unemployment Rate (May)	6.9%	7.1%	6.4%(↑)	Part-time workers affected disproportionately
Friday, June 19					
CA	Retail Sales (Apr, m/m)	-15.0%	-26.4%	-10.0%	Sales should rebound strongly in May.
UK	Retail Sales (May, m/m)	6.3%	12.0%	-18.0%(↑)	Sales rebound as lockdown lifts.
UK	GfK Consumer Confidence (Jun, prelim)	na	-30	-36	Modest improvement.
JN	CPI (May, y/y)	0.2%	0.1%	0.1%	A second month of negative core CPI.

Source: for data, Bloomberg®; for commentary, State Street Global Advisors Economics.

Week In Preview (June 22–June 26)

Country	Release (Date, format)	Consensus	Last	Comments
Monday, June 22				
US	Existing Home Sales (May, m/m)	-4.2%	-17.8%	
Tuesday, June 23				
US	New Home Sales (May, thous)	630	623	Might be even better given mortgage applications.
UK	Manufacturing PMI (Jun, prelim)	45.5	40.7	
UK	Services PMI (Jun, prelim)	40.0	29.0	
EC	Manufacturing PMI (Jun, prelim)	43.0	39.4	We see scope for upside surprise here.
EC	Services PMI (Jun, prelim)	40.0	30.5	
GE	Manufacturing PMI (Jun, prelim)	42.5	36.6	We see scope for upside surprise here.
GE	Services PMI (Jun, prelim)	40.0	32.6	
FR	Manufacturing PMI (Jun, prelim)	47.0	40.6	
JN	Manufacturing PMI (Jun, prelim)	na	38.4	Slight improvement expected.
JN	Services PMI (Jun, prelim)	na	26.5	Re-opening a harbinger of good news for services.
Wednesday, June 24				
US	FHFA House Price Index (Apr, m/m)	na	0.1%	
GE	IFO Business Climate (Jun)	84.8	79.5	
FR	Business Confidence (Jun)	na	59	
JN	Leading Index (Apr, final)	76.2(p)	85.1	Should get better from here.
Thursday, June 25				
US	Initial Jobless claims (Jun 20, thous)	1300	1508	Still extremely high.
US	Continuing Claims (Jun 13, thous)	na	20544	
US	GDP (Q1, final, q/q saar)	-5.0%(p)	2.1%	
US	Durable Goods Orders (May, prelim, m/m)	10.5%	-17.7%	Orders should bounce as factories reopen.
US	Kansas City Fed Manf. Activity (Jun)	-10	-19	Could it surprise to the upside like Empire and Philly indexes?
GE	GfK Consumer Confidence (Jul)	-12	-18.9	
JN	All Industry Activity Index (Apr, m/m)	-6.6%	-3.8%	
AU	Job vacancies (May	na	6.2%	Keep an eye out to gauge damage to the labor market.
Friday, June 26				
US	Personal Income (May, m/m)	-5.8%	10.5%	Loss of one-time stimulus checks.
US	Personal Spending (May, m/m)	8.7%	-13.6%	Might be even stronger given retail sales.
US	U of Mich Sentiment (Jun, final)	78.9(p)	72.3	
FR	Consumer Confidence (Jun)	95	93	
IT	Consumer Confidence (Jun)	na	94.3	

Source: for data, Bloomberg®; for commentary, State Street Global Advisors Economics.

Economic Indicators

Central Bank Policy Targets

Region	Target	Year/Year %Change in Target				
		Jan	Feb	Mar	Apr	May
US	Target: PCE price index 2.0% y/y	1.8	1.8	1.3	0.5	
Canada	Target: CPI 2.0% y/y, 1.0%-3.0% control range	2.4	2.2	0.9	-0.2	-0.4
UK	Target: CPI 2.0% y/y	1.8	1.7	1.5	0.8	0.5
Eurozone	Target: CPI below but close to 2.0% y/y	1.4	1.2	0.7	0.3	0.1
Japan	Target: CPI 2.0% y/y	0.7	0.4	0.4	0.1	0.1
Australia	Target Range: CPI 2.0%-3.0% y/y	2.2	2.2	2.2		

Source: Macrobond

Key Interest Rates

	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	#####	Apr-20	######
US (top of target range)	2.50	2.25	2.00	1.75	1.75	1.75	1.75	1.75	0.25	0.25	0.25
Canada (Overnight Rate)	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	0.25	0.25	0.25
UK (Bank Rate)	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.10	0.10	0.10
Eurozone (Refi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Japan (OCR)	-0.07	-0.06	-0.06	-0.03	-0.03	-0.07	-0.04	-0.03	-0.07	-0.06	-0.07
Australia (OCR)	1.02	1.00	1.00	0.76	0.75	0.75	0.75	0.75	0.43	0.25	0.25

Source: Macrobond

General Government Structural Balance as a % of Potential GDP

	2011	2012	2013	2014	2015	2016	2017	2018	Forecast 2019	Forecast 2020
US	-8.2	-6.4	-4.5	-3.8	-3.6	-4.4	-4.8	-6.0	-6.3	-6.3
Canada	-3.1	-2.1	-1.1	0.1	0.8	0.7	0.0	-0.2	-0.5	-0.8
UK	-5.9	-6.0	-4.0	-4.7	-4.1	-2.9	-2.0	-1.5	-1.3	-1.4
Eurozone	-3.9	-2.1	-1.2	-0.9	-0.8	-0.7	-0.7	-0.6	-0.7	-0.9
Germany	-1.4	0.0	0.6	1.2	1.2	1.3	1.1	1.4	0.9	1.0
France	-5.0	-4.4	-3.4	-3.3	-3.0	-2.8	-2.6	-2.5	-2.4	-2.5
Italy	-4.1	-1.5	-0.6	-1.1	-0.7	-1.4	-1.7	-1.8	-1.5	-2.1
Japan	-8.0	-7.6	-7.5	-5.5	-4.3	-4.1	-3.4	-3.1	-2.9	-2.1
Australia	-4.3	-3.3	-2.6	-2.6	-2.4	-2.2	-1.5	-0.6	-0.4	-0.4

Source: International Monetary Fund, World Economic Outlook

Headline Consumer and Producer Price Inflation

	CPI Year/Year %Change						PPI Year/Year %Change				
	Jan	Feb	Mar	Apr	May		Jan	Feb	Mar	Apr	May
US	2.5	2.3	1.5	0.3	0.1		2.0	1.3	0.7	-1.2	-0.8
Canada	2.4	2.2	0.9	-0.2	-0.4		0.6	-0.4	-3.0	-6.0	
UK	1.8	1.7	1.5	0.8	0.5		1.0	0.5	0.3	-0.7	-1.4
Eurozone	1.4	1.2	0.7	0.3	0.1		-0.6	-1.3	-2.8	-4.5	
Germany	1.7	1.7	1.4	0.9	0.6		0.2	-0.1	-0.8	-1.9	-2.2
France	1.5	1.4	0.7	0.3	0.4		0.2	-0.6	-2.0	-3.9	
Italy	0.5	0.3	0.1	0.0	-0.2		-2.3	-2.7	-3.7	-5.1	
Japan	0.7	0.4	0.4	0.1	0.1		1.5	0.8	-0.4	-2.4	-2.7
Australia	2.2	2.2	2.2								

Source: Macrobond

Real GDP Growth (Q/Q Seasonally Adjusted)

	Quarter/Quarter %Change						Year/Year %Change				
	Q1-19	Q2-19	Q3-19	Q4-19	Q1-20		Q1-19	Q2-19	Q3-19	Q4-19	Q1-20
US	0.8	0.5	0.5	0.5	-1.3		2.7	2.3	2.1	2.3	0.3
Canada	0.3	0.8	0.3	0.1	-2.1		1.5	2.0	1.6	1.5	-0.9
UK	0.7	-0.2	0.5	0.0	-2.0		2.0	1.3	1.3	1.1	-1.6
Eurozone	0.5	0.1	0.3	0.1	-3.6		1.5	1.2	1.3	1.0	-3.1
Germany	0.5	-0.2	0.3	-0.1	-2.2		1.0	0.3	0.7	0.4	-2.3
France	0.5	0.3	0.2	-0.1	-5.3		1.7	1.8	1.6	0.9	-5.0
Italy	0.2	0.1	0.0	-0.2	-5.3		0.3	0.4	0.5	0.1	-5.4
Japan	0.6	0.5	0.0	-1.9	-0.6		0.8	0.9	1.8	-0.7	-1.9
Australia	0.5	0.6	0.6	0.5	-0.3		1.7	1.6	1.8	2.2	1.4

Source: Macrobond

Industrial Production Index (M/M Seasonally Adjusted)

	Month/Month %Change						Year/Year %Change				
	Jan	Feb	Mar	Apr	May		Jan	Feb	Mar	Apr	May
US	-0.4	0.1	-4.6	-12.5	1.4		-0.8	-0.2	-4.9	-16.2	-15.3
Canada	0.1	0.1	-3.9				-0.2	0.8	-4.9		
UK	-0.1	-0.1	-4.2	-20.3			-3.1	-3.4	-8.2	-24.4	
Germany	2.5	0.3	-8.9	-17.9			-1.5	-1.8	-11.1	-25.3	
France	0.8	0.9	-16.2	-20.1			-3.1	-1.6	-17.3	-34.2	
Italy	3.7	-1.0	-28.4	-19.1			-0.6	-2.3	-29.4	-42.5	
Japan	1.9	-0.3	-3.7	-9.8			-2.4	-3.7	-6.8	-15.9	

Source: Macrobond

Unemployment Rate (Seasonally Adjusted)

	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	#####	Apr-20	######
US	3.7	3.7	3.5	3.6	3.5	3.5	3.6	3.5	4.4	14.7	13.3
Canada	5.7	5.7	5.5	5.6	5.9	5.6	5.5	5.6	7.8	13.0	13.7
UK	3.9	3.8	3.8	3.8	3.8	3.9	4.0	3.9	3.9		
Eurozone	7.6	7.5	7.5	7.4	7.4	7.3	7.3	7.2	7.1	7.3	
Germany	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.8	6.3
France	8.5	8.5	8.4	8.3	8.2	8.2	8.0	7.6	7.6	8.7	
Italy	9.9	9.6	9.7	9.5	9.5	9.5	9.4	9.1	8.0	6.3	
Japan	2.3	2.3	2.4	2.4	2.2	2.2	2.4	2.4	2.5	2.6	
Australia	5.2	5.2	5.2	5.3	5.1	5.1	5.3	5.1	5.2	6.4	7.1

Source: Macrobond

Current Account Balance as a % of GDP (Seasonally Adjusted)

	Q1-17	Q2-17	Q3-17	Q4-17	Q1-18	Q2-18	Q3-18	Q4-18	Q1-19	Q2-19	Q3-19
US	-2.2	-2.5	-2.0	-2.3	-2.3	-2.1	-2.4	-2.8	-2.6	-2.4	
Canada	-2.2	-2.7	-3.4	-3.0	-2.8	-2.6	-1.8	-2.8	-3.0	-1.2	-1.7
UK	-3.2	-4.0	-3.4	-3.3	-3.4	-4.4	-4.3	-5.1	-6.0	-4.6	
Eurozone	3.1	1.9	3.9	3.6	3.5	3.6	2.6	2.8	3.1	2.4	
Germany	8.3	7.0	8.6	8.6	8.5	7.6	6.5	7.4	7.8	7.6	8.1
France	-1.3	-0.7	-0.7	-0.3	-0.3	-1.4	-0.5	-0.5	-0.8	-0.8	-1.0
Japan	4.3	3.7	4.6	4.2	3.6	4.0	3.4	3.1	3.4	3.5	3.5
Australia	-1.5	-2.5	-2.8	-3.5	-2.2	-2.7	-2.2	-1.4	-0.2	1.2	

Source: Macrobond

About State Street Global Advisors

For four decades, State Street Global Advisors has served the world's governments, institutions and financial advisors. With a rigorous, risk-aware approach built on research, analysis and market-tested experience, we build from a breadth of active and index strategies to create cost-effective solutions. As stewards, we help portfolio companies see that what is fair for people and sustainable for the planet can deliver long-term performance. And, as pioneers in index, ETF, and ESG investing, we are always inventing new ways to invest. As a result, we have become the world's third largest asset manager with nearly US $3.12 trillion* under our care.

*AUM reflects approximately $43.72 billion USD (as of December 31, 2019), with respect to which State Street Global Advisors Funds Distributors, LLC (SSGA FD) serves as marketing agent; SSGA FD and State Street Global Advisors are affiliated.

ssga.com

Important Risk Discussion

Investing involves risk including the risk of loss of principal.

The whole or any part of this work may not be reproduced, copied, or transmitted or any of its contents.

This material is for informational purposes only, not to be construed as investment advice, or a recommendation or offer to buy or sell any security and should not be construed as such. The views expressed in this material are the views of the SSGA Economics Team, through the period ending June 19 2020, and are subject to change without notice based on market and other conditions. All material has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected. Past performance is not a guarantee of future results. SSGA may have or may seek investment management or other business relationships with companies discussed in this material or affiliates of those companies, such as their officers, directors and pension plans.

Intellectual Property Information

BLOOMBERG®, a trademark and service mark of Bloomberg Finance L.P. and its affiliates, and BARCLAYS®, a trademark and service mark of Barclays Bank Plc.

Standard & Poor's S&P 500 Index® is a registered trademark of Standard & Poor's Financial Services LLC. FTSE 100® is a trademark jointly owned by the London Stock Exchange Plc and The Financial Times Limited, and is used by FTSE International Limited under license. "All-World", "All-Share" and "All-Small" are trademarks of FTSE International Limited.

© 2020 State Street Corporation.

All Rights Reserved.

2537623.58.1.GBL.RTL

Exp. Date: 06/30/2021