Inflation-Linked Bond Outlook December 2019 – For Professional Investors

United States

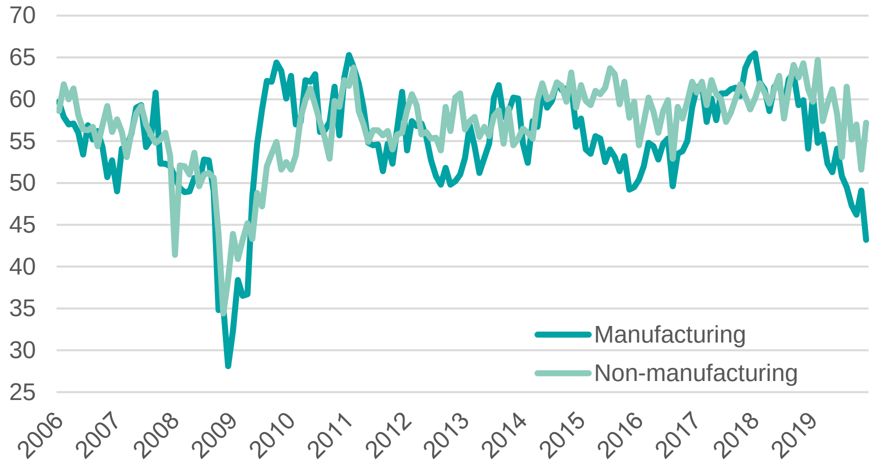
Economic developments in the fourth quarter

For some months, the investment team's view has been that the US economy is transitioning from a (temporary) above-trend growth phase in which growth was super-charged by fiscal stimulus, lower corporate tax rates and deregulation - to a more sustainable growth phase - as fiscal stimulus wanes in 2019 and 2020. Our forecast in early 2019 was that US growth would slow from 3.0% in 2018 to around 2.25% in 2019. The downside risks to that forecast were the potential for an escalation in international trade tensions, the possibility of a sharper structural and cyclical slowdown in China, as well as the risk of a disorderly exit of the United Kingdom from the European Union (EU). On the upside, however, we noted that easier financial conditions as a result of the Federal Reserve's rate cuts and guidance would provide support to the economy, and an offset against those risks.

Our forecast for 2019 GDP growth of 2.25% appears to have been relatively accurate (we are waiting for fourth quarter GDP data for confirmation). But our earlier forecast for a 2020 slowdown to a pace slightly below trend (around 1.50%) may now require some upward revision, as we perceive some of the downside risks to have receded.

Looking at the key economic data of the last three months, we see that the divergence between 'soft' and 'hard' economic data has continued. The manufacturing Institute for Supply Management (ISM) survey, for example, has continued to indicate contraction, with five consecutive months below 50 – suggesting significant concern within the manufacturing sector as a result of tariffs. Non-manufacturing ISM, meanwhile, has drifted lower since 2018, but remains in expansion territory. Furthermore, non-manufacturing ISM has risen from September's lows, suggesting that the slide in the services sector confidence may have stabilised.

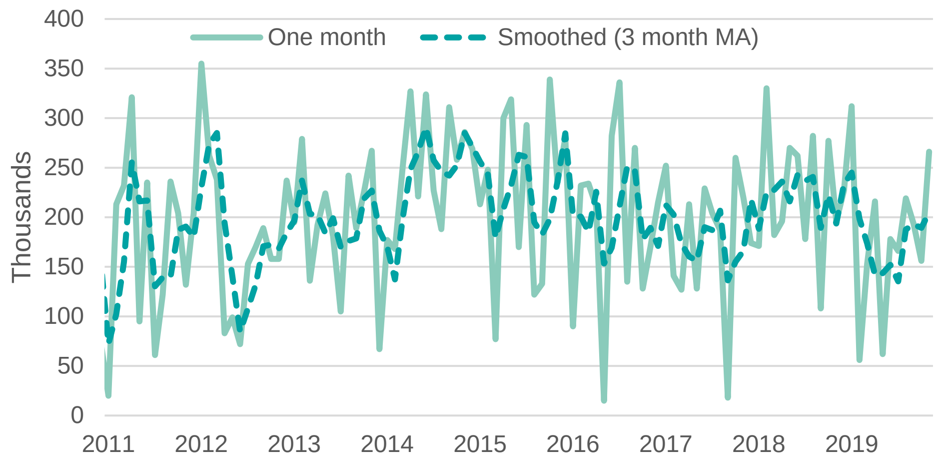
Manufacturing and non-manufacturing ISMs



Source: Bloomberg; December 2019

At the same time, payrolls data has shown renewed vigour in the labour market after a soft patch in the summer. Weaker payroll gains in September and October were revised higher, and November's numbers showed a particularly strong seasonally adjusted gain of 266,000 jobs, taking the 3-month moving average back above 200,000 jobs (having been at 135,000 in July). As per November, the unemployment rate sits at 3.5%, and average hourly earnings growth remains robust at 3.1%. The implication is that the summer slump in hiring was not as deep as first thought, and that the pace of hiring has now picked back up.

Change in employment payrolls



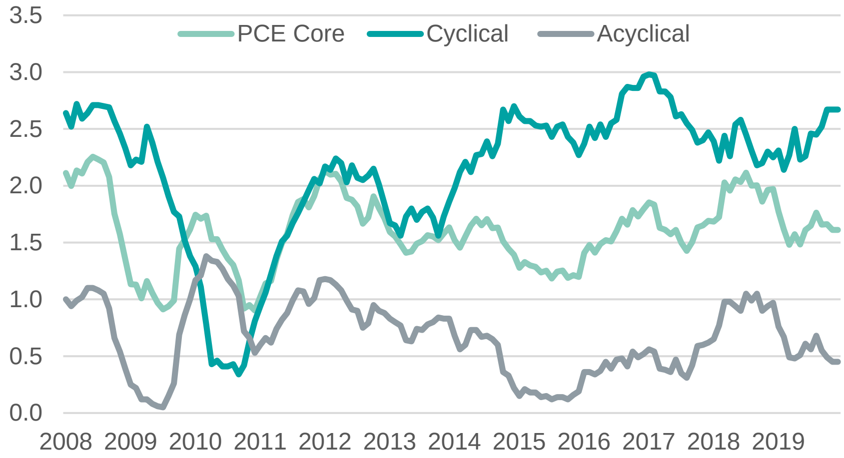
Source: Bloomberg; December 2019

The data suggests that the manufacturing sector remains troubled by the imposition of tariffs, but that the gloom has so far not yet spread to the services sector, perhaps because the Fed's rate cuts have provided sufficient offset. Furthermore, robust employment gains are underpinning consumer confidence.

Inflation developments

On the inflation side, we have little news to report. After three consecutive strong core CPI prints in the third quarter, the fourth quarter brought only relatively soft prints. As a result, core CPI retreated slightly on a year-over-year (YoY) basis, from 2.4% to 2.1%. The Fed's favoured Personal Consumption Expenditures (PCE) measure also fell back from 1.76% YoY in August to 1.62% YoY in November, pulled lower by acyclical items (as per the San Francisco Fed's classification methodology). The data suggests that cyclical pressures are indeed continuing to pressure inflation upwards, but are being offset by falls in acyclical components.

Procyclical Versus Non-Cyclical Inflation



Source: Bloomberg; December 2019

Monetary policy developments

After lowering policy rates in July and September, the Federal Open Market Committee (FOMC) cut once again at its October meeting, but stayed on hold in December. For the first two rate cuts, the FOMC had emphasized that it viewed the moves as a "mid-cycle adjustment" and "insurance cuts" intended to protect against downside risks from the trade dispute with China. Investors had reacted poorly to the communication In July, interpreting the statement as signifying a reluctance to initiate a full easing cycle if needed. The FOMC was therefore more careful in September and October, stating that rates could be cut further if evidence supporting a "material reassessment of the outlook" emerged, and noting that on balance risks were still tilted to the downside. In December, when rates were left unchanged, the statement referenced "global developments and muted inflation pressures", suggesting rate cuts were still more likely than hikes.

Developments in the Treasury and TIPS markets

These adjustments to the tone of the Fed's communication provided a more supportive backdrop for the economy and financial assets. The 75 bps of rate cuts, helped to hold down Treasury yields and mortgage rates, while continuing to support housing activity. A dovish Fed, better data and renewed optimism on a trade deal, then pushed the equity market to new highs.

Changes to our outlook

As we enter 2020, we take stock of developments and reassess the key risks to growth over the next few months.

- **The US-China trade dispute** has simmered down (for now), with the agreement in December of a so-called 'phase one' deal focused on Chinese imports of agricultural goods. The agreement will help to reduce the US trade deficit. But narrowing the trade imbalance between the US and China will not address the US's strategic concerns around technology transfer, intellectual property theft and market access. We anticipate that little progress will be achieved on these matters in 2020, while re-escalation also remains possible.

Even if no further escalation occurs, it should be noted that tariffs act as a tax on US consumers (who import finished goods) and US producers (who import intermediate goods). Some economists are warning of a scenario where business profitability and consumer purchasing power are both negatively impacted by existing tariffs, leading to a pullback in consumer confidence, business investment and hiring. We note that import volumes have fallen dramatically for goods categories subjected to tariffs, while there is scant evidence of substitution by domestic producers. Clearly, it will be worth closely watching the retail sales data for evidence of a pullback by consumers. But the boost to asset prices and strong employment gains could well provide a sufficient offset to tariffs.

- **The Chinese growth slowdown** appears to be bottoming out and stabilising following the trade and auto shocks, as the authorities have undertaken monetary easing to stabilise growth while keeping an eye on financial stability concerns. Our China economist, Chi Lo, assesses that the PBOC's 'selective easing' stance, and financial system reforms, have likely been successful. Production of consumer goods like autos and cell phones is recovering. And credit growth and infrastructure investments are at levels that will permit GDP to grow at a 6.1% pace. A stabilisation of Chinese growth would, of course, reduce a key downside risk to global growth.

- **The US Democratic primaries** pose a significant risk for equity investor confidence in the coming weeks. The nomination of a relatively left-wing candidate (most likely Elizabeth Warren) could concern markets, given her proposals to implement higher corporate taxes and redistributive income and wealth taxes in order to fund enhanced healthcare and education entitlements. We caution, however, that the nomination of a left-wing Democratic candidate could be self-defeating – the UK roundly rejected Jeremy Corbyn in the most recent election, and our feeling is that the American voter could react in similar fashion to the prospect of a Warren or Barry Sanders presidency. In our mind, the more centrist, Joe Biden remains the candidate with the best chance of denying President Trump a second term, and would be the less disruptive Democratic candidate for financial markets.

- After a convincing UK election victory by the Conservatives, the UK will leave the EU on January 31. However, with further extensions to the transition period beyond 31 December 2020 ruled out, the risk of a **'hard' Brexit** is merely postponed. The UK must now complete a trade deal with the EU by the end of 2020 to avoid leaving the EU on World Trade Organization (WTO) terms. However, it is our view that the potential for disruption from Brexit - even no-deal Brexit - has been diminished, as firms and governments have had the opportunity to plan. We do not see it as a major threat to global or US growth at this point.

Overall, we conclude that the headwinds to growth in 2020 have likely died down versus our assessment last quarter. Correspondingly, we now forecast 2020 growth to pace at around trend (i.e. around 2.00%).

This more constructive growth outlook, of course, means that we view the FOMC as much less likely to cut rates further – although the risk on rates remains tilted to the downside. The Overnight Index Swap market is currently pricing around 25 bps of cuts by October 2021, and that seems broadly reasonable to us.

Market developments, portfolio performance and current strategy

After a difficult third quarter, active performance was positive in the fourth quarter as breakeven inflation (BEI) rates finally recovered from distressed levels as trade concerns retreated, US growth data outperformed forecasts and the FOMC confirmed it would keep financial conditions accommodative. As a result, over the quarter, 10-year Treasury yields gradually rose (from 1.67% to 1.92%), BEI rates widened (from 1.42% to 1.70%). Despite the improvement in growth data (but perhaps because breakevens widened), the nominal 5s / 30s yield curve steepened (from 56 bps to 70 bps).

Our fundamental views at the beginning of the fourth quarter were as follows:

- We were negative on US growth prospects for the fourth quarter of 2019 and 2020, driven by trade concerns and further slowing in China, as well as US political upheaval (given the Trump impeachment and the potential for the Democrats to nominate a relatively left-wing presidential nominee). We anticipated that weaker sentiment surveys would begin to impact business and consumer behaviour, and viewed the deterioration in labour market data in the second and third quarter as evidence of a slowdown that was likely to spread from manufacturing to services, and ultimately to consumers. We penciled in a decline in GDP growth to 1.50% in 2021.

- Given our pessimistic growth outlook, we thought the FOMC would ultimately need to cut rates further in 2020 and 2021 - perhaps as low as 0.50% - but that it would be slow to acknowledge the need to do so (i.e. it would be 'behind the curve'), which would require the market to drive longer-dated Treasury yields lower. We expected that evidence of a US growth slowdown would accumulate in the fourth quarter, and that the FOMC would indicate that further cuts might be required at some point in 2020.

- On the monetary policy framework review, our perception was that the bulk of the FOMC was relatively unconcerned about the historic undershoots in core PCE versus the target, given that core PCE was already back at 1.8% (looking at the August print). Hence we saw low odds that the FOMC would adopt a fully-fledged Average Inflation framework at the conclusion of its review in early 2020. Instead, we expect the committee to approve some watered-down version, such as conditional Average Inflation targeting – which will do practically nothing to shift either the public's or investors' expectations. As a result we lowered our target for 10-year BEI rates from 2.00% to 1.75%.

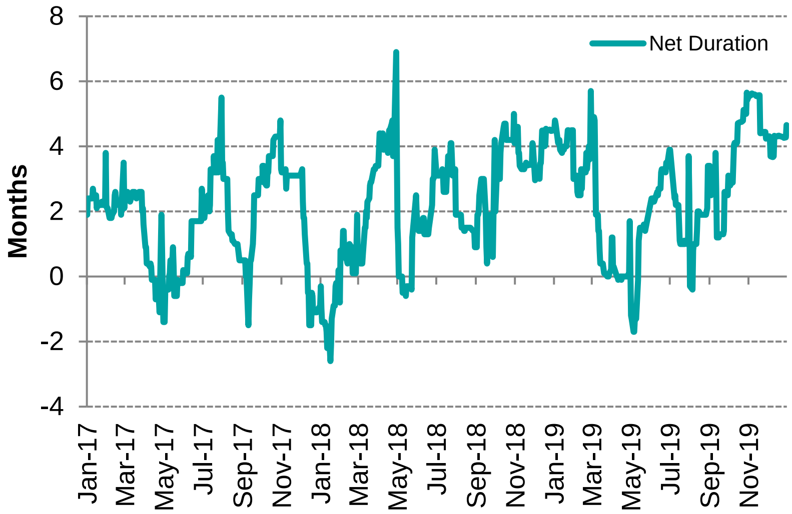
- We thought that core inflation, typically a lagging indicator, should continue to gently strengthen over the coming months, reflecting the pressures from rising labour costs, tariffs, and costs of reorganising global supply chains as the United States resets its global trading arrangements.

As a result, at the start of fourth quarter, we were positioned for a 'stagflationary' regime – i.e. long real yield duration (via 10y 20y forward real yields), long BEI rates, and a nominal 5s / 30s yield curve steepener. The long duration position was motivated by our pessimistic growth outlook and our expectation that the FOMC would ultimately deliver more easing. Our view on the Fed argued to have a nominal yield curve steepener. Our breakeven overweight was motivated by relatively cheap valuation – but tempered by our perception that the FOMC could remain 'behind the curve' for some time, and the risk that the trade war could escalate sharply.

In early November, we reduced the nominal yield curve steepener (given the absence of yield curve movement and improving growth data). Throughout the period, we traded duration tactically to adjust the balance between TIPS duration and breakevens as the 10-year Treasury traded in a range between 1.55 and 1.92%. Over the quarter, as a whole, the active strategy outperformed by 11 bps, almost entirely as a result of the BEI overweight. We note that even though nominal Treasury yields rose, the widening in breakevens meant that 10-year TIPS yields closed the quarter unchanged, meaning the long duration position had flat performance.

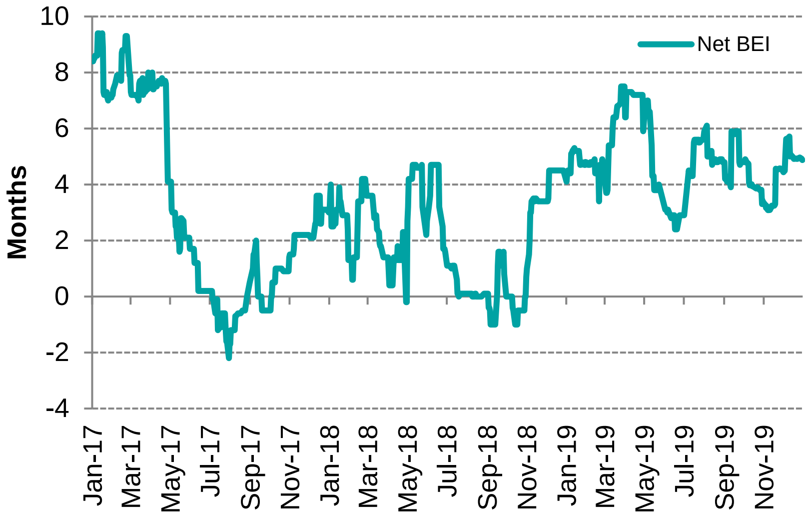
Our historic active TIPS duration and BEI exposures are represented in the charts below:

Chart of Active TIPS Duration Exposure since Jan 2017



Source: BNPPAM; December 31, 2019

Chart of Active Breakeven Inflation Exposure since January 2017



Source: BNPPAM; December 31, 2019

Current positioning & strategy

Developments over the last quarter have forced a change in some of our core views, and in our positioning. Looking first at our core views:

- On US growth, we now forecast that 2020 growth is likely to come in at 2.0% YoY, roughly at trend. The Chinese economy appears to have stabilized, and the US has reached a 'phase one' trade deal with China. However, the risks remain tilted to the downside. Given the unpredictability of the Trump administration, we could imagine a renewed flaring of trade tensions, though it is not our base case.

- We forecast cyclical inflation pressures to keep nudging core PCE and core CPI upwards, although the influence of non-cyclical components is hard to anticipate.

- Trend growth means the FOMC is not likely to cut rates further, but recent communication suggests they have rediscovered the need to support inflation expectations. Overall, the hurdle to rate hikes seems higher than for rate cuts, meaning monetary policy should remain supportive. For the framework review, we anticipate the Fed to announce some sort of conditional Average Inflation framework, which we regard as too weak to meaningfully impact inflation expectations.

- In terms of TIPS technicals, we note that the resumption of asset purchases by the Fed, in combination with changes to the TIPS issuance schedule, favours TIPS over Treasuries, and the 30-year TIPS sector in particular. The Treasury has shifted issuance away from 30-year TIPS to 5-years, and the Fed has increased its net purchases of TIPS. Furthermore, in recent TIPS coupon passes the Fed has bought primarily 30-year issues.

Our current positions are as follows:

- The portfolio is overweight 6.6 months of breakevens, concentrated in the 30-year sector. Breakevens remain cheap versus the current run rate of inflation, inflation pressures are likely building at a global level, and TIPS are arguably under-owned by investors. The 30-year sector should benefit from reduced net supply, making it an attractive location for an overweight. With the Fed having rediscovered some enthusiasm for encouraging inflation above target, we move our target for January 2029 BEIs from 1.75% to 1.85% (currently trading at 1.69%).

- On the breakeven curve, we are overweight 30-year BEIs versus 10-year BEIs, by around two months. At only 13 bps over 10-year breakevens, the 30-year sector probably reflects a sufficient discount for the upcoming 2050 TIPS auction in February.

- The portfolio is overweight 3.5 months of TIPS (real) yield duration, concentrated in the 30-year sector. The position acts to a degree as a directional hedge for the portfolio. However, if downside growth risks are indeed abating, there is the potential for nominal yields to move (modestly) higher - but we anticipate that if the Fed remains accommodative then the bulk of any sell-off would then be driven by wider breakevens, leaving TIPS yields little changed. Still, we are looking for opportunities to reduce duration further.

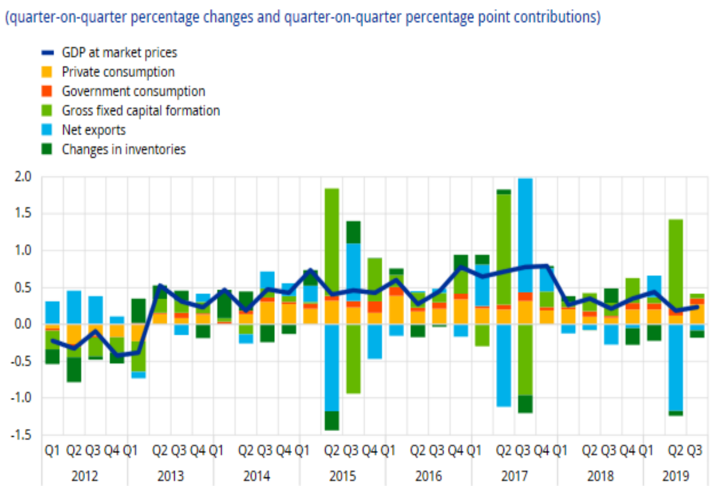
- Within the TIPS curve, we remain overweight cheap off-the-run 7-year TIPS versus rich benchmark 5s and 10s. We currently have no meaningful active nominal curve exposure.

Eurozone

Macro developments

The Eurozone economy has settled into a lower growth trajectory since an abrupt slowdown in early 2018. Euro area real GDP growth continued at a moderate pace (0.2% quarter-on-quarter) in the third quarter of 2019. While ongoing slowdown in global growth and persistent global trade tensions continued to weigh heavily on the Eurozone's manufacturing sector and dampen investment growth, the services sector remained resilient, thanks to further strengthening in the labour market with rising wages and a mildly expansionary fiscal stance amid an accommodative monetary backdrop. The contrasting developments between external and internal demands, and hence performance in the manufacturing versus services sector, have in fact been a feature in 2019 for some time. Recent Purchasing Managers' Index (PMI) data would suggest that divergence continues, with the manufacturing PMI index remaining firmly in contractionary territory since February 2019, while services PMI continues to tread above 50, indicating steady expansion. The good news is that there has been some tentative signs that the manufacturing recession is bottoming out – global manufacturing output has recovered somewhat, and the recent easing in trade tensions and Brexit-related political developments, suggest that downside risks to growth has become less pronounced.

Eurozone real GDP and its components



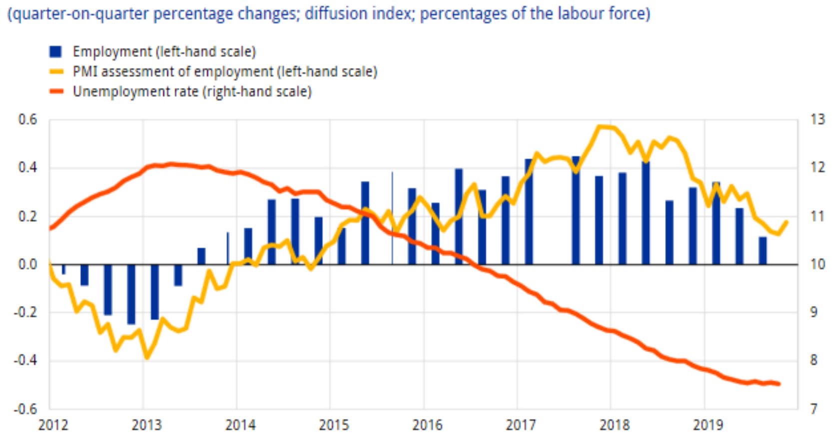
Source: Eurostat, ECB Economic Bulletin; December 27, 2019

Eurozone PMI surveys

Source: Haver; December 2019

Yet, the risk for the Eurozone recovery remains that the weakness in the manufacturing sector leaks out into the wider economy. Internal consumptions have been supported by strong employment gains and higher labour income, and while the labour market and the consumer remain the bright spots, the momentum in those areas is decelerating. Employment growth increased 0.1% in the third quarter of 2019, down from 0.2% in the previous quarter. The pace of decline in the unemployment rate has slowed, with the unemployment rate hovering around 7.5% to 7.6% since April 2019. And while the level of wage growth has remained resilient, with annual growth in compensation per employee standing at 2.1% in the third quarter, most measures of wage growth in the Eurozone have moved sideways compared with previous quarters. The lack of acceleration in pay growth suggests that further strengthening in consumer spending will likely be limited in the near term.

Eurozone employment growth has slowed



Source: Eurostat, Markit, ECB Economic Bulletin; December 27, 2019

Eurozone wage growth (% YoY)

Source: ECB, Morgan Stanley Research; November 2019

Monetary policy developments

Christine Lagarde's first press conference as European Central Bank (ECB) president in December was relatively uneventful – most of the monetary policy heavy lifting was already done by Mario Draghi in September, and the updated macro forecasts were little changed from the previous set, suggesting no urgency to act. Lagarde was careful in avoiding communication mishaps and misunderstandings, and she portrayed herself as a broad consensus builder by saying that she is neither a dove nor a hawk, but rather a wise owl. Indeed, Lagarde struck a balanced tone throughout the conference. The upbeat opening statement (growth has stabilized, downside risk is less pronounced and underlying inflation enjoyed a mild increase) was accompanied by dovish hints in the question and answer session where she acknowledged that growth will remain below trend until 2022 and interpreted the ECB staff fourth quarter 2022 inflation forecast of 1.7% as "not at our aim". And while there has been continued debate about the adverse side effects of negative rates, Lagarde described them as effective, with data showing expanding credit, suggesting that the ECB policy is not at the reversal rate yet.

Another important topic to cover from the December ECB press conference was the upcoming ECB framework review. The strategic review will be longer and broader than most market participants had expected. It will run from January until late 2020. The review will consult not just the ECB's Governing Council and academics, but will also reach out to a wider range of stakeholders including European Parliament members. Topics covered will be comprehensive, including climate change, inequality, digital currency, etc., in addition to reviewing the central bank's inflation target and monetary policy tools.

Overall, the ECB kept its monetary policy unchanged, and its forward guidance remains the same:

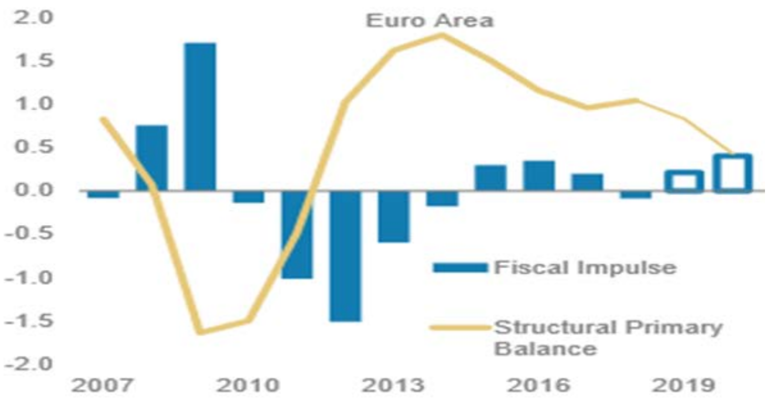
> *The Governing Council expects the key ECB interest rates to remain at their present or lower levels until it has seen the inflation outlook robustly converge to a level sufficiently close to, but below, 2% within its projection horizon, and such convergence has been consistently reflected in underlying inflation dynamics.*

With the ECB staff projections showing fourth quarter 2022 inflation at 1.7%, which is enough convergence to the target but not sufficiently and consistently at target, the ECB is likely to be on autopilot in the next couple of quarters while focusing on its policy framework review. Barring significant shocks, the ECB is likely to look beyond the near-term noise and keep its policy rates unchanged and asset purchase program steady in the near future.

Fiscal developments

As ECB monetary policy appears to have run its course, the calls by policymakers for a more expansionary fiscal stance have become louder and clearer, across the Eurozone and particularly from the ECB. However, the Eurozone still lacks a budget that can be used for stabilization and counter-cyclical purposes. In 2017, French President Emmanuel Macron called for a Eurozone budget, named the Budgetary Instruments for Convergence and Competitiveness (BICC), initially envisioned to achieve further fiscal integration with hundreds of billions of euros over time to be spent by the EU Finance Minister. The ambitious budget goal was met with lukewarm backing from some northern countries as moral hazards remained a concern. The first Eurozone budget, agreed in October by EU finance ministers, will provide around €17 billion over seven years for the 19 Eurozone member states, and the money will mainly be redistributed to fund projects linked to investment or reforms, but not to stabilize economies. Given that the Eurozone budget fell short of Macron's ambition and what is needed to stimulate growth, any meaningful fiscal expansion in the Eurozone will have to rely on the ability and willingness of individual countries to spend. The difficulty, however, is that countries with the fiscal space, such as Germany and the Netherlands, are penciling in only modest fiscal stimulus for 2020, while countries that need expansionary policy to boost economic growth do not have sufficient fiscal room. As such, member states' 2020 budget plans will only provide a modest fiscal impulse, and any additional fiscal responses will likely remain reactive to further slowing in growth.

Structural Primary Balance & Fiscal Impulse (% of GDP)

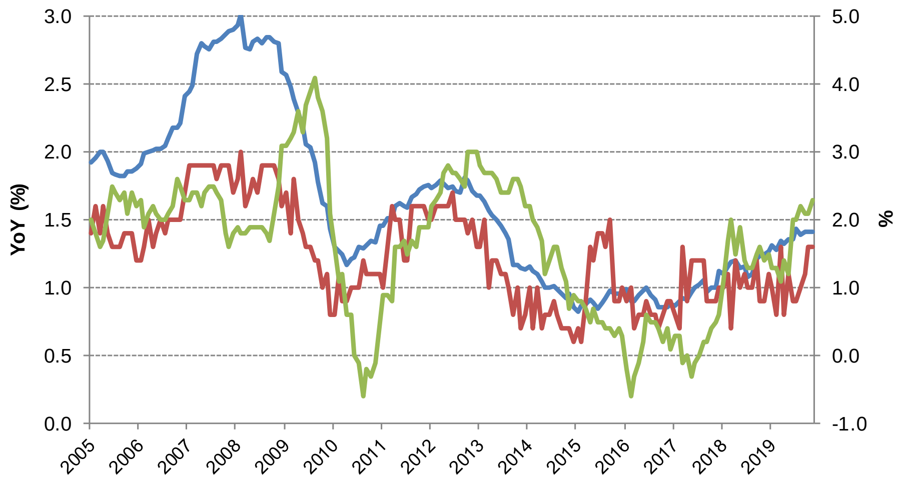


Source: European Commission, Morgan Stanley; October 2019

Inflation

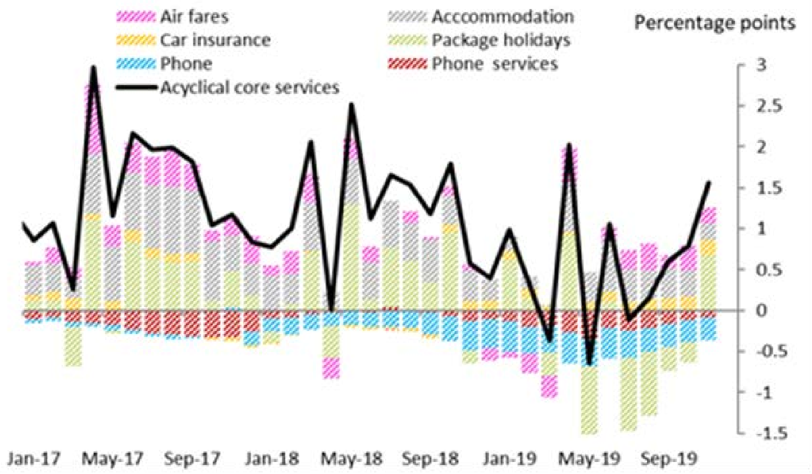
There has been some tentative good news in inflation over the past few months. Core inflation climbed steadily higher from 0.9% year-over-year (YoY) in August to 1.3% YoY in December, while headline inflation also rebounded from a recent low of 0.7% YoY in October to 1.3% YoY in December. However, one should be careful in interpreting these Harmonised Index of Consumer Prices (HICP) prints, as the continued unwinding of distortion coming from methodological changes in packaged holiday prices and base effects from previous declines in energy prices provided the bulk of the upward boost.

Eurozone HICP Inflation



Source: Eurostat, Bloomberg; as of December 2019

Package Holidays Contributed to Acyclical Core Inflation

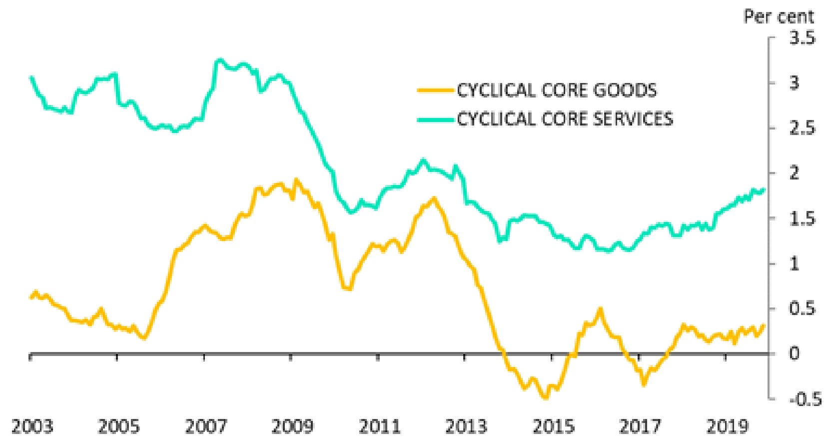


Source: BNPPAM; December 2019

Looking at the cyclical components of inflation, there is some good news there. Cyclical core services inflation, which measures the domestic, labour-intensive subcomponents within core inflation, such as restaurants and home maintenance, is showing steady acceleration, reflecting the pass-through effects of rising wages. However, cyclical core goods prices barely accelerated, as structural forces of globalization and technological developments remain disinflationary.

In early 2020, energy base effects and a strong labour market will likely help headline and core inflation to sustain at around 1.3% YoY (year-over-year). However, as economic growth remains lackluster and pass-through of higher wages to HICP continues to be muted relative to prior cycles, underlying inflation is unlikely to accelerate meaningfully in the near term.

Cyclical Core Services Inflation Climbed Steadily



Source: Eurostat, BNPPAM; December 2019

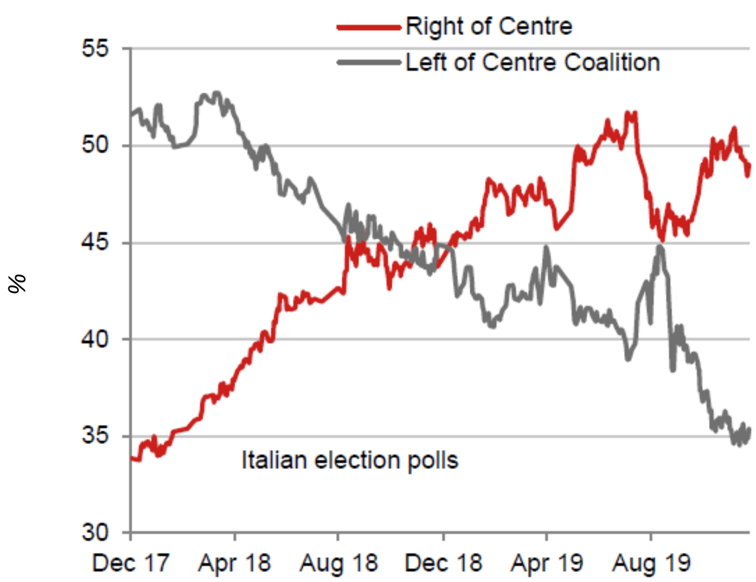
Political developments in Italy

Infightings between the populist Five Star Movement (M5S) and the Democratic Party (PD) have raised concerns about the longevity of the coalition government which was newly formed in September. The disputes include M5S's strong environmentalist roots which stood in the way of the government's rescue plans for the struggling steel plant, whose closure could lead to thousands of job losses. The European Stability Mechanism (ESM) debate, initiated by the opposition right-wing party Lega, also exposed the internal divisions within the government. M5S was against signing off on the ESM reform until plans for a wider European banking union became clearer, while PD supported the plan.

Crevices within the two ruling political parties have also been surfacing. In late December, three M5S senators defected to the right-wing party Lega, which in turn narrowed the ruling coalition's majority at the Senate. M5S's Education Minister Lorenzo Fioramonti resigned from the government over insufficient funding. As internal dissatisfaction with M5S leader Luigi Di Maio spread, ten M5S Members of Parliament (MPs), including Fioramonti, had plans to form a new parliamentary group to break away from the party but continue to support the government. Previously in September, within the PD, former Prime Minister Matteo Renzi broke with the party and formed a new centrist party called Italia Viva.

Looking ahead, there are a couple of political events that could put the already fragile government under further stress in the coming months. First, the Italian MPs have reached the required number of signatures to trigger a referendum on the constitutional reform to cut the number of MPs from a total of 945 to 600. If the quorum of 64 signatures stays committed until January 12th, a formal request to the Constitutional Court will then be put forward for approval, and depending on how quickly the process goes, the referendum could take place in May or June. The prospect of an electoral reform may change the incentives for individual MPs to agree to new elections, as there are higher chances to be re-elected in the current legislature than when the available parliamentary seats are cut should the proposed constitutional reform pass. In addition to cutting the number of MPs, Lega is proposing another referendum to repeal the proportional share of the current electoral law in order to have a full first-past-the-post voting system. While a first-past-the-post system could reduce the likelihood of a "hung" or fragmented parliament, the majority seems to favor new electoral law skewed toward a proportional system. The other risk event is the Emilia Romagna regional election on January 26th. Emilia Romagna has always been a PD stronghold, and a Lega victory could have disruptive impacts on the resilience of the coalition government. Lega's leader Matteo Salvini has been campaigning for right-wing forces to gain control in the January election. If PD loses, political pundits fear that PD may blame the alliance with M5S for alienating traditional left-wing supporters, causing PD to split from the coalition government and setting new elections in motion.

Current Coalition Government has No Incentives to Call an Early Election



Source: Macrobond, Nomura; December 2019

Eurozone inflation-linked bond performance review

Following the monetary policy stimulus package announced in September, the case that the ECB has limited easing room left and it is time for fiscal policies to pick up the easing baton, has grown stronger. However, significant political hurdles, fiscal rectitude in countries that have fiscal space, and divergent views on the growth outlook among politicians, suggest that meaningful fiscal expansions will only come if the macro backdrop deteriorates meaningfully from current levels. During the last quarter of 2019, despite rising dissents from the ECB Governing Council, and as optimism for significant fiscal easing was unlikely to materialize, we believed the market would focus on the flow effects from quantitative easing (QE), which should continue to support the "search for yield" theme. At the same time, with policy rates not far from the so-called reversal levels, further future rate cuts should be limited, which in turn should be supportive to yield curve flatteners. Despite the turn in risk sentiment during the quarter, we remained cautious regarding the global growth outlook as Brexit was not yet fully resolved and protectionism was likely to linger. But with Eurozone economic data pointing to a bottoming of the cyclical downturn, we were cognizant that government bond yields could re-anchor at higher levels.

As such, we maintained an overweight bias in peripheral versus core countries in the Eurozone, a modest overweight in duration and a 5s30s nominal yield curve flattener throughout the quarter. Despite the overall yield curve flattening bias, within the real yield curves, our inflation-linked bond holdings were more concentrated in the 2- to 5-year sector as shorter-dated real yields were undervalued versus the near-term projected inflation path. In breakeven (BEI) rates, we held a modest tactical long position in October. While the underlying inflation trend remained weak, inflation was expected to move higher due to package holidays and energy prices base effects. We believed Eurozone BEI rates, which were trading at their historical lows at the beginning of October, offered some tactical value.

A turn in risk sentiment on the back of positive Brexit developments, initial signs of a "phase 1" US-China trade deal, as well as bottoming pessimism in Eurozone growth helped 10-year HICPxT inflation swap rates to bounce from a low of 0.98% to 1.2% over the quarter, and 10-year German Bund yields to rise from -0.57% to -0.18% during the same period. Peripheral spreads initially tightened, but Italian bonds started to underperform in November as political risks resurfaced. The German 5s30s curve, in the meantime, gently steepened from 70 bps to 80 bps.

The underperformance of Italian government bonds was notable in the fourth quarter. The honeymoon period of the new PD-M5S led coalition government was short-lived. Concerns about the fragility of the government first returned as Lega won the governorship of Umbria, a region that has been PD's stronghold for half a century, in late October. Then in November, disputes over the government's handling of the shutdown of a steel plant, ESM reforms and local election strategies drew attention to the political infighting within the government. At the same time, the side effects of the ECB's deposit rate tiering meant that for some banks, it made sense to sell short-dated Italian government bonds at negative yields and park cash as bank reserves instead. In terms of market positioning, consensus overweight positions in Italy had been profitable, and the return of political noise triggered profit-taking flows as investors start paring the risk exposures ahead of yearend. As such, BTP-Bund yield spreads widened from a low of around 130 bps in mid-October to a high of around 165 bps during the second half of the quarter.

Overall, our Eurozone positions were moderately profitable in the fourth quarter. While overweight in peripheral versus core countries suffered in November, the losses were offset by strong gains in October and a modest recovery in December. Similarly, losses from our German 5s30s nominal yield curve flattener were compensated by profits coming from the overweights in the 2- to 5-year sector of the real yield curves. Lastly, our tactical overweight in BEI early in the quarter also added slightly to performance.

Eurozone inflation-linked market outlook and current exposures

The ECB's easing package announced in September has failed to convince markets about the ECB's ability and commitment to lift inflation. While Draghi had attempted to introduce the concept of symmetry around the ECB's inflation target, and tied the ECB's forward guidance to inflation outlook robustly converge to a level sufficiently close to, but below, 2% within its projection horizon, his efforts in defending the central bank's inflation credibility did not receive unanimous support. More importantly, there is wide spread belief that negative interest rates and more asset purchases are unlikely to boost demand to a level that's sufficient to generate higher inflation.

The hope in 2020 is that the ECB's framework review will help clarify its inflation targeting strategy, and by doing so also raise the central bank's price stability credibility. One problem is that there are differences in how members of the Governing Council define price stability. The more hawkish camp within the ECB is comfortable with inflation expectations re-anchoring at lower levels, and does not see deflation risk as significant. They may see lowering the inflation aim as an appropriate reaction to the now lower equilibrium inflation rate. However, such a change would misjudge the current low-inflation episode as permanent, and imply tighter policy in the future and increase the risk of policy rates hitting the effective lower bound during future economic cycles. The more dovish members may see the need to step up the emphasis on the symmetry of the central bank's inflation aim, taking into account past undershoots to allow future overshoots in inflation. Such a change would result in a pre-commitment to accommodative policy, a step that some ECB members may not be willing to take. The inevitable need to make compromises in the Governing Council suggests that changes to the ECB inflation targeting strategy will likely be fairly minor. An inflation range might be a suitable compromise to reinforce the commitment to symmetry, but agreeing on a range might not be easy.

In the medium term, inflation expectations will only re-anchor higher if (i) macro fundamentals improve substantially or (ii) there are sizeable fiscal policies to reaccelerate economic growth, while the ECB redoubles its efforts and unanimously commits to return inflation to its target. Unfortunately, both macro factors and fiscal policies are unlikely to provide much help. In terms of the global growth backdrop, while easing US-China trade tensions and Brexit developments should help the manufacturing sector in the Eurozone to recover in the near term, trade skirmishes are likely to return in 2020 and Brexit uncertainty remains as trade negotiations between the UK and the EU begins. Upward revisions in global growth projections have also been modest thus far. And while internal demand in the Eurozone is likely to remain resilient in the near term, the impetus coming from job gains and wage growth is moderating. Help from the fiscal front has so far been mild. Progress on fiscal integration remains elusive and limited by domestic political constraints. Countries with fiscal surplus still have little appetite to spend.

We expect the ECB to maintain its current policy stance during the first half of 2020. But with the balance of risks to growth tilted to the downside, albeit less pronounced. Side effects of negative interest rates and QE purchases could constrain the ECB's options and force it to innovate. The question is whether the ECB can reinvent its reaction function with the strategic review in time before the economy falters further. Given the moderate growth and low inflation backdrop, we remain of the view that the "search for yield" theme should help yields to stay low, semi-core and peripheral bonds to outperform and the yield curve to flatten. Higher inflation prints driven by energy base effects may provide tactical support to BEI in the coming months, but BEI rates are unlikely to break meaningfully higher until there is evidence of growth reacceleration and firming inflation.

However, we are cognizant that there is limited scope for yields to repeat their strong performance in 2019. The recent improvements in services PMI and a bottoming out of the manufacturing sector, coupled with reduced Brexit concerns and easing US-China trade tensions should help government bond yields to re-anchor at higher levels. Expected pickup in inflation in the coming months, albeit mostly driven by base effects, may also lead to further scrutiny of the monetary easing set out by the ECB stimulus package announced in September. We have closed our duration overweight and yield curve flattener as their risk-reward is no longer favorable. From a tactical perspective, duration underweights and yield curve steepener may also make sense in the near term.

In terms of country allocation, while recent events pointed to rising tensions in the Italian government, our base case scenario remains that the political benefits of MPs breaking away from the current coalition is outweighed by the risks of losing their seats at a new election, and therefore the current Italian government is likely to survive in 2020. Moreover, while market participants have been focusing on the downside risks to the government, things are not all negative. Recent defections of M5S senators to Lega is not reassuring, but there are other MPs moving in the opposition direction to support the government in order to fend off new elections. The incumbent governor in Emilia Romagna is also leading in the election polls, suggesting the local election may not be as politically divisive as anticipated. We therefore maintain our overweight in Italy.

UK

Brexit update

While the Conservative Party's decisive victory in the December 12th election should end the Brexit parliamentary deadlock, Brexit uncertainty is unlikely to go away in 2020.

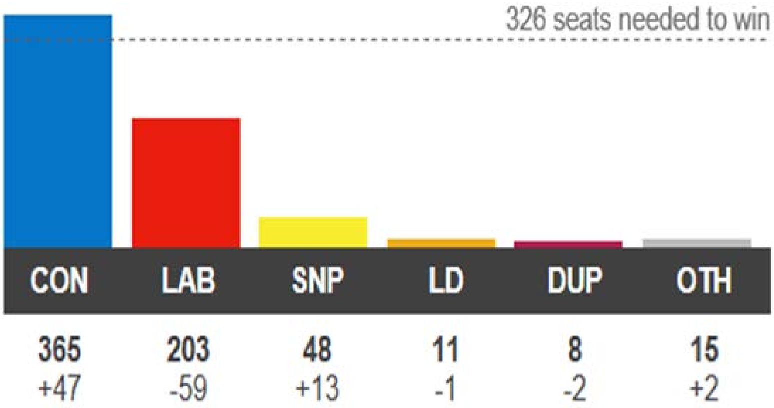
Despite the triumphal results, where the Conservatives have won a comfortable majority by 80 seats, the result is more of a Labour/Jeremy Corbyn loss than a Conservative/Boris Johnson win. When looking at the voting shares, about 43.6% of the vote went to the Conservatives, a merely +1.2% more than the election results in 2017. The Labour party, on the other hand, lost 7.8% of the vote since 2017, and the UK's first-past-the-post election system translated the vote share loss into a loss of 59 Member of Parliament (MP) seats. In order to defend their newfound majorities in previously Labour districts, the Conservatives will likely honor spending promises to boost spending on the National Health Service (NHS) and other social programs, putting previous Conservatives' fiscal austerity to an end.

But the Brexit journey is not ending yet. In terms of internal politics, the Scottish National Party (SNP)'s strong performance in the election has been interpreted by SNP politicians as a public endorsement of a movement to a second referendum on Scottish independence. Recall the majority in Scotland voted for "Remain" in the 2016 EU referendum, the imminent passing of the UK's withdrawal agreement means that Scotland will be taken out of the EU against its wishes. While Johnson has rejected calls for another Scottish referendum, the political dynamics suggest increasing likelihood of continued disputes between the two political parties and between Westminster and the Scottish government. In terms of politics between the UK and the EU, although Johnson's sizeable majority in the UK Parliament will ensure the passing of the withdrawal agreement, formal trade talks will only begin in early 2020.

The political game of chicken has already resumed, first with Johnson's government legislating to rule out an extension of the standstill transition period, arguing that a tight deadline helps concentrate minds and increase the chances of a trade deal going through. This strategy, however, creates a new "cliff-edge" at the end of 2020 if no trade deal is in place by then, and reduces the amount of time available for trade negotiations, and reintroduces the risk of a "cliff-edge" exit scenario if the two sides failed to reach an agreement in time. An optimistic observer would point out that a robust majority means that even if Johnson does legislate to rule out any extension, this can always be reversed later. However, there are also reasons why the government would want to avoid extending the transition period. First, "get Brexit done" and ruling out an extension were in the Conservatives' election manifesto, so there are political reasons to deliver election promises. Second, the UK would be required to make contributions to the EU budget for as long as the duration of the transition period, and the UK would be keen to stop contributing to the budget sooner. Also, any trade deal with third countries, while can be negotiated during the transition period, cannot be implemented until the UK has fully existed the transition period.

If the UK's preference remains to have a short transition period, the UK and the EU will not have sufficient time to agree on a complex and unique trade deal, but a quick tariff-free trade deal could be negotiated in time. Indeed, the EU's predictable response has been that the scope of the deal will need to be pared back, likely focusing on goods at the expense of services. It also has been argued that the UK will need to follow EU defined regulatory standards to conclude a deal so rapidly. The UK is likely to reject both these constraints, setting the stage for difficult negotiations, with a no-deal threat looming in late 2020.

2019 General Election Result



Source: BBC; December 13, 2019

Fiscal development

Chancellor Sajid Javid will announce his budget in mid-March. While details of his spending plans will only be spelt out in March, the new government's fiscal framework was already outlined in the election manifesto. During the election campaign, the Conservative party announced three fiscal rules:

- A balanced day-to-day budget by 2023
- A limit to net public investment of 3% of GDP (compared with the previous 2% restriction)
- A 6% of tax revenue "brake" on public investment

According to the Office for Budget Responsibility (OBR) calculations, after factoring in the £13.5 billion increase in spending announced in the 2019 Spending Review, the government now has only £5 billion of additional headroom in day-to-day spending to 2023 if its balanced budget rule is honored. However, the 3% of net public investment opens up space for around £100 billion in additional public investment over the course of the Parliament. Recent reports suggest that the increase in public investment is likely to focus on infrastructure, and the allocation of investment funds will be directed to less productive regions of the UK. The government will likely boost public spending on hospitals, police and infrastructure to live up to their election promises, and defend the Conservatives' newfound support in blue-collar regions that traditionally voted for the Labour Party.

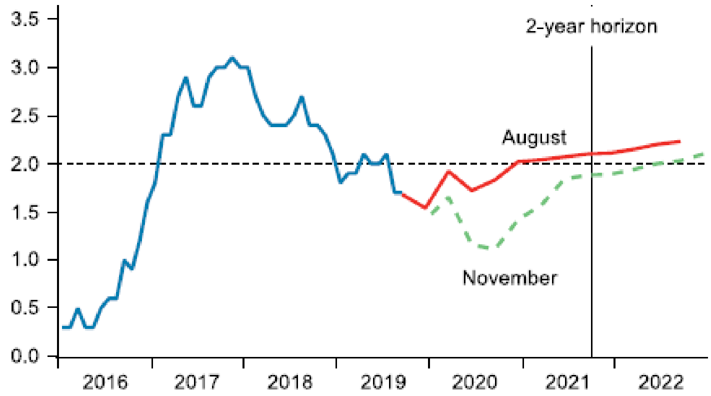
Monetary policy update

The Bank of England's (BoE) Monetary Policy Committee (MPC) kept interest rates on hold in both the November Monetary Policy Report (MPR) meeting and the December meeting. However, there were a number of dovish elements since the November MPR meeting. First, two MPC members, Jonathan Haskel and Michael Saunders) dissented in favor for a 25 bps rate cut. Second, the MPC has tweaked it's Brexit assumptions, from gradually adjusting to the average of a range of possible Brexit outcomes to a "deep free trade agreement" starting from 2021. As a result, non-tariff trade barriers could start to affect the BoE's forecast adversely in later years of the MPC projections. Third, the MPC's inflation projection was revised lower, with the central CPI path pointing below 2% at the end of the two-year assuming unchanged policy rates. This suggests a dovish shift from the August's set of forecasts. Lastly, there was a subtle tweak to the language about the prospect of a tightening in policy in the future. Whereas before the MPC thought that hikes "would be appropriate" in its central scenario, it downgraded this to say that tightening "may be needed" – a less committed stance.

Regarding leadership changes at the BoE, after a selection process that had dragged on for almost two years and overshadowed by Brexit, the appointment of the 121st governor of the Bank of England was finally announced. Andrew Bailey will succeed Mark Carney and embark on an eight-year term at the helm of the central bank in mid-August. Bailey's odds of the appointment were thought to be dimming after a bumpy ride as the Chief Executive of the Financial

Conduct Authority (FCA) rocked by financial scandals, but ultimately, his steady performance during the financial crisis placed him ahead of the other candidates. Bailey's appointment pointed to continuity in terms of the Bank of England's monetary policy strategy and political independence.

BoE CPI Projections Based on Unchanged Policy Rates



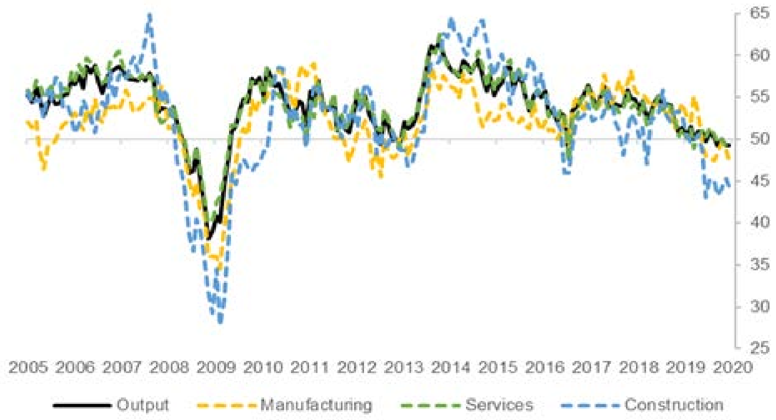
Source: Bank of England, BNP Paribas; November 2019

Macro development

Uncertainties surrounding the Article 50 deadline in late October and the UK General Election did not help sentiment. Over the last quarter, the UK manufacturing PMI index continued to stay in contractionary territory while services hovered at around 50. However, there was some initial signs that the decision election results may provide a boost to sentiment, at least in the near term. The UK's final services PMI for December was revised up significantly from the flash estimate of 49.0 to a final value of 50.0. This print therefore switched from being a deterioration to become an improvement from the November 49.3 print. The final December PMI result covers the period between December 5 and 19, while data for the flash estimate was collected between December 5 and 12, right before the conclusion of the General Election. The survey noted a limited increase in job creation, corroborating with the data from the BoE agents' survey in the fourth quarter which suggested that greater clarity on Brexit would likely help the employment outlook to improve. There were also signs that service providers have become hopeful that a more stable political backdrop will support business conditions in 2020. However, the recovery in sentiment could be short-lived. Despite less political noise from Parliament given Johnson's robust majority, Brexit uncertainty will likely re-emerge as trade negotiations with the EU start and concerns about another "cliff-edge" deadline may return if a speedy agreement cannot be reached by the end of 2020.

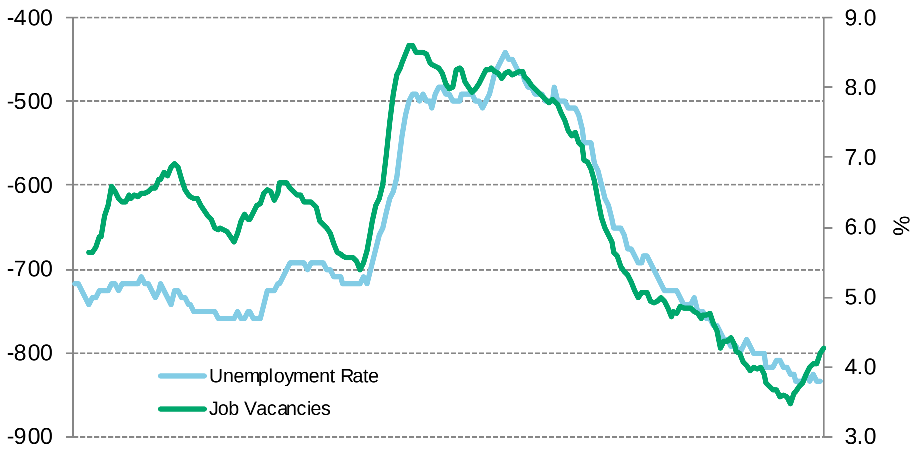
UK CPI inflation has been running below the BoE's 2% target over the last few quarters, with the latest headline number printing at 1.5% year-over-year (YoY) and core inflation at 1.7% YoY. The decline in inflation reflects both the base effects of previous British Pound depreciation dropping out of the yearly calculations, as well as reluctance of companies to pass on higher labour costs to consumers given the uncertain demand outlook. The weakness in inflation may continue. From a cost perspective, even though wage growth in the UK remains strong, there are signs that the labour market is loosening somewhat, with the number of job vacancies declining and wage growth moderating. UK total unit labour cost peaked at 4% YoY in the second quarter of 2019, and moderated to 3.6% YoY in the third quarter. The appreciation in British Pound over the past couple of months is also likely to weigh on import inflation.

UK PMI Surveys



Source: Markit, Haver; January 6, 2020

Job Vacancies Declined Further



Source: Bloomberg, December 2019

RPI reform update

As pointed out in our previous commentaries, the House of Lords (HoL) Economic Affairs Committee launched an inquiry to assess the suitability of using the Retail Price Index (RPI), whether alternative indices are available, and the implications of altering or abolishing RPI to its current users. Public hearings were held in mid-June of last year, and written submissions of "evidence" from the public were published in early September. The Committee then published its findings and key recommendations in mid-January of 2019. In September, market participants heard the government's official response through the exchanges of letters between Chancellor Javid and the UK Statistics Authority (UKSA). The UKSA seemed determined to resolve the RPI calculation methodology issues once and for all. Their recommendations to the Chancellor were as follows:

- The publication of the RPI be stopped at a point in future; and
- In the interim, the shortcomings of the RPI should be addressed by bringing the methods of the Consumer Prices Index Including Owner Occupiers' Housing Costs (CPIH) into it.

The Chancellor was sympathetic to the recommendations, but he was also concerned about the potential disruptions for RPI users. As such, the Chancellor decided to launch a consultation starting in January 2020, to better assess the full extent of the effects on users, before legislating UKSA's recommendations for implementation. The Chancellor is expecting to publish a response to the consultation before the end of the financial year (i.e. by the end of March 2020), suggesting a much speedier process than the 2012 one. At this point in time, we do not have detailed information regarding the format of the consultation, but we know that the consultation will focus on (i) technical matters concerning how to implement the proposed alignment of RPI with CPIH, and (ii) whether the changes should be made between 2025 and 2030.

While the inflation-linked bond market have reacted to the announcement with BEI rates declining, especially at longer-dated maturities, current market pricing suggests that the scenario of a full alignment between RPI and CPIH is not a forgone conclusion. A number of factors affect long-dated BEI rates and inflation swaps, which makes it difficult to precisely estimate what probability of a change the market is discounting. One approach is to compare forward starting inflation swap rates with the spot rates to estimate how much the market is expecting the implementation of RPI-CPIH alignment on a future date. Looking at the 5-year inflation swap rate starting 15 years from today versus the 15-year spot inflation swap rate, we can see that the two rates were highly correlated in the past couple of years. But starting in late 2018 when the House of Lords started its RPI inquiry, the long-dated forward rate underperformed, reflecting rising risks of RPI reform. The differential between the long-dated forward and spot inflation rates suggest that roughly 30 basis points of RPI decline is priced into the RPI forward rates. Given that CPIH is expected to average around 90 basis points below RPI, markets have not priced in a full alignment between CPIH and RPI. Indeed, various other estimation methods pointed to roughly a 25% to 50% chance of a full RPI-CPIH alignment.

Indeed, some market participants expect index-linked Gilt holders to be compensated for the potential inflation indexation loss, with RPI being redefined as CPIH plus a certain fixed spread, and some also expect RPI to continue indefinitely as a legacy index, as legal challenge, investor pressure, and political risks may eventually outweigh the UKSA's desire for full alignment. Indeed, in 2013, the Office for National Statistics (ONS) decided to keep RPI as a legacy index for the "foreseeable future" given its value to end users, despite the lengthy Consumer Prices Advisory Committee (CPAC) consultation conducted in 2012 which concluded RPI as flawed. In subsequent years, the Debt Management Office (DMO) continued to issue bonds in RPI format, in large notional sizes and extended maturity up to the 50-year point. Investors bought those bonds at real yield levels meaningfully lower than where they would have been if the bonds were indexed to CPI inflation, with the expectation that the worse real yields would be compensated by the future higher RPI inflation accretion. This reasonable expectation could potentially be the legal justification against the UKSA imposing windfall losses on investors. Additionally, fierce lobbying by pensioner groups which swayed the decision in 2013 could return. The political pressure from voters' whose pension payouts are linked to RPI makes the approach of redefined RPI as CPIH plus a spread probable.

UK index-linked Gilts performance review

Throughout the past year, our key view in the UK was that the Brexit premium embedded shorter-dated BEI rates was too high. We were also of the view that heightened Brexit uncertainty would increasingly weigh on the UK's growth outlook and business sentiment, which in turn should also weigh on inflation expectations. In addition, the calculation methodology of the Retail Price Index (RPI), to which UK index-linked Gilts are referenced, was under renewed scrutiny. Because of their rich valuation, the deteriorating growth outlook, and the rising risk of a RPI reform, we have been trading UK BEI rates tactically with a short bias.

On the political front, at the start of the fourth quarter, we believed there was a higher chance for a positive surprise in terms of the UK and EU coming closer to reach a Brexit deal than the chance of a tail-risk no-deal scenario. As such, we saw asymmetric risk-reward skewed in favor for a stronger British pound, which in turn should help our short BEI position to perform. During the second week of October, with the UK and Ireland jointly signaling a "pathway" to a deal, we added to our short BEI positions and initiated a small tactical duration underweight. As the UK government hammered out a Brexit deal with the EU, Gilt yields sold off, BEI rates fell, yield curve flattened and GBP rallied to reflect the diminishing probability of a disorderly no-deal scenario. We took partial profit on the position following the meaningful move in October, and maintained our short BEI bias at a smaller size in the following months. Given the consistency of the Conservative Party's lead in a number of opinion polls in the few weeks leading up to the December General Election, we believed the Conservative Party was on course to win a parliamentary majority. We thought that BEI spreads were likely to narrow further in such a scenario, but such a "relief" move could be short-lived, as the prospects of a hard Brexit and the fear of a failure to reach a trade deal in time could drive market sentiment once again. Indeed, UK BEI rates moved sideways between 3.05% and 3.23% since mid-October, as support to BEI from pension funds rushing in their inflation hedging flows before the holiday season prevented BEI from falling further despite further declines in Brexit risk premium.

We also held a 20s30s real yield curve steepening position, as we anticipated lingering RPI reform uncertainty to be more detrimental to longer-dated index-linked Gilts. However, the RPI reform theme was overshadowed by the broader Brexit and General Election stories, which led to a flattening of the real yield curve over the quarter.

Our active UK positions added strongly to performance in the fourth quarter, with our short BEI position being the main contributor. Our tactical duration underweight added modestly to performance, while the 20s30s real yield curve steepener suffered slightly.

UK index-linked Gilts market outlook and current exposures

With the UK now set to leave the European Union on January 31st, focus will now turn to both the length of the standstill transition period and the type of free trade deal to be negotiated. At the time of writing, Prime Minister Johnson seems determined that the transition period will not be extended beyond December 2020, and is angling for a looser future relationship with the EU, perhaps seeking a Canadian-style trade deal, which will result in a material increase in trade barriers for both the manufacturing and services sectors.

The negotiating style and tactics used by Boris Johnson since he first became the Prime Minister suggest that while messy pragmatism would ultimately prevail, there could be several iterations of political brinkmanship along the way. In fact, the current commitment to not extend the standstill transition could well be Johnson's political tactic, designed to "focus minds" and draw more concessions from the other side of the negotiating table. Political brinkmanship also suggests that any details of any agreement will come late in the day. However, businesses on both sides will face the tricky task of preparing to implement an agreement before it has been properly negotiated, and may be forced to make changes based on a worst-case outcome. The worst-case outcome could well be similar to another "cliff-edge" no-deal situation, as the extremely tight timeline suggests that only a shallow agreement could be reached, and businesses would have to prepare for non-tariff barriers such as new checks and controls at the border.

The key question for the economy is how persistent uncertainty will feed through into the sentiment and economic activities among households and businesses over the course of the year. In the near term, the decisive December election results may provide some relief. The beginning of the standstill transition period also means that nothing material really changes, as EU rules and the current trading regime continue to apply. Compared with the tensions and uncertainty prior to the election, businesses and households may see the ending of parliamentary deadlock and removal of the risks of the Labour Party's left-wing anti-business policies as good news. Indeed the Deloitte Chief Financial Officer (CFO) survey, conducted between December 13 and January 6, pointed to a significant rebound in CFO confidence. While this is only one data point and looks like an over-reaction, a similar swing in the survey coincided with a meaningful jump in UK PMI indices in the aftermath of the 2016 EU referendum. But Brexit anxiety and concerns about another "cliff-edge" deadline will re-emerge, and entrenched uncertainty will continue to weigh on the growth and inflation outlook.

Index-linked Gilt investors will also face RPI reform uncertainty in 2020, as another RPI consultation will commence in January. The detrimental impact of changes to the RPI calculation suggested by the UK Statistics Authority (UKSA) has not been fully reflected in market pricing. If the consultation focuses narrowly on the timing and technical considerations of the UKSA's proposals, longer-dated BEI will likely suffer. Conversely, if the consultation gets delayed, or morphed into a longer exercise to include discussion about designing a smoother transition and/or minimizing unfair windfall losses and gains to RPI stakeholders (including pensioners and investors), then the end results of RPI reform may not be as detrimental as suggested by UKSA recommendations.

We maintain a short BEI bias, as weaker growth outlook, slowing labour market, peaking wage growth and lingering RPI reform uncertainty do not bode well for BEI. We also see asymmetric risks regarding potential RPI reform developments. The market hasn't fully priced the scenario of a full alignment between RPI and CPIH as suggested by the UKSA, and even if the consultation is broadened to include considerations of unfair wealth transfer associated with RPI changes, we expect uncertainty during the consultation period to keep liability-driven demand for linkers on the sideline, with pension hedging activities favoring conventional Gilts instead.

In yield curve, we maintained a 20s30s real yield curve flattening bias. The detrimental effects resulting from the potential RPI changes would be mostly borne by longer-dated index-linked Gilts. At the same time, the "preferred habitat" for pension liability hedging activities has gradually moved from the ultra-long end to the 15- to 20-year sector of the curve, we believe this trend will likely continue. Monetary and fiscal policies are also supportive to a yield curve steepening bias. The UK government's plan to fulfill their election promises of ending austerity and increase public spending points to higher issuance and perhaps more supply pressure at the longer-end of the curve, while the dovish shift at the Bank of England suggests that shorter-dated yields will be better anchored.

In duration, we believe the recent improvement in the global growth outlook and the rebound in UK sentiment following the UK election provide opportunities for a tactical underweight in UK duration. In the longer term, however, we expect a return of Brexit anxiety to weigh on the growth and inflation outlook, leading to rising chances of BoE monetary policy easing, and Gilts should outperform in such a scenario.

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