STATE STREET GLOBAL ADVISORS

September 2020
Commentary

Global Macro Policy Quarterly

Contents

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The Big Picture

Economics vs. Health trade-offs still dominate with big divergences

Historically unprecedented times. We are through another quarter battling Covid-19 with optimism around vaccine releases tempered by high global case incidences led by India, Brazil, and the US. The latest WHO statistics (as of Sept 22) indicate almost a million deaths and 31.2+ million cases. Still, while the pandemic is not behind us, further full lockdowns should be avoided given adverse economic, psychological and social effects.

Advanced countries have managed the pandemic's effects fairly successfully through job protection programs, accelerated vaccine development, lockdowns of different kinds and monetary and fiscal stimulus. Emerging countries have high-density mega-cities, limited public health resources, crowded housing and joint family structures. Their policy response has been varied; the crisis has hit the informal sector hard, especially services and small/medium scale manufacturing. By and large, countries have responded individually to the crisis; limited global coordination contrasts the 2008 GFC experience.

In many countries, geopolitics as well as domestic politics, have played an important role in influencing the economic recovery path. The current global macro environment is also affected by the US-China tensions in areas of trade, tech, defense, capital, and pharma/health. There affect dollar hegemony and the dollar's role in a changing world. The oil price and political disagreements among countries has added to the Covid initiated aggregate risk and uncertainty that still fuels fear in the mind of many in the recovery path towards normalcy (a normalcy likely to be v different in near future). The trend towards protectionism and restrictions on mobility of capital as well as people is likely to have perverse effects on behavior of people and companies.

Japan's leadership change comes as the country faces important economic, monetary and structural issues. The 2020 US Presidential elections are probably one of the most important political events that will shape the future of the US and the world. Fiscal policy differences, climate change, Black Lives Matter (BLM), health care, domestic political unrest, growing inequality, mail-in-ballots are few of the key issues in this election.

The market optimism especially in the US Tech sector (FAAMG), select GRANOLAS[1] stocks in Europe and selected sectors and stocks in EM has led to optimism and buoyance of global investor sentiment. However, aggregate economic sentiment (consumers, jobs, manufacturing) starting to reverse from v. weak numbers is still weighed down by aggregate uncertainty regarding future fiscal stimulus and jobs.

The expiration of earlier income support and furlough schemes poses new challenges to policy-makers. The Fed and BOJ have pivoted away from their focus on inflation and reflation towards their Jobs/Employment mandates. On the fiscal policy side, supporting households, companies and sectors may create some moral hazard but timeliness is needed. The current low interest rates help alleviate the national debt service burdens.

This is a time for strong leadership, global coordination and understanding against a common enemy affecting 200 economies. Actions taken now will be assessed by future generations who will judge if we were truly brave enough. (**Amlan Roy)**

[1] GRANOLAS refer to a term coined by Peter Oppenheimer of Goldman Sachs referring to few European stocks that promise a combination of growth, stability and income. (Glaxo, Roche, ASML, Nestle, Novartis, Novo Nordisk, L'Oreal, LVMH, SAP & Sanofi.)

Global Macro Highlights

The Relay Recovery Enters The Next Stage

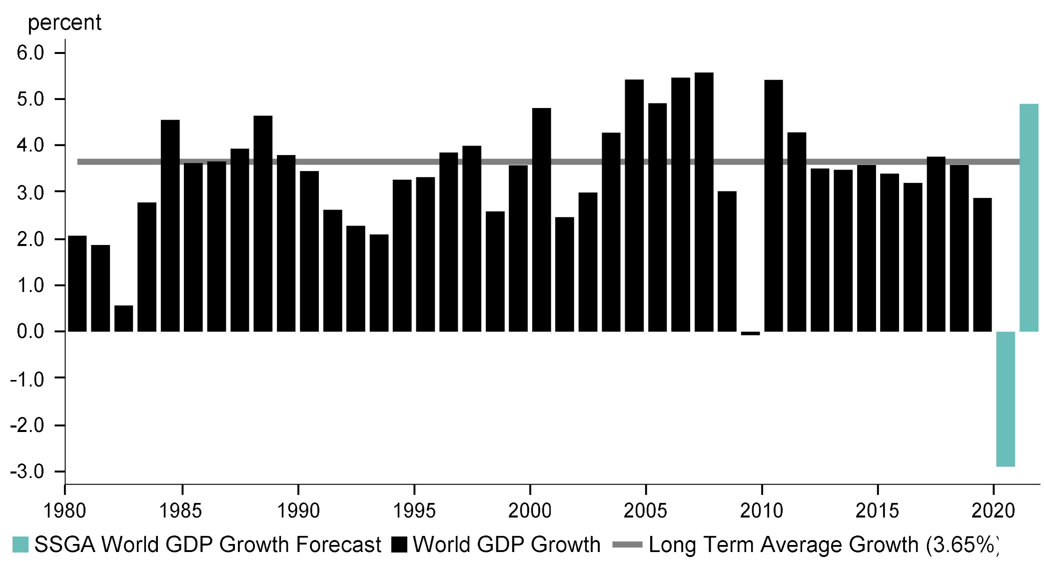
Following big downgrades in March and June, this round we've made relatively small forecast changes. At the global level, a slightly worse outcome for developed economies is partly offset by an upgrade in China such that the estimated contraction in global GDP is only a tenth worse than we anticipated back in June. 2021 is then expected to bring a slightly stronger rebound that pushes global growth to its best since 2010.

One may argue that this is a V-shaped recovery. But we dislike letter labels since, as far as the recovery shape goes, what you'll see will really depend on where you look. Sectors such as housing or manufacturing should do much better and make a fuller/speedier recovery than travel services, for instance. The magnitude of the initial contraction and subsequent rebound will also vary considerably across countries.

It is far better, in our estimate, to focus on the nature of this shock and the subsequent recovery. Along these lines, we've embraced the "relay recovery" concept. The successful race toward a full recovery depends on a succession of well executed baton handovers. The first runner out of the gate, so to speak, was represented by powerful monetary and fiscal stimulus. The second "runner" was the process of economic reopening, of learning to resume and sustain economic activity while coping with and managing the virus outbreak. Experiences in the US, France, Spain, and the UK show this runner close to stumbling at times but so far still in the race.

Ultimately, though, a full recovery will require a medical solution. There is more than just a vaccine under this umbrella—cheap and widely available testing, contact tracing capacity, and good therapeutics are milestones along the way. But a vaccine is what will push us over the finish line. With every passing month, we are getting closer, but with every passing month, our vulnerability also grows. The race is not yet won!

Figure 1: Poised For A 2021 Rebound



Sources: SSGA Economics, IMF WEO
Updated as of 9/24/2020

STATE STREET GLOBAL ADVISORS

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	-2.9	4.9
Advanced Economies	40.8	2.3	1.7	2.5	2.3	1.7	-4.9	4.4
US	15.2	2.9	1.6	2.4	2.9	2.3	-3.7	4.0
Euro area	11.4	2.0	1.9	2.7	1.9	1.2	-7.0	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	-7.9	5.5
Italy	1.8	0.8	1.3	1.7	0.8	0.3	-8.8	6.0
Japan	4.2	1.3	0.5	2.2	0.3	0.7	-5.5	3.3
UK	2.2	2.4	1.9	1.9	1.3	1.4	-9.2	7.9
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	-2.8	3.9
Developing Economies	59.2	4.3	4.6	4.8	4.5	3.9	-1.5	5.3
Advanced Economy Inflatic	40.8	0.3	0.8	1.7	2.0	1.5	0.9	1.6
US	15.2	0.1	1.3	2.1	2.4	1.8	1.3	2.0
Euro area	11.4	0.2	0.2	1.5	1.8	1.2	0.4	1.1
Germany	3.2	0.0	0.5	1.5	1.7	1.4	0.7	1.4
France	2.2	0.0	0.2	1.0	1.9	1.1	0.6	1.2
Italy	1.8	0.0	-0.1	1.2	1.1	0.6	-0.1	0.7
Japan	4.2	0.8	-0.1	0.5	1.0	0.6	-0.3	0.0
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	1.1
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	88.2
At Purchasing Power Parities		115.8	120.8	127.7	135.4	141.9	137.7	144.5

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

Weight is the share of world GDP on a purchasing power parity basis (IMF *World Economic Outlook)*

Historical data sources: Oxford Economics, IMF. Forecast: SSGA Global Macro and Policy Research

Politics and Geopolitics

US 2020 – The Covid Election: Overview of Market Implications

The “EM election with a reserve currency” moniker continues to apt in light of a volatile electoral season, with the highest number of legal disputes ahead of election day, and the incumbent questioning the credibility of the election as well as hinting at other means. We use this Quarterly issue to summarize the main investment themes arising from the US election.

1. Beware Macro Risks

US Elections are rarely a macro event. However, the potential scenario of a protracted dispute with legal, political and, possibly, physical confrontations makes 2020 different from all previous US elections. In order to qualify as a macro event, the dispute would need to take several weeks and be severe enough to undermine general investor sentiment; challenge the investment thesis in US risk assets for foreign investors; and eventually spill over into household and business decisions. The pandemic has heightened these fears given the extraordinary share of expected mail-in ballots (forecast around 50% of all votes, up from 21% in 2016). In addition, five of the six key battleground states (Florida, N. Carolina, Pennsylvania, Wisconsin and Michigan) have had election-related disputes and problems during 2020. The main market expression of such a macro event would be heightened volatility in the exchange rate, with the USD perhaps experiencing a disorderly depreciation as it would only enjoy a reduced safe haven effect in a home-made US political crisis. While a weaker USD should normally act as a stimulus to non-US growth, negative sentiment would likely overwhelm any positive impulse.

2. Watch for Policy Themes

Any smooth election with a credible outcome will deliver a relief rally to markets, particularly coinciding with the year-end season and the beginning of the Covid-19 vaccine era. Nonetheless, the policy differences between the two leading candidates are substantial. Conceptually, we considered the Trump administration as having pursued a policy mix that could be equated with ‘broad beta’ support for corporations via lower corporate taxes and regulatory relief. This approach mirrored a wealth transfer from the government balance sheet to corporate balance sheets since the tax cuts widened the budget deficit. Both levers helped expand profit margins and improve earnings.

In this regard, we consider the Biden agenda to largely be a reversal of this approach. At the same time, we find his proposals for meaningful increase in public spending in areas with a high fiscal multiplier (e.g. infrastructure) to be a partial offset to corporate headwinds. In other words, we have termed it an ‘alpha’ regime with plenty of winners and losers in the new environment. Such a policy-regulatory backdrop would require adjustments in investment strategy. In equities, we believe this is better expressed via sector or thematic investing than broad large-cap indices.

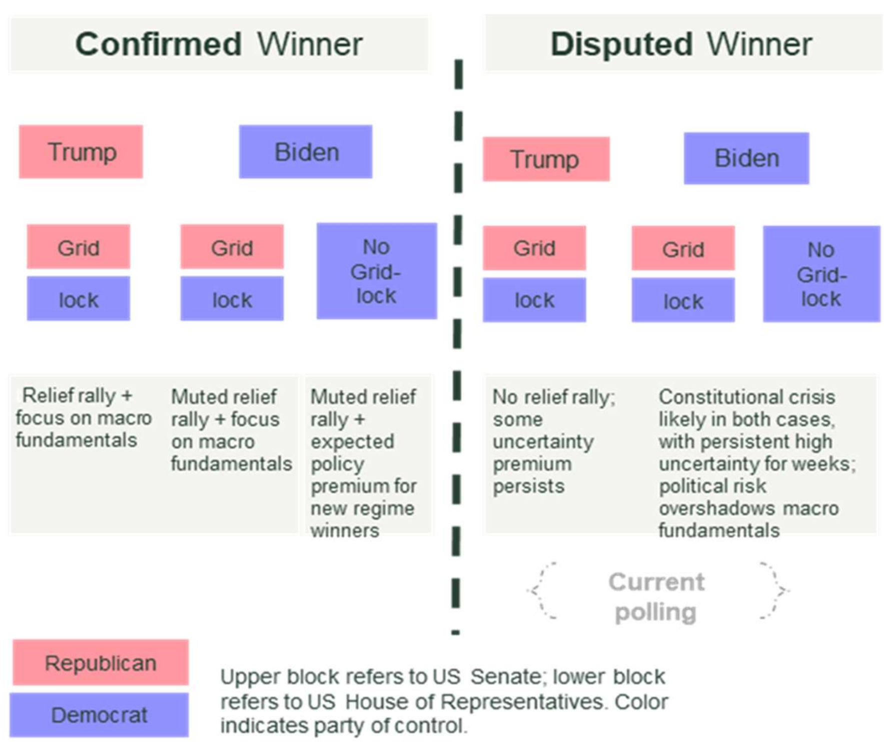
3. Take Note of Derivative Effects

All election campaigns entail surprises and 2020 is no exception. Already in September, the Trump administration enjoyed its arguably biggest foreign policy achievement by overseeing the normalization of relations between Israel and the UAE and Bahrain. Even more importantly, the passing of Supreme Court Justice Ginsburg opened up another presidential appointment and controversial nomination hearings ahead of election day. The uber-politicization and cementing of the Republican majority on the Supreme Court has set off a paradoxical effect for investment considerations. While this will contribute to institutional erosion in the medium term and greater policy swings going forward, the near-term effect is likely to dilute the policy impact in the event of a Democratic electoral victory. This is due to elevating multiple other policy priorities as well as delaying additional policy support to the post-Covid recovery, forcing a future President Biden to concentrate on a smaller agenda, with less scope for impacting risk asset valuations.

4. Spot the Transition

Among developed markets, the US is the outlier in length of power transition to the newly elected leadership. Nearly 11 weeks will pass between election day and inauguration. This lame duck session used to be a standstill period. In the event of President Trump's loss, however, it cannot be ruled out that this time will witness unprecedented volatility. While most measures would appear to have short-term relevance, they may provoke counter-reactions by the incoming administration or re-ignite market uncertainty. In the long term, any measures that undercut institutional capability would raise longer term questions about US governance, an issue that has thus far found no corresponding investment theme.

Figure 2: US 2020 Election Outcomes



Demographics and Pensions

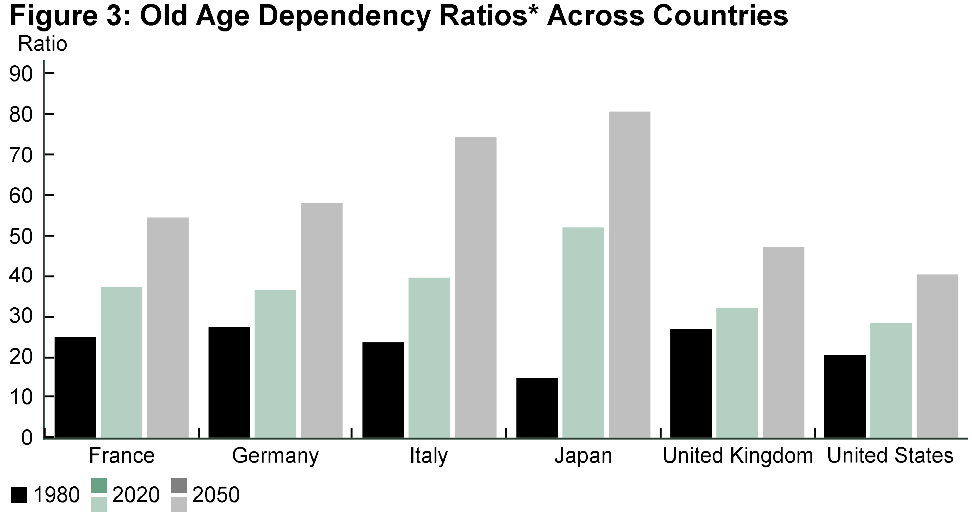
Demographics, Debt, Savings and Fiscal Sustainability (Who will pay?)

We focus on the link between demographics, debt, savings and pensions. The Covid-19 pandemic has put demographics into the global spotlight, with pandemic-related incidences and prevalence associated with demographic profiles. Latest data from WHO, Johns Hopkins University and other global data sources show that older European countries have experienced higher case fatality rates. Also, ethnic minorities are at greater risk of dying from Covid-19. As we highlighted in our last quarterly issue, real personal income and population density are highly correlated with Covid-19 cases and deaths.

As discussed in previous reports, ageing populations in advanced countries have led to severe fiscal strains and pressure on government budgets. Higher life expectancy combined with lower fertility rates have driven significant increases in old age dependency ratios, which is set to continue in the next few decades (Figure 3). The Covid-19 fiscal rescue packages have significantly increased debt ratios in both the developed and developing world. While emergency rescue packages leading to rising debt is warranted, **the 64-million dollar question is** who will pay off these debts and how?

L.J. Kotlikoff in "***The Coming Generational Storm***" and Peter Heller in "***Who will Pay?***" had raised the long-term fiscal sustainability issues early in the Millennium much long before the ongoing COVID spectre. We have previously discussed issues of EU sustainability[2] and ageing is at the core of those issues.

Figure 3: Old Age Dependency Ratios* Across Countries

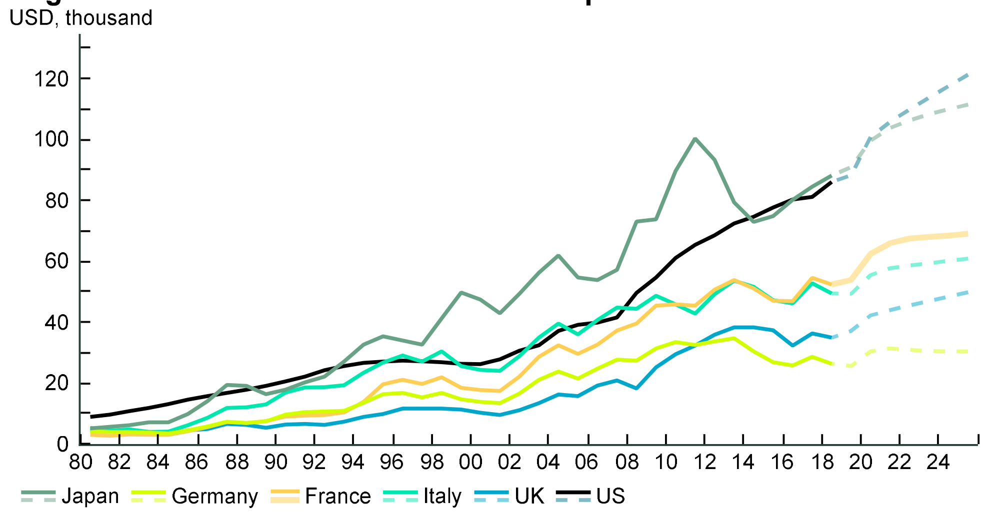


Sources: SSGA GMPR, UNDESA
*Note: *Ratio of Population Age 65+ To Population Aged 20 to 64*

Gross debt per capita has increased considerably in advanced countries (Figure 3, page 8). Fiscal stimulus responses to the pandemic have also caused debt to surge in many countries in 2020. Among the G6, the US has the highest gross government debt per capita, followed by Japan. By 2025, debt per capita in G6 countries is projected to increase by another 10-20%.

[2] A Demographic Perspective of Fiscal Sustainability: Not Just the long-Term Matters (2010), Credit Suisse Demographics Research and "European Demographics & Fiscal Sustainability (2013), CS Research.

Figure 4: Gross Government Debt Per Capita



Sources: SSGA GMPR, OE, UNDESA

In a low growth, low rates world, debt sustainability concerns will necessarily require renegotiation of age-related pensions, health and social care promises. The Covid-19 crisis is also worsening gender inequality and intergenerational inequality. Academic and policy research has connected demographics to savings-investment gap, capital flows and the current account. Global imbalances are connected with demographics and savings behaviours. governments and families as well as households collectively need to plan to ensure that their savings and resources cover their longer retirement horizons.

The world faces a serious challenge of intertemporal resource allocation in a world of longer retirement periods with lower productivity, lower growth and lower interest rates. In "***The Age of Responsibility***"[3], we argued that higher annual savings/GDP of up to 15% is needed for long-term fiscal sustainability.

The pandemic has led to unprecedented increase in savings rates in many countries, due to precautionary savings and largely due to forced savings[4]. Precautionary motives might keep households' savings rates at higher levels than before the COVID-19 crisis. While we acknowledge that retirement planning needs to keep up with changes in the macro environment and changes in investment knowledge[5], greater savings should be channeled towards good investments and focusing on governance and operational efficiencies including liquidity, collateral and cash management[6].

The EU's Fiscal Rescue package are directing resources towards a more sustainable green and modern technological future—the rescue is tied to considerations of modernization, climate change and environment too. The world faces critical long-term challenges of debt sustainability, climate change and ageing which are directly and indirectly connected.

[3] The Age of Responsibility, Redington. http://aor.redington.co.uk/
[4] https://www.ecb.europa.eu/pub/economic-bulletin/focus/2020/html/ecb.ebbox202006_05~d36f12a192.en.html
[5] SSGA Global Demographics & Retirement Research, 2019, " Retirement Planning Requires Changes in Mindsets, Tools & Asset Allocation"
[6] SSGA Global Demographics & Retirement Research, 2019 "UK Spotlight: Demographics, Pensions & Governance"

Country Macro Highlights

Please see country-specific commentary in the sections below.

US: Getting Back Up

We are pleased to remark, as we take stock of macroeconomic developments since the last time we published our GMPR Quarterly, that incoming data have aligned well with our view of US economic performance. Back in June, our forecast of a 3.4% economic contraction in 2020 was squarely at the optimistic end of market forecasts (consensus then was -5.7%) and well outside the Fed's own range of projections. By September, however, reflecting sharp improvements in the labor market, consumer spending, and housing, consensus views have moved much closer to our own position. Unlike in March and June, this round we made few changes to our 2020-21 forecasts. As it happens, we are now perfectly aligned with the Fed's projections, anticipating a 3.7% contraction this year, followed by 4.0% growth in 2021. However, we would caution against taking any point forecast too seriously since many risks to the outlook remain. At the same time, with three quarters now "under the belt", the 2020 number should be close enough. Next year's performance will depend critically on virus and vaccine developments.

We do not believe it is possible to make a full recovery without a vaccine that facilitates a return to normalcy in the most impacted sectors: travel, leisure, and hospitality among others. Until such time as a vaccine becomes widely available, the summer surge experience in the US, as well as the latest case surges in Spain, France, and the UK, show clearly that societies cannot allow to lower their guard in terms of transmission mitigating behavior such as face covering and social distancing. This does not mean that business can't take place—indeed, it is critical that it does!—but it must take place with the necessary safety precautions.

After contracting at a 31.7% seasonally adjusted annualized rate (saar) in the second quarter, US GDP is poised to grow by a similar magnitude in the third. The large monetary and fiscal stimulus quickly injected into the economy in the early days of the crisis have a lot to do with this. As a result, traditional relationships between key macroeconomic variables no longer held: personal income actually increased since the start of the year, the personal savings rate spiked to 33% (and remains abnormally elevated at 17% even today), and household net worth hit a record high in the second quarter, even as the unemployment rate spiked to 14.7%. August home sales hit their highest level since the summer of 2006... There is nothing even remotely close to "business as usual" here! As the economy reopened post lockdowns, aggregate employment has so far retraced about half of the earlier losses, with the unemployment rate down to 8.4% in August. But let there be no doubt: getting from 15% to 8% will prove easier and much faster than getting from 8% to the 3.5% level that prevailed at the start of 2020!

After a relentless salvo of stimulus measures early on, the last few months have been quiet on that front. In fact, earlier expectations of a fourth fiscal stimulus bill have been repeatedly pushed back as Congress failed to reach agreement on the size of the package. Preoccupation with the confirmation process for replacing Supreme Court Justice Ginsburg further dim prospects for additional fiscal stimulus in the short term, though do not make agreement outright impossible. At least, agreement has been found on a continuing resolution to avoid a government shutdown. While we would prefer to see some additional stimulus—especially for most impacted industries such as air travel and the most impacted among the unemployed—a delay of some weeks a roughly USD1.0 trillion package is unlikely to materially shift the economic trajectory. In fact, we'd happily trade the extra fiscal stimulus in exchange for avoiding a serious fall resurgence in Covid cases.

The big news on the monetary policy front was not about Fed action, but about the Fed's thinking. What had been anticipated for some time, is now official: the Fed has embraced an average inflation targeting (AIT) framework. AIT adoptions was accompanied by a considerably extended and expanded forward guidance that laid out the conditions for lift-off from the current 0.00-0.25% interest rate level: the labor market has returned to full employment, inflation has returned to 2.0%, and inflation is also on track to moderately exceed 2 percent "for some time". The latest FOMC projections do not envision these conditions to be met any time soon such that the Fed Funds rate is seen unchanged through 2023. Time will tell…

Inflation is not an issue. In the context of AIT, it would actually take a significant and protracted overshoot of the 2.0% rate to really deem such deviations problematic. Remember: a moderate overshoot for some time is currently the goal. We have modestly raised our inflation forecasts for both this year and next, but we are watching inflation developments closely to help us answer one of the most salient questions related to the Covid-19 crisis: will this prove to be an inflationary or deflationary shock over the medium term?

Canada: The Coming Of The "Second Wave"

Canadian Prime Minister Justin Trudeau said back in April that "normality as it was before will not come back full-on until we get a vaccine… We will have to remain vigilant for at least a year." Canada has gotten it generally right with a timely imposition of the Quarantine Act, social security and financial aid programs. Apart from the health crisis, the economy has faced several issues since early in the year—including oil pipeline shutdowns, rail strikes, auto manufacturing strikes and global trade tensions. Nonetheless, the economy has held up pretty well.

Real GDP grew a better than expected 6.5% in June but the GDP level was still 9% below February's. Consumer spending plummeted amid lockdowns and was a big contributor to the 13.3% decline in GDP during the first half of the year. After a subsequent surge once the economy reopened, retail sales have sine reverted to more typical levels. The major concern currently is that Canada is on the verge of a second wave of the coronavirus with a recent spike in the number of daily cases (at least in the four large provinces). We believe that the surge will subside but the measures taken to curb it will slow down the economic recovery. Therefore maintaining fiscal support is imperative.

In the opening day of the new legislative session, the government committed to extending the Canada Emergency Wage Subsidy to the summer of 2021 apart from increasing the funds under the Canada Emergency Business Account (C$40,000 loans to small business). The government stated it will further support sectors hard hit by the pandemic such as tourism. A new childcare policy was also mentioned but with few specific details.

The recovery faces another headwind due to the collapse in world oil prices from $60 per barrel to current prices in the $40 per barrel range, especially for energy producing provinces like Alberta, Saskatchewan, Newfoundland and Labrador. On the positive side, the USMCA tri-partite trade deal will be beneficial for trade and help boost investor sentiment, providing tailwinds to the recovery. Overall, we maintain our GDP growth forecasts for Canada at -5.6% in 2020 followed by a 5.7% rebound in 2021, subject to downside risks.

Extended fiscal transfers will help sustain the better than expected recovery seen in the labor market. The economy has recouped around 2 out of the 3 million jobs lost since February, bringing the employment level back to 94% of where it was in February. Curiously, growth in average hourly wages peaked in April-May which were also the worst months for employment. Similar to the US case, this reflected compositional changes in employment, with more full time and higher paid workers holding on to their jobs. Wages have moderated since then and are back to February levels, but we believe they could fall further still. Thus wage growth is unlikely to push inflation higher.

Consumer price inflation remained at a meager 0.1% y/y in August, with the slowdown concentrated on a few items like air transportation prices. Gas prices increased again at the margin but are still relatively benign. However, the average of the three core measures that the Bank of Canada (BoC) follows increased to 1.7% y/y, close to target. The output gap—the main driver of the BoC's inflation projections—is unlikely to close during our forecast horizon. Admittedly, a weaker CAD could contribute to higher inflation but we remain comfortable with our 0.9% and 1.5% projections for 2020 and 2021 CPI inflation, both unchanged from June.

There were no changes to policy settings in the Bank of Canada's September 9 monetary policy meeting. The target for the overnight rate was maintained at 0.25%, while the large-scale asset purchase program was unchanged. The Bank also reiterated its commitment to accommodative monetary policy, stating that it will "hold the policy interest rate at the effective lower bound until economic slack is absorbed so that the 2 percent inflation target is sustainably achieved." The next move for the BoC can be to calibrate its quantitative easing program, which is likely in 2021 depending on the severity of the "second wave" and what the Federal Reserve does. The recent adoption of Flexible Average Inflation Target at the Fed will most likely influence BoC's line of thinking. Both headline and core inflation had been around the 2% level at the onset of the crisis. We think that inflation will again push towards the target once the economy starts operating close to full capacity. In such a scenario, the Bank's action will be dictated by shortfalls from full employment, which typically lags activity. Recent actions by BoC already point towards greater tolerance for above-target inflation.

UK: Besieged!

Of all the developed economies we cover, the UK experience during the time of Covid is, in a sense, the most disappointing. It is not that other countries have not experienced more cases per capita of higher mortality rates—there are worse performers on both counts. It is that although the UK had good start in the crisis with a swift and powerful monetary/fiscal response early on—but then managed to squander that advantage. Somehow, the UK ended up with a very sub-optimal lockdown-virus case count-economic activity balance. It's initial lockdown was among the most severe globally, and the longest lasting among the G7. As a result, the economic cost was worse than its peers: while US, German, French, and Italian economies shrank by roughly 9-10% q/q in Q2, the UK contraction was twice as bad. GDP plunged 20.4% q/q during the second quarter as private consumption dropped by 23.5% and fixed investment collapsed by over 25%!

As the economy reopened, another sub-optimal choice of social distancing guidelines drove a quick new spike in cases and, in turn, triggered new restrictions on people movement and economy activity. These new restrictions are not nearly as severe as the earlier lockdown, but the risks are they would need to be tightened further should cases remain elevated. It pains us to say it, but the end result of all this is that the UK economy will underperform relative to other developed peers. In fact, we expect it to be the worst performing economy in our sample (see table on page 4), faring worse than Italy and underperforming Germany by an almost 2:1 margin this year and the US by an even wider margin.

Early in the crisis, the Bank of England (BoE) cut the Bank Rate by 65 basis points to 0.1% and increased the QE program from £435 billion to £745 billion, engaging in various liquidity operations and extending real-economy lending incentives. It had since taken no additional steps, but we know that "the MPC had been briefed on the Bank of England's plans to explore how a negative Bank Rate could be implemented effectively" and that "the Bank of England and the Prudential Regulation Authority will begin structured engagement on the operational considerations in 2020 Q4." The MPC is very worried about Brexit going array at the last moment, just as the economy is still reeling from the Covid shock. Is it surprising that the MPC is looking to beef up the monetary policy defenses?

Indeed, the challenge facing the BoE would be formidable enough even if the pandemic were the only crisis on hands. But, of course, there is more. The final scheduled round of talks regarding the future trading relationship between the EU and the UK is about to begin but prospects for a deal look bleak, such that the government's own new base case implies a fallback to WTO rules at the end of the year. A chaotic transition poses downside risks to our 2021 forecast. We assume that the government would accept a lax implementation of border controls (at least temporarily) and regulations to mitigate the negative business impact.

Fiscal policy has a role to play and it has played a role from the very beginning. But the actor must fill some very big shoes, so to speak. Cognizant of this, the government has just announced new support measures to replace expiring labor market support schemes. But these new measures are less generous and impose a larger burden sharing cost on businesses. Whether they will be able to bear this burden, especially in the context of new restrictions that will likely impact revenues, is questionable. More fiscal stimulus will be needed.

Inflation has taken a dive recently, with the headline measure at only 0.2% y/y in August and the core at just 0.9% y/y, levels not seen since 2015. Base effects, higher oil prices, higher tariffs, and a weaker currency all suggest a reacceleration in inflation in 2021, but the weak demand backdrop will be a powerful headwind.

Eurozone: Rising To The Challenge

The eurozone presents an interesting case in the current Covid-19 drama. Cyclically, it is one of the worst affected regions, its vulnerabilities stemming from high level 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, the region seems poised to emerge from this crisis in a much better shape from a structural standpoint as the intensity of this shock has energized transformative integrational efforts to a larger extent that 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 (and now including in traditionally austere countries like Germany) but—most importantly—at the supranational level. The creation of the €750 billion recovery fund this summer marks an important moment in EU macro policy—a big step toward building a more effective policy response to aid the economy in times of crisis. Meanwhile, the ECB has also stepped on the stimulus gas pedal, having nearly doubled the size of its Pandemic Emergency Purchase Program to €1,350 billion.

These measures will not avoid a serious recession. Indeed, on account of the big surge in cases in both France and Spain in recent weeks (likely to get worse before getting better), we have slightly downgraded our expectations for eurozone GDP this year to a 7.0% contraction. But we feel more confident in next year's rebound, particularly in Italy, who should be among the biggest beneficiaries of the recovery fund. An opportunity exists for countries such as Italy, which had lagged in certain aspects of technology adoption, to come out of the Covid crisis stronger thanks to targeted investments in digitization and green investments.

Cross-country performance differences will persist, however. We anticipate a notably smaller contraction in Germany than in either France or Italy on account of a larger stimulus injection, stronger consumer finances, lesser dependence on tourism and higher dependence on manufacturing (a sector that's better positioned to make a fuller/faster recovery).

Inflation continues to badly undershoot targets but this nothing new, nor is this the biggest worry for policymakers at the moment. To some extent, it is a bit of a blessing as it shields households' purchasing power during the crisis while also helping build support for increased fiscal stimulus from would-be inflation hawks.

Japan: New Leader, Old Challenges

After close to a decade of stability under Shinzo Abe, Japan has a new prime minister in Yoshihide Suga to navigate the country through a delicate phase. Abe's policies had propped up economic growth to some extent, spurred corporate profits and sentiment through a weaker Japanese yen and higher stock markets. But inflation and wage growth still remain well below target. Fears of a resurgence in cases, especially after the "Go To Travel" comes into full swing, and subsequent recovery will dominate macroeconomic policy settings in the short run, and a revival in domestic demand remains the key to growth in the medium term.

Japanese GDP growth estimates for the second quarter were the lowest on record, even lower than consensus. This was the third consecutive quarter of contraction, starting with the adverse impact of a hike in consumption tax in Q4 2019. Growth had already begun to slow in Q1 as inbound tourism collapsed and households began to reduce spending in the early stages of the COVID-19 outbreak. However, the worsening of the pandemic—both at home and abroad, led to a much sharper hit to Q2 GDP. Domestic demand was very weak—an 8.6% q/q drop in private consumption was the most notable component. This explains why we have downgraded the GDP forecast for 2020 by 1.3 percentage points to -5.5%.

Our current view of 2021 is slightly more upbeat than our earlier view in June. The strength of recovery will depend on interplay of factors such as the labour market, fiscal stimulus and incentives to promote tourism. A strong labour market will play a key role in reviving spending. The rise in Japan's unemployment rate has been relatively less compared to its peers, but questions remain if we shall see this tight labour market persist. Though the number of active jobs per applicant are low, there are signs that the stress on the labour market is lessening. The number of people "on leave" has dropped sharply. While this will support consumers, it also has a flipside. Firms who are unable to lay off employees to streamline operating costs, will invariably have to compromise in terms of wage growth and capex once fiscal transfer programs start to taper.

With the economy under severe pressure, we do not anticipate any change to fiscal policy in the near future. But Suga might call for a snap election to consolidate his position. Expectations of additional fiscal stimulus via a third Fiscal Year 2020 (April-March) supplementary budget and an expanded FY 2021 budget remain unchanged. A rollback of the VAT tax hike remains unlikely, mainly because of push back from the Finance Ministry. Longer term, Suga will ideally place more emphasis on structural reform—deregulation, industry consolidation, higher efficiency—than Abe. This has been a relatively underutilized aspect of Abe's economic agenda, and Suga has been keen to promote digitalization and tackle thorny issues such as regulatory reform and administrative inefficiency.

The "Go To Travel" campaign initiated in August to promote domestic tourism will support the most affected industries like hotels and accommodations. The subsidies are scheduled to expand to restaurants and to travel to/from Tokyo in October. We expect the July 2021 Tokyo Olympics to go ahead, perhaps with limited spectators. All in all, we see a slightly stronger recovery in 2021, with GDP expanding 3.3% in 2021 on an improved outlook for consumption of services and more favorable base effects.

Headline inflation has been remarkably stable considering the drop in private demand and the fact that inflation hardly had any momentum even in the months leading to COVID. The underlying measures weakened considerably in August though—both the core measure of CPI (excluding fresh food) and the new BoJ core CPI (excluding fresh food and energy) fell by 0.5 percentage points to -0.5% and -0.1% y/y respectively. The declines were expected and an unintended consequence of the "Go To Travel" campaign. As much as half of the costs for domestic travel are being subsidized under this scheme, which caused accommodation costs component of CPI to plunge. The medium term outlook for inflation has weakened somewhat, due to lack of demand in the economy, and specific components like an anticipated drop in charges for mobile network carriers. Our outlook for inflation in 2020 remains unchanged at a negative 0.3%, but we have slightly upgraded the forecast for 2021 by 0.2 percentage points to 0.0%, on the back of a stronger recovery and favorable base effect.

The BoJ has adopted several measures to defend the economy—yield curve control, asset purchases and a dollar swap line with the Fed to provide USD liquidity. Suga has expressed his confidence in BoJ Governor Haruhiko Kuroda's policy moves. The current monetary policy framework (-0.1% short-term interest rate target and a pledge to cap 10-year government bond yields around zero) will thus likely be maintained going into 2021. The BoJ might be induced to cut the policy rate one more time if the Yen appreciates rapidly and persistently. But further negative rates will face a high political hurdle as it would reduce banks' lending margin when the BoJ is encouraging them to provide more credit to firms and households. So the most promising tool remains credit easing through coordination with fiscal policy accompanied by generally accommodative financial conditions, where the government takes risks and the BoJ provides liquidity.

Australia: Focus On Fiscal Stimulus

Our assessment of COVID's impact on Australia's economy has been largely accurate. The crisis ushered in a technical recession, breaking Australia's record of three decades of uninterrupted growth. But a massive fiscal stimulus has so far sheltered Australia from the worst of the economic impacts of shutdowns. The stimulus amounts to around 15% of GDP and is complemented by other measures such as loan payment deferrals for both mortgages and business loans and temporary insolvency protection. While GDP fell a record 7% in the June quarter, the unemployment rate has peaked at 7.5% in July, much below the 10% expected by the Reserve Bank of Australia. Yet, the outlook remains highly uncertain.

The "second wave" in Melbourne and Mitchell Shire and the consequent lockdown in Victoria pose the greatest threat to the outlook for the rest of 2020. GDP should have expanded at a modest pace in the third quarter, with the opening up of businesses and easing of restrictions outside Melbourne more than offsetting another fall in activity in Victoria. Household spending has also improved from its April low point, although the initial surge has now largely faded. We have downgraded our 2020 growth forecast slightly, anticipating a 2.8% contraction (versus 2.2% in June).

Our view about the recovery in 2021 however, remains unchanged. Public spending is likely to be a major driver of growth in 2021. The Australian government was one of the first to calibrate and extend the fiscal support program. We expect further announcements of large scale fiscal stimulus in the upcoming 2020-21 Commonwealth Budget. The spending is likely to be oriented towards supporting incomes in the short term and driving jobs growth in the medium term. Changes to income tax brackets due to come into effect in mid-2022 and mid-2024 may be brought forward to boost consumption. With several major infrastructure projects in the pipeline, as well as other 'nation-building' projects, public investment will also rise quite strongly. This will provide the required boost to GDP in 2021, when we forecast a growth of 3.9%.

The evolution of the labor market so far has been more than satisfactory, but the extension of stage 4 restrictions in Victoria threaten to derail the recovery. Recipients of the JobSeeker and Youth Allowance (other) payments in Victoria increased by 29,000 between late June and late August, more than offsetting the 19,000 decline across the rest of the country. The slack in the labor market will also influence wage-setting behavior, in turn keeping inflation expectations low. Around 35% of firms in RBA's liaison program expect to implement a wage freeze in the year ahead, with around half of the surveyed firms expecting wage growth to be lower in the year ahead. Add to this weak domestic demand conditions, enough to keep underlying inflation much below target over the forecast period. Hence, we keep our expectations for headline inflation in 2020 unchanged at 0.6%, but have downgraded the forecast for 2021 by 0.2 percentage points to 1.1%.

The RBA has recently stepped back into the market after an extended lull, as the yield on three year ACGBs had moved slightly above target. The extension of the Term Funding Facility (TFF) for banks following the Board meeting on 1 September complements the bond purchase program. More importantly, it signals the RBA's intention to undertake additional easing measures to aid the recovery. The statement explicitly mentions that the Board "continues to consider how further monetary measures could support the recovery." We were expecting the RBA to act, but at a later stage. The RBA might consider a "separate bond buying program" in addition to its policy of yield curve control, targeting the longer end of the curve. Fiscal settings will be critical in determining the timing and extent of any further policy steps by the RBA.

Data Calendar

Week in Review (September 21–September 25)

Country	Release (Date, format)	Consensus	Actual	Last	Comments
Monday, September 21					
	No Major Releases				
Tuesday, September 22					
US	Existing Home Sales (Aug, m/m)	2.4%	2.4%	24.7%	
Wednesday, September 23					
US	FHFA House Price Index (Jul, m/m)	0.5%	1.0%	1.0%(↑)	
UK	Manufacturing PMI (Sep, prelim)	54.0	54.3	55.2	
UK	Services PMI (Sep, prelim)	55.9	55.1	58.8	
EC	Manufacturing PMI (Sep, prelim)	51.9	53.7	51.7	
EC	Services PMI (Sep, prelim)	50.5	47.6	50.5	Not a surprise…but a problem!
GE	GfK Consumer Confidence (Oct)	-0.8	-1.6	-1.7(↑)	
GE	Manufacturing PMI (Sep, prelim)	52.5	56.6	52.2	
GE	Services PMI (Sep, prelim)	53.0	49.1	52.5	
FR	Manufacturing PMI (Sep, prelim)	50.6	50.9	49.8	
JN	All Industry Activity Index (Jul, m/m)	1.3%	1.3%	6.1%	Services weakened.
JN	Manufacturing PMI (Sep, prelim)	na	47.3	47.2	Decline in components, but outlook positive.
JN	Services PMI (Sep, prelim)	na	45.6	45.0	Decline in components, but outlook positive.
Thursday, September 24					
US	Initial Jobless claims (Sep 19, thous)	840	870	866(↑)	
US	Continuing claims (Sep 12, thous)	12275	12580	12747(↑)	
US	New Home Sales (Aug, thous)	890	1011	965(↑)	Highest since mid-2006.
US	Kansas City Fed Manf. Activity (Sep)	14	11	14	
UK	GfK Consumer Confidence (Sep)	-27	-25	-27	
GE	IFO Business Climate (Sep)	93.8	93.4	92.5(↓)	
FR	Business Confidence (Sep)	94	92	90	
Friday, September 25					
US	Durable Goods Orders (Aug, prelim, m/m)	1.1%	0.4%	11.7%(↑)	But capital goods orders were notably stronger.
IT	Consumer Confidence (Sep)	100.8	103.4	101.0(↑)	

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

Week In Preview (September 28–October 2)

Country	Release (Date, format)	Consensus	Last	Comments
Monday, September 28				
GE	Retail Sales (Aug, m/m)	0.0%	-0.2%(↑)	
JN	Leading Index (Jul, final)	86.9(p)	83.8	
Tuesday, September 29				
US	S&P CoreLogic 20-City Index (Jul, m/m)	0.2%	0.0%	
US	Consumer Confidence (Sep)	90	84.8	
UK	Mortgage Approvals (Aug, thous)	na	66.3	
UK	Nationwide House PX (Sep, m/m)	na	2.0%	
FR	Consumer Confidence (Sep)	92	94	
Wednesday, September 30				
US	GDP (Q2, final, q/q saar)	-31.6%(p)	-5.0%	
US	Pending Home Sales (Aug, m/m)	2.0%	5.9%	
US	Chicago PMI (Sep)	52.0	51.2	
CA	GDP (Jul, m/m)	2.8%	6.5%	A “second wave” threatens to derail recovery.
UK	GDP (Q2, final, q/q)	-20.4%(p)	-2.2%	
GE	Unemployment Rate (Sep)	6.4%	6.4%	
FR	Consumer Spending (Aug, m/m)	na	0.5%	
JN	Retail Sales (Aug, m/m)	1.9%	-3.4%(↓)	Will “Go To Travel” help?
JN	Industrial Production (Aug, prelim, m/m)	1.1%	8.7%	Outlook is positive on improving exports.
AU	Private Sector Credit (Aug, m/m)	na	-0.1%	No meaningful pickup in credit yet.
Thursday, October 1				
US	Initial Jobless claims (Sep 26, thous)	na	870	
US	Continuing Claims (Sep 19, thous)	na	12580	
US	Personal Income (Aug, m/m)	-2.1%	0.4%	
US	Personal Spending (Aug, m/m)	0.7%	1.9%	
US	ISM Manufacturing (Sep)	55.9	56.0	
UK	Manufacturing PMI (Sep, final)	54.3(p)	55.2	
EC	Manufacturing PMI (Sep, final)	53.7(p)	51.7	
GE	Manufacturing PMI (Sep, final)	56.6(p)	52.2	
FR	Manufacturing PMI (Sep, final)	50.9(p)	49.8	
IT	Unemployment Rate (Aug, prelim)	na	9.7%	
IT	Manufacturing PMI (Sep)	na	53.1	
JN	Tankan Large Mfg Index (Q3)	-22	-34	Slight improvement expected, especially for services.
JN	Manufacturing PMI (Sep, final)	na	47.3	
AU	Job vacancies (Aug)	na	-43.2%	
Friday, October 2				
US	Change in Nonfarm Payrolls (Sep, thous)	865	1371	
US	Unemployment Rate (Sep)	8.2%	8.4%	
US	Vehicle Sales (Sep, mil.)	15.6	15.2	
US	U. of Mich. Cons Sentiment (Sep, final)	78.9(p)	74.1	
US	Factory Orders (Aug, m/m)	1.0%	6.4%	
JN	Unemployment Rate (Aug)	3.0%	2.9%	Steady at current level.
JN	Consumer Confidence (Sep)	na	29.3	
AU	Retail Sales (Aug, m/m)	-5.4%	3.2%	Fall in Victoria to impact aggregate figures.

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

Economic Indicators

Central Bank Policy Targets

Region	Target	Year/Year % Change in Target				
		Apr	May	Jun	Jul	Aug
US	Target: PCE price index 2.0% y/y	0.5	0.5	0.9	1.0	
Canada	Target: CPI 2.0% y/y, 1.0%-3.0% control range	-0.2	-0.4	0.7	0.1	0.1
UK	Target: CPI 2.0% y/y	0.8	0.5	0.6	1.0	0.2
Eurozone	Target: CPI below but close to 2.0% y/y	0.3	0.1	0.3	0.4	-0.2
Japan	Target: CPI 2.0% y/y	0.1	0.1	0.1	0.3	0.2
Australia	Target Range: CPI 2.0%-3.0% y/y	-0.3	-0.3	-0.3		

Source: Macrobond

Key Interest Rates

	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	######	#####	Jul-20	######
US (top of target range)	1.75	1.75	1.75	1.75	1.75	0.25	0.25	0.25	0.25	0.25	0.25
Canada (Overnight Rate)	1.75	1.75	1.75	1.75	1.75	0.25	0.25	0.25	0.25	0.25	0.25
UK (Bank Rate)	0.75	0.75	0.75	0.75	0.75	0.10	0.10	0.10	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)	-0.03	-0.03	-0.07	-0.04	-0.03	-0.07	-0.06	-0.07	-0.07	-0.02	-0.06
Australia (OCR)	0.76	0.75	0.75	0.75	0.75	0.43	0.25	0.25	0.25	0.25	0.25

Source: Macrobond

General Government Structural Balance as a % of Potential GDP

	2012	2013	2014	2015	2016	2017	2018	2019	Forecast 2020	Forecast 2021
US	-6.4	-4.5	-3.8	-3.6	-4.4	-4.8	-6.0	-6.3	-6.3	-6.2
Canada	-2.1	-1.1	0.1	0.8	0.7	0.0	-0.2	-0.5	-0.8	-0.8
UK	-6.0	-4.0	-4.7	-4.1	-2.9	-2.0	-1.5	-1.3	-1.4	-1.5
Eurozone	-2.1	-1.2	-0.9	-0.8	-0.7	-0.7	-0.6	-0.7	-0.9	
Germany	0.0	0.6	1.2	1.2	1.3	1.1	1.4	0.9	1.0	0.7
France	-4.4	-3.4	-3.3	-3.0	-2.8	-2.6	-2.5	-2.4	-2.5	-2.4
Italy	-1.5	-0.6	-1.1	-0.7	-1.4	-1.7	-1.8	-1.5	-2.1	-2.3
Japan	-7.6	-7.5	-5.5	-4.3	-4.1	-3.4	-3.1	-2.9	-2.1	-1.9
Australia	-3.3	-2.6	-2.6	-2.4	-2.2	-1.5	-0.6	-0.4	-0.4	0.0

Source: International Monetary Fund, World Economic Outlook

Headline Consumer and Producer Price Inflation

	CPI Year/Year % Change						PPI Year/Year % Change				
	Apr	May	Jun	Jul	Aug		Apr	May	Jun	Jul	Aug
US	0.3	0.1	0.6	1.0	1.3		-1.5	-0.8	-0.8	-0.4	-0.2
Canada	-0.2	-0.4	0.7	0.1	0.1		-6.0	-4.9	-3.3	-2.3	
UK	0.8	0.5	0.6	1.0	0.2		-0.7	-1.2	-0.9	-0.9	-0.9
Eurozone	0.3	0.1	0.3	0.4	-0.2		-4.5	-5.0	-3.7	-3.3	
Germany	0.9	0.6	0.9	-0.1	0.0		-1.9	-2.2	-1.8	-1.7	-1.2
France	0.3	0.4	0.2	0.8	0.2		-3.7	-3.3	-2.2	-2.1	
Italy	0.0	-0.2	-0.2	-0.4	-0.5		-5.1	-5.3	-4.5	-4.2	
Japan	0.1	0.1	0.1	0.3	0.2		-2.5	-2.8	-1.6	-0.9	-0.5
Australia	-0.3	-0.3	-0.3								

Source: Macrobond

Real GDP Growth (Q/Q Seasonally Adjusted)

	Quarter/Quarter % Change						Year/Year % Change				
	Q2-19	Q3-19	Q4-19	Q1-20	Q2-20		Q2-19	Q3-19	Q4-19	Q1-20	Q2-20
US	0.4	0.6	0.6	-1.3	-9.1		2.0	2.1	2.3	0.3	-9.1
Canada	0.8	0.3	0.1	-2.1	-11.5		2.0	1.6	1.5	-0.9	-13.0
UK	-0.1	0.5	0.0	-2.2	-20.4		1.4	1.3	1.1	-1.7	-21.7
Eurozone	0.1	0.3	0.1	-3.7	-11.8		1.2	1.4	1.0	-3.2	-14.7
Germany	-0.5	0.3	0.0	-2.0	-9.7		0.1	0.8	0.4	-2.2	-11.3
France	0.2	0.2	-0.2	-5.9	-13.8		1.8	1.6	0.8	-5.7	-18.9
Italy	0.1	0.0	-0.2	-5.5	-12.8		0.4	0.5	0.1	-5.6	-17.7
Japan	0.4	0.0	-1.8	-0.6	-7.9		0.9	1.7	-0.7	-1.9	-10.1
Australia	0.8	0.5	0.6	-0.3	-7.0		1.6	1.8	2.3	1.6	-6.3

Source: Macrobond

Industrial Production Index (M/M Seasonally Adjusted)

	Month/Month % Change						Year/Year % Change				
	Apr	May	Jun	Jul	Aug		Apr	May	Jun	Jul	Aug
US	-12.9	1.0	6.1	3.5	0.4		-16.5	-15.9	-10.7	-7.4	-7.7
Canada	-14.6	3.6	5.8				-21.1	-18.4	-13.5		
UK	-20.4	6.2	9.4	5.2			-24.0	-20.1	-12.5	-7.8	
Germany	-17.6	7.4	9.3	1.2			-24.8	-19.6	-11.3	-10.0	
France	-20.5	20.0	13.0	3.8			-34.9	-23.2	-11.3	-8.3	
Italy	-20.1	41.5	8.2	7.4			-43.4	-20.6	-13.8	-7.6	
Japan	-9.8	-8.9	1.9	8.7			-15.9	-24.5	-21.0	-14.7	

Source: Macrobond

Unemployment Rate (Seasonally Adjusted)

	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	######	#####	Jul-20	######
US	3.6	3.5	3.5	3.6	3.5	4.4	14.7	13.3	11.1	10.2	8.4
Canada	5.6	5.9	5.6	5.5	5.6	7.8	13.0	13.7	12.3	10.9	10.2
UK	3.8	3.8	3.9	4.0	3.9	3.9	3.9	3.9	4.1		
Eurozone	7.4	7.4	7.4	7.4	7.3	7.2	7.4	7.5	7.7	7.9	
Germany	5.0	5.0	5.0	5.0	5.0	5.0	5.8	6.3	6.4	6.4	6.4
France	8.3	8.2	8.2	8.0	7.7	7.5	7.8	6.9	6.6	6.9	
Italy	9.5	9.5	9.6	9.6	9.4	8.5	7.3	8.5	9.3	9.7	
Japan	2.4	2.2	2.2	2.4	2.4	2.5	2.6	2.9	2.8	2.9	
Australia	5.3	5.1	5.1	5.3	5.1	5.2	6.4	7.1	7.4	7.5	6.8

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.

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