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GLOBAL INSIGHT

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Global Macro Mid-Year Outlook

Cycle Maturing but Not Ending

The global expansion should continue at above-trend speed in 2H18 and 2019, driven by the ongoing capex and productivity recovery. The cycle has more room to go as we see limited signs of overheating. Speed bumps could emerge if the lift in Fed real rates causes major stress in US corporate credit.

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Global growth cycle – moderating but staying above trend: We expect global growth to stay strong at an above-trend pace over the forecast horizon, averaging 3.9%Y in 2018 and 3.8%Y in 2019. The cycle is being sustained by strong investment and improving productivity growth. Moreover, there are limited signs of misallocation across DM and EM (except in some segments of the US private corporate sector).

Inflation – rising but not overshooting: While inflation is set to rise in both DM and EM, it is projected to stay around central banks' targets. In DM, we expect core inflation to rise, driven by a further tightening of labour markets and rise in capacity utilisation. However, more moderate wage growth than at this stage in past cycles and structural factors such as technology diffusion and globalisation should continue to keep upward pressures in check.

Central banks – hiking rates but not turning too restrictive: Central banks will likely continue to lean against still easy financial conditions. In our view, the Fed will lift real policy rates only marginally (~20bp) above the natural rate (r*) by end-2019. However, that alone is not likely to end the business cycle given that, in previous cycles, real policy rates rose meaningfully (~200bp) above r* before the expansion ended.

Risks – US financial stability, China tightening, trade policy and politics: Given that the cycle is maturing, we see risks as skewed to the downside. We are watching key factors such as US financial stability (particularly in the corporate credit space as real rates rise), China's policy tightening, protectionism and political risks.

Exhibit 1:

Morgan Stanley real GDP growth forecasts

	2017	2018E		2019E	
	MS	MS	Cons.	MS	Cons.
GLOBAL	**3.7**	**3.9**	**3.9**	**3.8**	**3.8**
G10	**2.3**	**2.2**	**2.4**	**2.0**	**2.1**
US	**2.3**	**2.7**	2.8	**2.2**	2.5
Euro Area	**2.5**	**2.1**	2.3	**1.9**	2.0
Japan	**1.7**	**1.3**	1.3	**1.5**	1.0
UK	**1.8**	**1.2**	1.5	**1.0**	1.5
EM	**4.8**	**5.0**	**5.0**	**5.0**	**5.0**
China	**6.9**	**6.6**	6.5	**6.4**	6.3
India	**6.4**	**7.5**	7.3	**7.7**	7.4
Brazil	**1.0**	**2.7**	2.6	**3.4**	2.8
Russia	**1.5**	**1.8**	1.8	**1.7**	1.8
MW Global*	**3.2**	**3.3**	**3.3**	**3.1**	**3.1**

Source: Bloomberg, IMF, Morgan Stanley Research forecasts; Note: Aggregates are PPP-weighted. MW Global* is weighted by long-term market exchange rates and is given here for comparison. Cons = consensus.

Exhibit 2:

The twin recoveries in capex and productivity

Source: Haver Analytics, Conference Board, Morgan Stanley Research; Note: Labour productivity data and forecasts from Conference Board, real investment forecasts from Morgan Stanley Research.

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Important note regarding economic sanctions: Russia is a country which is generally the subject of targeted sanctions programs administered or enforced by the United States, the European Union and/or by other countries, which target among other things Russia's banking, energy, defense and intelligence sectors. The U.S. could in the future impose restrictions in relation to Russian sovereign debt. Any references in this report to debt or equity instruments or transactions that may be covered by such sanctions are strictly incidental to general coverage of the issuing company as germane to its overall financial outlook, and should not be read as recommending or advising as to any investment activities in relation to such instruments or on the basis of such transactions. Users of this report are solely responsible for ensuring that their investment activities in relation to any sanctioned companies are carried out in compliance with applicable sanctions.

Cycle maturing but not ending

Why this cycle still has more legs

An intensifying debate about the length of the global cycle: Over the last few weeks, in our conversations with investors, we sensed increased concerns about the strength and duration of the global expansion cycle. A variety of reasons have been cited as concerns. The rise of protectionism risks, softening data prints in DM, a seemingly more intense tightening in China and most recently the adverse impact that rising US yields and an appreciating USD would have on EM economies have added to worries that the cycle might end soon.

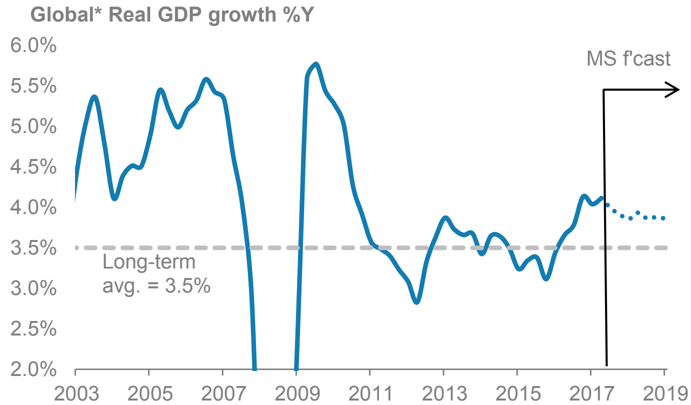
Rising concerns, stable growth: Despite the emergence of these concerns, global growth has actually held up well at 4%Y in 1Q18, similar to its pace in previous quarters. Sequentially, DM growth has moderated but this has been offset by stronger EM growth, supported by China. Moreover, transitory factors have impacted DM growth in 1Q (for more details, see the box on the next page) and, as the effects of these factors fade, we expect sequential growth in DM to improve.

Staying constructive on the cycle: From a broader perspective, our base case remains that the global economic expansion still has room to run. However, as the cycle matures, we do expect a slight moderation in global growth to a still above-trend pace in the coming quarters. On an annual average basis, we expect global real GDP to grow at 3.9%Y in 2018 and 3.8%Y in 2019, as compared to 3.7%Y in 2017 and 3.4%Y in 2012-16. We see global nominal GDP (G3 and BRIC) growing by 6.5%Y in 2018 and 6.6%Y in 2019, compared to 6.6%Y in 2017.

This recovery has been different from previous cycles: We often hear the argument that this expansion has been rather long and would enter its tenth year in 2019. However, the passage of time is not the best indicator to predict when the business cycle would end. This recovery (which had been sub-par until 2016) was preceded by a very deep recession and has been interrupted by a number of temporary crises.

Exhibit 3:

Global growth: Moderating but still above trend



Source: Haver Analytics, Morgan Stanley Research forecasts; *Global is Morgan Stanley coverage excluding Argentina, Venezuela, Nigeria, Saudi Arabia and Kazakhstan.

Exhibit 4:

Nominal GDP growth: Stable at cycle highs

Source: Haver Analytics, Morgan Stanley Research forecasts

Exhibit 5:

Morgan Stanley real GDP growth forecasts: Base, bull and bear cases

	2017	2018E			2019E			2020-22
	Base	Bear	Base	Bull	Bear	Base	Bull	Base
GLOBAL	**3.7**	**3.1**	**3.9**	**4.3**	**2.4**	**3.8**	**4.5**	**3.4**
G10	**2.3**	**1.6**	**2.2**	**2.6**	**0.4**	**2.0**	**2.7**	**1.3**
US	2.3	2.0	**2.7**	3.1	0.4	**2.2**	2.8	1.2
EA	2.5	1.8	**2.1**	2.3	0.5	**1.9**	3.1	1.2
Japan	1.7	0.5	**1.3**	1.6	0.3	**1.5**	2.0	1.1
UK	1.8	0.6	**1.2**	1.7	-0.1	**1.0**	1.8	1.4
EM	**4.8**	**4.2**	**5.0**	**5.6**	**3.7**	**5.0**	**5.8**	**4.8**
China	6.9	6.2	**6.6**	6.8	5.6	**6.4**	6.7	5.6
India	6.4	6.5	**7.5**	8.2	6.5	**7.7**	8.5	7.3
Brazil	1.0	2.1	**2.7**	3.1	1.8	**3.4**	4.0	2.3
Russia	1.5	-0.5	**1.8**	3.0	-1.0	**1.7**	3.1	1.8

Source: IMF, Morgan Stanley Research forecasts; Note: The above aggregates are PPP-weighted.

While growth has moved to an above-trend pace in 2017 and the cycle is now maturing, there are limited signs that the cycle will be ending over the next 18 months. Our constructive view is informed by the following observations:

1) Capex cycle not stretched, productivity improvements to be sustained: From the perspective of a stylised business cycle, we believe that the global economy has moved from a gradual recovery phase in 2017 to a productive growth phase (i.e., strong growth driven by capex and improvements in productivity). Both capex and productivity have improved recently after a prolonged phase of post-crisis weakness that was driven by the confluence of cyclical and structural reasons. We think that the capex cycle is not stretched as yet, given that the recovery in global investment is in its sixth quarter and investment/GDP ratios are below previous cycle peaks. We expect global (G4 and BRIC) investment growth to improve further to 4.2%Y in 2018 and 4.3%Y in 2019 from 3.7%Y in 2017. This should sustain the improvement in productivity growth and mitigate overheating concerns. Moreover, there are initial signs of a structural pick-up in productivity, as digitalisation and adoption of new technology have the potential to increase efficiency across sectors.

2) No major signs of misallocation yet, except in some segments of the US private sector: On aggregate in DM, there has not been a significant uptick in private sector debt/GDP trends. Core inflation, while rising, is not yet at concerning levels. However, within DM, there is some concern about financial stability risks in the US, given that there has been a meaningful pick-up in leverage in parts of the private sector, particularly among corporates. For EM economies, misallocation typically tends to be reflected in higher inflation and significant widening of current account deficits. However, these have remained relatively contained in EM as a whole, though they are more stretched in select EMs than others.

Transitory factors affecting DM growth in 1Q18

DM growth slowed sequentially to an estimated 1.6%Q SAAR from an average pace of 2.5% over the past four quarters. The slowdown in sequential growth was broad-based across G4. However, this moderation in growth can be partly attributed to transitory factors. In the **US,** the main drivers were a payback in consumption in 1Q18, after widely publicised tax cuts and hurricane-related auto replacement had boosted consumption in 4Q17, and residual seasonality. In the **euro area,** issues such as tax hikes, the shifting of the timing of Easter, unusually cold weather and strikes in parts of the region partially impacted growth. In **Japan,** consumption took a hit too in 1Q18 due to weather-related issues. Moreover, in some cases the dip in high-frequency indicators appears to have been more pronounced in the soft data (such as PMIs) due to heady levels previously rather than in the hard data. As the impact of these transitory factors fades, we expect growth to improve from 2Q18 onwards. However, the cycle is more mature in DM and there is less economic slack than before. Hence, we are expecting growth to return to a 2%Q SAAR pace over the forecast horizon, as compared to 2.5% over the past four quarters.

Exhibit 6:

Capex recovery supporting a revival in productivity growth

Source: Haver Analytics, Conference Board, Morgan Stanley Research. Note: Labour productivity data and forecasts from Conference Board, real investment forecasts from Morgan Stanley Research.

Exhibit 7:

EMs ex China to be the main driver of global growth

Source: Haver Analytics, Morgan Stanley Research forecasts; Note that DM includes countries under Morgan Stanley coverage only. *EMXC is Morgan Stanley coverage excluding Argentina, Venezuela, Nigeria, Saudi Arabia and Kazakhstan.

Growth outlook by region

DM more advanced, EM catching up: The global cycle is undoubtedly maturing. But this masks important regional differences. The current cycle is clearly more advanced in DM, and the US is furthest along the cycle followed by Japan and the euro area. The majority of EMs excluding China are still in the early or mid-cycle stages of the business cycle. As regards China, it is difficult to classify it according to a traditional business cycle, given its countercyclical growth model (see below for a detailed discussion). We believe that China will implement further tightening to address its financial risks alongside a continuation of supply-side reforms, and face a moderate slowdown in growth as a result.

DM: From balance sheet recession to self-sustaining recovery

Given the maturing economic cycle in DM, we expect DM growth to moderate somewhat to 2.2%Y in 2018 and 2.0%Y in 2019 from 2.3%Y in 2017. However, this growth forecast is still stronger than the 2012-16 average economic performance of 1.6%Y. Receding headwinds from deleveraging, improving inflation expectations and normalising private sector risk attitudes are supporting a recovery in aggregate demand. Stronger nominal GDP growth and improved profitability have lifted business return expectations of the corporate sector, leading to a recovery in capex spending. The resulting pick-up in productivity growth should help to sustain the DM cycle and allow for a gradual removal of monetary policy accommodation.

EM: China's moderate slowdown offset by stronger growth elsewhere

We expect EM growth to be 5.0%Y in 2018 and 2019, up from 4.8%Y in 2017. A policy-induced slowdown in China (from 6.9%Y in 2017 to 6.6%Y in 2018 and 6.4%Y in 2019) will largely be offset by an acceleration in emerging markets excluding China (EMXC) growth from 3.6%Y in 2017 to 4.1%Y in 2018 and 4.2%Y in 2019.

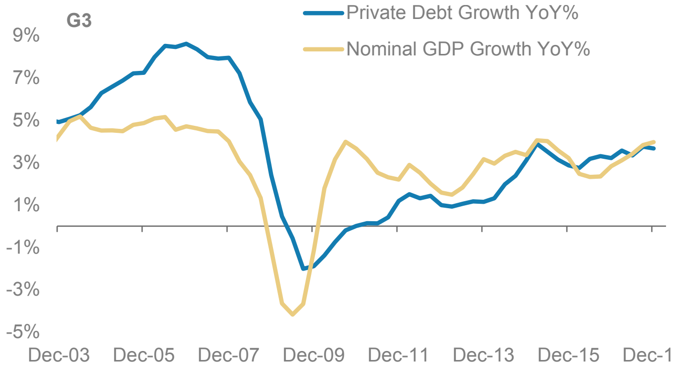
China: Countercyclical growth model in action

Policy-makers have been on a tightening path, which has raised concerns about its impact on the growth trajectory.

However, this tightening cycle is different in three aspects from the 2013-15 cycle (when growth slowed significantly). We assess the pace of tightening by looking at broader credit (total social financing) growth as our preferred metric as it covers both the impact of monetary and fiscal (via tracking issuance of government bonds) tightening.

Exhibit 8:

G3: Private sector exits deleveraging, risk attitudes improving



Source: Haver Analytics, Morgan Stanley Research; Note: Private debt includes households and non-financial corporate debt.

Exhibit 9:

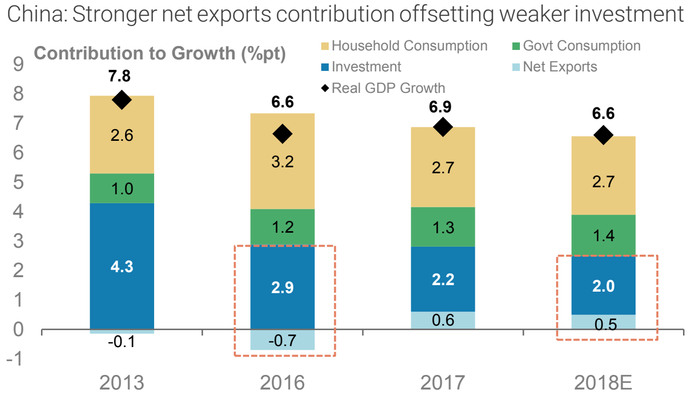
DMs: From balance sheet recession to self-sustaining recovery

	2012-16	2017-Now
Private Sector's Risk Attitudes	• In deleveraging mode • Risk-averse	• Exited deleveraging • Risk attitudes normalised
Aggregate Demand	• Below trend	• Above trend
Prices	• Lowflation persists	• Pricing power comes back
Capex	• Lower return expectations, weak capex	• Return expectations improve, capex picks up
Risks	• Premature tightening leading to double dip recession • Risk of secular stagnation	• Price and financial stability risks

Source: Morgan Stanley Research

Exhibit 10:

China: Stronger net exports contribution offsetting weaker investment



Source: CEIC, Morgan Stanley Research forecasts

1. **The tightening cycle has been more gradual:** During the 2013-15 cycle, broader credit growth slowed by 930bp in a period of 25 months. In the current cycle, broader credit growth has slowed by 400bp in the past 24 months (until March 2018).
2. **The bulk of the tightening is now behind us:** We expect a further cumulative deceleration in broader credit growth of about 100bp in the next 12 months.
3. **This tightening is countercyclical:** In 2013-15, as tightening was under way, export growth continued to decelerate. In this cycle, export growth has been strong. Indeed, as policy-makers continue to pare back stimulus in the infrastructure and real estate sectors, net exports, private investment and consumption are providing offsets, helping to support overall growth momentum. On our estimates, from 2016 to 2018, the contribution of net exports to GDP growth has swung by 120bp (from being a drag to a boost), offsetting the decline in the contribution from investment.

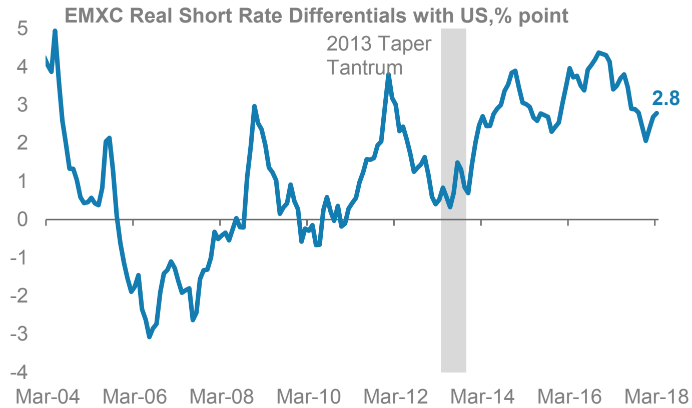
Given this backdrop, we expect only a moderate slowdown in China's growth to 6.6%Y in 2018, and China should continue to account for about one-third of global growth in 2018.

EMXC: Still in early to mid-cycle phase of the business cycle

EMXC in recovery phase: In EMs excluding China (EMXC) it was the adjustment in the macro policy mix during 2012-16 that brought about a turnaround in macro stability indicators. Over the last few quarters, most EMXCs have moved out of the adjustment phase to recovery. As capacity utilisation has begun to improve with the support of consumption and exports, we have seen a broad-based recovery in investment growth over the last three quarters.

Exhibit 11:

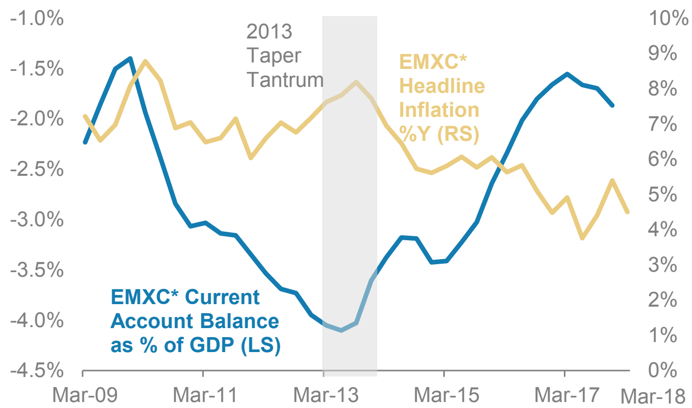
EMs ex China: Adequate real rate buffers maintained



Source: Bloomberg, Haver Analytics, Morgan Stanley Research; Note: EMXC includes Brazil, India, Indonesia, Korea, Mexico, Poland, Russia, South Africa and Turkey.

Exhibit 12:

EMs ex China: Macro stability in better shape today vs. 2013



Source: Haver Analytics, Morgan Stanley Research; *Includes major countries which faced high inflation/ large external deficits before the taper tantrum (India, Indonesia, South Africa, Turkey, Brazil and Colombia).

EM fundamentals and policy mix still favourable in aggregate… We assess EM fundamentals by looking at the policy mix including real rate buffers, fiscal policy and labour market policies, and the impact of this policy mix on macro stability indicators. The policy mix is still favourable at this juncture, with major EMs maintaining adequate real interest rate buffers, staying on a path of fiscal consolidation, while real wage growth trends are broadly in line with real GDP growth. Moreover, the inflation and current account trends for most EMs have remained well within the central banks' comfort zone. Given the favourable policy mix and early stage of the growth cycle, there is more room for growth to be sustained at close to current levels without creating a major deterioration in macro stability indicators.

…though macro stability is relatively stretched in select EMs: Macro stability risks in the bulk of the EM universe are therefore projected to remain low to moderate, though there are a few select EMs like Turkey and Argentina which do have stretched macro stability indicators and where some adjustment in the policy mix is necessary. In Colombia and South Africa macro stability indicators are also somewhat more stretched relative to other EMs, but have shown significant improvement recently.

Inflation: Higher but no major overshoot

Global headline inflation is projected to rise, given a backdrop of a further reduction in output gaps, rising oil prices and fading of temporary factors that have held core inflation down in 2017 (**Exhibit 14**).

DM core inflation rising: Global core inflation is set to pick up gradually over the forecast horizon. The increase in underlying inflation should mainly be driven by G3 core inflation, which we expect to rise from 1.3%Y in 1Q18 to 1.6%Y in 4Q18 and 1.8%Y in 4Q19 (**Exhibit 13**).

No significant overshoot relative to central banks' targets: At the same time, our long-standing view is that a significant overshoot in G3 inflation above central banks' goals is less likely. This is because core inflation remains relatively low as wage growth remains more moderate than during previous cycles and structural factors such as technology diffusion and globalisation continue to keep upward pressures in check.

Why there are limited risks of a significant overshoot in US core PCE price inflation: In the case of the US, there has been concern that a confluence of factors – rising commodity prices, the unemployment rate moving below its long-run normal levels and past dollar weakness – will lead to an overshoot in core inflation. While our forecasts suggest that core PCE should rise modestly above the 2%Y goal over the forecast horizon, we think that a significant overshoot seems less likely:

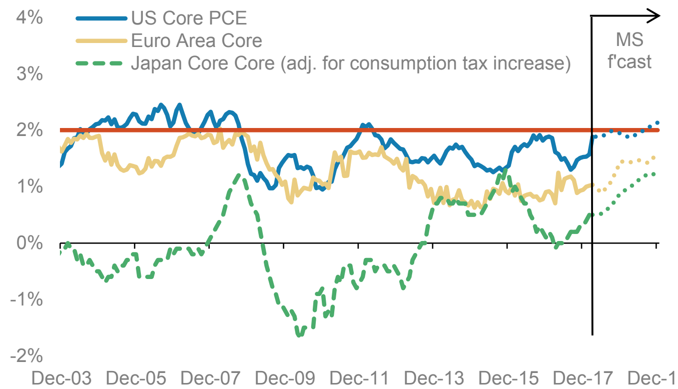
First, as our US team noted, **there are no indications of broad-based inflationary pressures** as almost the entire rise in core inflation since last November has been driven by base effects in cellphone services (the impact of last year's price cuts dropping out) and price increases in the hospital and financial services categories.

Second, wage growth is still moderate compared to previous cycles and below levels that would provide major upside risks to inflation (i.e., not exceeding the Fed's 2%Y inflation goal plus trend labour productivity growth) (**Exhibit 15**).

Third, structural factors such as technology diffusion and globalisation are likely to check the rise in inflationary pressures. Indeed, during 2005-07, despite the confluence of a persistent depreciation in USD, a rise in commodity prices, an unemployment rate lower than its long-run normal level and accelerating wage growth and a rise in China non-commodity producer prices, core PCE did not overshoot 2%Y by a significant magnitude (**Exhibit 16**).

Exhibit 13:

G3 core inflation to pick up further



Source: Haver Analytics, Morgan Stanley Research forecasts

Exhibit 14:

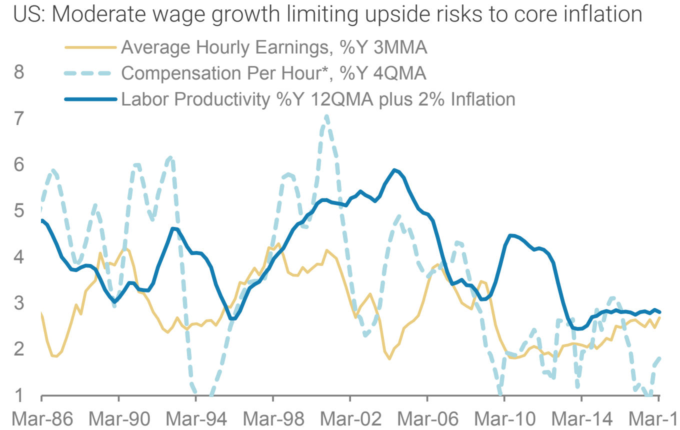
Morgan Stanley inflation forecasts: Base, bull and bear cases

	2017	2018E			2019E			2020-22
	Base	Bear	Base	Bull	Bear	Base	Bull	Base
GLOBAL	**2.5**	**2.8**	**2.9**	**3.1**	**2.4**	**2.8**	**3.2**	**2.8**
G10	**1.8**	**1.9**	**2.1**	**2.4**	**0.8**	**1.7**	**2.6**	**1.9**
US	2.1	2.6	**2.6**	3.0	1.1	**1.9**	3.0	2.0
EA	1.5	1.5	**1.7**	1.8	0.4	**1.6**	2.1	1.7
Japan	0.5	0.7	**1.1**	1.3	0.3	**1.0**	1.7	1.5
UK	2.7	2.1	**2.5**	3.0	1.9	**2.1**	3.0	2.2
EM	**3.1**	**3.5**	**3.4**	**3.5**	**3.5**	**3.5**	**3.6**	**3.4**
China	1.6	2.1	**2.4**	2.6	1.9	**2.5**	2.8	2.5
India	3.3	5.0	**4.6**	4.4	5.5	**4.4**	4.3	4.0
Brazil	3.5	3.5	**3.1**	2.8	4.5	**3.9**	3.7	4.0
Russia	3.7	5.0	**3.0**	2.0	7.0	**4.2**	2.8	4.0

Source: IMF, Morgan Stanley Research forecasts; Note: Global and EM aggregates are calculated excluding Argentina and Venezuela.

Exhibit 15:

US: Moderate wage growth limiting upside risks to core inflation



Source: BLS, Haver Analytics, Morgan Stanley Research; *Inflationary pressures from a tightening labour market are limited so far as wage growth remains moderate and below productivity growth (non-farm business sector output per hour in this graph) plus the 2%Y inflation target.

EM inflation – rising but also not above targets on a sustained basis: Inflation in EM is set to rise too, given that the ongoing economic recovery should lead to a rise in capacity utilisation. Headline inflation will likely also rise in the near term due to higher energy prices. However, for most economies, we are expecting inflation to remain within the central banks' targets (or comfort zones) as the overall policy mix remains favourable. Productivity growth is recovering, an adequate level of real rates is being maintained, fiscal policy is still on a path of consolidation and there is no major distortion of labour markets.

Central banks on a path of policy normalisation...

DM central banks to reduce monetary accommodation: As DM growth remains relatively strong, we should see a further tightening of labour markets and rise in capacity utilisation driving core inflation higher, which should continue to encourage central banks to lean against still easy financial conditions. G4 central banks should either continue (in the case of the Fed) or embark on a path of policy normalisation. While we expect the ECB to end asset purchases in December 2018 and hike deposit rates in June 2019 and the BoJ to adjust the 10-year JGB yield to around 0.15% in 1Q19, monetary policy will still be expansionary (see Exhibit 17 for detailed forecasts on central bank policy actions).

How restrictive will the Fed get? As the Fed's policy normalisation process is already well under way, there are concerns that further rate hikes would lift real rates to meaningfully restrictive levels and weigh on growth. Our base case projections are that real policy rates will reach ~0.2% by December 2018 and 0.7% by December 2019. This implies that real rates would rise above natural (r*) in 1Q19 and would be about 20bp higher than r* in 4Q19 [1]. The key question that arises in this context is what level of real rates would risk a major slowdown in growth. In the previous two cycles, real policy rates had risen by about 200bp above the natural rate before the expansion ended a few quarters later. In this regard, considering our forecast of actual real rates and r*, we project the US expansion to be sustained through to end-2019 (we see a recession probability of 15%).

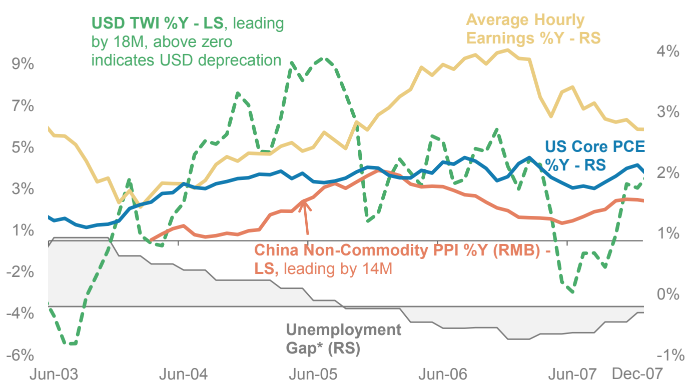
1. Our estimate of the natural rate of interest (r*) is 0.5%, which is based on the Laubach and Williams model (2003) but calculated based on our trend productivity growth estimate of 1.7%.

Assessing the sensitivity of higher oil prices

Given the recent rise in oil prices, there has been an increased attention on the impact higher oil prices could have on headline inflation. In this regard, for the G4 + BRIC economies, we have analysed the impact of a sustained average US$10/bbl increase in Brent crude prices relative to what futures are pricing. **Our analysis suggests that headline inflation (G4 + BRIC) would be above our baseline forecast by 20bp in 2018 and 10bp in 2019.** Importantly, the pass-through to G3 core inflation would be more moderate and occur with somewhat of a lag, raising our 2018 forecast by 5bp and our 2019 forecast by 10bp above the baseline forecast of an average 1.4%Y in 2018 and 1.7%Y in 2019.

Exhibit 16:

US: Core PCE did not overshoot by significant magnitude above 2%Y in 2005-07



Source: CEIC, Haver Analytics, Morgan Stanley Research; Note: TWI stands for trade-weighted index. *Unemployment gap = actual unemployment rate minus long-run normal level.

Exhibit 17:

Key central banks: Next moves

Central Bank	Policy Action
Fed	2 more hikes in 2018, 3 hikes in 2019
ECB	Begin tapering asset purchases in Oct-18, ending purchases in Dec-18. One 15bp deposit rate hike in Jun-19
BOJ	Adjust 10Y JGB yield target to "around 0.15%" (0-0.3%) in 1Q19
BOE	1 hike in 3Q18, 2 hikes in 2019
PBOC	Increase in bank deposit rates via liberalisation of deposit rate caps
RBI	1 hike in 4Q18, 2 hikes in 2019
BCB	25bp cut in 2Q18, 125bp hike in 2019
CBR	2 more cuts in 2018, on hold in 2019

Source: Morgan Stanley Research forecasts

Uncertainty surrounding natural rate (r*) estimates

While our **base case view is that monetary policy is not turning meaningfully restrictive,** we are conscious of the risks that the real natural rate (r*) continues to be lower than currently estimated and, as the Fed continues to lift real rates, policy could be more restrictive than we thought.

The assessment of **how restrictive monetary policy is hinges heavily on the reliability of estimates of the natural rate.** However, according to a San Francisco Fed Economic Letter (Wu 2005), the Laubach and Williams **model faces three drawbacks:**

1. *The 'one-sided filtering problem'*: With real-time estimation, the lack of data beyond today means that the resulting estimate would be 'one-sided' (as it is modelled on data available today only). Even if we employ the 'two-sided' approach (which uses both existing and forward projections of data using autoregressive model-based forecasts), inputs for 'beyond today' are still forecasts;
2. *Data revisions:* Subsequent revisions in macroeconomic data can lead to issues with both the model parameters and the r* estimate;
3. *Model specifications:* Different models have been shown to derive different estimates, leading to uncertainties regarding the reliability of the estimated r*.

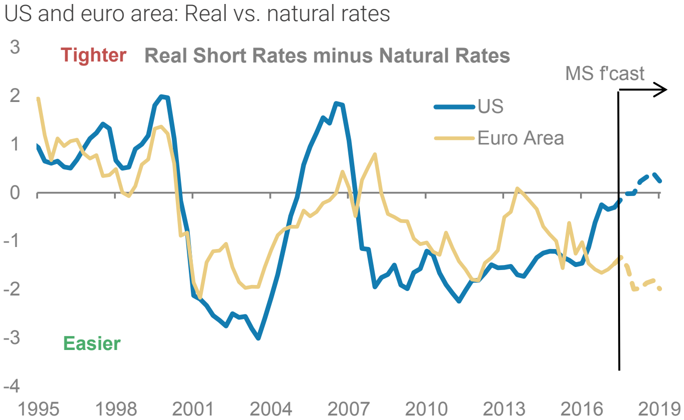
To delve deeper into this issue, we tried to look at the Fed's real-time r* estimates for 2006-07 at that time as compared with the two-sided estimates today from the Laubach and Williams model for the same period. We found that the Fed's real-time r* estimates could have been higher by at most 100bp relative to today's estimates. Hence, **in hindsight it appears that the Fed had assumed natural rates for 2006-07 to be higher than what it would estimate today.**

Interestingly, in terms of timing as per real-time estimates, the Fed took real rates to about 100bp above r* in 2Q07 – as per its estimates back then – while as per today's revised estimates, it took real rates above r* by about 100bp in 2Q06, eventually hitting a peak of 180bp in 3Q07. Observing this another way, the **Fed had taken real rates above real GDP growth by 2Q06. By 4Q07, the economy had entered into recession.**

Apart from this issue of reliable estimation of natural rates, the conduct of monetary policy in this cycle is complicated by the **challenge of accurately assessing the impact of balance sheet normalisation on overall financial conditions.** Various Fed officials like Bernanke, Bullard and Dudley have downplayed these concerns. Policy rates off the zero bound, alongside a balance sheet drawdown which is already in progress (and on auto-pilot) and therefore reduced signalling effects from balance sheet actions, have been cited as mitigating factors. However, given that we are after all in uncharted territory, the uncertainty and its impact would still have to be monitored.

Exhibit 18:

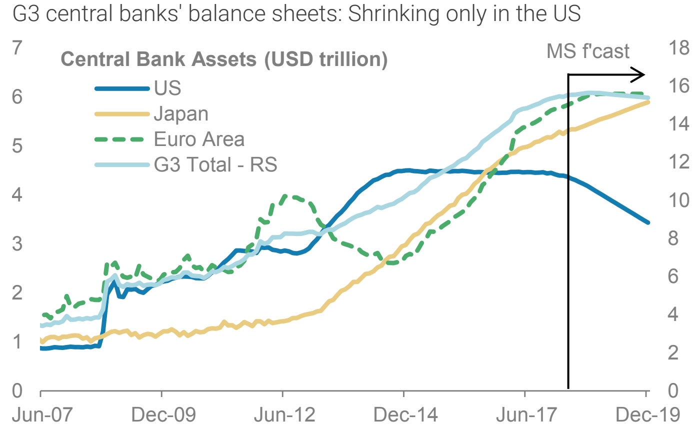
US and euro area: Real vs. natural rates



Source: BEA, FRB, ECB, Eurostat, Morgan Stanley Research forecasts; Note: Natural interest rate estimates for US are from Laubach and Williams (2003) and for the euro area Holston, Laubach and Williams (2016).

Exhibit 19:

G3 central banks' balance sheets: Shrinking only in the US



Source: Haver Analytics, Morgan Stanley Research forecasts

...and fiscal policy more expansionary in DM

DM fiscal policy has become more expansionary this year and should continue to provide mild support in 2019: We expect the G4 cyclically adjusted primary deficit to widen by 0.5pp of GDP in 2018 and 0.3pp in 2019 compared to an increase of 0.2pp of GDP in 2017. We expect the **US** overall fiscal deficit to widen to 4.1% in 2018 and further to 4.5% in 2019 from 3.4% in 2017 (although this is lower than what we had pencilled in previously due to the clarity on the timing of the outlays of the defence sector). The fiscal multiplier will likely be more moderate at this stage of the cycle though. In the **euro area,** fiscal policy should also be mildly expansionary this year and next. In **Japan,** fiscal policy will tighten this year before providing some pre-election and pre-consumption tax hike stimulus in 2019. In **EM,** policy-makers will likely remain on a modest consolidation path this year before turning broadly neutral in 2019.

Exhibit 20:

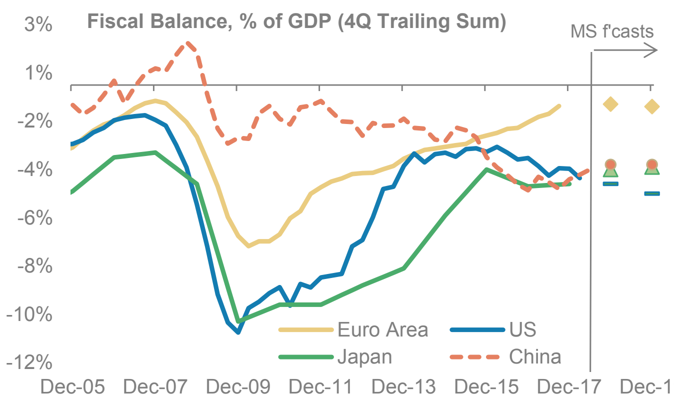
Morgan Stanley government budget balance forecasts

General Gov't Budget Balance (% of GDP)				
	2016	2017	2018E	2019E
US*	-3.1	-3.4	-4.1	-4.5
EA	-1.5	-0.8	-0.8	-0.9
JPN	-3.7	-4.2	-3.5	-3.4
UK	-3.0	-1.9	-2.3	-2.3
G4	**-2.6**	**-2.5**	**-2.8**	**-3.0**
China	-3.8	-3.7	-3.3	-3.3
India	-7.0	-6.7	-6.5	-6.3
Brazil	-9.0	-7.8	-7.5	-6.9
Russia	-3.4	-1.4	1.5	1.4
BRIC	**-5.0**	**-4.5**	**-3.9**	**-3.9**

Source: Haver Analytics, Morgan Stanley Research forecasts; *We have revised these from our earlier forecasts of -4.4% in 2018 and -5.0% in 2019

Exhibit 21:

DM and China fiscal policy: Lending mild support to growth



Source: Haver Analytics, Morgan Stanley Research forecasts

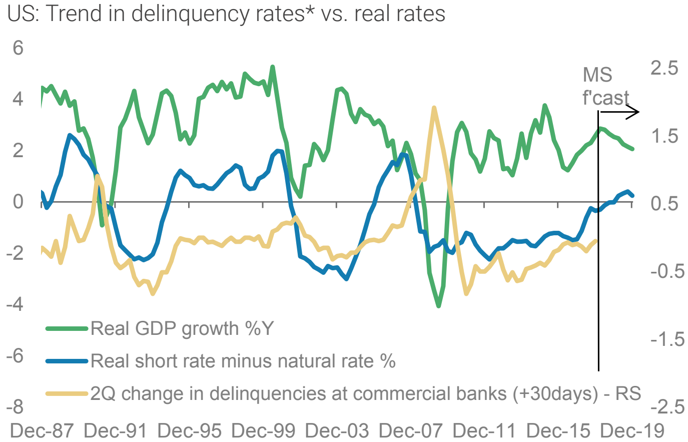
Risks: US financial stability, China tightening, trade policy and politics

Given that the cycle is maturing, we believe that the risks are skewed to the downside: The key risks (both positive and negative) that we are watching include:

(1) US financial stability risks: While US financial stability risks seem more moderate at this juncture, there are some pockets of risks which bear watching. Non-financial business debt is elevated relative to trend and companies with weaker credit ratings are now accounting for a higher share of bonds outstanding (share of BBB rated debt in outstanding investment grade bonds has increased from 38% at end-2007 to 50% currently). A backdrop of improving profitability and tax reform has helped to stabilise non-financial business debt in 2017, but rising interest rates (particularly as the Fed is expected to take real rates modestly above neutral by 1Q19) could reveal weakness in the highly levered parts of the sector.

Exhibit 22:

US: Trend in delinquency rates* vs. real rates



Source: Haver Analytics, Morgan Stanley Research forecasts. *Delinquency rates for all loans and leases at commercial banks (delinquent 30 days plus).

(2) China policy tightening: China's policy-makers face the difficult challenge of addressing financial risks while avoiding a major slowdown in growth. Our base case is that tightening is gradual and countercyclical in nature. However, if the pace of tightening were to quicken or if domestic demand slows more meaningfully in response to past tightening (particularly in the real estate sector), China's growth could slow much more sharply than we expect, with negative repercussions on commodity prices and global growth.

(3) Protectionism: While our base case is still that a negotiation (towards an eventual outcome of gradual and non-disruptive adjustment) and de-escalation is likely, we are mindful of the risk that it could tip over to a more protectionist scenario in which the US takes up aggressive and wide-ranging trade action against China while China takes up significant counter actions. Trade and investment growth in US and China could be impacted, with spillover effects to the rest of the world, particularly as two-thirds of global trade is related to global supply chains.

(4) Stronger improvement in investment and productivity growth: A stronger-than-expected recovery in investment growth should boost aggregate demand directly. The current recovery in investment could also lead to a stronger-than-expected positive impact on productivity growth. This would then add further runway for the global cycle, allowing it to be sustained for longer.

(5) Fiscal policy in the US: If the fiscal multiplier in the US turns out to be larger than we currently expect, growth would rise more strongly, though there could be some offset from more aggressive-than-expected tightening by the Fed.

(6) Political risks: Finally, there are a number of political events which could pose risks to growth – mid-term elections in the US, political uncertainty in Japan and Italy, Brexit talks, US sanctions on Russia and elections in a number of EMs (Indonesia regional elections in June 2018, Mexico presidential and legislative elections in July 2018, Brazil general elections in October 2018 and India general elections in 2Q19).

Exhibit 23:

Political events calendar

2018			
2Q18	**Venezuela**: Presidential Elections (20-May) **Colombia**: Presidential Elections - 1st Round (27-May) **India**: State Elections (May) **Colombia**: Presidential Elections - 2nd Round (17-Jun) **Indonesia**: Regional Elections (27-Jun)	4Q18	**China**: 4th Plenary Session of 19th CPC (4Q) **Brazil**: Presidential and Parliamentary Elections - 1st Round (7-Oct) **EU**: European Council Meeting on Brexit (18-Oct) **Brazil**: Presidential Elections - 2nd Round (28-Oct) **US**: Midterm Elections (6-Nov) **China**: Central Economic Work Conference (Dec) **India**: State Elections (Dec)
3Q18	**Mexico**: Federal (Presidential + Congressional) Elections (1-Jul) **China**: Politburo Meeting on Economic Work (Jul) **Sweden**: General Elections (9-Sep) **Japan**: LDP Leadership Election (Sep) **Italy**: National Election (probably between July and October, if government formation attempts fail)		
2019			
1Q19	**Ukraine**: Presidential Elections (Mar) **UK**: Exit from European Union (29-Mar)	3Q19	**Japan**: Upper House Election (Jul)
2Q19	**Japan**: Abdication of Emperor Akihito & Nationwide Local Elections (Apr) **India**: State General Elections (Apr / May) **EU**: European Parliamentary Elections (May) **Belgium**: Federal Elections (26-May)	4Q19	**Argentina**: Presidential and Legislative Elections (Oct) **Portugal**: General Elections (Oct) **Greece**: General Elections (Oct) **Ukraine**: Parliamentary Elections (Nov)

Source: Morgan Stanley Research

Why focus on US financial stability risks

The importance of tracking US financial stability risks: The key risk to the global cycle is if the US were to enter into a recession. In this regard, we are more concerned about the threat that financial stability risks pose to the business cycle. In this box, we summarise the key issues related to US financial stability risks (for a detailed overview, see Global Macro Briefing: A Spotlight on US Financial Stability Risks, April 16, 2018).

Funding risks could rise as Fed continues to lift rates: As the Fed takes real interest rates into restrictive territory, the risk is that this in itself and/or in combination with potential external developments could cause tightening in financial conditions, exposing the weaker parts of the financial system.

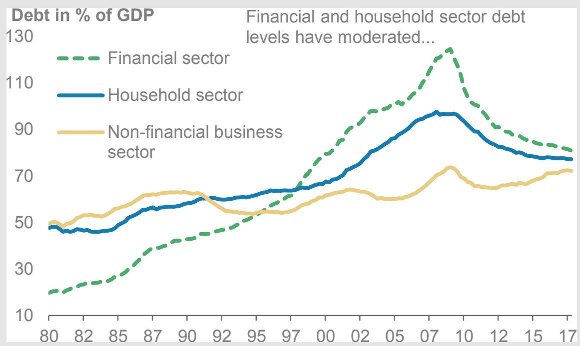
Concerns about certain sub-segments of US corporate credit… Our credit strategists have highlighted retail, telecommunications and health care as having both a relatively high representation in lower-rated debt while also facing structural challenges. Another sector which accounts for a large share of high yield debt and has faced challenges during previous years is mining. However, a rebound in earnings and reduction in debt in 2017 have helped to mitigate some risks.

…as well as in commercial real estate and non-mortgage consumer debt: In the commercial real estate space, low capitalisation rates and elevated valuations are a concern. In non-mortgage consumer debt, deterioration in underwriting quality of auto loans and credit cards as well as a rise in delinquencies are suggesting that low household debt-service ratios may not be as comforting as they appear to be at first sight.

What if interest rates rise faster than we expect? A more aggressive rise in interest rates – in our baseline we expect US real policy rates to rise modestly above neutral in 2019 – or shock to earnings (e.g., a sharp slowdown in China or fall in commodity prices) could lead to an increase in delinquencies and defaults among weaker debtors. This raises credit spreads more broadly, with negative repercussions on other sectors. Note that a full-blown protectionist push scenario also poses risks as it could impact earnings of the manufacturing sector. A coincidental occurrence of several shocks could significantly weaken the ability of the corporate sector to service its debt.

Exhibit 24:

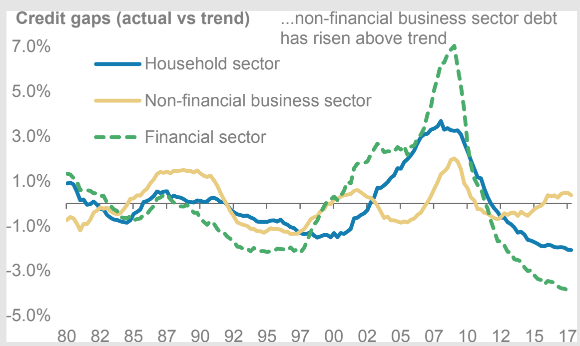
US debt trends



Source: BEA, Federal Reserve, Morgan Stanley Research

Exhibit 25:

US credit gaps (actual debt/GDP level relative to trend)



Source: BEA, Federal Reserve, Morgan Stanley Research; Note: We calculate the trend using HP filter with lambda set equal to 400,000.

Key forecast profile

	Quarterly												Annual		
	2017				2018				2019				2017	2018E	2019E
Real GDP	1Q	2Q	3Q	4Q	1QE	2QE	3QE	4QE	1QE	2QE	3QE	4QE			
Global (YoY)	**3.4**	**3.6**	**4.0**	**3.9**	**4.0**	**3.9**	**3.8**	**3.7**	**3.8**	**3.8**	**3.8**	**3.8**	**3.7**	**3.9**	**3.8**
Global (%Q, SAAR)	**4.0**	**4.3**	**4.0**	**3.8**	**3.8**	**4.0**	**3.8**	**3.7**	**4.0**	**3.9**	**3.8**	**3.5**	**3.7**	**3.9**	**3.8**
G10 (YoY)	**2.0**	**2.2**	**2.4**	**2.5**	**2.5**	**2.3**	**2.1**	**1.9**	**2.0**	**2.0**	**2.0**	**1.8**	**2.3**	**2.2**	**2.0**
G10 (%Q, SAAR)	**1.9**	**2.9**	**2.8**	**2.5**	**1.6**	**2.3**	**2.0**	**1.9**	**2.0**	**2.1**	**1.9**	**1.5**	**2.3**	**2.2**	**2.0**
United States	1.2	3.1	3.2	2.9	2.3	2.9	2.5	2.4	2.1	2.0	2.1	2.0	2.3	2.7	2.2
Euro Area	2.6	2.9	2.8	2.7	1.7	1.8	1.7	1.7	2.1	2.1	1.9	1.9	2.5	2.1	1.9
Japan	1.9	2.4	2.4	1.6	-0.3	1.5	1.4	1.6	2.2	2.1	1.1	-1.7	1.7	1.3	1.5
UK	1.3	1.0	1.9	1.6	0.4	1.8	1.0	0.2	0.6	1.8	1.4	1.4	1.8	1.2	1.0
EM (YoY)	**4.5**	**4.6**	**5.1**	**4.9**	**5.1**	**5.0**	**5.0**	**5.0**	**5.0**	**5.0**	**5.1**	**5.1**	**4.8**	**5.0**	**5.0**
China (YoY)	6.9	6.9	6.8	6.8	6.8	6.6	6.5	6.4	6.3	6.4	6.4	6.5	6.9	6.6	6.4
India (YoY)	6.1	5.7	6.5	7.2	7.5	7.6	7.4	7.4	7.7	7.6	7.7	7.8	6.4	7.5	7.7
Brazil (YoY)	0.0	0.4	1.4	2.1	1.5	2.2	3.0	3.9	3.7	3.4	3.5	3.2	1.0	2.7	3.4
Russia (YoY)	0.6	2.5	2.2	0.9	1.1	0.9	2.1	3.0	2.4	1.8	1.4	1.2	1.5	1.8	1.7
Consumer Price Inflation (YoY)															
Global*	**2.7**	**2.4**	**2.4**	**2.6**	**2.7**	**2.9**	**3.0**	**2.9**	**2.8**	**2.8**	**2.8**	**2.7**	**2.5**	**2.9**	**2.8**
G10	**2.0**	**1.6**	**1.7**	**1.8**	**1.8**	**2.2**	**2.3**	**2.1**	**1.8**	**1.8**	**1.7**	**1.7**	**1.8**	**2.1**	**1.7**
United States	2.6	1.9	2.0	2.1	2.3	2.8	2.8	2.4	2.0	2.0	1.9	1.9	2.1	2.6	1.9
Euro Area	1.8	1.5	1.4	1.4	1.3	1.6	1.9	1.9	1.8	1.6	1.4	1.5	1.5	1.7	1.6
Japan	0.3	0.4	0.6	0.6	1.3	1.2	1.5	1.3	0.9	1.1	0.9	0.7	0.5	1.1	1.0
UK	2.1	2.7	2.8	3.0	2.7	2.5	2.4	2.2	2.1	2.1	2.1	2.2	2.7	2.5	2.1
EM*	**3.2**	**3.0**	**3.0**	**3.3**	**3.3**	**3.4**	**3.5**	**3.5**	**3.5**	**3.5**	**3.5**	**3.4**	**3.1**	**3.4**	**3.5**
China	1.4	1.4	1.6	1.8	2.2	2.2	2.5	2.5	2.4	2.6	2.6	2.5	1.6	2.4	2.5
India	3.6	2.2	3.0	4.6	4.6	5.1	4.5	4.0	4.4	4.2	4.5	4.5	3.3	4.6	4.4
Brazil	4.9	3.6	2.6	2.8	2.8	3.0	3.3	3.4	3.8	3.9	3.9	3.9	3.5	3.1	3.9
Russia	4.6	4.2	3.4	2.6	2.3	2.4	3.2	4.0	4.5	4.4	4.1	3.9	3.7	3.0	4.2
Core Inflation (YoY)															
Global	**2.2**	**2.1**	**2.0**	**2.1**	**2.1**	**2.2**	**2.3**	**2.5**	**2.4**	**2.5**	**2.5**	**2.5**	**2.1**	**2.3**	**2.5**
G4	**1.2**	**1.3**	**1.2**	**1.2**	**1.3**	**1.4**	**1.5**	**1.7**	**1.6**	**1.7**	**1.8**	**1.9**	**1.2**	**1.5**	**1.7**
G3	**1.2**	**1.2**	**1.1**	**1.1**	**1.3**	**1.3**	**1.5**	**1.6**	**1.6**	**1.7**	**1.7**	**1.8**	**1.1**	**1.4**	**1.7**
United States^	1.8	1.5	1.4	1.5	1.7	1.9	2.0	1.9	1.9	1.9	2.0	2.1	1.5	1.9	2.0
Euro Area	0.8	1.1	1.2	0.9	1.0	0.9	1.1	1.4	1.4	1.5	1.4	1.6	1.0	1.1	1.5
Japan	0.1	0.0	0.2	0.3	0.5	0.5	0.7	0.9	1.0	1.1	1.2	1.2	0.1	0.6	1.1
UK	1.8	2.5	2.6	2.6	2.5	2.1	2.2	2.3	2.4	2.5	2.5	2.6	2.4	2.3	2.5
BRIC	**3.2**	**2.9**	**2.9**	**2.9**	**2.9**	**3.0**	**3.1**	**3.3**	**3.2**	**3.3**	**3.2**	**3.2**	**3.0**	**3.1**	**3.2**
China	2.0	2.1	2.2	2.3	2.1	2.1	2.3	2.5	2.4	2.6	2.5	2.4	2.2	2.3	2.4
India	4.9	4.2	4.3	4.9	5.2	5.5	5.3	4.9	4.7	4.5	4.6	4.5	4.6	5.2	4.6
Brazil	4.5	3.8	3.1	3.0	2.8	2.8	3.0	3.1	3.5	4.1	4.3	4.5	3.6	2.9	4.1
Russia	5.2	3.9	3.0	2.1	1.6	2.3	3.2	4.1	4.2	4.0	3.8	3.8	3.6	2.8	4.0
Monetary Policy Rate (% p.a., eop)															
Global	**2.7**	**2.7**	**2.5**	**2.5**	**2.6**	**2.7**	**2.7**	**2.8**	**2.8**	**2.9**	**3.0**	**3.1**	**2.5**	**2.8**	**3.1**
G10	**0.3**	**0.4**	**0.4**	**0.6**	**0.7**	**0.8**	**0.9**	**0.9**	**1.0**	**1.2**	**1.3**	**1.4**	**0.6**	**0.9**	**1.4**
United States	0.875	1.125	1.125	1.375	1.625	1.875	2.125	2.125	2.375	2.625	2.875	2.875	1.375	2.125	2.875
Euro Area	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.25	-0.25	-0.25	-0.40	-0.40	-0.25
Japan	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
UK	0.25	0.25	0.25	0.50	0.50	0.50	0.75	0.75	0.75	1.00	1.00	1.25	0.50	0.75	1.25
EM	**4.5**	**4.3**	**4.1**	**4.0**	**4.0**	**4.1**	**4.1**	**4.1**	**4.1**	**4.1**	**4.2**	**4.2**	**4.0**	**4.1**	**4.2**
China^^	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
India	6.25	6.25	6.00	6.00	6.00	6.00	6.00	6.25	6.25	6.50	6.50	6.75	6.00	6.25	6.75
Brazil	12.25	10.25	8.25	7.00	6.50	6.25	6.25	6.25	6.25	6.50	7.50	7.50	7.00	6.25	7.50
Russia	9.75	9.00	8.50	7.75	7.25	7.25	7.00	6.75	6.75	6.75	6.75	6.75	7.75	6.75	6.75

Source: IMF, Morgan Stanley Research forecasts; Note: Global and regional aggregates for GDP growth are GDP-weighted averages, using PPPs; Japan CPI includes VAT; Japan policy rate is the interest rate on excess reserves; CPI numbers are period average. Global* and EM* Consumer Price Inflation Aggregates exclude Venezuela and Argentina. The global core inflation aggregate consist of G4+BRICS. ^The US core inflation number is core PCE. ^^1Y benchmark deposit rate.

Consumer expenditure and investment spending forecasts

	Quarterly												Annual		
	2017				2018				2019				2017	2018E	2019E
Pvt Consumption (%Q, SAAR)	1Q	2Q	3Q	4Q	1QE	2QE	3QE	4QE	1QE	2QE	3QE	4QE**			
Global*	**3.2**	**4.7**	**3.9**	**4.0**	**3.8**	**4.4**	**4.0**	**4.2**	**3.7**	**4.5**	**4.2**	**3.5**	**3.9**	**4.1**	**4.1**
G4	**1.8**	**2.8**	**1.2**	**2.4**	**1.1**	**2.1**	**2.0**	**1.9**	**1.8**	**2.0**	**2.2**	**0.8**	**2.1**	**1.8**	**1.9**
United States	1.9	3.3	2.2	4.0	1.1	3.0	2.6	2.4	2.1	2.0	2.1	2.1	2.8	2.5	2.3
Euro Area	2.0	2.0	1.3	0.7	1.6	1.6	1.6	1.6	1.6	1.9	1.6	1.8	1.7	1.4	1.7
Japan	1.3	3.7	-2.6	2.1	0.1	1.4	1.5	1.8	1.9	2.5	4.9	-7.1	1.1	0.9	1.7
UK	1.5	1.1	1.2	1.0	0.8	0.6	0.2	-0.2	1.0	1.4	1.3	1.3	1.7	0.7	0.8
BRIC	**4.7**	**6.7**	**6.8**	**5.7**	**6.5**	**6.8**	**6.1**	**6.6**	**5.6**	**7.0**	**6.2**	**6.2**	**5.9**	**6.4**	**6.3**
China ^	7.0	7.0	7.0	7.0	6.9	6.9	6.9	6.9	6.8	6.8	6.8	6.8	7.0	6.9	6.8
India	-0.2	8.1	8.1	5.6	7.9	8.4	6.2	8.7	4.3	10.7	7.3	7.4	5.7	7.4	7.3
Brazil	0.7	4.7	4.7	0.5	2.4	4.5	3.2	2.0	3.6	2.0	2.0	1.6	1.0	2.9	2.7
Russia	6.4	3.2	4.8	2.9	4.1	3.6	3.6	3.2	3.2	3.2	2.8	2.8	3.4	3.7	3.2
Pvt Consumption (%Y)	1Q	2Q	3Q	4Q	1QE	2QE	3QE	4QE	1QE	2QE	3QE	4QE			
Global*	**3.8**	**4.2**	**4.0**	**4.0**	**4.1**	**4.1**	**4.1**	**4.1**	**4.1**	**4.2**	**4.2**	**4.0**	**3.9**	**4.1**	**4.1**
G4	**2.2**	**2.3**	**2.0**	**2.1**	**1.9**	**1.7**	**1.9**	**1.8**	**2.0**	**1.9**	**2.0**	**1.7**	**2.1**	**1.8**	**1.9**
United States	2.9	2.7	2.6	2.8	2.6	2.6	2.7	2.3	2.5	2.3	2.1	2.1	2.8	2.5	2.3
Euro Area	1.7	1.9	1.9	1.5	1.4	1.3	1.4	1.6	1.6	1.7	1.7	1.7	1.7	1.4	1.7
Japan	0.7	1.7	0.6	1.1	0.8	0.2	1.3	1.2	1.7	1.9	2.8	0.4	1.1	0.9	1.7
UK	2.5	1.7	1.2	1.2	1.0	0.9	0.6	0.4	0.4	0.6	0.9	1.2	1.7	0.7	0.8
BRIC	**5.5**	**6.3**	**6.2**	**6.0**	**6.5**	**6.5**	**6.3**	**6.5**	**6.3**	**6.3**	**6.4**	**6.2**	**5.9**	**6.4**	**6.3**
China	7.8	7.4	7.0	7.0	7.0	6.9	6.9	6.9	6.9	6.8	6.8	6.8	7.0	6.9	6.8
India	4.2	6.8	6.5	5.4	7.4	7.5	7.0	7.8	6.9	7.4	7.7	7.4	5.7	7.4	7.3
Brazil	-1.6	0.6	2.2	2.6	3.1	3.0	2.7	3.0	3.3	2.7	2.4	2.3	1.0	2.9	2.7
Russia	1.5	3.0	4.1	4.3	3.7	3.9	3.6	3.6	3.4	3.3	3.1	3.0	3.4	3.7	3.2
Investment (%Q, SAAR)	1Q	2Q	3Q	4Q	1QE	2QE	3QE	4QE	1QE	2QE	3QE	4QE**			
Global*	**3.5**	**5.7**	**3.3**	**6.2**	**3.0**	**3.7**	**4.3**	**4.6**	**4.3**	**4.3**	**4.3**	**3.7**	**3.7**	**4.2**	**4.3**
G4	**3.9**	**5.2**	**0.3**	**6.1**	**2.8**	**3.1**	**3.0**	**3.0**	**3.5**	**3.6**	**3.6**	**2.0**	**3.3**	**3.4**	**3.3**
United States	7.4	2.2	1.4	8.6	4.1	4.1	3.0	3.2	3.0	2.9	3.0	2.8	3.4	4.3	3.1
Euro Area	0.4	8.4	-1.3	4.7	2.9	3.1	3.5	3.4	4.5	4.4	4.2	4.6	3.2	3.2	4.0
Japan	0.9	7.8	-0.4	1.4	0.1	1.3	2.3	3.4	5.3	5.3	4.9	-7.6	2.5	1.5	3.4
UK	2.6	6.9	2.0	4.4	-0.9	0.4	1.2	-0.9	-1.9	1.6	1.9	1.9	4.0	1.4	0.2
BRIC	**3.1**	**6.2**	**6.5**	**6.4**	**3.3**	**4.2**	**5.7**	**6.2**	**5.0**	**5.0**	**5.1**	**5.4**	**4.1**	**5.1**	**5.3**
China ^	4.0	4.0	4.0	4.0	3.9	3.9	3.9	3.9	3.8	3.8	3.8	3.8	4.0	3.9	3.8
India	3.7	14.0	13.9	13.1	1.2	4.6	8.6	11.6	8.0	7.0	9.2	10.9	6.6	7.9	8.6
Brazil	-2.2	1.6	7.6	8.1	4.1	8.2	13.0	11.2	7.4	10.4	4.9	4.1	-1.6	7.5	8.7
Russia	0.6	4.6	2.7	3.5	4.1	2.0	3.2	2.8	3.2	2.8	2.8	2.8	3.6	3.4	2.9
Investment (%Y)	1Q	2Q	3Q	4Q	1QE	2QE	3QE	4QE	1QE	2QE	3QE	4QE			
Global*	**3.8**	**3.2**	**3.7**	**4.7**	**4.6**	**4.1**	**4.3**	**3.9**	**4.2**	**4.4**	**4.4**	**4.2**	**3.7**	**4.2**	**4.3**
G4	**3.1**	**3.2**	**2.9**	**3.8**	**3.6**	**3.1**	**3.7**	**3.0**	**3.2**	**3.3**	**3.4**	**3.2**	**3.3**	**3.4**	**3.3**
United States	2.4	3.0	3.2	4.9	4.0	4.5	4.9	3.6	3.4	3.0	3.0	2.9	3.4	4.3	3.1
Euro Area	4.1	3.5	2.5	3.0	3.6	2.3	3.6	3.2	3.6	4.0	4.1	4.4	3.2	3.2	4.0
Japan	2.2	3.1	2.7	2.4	2.2	0.6	1.3	1.7	3.1	4.1	4.7	1.8	2.5	1.5	3.4
UK	4.5	4.2	3.6	4.0	3.1	1.4	1.2	-0.1	-0.3	0.0	0.2	0.9	4.0	1.4	0.2
BRIC	**4.6**	**3.1**	**4.5**	**5.5**	**5.6**	**5.1**	**4.9**	**4.8**	**5.3**	**5.5**	**5.3**	**5.1**	**4.1**	**5.1**	**5.3**
China	5.2	4.6	4.0	4.0	4.0	4.0	3.9	3.9	3.9	3.8	3.8	3.8	4.0	3.9	3.8
India	6.5	1.5	7.4	11.1	10.4	8.1	6.8	6.4	8.2	8.8	8.9	8.8	6.6	7.9	8.6
Brazil	-5.2	-5.1	-0.6	3.7	5.3	7.0	8.3	9.1	9.9	10.5	8.4	6.7	-1.6	7.5	8.7
Russia	4.6	5.1	4.6	2.9	3.7	3.1	3.2	3.0	2.8	3.0	2.9	2.9	3.6	3.4	2.9

Source: Morgan Stanley Research forecasts; *Global includes G4 and BRIC, PPP-weighted. Note that the %Y quarterly number for China is based on interpolations of the annual forecast and does not represent our official quarterly forecast. ** The 4Q19 slowdown is mainly driven by Japan. Assuming stable growth in Japan in 4Q19, both global consumption and investment growth would be higher at 4.3%Q SAAR and 4.4%Q SAAR respectively.

Exploring the bull and bear cases

Global growth risks are modestly skewed towards the downside in 2018 and will likely become more pronounced in 2019 as late-cycle risks in DMs, particularly in the US, rise. Global financial conditions, protectionism and political events are the key risk drivers of our bull-bear scenarios. On inflation, we see risks as broadly balanced in 2018 but slightly skewed towards the downside in DM and towards the upside in EM in 2019.

Bear case: In our bear case, we see global financial conditions tightening more than in our base case by 75bp in 2018 and 150bp in 2019, and global trade growth lower than in our base case by 1pp in 2018 and 3pp in 2019. A bear scenario could be triggered by more aggressive Fed tightening or larger negative repercussions from past tightening – including balance sheet drawdown – on risk assets (for example if the Fed tightened more aggressively due to concerns about inflation or if the natural interest rate is in reality lower than estimated). In addition, trade frictions between the US and China could escalate, leading to a ripple-through effect via global supply chains as well as a decline in business sentiment and investment growth. In China, faster-than-expected policy tightening could have negative repercussions on commodity prices and global growth. Finally, elections in major EMs could turn out in a way that impacts fiscal consolidation plans and reforms and weighs on private investment growth.

Bull case: Our bull case is a combination of easier financial conditions (easing relative to our base case by 50bp in 2018 and 100bp in 2019) and stronger global trade (0.75pp higher in 2018 and 2.0pp higher in 2019 relative to our base case). Such a scenario could be driven by more fiscal easing and a higher fiscal multiplier in DM, a faster de-escalation of trade tensions between the US and China or more market-friendly outcomes of political events such as Brexit negotiations and elections in major EMs. If stronger capex lifts productivity more as a result, the expansion cycle could continue for longer.

Exhibit 26:

Growth risks are skewed to the downside in both 2018 and 2019

	2017	2018E			2019E			2020-22
	Base	Bear	Base	Bull	Bear	Base	Bull	Base
GLOBAL	**3.7**	**3.1**	**3.9**	**4.3**	**2.4**	**3.8**	**4.5**	**3.4**
G10	**2.3**	**1.6**	**2.2**	**2.6**	**0.4**	**2.0**	**2.7**	**1.3**
US	2.3	2.0	**2.7**	3.1	0.4	**2.2**	2.8	1.2
EA	2.5	1.8	**2.1**	2.3	0.5	**1.9**	3.1	1.2
Japan	1.7	0.5	**1.3**	1.6	0.3	**1.5**	2.0	1.1
UK	1.8	0.6	**1.2**	1.7	-0.1	**1.0**	1.8	1.4
EM	**4.8**	**4.2**	**5.0**	**5.6**	**3.7**	**5.0**	**5.8**	**4.8**
China	6.9	6.2	**6.6**	6.8	5.6	**6.4**	6.7	5.6
India	6.4	6.5	**7.5**	8.2	6.5	**7.7**	8.5	7.3
Brazil	1.0	2.1	**2.7**	3.1	1.8	**3.4**	4.0	2.3
Russia	1.5	-0.5	**1.8**	3.0	-1.0	**1.7**	3.1	1.8

Source: IMF, Morgan Stanley Research forecasts; Note: The above aggregates are PPP-weighted.

Exhibit 27:

Inflation risks in 2019 slightly skewed to the downside in DM and to the upside in EM

	2017	2018E			2019E			2020-22
	Base	Bear	Base	Bull	Bear	Base	Bull	Base
GLOBAL	**2.5**	**2.8**	**2.9**	**3.1**	**2.4**	**2.8**	**3.2**	**2.8**
G10	**1.8**	**1.9**	**2.1**	**2.4**	**0.8**	**1.7**	**2.6**	**1.9**
US	2.1	2.6	**2.6**	3.0	1.1	**1.9**	3.0	2.0
EA	1.5	1.5	**1.7**	1.8	0.4	**1.6**	2.1	1.7
Japan	0.5	0.7	**1.1**	1.3	0.3	**1.0**	1.7	1.5
UK	2.7	2.1	**2.5**	3.0	1.9	**2.1**	3.0	2.2
EM	**3.1**	**3.5**	**3.4**	**3.5**	**3.5**	**3.5**	**3.6**	**3.4**
China	1.6	2.1	**2.4**	2.6	1.9	**2.5**	2.8	2.5
India	3.3	5.0	**4.6**	4.4	5.5	**4.4**	4.3	4.0
Brazil	3.5	3.5	**3.1**	2.8	4.5	**3.9**	3.7	4.0
Russia	3.7	5.0	**3.0**	2.0	7.0	**4.2**	2.8	4.0

Source: IMF, Morgan Stanley Research forecasts; Note: Global and EM aggregates are calculated excluding Argentina and Venezuela.

Bull-base-bear scenarios – DM

Bear	Base	Bull
US: Ellen Zentner & US Economics Team		
Trade fears lead to a **decline in investment,** while volatile markets negate the benefit from tax stimulus. Additionally, **global growth flags.** The Fed forgoes hiking in September as the **balance sheet tightening triggers adverse financial market developments.** With incoming data pointing to negative GDP growth in 4Q18, the Fed begins to cut rates back towards zero as the **US enters recession** and halts balance sheet drawdown simultaneously.	The **expansion continues,** with **tailwinds from fiscal stimulus** countering the effects of trade tensions and heightened market volatility. Household consumption holds up well and **capex continues to be a source of strength,** supporting productivity growth. Growth accelerates to an average 2.7%Y in 2018 with a rebound in 2Q following a slow start to the year caused by transitory factors before slowing to 2.2%Y in 2019.	The theory of low multipliers in a late-cycle environment does not hold. **Fiscal multipliers turn out to be larger than expected** and **propel GDP growth to above 3%Y.** A non-linear Phillips curve comes through with a vengeance and **monetary policy responds more aggressively.** The economy goes through a boom/bust cycle that ends in US recession by end-2019.
Euro area: Daniele Antonucci & EA Economics Team		
Trade policy **uncertainty escalates,** thus implying weaker output growth and lowering business sentiment more generally. **Financial conditions tighten,** which the ECB fails to offset with a more expansionary policy – given a more limited toolkit.	The euro area is becoming **more mid-cycle,** with growth slowing from 2.5%Y in 2017 to ~2.0%Y on average in 2018 and 2019. With less slack in the economy, **inflation continues to rise** and the ECB keep **normalising policy,** but more gradually than previously envisaged.	**Wage growth rises faster** as we move into a steeper part of the Philips curve. **Productivity accelerates** in a reaction to a stronger recovery in capex. **Fiscal policy** becomes more supportive and **boosts GDP** by a more meaningful extent.
Japan: Takeshi Yamaguchi & Hiromu Uezato		
Weaker external demand including a US recession hurts Japan's exports and capex. If **PM Abe steps down** due to declining Cabinet support rates, some of the **policies in Abenomics could be reversed.** Other downside risks include **higher oil prices** andpremature policy normalisation by the BoJ.	We retain our view that the **mild economic expansion will continue** as a trend until the next consumption tax hike in October 2019. That said, we think the economy has entered the late-cycle phase of its expansion. Japan is making a **gradual exit from deflation**.	Japan's exports and capex gain from a **stronger than-expected global recovery**. We see a risk of **more expansionary fiscal policy** towards 2019 ahead of important national elections and the c-tax hike. PM Abe announcing a postponement of the next c-tax is still a possibility. An **early snap election** could reduce political uncertainty.
UK: Jacob Nell		
Trade talks break down ('no deal'). The UK moves into a WTO relationship with the EU in March 2019, **pushing the economy into a recession,** and keeping the **MPC on hold** through the forecast horizon.	We see heightened uncertainty, before a **last-minute deal** for a soft Brexit. **Growth stalls** in the Brexit endgame in 4Q18/1Q19, before a **modest 2019 recovery. The MPC hikes once this year,** pauses until the UK has navigated Brexit, and then hikes twice in 2019.	**Early agreement on a soft Brexit outcome** drives a **rebound in growth,** which holds at nearly 2%Y through 2018/19.In this scenario, we would expect **more aggressive tightening from the MPC,** with the policy rate reaching 1.75% by end-2019.

Bull-base-bear scenarios – EM

Bear	Base	Bull
China: Robin Xing, Jenny Zheng & Zhipeng Cai		
A rise in **US-China trade friction/weaker-than-expected growth** in the US could drag down China's exports growth, and a **more aggressive domestic tightening** could weigh on both public and private capex. As a result, **GDP growth could decelerate rapidly** to 6.2%Y in 2018 and 5.6%Y in 2019, and CPI could be subdued at 2.1%Y in 2018 and 1.9%Y in 2019 amid weaker wage growth.	We expect China's **real GDP growth to moderate from 6.9%Y in 2017 to 6.6%Y in 2018 and 6.4%Y in 2019,** led by weaker public and property investment growth amid **calibrated policy tightening.** Meanwhile, we expect a mild CPI reflation, from 1.6%Y in 2017 to 2.4%Y in 2018 and 2.5%Y in 2019, led by higher core CPI and food price normalisation.	**A stronger-than-expected global recovery** and **milder-than-expected** pace of **domestic deleveraging** could lift China's exports and capex. As a result, real GDP growth can remain resilient at 6.8%Y in 2018 and 6.7%Y in 2019, supporting headline CPI at 2.6%Y in 2018 and 2.8%Y in 2019, close to the upper bound of the PBOC's comfort zone.
India: Derrick Kam, Avni Jain		
The **financial system remains impaired** and is unable to fully support a recovery in growth. **Policy uncertainty** prevails in the run-up to and post the election, which, coupled with **weaker trade and tighter financial conditions** globally, results in businesses holding back on spending, posing a drag on growth.	A **synchronous recovery in consumption and exports** lifts capacity utilisation, which incentivises the corporate sector to invest. Moreover, **a repair of corporate balance sheets and recapitalisation of state-owned banks** leads to an improvement in sentiment. Both these factors should pave the way for a private capex recovery in 2018, which sets the stage for a sustained growth cycle.	The **capex recovery** happens at a **quicker and stronger pace** due to a combination of a stronger pick-up in demand and easing lending conditions, strengthening the growth momentum. **Stronger fiscal spending ahead of the elections** would boost consumption expenditure, particularly in rural areas.
Russia: Alina Slyusarchuk		
External demand weakens. **New geopolitical tensions** result in the US adding systemic Russian SOEs to the OFAC SDN list. **The state increases control over the economy** and **fails to deliver micro reforms** to boost growth, which translates into lower investment. This keeps uncertainty high and investment depressed. Oil price and **RUB volatility translate into higher inflation.**	**An orthodox policy-makers' response** to the new external shocks **helps to stabilise the economy.** Inflation averages 3.0%Y in 2018, supporting household real incomes. The CBR moves to **neutral monetary policy,** cutting rates to 6.75% in 2018. The fiscal rule preserves budget discipline and results in a federal budget surplus at 1.5% of GDP.	The **Comprehensive Government Action Plan**, with the pro-reform agenda including measures such as infrastructure investment, redistribution of spending towards education and healthcare as well as public service reform, **boosts sentiment, supports investment and increases potential growth. Geopolitical tensions ease.** Western sanctions are lifted gradually, supporting business confidence and growth further.
Brazil: Arthur Carvalho & Thiago Machado		
A **non-reformist candidate** wins the presidential elections, **does not push forward the pension reform** and **puts in place unorthodox measures.** This brings into question debt sustainability and puts pressure on the currency, creating **strong inflationary pressures** and triggering the central bank to start **hiking rates earlier than expected,** impacting growth negatively.	The **consumer** should continue to benefit from the materially lower interest rate, with some releveraging likely in 2H18. On **investment growth,** although we see capex growth remaining in positive territory, we believe that political uncertainty will have some adverse impact. **Benign inflation should lead to one last cut** in May, taking rates to 6.25%. **Inflation should normalise and trigger the central bank to hike rates again in 2019.**	A **reformist candidate** wins the presidential elections and **puts the pension reform back on track,** which should lead to a pick-up in confidence. This would impact growth positively, creating slight inflation pressures, which would be partly offset by a stronger currency. The central bank would then engage in a **hiking cycle,** but bring rates to a lower level as compared to our bear case.

US: When tailwinds subside

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Congress has deployed a good deal of fiscal muscle to spur growth, and inflation is now rising. The Fed remains on a gradual path as it balances overheating risks with the desire to steer policy carefully towards neutral. Near-term tailwinds morph into the downside of fiscal stimulus as the positive impulse begins to fade in 2019.

Growth: The US economic expansion will shortly become the second-longest on record. Rising gas prices, ongoing global trade tensions and heightened market volatility may dampen (but are not enough to overcome) the tailwinds from fiscal stimulus and additional authorised government spending. Fiscal expansion is near-term growth-supportive, but risks increasing pro-cyclical behaviour.

Following a softer start to the year, a rebound in 2Q is apparent and is enough to keep our full-year forecast intact. We have **bumped up 2018 GDP growth by 0.1pp to 2.5% 4Q/4Q (2.7%Y)** and **2019 GDP growth by 0.2pp to 2.1% 4Q/4Q (2.2%Y)** on a stronger assumption about direct government investment from higher spending caps. However, growth is slower in 2019 compared with 2018 as the positive impulse from fiscal stimulus fades.

Household consumption holds up well through early 2019, supported by higher disposable income. However, the savings rate remains quite elevated as wealthy households have slowed spending amid financial market and tax uncertainty. These themes have been described in more detail in our 2018 US Consumer Outlook. Energy prices have risen and higher gasoline prices, if sustained, stand to shave off roughly one-third of the 'paycheck' benefit to households, which holds consumer spending to around a 2.5%Y rate of growth.

Investment in equipment continues to be a source of strength in the outlook as rising labour costs and tax benefits incentivise businesses to further substitute capex for labour. Productivity increased by 1.2%Y in 2017 and we expect similar growth throughout the forecast horizon. Coupled with further tightness in the labour market – where we are taking our unemployment rate forecast down by two-tenths to 3.6% in 2019 – we look for average hourly earnings to grow by 3.1%Y in 4Q this year and 3.3%Y next year, approaching historically normal rates of growth.

Inflation: The labour market tightens further; measures of wage growth and core inflation are rising. A combination of temporary factors that had been depressing core inflation has now abated and inflation is sitting comfortably around the Fed's 2%Y goal. Still, longer-term structural forces, such as those from technological change and adoption, continue to exert downward pressure. **After averaging 1.5%Y in 2017, we see core PCE inflation rising by 1.9%Y in 2018, and further to 2.0%Y in 2019.** On a 4Q/4Q basis, core PCE inflation rises to 1.9% in 2018 and 2.1% in 2019.

Monetary policy: In 2018 the pace of tightening accelerates, with three hikes plus the first full year of balance sheet run-off. Following the third hike in September, real rates will be a touch into positive territory. With rates generally in line with current r*, the Fed pauses, but continues to tighten passively via balance sheet run-off. We then expect the FOMC to hike three additional times in 2019, beginning in March, prompted by a continued decline in the unemployment rate to 3.6%, growth in average hourly earnings approaching historical norms, and core inflation persisting around 2%Y – key elements in our macro forecast.

United States: Forecast summary

	2016	2017	2018E	2019E
Real GDP (%Y)	1.5	2.3	2.7	2.2
Private consumption	2.7	2.8	2.5	2.3
Government consumption	0.8	0.1	1.6	1.8
Gross fixed investment	0.6	3.4	4.3	3.1
Contribution to GDP (pp)				
Final domestic demand	2.1	2.6	2.8	2.4
Net exports	-0.2	-0.2	-0.2	-0.1
Inventories	-0.4	-0.1	0.1	-0.1
Unemp. rate (eop, % labour force)	4.7	4.1	3.8	3.6
CPI (%Y)	1.3	2.1	2.6	1.9
Core PCE (%Y)	1.8	1.5	1.9	2.0
Policy rate (eop, %)	0.625	1.375	2.125	2.875
General govt. balance (% GDP)	-3.1	-3.4	-4.1	-4.5
Gross govt. debt (% GDP)	106	106	107	107
Current account balance (% GDP)	-2.4	-2.4	-3.0	-2.7

Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Morgan Stanley Research forecasts

Euro area: Past the peak

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As the cycle matures and slack diminishes, growth should decelerate. The consumer is unlikely to provide the same support to the economy. But we expect capex growth to stay strong, and productivity to rise gradually. Trade protectionism remains a risk. Inflation is likely to trend higher, but more slowly. We think the ECB will taper the QE programme to stop at year-end and hike later than initially envisaged.

Growth moderates: The business cycle is slowing. We see GDP expanding by ~2%Y this year and next, some 40-50bp less than last year, but still above potential growth of less than 1.5%Y. Apart from temporary factors, the deceleration also has to do with less spare capacity and pent-up demand, and so less room to grow fast. Domestically, even though capex continues to grow strongly, consumer spending is weakening, partly because higher inflation is eroding the purchasing power of households. A somewhat more expansionary fiscal policy than we thought is likely to provide a partial offset. An overly bullish consensus should gravitate back to our unchanged, lower forecast.

Capacity constraints emerge: This economic deceleration is confirmation that the output gap is turning positive. Capacity utilisation rates in industry and services are at or near record highs, just like backlogs of orders and supply delivery times. This is one of the key reasons why we expect strong capex growth and, eventually, also a pick-up in productivity, which should get back to the pre-crisis norm. The unemployment rate has fallen below the mid-point of 8.5% of the NAIRU range and broader measures of labour underutilisation, while still elevated, are now falling. In the core countries, an increasing number of firms are indicating that a shortage of equipment and qualified labour is limiting their production.

Inflation recovers more slowly: Transitory factors have pushed both the headline and core measures down more than expected. While still above consensus and market pricing, this means that the HICP profile gets revised marginally lower – for headline we now see 1.7%Y in 2018 and 1.6%Y in 2019; for core, we're at 1.1%Y and 1.5%Y, respectively. The inflation uptrend is about to resume, as these factors are dissipating. Various measures of underlying inflation, which are less volatile, haven't weakened so much, or at all. Energy base effects should finally turn positive and the rise in oil prices should boost the energy component. Wage growth, albeit less than in past cycles, is beginning to accelerate, as trade unions demand higher compensation.

The ECB ends QE and hikes later: The central bank has turned more dovish, partly because of the data rollover, and partly because it thinks that the inflation path still requires ample monetary stimulus. Rather than ending this September, we think that the net asset purchases are likely to be extended with an extra €10 billion per month over the three final months of the year, with an announcement in June or, more likely, July. We expect the reinvestment policy to continue for an extended period of time. Our view is that the ECB would want to maintain a half-year between the end of QE and the first rate hike. This means that our long-standing call for a 15bp depo rate hike, rather than in March 2019, happens in June 2019. We don't see the refi rate rising throughout the forecast horizon.

Uncertainty rises, mostly externally: Exports are likely to slow too. Also because of past euro strength, they have started to weaken, as have orders. The decline in some indicators relating to the export sector may indicate that downside risks from global factors – including increased protectionism – have probably become more prominent. The EU has an exemption from the US import tariffs until June 1. Should they trigger, these tariffs won't likely derail the economic outlook. But extra levies on sectors which are part of a complex, high value-added supply chain could. The non-binary nature of an early election in Italy mitigates the risk of a major change in policies.

Euro area: Forecast summary

	2016	2017	2018E	2019E
Real GDP (%Y)	1.8	2.5	2.1	1.9
Private consumption	1.9	1.7	1.4	1.7
Government consumption	1.8	1.2	1.3	1.3
Gross fixed investment	4.5	3.2	3.2	4.0
Contribution to GDP (pp)				
Final domestic demand	2.3	1.9	1.7	2.0
Net exports	-0.5	0.6	0.5	-0.2
Inventories	-0.1	0.0	-0.1	0.1
Unemp. rate (eop, % labour force)	9.7	8.7	8.1	7.8
HICP (%Y)	0.2	1.5	1.7	1.6
Core HICP (%Y)	0.9	1.0	1.1	1.5
Policy rate (eop, %)	-0.40	-0.40	-0.40	-0.25
General govt. balance (% GDP)	-1.5	-0.8	-0.8	-0.9
Gross govt. debt (% GDP)	89.0	86.7	84.6	82.7
Current account balance (% GDP)	3.4	3.5	3.3	3.3

Source: ECB, Eurostat, Morgan Stanley Research forecasts

Japan: In a late-cycle expansion

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In a late-cycle expansion with the economy close to full employment, we expect Japan's inflation to pick up moderately ahead. That said, we remain vigilant about downside risks to our growth outlook, including political uncertainties.

Domestic demand to recover gradually: We are cautiously optimistic on Japan's domestic demand outlook until the next consumption tax hike in October 2019, although we believe that the economy has entered the late-cycle phase of its expansion. There are no changes in our annual forecasts: We expect real GDP growth to slow to 1.3%Y in 2018 from 1.7%Y in 2017, partly due to a slowdown in 1Q18, but we expect reacceleration to 1.5%Y in 2019.

With the economy being close to full employment, we expect private consumption to pick up gradually on solid income growth, with front-loaded spending ahead of the consumption tax hike kicking in for 1H19. Domestic capex should remain solid on higher capacity utilisation rates and a further decline in real interest rates. Also providing support are spending on labour-saving technology, spurred by rising wages and labour shortages, as well as investment to deal with inbound consumption by foreign tourists ahead of the Tokyo Olympics. Meanwhile, we expect real export growth to moderate in 2018-19 after a sharp acceleration in 2017.

Heading towards a sustained exit from deflation: Our view of Japan exiting from deflation is unchanged. With Japan's potential growth at around 1%Y, the output gap should continue to narrow based on our forecast of above-trend GDP growth, supporting a gradual rise in the underlying inflation trend. That said, we do not expect the 2%Y inflation target to be achieved during our forecast horizon, partly because of our FX team's sharp yen appreciation forecast. Since inflation will likely slow in 2020 on a post-tax hike economic slowdown, we expect the earliest timing of hitting the 2%Y target to be 2021 or later.

No changes to our BoJ call: Monetary policy should remain dependent on inflation developments. We expect the BoJ to adjust the 10-year JGB yield target in January-March 2019, when we expect core-core CPI to reach 1%Y (no changes from our recent note in February 2018). We expect the BoJ to widen the band margin applied to the 10-year yield, taking the target from "around 0%" currently to "around 0.15% (0-0.3%)". Despite the nominal rate adjustment, we expect real long-term rates to continue to decline, with inflation expectations edging up. We expect the BoJ to maintain other measures (pace of ETF purchases and the short policy rate) during our forecast horizon.

Fiscal policy – focus on the next supplementary budget: We expect the government to formulate a supplementary budget in the fall Diet session, pointing to the fiscal stance turning somewhat expansionary in 1H19, mainly because of political cycle factors ahead of unified regional elections in April 2019 (every four years) and Upper House elections in July 2019 (every three years), and the next consumption tax hike in October 2019. In our base case we expect the tax hike to be implemented as scheduled with offsetting fiscal measures.

Risks tilted to the downside: In a late-cycle expansion, we think that risks around our growth outlook are tilted to the downside. Main downside risks include: i) Political uncertainty: If there was a change in the administration, continuation of some of the key policies in Abenomics would become uncertain; ii) Global trade: Weaker external demand would hurt Japan's growth; and iii) Premature policy normalisation by the BoJ. Meanwhile, main upside risks include: i) Expansionary fiscal policy: The government may adopt more expansionary fiscal policy for a rebalancing purpose, given external pressure to reduce Japan's bilateral trade surplus. PM Abe announcing the postponement of the next consumption tax hike is still a possibility; ii) An early snap election; and iii) Less geopolitical risk.

Japan: Forecast summary

	2016	2017	2018E	2019E
Real GDP (%Y)	0.9	1.7	1.3	1.5
Private consumption	0.1	1.1	0.9	1.7
Government consumption	1.3	0.1	0.3	0.4
Gross fixed investment	1.1	2.5	1.5	3.4
Contribution to GDP (pp)				
Final domestic demand	0.6	1.3	1.0	1.8
Net exports	0.5	0.5	0.1	-0.5
Inventories	-0.2	-0.1	0.2	0.1
Unemp. rate (eop, % labour force)	3.1	2.8	2.5	2.3
CPI (%Y, ex. VAT)	-0.1	0.5	1.1	1.0
Core-core CPI (%Y, ex. VAT)	0.6	0.1	0.6	1.1
Policy rate (eop, %)	-0.10	-0.10	-0.10	-0.10
General Govt. balance (% GDP)	-3.7	-4.2	-3.5	-3.4
Gross Govt. debt (% GDP)	236	236	237	234
Current account balance (% GDP)	3.8	4.0	3.6	3.4

Source: Bank of Japan, Cabinet Office, Ministry of Internal Affairs and Communications, Ministry of Finance, Morgan Stanley Research forecasts; Note: Forecast table show calendar years, not fiscal year

UK: Uncertain endgame, soft outcome

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Brexit dominates the UK outlook. We expect a weak consumer and high uncertainty to slow growth to a standstill in the run-up to Brexit and put the MPC on pause, before a last-minute deal for a soft Brexit paves the way for a modest 2019 recovery and a resumption of tightening.

Brexit endgame: Last-minute deal: We expect heightened uncertainty as the Brexit talks approach a conclusion, and the looming March 2019 Brexit date forces decisions. The range of outcomes remains wide and the path to the outcome uncertain. In the end, we see a late deal for a soft and slow Brexit – likely involving the UK staying in a customs union with the EU – as the most likely outcome.

Growth: Stalling into Brexit: In recognition of progress in the Brexit talks on the withdrawal agreement and transition, we upgrade our growth forecasts by 10bp to 1.2%Y in 2018 and by 20bp to 1%Y in 2019. Still, this remains well below consensus at 1.5%Y for both years, reflecting our expectations of weaker consumption and a more disruptive Brexit endgame which keeps uncertainty high. We see growth rebounding modestly from the weak 1Q18 outturn, before Brexit endgame uncertainty slows growth to a standstill in autumn 2018. Once Brexit has been navigated, we expect a modest 2019 recovery.

Inflation: Rising homemade inflation: Inflation is past its peak, with FX pass-through fading faster than expected. But we see headline and core inflation holding above target, as the tight labour market drives a gradual build-up in wages which, in turn, in the absence of a strong recovery in productivity, drives rising domestic inflationary pressures.

Monetary policy: Hawkish outlook, but paused for Brexit: We see a hawkish MPC, with a framework based on the forecast that growth will run above potential. This has hawkish implications, assuming that the policy rate should be around neutral when the economy gets to full employment, which the forecast suggests will be in about two years' time. Nonetheless, after one more hike in August, we think that the MPC will be deterred from hiking again until the UK has navigated Brexit, since we expect a slowdown in the endgame to nudge unemployment back above equilibrium and push growth below potential. Beyond Brexit, with rising homemade inflation, we expect a pick-up in the pace of tightening, with hikes in May and November 2019 and a start to QE unwind at a moderate pace in late 2019. Despite the departures of Cunliffe and McCafferty later this year, we expect policy continuity, including under the new governor, likely to be announced in autumn 2018 to take over from Carney in June 2019.

Fiscal policy: Another modest easing: We expect a modest further c.£5 billion per annum increase in public spending in the autumn 2018 budget, given some fiscal headroom within the rules, and pressures for more public spending. As a result, we see a continued gradual shift away from the previous 'easy monetary, tight fiscal' policy mix.

Risks: Diminished concerns: i) The **current account deficit** narrowed more than expected in 2017 from 5.8% to 4.1% of GDP, with improvement on both the trade and income accounts. We expect rebalancing to continue, albeit more gradually, given UK growth underperformance and a still weak GBP. ii) Similarly, **house prices** have held up better than expected, with restricted supply and higher employment offsetting headwinds from weak real incomes and tax increases, leading us to revise up our house price forecast, so we now expect house prices to flat-line rather than fall.

Bull-bear scenarios: In our bull case, the parties reach early agreement on a soft Brexit, triggering a rebound in growth, and more rapid MPC tightening, with the policy rate reaching 1.75% by end-2019. In our bear case where the talks break down, an immediate hard Brexit drives the UK into a shallow recession and the MPC keeps rates at current levels until end-2019.

United Kingdom: Forecast summary

	2016	2017	2018E	2019E
Real GDP (%Y)	1.9	1.8	1.2	1.0
Private Consumption	2.9	1.7	0.7	0.8
Government consumption	0.8	0.1	0.7	0.9
Gross fixed investment	1.8	4.0	1.4	0.2
Contribution to GDP (pp)				
Final domestic demand	2.4	1.8	0.8	0.7
Net exports	-0.8	0.6	0.4	0.3
Inventories	0.2	-0.6	-0.1	0.0
Unemployment rate	4.9	4.4	4.4	4.4
CPI	0.7	2.7	2.5	2.1
Core CPI	1.3	2.4	2.3	2.5
Policy rate	0.25	0.50	0.75	1.25
General govt. balance (% GDP)	-3.0	-1.9	-2.3	-2.3
Gross govt. debt (% GDP)	88.2	87.7	84.4	85.0
Current account balance (% GDP)	-5.8	-4.1	-3.4	-2.8

Source: ONS, BoE, Morgan Stanley Research forecasts

Australia: Transition year

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We expect Australia's mixed growth trajectory to continue through 2018, with GDP growth of 2.1%Y as weak income growth and a credit squeeze weigh on consumption/housing. With the RBA on hold for an extended period (50bp of hikes forecast in 2H19), we see an AUD depreciation helping to drive a gradual growth/inflation recovery in 2019.

A soft start: Australia has had a mixed start to the year – jobs growth has continued, but at a slower rate, and the housing market has softened, although consumer and business confidence have proven resilient. A stronger export profile has seen us tweak our 2018 GDP growth up by +0.1pp to 2.1%Y, but we continue to call for a deceleration, in contrast to consensus seeing a return to trend (2.8%Y). More fiscal easing, a lower AUD and a lessened LNG capex drag should see growth recover to 2.7%Y in 2019, allowing the RBA to begin hiking in 2H19 (+50bp).

Jobs boom slowing, leaving the consumer crunched: 2017 saw a record 415k jobs added, supporting household incomes in the face of flat wages. However, the past few months have seen the jobs boom slow markedly, with 2018 currently annualising at ~140k jobs. We see unemployment remaining elevated (5.8% in 1Q19) before falling gradually to 5.3% in 4Q19, delaying hopes of a wage recovery. Tighter credit and fading wealth effects should add to the grind for the consumer.

Government playing its role in supporting economy: The step-up in government spending over 2017 has proven timely – this has largely occurred through greater infrastructure spending, especially in NSW and Victoria, although the growth impulse from this will likely fade somewhat in 2019. Greater public spending has also been spilling over into higher private non-mining investment, which we expect to continue, while LNG remains a drag. Last week's budget announced a programme of income tax cuts, but near-term relief is limited and delayed until 2H19.

Slowing housing market is key: An important development for 2018 has been the slowing housing market, especially in Sydney, where prices have fallen ~5% from their peak in late 2017. Our proprietary leading housing market indicator (MSHAUS) points to further declines in prices and activity over 2018. Our central expectation is that this slowing is relatively shallow and orderly, but we still expect this to continue weighing on GDP and to dampen sentiment throughout the rest of the year, contributing to our below-consensus outlook.

RBA left on the sidelines: We see conditions deteriorating somewhat over 2018, in contrast to the RBA's forecast of a gradual improvement in prices and activity. The change should be moderate enough to see it remain on hold, especially with the expected depreciation in AUD supporting inflation and competitiveness. We expect the RBA to be in a position to hike rates in 3Q19, as higher import prices boost inflation and the labour market begins to improve.

Risks skew to the downside: Our bull case sees the substantial fiscal easing and stronger global growth supporting exports and employment. This leads to an earlier-than-expected pick-up in wages and GDP, with the RBA hiking rates early in 2019. Our bear case sees a sharper slowdown in housing leading to consumer retrenchment and balance sheet recession, prolonged and exacerbated by Australian households' record leverage. Fiscal policy is eased further, presenting risk to the AAA sovereign rating, while the RBA cuts rates to 0.5%.

Australia: Forecast summary

	2016	2017	2018E	2019E
Real GDP (%Y)	2.6	2.3	2.1	2.7
Private consumption	2.9	2.7	2.0	1.7
Government consumption	4.2	3.6	3.9	3.6
Gross fixed investment	-2.1	3.0	1.1	1.2
Contribution to GDP (pp)				
Final domestic demand	2.0	2.9	2.2	2.0
Net exports	1.2	-0.9	-0.3	0.7
Inventories	0.1	-0.1	0.0	0.0
Unemp. rate (eop, % labour force)	5.7	5.5	5.7	5.3
CPI (%Y)	1.3	2.0	2.4	2.6
Core CPI (%Y)	1.5	1.8	2.1	2.7
Policy rate (eop, %)	1.5	1.5	1.5	2.0
General govt. balance (% GDP)	-2.4	-2.1	-1.0	-0.8
Gross govt. debt (% GDP)	25.4	28.7	29.3	29.8
Current account balance (% GDP)	-3.1	-2.3	-3.6	-4.1

Source: ABS, RBA, Morgan Stanley Research forecasts

China: Slower but sustainable

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We revise GDP forecasts up by 0.1pp to 6.6%Y in 2018 and 6.4%Y in 2019, slightly above consensus. Growth is turning more sustainable and less reliant on credit amid improving private investment and productivity growth. We expect a near-stabilisation in the debt/GDP ratio in 2H19.

Moderating but more sustainable: We make mark-to-market upward revisions to annual GDP forecasts (+0.1pp to 6.6%Y in 2018 and 6.4%Y in 2019), considering a stronger-than-expected 1Q outturn (6.8%Y vs. our original estimate of 6.6%Y) and fine-tuning in the pace of tightening in view of increased external uncertainty. On the quarterly trajectory, we still project a moderate slowdown from 6.8%Y in 4Q17-1Q18 to 6.5%Y in 2H18, dragged by public and property investment, but net exports, private consumption and private investment should remain broadly supportive, providing a partial offset.

Inflation to pick up but stay benign: We expect mild CPI reflation to 2.4%Y in 2018 and 2.5%Y in 2019 (vs. 1.6%Y in 2017) led by higher core CPI (from 2.2%Y in 2017 to 2.3%Y in 2018 and 2.4%Y in 2019) amid resilient wage growth. It is slightly lower than our original estimate of 2.7%Y in 2018 and 2.8%Y in 2019 due to a lower entry point (2.2%Y in 1Q vs. our original estimate of 2.5%Y) and prolonged pork price deflation amid oversupply. Meanwhile, we revise down our PPI forecasts by 0.2pp to 3.4%Y in 2018 and 2.6%Y in 2019, considering the weaker-than-expected 1Q reading (3.7%Y vs. our original estimate of 4.3%Y). That said, non-commodity PPI should hold up relatively well on the back of improving downstream pricing power.

Mild tightening: The tightening has been flexible and countercyclical in this cycle, and fine-tuning of the pace is apparent in the recent 1% cut in reserve requirement ratios (RRR) and the extended timeframe for implementing shadow banking tightening, in view of increased external uncertainty. We think the bulk of the tightening cycle may well be behind us, and expect a milder deceleration in broad credit growth (to 11-11.5%Y by year-end from 12.0%Y in 1Q) amid further RRR cuts. Meanwhile, we now expect a moderate increase in bank deposit rates via liberalisation of rate caps instead of benchmark rate hikes. On the fiscal front, we see a modest consolidation this year before turning broadly neutral in 2019 (fiscal deficit narrowing to 3.3% of GDP in 2018-19 versus 3.7% in 2017), as the bulk of deficit reduction has been completed (down to 3.5% on a 12-month trailing basis in March vs. 4.4% in 3Q16). Moreover, local government has not issued new bonds in Jan-Apr despite a higher quota this year (Rmb2,180bn vs. issuance of Rmb1,590bn in 2017), suggesting faster bond issuance in 2H18.

Stable CNY NEER, more capital account liberalisation: We expect the PBOC to continue to focus on the stability of CNY vs. its trade-weighted basket while keeping USDCNY moves as a function of USD. To temper CNY overshooting risks considering China's slipping C/A balance and plateaued exports market share, the PBOC will likely opt to relax some capital controls on outflows. We thus maintain our USDCNY forecast at 6.25 by end-2018 but lift the rate to 6.10 by end-2019 (vs. 6.15 previously), as our FX team now expects more USD depreciation in 2019.

Some risks bear watching: Our bull case assumes that a stronger-than-expected global recovery and milder domestic deleveraging could lift China's exports and capex, keeping real GDP growth resilient at 6.8%Y in 2018 and 6.7%Y in 2019. In the bear case, a rise in trade frictions or weaker-than-expected growth in the US and a more aggressive domestic tightening could bring growth down to 6.2%Y in 2018 and 5.6%Y in 2019.

China: Forecast summary

	2016	2017	2018E	2019E
Real GDP (%Y)	6.6	6.9	6.6	6.4
Private consumption	8.5	7.0	6.9	6.8
Government consumption	8.8	9.6	9.5	9.3
Gross fixed investment	6.3	4.0	3.9	3.8
Contribution to GDP (pp)				
Final domestic demand	7.4	5.9	5.8	5.7
Net exports	-0.7	0.6	0.5	0.5
Inventories	0.0	0.4	0.3	0.2
Unemp. rate (eop, % labour force)	4.0	3.9	3.9	3.9
CPI (%Y)	2.0	1.6	2.4	2.5
Core CPI (%Y)	1.6	2.2	2.3	2.4
Policy rate (eop, %)*	1.50	1.50	1.50	1.50
General govt. balance (% GDP)	-3.8	-3.7	-3.3	-3.3
Gross govt. debt (% GDP)	48	46	45	45
Current account balance (% GDP)	1.8	1.4	0.8	0.5

Source: CEIC, Morgan Stanley Research forecasts; *One-year benchmark deposit rate.

India: Towards a full-fledged recovery

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With end demand holding up well, private capex appears poised for a recovery later this year. As the economy enters into a full-fledged recovery, we expect the central bank to embark on a shallow rate hike cycle beginning from 4Q18.

We maintain our expectation for a recovery in real GDP growth to 7.5%Y in 2018 and further to 7.7%Y in 2019, from 6.4%Y in 2017. More importantly, we believe that the economy is on track towards a full-fledged recovery, as we expect a recovery in private capex later this year.

Full-fledged recovery to take hold: Since September 2017, economic growth has been recovering as the economy is leaving behind the headwinds caused by the currency replacement programme and GST implementation. Private consumption expenditure has remained robust while exports growth, despite the volatile monthly movements, has also been on a recovery path. More recently, we have begun to see incipient signs of a revival in investment activity, with capital goods imports and order books of engineering and construction firms posting strong growth in recent months.

Looking ahead, as end demand holds up well, we are confident that a recovery in private capex will be under way later this year. Indeed, with the current recovery in consumption and exports, capacity utilisation ratios have already begun to pick up, rising to 74.1% in 4Q17 from 71.8% previously. Corporate balance sheet fundamentals are improving, with interest rates dipping below corporate revenue growth and also reflected in favourable trends in credit ratios (ratings upgrade to downgrade ratio). Together, these factors should lead to a recovery in private capex in 2018.

Temporary spike in CPI inflation: Softer sequential trends in food prices have led to weaker headline CPI inflation, while core measures of inflation have been edging up. Incorporating higher oil prices and taking on board the incoming food price trends, we have revised our forecast upwards marginally to 4.6%Y for 2018. In the June 2018 quarter, favourable base effects should kick in and lead to a temporary spike in headline inflation. However, these effects will likely fade by July, and we expect headline inflation to average 4.0%Y in the December 2018 quarter.

A shallow rate hike cycle from 4Q18: We expect the RBI to commence its rate hike cycle from 4Q18, as we think that the MPC does have time to pause and assess more incoming data before acting in 4Q. This is predicated on our view that we don't expect a significant overshoot of inflation relative to the RBI's target (hence reducing the urgency/impetus to hike rates) and that the economic recovery will be on a surer footing by then (as we expect private capex to show signs of recovery). Against this backdrop of greater certainty and a more sustained recovery in growth, the central bank can then move to commence a shallow rate hike cycle. Over 2018-19, we pencil in a total of only three rate hikes, taking the terminal policy rate to 6.75%.

Risks skewed to the downside: In addition to the swings in trade and financial conditions at a global level, the domestic factors of private capex momentum and the election outcome in May 2019 would be the key swing factors. In the bull case, the capex recovery happens at a quicker and stronger pace due to a combination of a stronger pick-up in demand and easing lending conditions, strengthening the growth momentum. In the bear case, the financial system remains impaired and is unable to fully support a recovery in growth. Policy uncertainty prevails in the run-up to and post the election which, coupled with weaker trade and tighter financial conditions globally, should result in businesses holding back on spending, posing a drag on growth.

India: Forecast summary

	2016	2017	2018E	2019E
Real GDP (%Y)	7.9	6.4	7.5	7.7
Private consumption	8.3	5.7	7.4	7.3
Government consumption	9.0	11.1	7.6	7.6
Gross fixed investment	10.5	6.6	7.9	8.6
Contribution to GDP (pp)				
Final domestic demand	8.8	6.4	7.4	7.6
Net exports	0.2	-0.8	0.0	0.1
Inventories	-1.0	-0.3	0.0	0.0
Unemp. rate (% labour force)	NA	NA	NA	NA
CPI (%Y)	5.0	3.3	4.6	4.4
Core CPI (%Y)	4.8	4.6	5.2	4.6
Policy rate (eop, %)	6.25	6.00	6.25	6.75
General govt. balance (% GDP)	-7.0	-6.7	-6.5	-6.3
Gross govt. debt (% GDP)	67.8	66.7	68.0	68.0
Current account balance (% GDP)	-0.6	-1.5	-1.6	-2.2

Source: CSO, RBI, CEIC, Morgan Stanley Research forecasts

Indonesia: Limited disruption from 3% US 10y

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We expect the economy to stay on a gradual recovery path from export spillover to domestic demand and fiscal support ahead of elections. We see a 25bp hike in 2Q18 and 3Q18 but do not expect this countercyclical tightening to disrupt the gradual recovery.

We are marking to market our GDP growth forecasts from 5.4%Y to 5.3%Y in 2018 and 5.5%Y to 5.4%Y in 2019 to factor in the incoming trajectory in 1Q18. The big picture remains one of a gradual recovery, driven by the following factors.

Export recovery and the spillover to domestic demand: Korea's export recovery is well known but what is lesser known is Indonesia's exports have risen at a similar pace, albeit driven more by commodities. Nonetheless, the commodity export pick-up has led to a pick-up in commodity capex, and we suspect the pent-up demand is likely to stay in the capex numbers. Meanwhile, non-commodity exports have also improved, alongside Indonesia's rising global manufactured export share. The continuation of the global growth cycle would further support Indonesia's non-commodity export base and improve capacity utilisation and non-commodity capex momentum.

Consumer segment not that weak; fiscal policy in run-up to elections will provide support: %Y private consumption has flat-lined over the past few years. Despite what is perceived by investors to be a weak consumer sector, we think the flat-line trend belies disparate trends in the space, i.e., weakening momentum in consumer staples on one hand and a recovering trend in consumer discretionary/property and healthy outbound tourism on the other. Weak momentum in consumer staples may be a reflection of uneven fiscal disbursement and/or a rising share of e-commerce as consumer fundamentals still look healthy. The level of indebtedness is low and labour market conditions remain benign. Fiscal loosening in the run-up to elections and a focus on social assistance programmes should also lend support to consumers.

A more efficient government expenditure mix would lift the multiplier effect: Infrastructure spending has been under way, rising from 1.5% of GDP in 2014 to 3.0% in 2017 and is expected at 2.8% in 2018. This has come on the back of a more efficient expenditure mix, with infrastructure spending accounting for 20.0% of total expenditure in 2017 and an expected 18.5% in 2018, rising from 8.7% in 2014. In our view, the more efficient government expenditure mix would generate a better multiplier effect and crowd in private sector domestic demand.

A 3% US 10y yield is unlikely to disrupt the economy: Our global interest rate strategists expect US yields to hover around 3% in 3Q18 before edging down to 2.7% by 2Q19. A pick-up in Indonesia's inflation in 2H18 due to a base effect and a gradual growth recovery underpin our expectation for a 50bp hike by BI this year, but recent market pressures and signalling by policy-makers lead us to bring forward the first hike from 3Q18 to 2Q18 (May 17 meeting). We think the economy would be able to handle such countercyclical tightening, and a repeat of the disruptive tightening leading to an abrupt slowdown in domestic demand like in 2013 looks unlikely. Indeed, macro fundamentals are better today. The inflation environment is more benign. Indonesia's real rates and real rates differentials versus the US are higher than before, buying protection against capital volatility. The current account deficit is narrower and the foreign reserves buffer has also improved.

Where are the risks? On the domestic demand front, we watch for political/policy risks and what this means for domestic demand, reform momentum and policy direction in the run-up to the 2019 elections. On the external front, the sustainability of global demand, China's macro-rebalancing process, commodity prices and funding environment are factors to watch.

Indonesia: Forecast summary

	2016	2017	2018E	2019E
Real GDP (%Y)	5.0	5.1	5.3	5.4
Private consumption	5.0	5.0	5.2	5.4
Government consumption	-0.1	2.1	3.5	3.5
Gross fixed investment	4.5	6.2	6.4	6.7
Contribution to GDP (pp)				
Final domestic demand	4.5	4.7	5.2	5.4
Net exports	0.2	0.3	0.1	0.0
Inventories	0.2	-0.2	-0.1	-0.1
Unemp. rate (eop, % labour force)	5.6	5.5	5.3	5.0
CPI (%Y)	3.5	3.8	3.5	3.8
Core CPI (%Y)	3.4	3.1	2.7	3.2
Policy rate (eop, %)*	4.75	4.25	4.75	4.75
General govt. balance (% GDP)	-2.5	-2.4	-2.6	-2.6
Gross govt. debt (% GDP)	28.3	29.0	30.4	31.6
Current account balance (% GDP)	-1.8	-1.7	-2.2	-2.2

Source: CEIC, Morgan Stanley Research forecasts

Korea: Macro cross-currents at play

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Export recovery and a gradual spillover to domestic demand would likely be offset by a drag from a slowdown in construction capex. We do not expect policy measures to provide a significant growth support.

Marking to market: We are revising our 2018 GDP growth forecast from 3.0%Y to 2.9%Y (versus 3.1%Y in 2017) to reflect the recent 1Q18 GDP advance estimate. Meanwhile, we maintain our 2019 GDP growth forecast at 2.7%Y. Our growth trajectory reflects the following factors:

Export momentum to sustain: The April data suggest that export momentum is showing some signs of moderation. However, a look at the details suggests this is not due to trade friction. Trade disputes are not uncommon, and recent trade friction should not alter Korea's trade trajectory materially as underlying global demand conditions are a more important factor. Korea's export trajectory may not unfold in a straight line but we expect a sustained global growth cycle to remain supportive for Korea's export volume growth.

Construction capex slowdown to offset export-led improvement in facilities capex: The export recovery has led to an improvement in facilities capex, particularly in the tech sectors, and 1Q18 facilities investment has sustained at high single-digit momentum on the back of special industrial machinery & equipment investment. However, the continued slowdown in construction capex would likely continue to weigh on overall capex. 1Q18 fixed capex growth slowed to 4.7%Y (vs. 5.0%Y in 4Q17) as construction capex decelerated further to 2.7%Y from 3.8%Y. Indeed, a series of macro-prudential measures in the property market have moderated property price inflation and slowed presales. We expect this to feed through to construction capex with a lag.

Consumers unlikely to show V-shaped recovery: Consumer momentum has shown signs of improvement and we note the wage momentum in the first two months of the year showed a discernible pick-up. However, it remains to be seen whether this can be sustained as the export recovery has yet to lead to a broad-based pick-up in employment growth as the former had been concentrated in select export segments. Although household credit growth has decelerated, household balance sheet has not delevered and a stronger income recovery (backed by productivity) is required to further spur consumer spending and help households pay down debt.

Fiscal policy stance still relatively conservative; BoK to hike once more in 3Q18: A KRW 3.9 trillion (0.2% of GDP) supplementary budget has been planned, targeted at young adult employment and local economies. However, we do not expect this to lend much support as fiscal deficits have typically come in narrower than planned. Meanwhile, we expect the BoK to undertake one more rate hike but push it from 2Q18 to 3Q18, given the recent subdued inflation. Overall, Korea's high indebtedness means any rate hike cycle is likely to be shallow. If we are right that GDP moderates into 2019 and inflation stays below the 2%Y target, any further delay in BoK tightening would reduce the likelihood of it actually happening.

Where are the risks? Risk factors to watch include: i) Sustainability of the global recovery, particularly for the late-cycle economies; ii) Potential shifts in trade policies to a more aggressive 'protectionist push' stance. We estimate that every 1pp slowdown in Korea's export growth would reduce its GDP growth by 0.3pp; iii) The pace and direction of policy reforms. Redistributive measures need to be accompanied by productivity-lifting structural measures for longer-term growth; and iv) Developments in the geopolitical situation and spillover effects. A denuclearisation and liberalisation of the economy in North Korea would reduce the risk premium in the near term and offer capex/consumption opportunities for South Korea further out. Should the uneasy equilibrium in the geopolitical situation remain, we watch for risks that geopolitical tension could spill over to policies.

Korea: Forecast summary

	2016	2017	2018E	2019E
Real GDP (%Y)	2.9	3.1	2.9	2.7
Private consumption	2.5	2.6	2.9	2.7
Government consumption	4.5	3.4	3.5	3.5
Gross fixed investment	5.6	8.6	3.9	2.6
Contribution to GDP (pp)				
Final domestic demand	3.5	4.7	3.1	2.9
Net exports	-0.7	-1.7	-0.2	-0.2
Inventories	0.0	0.4	-0.1	0.3
Unemp. rate (eop, % labour force)	3.7	3.7	3.4	3.1
CPI (%Y)	1.0	1.9	1.6	1.6
Core CPI (%Y)	1.9	1.5	1.5	1.4
Policy rate (eop, %)	1.25	1.50	1.75	1.75
General govt. balance (% GDP)	-1.4	-1.1	-1.5	-1.7
Gross govt. debt (% GDP)	38.2	38.2	38.8	39.6
Current account balance (% GDP)	7.0	5.1	5.4	5.5

Source: CEIC, Morgan Stanley Research forecasts

Russia: New sanctions to weigh on growth

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Despite a more favourable oil outlook, we downgrade our 2018 growth forecast to 1.8%Y, due to a cautious consumer and US sanctions harming business confidence and increasing funding costs. We see somewhat higher inflation and a slower rate-cutting cycle due to RUB weakness and volatility.

Despite higher oil prices, our growth outlook deteriorates: Our oil price assumption moves higher to US$70/barrel for 2018 and US$68 for 2019 versus US$62 and US$59 before. However, we bring our real GDP growth forecast down to 1.8%Y in 2018 and 1.7%Y in 2019 from 2.3%Y and 1.8%Y, respectively. There are four reasons for our downward revision. First, the fiscal rule introduced since 2017 restricts the impact of oil prices on budget expenditure and the economy in general. Second, we account for the weak entry point as growth disappointed at end-2017. Remember, GDP growth slowed down to 0.9%Y in 4Q17 from 2.5%Y in 2Q17 after two quarters of contraction. Third, pre-election public sector wage increases were not channelled to domestic retail sales but found reflection in higher online purchases from abroad and were also used to repay debts, so we revise our household consumption forecast down to 3.7%Y from 4.0%Y previously. Finally, we account for **the adverse impact of recent US sanctions on Russian GDP growth,** as the US added Russian companies to the OFAC SDN list. We expect sanctions to affect business confidence and reduce private sector investment (we see fixed investment growth at 3.4%Y versus 3.9%Y before) and increase the risk premium, which would be reflected in a higher cost of funding. In 2019 we see growth slowing down to 1.7%Y due to the base effect from the moderate pre-election stimulus and an oil price slowdown to US$68/barrel.

RUB weakness and volatility imply higher inflation, slower rate cuts and a higher terminal rate: Inflation has been surprising on the downside in early 2018. However, following the sanctions announcement and RUB depreciation, we expect inflation to accelerate to 4.1%Y by end-2018, averaging 3.0%Y this year (versus 3.5%Y and 3.7%Y previously). We see a protracted pause in the rate-cutting cycle, with the next rate cut in September. We expect the key rate to go down to 6.75% by end-2018. Given an increase in the Russia risk premium, our terminal rate moves higher to 6.75% versus 6.50% previously, as we see the key rate on hold in 2019.

Fiscal policy stance is set to remain tight despite the oil price recovery: An oil recovery to over US$70/barrel combined with RUB weakness meant that the oil price in RUB reached a historical high. However, the fiscal rule allows the MinFin to expand spending only by the amount of additional non-oil revenues, while extra oil and gas revenues will be saved in the National Welfare Fund. Moreover, the current 2018-20 budget presumes fiscal tightening, with federal budget spending shrinking from 17.8% of GDP in 2017 to 15.6% in 2020. As we assume a higher oil price, we expect the federal budget to switch from a 1.4% of GDP deficit in 2017 to a 1.5% of GDP surplus this year.

What are the risks? Given the higher uncertainty regarding the sanctions outlook, we see a more negative bear case scenario with a 0.5%Y contraction in the case of some systemic Russian SOEs being added to the SDN list. On the upside, if geopolitical tensions moderate, the new presidential term provides a window of opportunity to implement structural reforms and unpopular measures and boost potential growth above our estimate of 1.8%Y, given Putin's strong victory at the presidential elections in March. In the bull case scenario we would expect growth to accelerate above 3%Y by 2019, driven by private sector fixed investment and a productivity improvement. It has been reported in the local press that Putin could announce a RUB 10 trillion increase in spending on healthcare, education and infrastructure. We expect the net stimulus to be smaller, with spending increases offset by cuts in other areas or by a higher taxation level.

Russia: Forecast summary

	2016	2017	2018E	2019E
Real GDP (%Y)	-0.2	1.5	1.8	1.7
Private consumption	-2.8	3.4	3.7	3.2
Government consumption	-0.6	0.4	1.9	0.5
Gross fixed investment	0.8	3.6	3.4	2.9
Contribution to GDP (pp)				
Final domestic demand	-1.1	3.0	3.4	3.0
Net exports	1.6	-2.3	-1.6	-1.5
Inventories	-0.6	0.8	0.0	0.2
Unemp. rate (eop, % labour force)	5.3	5.1	4.9	4.8
CPI (%Y)	7.1	3.7	3.0	4.2
Core CPI (%Y)	2.6	3.6	2.8	4.0
Policy rate (eop, %)	10.00	7.75	6.75	6.75
General govt. balance (% GDP)	-3.4	-1.4	1.5	1.4
Gross govt. debt (% GDP)	12.9	13.6	15.1	15.3
Current account balance (% GDP)	1.9	2.4	4.0	3.6

Source: CBR, Rosstat, MinFin, Morgan Stanley Research forecasts

Turkey: No rebalancing this year

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Looking from a real policy rate perspective, Turkey is implementing tighter monetary policy this year. However, the effectiveness of this is limited due to ongoing stimulus measures, which are likely to be more pronounced on the fiscal side in 2018 compared to quasi-fiscal-dominated measures in 2017. Unless tight monetary and tight fiscal policy are implemented together, rebalancing should not be expected.

Growth to slow down, but still above potential: We revise up our GDP growth forecasts by 1.0pp to 4.2%Y for 2018 while revising it down by 0.3pp to 3.4%Y for 2019. The upward revision especially for 2018 is mainly due to the additional stimulus measures on the back of the early election decision. Two measures are especially worth mentioning. First, the decision to extend minimum wage support for new employees into 2018. The focus was especially on the CGF-driven credit expansion in 2017; but indeed the new job creation was at least as important as loan expansion, in our view. Turkey has created 1.4 million new jobs in 2017, up from 390K a year ago. Second, the recently announced bonus amount of TRY 2,000 to almost 12 million retirees in the country. We calculate the net of impact of this measure on economic growth in 2018 as around 1pp.

But the growth-friendly policy mix is still taking its toll on other macro balances: i) Higher budget deficit: We expect the budget deficit to reach 2.3% in 2018 and 2.6% in 2019, up from 1.3% on average in 2011-17. The additional spending package of TRY 24 billion for a retiree bonus would be partly offset by zoning reform and tax restructuring in 2018-19. However, the problem is that the bonus package is recurring, and will add 0.7pp to the budget deficit to GDP every year. **ii) Higher C/A deficit:** Despite an ongoing rise in energy prices and deterioration in the core goods deficit (excluding oil and gold), we expect a relatively limited increase in CAD/GDP by 0.4pp to 5.9%. However, this hinges on three main assumptions: a) A 20%Y increase in tourism revenues to US$27 billion in 2018; b) A slowdown in economic activity in 2H18; and c) Some mean-reversion in the gold deficit to US$10.6 billion from US$13 billion as of February 2018 in 12M trailing terms. **iii) Higher inflation:** With the revised output gap and higher USDTRY (up to 4.40 for end-2018 from 4.0 previously) and oil (up to US$69/bbl on average in 2018 from US$63 previously), we have increased our end-2018 CPI forecast to 10.5%Y from 9.1%Y previously.

150bp hike in June: We expect an additional 150bp tightening in June (versus a 50bp hike in our previous call) and policy rates on hold at 15.0% in 2H18. The CBT has been making all of its funding from the marginal rate since November 2017. Therefore, there is no flexibility benefit of maintaining an unorthodox policy setting. In line with this, we have been noting since the beginning of April that we expect simplification from the CBT. Confirming our expectation, Governor Cetinkaya has recently noted that the CBT is very close to simplification, and it will make all funding from a single policy rate. In our view, it is more likely to be the O/N rate. In line with the simplification move, we expect the Late Liquidity Window to be set somewhere around 17% and to start to be used just for its main purpose (not as an active policy tool), which is an emergency window for banks to borrow from the CBT at the end of the day at a higher cost.

Any change in economic policies after June 24 elections? The parliamentary and presidential elections were brought forward from November 2019 to June 2018. These are very critical elections for political parties as they will mark the shift to a presidential system in the country following the public referendum in April 2017. The initial market reaction to early elections was positive, with two main assumptions/expectations, in our view. First, tighter monetary policy until the elections. Second, tighter fiscal policy after the elections. We do not agree with the second one. It is not very realistic to expect a major change in fiscal policies before the municipal elections in March 2019. The recent announcement of a bonus package to retirees strengthens our conviction.

Turkey: Forecast summary

	2016	2017	2018E	2019E
Real GDP (%Y)	3.2	7.4	4.2	3.4
Private consumption	3.7	6.1	4.1	3.8
Government consumption	9.5	5.0	4.4	3.1
Gross fixed investment	2.2	7.3	3.3	2.0
Contribution to GDP (pp)				
Final domestic demand	4.2	6.4	4.0	3.3
Net exports	-1.3	0.2	0.2	0.1
Inventories	0.3	0.8	0.0	0.0
Unemp. rate (eop, % labour force)	10.9	10.9	10.8	11.4
CPI (%Y)	7.8	11.1	10.6	9.3
Core CPI (%Y)	8.5	10.1	10.3	9.6
Policy rate (eop, %)	8.3	12.8	15.0	15.0
General govt. balance (% GDP)	-1.1	-1.5	-2.3	-2.6
Gross govt. debt (% GDP)	29	28	30	31
Current account balance (% GDP)	-3.8	-5.5	-5.9	-5.1

Source: Turkstat, Central Bank of Turkey, Republic of Turkey Undersecretariat of Treasury, Morgan Stanley Research forecasts

Brazil: Still recovering

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Strong fundamentals should push the consumer recovery in 2018, even as investment struggles to accelerate further due to political uncertainty. Beyond this year, the recovery should depend on policy choices from the incoming administration that will take office in 2019. Despite this uncertainty, inflation and rates should remain at low levels.

The Brazilian economy has strong fundamentals that should push the consumer to lead the recovery in 2018: Despite the political uncertainty around the electoral outcome in October 2018, we believe that fundamentals are strong enough to boost growth this year. Nevertheless, we are revising down our growth forecast from 3.1%Y to 2.7%Y in 2018 and keeping it at 3.4%Y for 2019. The sustainability of the recovery beyond the elections will likely depend on the policy path that the incoming administration will take. Despite stronger growth due to a large output gap, inflation should accelerate mildly, mostly due to food price normalisation after a very benign 2017. The central bank will likely cut rates one last time in May, taking rates to 6.25%. A normalisation of inflation over coming quarters should trigger the central bank to hike rates again in 2019.

The consumer fundamentals continue to improve and should lead the recovery, while investment, although growing, should suffer due to political uncertainty: The consumer should continue to benefit from the materially lower interest rates and credit growth. Indeed, consumer leverage indicators continue to show material improvement and should allow releveraging in 2H18. Also, the slow recovery in the labour market should continue to help the consumer benefit from the cheaper leverage.

On the investment side, although we see this remaining in positive territory, we believe that political uncertainty is taking a toll on the corporate appetite for investment: Also, continued shrinkage of the development bank's balance sheet is forcing corporates to fund themselves either with banks or capital markets which charge materially higher rates than the subsidised credit from the development bank, and this along with uncertainty is postponing investment plans of most corporates. Beyond this year, the policy choices should drive the investment recovery.

Inflation should show a slight acceleration, but remain at very low levels, close to the 3%Y lower bound of the target in 2018 and around 4%Y in 2019: This is due to a combination of food inflation, which has benefitted from good weather, ending 2018 at -0.8%Y, and core inflation staying at low levels (2.9%Y in 2018 and 4.1%Y in 2019) as the labour market continues to have plenty of slack, as well as the backward-looking price-setting mechanism in Brazil. For 2019, the downward revision is mostly due to the inertial impact from this year's lower print.

The economic recovery should lead to a better fiscal outlook, but the current account deficit should continue at healthy levels: Not only should stronger growth lead to higher tax revenues, but we also expect some non-recurring revenues from privatisation. On the spending side, despite the lack of pension reform, the spending cap should keep expenditures from growing over the next two years. The current account deficit should widen only marginally, as commodity prices continue to be supportive and imports are weaker than anticipated due to weak investment.

Brazil's bull and bear case are dependent on the policy path the incoming administration will take: In case the current reform agenda is reversed, this would impact growth negatively, mainly through the confidence channel, while pressuring FX and higher inflation in 2018 and 2019. This would force the central bank to hike rates earlier than expected in 2019. Meanwhile, the bull case assumes a further aggressive push on the reform agenda which would have a positive impact on growth, mainly in 2019. Inflation should continue to behave well, allowing the central bank to keep rates at low levels throughout 2019.

Brazil: Forecast summary

	2016	2017	2018E	2019E
Real GDP (%Y)	-3.5	1.0	2.7	3.4
Private consumption	-4.3	1.0	2.9	2.7
Government consumption	-0.1	-0.6	-0.1	0.3
Gross fixed investment	-10.1	-1.6	7.5	8.7
Contribution to GDP (pp)				
Final domestic demand	-4.9	0.3	3.3	3.5
Net exports	2.3	0.0	-0.4	-0.4
Inventories	-0.9	0.8	-0.2	0.3
Unemp. rate (eop, % labour force)	12.6	12.4	10.9	9.4
CPI (%Y)	8.8	3.5	3.1	3.9
Core CPI (%Y)	4.8	3.6	2.9	4.1
Policy rate (eop, %)	13.75	7.00	6.25	7.50
General govt. balance (% GDP)	-9.0	-7.8	-7.5	-6.9
Gross govt. debt (% GDP)	69.5	74.0	75.4	78.8
Current account balance (% GDP)	-1.3	-0.5	-0.8	-1.3

Source: IBGE, BCB, Morgan Stanley Research forecasts

Mexico: Elections and policy continuity risk

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Despite a strong fundamental picture, the outlook for Mexico remains uncertain as policy continuity could be at stake in the mid-year election, and question marks about NAFTA's future linger. Against this backdrop and even as external demand remains supportive, we still see a below-consensus expansion at 2.0%Y in 2018 and 2.3%Y next year as uncertainty keeps weighing on investment and spending decisions.

Uncertainty caps growth upside: The fundamental picture remains strong: years of adjustment have put the fiscal coffers on a stronger path; the improvement also extends to the current account deficit, which is running near 1.6% of GDP – the narrowest since 2012 – thanks in great part to surging industrial exports; given our outlook for a further expansion in global trade, the deficit is set to widen only slightly, approaching 2.1% of GDP by 2019. The rate of unemployment is near historically low levels, and inflation is normalising. Against this backdrop, the economy keeps expanding at a moderate pace, prompting us to fine-tune our 2018 growth view upwards to 2.0%Y from 1.8%Y previously; the bulk of the change reflects a slightly stronger pick-up in investment to 2.2%Y (1.0%Y previously), linked to pre-election spending and earthquake rebuilding efforts. For 2019, we maintain a conservative 2.3%Y forecast, reflecting lack of visibility about the policy direction after the December 1 transition and a less supportive external backdrop, including slower US growth.

Leaving highflation behind: After a series of shocks in 2017 – including the hit from fuel price liberalisation and soaring produce quotes – that pushed inflation to the highest level since 2001 (6.0%Y), consumer prices have been normalising at a surprisingly fast pace so far in 2018. Accordingly, we now see inflation closing 2018 at 4.0%Y (averaging 4.6%Y) versus 4.2%Y (4.2%Y) previously as a faster-than-anticipated normalisation in prices more than offsets the higher entry point, which mainly came from a spike in vegetable and fuel prices at the turn of the year. For 2019, the easing trend carries on, reaching 3.6%Y amid limited demand-side pressures and a stronger peso.

Financial stability considerations dominate the policy stance: The commitment to prudent fiscal policy remains intact: the multi-year consolidation effort is approaching its final phase in 2018 as the deficit reaches 2.0% of GDP, a level consistent with declining debt ratios. In fact, debt/GDP already reached an inflection point last year – dipping to 47% of GDP from near 50% in 2016 – with further improvement expected ahead. Since our last update, Banxico delivered additional tightening, lifting its reference rate to 7.50%; with inflation surprising to the downside, policy-makers seem comfortable maintaining the current stance, thus we no longer see room for a final hike to 7.75%. Still, they are likely to keep policy tight as they prioritise financial stability, particularly given risks from NAFTA and elections; accordingly, and given limited slack in the economy, we still see rate cuts as a 2019 story, with the terminal rate at 6.00% – ending above estimates of neutral (closer to 5.50%) given expectations for further Fed tightening over the forecast horizon.

Elections and policy continuity define the risk outlook: The outcome of the twin challenges from policy uncertainty and the future shape of the US-Mexico trade relationship, and the threat from protectionism more broadly, are the main considerations shaping our growth view under a bear (0.5%Y) and bull (2.9%Y) scenario for 2019. Our work suggests that policy continuity is not guaranteed: Mexico's institutional framework remains untested and allows the executive enough latitude to bring about meaningful change in areas relevant to the economic outlook, such as the energy sector opening and fiscal policy. And this should be the case even under a scenario of a divided congress. Accordingly, the policy continuity debate is likely to heat up, particularly given a lack of clarity about the candidates' platforms so far.

Mexico: Forecast summary

	2016	2017	2018E	2019E
Real GDP (%Y)	2.9	2.0	2.0	2.3
Private consumption	3.7	3.0	2.0	2.5
Government consumption	2.4	0.1	1.2	1.5
Gross fixed investment	1.1	-1.5	2.2	3.0
Contribution to GDP (pp)				
Final domestic demand	2.9	1.7	2.0	2.7
Net exports	0.2	-0.8	-0.2	-0.3
Inventories	-0.2	1.1	0.2	-0.1
Unemp. rate (% of labour force)	3.9	3.4	3.3	3.2
CPI (%Y)	2.8	6.0	4.6	3.6
Policy rate (eop, %)	5.75	7.25	7.50	6.00
Fiscal balance (% GDP)	-2.5	-1.1	-2.0	-2.2
Gross govt. debt (% GDP)	49.4	47.3	46.0	45.1
Current account balance (% GDP)	-2.1	-1.6	-1.8	-2.1

Source: Banxico, INEGI, SHCP, Morgan Stanley Research forecasts

GDP forecasts: Base, bear, bull scenarios

We have revised our global growth forecasts higher by one-tenth for both 2018 and 2019 relative to our 2018 Global Macro Outlook published in November, driven by stronger growth in the US. However, they have remained stable on aggregate relative to our last published forecasts in mid-April. With regards to individual countries, we have made slight upward revisions in the US, UK and China for both years since then. At the same time, we have revised growth forecasts lower for Brazil in 2018 and for Russia in both 2018 and 2019.

	2017		2018E			2019E		2020-22E
	Base	Bear	Base	Bull	Bear	Base	Bull	Base
Global	**3.7**	**3.1**	**3.9**	**4.3**	**2.4**	**3.8**	**4.5**	**3.4**
G10	**2.3**	**1.6**	**2.2**	**2.6**	**0.4**	**2.0**	**2.7**	**1.3**
US	2.3	2.0	2.7	3.1	0.4	2.2	2.8	1.2
Euro Area	2.5	1.8	2.1	2.3	0.5	1.9	3.1	1.2
Japan	1.7	0.5	1.3	1.6	0.3	1.5	2.0	1.1
UK	1.8	0.6	1.2	1.7	-0.1	1.0	1.8	1.4
Canada	3.0	1.2	1.9	2.5	-0.1	2.1	2.0	1.3
Norway	1.8	1.5	2.6	3.4	1.3	2.3	3.2	1.7
Sweden	2.4	1.9	2.8	3.9	1.2	2.3	3.2	2.0
Australia	2.3	-0.1	2.1	3.5	0.5	2.7	3.5	2.7
New Zealand	3.0	1.2	3.2	4.0	1.8	3.1	3.5	2.9
EM	**4.8**	**4.2**	**5.0**	**5.6**	**3.7**	**5.0**	**5.8**	**4.8**
CEEMEA	**2.7**	**1.3**	**2.8**	**3.8**	**0.6**	**2.7**	**3.9**	**2.6**
Russia	1.5	-0.5	1.8	3.0	-1.0	1.7	3.1	1.8
Poland	4.7	4.0	4.5	4.8	1.6	4.0	5.9	2.5
Czech Rep	4.6	3.3	3.8	4.1	0.9	3.2	5.2	2.8
Hungary	4.0	3.4	3.9	4.2	1.0	3.3	5.3	2.5
Ukraine	2.5	1.0	3.2	5.0	0.5	3.4	6.0	3.5
Kazakhstan	4.0	3.0	4.4	5.5	2.0	4.2	6.0	4.0
Turkey	7.4	2.2	4.2	5.2	1.4	3.4	4.4	3.0
Israel	3.3	2.7	3.2	3.7	2.9	3.4	3.9	3.0
South Africa	1.3	0.8	2.3	2.9	0.5	2.5	2.5	1.6
Nigeria	0.8	1.8	2.6	3.1	2.1	3.1	3.8	3.5
Saudi Arabia	-0.7	0.8	1.8	2.8	0.9	1.9	2.9	3.0
AXJ	**6.2**	**5.6**	**6.3**	**6.7**	**5.1**	**6.2**	**6.7**	**5.7**
China	6.9	6.2	6.6	6.8	5.6	6.4	6.7	5.6
India	6.4	6.5	7.5	8.2	6.5	7.7	8.5	7.3
Hong Kong	3.6	1.4	3.0	4.0	1.0	2.5	3.0	2.5
Korea	3.1	2.1	2.9	3.5	1.3	2.7	3.8	2.8
Taiwan	2.9	1.9	2.9	3.7	0.7	2.6	3.8	2.8
Singapore	3.6	2.3	3.6	4.6	1.0	3.3	4.8	3.0
Indonesia	5.1	4.8	5.3	5.7	4.5	5.4	6.0	5.7
Malaysia	5.9	4.7	5.6	6.3	3.6	5.3	6.4	5.0
Thailand	3.9	3.0	3.9	4.6	1.9	3.6	4.7	3.0
Philippines	6.7	5.6	6.3	6.8	4.8	6.0	6.8	6.8
LatAm	**0.9**	**1.1**	**1.8**	**2.4**	**0.7**	**2.5**	**3.4**	**2.8**
Brazil	1.0	2.1	2.7	3.1	1.8	3.4	4.0	2.3
Mexico	2.0	1.4	2.0	2.4	0.5	2.3	2.9	2.8
Chile	1.5	3.0	3.7	4.1	1.7	3.3	4.0	3.2
Peru	2.5	2.5	3.3	3.6	2.2	3.4	4.0	3.6
Colombia	1.8	1.9	2.5	3.2	2.0	3.0	4.5	3.2
Argentina	2.9	1.0	2.3	3.2	1.7	2.9	4.5	3.0
Venezuela	-15.4	-18.0	-15.8	-13.0	-20.0	-12.4	-6.0	5.0

Source: Morgan Stanley Research forecasts

CPI forecasts: Base, bear, bull scenarios

We have kept our global inflation forecasts for 2018 unchanged relative to our 2018 Global Macro Outlook and our last published forecast update in mid-April. However, at a regional level we have revised DM inflation higher and EM inflation lower (by two-tenths each). The main drivers are higher headline inflation in the US and lower inflation in China and Brazil. In 2019, we have revised global inflation modestly lower by one-tenth compared with our mid-April forecast. In EM this was mainly driven by lower inflation in China and Brazil and in DM by modestly lower inflation in the US and the euro area.

	2017	2018E			2019E			2020-22E
	Base	Bear	Base	Bull	Bear	Base	Bull	Base
Global*	**2.5**	**2.8**	**2.9**	**3.1**	**2.4**	**2.8**	**3.2**	**2.8**
G10	**1.8**	**1.9**	**2.1**	**2.4**	**0.8**	**1.7**	**2.6**	**1.9**
US	2.1	2.6	2.6	3.0	1.1	1.9	3.0	2.0
Euro Area	1.5	1.5	1.7	1.8	0.4	1.6	2.1	1.7
Japan	0.5	0.7	1.1	1.3	0.3	1.0	1.7	1.5
UK	2.7	2.1	2.5	3.0	1.9	2.1	3.0	2.2
Canada	1.6	1.3	2.2	2.0	1.0	2.2	2.8	1.8
Norway	1.9	1.5	2.3	2.8	1.0	2.2	3.3	2.0
Sweden	1.8	1.2	1.8	2.4	1.4	2.3	3.0	2.0
Australia	2.0	1.2	2.4	3.3	1.0	2.6	3.5	2.5
New Zealand	1.9	1.5	2.0	3.5	1.8	2.3	3.0	2.0
EM*	**3.1**	**3.5**	**3.4**	**3.5**	**3.5**	**3.5**	**3.6**	**3.4**
CEEMEA	**5.7**	**5.8**	**5.3**	**5.4**	**6.0**	**5.4**	**5.4**	**5.4**
Russia	3.7	5.0	3.0	2.0	7.0	4.2	2.8	4.0
Poland	2.0	1.6	1.8	1.9	0.6	2.5	3.2	3.0
Czech Rep	2.5	1.6	1.8	1.9	0.5	1.9	2.5	2.0
Hungary	2.3	2.1	2.4	2.5	0.8	3.1	4.1	3.0
Ukraine	14.4	14.0	11.3	9.0	11.0	7.5	5.5	6.0
Kazakhstan	7.4	8.0	6.3	5.0	7.5	5.6	4.0	5.5
Turkey	11.1	8.6	10.6	13.6	7.3	9.3	12.3	8.0
Israel	0.2	0.3	0.8	1.3	0.8	1.3	1.8	2.0
South Africa	5.3	5.0	4.7	4.3	6.0	5.0	3.9	5.2
Nigeria	16.5	13.7	11.9	10.9	13.7	12.2	10.7	12.7
Saudi Arabia	-0.9	2.4	2.9	3.4	2.0	2.5	3.0	3.5
AXJ	**2.2**	**2.8**	**2.9**	**3.0**	**2.8**	**2.9**	**3.1**	**2.8**
China	1.6	2.1	2.4	2.6	1.9	2.5	2.8	2.5
India	3.3	5.0	4.6	4.4	5.5	4.4	4.3	4.0
Hong Kong	1.7	2.1	2.7	3.5	1.4	3.1	3.5	2.5
Korea	1.9	1.1	1.6	1.9	0.8	1.6	2.2	1.8
Taiwan	0.6	1.1	1.6	1.9	0.3	1.1	1.7	1.5
Singapore	0.6	0.2	0.9	1.3	0.3	1.4	2.2	1.5
Indonesia	3.8	4.2	3.5	3.0	5.0	3.8	3.0	3.5
Malaysia	3.8	1.8	2.3	2.6	1.3	2.1	2.7	2.0
Thailand	0.7	0.7	1.3	1.7	0.2	1.2	1.9	1.5
Philippines	2.9	3.9	4.5	4.9	2.1	3.1	3.8	3.0
LatAm*	**4.3**	**3.8**	**3.5**	**3.3**	**4.2**	**3.6**	**3.4**	**3.5**
Brazil	3.5	3.5	3.1	2.8	4.5	3.9	3.7	4.0
Mexico	6.0	4.9	4.6	4.3	4.3	3.6	3.2	3.3
Chile	2.2	2.1	2.4	2.6	2.5	2.8	3.3	3.0
Peru	2.8	1.1	1.4	1.8	1.7	2.2	2.7	2.5
Colombia	4.3	4.0	3.2	3.0	4.6	3.3	3.1	3.2
Argentina	25.6	28.0	25.5	22.5	23.0	17.7	14.7	11.0
Venezuela	1251	1000000	500573	200000	100000000	23397355	5000	120

Source: Morgan Stanley Research forecasts; Note: Japan CPI includes VAT; Global*, EM* and LatAm* CPI aggregates exclude Venezuela and Argentina

Monetary policy rate forecasts

Compared with our 2018 Global Macro Outlook and last published forecasts in mid-April, we expect one additional Fed hike in 2019 and have pushed back the timing of the first ECB deposit rate hike to 2Q19 from 1Q19 previously as we now expect the ECB to take up a short taper from October to December 2018 (versus our previous expectations of QE ending in September). In China, we removed the deposit rate hike this year as we think that the rise in deposit rates will come via liberalisation of deposit rate caps instead. In Russia, we now expect two rate cuts in 2018 instead of three previously.

	Current	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19
US	1.625	1.875	2.125	2.125	2.375	2.625	2.875	2.875
Euro Area	-0.40	-0.40	-0.40	-0.40	-0.40	-0.25	-0.25	-0.25
Japan	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
UK	0.50	0.50	0.75	0.75	0.75	1.00	1.00	1.25
Canada	1.25	1.25	1.25	1.50	1.75	1.75	2.00	2.25
Norway	0.50	0.50	0.50	0.75	1.00	1.00	1.25	1.50
Sweden	-0.50	-0.50	-0.50	-0.50	-0.50	-0.40	-0.25	0.00
Australia	1.50	1.50	1.50	1.50	1.50	1.50	1.75	2.00
New Zealand	1.75	1.75	1.75	1.75	2.00	2.25	2.50	2.75
Russia	7.25	7.25	7.00	6.75	6.75	6.75	6.75	6.75
Poland	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Czech Republic	0.75	0.75	0.75	1.00	1.25	1.50	1.75	2.00
Hungary	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Romania	2.50	2.50	2.75	3.00	3.25	3.50	3.75	4.00
Turkey	13.50	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Israel	0.10	0.10	0.10	0.25	0.25	0.25	0.25	0.50
South Africa	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.75
Nigeria	14.00	14.00	13.50	13.50	13.50	13.50	13.50	13.50
Saudi Arabia	2.25	2.50	2.75	2.75	3.00	3.25	3.50	3.50
China	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
India	6.00	6.00	6.00	6.25	6.25	6.50	6.50	6.75
Hong Kong	2.00	2.25	2.50	2.50	2.75	3.00	3.25	3.25
S. Korea	1.50	1.50	1.75	1.75	1.75	1.75	1.75	1.75
Taiwan	1.375	1.375	1.375	1.500	1.625	1.625	1.625	1.625
Indonesia	4.25	4.50	4.75	4.75	4.75	4.75	4.75	4.75
Malaysia	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25
Thailand	1.50	1.50	1.50	1.50	1.50	1.75	2.00	2.00
Philippines	3.25	3.25	3.75	3.75	3.75	3.75	3.75	3.75
Brazil	6.50	6.25	6.25	6.25	6.25	6.50	7.50	7.50
Mexico	7.50	7.50	7.50	7.50	7.25	6.00	6.00	6.00
Chile	2.50	2.50	2.50	2.50	3.00	3.50	3.50	3.50
Peru	2.75	2.50	2.50	2.50	2.75	3.00	3.25	3.50
Colombia	4.25	4.00	4.00	4.00	4.00	4.00	4.50	4.50
Argentina	40.00	40.00	34.00	31.00	28.00	25.00	23.00	24.00

Source: Bloomberg, Morgan Stanley Research forecasts

Government budget balance and debt forecasts

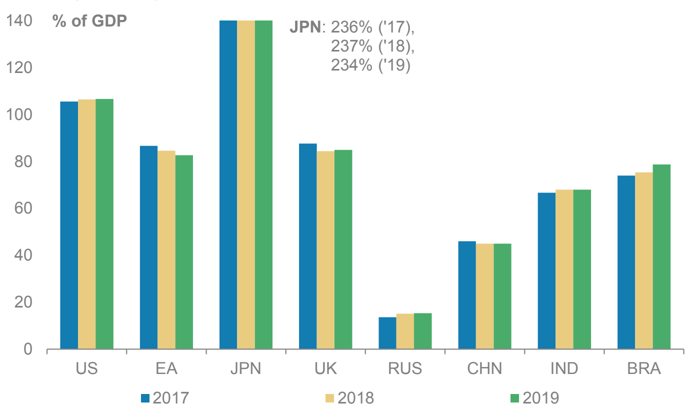
	General Gov't Budget Balance (% of GDP)				Primary General Gov't Budget Balance (% of GDP)			
	2016	2017	2018E	2019E	2016	2017	2018E	2019E
DM								
US	-3.1	-3.4	-4.1	-4.5	-1.8	-2.1	-2.6	-2.9
Euro Area	-1.5	-0.8	-0.8	-0.9	0.6	1.2	1.0	0.9
Japan	-3.7	-4.2	-3.5	-3.4	-2.9	-3.7	-3.2	-3.3
UK	-3.0	-1.9	-2.3	-2.3	-0.5	0.8	0.1	0.1
Canada	-1.1	-1.0	-0.8	-0.8	-0.4	-0.6	-0.5	-0.4
Sweden	1.2	1.1	1.0	1.0	1.6	1.5	1.2	1.2
Australia	-2.4	-2.1	-1.0	-0.8	-1.6	-1.8	-0.7	-0.1
BRICs								
Russia	-3.4	-1.4	1.5	1.4	N/A	N/A	N/A	N/A
China	-3.8	-3.7	-3.3	-3.3	-3.1	-3.0	-2.5	-2.4
India	-7.0	-6.7	-6.5	-6.3	-2.1	-2.2	-1.4	-1.4
Brazil	-9.0	-7.8	-7.5	-6.9	-2.5	-1.7	-1.8	-1.8

	Gross General Gov't Debt (% of GDP)				Net General Gov't Debt (% of GDP)			
	2016	2017	2018E	2019E	2016	2017	2018E	2019E
DM								
US	106	106	107	107	77	77	78	79
Euro Area	89	87	85	83	70	67	N/A	N/A
Japan	236	236	237	234	153	153	153	151
UK	88	88	84	85	52	51	48	49
Canada	91	90	87	84	29	28	27	27
Sweden	42	41	38	36	-31	N/A	N/A	N/A
Australia	25	29	29	30	18	18	19	18
BRICs								
Russia	13	14	15	15	N/A	N/A	N/A	N/A
China	48	46	45	45	N/A	N/A	N/A	N/A
India	68	67	68	68	N/A	N/A	N/A	N/A
Brazil	69	74	75	79	48	52	58	64

Source: IMF, Morgan Stanley Research forecasts; Note: *Central government

Exhibit 28:

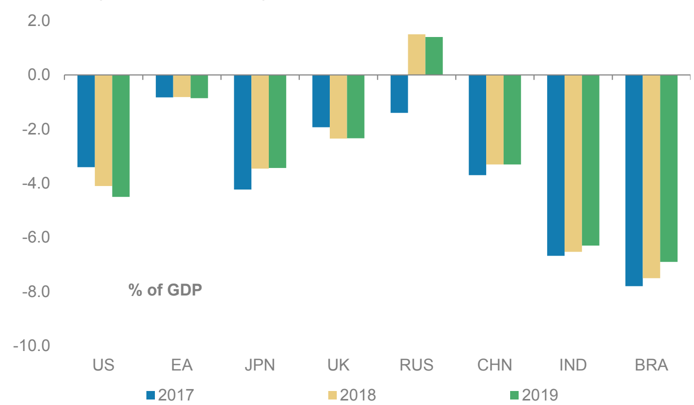
Gross general government debt



Source: Morgan Stanley Research forecasts

Exhibit 29:

General government budget balance



Source: Morgan Stanley Research forecasts

Government 10Y bond yield/spread forecasts

DM	4Q18E	2Q19E
US	2.85	2.70
Germany	0.75	0.95
Japan	0.08	0.10
UK	1.60	1.85
Australia	2.60	2.60
Austria*	20	20
Netherlands*	15	15
France*	25	25
Belgium*	20	25
Ireland*	35	40
Spain*	50	65
Italy*	120	135
Portugal*	95	120
EM		
Russia	7.30	7.10
Poland	3.10	2.90
Hungary	2.40	2.30
Turkey	14.00	14.40
South Africa	7.90	7.70
China	3.50	3.60
India	8.00	7.70
Hong Kong	2.30	2.50
Singapore	2.45	2.30
S. Korea	2.65	2.45
Taiwan	1.15	1.30
Indonesia	7.00	6.80
Malaysia	4.40	4.20
Thailand	2.40	2.30
Argentina	19.50	19.75
Brazil	9.30	9.20
Mexico	8.00	7.75
Chile	4.60	4.75
Peru	5.30	5.50
Colombia	6.10	6.00

Source: Morgan Stanley Global Interest Rate Strategy forecasts; *Yield spread to German Bunds

Global currency forecasts

DM	2Q18E	3Q18E	4Q18E	1Q19E	2Q19E	3Q19E	4Q19E
EURUSD	1.16	1.21	1.26	1.30	1.33	1.36	1.38
USDJPY	110	104	101	98	96	95	93
GBPUSD	1.33	1.32	1.37	1.42	1.46	1.50	1.55
EURCHF	1.22	1.20	1.20	1.22	1.24	1.25	1.26
EURSEK	10.30	10.50	10.60	10.40	10.30	10.20	10.10
EURNOK	9.30	9.40	9.50	9.40	9.30	9.20	9.10
USDCAD	1.31	1.32	1.36	1.35	1.34	1.33	1.32
AUDUSD	0.74	0.71	0.68	0.69	0.70	0.70	0.71
NZDUSD	0.69	0.67	0.66	0.68	0.70	0.70	0.70
USDCHF	1.05	0.99	0.95	0.94	0.93	0.92	0.91
USDSEK	8.88	8.68	8.41	8.00	7.74	7.50	7.32
USDNOK	8.02	7.77	7.54	7.23	6.99	6.76	6.59
EURJPY	128	126	127	127	128	129	128
EURGBP	0.87	0.92	0.92	0.92	0.91	0.91	0.89
DXY	95	92	89	86	84	83	81
ECB EUR TWI	97	99	101	102	103	104	104
Broad USD (Fed)	121	119	117	115	114	112	111
AxJ							
USDCNY	6.40	6.32	6.25	6.20	6.17	6.12	6.10
USDHKD	7.80	7.80	7.80	7.80	7.80	7.80	7.80
USDIDR	13900	13800	13500	13400	13300	13200	13100
USDINR	67.5	68.0	67.5	67.0	66.0	65.0	64.0
USDKRW	1070	1055	1040	1035	1030	1025	1025
USDMYR	4.15	4.25	4.20	4.15	4.10	4.05	4.00
USDPHP	51.3	50.8	51.5	52.3	52.8	53.3	53.5
USDSGD	1.34	1.32	1.29	1.26	1.25	1.24	1.23
USDTHB	31.8	31.4	30.5	29.8	29.6	29.4	29.3
USDTWD	29.9	29.6	29.3	28.8	28.5	28.3	28.3
LatAm							
USDBRL	3.45	3.70	3.40	3.30	3.20	3.10	3.00
USDMXN	20.00	19.50	19.50	19.00	18.75	18.50	18.50
USDARS	21.5	22.0	22.8	23.5	24.3	25.0	26.0
USDCLP	580	610	620	610	585	560	555
USDCOP	2850	2875	2880	2840	2750	2650	2600
USDPEN	3.23	3.24	3.26	3.23	3.22	3.20	3.15
CEEMEA							
USDZAR	12.4	11.6	11.4	11.3	11.1	11.0	10.9
USDILS	3.65	3.55	3.50	3.45	3.45	3.40	3.40
USDTRY	4.25	4.30	4.40	4.45	4.50	4.55	4.60
USDRUB	66	66	64	61	61	61	60
EURCZK	25.5	25.3	25.3	25.0	24.8	24.5	24.5
EURHUF	315	312	310	310	310	310	310
EURPLN	4.25	4.20	4.15	4.10	4.10	4.05	4.00
EURRON	4.65	4.65	4.60	4.60	4.55	4.50	4.50

Source: Morgan Stanley Global FX Strategy forecasts

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Disclosure Section

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