

Global Macro Policy Quarterly

Global Macro Quarterly Highlights

- Global Macro and Policy Research team (GMPR) vision (page 2).
- Key macro themes and forecast summary: modest growth, soft inflation, and accommodative central banks (pages 3-4).
- Focus on Italy: the next elections and budgetary cycle and implications for investors (pages 5-6).
- How Demographics affects economic growth and debt (pages 7-8).
- Macro commentary by country (pages 9-14).
- Data tables (pages 15-16).
- Economic Indicators (pages 17-18).

Contact Information

Global Macro & Policy Research

Amlan Roy

Head, Global Macro & Policy Research

amlan_roy@ssga.com

+44-203-395-6719

Simona Mocuta

Senior Economist

simona_mocuta@ssga.com

+1-617-664-1133

Elliot Hentov, PhD

Head, Policy Research

elliott_hentov@ssga.com

+44-203-395-6610

Kaushik Baidya

Economist

kaushik_baidya@ssga.com

+91-80-6741-5048

Amy Le, CFA

Macro-Investment Strategist

amy_le@ssga.com

+44-203-395-6590

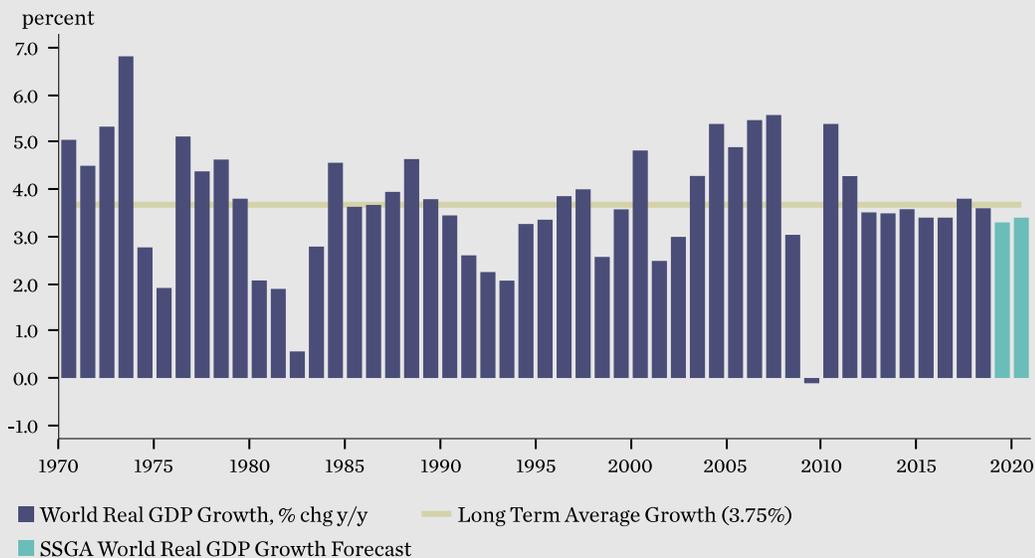
Alexander Petrov

Policy Research Strategist

alexander_petrov@ssga.com

+44-203-395-6228

Figure 1: Global Growth Slows, Risks Escalate



Sources: IMF, SSGA Global Macro and Policy Research, Oxford Economics

Global Macro and Policy Research (GMPR) Vision

Adam Smith—The Wealth Of Nations, Book II, Chapter III, p.346, para. 36

The statesman who should attempt to direct private people in what manner they ought to employ their capitals, would not only load himself with a most unnecessary attention, but assume an authority which could safely be trusted, not only to no single person, but to no council or senate whatever, and which would nowhere be so dangerous as in the hands of a man who had folly and presumption enough to fancy himself fit to exercise it.

Times Are A' Changing: Uncertain Macro Policy

Welcome to the inaugural issue of our Global Macro Policy Quarterly where we present different interconnected research perspectives of the macro world around us drawing on our experience in Demographics, Economics, Finance, Geopolitics & Policy. We believe that demographics impacts growth and inflation both in the short-term and in the long-term, contrary to most conventional views. We also believe that politics are more important than ever before in affecting macroeconomics and markets.

We are currently in “non-normal” or “abnormal times”¹ that are challenging the collective knowledge and understanding of experts, market participants and the common consumer as well as worker. In critiques of Economics as a profession, Nobel laureates George Akerlof and Robert Shiller² highlighted how macroeconomics ignores behavioral attributes (Trust, Confidence, Money Illusion, etc.) and how economists’ narratives or rhetoric contribute to such failures.

In such environment, economic and market data acts as a validator or negator of many theories, premises, conjectures, conventions and strong beliefs. Today, both micro and macro data, amplified by new informational channels and social media, have far-reaching effects on the economic decision making of individuals, corporates, sectors, countries, regions and the world. Contradicting the standard adage that more information leads to more efficient markets, in fact, much of this information creates additional volatility. In plain English, markets do not operate in isolation of the macro and political environment.

In this inaugural issue we bring you our views on (i) Macroeconomic analysis and commentary of GDP/output, prices/inflation and labor force/employment trends (ii) Political dynamics of Italy within the EU and market pricing/impact of Italian debt and (iii) Demographic underpinnings of low growth and rising public debt which is creating fiscal sustainability issues. This showcases different angles and lenses through which our team views the macro world that affect income, wealth, well-being and environment of the global population. In addition, we also present our Quarterly Economic Forecasts for major economies.

In future issues of our quarterly publication, we hope to provide better integrated macro perspectives as a complement to our weekly economic perspectives, white papers, blogs and other client presentations. Comments and criticisms are most welcome.

Amlan Roy (Head, Global Macro Policy Research)

¹ Note that we do not wholly subscribe to the notion of “new normal” as we believe that we are far from normal in terms of the macro environment of prices, rates, vols, spreads, skews, yields and output than standard in neoclassical macro or finance models.

² “Animal Spirits” and “Phishing For Phools” are two must read books on limitations highlighted in terms of content and communication.

Key Macro Themes for the Global Economy

- The world economy has swung from a synchronized global upturn that saw **global GDP growth** accelerate to a six-year high of 3.8% in 2017 to a synchronized global slowdown set to reduce growth to a post-crisis low of 3.3% this year. The shift may appear drastic seen from this perspective, but the reality is that we had been inching this way for some time. Indeed, compared to the March issue, our estimates of 2019 and 2020 global growth have only been reduced by 0.1 percentage point (ppt) each, to 3.3% and 3.4%, respectively. The downgrades largely reflect the materialization of risks on the trade front, with additional escalation of tariffs relative to what we anticipated earlier in the year. More so than the tariffs so far, the breakdown of trade negotiations between China and the US in early May fueled expectations of further escalation and fears of a broadening dispute (as exemplified by Huawei). This, in turn, not only exacerbated the already sharp slowdown in global trade—mirrored in a similar pullback in global industrial production—but also undermined business sentiment and caused the capex cycle to fizzle out. Half way through the year, while the possibility of a trade deal is still alive and indeed remains our baseline scenario (the G20 meeting in Japan at the end of June is a pivotal moment that should provide clarity), the reality is that more damage has been done to the global economy and any subsequent healing take longer to materialize. Therefore, what had earlier on looked to be a brief and shallow deceleration, has taken on a more permanent hue.
- **Global inflation** forecasts were also only minimally altered, but where changes were made, they were to bring estimates down. The key message remains that the much talked about inflation “deficit” persists across developed markets despite continued labor market healing that has brought unemployment rates to multi-decade lows. Having highlighted the inflation “mystery” a couple of years ago, the Fed, alongside other central banks, has engaged in a more focused review of concepts such as NAIRU (non-accelerating-inflation rate of unemployment) and the neutral interest rate. From the Fed to the BoC to the RBA, there is clearly greater openness to the idea that NAIRU may be quite a bit lower than previously thought, the implication being that central banks can afford to let economies run “hot” without risking an inflation event. And yet, it would be incorrect to assume that inflation is altogether dead; rather, we view it as “manageable”.
- Changing **central banks’** views around NAIRU and the neutral rate help reconcile what might otherwise be viewed as an apparent contradiction in the evolution of our forecasts this round. Indeed, whereas growth and inflation forecasts were little changed, expectations about the monetary policy stance associated with these new forecasts changed meaningfully. In a sense, our biggest challenge this time around was trying to reconcile incoming macro data that, while signaling a slowdown, remains inconsistent with a recession, and current market expectations (and even central bank signals) of meaningful easing that seem better aligned with just such a recession scenario. Ultimately, we chose to acknowledge the seemingly changing reaction function of central banks while still calibrating the response in terms of the number of rate cuts incorporated in our central forecast. We are concerned that while there is a commendable desire to “extend the cycle”, doing so by deploying monetary easing at a juncture which may not allow a subsequent unwind of such cuts before the next recession hits, may actually leave central banks with less rather than more, policy space at that future point.
- **Energy prices** have played a key role in the evolution of headline inflation in recent years. After collapsing from about \$110 per barrel in mid-2014 to \$30 a barrel in January 2016, Brent oil prices subsequently began to recover—helped partly by OPEC+’s decision to cut production 1.2 mbd in November 2016. Brent broke through \$60 in October 2017, \$70 in January of last year, and briefly above \$80 in September. However, the rally was subsequently short-circuited by the US decision to offer multiple waivers from Iran sanctions and by concomitant signs of softer global growth slowdown. Further production cuts from OPEC+ helped stabilize prices around \$60 but the specter of the trade war and weaker demand against a backdrop of US shale production limits the upside. Meanwhile, geopolitical risks are always important to oil prices, but their influence can go two ways: events that threaten supply flows tend to lift prices, but those seen as raising general uncertainty (such as trade tensions) are likely to suppress demand and prices.

Summary of World Output¹ and Inflation²

(Annual percent change)

| | Weight (2018) | History | | | | | Forecast | |
|---------------------------------------|------------------|---------|-------|-------|-------|-------|----------|-------|
| | | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| World Growth | 100.0 | 3.6 | 3.4 | 3.4 | 3.8 | 3.6 | 3.3 | 3.4 |
| Advanced Economies | 40.8 | 2.1 | 2.3 | 1.7 | 2.4 | 2.2 | 1.7 | 1.6 |
| US | 15.2 | 2.5 | 2.9 | 1.6 | 2.2 | 2.9 | 2.3 | 1.9 |
| Euro area | 11.4 | 1.6 | 2.3 | 1.9 | 2.5 | 1.8 | 1.2 | 1.4 |
| Germany | 3.2 | 2.2 | 1.5 | 2.2 | 2.5 | 1.5 | 0.8 | 1.5 |
| France | 2.2 | 1 | 1.0 | 1.1 | 2.3 | 1.5 | 1.4 | 1.5 |
| Italy | 1.8 | 0.2 | 0.8 | 1.2 | 1.7 | 0.8 | 0.0 | 0.4 |
| Japan | 4.2 | 0.3 | 1.3 | 0.6 | 1.9 | 0.8 | 0.7 | 0.5 |
| UK | 2.2 | 3.0 | 2.4 | 1.8 | 1.8 | 1.4 | 1.3 | 1.6 |
| Canada | 1.4 | 2.9 | 0.7 | 1.1 | 3.0 | 1.8 | 1.4 | 1.7 |
| Australia | 1.0 | 2.6 | 2.5 | 2.8 | 2.4 | 2.8 | 1.9 | 2.5 |
| Developing Economies | 59.2 | 4.7 | 4.3 | 4.6 | 4.8 | 4.5 | 4.4 | 4.6 |
| Advanced Economy Inflation | 40.8 | 1.4 | 0.3 | 0.8 | 1.7 | 2.0 | 1.6 | 1.8 |
| US | 15.2 | 1.6 | 0.1 | 1.3 | 2.1 | 2.4 | 1.9 | 2.0 |
| Euro area | 11.4 | 0.4 | 0.2 | 0.2 | 1.5 | 1.8 | 1.3 | 1.5 |
| Germany | 3.2 | 0.9 | 0.0 | 0.5 | 1.5 | 1.7 | 1.4 | 1.7 |
| France | 2.2 | 0.5 | 0.0 | 0.2 | 1.0 | 1.9 | 1.3 | 1.5 |
| Italy | 1.8 | 0.3 | 0.0 | -0.1 | 1.2 | 1.1 | 0.9 | 1.0 |
| Japan | 4.2 | 2.8 | 0.8 | -0.1 | 0.5 | 1.0 | 0.8 | 1.1 |
| UK | 2.2 | 1.5 | 0.1 | 0.6 | 2.7 | 2.5 | 1.9 | 1.9 |
| Canada | 1.4 | 1.9 | 1.1 | 1.4 | 1.6 | 2.2 | 1.9 | 2.0 |
| Australia | 1.0 | 2.5 | 1.5 | 1.3 | 1.9 | 1.9 | 1.6 | 2.1 |
| Developing Economies | 59.2 | 4.7 | 4.7 | 4.2 | 4.3 | 5.0 | 4.8 | 4.7 |
| Value of World Output (\$ trl) | | | | | | | | |
| At Market Exchange Rates | | 78.8 | 74.6 | 75.7 | 80.1 | 84.8 | 87.6 | 90.6 |
| At Purchasing Power Parities | | 110.8 | 115.7 | 120.7 | 127.5 | 135.2 | 139.7 | 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*, October 2018

Source for historical data: Oxford Economics and IMF. Forecast: SSGA Economics

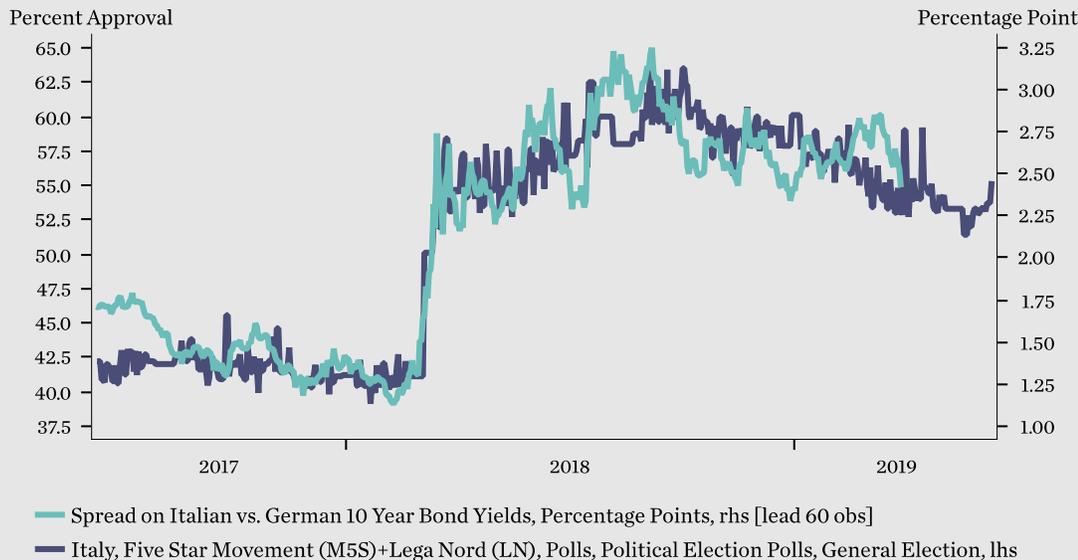
Political Risk In Focus: Il Sorpasso

In the 1962 Italian movie *Il Sorpasso* (“The Overtaking”), two characters face off: one is loud, brash, impulsive, and engages in reckless driving maneuvers (hence the movie’s title); the other is a serious law student, staid, risk-averse and responsible. One may be forgiven for projecting similar traits on the brewing Rome-Brussels dispute.

After a short hiatus, the Italian drama will increasingly concentrate investors’ minds in coming months. Italy has emerged from a technical recession but the outlook is for very tepid growth. There may be little reason for an acute crisis, but the political calendar now invites a re-escalation between the Italian government and the European Union. The European parliamentary elections delivered a satisfying European-wide result for integrationist forces so the EU has less reason to ignore the populist government in Rome and its worsening fiscal profile.

The spread on Italian 10-year bonds over German equivalents has closely tracked the national popularity of the two coalition parties in government, suggesting that investors believe that the current government’s popularity does not bode well for Italy’s long-term debt sustainability (Figure 2 below). This correlation is likely to break down over the coming months as spreads could widen even as the government loses popularity.

Figure 2: Italian Political Polls And Sovereign Bond Spreads



Sources: Political Thermometer, Macrobond Financial AB

Eurozone finance ministers will meet on July 9 and will likely launch an Excessive Deficit Procedure (EDP) on Italy. On paper, the EDP is a political process of supervision and negotiation between the European Council and a Member State, with the possibility of imposing sanctions on a state that does not comply with deficit targets. Italy will have roughly three months to formulate a budgetary response and though sanctions are highly unlikely to materialize in 2019, 2020 or even beyond, the political noise will draw attention to Italian risk—particularly in a globally fragile macro environment.

The durability of the 5 Star-Lega coalition is diminishing. Lega leader Salvini has successfully displaced 5 Star as Italy’s dominant political force, eating directly into his coalition partner’s electorate. Such cohabitation between adversaries is not sustainable. In particular, Salvini has continued to ride the wave of anti-establishment resentment without having to take responsibility for difficult policy decisions. Outsourcing of the prime minister role to a technocrat has allowed him to advocate for fiscal expansion while evading responsibility for the 2018 technical recession caused by higher government borrowing costs and weaker credit—both the result of the government’s policy choices.

The EU would like to force responsibility on all Italian actors. It could use the EDP to force a tighter budget that would erode the government’s credibility, similar to Syriza in Greece in 2015 (Syriza is likely to lose the 7 July election). If Rome resists budget measures, the EU expects the bond markets to inflict enough pain to exact a similar political price. The approach is similar to the cliff-edge driving in *Il Sorpasso*: it would not take much for everything to go terribly wrong.

European banks, especially in France and Spain, remain heavily exposed to Italy even if sovereign bond contagion is no longer a concern. More importantly, many critical Eurozone reforms could be upended by an Italian crisis. There is a recognition that current fiscal rules are too pro-cyclical and should be adjusted. A standoff with Italy could delay this change amid concerns about the optics of expanding fiscal leeway at the time Italy is asking for precisely that.

Italy could claim that rules are applied in a discriminatory fashion since Spanish fiscal deficits exceeded stated limits for nearly a decade (Figure 3). Moreover, Italy achieved the highest average primary surplus in the Eurozone in 2008-2017, highlighting that the debt burden is largely a legacy problem. Nonetheless, Brussels has always taken a more rigid line against Italian deficits, primarily because of Italy’s reluctance to engage in structural reform.

Figure 3: General Government Net Lending/Borrowing, Percent of GDP



Sources: International Monetary Fund (IMF)
 Note: 2018 is IMF estimate, 2019 and 2020 are IMF forecasts

In 2017, Italy surpassed Germany as the country with the largest government debt stock in Europe. During the 2015 Greek standoff, the ECB signaled it would follow political instructions and withhold liquidity from Greek banks. But while Europe could easily have afforded a Greek default/exit from the monetary union, it cannot afford an Italian exit. Italy’s Target 2 liabilities amount to half a trillion euros and roughly EUR 360 billion of government debt sits on the ECB’s balance sheet.

Hence, Salvini and Co. could play on these systemic risks knowing that there is a mutual interest in avoiding a repeat of the sovereign debt crisis. The upcoming leadership transition at the European Commission and the ECB means there will be no resolution prior to November, only more uncertainty about what approach new leaders would consider vis-à-vis Rome. Markets should fear the proposition that any new leadership may confront the issue sooner rather than later, convinced that Italian voters will desert the populists in the face of a brewing financial crisis. That is a daring proposition. In *Il Sorpasso*, it is ultimately the responsible law student who drives off a cliff in a failed imitation of the loudmouth.

Headline risk is thus likely to resume its weight on sentiment across European assets this summer. The rise in the risk premium will dampen any potential rise in the euro exchange rate even if rate differentials narrow. Similarly, given the importance of European financials to the equity market, European equities will continue to appear cheap but tail risks of financial contagion remain very much alive.

How Demographics affects Economic Growth and Debt

In our view, demographics encompasses a range of “consumer and worker characteristics” beyond the narrow interpretation of demographics as being solely age-related. Worker characteristics of a population influence a nation’s GDP on the supply side while consumer characteristics affect the demand side of GDP, contributing to inflation. We examine the demographic landscape in Germany, Japan and the US focusing on economic growth and debt.

Unprecedented demographic changes in terms of not only numbers of people are having a profound global impact on economies and societies in the **short, medium, and long-term** through GDP growth, GDP per capita growth, inflation, capital flows, asset returns as well as asset prices. Demographic differences translate into differences **in the economic environment** and effectiveness of fiscal and monetary policy in each country.

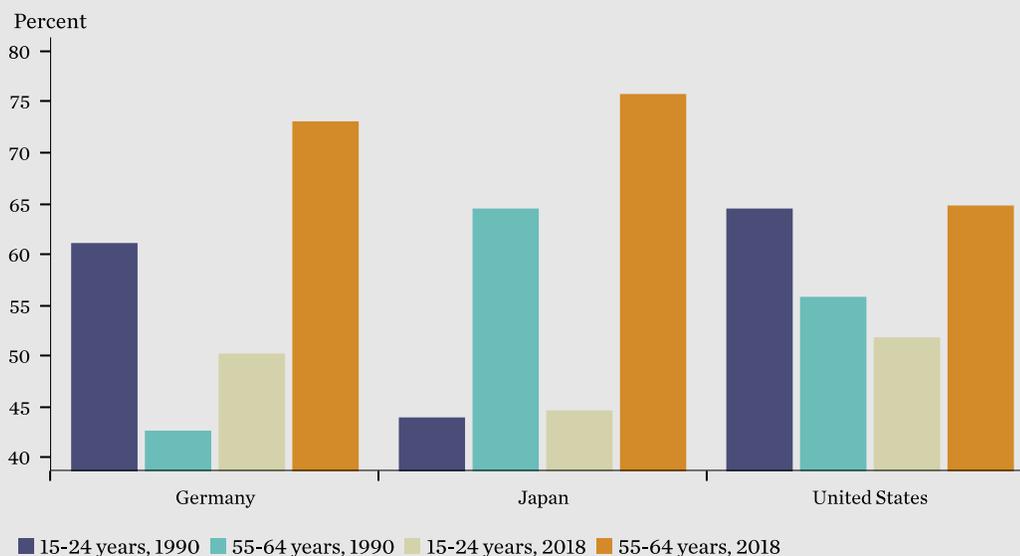
Germany, Japan and the US have experienced rising life expectancy and declining fertility rates over the last few decades, which has altered the age structures of their populations. However, they are demographically different in terms of people (“consumers and workers”) characteristics and core demographic metrics like population growth, median age, life expectancy and fertility rates. Also, the behavior and backgrounds of these consumers are different.

Over 2015-2020, the US is expected to have a higher annual population growth (0.7% p.a.) and higher fertility rate (1.9 children per woman) than Germany (0.2% p.a. and 1.5 children per woman) and Japan (-0.2% p.a. and 1.5 children per woman). Germany and Japan both have higher life expectancies at birth (81.3 years and 84.0 years respectively) than the US (79.6 years) over the same period. Japan has seen the largest increase in the share of people aged 60+ years (14.5% in 1985 to 33.6% in 2018), followed by Germany (19.9% in 1985 to 28.4% in 2018) and then the US (16.7% in 1985 to 22% in 2018). The median ages of the Japanese (48.2 years) and Germans (46.6 years) are projected to be almost 10 years higher than that of the average US person (38.3 years) in 2020.

Labor Force Participation Rates and Economic Growth

Total labor participation rates have declined over the last three decades in Japan and the US, but have increased in Germany mainly due to increased participation of older age groups and women in the labor force.

Figure 4. Labor Force Participation Rates by Age Group



Source: International Labor Organization (ILO)

The last three decades have seen a significant and sharp drop in the labor force participation rate of the youngest working-age group (**aged 15-24 years**) in the US and Germany. In the US, labor force participation rates have declined significantly for most prime-age groups too.

Meanwhile, the labor participation rates of older people (**aged 55-64 years**) have increased in all three countries but most dramatically in Germany (from 42.6% in 1990 to 73.1% in 2018). There are more people working after reaching their state pension age in the US and Germany as well. The labor force participation rate for people aged 65+ in the US has risen from 11.7% (1990) to 19.5% (2018) too. In previous research “Global Demographics & Retirement Implications”, we showed that the overall female labor force participation rates have increased significantly, helping to offset the sharp decline in the overall male labor force participation rate in these countries.

The impact on economic growth of these labor changes has been significant. Economic growth is composed of growth in working age population, labor productivity and hours worked. As highlighted in our report “Italian Demographics Spotlight”, **lower productivity growth is the main contributor towards lower GDP growth in Italy as well as many other developed countries.** This is evident even as these countries recovered from the 2008 financial crisis. For example, in the US, real GDP growth has dropped from 3.4 % p.a. (1998-2007) to 1.5% p.a. (2008-2017) due to the sharp fall in labor productivity growth from 2.7% p.a. to 1.1 % p.a. over the same period. Similarly, labor productivity growth rates have halved over that same time frame in Japan (from 2.2% p.a. 1.1% p.a.) and Germany (1.6% to 0.8%). Declines in working-age population in Japan (-1% p.a. over 2008-2017) and Germany (-0.04%p.a. over 2008-2017) also contributed towards lower GDP growth.

Given ageing population and the current composition of the workforce, low labor productivity growth and low labor force growth will continue in the three countries, creating a drag on their economic growth in the next few quarters as well as in the long run.

Consumption, old-age poverty and public debt

Consumption is an important determinant of growth and inflation. In advanced countries, aggregate private consumption expenditure accounts for nearly 60% of GDP expenditures. As mentioned earlier, it is not just the number of consumers that is important but their behaviors and characteristics are important as well. GDP growth and GDP per capita growth are affected by demographics. GDP per capita and the personal tax system influence disposable income which may either be consumed or saved. Savings are then routed to financial institutions and capital markets. Behavioral differences play a role in influencing quantum of savings and how those are allocated across financial investments, real estate etc.

The old-age consumers (above 60 years of age) in Germany, Japan and the US account for roughly 22%-34% of populations in these countries. They are also the fastest growing and the most expensive age group in terms of public finances and are the major contributor to growth in public debt. Ageing-related expenditures on account of public pensions, healthcare and long-term care add up to a large proportion of GDP in these rich countries. In Germany, they are projected to be 20.4% of the nation’s GDP in 2020 as per the European Commission. In the US, Social Security & Medicare accounted for 45% of Federal program expenditures in 2018.

Old-age poverty rates for the 60+ years group are relatively high in Japan (19.0%) and the US (20.9%) compared to Germany (9.5%). This will continue to impose **significant fiscal challenges and strains on the public budgets** of these ageing countries over the next few quarters. The proportion of older voters is significantly higher than those in younger age groups i.e., the voting power resides with older age groups. The spending patterns of older people differ significantly across these countries too. The older Japanese tends to consume more food and beverages and spend less on housing than their US and German counterparts. The proportion of expenditures spent on housing and utilities is approximately 34% by age group 65+ years in the US, 36% by age group 60+ years in Germany but only 19% by age group 60+ years in Japan. The increased numbers and changing expenditure patterns of the older consumers also affects inflation, we shall discuss that in greater detail in future commentary.

Outlook for the Major Advanced Economies

US: Extending The Cycle

As of this writing, the US economic expansion has become the longest on record, bringing into sharper focus the natural question of how much longer could this already long economic cycle continue. It is unclear exactly how much, but we are quite confident that there is “further to run”, to quote the tag line of our mid-year Global Market Outlook. Admittedly, we’ve just come through a turbulent couple of months that saw investor sentiment swing widely from near-complacency about the almost “done deal” US-China trade agreement to outright panic over seemingly equally “sure thing” tariffs on Mexican imports. In the event, neither has materialized so far. There might be a lesson here for us all as we try to assess where do we go from here...

There is no question that the US economy has slowed from last year’s solid 2.9% pace. The combination of corporate tax cuts, the immediate expensing of capital expenditures and a broad deregulation effort pushed capex intentions sharply higher earlier on. High levels of capacity utilization and \$800+ billion in repatriated profits also supported the capex cycle (even though a good chunk of those funds undoubtedly went into share buybacks). Unsurprisingly, then, private nonresidential fixed investment grew 6.9% y/y last year, the most since 2014. Business equipment investment grew 7.4%, while investment in intellectual property jumped 7.5%. By contrast, residential investment contracted for the first time since 2012 as high input costs, labor shortages, and softer demand amid rising mortgage rates took their toll.

Unfortunately, the capex cycle began to lose steam late last year as global growth slowed and trade uncertainty increased. Import tariffs on \$200 billion worth of Chinese imports, consisting primarily of intermediate and capital goods did not help. By the first quarter of 2019, business fixed investment (private non-residential investment in equipment) actually contracted on a quarter over quarter basis, the first decline in three years. Capex intentions have definitely taken a hit amid the escalating trade conflict, though it is interesting to note that small business sentiment appears to have held up better in that regard (likely due to primary reliance on domestic demand and perhaps also a sectoral skew towards services).

The good news is that consumer spending remains a solid anchor for the economy. Overall household consumption growth accelerated a tenth to 2.6% last year and despite a first-quarter wobble, seems likely to perform similarly in 2019. This is critically important given consumption’s large share in the economy. Indeed, as we like to say, if the consumer and services hold, the US economy as a whole will hold. So while the industrial sector seems to be once again on the downside of a mini-cycle, resilience elsewhere suggest the overall deceleration will not be extreme. In fact, our 2019 growth projection for the United States has not changed at all from the 2.3% growth rate we forecast back in March. If anything, we see reasons to bring that figure a tad higher given performance so far, but heightened risks surrounding trade persuaded us against that option. Growth likely slows further still in 2020, but only to 1.9%, which is essentially the estimated potential growth rate for the economy and still better than any other G7 economy.

The Fed will play a key role in extending the economic cycle. Indeed, having already made a drastic dovish pivot in March (when it did away with the previously expected two rate hikes in 2019), it has since turned more dovish still, opening the door to possible multiple rate cuts in coming months. The one obvious rationale for the shift has been the escalation in risks to the economic outlook. As noted, the data has certainly softened in places, and while not consistent with a recession, it does not rebuke the usefulness of some policy support. But this is not the only rationale for rate cuts that the Fed has advanced. Indeed, even if the economy were to perform quite well, Fed officials seem to have come around to the view that prior notions of what the neutral level of the interest rate or unemployment might need to be tweaked. Unemployment might be brought down further without causing inflation, implying that the neutral interest rate is lower than previously estimated. Indeed, the Fed’s latest Summary of Economic Projections (SEP) puts that neutral rate at 2.5%; it was 2.8% back in March. Thus, the current level of the Fed Fund rate is right on that median estimate of neutral, no longer at the “lower end of the estimated range” as it had been previously believed to be. And maybe, given intensifying risks to the outlook, that’s a bit higher than where the Committee would like it to be. So while we continue to believe that the multiple rate cuts currently implied by the bond market are excessive, we do see scope for two reductions over the next six to nine months. The Fed will likely go to great lengths to position such cuts as a minor calibration of the policy stance to a lower neutral rate out of a desire to not be “tight” when inflation is muted, rather than a signal of serious weakness in the economy.

Speaking of inflation: we do not believe it is dead...merely manageable. And we agree with the Fed's earlier assessment that the recent deceleration is largely transient (although that characterization was dropped from the latest Fed statement). Admittedly, headline CPI inflation touched a 28-month low of 1.5% y/y in February and the core PCE inflation rate slowed to an eighteen-month low of 1.5% y/y in March (it quickened to 1.6% in April). However, core inflation remains at 2.0% and the Dallas Fed's trimmed mean measure of PCE inflation shows little signs of weakness. Meanwhile, wage inflation has strengthened over the past eighteen months. While the ascent has recently paused, both the employment cost index and average hourly earnings (particularly for production and non-supervisory employees) are close to cycle highs. Although it took much longer than anticipated, it appears that the tight labor market is finally generating some genuine wage inflation.

Canada: Should Get Better From Here

After a stellar 2017, economic performance moderated in 2018 and is poised to soften further this year. Fiscal stimulus and a rebound in oil prices that encouraged a pickup in business investment lifted GDP growth to a six-year high of 3.0% in 2017. By 2018, growth moderated to 1.8% and the weak momentum has carried forward to 2019. Modest wage growth has caused household consumption to slow once the positive effects of earlier government fiscal transfers waned. Additionally, tougher mortgage lending regulations took a toll on housing, undermining confidence. Residential investment has been a major drag on growth, contracting 7.1% from highs reached in late 2017. House prices have been either flat or falling in most major metropolitan markets, capping investment and consumer confidence alike. Meanwhile, uncertainties regarding the NAFTA renegotiation and falling oil prices late last year, caused fixed investment to steadily deteriorate.

The economy grew modestly during the first quarter of 2019, supported in part by a 1.0% increase in fixed investment. Household spending has also contributed positively, with notable gains in both durable goods and services spending. We expect growth to pick up from the second quarter onwards, underpinned by strong investment intentions in both energy and non-energy sectors, while consumption should be supported by robust employment income. However, we are less optimistic than the Bank of Canada as we believe geopolitical uncertainties will weigh on business sentiment and cap the improvement in business investment. We forecast the economy to grow at 1.4% in 2019 and 1.7% in 2020.

Inflation is unlikely to pick up materially, but it is already essentially at target. Headline consumer price inflation accelerated to 2.4% y/y in May, although higher oil prices played a key role. All three measures of core inflation have stayed at around the 2.0% mark, while the trimmed mean measure rose to 2.3% in May. Taking into account the new carbon pollution charge, we see inflation at 1.9% and 2.0% in 2019 and 2020 respectively. The unemployment rate has declined by four tenths since the start of the year, standing at 5.4% as of May but there is probably slack in the labor market still. This should put keep wage inflation in check and, along with stabilization in energy prices, will keep inflation contained.

The Bank of Canada (BoC) appeared surprised by the speed of the turnaround in the economy in 2016-2017, and reacted by raising the policy interest rate in July and September of 2017. After a couple of stellar employment reports, it followed up with another move in January of 2018 and continued tightening in August and October. Up until very late last year, the BoC had been expected to raise rates again in early 2019. However, it appears to have recently joined the Fed and the ECB in embracing a dovish rhetoric as growth momentum eroded in recent months. As has been the case with the Fed, markets now price a higher likelihood of a cut than a hike this year. That might be asking too much given where the current policy rate is relative to its perceived neutral level, but there is also no urgency for any rate hike for the time being. Rather, we see the BoC on a prolonged pause throughout 2019 and 2020.

UK: Closer To The Moment of Truth?

The British economy proved quite resilient at first to the June 2016 Brexit shock. Indeed, despite the surprise, GDP rose 1.8% in 2016 thanks largely to consumer spending. And just as that faded, exports picked up on the lagged effects of sterling's devaluation to keep growth buoyant in 2017. However, momentum waned in the early part of 2018, although it reaccelerated in the second and third quarters on a combination of the World Cup, Royal Wedding, and unusually warm weather. Nevertheless, sluggish real wages and fragile home prices (particularly in London) have hindered consumption, while Brexit chaos weighed on business sentiment, causing fixed investment to come to standstill. Hence, the economy advanced just 1.4% in 2018, the twin lowest since 2012.

Unfortunately, we are no closer to having clarity on the final end point than we were at the start of the year, or a year ago, or two... At the core, this is due to the fact that the Brexit the UK seems to want amounts to an unsolvable puzzle (the equivalent of the “impossible trinity” in economics). The UK cannot retain full free access to the European market without also accepting the free movement of people (even though the EU may offer some concessions), and it cannot drive its own trade agreements without somehow imposing a border between Ireland and Northern Ireland. Therefore, while the delay in the Brexit deadline to October has bought some time, it has also prolonged the interim period of uncertainty. Additionally, Prime Minister’s May resignation and the ensuing Conservative Party leadership contest have raised the likelihood that a harder “Brexititeer” would lead the country in the next leg of negotiations with the European Union. This could intensify frictions so the future looks as uncertain as ever. And that’s not good for growth!

Assuming a cliff-edge is eventually avoided, growth does not slow much further from here. However, considerable damage to the economy has already been done. Fixed investment grew just 0.2% last year, the worst performance since the Global Financial Crisis. Although there was a surprising rebound in the first quarter of 2019, it is difficult to see that as the harbinger of a lasting acceleration. Moreover, sharply lower eurozone growth and the broad global growth deceleration handicap export demand, eroding the competitive benefits of a weaker sterling. Although the labor market remains healthy and wage growth has actually picked up, consumer sentiment remains gloomy, capping consumption gains. Chances are that a massive inventory build ahead of the original Brexit deadline in March will ultimately unwind, although the net effect of such an unwind on is uncertain due to it being largely satisfied through imports. All in all, we expect growth to erode one tenth to 1.3% this year before picking up to 1.7% in 2020. There are considerable two way risks to these projections, however and we will of course revisit these numbers accordingly. Despite sluggish growth over the next two years, the labor market remains tight, with the unemployment rate having crossed below 4.0% for the first time since 1975.

Inflation accelerated quite sharply in 2017 on a combination of rising oil prices and the depreciation of sterling following the referendum result. Indeed, headline consumer price inflation jumped 2.0 percentage points to 2.7%, by far the highest in the G7. Oil prices rose about 80% between the beginning of 2016 and the end of 2017, contributing to an acceleration of inflation around the G7. But, the UK was simultaneously buffeted by a precipitous drop in sterling, which plunged from around \$1.50 to \$1.20 between June and September 2016. Fortunately, such an exchange rate movement had only a temporary effect on inflation and that is now beginning to fading. Lower oil prices have also contributed to a disinflationary push in recent months. The combination of more favorable base effects, stronger sterling, and weak growth help push inflation from 2.5% in 2018 to 1.9% this year and next. But a no-deal Brexit might send sterling tumbling, and it is worth noting that wage inflation has picked up of late, with average weekly earnings recently exceeding 3.5% y/y, the highest since the Global Financial Crisis.

The Bank of England cut the Bank Rate to help bolster the economy in the aftermath of the referendum, but has since changed course. Shortly after the referendum shock, the Bank cut its policy rate 25 basis points to just 25 basis points. It maintained that rate for 15 months, before hiking 25 basis points in November 2017. It followed with another hike in August 2018, leaving Bank Rate at 75 basis points, the highest since 2009. Assuming an agreement is reached that ushers in a transition period, the Old Lady seems likely to hike once in 2019, and at least once more in 2020. The Monetary Policy Committee (MPC) anticipates that, directionally, the next move will be another hike. However, whereas we had previously expected such a hike to come this year, the escalation in both domestic and global risks, coupled with the sharp dovish turn in global central bank rhetoric of late, suggests that the Old Lady might be forced to stay on hold for an extended period.

Eurozone: Stuck In Low Gear

Not that long ago—as recently as 2017 in fact—the eurozone was the undisputed biggest positive surprise of the world economy. Growth accelerated to an impressive 2.5%, the best since 2007 and well above potential. Sadly, that outperformance did not last. Partly that was simply because it is very hard—almost impossible, even—to sustain that kind of momentum. But it was also because too many things conspired to buffet the regional economy: ongoing Brexit drama, new emission standards in Germany, threats of automotive tariffs and escalating trade tensions, Chinese slowdown, etc. Growth therefore slowed from a quarterly pace of 0.7% in 2017 to 0.4% q/q during the first half of 2018 and then to 0.2% in the second half. Full-year GDP growth—which in mid-2018 was seen reaching 2.2%—came in at 1.8%. Rather than a

turnaround, 2019 is poised to bring further deterioration: we've reduced our growth forecast by a tenth each this year and next, to 1.2% and 1.4%, respectively.

Not only have both the weak and the strong been hurting in this downturn, but the traditional roles have even reversed somewhat. Germany is poised to grow just 0.8% this year, having narrowly escaped a technical recession in late 2018. And the road ahead remains exceedingly bumpy: Germany's manufacturing PMI has been stuck in contraction territory for half a year, with little signs of improvement so far. In fact, it has fared worse than Italy's, whose economy did undergo a mild technical recession in 2018...By contrast, France is shaping up to be the growth leader among the "Big-3" this year, and unusual situation that to some extent mirrors the dichotomy seen around the world between a weak manufacturing sector and a much more resilient service sector. France is still expected to manage 1.4% growth this year, whereas Italy will be flat.

Despite the current shared woes, however, there has been a marked divergence between the three big eurozone economies over the longer course of the post-GFC recovery. Germany has boomed, with the unemployment rate falling steadily since mid-2014 to under 5.0% currently (the lowest in the near-30 year history of the series). France has generally lagged, with the (mainland) unemployment rate not beginning to fall until late 2015, and still at an elevated 8.7%. And, Italy has really struggled, with the labor market improvement not beginning until 2015 and proceeding at a very modest pace. It's taken four years to reduce the unemployment rate by 2.5 percentage points and it's still above 10%!

As has been the case everywhere, headline consumer price (CPI) inflation has closely reflected the evolution of oil prices over the last several years. In early 2017, it accelerated sharply to 2.0% y/y, while core CPI inflation (which excludes food and energy) continued to drift sideways around 1.0%. Since then the headline has continued to oscillate with oil prices, while core hasn't moved much at all. Indeed, it was still below 1.0% y/y in May. Progress on inflation is likely to be slow. The core measure is unlikely to move materially above 1.0% for some time yet given the backdrop of softer growth. Meanwhile, the headline dips to 1.3% in 2019, largely on account of oil prices and only moves up a couple of tenths next year.

Against this backdrop, the ECB eased progressively, with the deposit rate falling to zero in 2012, -20 basis points in 2014, -30 basis points in 2015, and to -40 basis points in March 2016. It also introduced a genuine QE program in January 2015, and subsequently made a slew of adjustments and enhancements to it. Then, in early 2017, growth picked-up and the threat of a broad-based deflation receded, prompting the Bank to change direction. In April 2017, it began by "tapering" the quantity of assets purchased. The program ended in December 2018 (reinvestments will continue), shifting monetary policy focus away from QE and back to traditional interest rate policies.

And yet, ECB's hopes of finally initiating genuine policy normalization have been thwarted once again. In response to the region's sharp slowdown, the Bank has repeatedly altered its forward guidance in recent months, extending the period when rates are expected to "remain at their present levels" all the way to mid-2020. It also announced a new set of quarterly targeted longer-term refinancing operations (TLTRO-III) scheduled to run from September 2019 to March 2021, each with a two-year maturity. And most recently, President Draghi delivered another powerful promise to use "all instruments" available to the Bank in the pursuit of the inflation target. Investors are now expecting a rate cut as the next move...and the ECB may well deliver it. We are, however, skeptical it would accomplish much since it is not the high cost of capital that we perceive to be eurozone's real problem, but rather the lack of productivity-inducing structural reforms.

Japan: Structural Reforms Needed To Kickstart Growth

Japan's current expansion is set to be the longest since the post-war era, but growing domestic risks and global uncertainty will continue to weigh on growth over the next few years. The Bank of Japan's stance has been accommodative for a long time, and there remains very little space for fiscal policy. Structural reforms such as a more open migration policy, along with efforts to accelerate productivity are required to offset the aging workforce and revive potential growth.

GDP grew a decent 0.8% in 2018 despite outright contractions in the first and third quarter, due to a larger than anticipated rebound in the fourth quarter. However, exports are being increasingly challenged by slower overseas demand—both in specific markets such as semiconductors and autos, but also more broadly due to second-hand effects of the US-China trade spat. In turn, the softer export outlook threatens to undermine capex spending, exacerbating downside risks. The

Manufacturing PMI dipped to below 50 in February for the first time in three years, led by decreases in new and export orders components. Consumer spending has remained somewhat resilient, underpinned by a strong labor market. However, wage growth has been rather slow, with labor cash earnings having contracted for three consecutive months since the start of this year. Despite weak earnings, spending has been propped up by the front-loading ahead of the VAT tax increase scheduled for October. Typically, a VAT tax hike tends to depress demand in subsequent quarters, but this is less likely to be the case this time around due to the offsetting fiscal measures the government is planning. The combination of weaker external demand and a net pullback in consumption in the fourth quarter results in 0.7% GDP growth this year, while growth slows further to 0.5% in 2020. Increased spending surrounding the 2020 Olympics should provide some support, limiting the downside.

Inflation has also been anemic. There were false starts in 2013-14 and again in 2017-18. Inflation accelerated in late 2017-early 2018, with headline consumer price inflation exceeding 1.0% through March and then again from August to October. However, it has since relapsed amid lower energy prices. Underlying inflation has also been languishing. Both the headline and national core (which excludes only fresh food products) continue to trend sideways between zero and 1.0% y/y. We retain the expectation that, eventually, the very tight labor market (unemployment is at 2.4%, lowest since the 90's) will translate into sufficient wage growth to push broad inflation higher. Wage inflation had indeed reached a cycle high at 3.3% y/y in November, but has turned negative since the start of this year (partly due to a change in methodology) so it remains to be seen whether the 163 job vacancies available for every 100 applicants mean the labor market is tight enough to ignite wage inflation in a sustainable manner. While we await such evidence, we see headline inflation settling around 0.8% this year before accelerating to 1.1% in 2020 on the impact of the VAT hike.

Because of the lack of progress on inflation, the Bank of Japan's (BoJ) hands are tied, with no meaningful change to policy anticipated before 2020 at the earliest. In 2016, the ongoing failure to boost inflation prompted the Bank to conduct a comprehensive assessment of its policy actions. And in light of that, it changed the policy framework yet again, introducing "quantitative and qualitative easing with yield curve control," under which it tried to control the shape of the yield curve by establishing a negative short-term interest rate (of -10 basis points) while simultaneously targeting a zero percent yield on the 10-year Japanese Government Bond. In July 2018 the Bank made some technical adjustments to this framework meant to allow it to maintain ultra-low interest rates for longer. It also formally introduced forward guidance, all in an effort to override the effects of prolonged deflation on inflation expectations. In the latest monetary policy meeting, the BoJ introduced further macro prudential measures to ease liquidity in the system. We do not anticipate any change in the BoJ's policy stance over the next two years, but a lack of progress on the inflation front might induce the BoJ to undertake additional stimulus measures in late 2019 or early 2020.

Australia: A Weak 2019, But 2020 Looks Better

After a strong 3.8% (annualized) growth in the first two quarters of 2018, momentum fizzed out sharply in the second half, when GDP grew just 0.9% (annualized). Thus, while the full-year growth of 2.8% was an improvement over the 2.4% 2017 performance, this was two tenths below what the Reserve Bank of Australia had been anticipating. The RBA has revised down its forecasts for 2019 and 2020 growth to average around 2.75%, but we suspect further downgrades are in order.

Although private consumption picked up a little in 2018, several factors had weighed it down recently. Firstly, the negative wealth effect is undeniable, as the house price correction intensified. House prices plunged 3.0% q/q in the first quarter—the sharpest decline on record that left it 7.4% lower than a year earlier. Secondly, financial conditions have tightened marginally, as several lenders raised mortgage rates in the second half of the year. In the context of high household debt, this had deterred household spending. Lastly, although the labor market has been red hot and keeps improving, wage growth had been disappointingly weak. Still, we believe things will improve in the second half of the year. While house prices may not bottom until 2020, we expect the low- and middle-income tax offset, including the increase announced in the Budget for 2019/20, to boost income. The recent interest rate cut by the Reserve Bank of Australia (RBA) should also modestly alleviate households' debt burden, while the proposed amendment by the Australian Prudential Regulatory Authority (APRA) to ease borrowing criteria will help improve housing sentiment.

Eroding house prices have led to a sharp downturn in residential investment, which will weigh on growth for some time yet. However, the CAPEX survey for the first quarter revealed increased investment intentions in both mining and non-mining sectors for 2020. Public demand is slated to play an especially important role, with a number of infrastructure projects in the pipeline. Additionally, the roll out of the National Disability Insurance scheme in 2020 will increase public consumption. We expect the combined impetus of all these measures to bring about 1.9% growth this year and an acceleration to 2.5% in 2020.

The inflation outlook was revised slightly upward in the Statement of Monetary Policy published in May. However, headline inflation came in at a woeful 1.3% y/y in the first quarter, a two and a half year low. This was partly due to fuel prices, but underlying inflation has also 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. Indeed, while wage inflation (as measured by private-sector wages excluding bonuses) has clearly bottomed, it still only tracked at 2.3% y/y in the first quarter (whereas it ran at about 4.0% per year during the mid to late 2000s). Wage growth is unlikely to shoot up sometime soon, due to the excess capacity in the system. The underemployment rate rose for the third consecutive month to 8.9% in May, while the unemployment rate still has further room to fall from the current 5.2%. The RBA recently acknowledged that the full-employment rate is probably somewhere around 4.5%, hence wage growth will recover only slowly as the gap closes. Our baseline expectation is therefore for inflation to average just 1.6% in 2019 before rising to a still modest 2.0% in 2020.

The ongoing labor market tightening, slow progress on inflation, declining consumer confidence, an intensifying housing correction, and heightened uncertainty about external demand induced the RBA to initiate a 25 basis points cut in June. The RBA has emphasized that any action hereon will be dependent on the nature of the incoming data. Despite some turnaround in growth in the second half of the year, low inflation may force the RBA to cut again towards the end of 2019. We expect one more rate cut of 25 basis points in 2019, bringing the cash rate to 1.00%, while data improves just enough to enable them to hold for the rest of 2020.

Financial Markets Summary

6/21/19 2:48 PM

Stock Markets

| Country | Exchange | Last | % Ch | | 10 Year Bond Yields | | | Currencies | | |
|-----------|------------|----------|------|-------|---------------------|------------|-----------|------------|-----------|----------|
| | | | Week | YTD | Last | BP Ch Week | BP Ch YTD | Last | % Ch Week | % Ch YTD |
| US | S&P 500® | 2954.42 | 2.3% | 17.9% | 2.06 | -2 | -62 | 96.252 | -1.4% | 0.1% |
| Canada | TSE 300 | 16533.35 | 1.4% | 15.4% | 1.48 | 5 | -48 | 1.321 | -1.5% | -3.1% |
| UK | FTSE® | 7407.5 | 0.8% | 10.1% | 0.85 | 0 | -43 | 1.2738 | 1.2% | -0.1% |
| Germany | DAX | 12339.92 | 2.0% | 16.9% | -0.29 | -3 | -53 | | | |
| France | CAC-40 | 5528.33 | 3.0% | 16.9% | 0.05 | -5 | -66 | 1.1367 | 1.4% | -0.9% |
| Italy | FTSE® MIB | 21388.63 | 3.8% | 16.7% | 2.15 | -20 | -59 | | | |
| Japan | Nikkei 225 | 21258.64 | 0.7% | 6.2% | -0.16 | -3 | -16 | 107.39 | -1.1% | -2.1% |
| Australia | ASX 200 | 6650.785 | 1.5% | 17.8% | 1.28 | -9 | -104 | 0.6929 | 0.8% | -1.7% |

Commodity Markets

| Commodity | Unit | Source | Last Price | %Ch Week | %Ch YTD | %Ch Yr Ago |
|-------------|---------------|-----------|------------|----------|---------|------------|
| Oil (Brent) | US \$/Barrel | Bloomberg | 64.67 | 2.8% | 21.6% | -10.8% |
| Gold | US \$/troy oz | Bloomberg | 1398.02 | 4.2% | 9.0% | 10.3% |

Source: Bloomberg®

Week in Review: Data Releases and Major Events (June 17–June 21)

| Country | Release (Date, format) | Consensus | Actual | Last | Comments |
|---------------------------|---|-----------|---------------|------------|--|
| Monday, June 17 | | | | | |
| US | Empire Manufacturing (Jun) | 11 | -8.6 | 17.8 | Concerning. |
| US | NAHB Housing Market Index (Jun) | 67 | 64 | 66 | Decent. |
| Tuesday, June 18 | | | | | |
| US | Housing Starts (May, thous) | 1239 | 1269 | 1281(↑r) | Good. |
| US | Building Permits (May, thous) | 1292 | 1294 | 1290(↓r) | Good. |
| CA | Manufacturing Sales (Apr, m/m) | 0.4% | -0.6% | 2.6%(↑r) | Autos led surprise decline in sales. |
| EC | CPI (May, final, y/y) | 1.2%(p) | 1.2% | 1.7% | Most likely to rebound next month. |
| GE | ZEW Investor Expectations (Jun) | -5.8 | -21.1 | -2.1 | Distressing. |
| AU | RBA Meeting Minutes | | | | Further easing ahead. |
| AU | House Price Index (Q1, q/q) | -2.6% | -3.0% | -2.4% | Sharpest fall on record, yet to bottom out. |
| Wednesday, June 19 | | | | | |
| US | FOMC Monetary Policy Decision | 2.5% | 2.5% | 2.5% | Major dovish shift in the “dots”. |
| CA | Terantet/National Bank HPI (May, y/y) | na | 0.7% | 1.2% | A monthly gain, first in nine months. |
| CA | CPI (May, y/y) | 2.1% | 2.4% | 2.0% | Inflation at highest since October. |
| UK | CPI (May, y/y) | 2.0% | 2.0% | 2.1% | Core eased modestly. |
| UK | PPI Output (May, y/y) | 1.8% | 1.8% | 2.1% | Moderating. |
| GE | PPI (May, y/y) | 2.1% | 1.9% | 2.5% | More volatile recently. |
| JN | Trade Balance Adjusted (May, ¥ bil.) | -754.5 | -609.1 | -170.2(↓r) | Exports fell for a sixth consecutive month. |
| Thursday, June 20 | | | | | |
| US | Initial Jobless claims (Jun 15, thous) | 220 | 216 | 222 | These remain very encouraging. |
| US | Philadelphia Fed Business Outlook (Jun) | 10.4 | 0.3 | 16.6 | Concerning. |
| US | Leading Index (May, m/m) | 0.1% | 0.0% | 0.1%(↓r) | Clear loss of momentum. |
| UK | BoE Monetary Policy Decision | 0.75% | 0.75% | 0.75% | Sounding more cautious. |
| UK | Retail Sales (May, m/m) | -0.5% | -0.5% | -0.1%(↓r) | Weak, but it was expected. |
| JN | BoJ Monetary Policy Decision | -0.10% | -0.10% | -0.10% | No change to the statement. |
| JN | All Industry Activity Index (Apr) | 0.7% | 0.9% | -0.3%(↑r) | Contributions were broad-based. |
| Friday, June 21 | | | | | |
| US | Existing Home Sales (May, m/m) | 1.2% | 2.5% | -0.4% | Good print. |
| CA | Retail Sales (Apr, m/m) | 0.2% | 0.1% | 1.3%(↑r) | Third consecutive rise. |
| EC | Manufacturing PMI (Jun, prelim) | 48.0 | 47.8 | 47.7 | Still bad, but at least not worse than before. |
| EC | Services PMI (Jun, prelim) | 53.0 | 53.4 | 52.9 | Critical for this to hold! |
| GE | Manufacturing PMI (Jun, prelim) | 44.6 | 45.4 | 44.3 | Still bad, but at least not worse than before. |
| GE | Services PMI (Jun, prelim) | 55.3 | 55.6 | 55.4 | Critical for this to hold; holding so far! |
| FR | Manufacturing PMI (Jun, prelim) | 50.9 | 52.0 | 50.6 | We'll take it! |
| FR | Wages (Q1, final, q/q) | 0.7%(p) | 0.8% | 0.2% | We'll take this one, too. |
| JN | CPI (May, y/y) | 0.7% | 0.7% | 0.9% | Temporary factors weighing on inflation. |
| JN | Manufacturing PMI (Jun, prelim) | na | 49.5 | 49.8 | New orders fall fastest since June 2016. |

Source: for data, Bloomberg®; for commentary, SSGA Economics

Week in Preview: Data Releases and Major Events (June 24 – June 28)

| Country | Release (Date, format) | Consensus | Last | Comments |
|---------------------------|--|-----------|-----------|--|
| Monday, June 24 | | | | |
| GE | IFO Business Climate (Jun) | 97.5 | 97.9 | Will this hold given plunge in ZEW? |
| JN | Leading Index (April, final) | 95.5(p) | 95.7 | |
| Tuesday, June 25 | | | | |
| US | FHFA House Price Index (Apr, m/m) | 0.2% | 0.1% | |
| US | S&P CoreLogic 20-City Index (Apr, m/m) | 0.1% | 0.1% | |
| US | Consumer Confidence (Jun) | 132.0 | 134.1 | This is very important to watch. |
| US | New Home Sales (May, thous) | 685 | 673 | Lower mortgage rates offer support. |
| FR | Business Confidence (Jun) | na | 106 | |
| JN | PPI Services (May, y/y) | 1.0% | 0.9% | Has been hovering around 1.0% for a year now. |
| Wednesday, June 26 | | | | |
| US | Durable Goods Orders (May, prelim, m/m) | 0.0% | -2.1% | Important indicator for capex/business sentiment. |
| GE | GfK Consumer Confidence (Jul) | 10.0 | 10.1 | |
| FR | Consumer Confidence (Jun) | 100 | 99 | Signs of improvement in France. |
| Thursday, June 27 | | | | |
| US | Initial Jobless claims (Jun 22, thous) | --- | 216 | |
| US | GDP (Q1, third, saar q/q) | 3.2% | 2.2% | Second quarter print more in focus by now. |
| US | Pending Home Sales (May, m/m) | 1.0% | -1.5% | |
| US | Kansas City Fed Manf. Activity (Jun) | 0 | 4 | Could be worse given Philly, Empire. |
| UK | GfK Consumer Confidence (Jun) | -11 | -10 | |
| GE | CPI (Jun, prelim, y/y) | 1.6% | 1.4% | |
| IT | Consumer Confidence (Jun) | na | 111.8 | |
| JN | Retail Sales (May, m/m) | 0.6% | -0.1%(↓r) | Sales likely to stay positive before October VAT hike. |
| Friday, June 28 | | | | |
| US | Personal Income (May, m/m) | 0.3% | 0.5% | |
| US | Personal Spending (May, m/m) | 0.4% | 0.3% | Should be a good print given retail sales. |
| US | U of M Cons. Sentiment (Jun, final) | 97.9(p) | 100 | |
| US | Chicago PMI (Jun) | 54.0 | 54.2 | |
| CA | GDP (Apr, m/m) | na | 0.5% | Should get better from here. |
| CA | BoC Senior Loan Officer Survey (Q2) | na | -2.7 | Brighter for growth likely to pull sentiment up. |
| UK | GDP (Q1, final, q/q) | 0.5%(p) | 0.2% | Old news by now. |
| GE | Retail Sales (May, m/m) | 0.5% | -1.0%(↑r) | Very important for this to rebound. |
| FR | CPI (Jun, prelim, y/y) | na | 0.9% | |
| FR | PPI (May, y/y) | na | 2.2% | |
| FR | Consumer Spending (May, m/m) | na | 0.8% | |
| IT | CPI (Jun, prelim, y/y) | na | 0.8%(↓r) | |
| IT | PPI (May, y/y) | na | 2.8% | |
| JN | Unemployment Rate (May) | 2.4% | 2.4% | Labor market to remain as tight as ever. |
| JN | Industrial Production (May, prelim, m/m) | 0.7% | 0.6% | Slowing, PMI points to darker days ahead. |
| AU | Private Sector Credit (May, m/m) | 0.2% | 0.2% | Anemic. |

Source: for data, Bloomberg®; for commentary, SSGA Economics

Economic Indicators

Central Bank Policy Targets

| | | Year/Year % Change in Target | | | | |
|-----------|---|------------------------------|-----|-----|-----|-----|
| | | Jan | Feb | Mar | Apr | May |
| US | Target: PCE price index 2.0% y/y | 1.3 | 1.3 | 1.4 | 1.5 | |
| Canada | Target: CPI 2.0% y/y, 1.0%-3.0% control range | 1.4 | 1.5 | 1.9 | 2.0 | 2.4 |
| UK | Target: CPI 2.0% y/y | 1.8 | 1.9 | 1.9 | 2.1 | 2.0 |
| Eurozone | Target: CPI below but close to 2.0% y/y | 1.4 | 1.5 | 1.4 | 1.7 | 1.2 |
| Japan | Target: CPI 2.0% y/y | 0.2 | 0.2 | 0.5 | 0.9 | 0.7 |
| Australia | Target Range: CPI 2.0%-3.0% y/y | 1.3 | 1.3 | 1.3 | | |

Source: Macrobond

Key Interest Rates

| | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Nov-18 | Dec-18 | Jan-19 | Feb-19 | #### | Apr-19 | May-19 |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|
| US (top of target range) | 2.00 | 2.00 | 2.25 | 2.25 | 2.25 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 |
| Canada (Overnight Rate) | 1.50 | 1.50 | 1.50 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 | 1.75 |
| UK (Bank Rate) | 0.50 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 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 | -0.07 | -0.06 | -0.06 | -0.06 | -0.05 | -0.06 | -0.07 | -0.06 |
| Australia (OCR) | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 | 1.50 |

Source: Macrobond

General Government Structural Balance as a % of Potential GDP

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | Forecast | |
|-----------|------|------|------|------|------|------|------|------|----------|------|
| | | | | | | | | | 2018 | 2019 |
| US | -9.3 | -7.9 | -6.1 | -4.0 | -3.4 | -3.2 | -3.9 | -4.0 | -4.7 | -5.2 |
| Canada | -3.8 | -3.1 | -1.9 | -0.9 | 0.3 | 0.9 | 0.8 | 0.1 | -0.2 | -0.4 |
| UK | -7.2 | -5.9 | -5.9 | -3.9 | -4.6 | -3.9 | -2.8 | -1.9 | -1.4 | -1.2 |
| Eurozone | -4.8 | -3.9 | -2.2 | -1.3 | -1.0 | -0.9 | -0.8 | -0.7 | -0.7 | -0.9 |
| Germany | -2.4 | -1.4 | -0.1 | 0.2 | 0.9 | 0.8 | 1.0 | 0.9 | 1.3 | 0.7 |
| France | -6.2 | -5.2 | -4.5 | -3.5 | -3.3 | -3.0 | -2.8 | -2.6 | -2.5 | -2.5 |
| Italy | -3.7 | -4.1 | -1.5 | -0.6 | -1.1 | -0.7 | -1.4 | -1.6 | -1.7 | -2.1 |
| Japan | -8.0 | -8.0 | -7.6 | -7.5 | -5.5 | -4.3 | -4.1 | -3.4 | -3.1 | -2.8 |
| Australia | -4.9 | -4.2 | -3.3 | -2.6 | -2.5 | -2.4 | -2.2 | -1.2 | -1.0 | -1.2 |

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 | 1.6 | 1.5 | 1.9 | 2.0 | 1.8 | 1.9 | 1.9 | 2.2 | 2.2 | 1.8 |
| Canada | 1.4 | 1.5 | 1.9 | 2.0 | 2.4 | 1.0 | 1.2 | 1.5 | 1.8 | |
| UK | 1.8 | 1.9 | 1.9 | 2.1 | 2.0 | 2.1 | 2.4 | 2.2 | 2.1 | 1.8 |
| Eurozone | 1.4 | 1.5 | 1.4 | 1.7 | 1.2 | 2.9 | 3.0 | 2.9 | 2.6 | |
| Germany | 1.4 | 1.5 | 1.3 | 2.0 | 1.4 | 2.6 | 2.6 | 2.4 | 2.5 | 1.9 |
| France | 1.2 | 1.3 | 1.1 | 1.3 | 0.9 | 1.9 | 1.9 | 1.8 | 2.2 | |
| Italy | 0.9 | 1.0 | 1.0 | 1.1 | 0.8 | 3.4 | 3.1 | 2.9 | 2.1 | |
| Japan | 0.2 | 0.2 | 0.5 | 0.9 | 0.7 | 0.6 | 0.9 | 1.3 | 1.3 | 0.7 |
| Australia | 1.3 | 1.3 | 1.3 | | | 1.9 | 1.9 | 1.9 | | |

Source: Macrobond

Economic Indicators

Real GDP Growth (Q/Q Seasonally Adjusted)

| | Quarter/Quarter % Change | | | | | Year/Year % Change | | | | |
|-----------|--------------------------|-------|-------|-------|-------|--------------------|-------|-------|-------|-------|
| | Q1-18 | Q2-18 | Q3-18 | Q4-18 | Q1-19 | Q1-18 | Q2-18 | Q3-18 | Q4-18 | Q1-19 |
| US | 0.5 | 1.0 | 0.8 | 0.5 | 0.8 | 2.6 | 2.9 | 3.0 | 3.0 | 3.2 |
| Canada | 0.4 | 0.6 | 0.5 | 0.1 | 0.1 | 2.2 | 1.8 | 2.0 | 1.6 | 1.3 |
| UK | 0.1 | 0.4 | 0.7 | 0.2 | 0.5 | 1.2 | 1.4 | 1.6 | 1.4 | 1.8 |
| Eurozone | 0.4 | 0.4 | 0.1 | 0.2 | 0.4 | 2.5 | 2.2 | 1.7 | 1.2 | 1.2 |
| Germany | 0.4 | 0.5 | -0.2 | 0.0 | 0.4 | 2.1 | 2.0 | 1.2 | 0.6 | 0.7 |
| France | 0.3 | 0.2 | 0.3 | 0.4 | 0.3 | 2.4 | 1.9 | 1.5 | 1.2 | 1.2 |
| Italy | 0.2 | 0.0 | -0.1 | -0.1 | 0.1 | 1.4 | 1.0 | 0.5 | 0.0 | -0.1 |
| Japan | -0.1 | 0.6 | -0.6 | 0.5 | 0.6 | 1.4 | 1.4 | 0.1 | 0.3 | 0.9 |
| Australia | 1.0 | 0.9 | 0.3 | 0.2 | 0.4 | 3.1 | 3.1 | 2.8 | 2.4 | 1.8 |

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 | -0.6 | 0.1 | -0.4 | 0.4 | 3.6 | 2.7 | 2.2 | 0.9 | 2.0 |
| Canada | -0.2 | -0.8 | 1.3 | | | 2.0 | -0.2 | 0.4 | | |
| UK | 1.0 | 0.6 | 0.7 | -2.7 | | 0.0 | 0.4 | 1.3 | -1.1 | |
| Germany | -0.1 | 0.4 | 0.5 | -1.9 | | -2.1 | 0.1 | -0.8 | -1.9 | |
| France | 1.6 | 0.2 | -1.1 | 0.4 | | 2.1 | 0.8 | -0.7 | 1.1 | |
| Italy | 1.8 | 0.7 | -1.0 | -0.7 | | -0.8 | 0.7 | -1.8 | -1.3 | |
| Japan | -2.5 | 0.7 | -0.6 | 0.6 | | 0.7 | -1.2 | -2.8 | -1.6 | |

Source: Macrobond

Unemployment Rate (Seasonally Adjusted)

| | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Nov-18 | Dec-18 | Jan-19 | Feb-19 | #### | Apr-19 | May-19 |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|------|--------|--------|
| US | 3.9 | 3.8 | 3.7 | 3.8 | 3.7 | 3.9 | 4.0 | 3.8 | 3.8 | 3.6 | 3.6 |
| Canada | 5.9 | 6.0 | 5.8 | 5.7 | 5.6 | 5.6 | 5.8 | 5.8 | 5.8 | 5.7 | 5.4 |
| UK | 4.0 | 4.1 | 4.1 | 4.0 | 4.0 | 3.9 | 3.9 | 3.8 | 3.8 | | |
| Eurozone | 8.1 | 8.0 | 8.0 | 8.0 | 7.9 | 7.9 | 7.8 | 7.8 | 7.7 | 7.6 | |
| Germany | 5.2 | 5.2 | 5.1 | 5.1 | 5.0 | 5.0 | 5.0 | 5.0 | 4.9 | 4.9 | 5.0 |
| France | 9.0 | 9.0 | 9.0 | 9.0 | 8.9 | 8.9 | 8.8 | 8.7 | 8.7 | 8.7 | |
| Italy | 10.4 | 10.1 | 10.4 | 10.7 | 10.6 | 10.5 | 10.5 | 10.5 | 10.2 | 10.2 | |
| Japan | 2.5 | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.5 | 2.3 | 2.5 | 2.4 | |
| Australia | 5.3 | 5.3 | 5.0 | 5.0 | 5.1 | 5.0 | 5.0 | 4.9 | 5.1 | 5.2 | 5.2 |

Source: Macrobond

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

| | Q3-16 | Q4-16 | Q1-17 | Q2-17 | Q3-17 | Q4-17 | Q1-18 | Q2-18 | Q3-18 | Q4-18 | Q1-19 |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| US | -2.3 | -2.2 | -2.2 | -2.5 | -2.0 | -2.3 | -2.3 | -2.1 | -2.4 | -2.8 | -2.5 |
| Canada | -3.3 | -1.9 | -2.5 | -2.6 | -3.1 | -3.0 | -3.0 | -2.8 | -1.8 | -3.0 | -3.1 |
| UK | -6.3 | -4.0 | -3.0 | -4.1 | -3.1 | -3.0 | -3.4 | -3.3 | -4.3 | -4.4 | |
| Eurozone | 3.1 | 2.8 | 3.0 | 2.5 | 3.9 | 3.5 | 3.4 | 3.0 | 2.5 | 2.7 | 3.1 |
| Germany | 8.1 | 7.9 | 8.2 | 6.8 | 8.5 | 8.5 | 8.3 | 7.5 | 6.5 | 7.5 | 7.8 |
| France | -1.0 | -0.7 | -1.3 | -0.7 | -0.7 | -0.3 | -0.3 | -1.5 | -0.4 | -0.4 | -0.2 |
| Japan | 3.8 | 4.1 | 4.3 | 3.7 | 4.6 | 4.2 | 3.6 | 4.0 | 3.4 | 3.1 | 3.5 |
| Australia | -3.3 | -1.4 | -1.6 | -2.4 | -2.8 | -3.4 | -2.2 | -2.5 | -2.1 | -1.3 | -0.6 |

Source: Macrobond

Important Risk Discussion

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 Global Macro and Policy Research Team, through the period ending June 21, 2019, 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

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.

© 2019 State Street Corporation – All Rights Reserved

2537623.7.1.GBL.RTL

EXP: May 31, 2020