

Euro Bond Markets

A Research Publication by DZ BANK AG

Strategy



2020 – Manoeuvring in the fog

- » Is it Groundhog Day all over again? The situation is somewhat more nuanced than this of course. However, it is striking that the big issues which loomed over the capital markets in both 2018 and 2019 are still at the top of the list of market-moving events as we head into 2020.
- » While the concerns surrounding Italy have taken something of a back seat since the summer, they could resurface over the year ahead, and not only if the left-wing government collapses. Brexit should now finally take place on 31 January 2020. However, we are still in the dark as to what will happen after that. And last but by no means least we have the capricious US president, who could become even more unpredictable in the run-up to the presidential elections on 3 November next year.
- » The slowdown in eurozone economic growth that began 18 months ago could be brought to a halt in 2020. However, a vigorous recovery or a plunge towards recession are scenarios that look equally unlikely - provided that none of the major risks gain the upper hand.
- » Following the central banks' about-turns this year, which saw the Fed and the ECB perform 180 degree pivots in their monetary policy, the rate-setters can be expected to tread more softly in 2020. While the Fed is likely to make two further rate cuts, the ECB looks set to stick firmly to the accommodative monetary policy enshrined by Mario Draghi ahead of his departure.
- » Overall we expect stable to slightly falling Bund yields. Spreads should also either hold steady or edge down a little over the next 12 months, primarily as a result of the ECB's revived asset purchase programme.
- » In this setting, we recommend adopting a carry strategy on the credit markets for the time being with a view to capturing spreads in the higher-yielding segments amidst the low-yield environment.

BONDS

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STRATEGY OVERVIEW

Segment	Strategy
Overall market strategy	2019 – a strong year which has seen the credit segments outperform Total returns set to be much weaker in 2020; carry strategy recommended Weighting recommendation remains offensive: overweight corporate, bank and covered bonds; underweight sovereigns
Rate development and yield curve strategy	The planned phase one agreement in the trade conflict and the de-escalation on Brexit have put the capital markets in an exuberant mood The easing of geopolitical risks is likely to hold for now, but there is a risk of a setback in the medium term Yields expected to trend sideways over the coming months, but should be lower at the long end by the end of 2020 Continue to run neutral duration risk on a 3-month view – long-dated bonds remain attractive over the longer term
Interest rate derivatives and structured products	Higher risk of rising than falling rates points to a steeper curve Interest rate vols on the way down until monetary policy changes again
EMU sovereigns	Opportunities to enter the market after profit-taking – strategy remains offensive Outperformers: Italy¹¹⁾, Greece¹⁰⁾ Marketperformers: France¹¹⁾, Belgium^{10,11)}, Portugal¹¹⁾, Ireland¹¹⁾, Spain¹¹⁾ Underperformers: Germany^{10,11)}, Finland¹¹⁾, Austria^{10,11)}, Netherlands^{10,11)}
Covered bonds	Outlook for 2020: new issuance volume of EUR 135 billion and swap spread at zero basis points Due to the expected tightening of spreads, we maintain our offensive country weighting recommendations and continue to prefer covered bonds with comparatively high swap spreads.
Financials	Bank spreads heading sideways on a one-year view; ECB purchase programmes will prevent spreads from moving out We remain offensively positioned and favour bank bonds with a higher carry
Corporates	Potential for spreads to narrow in the short term, as the positives are not sufficiently priced in at current levels On a one-year view we expect spreads to be almost unchanged from current levels, as the ECB effect is likely to fade in the course of the year Due to the downside economic risks we are retaining our negative view on cyclical sectors (automotive and chemicals)
Asset-backed securities	We expect primary market issuance to grow slightly, but the marketing ratio heading downwards. Preferred investments in 2020: consumer ABS, AAA senior tranches of Euro-pean CLOs and selective CMBS with a maximum WAL of 5 years.

Source: DZ BANK Research

The weighting recommendations in this **Overall Market Strategy Fixed Income** refer to the relative comparison of the four bond segments in the overall market strategy to each other. The overall market strategy currently includes four bond segments: government bonds, covered bonds, bank bonds (senior unsecured) and corporate bonds (senior unsecured). **"Overweight"** means that the relevant bond segment is expected to perform significantly better than the average of all four bond segments in the peer group according to the total return calculations. **"Underweight"** means that the relevant bond segment is expected to perform significantly worse than the average of all four bond segments according to the total return calculations. **"Neutral weighting"** means that the relevant bond segment is expected to perform approximately average to all four bond segments according to the total return calculations. The total of relative weighting recommendations within the four bond segments always adds up to zero. The weighting recommendations in the overall market strategy are independent of the weighting recommendations within the individual bond segments themselves: government bonds, covered bonds, bank bonds (senior unsecured), corporate bonds (senior unsecured), because the respective peer group within each bond segment is completely different. For example, weighting recommendations within the government bond sector refer to issuer countries that are not relevant at the weighting level in the overall market strategy. These three weighting recommendations have a **validity period** of six months. The **principles and methodology** of these weighting recommendations are set out in the basic study "Methodology for Overall Bond Market Strategy". This is available for free [download](#)

This publication appears monthly.

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The prices and yields cited relate, unless otherwise specified, to closing prices 27th November 2019.

^{1) – 12)} Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

ECONOMICS AND INFLATION

	2019	2020	2021
Gross Domestic Product (in % y/y)			
USA	2.3	1.9	1.8
EMU	1.2	0.9	1.2
Germany	0.6	1.0	1.1
Consumer Prices (in % y/y)			
USA	1.8	2.0	2.0
EMU	1.2	1.3	1.4
Germany	1.3	1.4	1.4

Source: DZ BANK Research

RATES

in percent	+3M	+6M	+12M
United States (in %)			
Fed Funds Rate (upper bound)	1.75	1.50	1.50
10y US-Treasury Yield	1.70	1.40	1.20
Eurozone (in %)			
ECB Deposit Rate	-0.50	-0.50	-0.50
ECB Main Refinancing Rate	0.00	0.00	0.00
10y Bund Yield	-0.30	-0.50	-0.50
10y Swap Rate	0.15	0.00	0.00

Source: DZ BANK Research

BOND MARKET SPREADS

Asset Swap Spread in basis points	+3M	+6M	+12M
EMU Government Bonds (iBoxx Eurozone 1-10)	8	14	16
Covered Bonds (iBoxx Covered)	4	0	0
Bank Bonds (iBoxx Banks Senior)	55	60	60
Corporate Bonds (iBoxx Non-Financials Senior)	60	60	70

Source: DZ BANK Research

US DOLLAR

	+3M	+6M	+12M
Dollar / Euro	1.10	1.10	1.12

Source: DZ BANK Research

EQUITY MARKETS

Index Level	30/6/2020	30/9/2020	31/12/2020
S&P 500	3,100	3,100	3,100
Euro Stoxx 50	3,650	3,700	3,700
DAX	13,000	13,100	13,200

Source: DZ BANK Research

EDITORIAL

2020 – Manoeuvring in the fog

2019 has so far been a good year on the euro bond market

At least as far as the performance of the various market sectors is concerned, 2019 has been a good year for bond investments. Yields have fallen sharply overall, albeit with some appreciable volatility along the way, and credit spreads have also fallen significantly from the temporary highs they hit at the turn of the year 2018/2019.

The central banks, which in the case of the Federal Reserve and European Central Bank performed veritable 180 degree U-turns in the course of 2019, were once again the main drivers of this move. At the beginning of the year it still looked as if the Fed would continue hiking rates and the ECB would begin a cautious exit from its ultra-loose monetary policy. But it became clear as early as the spring that the state of the economy and the escalating trade tensions between the US and China would make this impossible. As we moved into the second half of the year, the market backdrop was dominated by simmering political, geopolitical and economic risks, which led to knee-jerk calls on the market for even looser monetary policy over the summer. In recent weeks, however, speculation about further monetary easing has deflated somewhat.

The three leading issues of 2018 and 2019 – a reinterpretation for 2020

With varying degrees of intensity, three issues have been recurrent concerns for the bond market and thus a constant over the last two years – Trump's trade war, the prospect of Brexit and the fears over Italian government debt. But as we will explain below, none of these issues has been conclusively resolved and each of them has the capacity to ambush the markets again next year.

In Italy's case, fears have eased considerably following the change of government. Spreads of Italian government bonds have fallen sharply and are now at fairly low levels. However, there is no guarantee that things will stay this way. Although both the Italian government and the European Union are keen to avoid a renewed escalation, a collapse of the government in 2020 is a distinct possibility and would rekindle uncertainty about the country's debt sustainability.

According to current opinion polls, Boris Johnson is on course to win the election on 12 December and secure an absolute majority. This would pave the way for ratifying the EU withdrawal treaty and an orderly Brexit on 31 January 2020. However, any relief at this is likely to be short-lived, since the transition phase agreed in the treaty expires at the end of 2020. The deadline could be extended, but the UK would have to request an extension by 30 June 2020, which Boris Johnson has said he will not do. There could therefore be renewed concerns about the issue of Brexit in the spring. However, the market is likely to regard the risk of a "pre-planned" no-deal Brexit in December 2020 as reasonably low, since if Brexit has taught us anything it is that there can always be another postponement. Nonetheless, there could be some nervousness in these circumstances. We do not believe Boris Johnson would be prepared to knowingly drive the British economy off the cliff and will thus ultimately request a postponement by the autumn or winter of next year at the latest. Brexit will therefore remain a live issue in 2020.

The trade dispute is again likely to present the biggest risk to the economy and the capital markets in 2020. Assuming President Trump survives the impeachment process, his focus next year will be entirely on his re-election on 3 November. This

Strong performance in 2019

Central banks perform 180 degree U-turns

Groundhog Day?

Familiar issues reinterpreted

Italy: will the government – and therefore also the truce with Brussels – hold?

We are nowhere near the end of Brexit yet

Or: it ain't over till the fat lady sings

Cold war in the trade dispute

means that his actions are likely to be even more unpredictable for the financial markets than they already are. Alongside personal attacks and smear campaigns, Trump's primary concern will be the performance of the economy and the stock markets. While an escalation in the trade war could prove counterproductive for the president, there are unlikely to be rapid successes in the trade talks with China and nor are the threats against Europe likely to be dropped any time soon. It will probably be too tempting for the president to pose as the candidate who is standing up for the interests of American workers against China and Europe and does not allow himself to be pushed around. Throughout 2020, periods of relative calm are thus likely to be interspersed with spells of rising concern about an escalation of the trade tensions.

No trade escalation, but no resolution either

Trump to remain consistent in his trademark unpredictability

World economy

Global economic growth weakened in 2019, not least due to the impact of the trade wars. After 3.5% in 2018, the growth rate is likely to have slipped to 2.8% in 2019. We expect GDP growth to stabilise below the 3% level next year and are forecasting 2.9%. The sluggish pace of world trade growth and the weak state of the Chinese economy remain a drag. We expect oil prices to fall towards USD 55 per barrel of Brent in the course of 2020 due to a weakening of demand growth. Against this backdrop inflation should not be an issue. We expect it to average around 3.7% globally, much the same as this year.

World economic growth to stabilise at a low level

United States

We are forecasting a slowdown in US GDP growth to 1.9% in 2020, following 2.3% this year. However, we do not share the fears of a recession that have been expressed in some quarters. Unemployment remains close to its historic lows and the outlook for residential construction has also brightened up again, while manufacturing industry is unlikely to regain its role as a growth engine for now. Inflation is also unlikely to rise sustainably above the 2% level, as in spite of the strong employment situation there is very little wage pressure to pass on to prices.

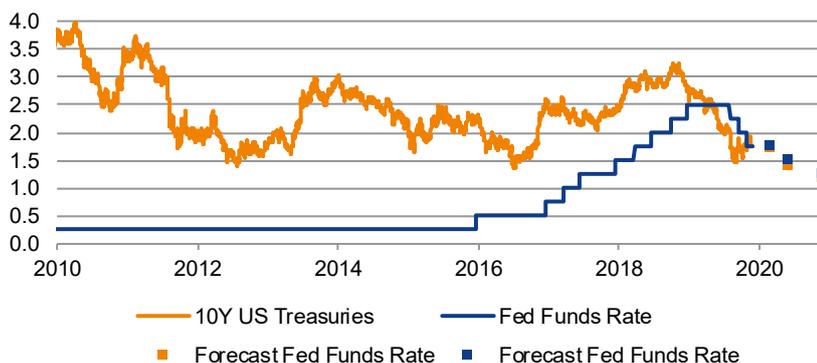
Weaker growth expected in the US

As the president fights for re-election, slightly slower growth and muted inflation are likely to prompt him to demand further rate cuts from the Fed. We expect the Fed to give in to this pressure with two further cuts to 1-1.25%, even though this will probably still not be enough for the Trump administration. It will no doubt have a convenient scapegoat to hand in the central bank if growth weakens further. Yields on 10-year US Treasuries could continue to trend down to 1.2% in this environment.

Fed will give way to political pressure again

Lower US Treasury yields expected

US: RATE CUTS EXPECTED TO CONTINUE IN 2020 AND YIELDS TO FALL IN PERCENT



Source: Bloomberg, DZ BANK Research

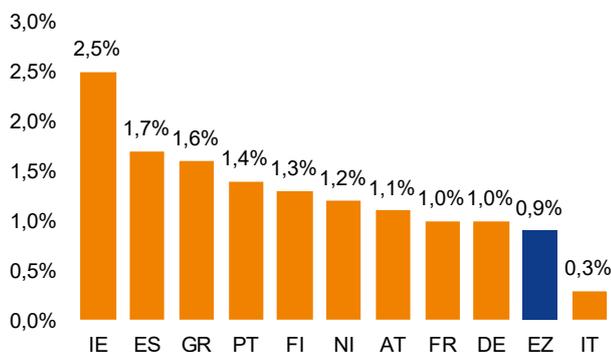
Euro area

Growth disappointed in the euro area in 2019. Economic growth was much weaker than expected a year ago, above all in Germany, but also in other eurozone countries. Manufacturing industry was hit hardest and actually slid into recession in Germany over the summer months. Although we still do not expect a whole-economy recession in the euro area, there is unlikely to be a vigorous economic recovery in 2020 either. Given the numerous risks and pressures, investment is likely to remain persistently weak. This should keep economic growth at very sluggish levels in the coming quarters. With GDP growth of 0.9% forecast for the eurozone next year, following 1.2% in 2019, growth could be even slower in full-year 2020, although we expect quarterly growth rates to pick up a little over the course of the year. However, the euro area will remain far removed from dynamic growth next year and simply halting the downward trend of the last 18 months is as much as can be expected.

The good news: growth not expected to weaken further

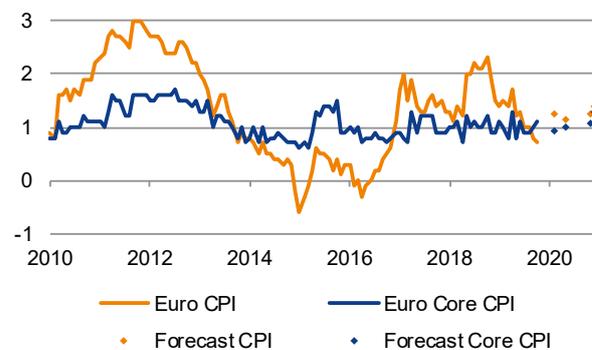
The bad news: things will not get much better

GROWTH RATES NEXT YEAR: CONSOLIDATING AT A LOW LEVEL
GDP GROWTH FORECAST (2020), IN PERCENT



Source: Bloomberg; DZ BANK Research

THE ECB WILL STILL STRUGGLE TO MEET ITS INFLATION TARGET OF JUST UNDER TWO PERCENT
IN PERCENT



Source: Bloomberg; DZ BANK Research

Inflation of 1 to 1.5 percent is unlikely to prompt an outbreak of euphoria at the ECB, but nor should it provide a reason to ease monetary policy again. We see policy rates remaining unchanged at current levels in the eurozone throughout 2020. The recently reactivated asset purchase programme is likely to continue as planned for now.

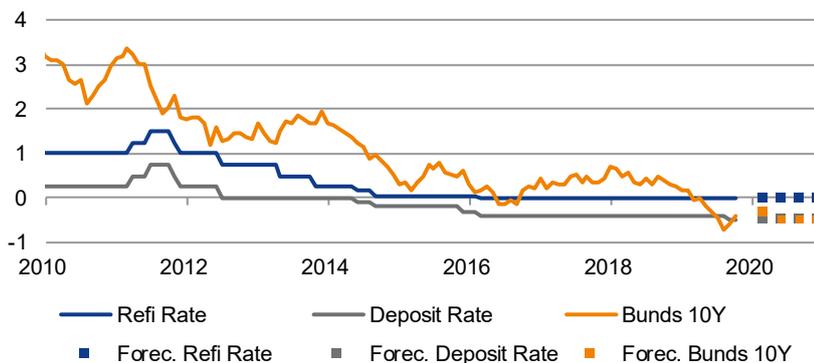
Inflation will not give the ECB any reason to change its stance

We are forecasting comparatively limited movement in yields in the coming year. There will of course be volatility in 2020, as there has been this year, but we do not anticipate a sustained rise in yields. At his last two council meetings, Mario Draghi linked monetary policy firmly to the path of inflation, pledging not to hike interest rates or end the asset purchase programme until inflation has robustly converged with the ECB's target of close to 2 percent. As this condition is very unlikely to be met in 2020, expectations about future monetary policy should not put any upward pressure on yield levels.

ECB not expected to provide any new impetus for yields

The numerous risks that are likely to lead to repeated flights to safe havens, combined with continued loose monetary policy and falling yields in the US should instead help to keep yields on Bunds up to a maturity of 10 years and beyond in negative territory. While we anticipate comparatively little movement at the short end, yields on longer maturities are expected to be a little more volatile. We are forecasting a 10-year Bund yield of -0.50% at the end of 2020.

The ECB's huge bond holdings and recurrent safe haven flows will put downward pressure on yields

ECB MONETARY POLICY EXPECTED TO REMAIN UNCHANGED IN 2020
 IN PERCENT


Source: Bloomberg, DZ BANK Research

Spread markets

The multitude of risks naturally represent an unfavourable backdrop for the credit markets. The fundamental environment has also deteriorated in a number of segments, leverage has risen and the default rates of corporate bonds may also tick up a little. Together with the subdued economic outlook, this is an environment in which one might expect rising spreads.

However, once again the central bank could prove to be the game changer. We believe the ECB may try to concentrate its renewed purchases in private sector bonds to avoid hitting its self-imposed limits for sovereign bonds (for example Bunds) too quickly. Overall, we expect stable to slightly falling spread levels in the credit markets, except in sovereign bonds, where we see slightly rising spreads due to Italy.

Risks to the forecast

While forecasting clear trends for the coming year is unusually difficult given the diffuse influences on the market, compiling a list of the potential risks is comparatively straightforward.

- » **US politics:** If Elizabeth Warren or Bernie Sanders win the Democratic nomination and defeat President Trump in the presidential election, this would undoubtedly be viewed as a negative by the financial markets. On the other hand, a moderate Democrat (such as Michael Bloomberg) or even the re-election of Donald Trump, in spite of all the associated uncertainties, would be market-positive.
- » **Trade war:** Our base case is that the trade tensions continue to simmer over the coming year but do not escalate. If there was an escalation, however, the impact would be very serious, particularly if the conflict broadened to Europe.
- » **European politics:** The collapse of another government in Rome would certainly not surprise anyone, but a resulting debt crisis would undoubtedly have the potential to spark market turmoil and a renewed rise in spreads. A fall of the grand coalition in Germany, subsequent fresh elections with no clear majority, or the prospect of a coalition between the social democratic, left and Green parties could also exacerbate market uncertainty.

Credit spreads to thwart the negatives and...

... benefit from the ECB's asset purchase programme

Manoeuvring in the fog

US election campaign

Trade war with Europe too?

Italian politics...

... and Germany also

- » **Brexit:** If Boris Johnson really did refuse to ask the EU for an extension of the transition period, a hard Brexit on 31 December 2020 would become unavoidable. This would have dire consequences for both the British and European economies. **No-deal Brexit with advance warning**
- » **ECB:** Our base scenario assumes that the ECB will continue the asset purchase programme at its current rate throughout 2020. If the economy turns out surprisingly weak (or strong), however, a further expansion or early termination of the programme would be possible. Both would be a surprise from the market's perspective and would therefore have a corresponding impact on the bond markets. **ECB: discussions about early termination of the APP or even more accommodative?**
- » **US debt levels:** The US debt mountain is growing inexorably without so far triggering turmoil on the bond market. However, an escalation of the trade war and a resultant, possibly significant, downward revision to US economic growth forecasts could change this situation quickly. **US debt mountain a risk**
- » **Popular unrest in emerging markets:** Hong Kong, Bolivia, Chile, Ecuador: a lengthening list of emerging markets are currently being plagued by unrest. To date the market has seen these as local events. However, if the unrest spreads further and turns into a generalised conflagration in the EM segment, it could have an adverse impact on overall market sentiment. **Generalised conflagration in the EM segment**

Conclusion

These are the cornerstones of our outlook for 2020: a global economy growing sluggishly at best, the monetary policy of the central banks in settled accommodative mode and a broad range of political risks. Given that periods of heightened risk appetite are likely to alternate with phases of severe risk aversion, clear trends will be few and far between. In this environment we expect yields in the euro area to remain negative, while credit spreads should tend to be supported by the ECB. Against this backdrop we recommend a carry strategy on the credit markets for now to capture the spreads of higher-yielding segments in this low-yield environment.

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STRATEGY

Overall market strategy

- » 2019 – a strong year which has seen the credit segments outperform
- » Total returns set to be much weaker in 2020; carry strategy recommended
- » Weighting recommendation remains offensive: overweight corporate, bank and covered bonds; underweight sovereigns

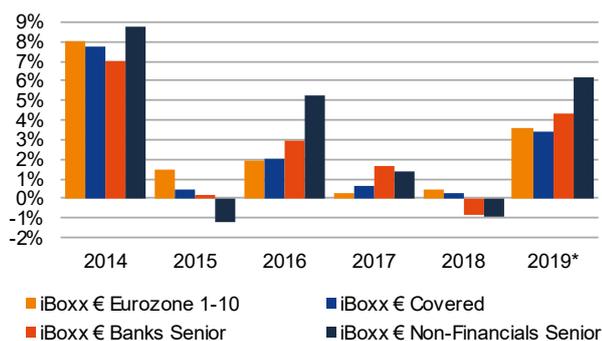
In terms of total returns, performance has been very good across all the bond segments this year. While the top-performing category of non-financial corporate bonds has generated overall gains of 6.2% in the year to date, even covered bonds, which have brought up the rear this year, have still produced total returns of 3.4%. This is the strongest market performance since 2014. The pronounced fall in yields has been the big performance driver this year. While the 10-year euro swap rate started 2019 at 81 basis points, it is currently trading at six. The marked decline in yields has sparked substantial price gains across all segments of the market. In tandem with this trend, spread narrowing has further boosted performance. The asset swap spreads of the iBoxx indices for sovereigns and covered bonds, which tend to be fairly safe havens, have tightened by 17 basis points respectively 13 basis points in the year to date. Turning to the riskier credit segments, spreads have compressed even more, contracting by 31 basis points in bank bonds and 25 points in non-financials.

2019: the best year since 2014

We expect comparatively little movement in yields over the coming year. As regards ECB monetary policy, Europe's rate-setters have now put inflation front and centre. The central bank will not even begin discussing a key rate hike or winding down its asset purchase programme until inflation has made a robust move towards convergence with the monetary guardians' target of just under 2%. And according to our forecasts, the inflation rate is very unlikely to come close to the ECB's target in 2020. Against this backdrop, we do not expect to see significant and sustained moves in yields at the short end of the curve over the year ahead. As far as the economy is concerned, there have been growing signs of late that the recent downturn has now bottomed out. That said, there appears to be little prospect of a sharp surge in economic growth next year. As a result, we do not anticipate any major, sustained adjustments to levels at the long end of the yield curve either. We are therefore forecasting only modest shifts in the curve over the year ahead. Looking 12 months down the line, we see the 2-year euro swap rate coming in at -22

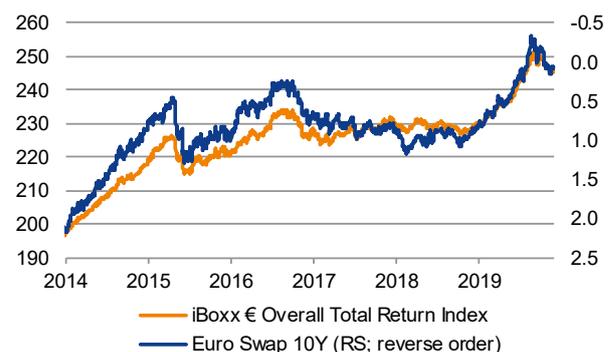
Yields unlikely to contribute much to total returns in 2020

2019: STRONG YEAR DRAWING TO A CLOSE
TOTAL RETURN PERFORMANCE P.A. IN PERCENT



Source: Markit, presentation and calculation by DZ BANK Research; segments are represented by the total return performance of the iBoxx € Eurozone 1-10, iBoxx € Covered, iBoxx € Banks Senior, iBoxx € Non-Financials Senior; data as at 25 November 2019

MARKED FALL IN RATES HAS BUOYED TOTAL RETURNS
LS: INDEX POINTS; RS: IN PERCENT



Source: Markit, Bloomberg, DZ BANK Research presentation

^{1) - 12)} Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

basis points (current level of -34), while our forecast for the 10-year euro swap rate is zero basis points. Given the yield changes we are forecasting, we expect price performance in the individual iBoxx indices to range from zero to -60 basis points. Yield movements were also relatively subdued in 2017 and 2018, prompting correspondingly weak total returns in the iBoxx indices.

Credit spread total returns set to be considerably lower in 2020

While there is likely to be no shortage of event risks that could move the markets, spread fluctuations also look set to be limited over the next 12 months. In Europe, Brexit will probably remain one of the defining issues next year too. Depending on the outcome of the UK's general election in mid-December, the process of leaving the EU could rapidly gather momentum. Whatever happens, we still do not expect a disorderly departure and any spread volatility as a result of Brexit developments should be temporary. With regard to the Italian government, we think the current coalition is fragile. As the administration in Rome seems destined for further turmoil next year, Italian government bond spreads will very probably rise. This should lead to widening in the asset swap spread of the iBoxx Eurozone 1-10 given that Italian sovereigns represent a substantial 24% of the index. However, we do not see any risk of contagion for other countries or bond segments. In the United States, the presidential election campaign is likely to be the prevalent influence on the market next year. Donald Trump faces a bumpy ride in his bid for re-election. Forced onto the defensive by the opposition amid the threat of impeachment proceedings, the president has little chance to shine on the domestic policy front. Giveaways such as fresh tax cuts should be few and far between as the opposition controls the House of Representatives and is likely to block any plans in this direction. That leaves foreign policy as his only means of scoring points with voters. With Trump keen to show a strong hand, the negotiations on a trade deal with China look set to be protracted, while the prospect of tariff hikes on EU goods is not off the table. At the same time, he is unlikely to risk a serious escalation of the trade spat as the economic fallout would do nothing to support his re-election campaign. While the topic of the US election may lead to temporary spread volatility, we do not envisage any general shift to significantly higher or lower levels.

Little change in spreads expected

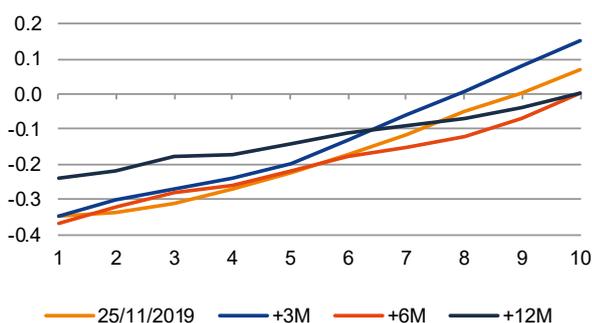
ECB bond purchases should counter potential spread widening

Given the risks mentioned above and the resultant scope for temporary spread widening, it is worth bearing in mind that the ECB's reactivated bond purchase programme will curb any upside potential in spreads. Besides net new purchases worth EUR 20 billion per month, the central bank's plans include reinvestments from

Possible temporary spread widening contained by ECB asset purchases

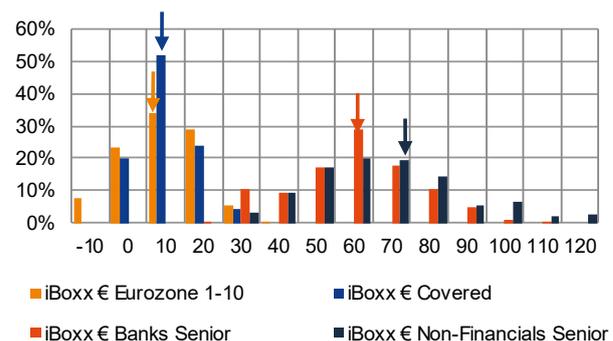
SWAP CURVE SEEN FLATTENING SLIGHTLY

X AXIS: MATURITY IN YEARS, Y AXIS: EURO SWAP RATE IN PERCENT



SPREADS CURRENTLY TRADING NEAR PEAK OF NORMAL DISTRIBUTION

X AXIS: SPREAD CLUSTER, Y AXIS: FREQUENCY OF SPREAD LEVELS OVER THE PAST FIVE YEARS IN PERCENT



Source: Bloomberg, DZ BANK Research presentation and forecast

Source: Markit, DZ BANK Research presentation and calculation; arrows = cluster in which the asset swap spread of the index is currently trading (range of the clusters is 10 basis points, for example the cluster for 50 basis points contains asset swap spreads ranging from 45 to 55 basis points)

¹⁾ – ¹²⁾ Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

the bond-buying programme averaging roughly the same volume. The high demand from the central bank as a result of these measures should either limit or completely thwart any general widening of spreads. All in all, we expect spreads to trend largely sideways in the riskier credit segments of bank and non-financial corporate bonds. Based on the historical distribution of spreads over the last five years, the asset swap spreads of the respective iBoxx indices are currently around the peak, i.e. in the centre, of the bell curve. The same applies to sovereign paper and covered bonds. However, while we expect government bond spreads to move out modestly in the course of next year for the reasons outlined above, the spreads of covered bank bonds should narrow thanks to demand from the ECB. Initially, we also expect to see spread compression in the corporate non-financial bond segment.

Based on our spread forecasts for next year, we see credit spread total returns ranging from -20 to +95 basis points. These will only marginally outweigh the negative price movements resulting from changes in the overall yield environment. All in all, we expect the iBoxx indices to deliver very low total returns of less than one percent in 2020. Yield is king in this environment and a carry strategy is advisable. The riskier bond categories of bank and non-financial corporate bonds should therefore be overweight due to their comparatively higher yields. We also recommend overweighting covered bonds as they harbour some degree of upside potential given the spread compression we are forecasting. In the sovereign bond segment, we suggest opting for an underweight position given the expected spread widening and relatively low carry on offer.

Recommendation:
carry strategy – offensive weighting

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RECOMMENDED RELATIVE BOND SECTOR WEIGHTINGS

Bond sector	Current (previous) recommendation	Date of recommendation	Index TR since recommendation	Index TR since start of year	Current spread	Change in spread since start of year	Spread forecast			Credit spread TR forecast (price/carry)		
							+3M	+6M	+12M	+3M	+6M	+12M
Sovereign bonds	↓ (↓)	19.09.2019	-0.68%	3.59%	8	-14	8	14	16	7 (5/2)	-20 (-24/4)	-16 (-25/9)
Covered bonds	↑ (↑)	19.09.2019	-0.67%	3.40%	8	-12	4	0	0	25 (24/1)	48 (47/1)	47 (44/3)
Bank bonds	↑ (↑)	19.09.2019	-0.33%	4.30%	62	-30	55	60	60	59 (45/14)	47 (19/28)	80 (24/57)
Corporate bonds	↑ (↑)	19.09.2019	-0.31%	6.17%	70	-24	60	60	70	76 (64/12)	90 (66/24)	67 (19/48)

Source: DZ BANK; data as at 25 November 2019; ↑ = overweight; → = neutral weight; ↓ = underweight; TR = total return; the bond segments are represented by the following iBoxx indices: iBoxx € Eurozone 1-10 (sovereign bonds); iBoxx € Covered (covered bonds); iBoxx € Banks Senior (bank bonds); iBoxx € Non-Financials Senior (corporate bonds); all numerical data in basis points with the exception of "Index TR since recommendation" and "Index TR since start of year"; differences between the sum of price/carry and credit spread TR forecast are due to rounding

Interest rates

- » The planned phase one agreement in the trade conflict and the de-escalation on Brexit have put the capital markets in an exuberant mood
- » The easing of geopolitical risks is likely to hold for now, but there is a risk of a setback in the medium term

Partial geopolitical détente

In the last few weeks there have been growing hopes on the capital markets that the geopolitical risks of recent months and quarters might suddenly vanish into thin air. There is a glimmer of hope in the trade conflict that the previously irreconcilable parties could reach a deal. Although the phase 1 agreement struck by the trade negotiators from the US and China has not been signed yet, both Washington and Beijing are making conciliatory noises. The governments have declared their intention to sign the agreement as soon as possible. But it is not only the receding fears about a possible trade war that has sparked growing euphoria on the capital markets. The other elephant in the room, a possible disorderly Brexit, has also gone dormant recently. The outlook for the UK's general election on 12 December is of course completely unclear. But even if the Brexit hardliners win the election, a no-deal exit by the UK on 31 January 2020 looks very unlikely. All of this has led investors to no longer see the world quite as pessimistically and concentrate on the unexpected rays of sunshine.

Positive sentiment is likely to continue setting the tone on the capital markets over the coming weeks. In this environment yields could even rise further. The question in our mind is how long these encouraging signs will last and whether the dark clouds will really dissipate completely. For one thing, the negotiations surrounding the Brexit process between the UK and the EU are likely to be anything but easy even after the UK general election. The agreement on the transitional period would have to be ratified by 31 January 2020. On top of this, the transition period that has been agreed between the EU and UK will end on 31 December 2020. If this deadline is not extended, negotiations on the long-term relationship would have to be completed by then. There is a considerable risk that the political uncertainties will move back centre stage and have an adverse impact on economic growth in both the UK and Europe in the medium term. The current outbreak of calm on this issue will probably continue for now, but Brexit will probably continue to preoccupy the financial markets over the coming year.

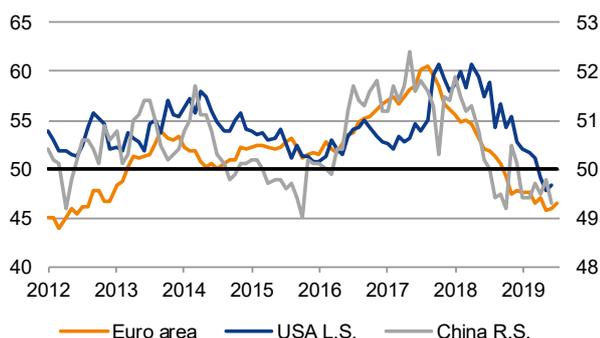
Financial markets celebrate the proposed deal between China and the US

Hopes on the market that the two parties will now reach a final and permanent deal

Tensions only expected to ease partially

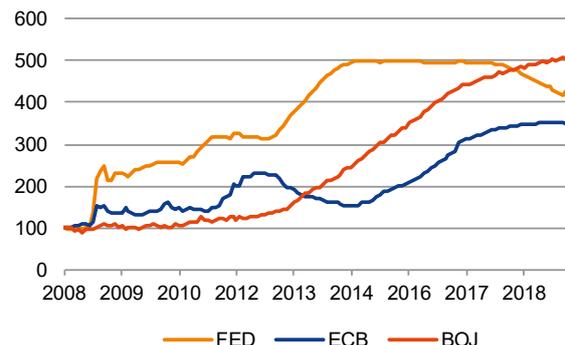
**Two important Brexit dates over the coming year:
31 January 2020
and
31 December 2020**

INDUSTRY STABILIZES AT A LOW LEVEL
R.S. AND L.S. PMI IN INDEX POINTS



Source: Bloomberg, DZ BANK Research

FURTHER EXPANDING CENTRAL BANK BALANCE SHEETS
IN PERCENT 2008=100



Source: Bloomberg, DZ BANK Research

We are also sceptical that a definitive long-term deal can be reached in the trade conflict. The attempt to move from irreconcilable positions in the tariff dispute to a sudden complete de-escalation could be on shaky foundations in the medium term in our view. For example, it is unclear whether the tariffs Washington has imposed on a wide range of Chinese goods over the past 18 months will actually be reversed. In the short term, however, the financial markets are celebrating the proposed phase one agreement between the US and China. The afterglow of this positive news could persist into next year and so keep sentiment buoyant on the financial markets. However, it is important not to forget that there have been several short-lived glimmers of hope in the trade conflict in the past, which usually dissipated again quickly. As the US presidential election battle is likely to pick up pace from the summer of next year, we expect the trade truce between China and the US to only hold temporarily. This would be in line with the rhetorical patterns that President Trump has tended to resort to in the past.

Doubts justified about whether the clash between the US and China for global primacy is over

President Trump is likely to tap into the views of working class voters, as they were the deciding factor in winning him the election in 2016. However, working class voters blame China for the decline in US manufacturing industry in recent decades, as a result of which they have lost jobs, prosperity and social prestige. Trump may again pose as the defender of the American worker and attack Chinese trade practices in his election campaign. The current period of calm is therefore likely to be temporary, even if Trump doubtless wants to avoid an economic downturn and stock-market fall due to a renewed escalation of the trade conflict ahead of the elections in early November 2020.

Trump wants to win an election

China was also an important issue in the 2016 campaign

In summary, the quiescent backdrop on the financial markets could continue in the coming weeks. In the medium term, however, we expect both Brexit to remain on the agenda and the uncertainty on the financial markets about the tariff barriers between the US and China and possibly also between the US and the eurozone to remain high. These uncertainties are likely to affect the mood on the financial markets both in the United States and the single currency bloc.

Cooling of geopolitical risks could be temporary

United States

We expect the US economy to slow over the coming year for the reasons we have set out here. We are forecasting economic growth of under 2.0% in 2020. In spite of this forecast we do not expect the US central bank to cut interest rates sharply. The Fed has already loosened the monetary reins considerably in anticipation of weaker economic growth. The current easing of geopolitical risks underpins our expectation

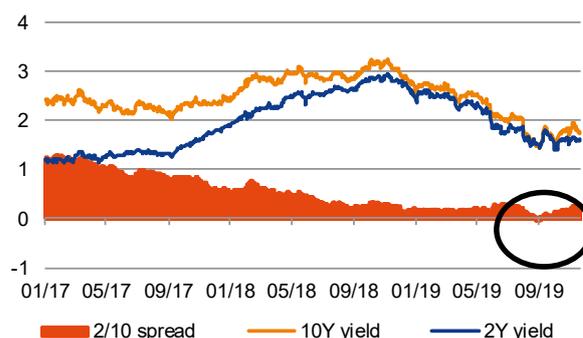
Economic growth slowing in the US

IMPLICIT FED FUNDS FUTURE POINT TO A PAUSE
IN PERCENT



Source: Bloomberg, DZ BANK Research

US YIELD CURVE HAS NORMALIZED
IN PERCENT



Source: Bloomberg, DZ BANK Research;

^{1) - 12)} Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

that the US central bank will put further monetary loosening on pause until next year. Fed chair Jerome Powell has also spoken out in favour of keeping key interest rates unchanged for now.

However, if the geopolitical risks come back to the fore in the spring of next year and hit business and consumer confidence in the US, the Fed will probably not hesitate to ease the monetary reins once again. We therefore foresee a cut in the federal funds corridor to 1.25% to 1.50% in the second quarter of 2020. The Fed is likely to be reluctant to cut rates again in the course of the year as the presidential elections draw closer. The US monetary guardians will want to avoid being accused of attempting to influence the elections by continuing to cut interest rates. A renewed pause until after the presidential elections is therefore likely. President Trump would undoubtedly sharply criticise these pauses in interest rates. Overall the pressure on the Fed to keep policy stimulative will thus remain high. We therefore believe a further rate cut in December 2020 is a distinct possibility, which would put the federal funds in a target range of 1.00% to 1.25% towards the end of next year.

With the considerable rise in US Treasury yields in recent weeks, the inversion of the yield curve in terms of the differential between 2-year and 10-year Treasury bonds has normalised again. The 2/10 spread currently stands at around 25 basis points, after having briefly dipped into negative territory around the end of August and early September. We expect 10-year yields to edge down slightly to 1.7% over the next three months, as the business and consumer confidence indicators weaken slightly with a slowdown in economic growth towards the end of this year and at the beginning of next year. A sharper fall in yields is then likely to be on the agenda by the spring of 2020 with a hard-fought election battle underway and a renewed rate cut by the US central bank. Although we expect a further fall in 10-year yields on a 12-month view, the pace of decline should be fairly moderate, as we expect the economic sentiment indicators to normalise again in the second half of 2020. We therefore see the 10-year US Treasury yield at 1.20% by the end of 2020.

Euro area

Christine Lagarde took over as president of the European Central Bank at the beginning of November. The question being asked on the financial markets is whether the new central-banker-in-chief, who is regarded as a dove on monetary policy, will adopt further measures in the near future to put monetary policy on an even more stimulative setting. We do not expect any further reduction in the deposit rate for the foreseeable future. There are several reasons for our view. Firstly, monetary policy is undoubtedly already ultra-loose following the deposit rate cut in September and the resumption of bond-buying. In addition, the signs of the economy bottoming out in recent confidence indicators do not suggest that the ECB needs to take further action. The easing of geopolitical risks could also give the central bank breathing space to keep monetary policy unchanged for some time. As long as there is no recession in Germany and/or the eurozone, the ECB council members are likely to sit tight. Given the improved labour market and continued robust service sector, we believe a marked economic slowdown is unlikely.

Ms Lagarde is likely to attempt to rebuild unity on the ECB Governing Council in the next few months. A possible way of achieving this would be to announce that she believes the current level of monetary stimulus is appropriate and no further monetary easing is expected. Against the backdrop of continued low inflation rates and subdued inflation expectations, however, we believe it is unlikely that she will withdraw the recent cut in the deposit rate and/or bring the asset purchases to an end in the near future. The ECB has linked its entire monetary policy to inflation

Fed pauses the rate cut cycle

But federal funds corridor expected to be lowered again in the early summer

Treasury yield curve has normalised

10-year yield forecast at 1.20% towards the end of 2020

ECB monetary policy remains highly stimulative, but will not be loosened further

ECB's package of measures linked to inflation – inflation expected to remain moderate

developments and there is little sign of movement in inflation. In our view the ECB's monetary policy is therefore on hold until the end of next year.

We expect the central bank to concentrate on other issues. For example, a review of the inflation target is on the ECB's agenda. It seems very unlikely, however, that the central bank will manage to reach agreement on this issue within the next year. It is also abundantly clear at the moment that Mario Draghi's tendency to plough his own furrow on monetary policy was not welcomed by all his colleagues. This seems to have created deep divisions within the Governing Council. The new ECB president will therefore probably concentrate first of all on building bridges on the council. A road she may well go down is to intensify her work at a political level and call on governments to undertake structural reforms, as ultimately monetary policy alone cannot lift the European economy onto a higher growth path. Many commentators believe monetary policy is close to or at its limits; the latest ECB council member to argue this is Robert Holzmann, who noted in a recent interview that "monetary policy seems to have reached its end." Reforms are needed in various eurozone countries to stimulate sustained growth. However, convincing the governments of the need for structural reforms is likely to be a Herculean task for the new central bank head.

The recent rise in 10-year Bund yields can be explained by the progress on the trade war and the renewed postponement of Brexit (see our report "Bunds: Positioning" of 14 November 2019). On a three-month view we expect the positive sentiment to remain intact. We are thus forecasting a 10-year Bund yield of -0.30% over a three-month horizon. Nonetheless, we believe the current easing of tensions on the financial markets is only superficial, as China and the US have only agreed on a limited trade deal and the nature of the UK's ultimate departure from the European Union is still unclear. If these issues come back to the fore and increase uncertainty, a renewed flight into the safe haven of Bunds is very much a possibility. Over a 6- and 12-month view we therefore expect 10-year yields to fall to -0.50%. Alongside a return of geopolitical uncertainty, lower US yields also favour declining Bund yields between now and the end of 2020.

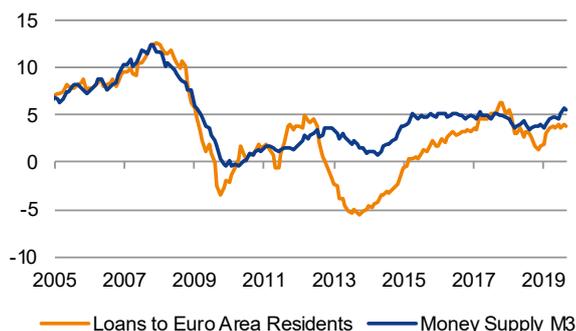
ECB Council expected to be preoccupied with other issues:
Unity within the ECB
Fiscal policy
Limits of monetary policy

Bund yields have risen significantly due to the easing of geopolitical risks

Yields seen falling if this easing of tensions is not sustained

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MONEY SUPPLY AND CREDIT GROWTH MODERATE
 IN PERCENT YOY



Source: Bloomberg, DZ BANK Research

INFLATION EXPECTATIONS ARE TOO LOW
 IN PERCENT



Source: Bloomberg, DZ BANK Research

Yield curve strategy

- » Yields expected to trend sideways over the coming months, but should be lower at the long end by the end of 2020
- » Continue to run neutral duration risk on a 3-month view – long-dated bonds remain attractive over the longer term

When the last edition of this yield curve strategy was published, the upward trend in yields, which had been in place since the 10-year Bund yield hit its all-time low of -72 basis points at the end of August, was still in full swing. After touching a fresh multi-month high of -25 basis points a few weeks ago, the benchmark yield now seems to have settled in a corridor of -35 to -30 basis points. This also happens to be consistent with our interest rate forecast for the coming months. Looking at other maturity segments as well, we see limited potential for yield movements over the coming weeks and months. As a result, there is no pressing need to implement any major deviations from the benchmark in our view. In light of an expected rise in yields at the long end of just 7 basis points over the next three months, the model shown in the left-hand chart below can be ignored – changes on this scale are in line with some of the bigger daily movements and do not warrant any underweighting of the long end at this point.

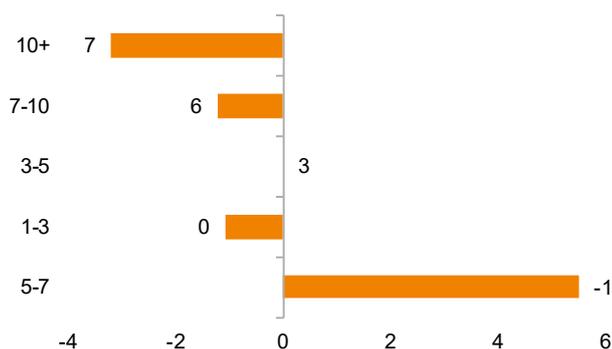
Looking ahead to 2020, our recommended strategic positioning over the 12-month horizon is slightly different. Our interest rate forecast sees the long end as the clear winner, with the 10-year Bund yield predicted to fall back to -50 basis points and the 30-year Bund yield expected to nudge the zero mark once again. However, in conjunction with the three-month forecast outlined above, investors will have to be patient as the downtrend in yields is only expected to kick in in six months' time.

Uptrend in yields grinds to a halt

Price gains still expected at the long end in 2020

TACTICALLY* BROADLY NEUTRAL...

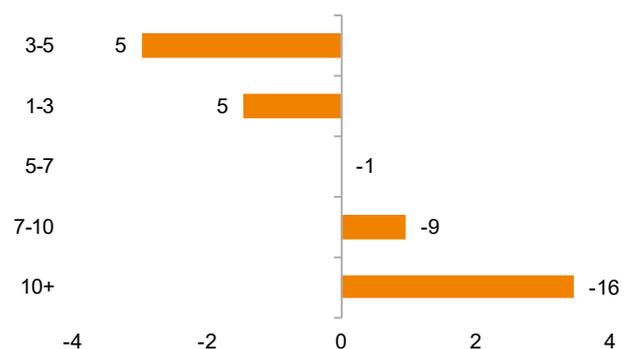
POSITIONING RELATIVE TO BENCHMARK IN PERCENTAGE POINTS
(FIGURES ALONGSIDE BARS SHOW EXPECTED CHANGE IN YIELD OF SEGMENT IN BASIS POINTS)



Source: DZ BANK Research, Bloomberg; *forecast horizon: 3 months

...AND STRATEGICALLY* MODESTLY LONG DURATION

POSITIONING RELATIVE TO BENCHMARK IN PERCENTAGE POINTS
(FIGURES ALONGSIDE BARS SHOW EXPECTED CHANGE IN YIELD OF SEGMENT IN BASIS POINTS)



Source: DZ BANK Research, Bloomberg; *forecast horizon: 31 December 2020

That said, on a three-month view a neutral positioning versus our benchmark, the iBoxx Germany Sovereign Index, should also deliver a moderately positive total return. Roll-down is still generating a positive return even on the Bund curve now that carry has almost ebbed away completely. But in view of our forecast that the curve will flatten again over the course of 2020, sending the 2/10 spread beneath its recent low of 15 basis points posted in September (forecast for end-2020: 10 basis points), this source of returns also looks set to gradually evaporate.

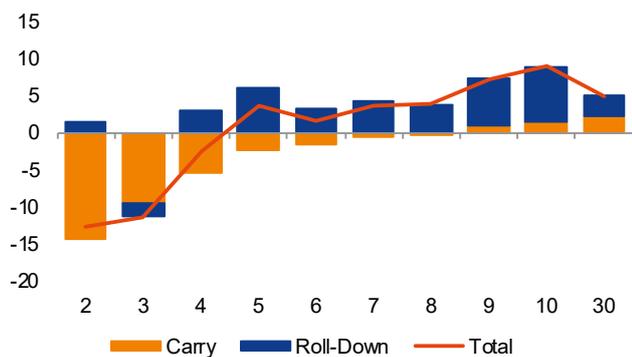
Roll-down set to dwindle in carry's wake

¹⁾ – ¹²⁾ Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

For the time being we recommend keeping portfolio duration close to the benchmark level, which currently stands at 8.08 years. However, as we expect the (ultra-) long end to outperform, due in part to the wave of new issuance anticipated at the start of next year and the reinvestment opportunities this will create, we advise favouring duration-rich paper on a longer-term view.

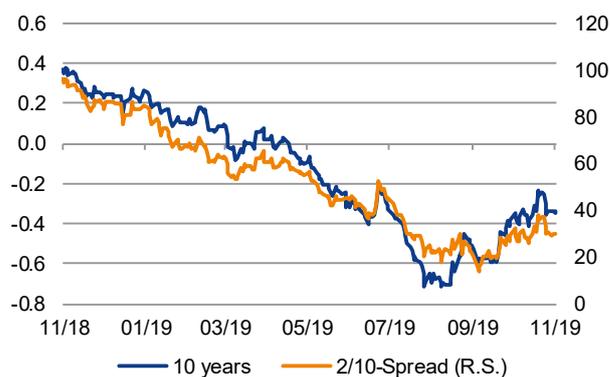
Continue to hold neutral duration relative to the benchmark for now

ROLLDOWN LEFT AS THE SOLE SOURCE OF RETURN
IN BASIS POINTS (12-MONTH HORIZON; BUND CURVE)



Source: DZ BANK Research, Bloomberg

CURVE IS FLAT – AND SHOULD REMAIN FLAT
BUND YIELD IN PERCENT (L.S.), CURVE SLOPE IN BASIS POINTS (R.S.)



Source: DZ BANK Research, Bloomberg

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¹⁾ – ¹²⁾ Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

Swap spreads

- » Bund/swap spreads virtually unchanged on continued easing of geopolitical risks in recent weeks
- » Looking ahead to the coming 12 months, we forecast moderately higher spreads as financial market uncertainty looks set to tick up again

Bund/swap spreads have been more or less unchanged overall during the last month amidst very low spread volatility. Minor spikes were primarily triggered by the progress of negotiations surrounding the “phase one” deal between the United States and China. Whenever the lead negotiators broadly reported constructive talks, the 10-year Bund/swap spread generally narrowed. During these phases, the spread contracted to as little as 39 basis points at times. Conversely, during periods in which President Trump was threatening to hike tariffs, the spread widened as far as 43 basis points. All things considered, however, when we look back at recent weeks we can say that the declining level of uncertainty – with regard to both a disorderly Brexit and further escalation in the trade dispute – has led to narrower Bund/swap spreads. On a three-month view, we forecast a relatively moderate rise in the 10-year Bund/swap spread to 45 basis points. While we do not expect the issues of Brexit and the trade war to return in full force and keep the financial markets on tenterhooks, they are unlikely to be fully resolved for some time yet in our view. If uncertainty resurfaces on the capital markets, Bund/swap spreads will move back out slightly.

Very low volatility in Bund/swap spreads due to defusing of geopolitical tensions

DZ BANK SWAPSPREADS: FORECASTS

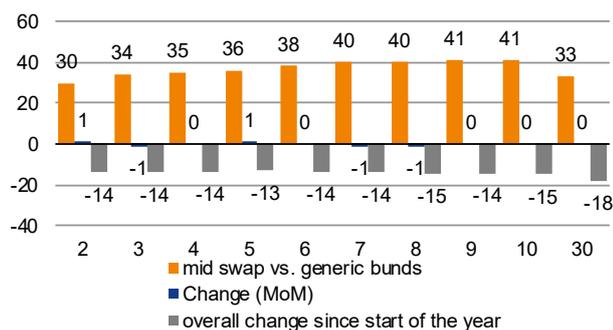
	current	+ 3 months	+ 12 months
2yr USA	1	0	2
10yr USA	-9	-10	-5
2yr Euro area	30	35	38
3yr Euro area	34	37	42
5yr Euro area	36	40	45
7yr Euro area	40	46	48
10yr Euro area	41	45	50
30yr Euro area	33	30	30
slope 2/10	11	10	12
curvature 2/5/10	1	0	2

source: DZ BANK Research, Bloomberg

As things stand there is little prospect of the US forging a permanent trade deal with China. The issue of the trade deficit could therefore return to the spotlight in the US presidential election campaign and create further uncertainty. However, we do not expect any pronounced widening of spreads as while Trump seems unwilling to end the sparring with China, it is not in his interest to escalate the tensions. The risk of any renewed uncertainty prompting turmoil on the financial markets, especially the equity markets, is simply too high. Similarly, the prevailing calm surrounding Brexit is likely to be short-lived as the UK will have to negotiate an agreement on its future relations with the EU after the transition period ends next year. In summary, we expect to see spreads in the 10-year segment widening moderately to a level of 50 basis points by the end of 2020.

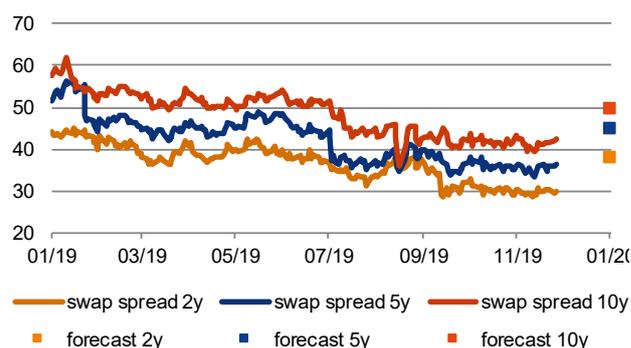
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PAST SPREAD NARROWING HAS COME TO AN END
Y AXIS: BASIS POINTS; X AXIS: MATURITY IN YEARS



Source: Bloomberg, DZ BANK Research

SPREADS EXPECTED TO WIDEN NEXT YEAR
IN BASIS POINTS



Source: Bloomberg, DZ BANK Research

¹⁾ – ¹²⁾ Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

Interest rate derivatives and structured products

- » Higher risk of rising than falling rates points to a steeper curve
- » Interest rate vols on the way down until monetary policy changes again

EUR swap rates have explored new frontiers in 2019. When recession fears almost reached fever pitch in the summer, for example, the short end fell to unprecedented levels. In August yields were below -0.50% on maturities out to 6 years, which were thus pricing in an average ECB deposit rate below current levels over the coming years. Meanwhile 30-year swaps set a new all-time low of -0.036%, which meant that the entire EUR swap curve was trading at negative levels on a spot basis. The subsequent payer activities have since catapulted the 30-year EUR swap rate back up to a level of just under 50 basis points – the resultant volatility explains the sharp rise in implied interest rate vols over the summer months. There have also been some important changes in the institutional framework this year. The switch in the benchmark overnight interest rate in the euro area from Eonia to the Euro Short-Term Rate (€STR) was carried out successfully in October without any major complications. Since then Eonia has become the €STR plus a fixed spread. For its part, the new benchmark has seen little impact from the tiering of the deposit rate, as the ECB had hoped. In addition, the methodological changes to Euribor were completed smoothly, which should have increased financial stability in the euro area.

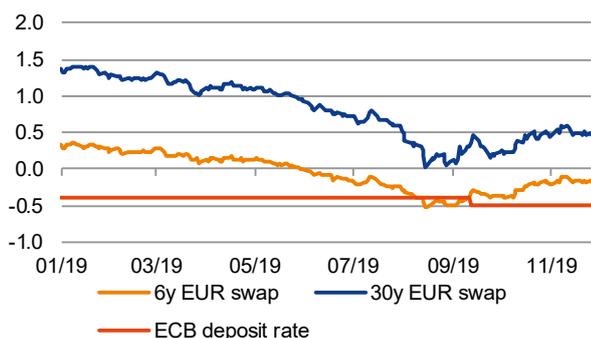
The economic data currently points to lethargic but non-negative economic growth in the euro area in 2020. The ECB has increased its monetary stimulus in response and removed uncertainty about monetary policy in the medium term. Exaggerated expectations of further rate cuts have faded for now and the forwards currently imply unchanged ECB policy rates in the next two years. The chances of EUR money market rates moving significantly in the first half of 2020 are therefore limited. This puts activist trading strategies centre stage in 2020. At the short end it looks attractive to sell the risk of significant movement in money market interest rates via caps and floors and collect the premiums. This can be used to fund payer positions in 2-, 3- and 4-year EUR swaps that currently have a negative carry of 6 to 14 basis points. But if EUR swap rates rise towards the end of 2020 as expected, these payer strategies will benefit from rising prices and possibly a positive carry.

2019 an extreme year for EUR swaps, benchmark reform has so far been successful

Lethargic economic outlook argues for activist trading strategies

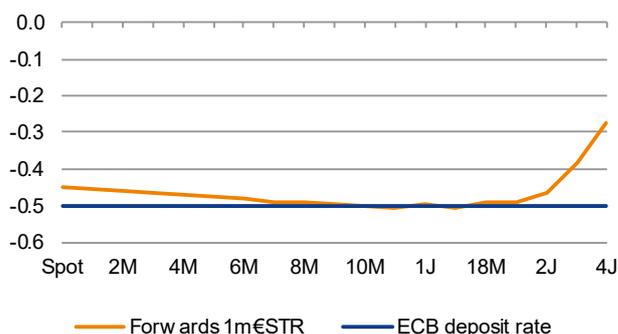
Sell interest rate risks at the short end, payer swaps on a moderate rise in rates at the end of 2020 attractive from a present value perspective

EUR SWAP CURVE HAS EXPERIENCED SEVERAL EXTREMES IN 2019 IN PERCENT



Source: DZ BANK Research, Bloomberg

NEW EUR OVERNIGHT RATE €STR IMPLIES LITTLE RISK OF KEY RATE CHANGES ON A TWO-YEAR VIEW IN PERCENT



Source: DZ BANK Research, Bloomberg

¹⁾ – ¹²⁾ Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

Despite the resumption of the APP, at a level of 1.18% market participants' medium-term inflation expectations (5y5y inflation forwards) remain rooted near their all-time lows. This goes a long way towards explaining what are currently very low EUR swap rates as well as the flat curve. With monetary policy already exceptionally accommodative and a growing consensus on the need for fiscal stimulus, 2020 appears to harbour a higher risk of rising as opposed to falling EUR swap rates at the long end of the curve. Medium maturities of around five years have recently proved to be the most volatile on a duration-adjusted basis. As a result, paying the 2/5/10 EUR butterfly at -17 basis points looks attractive. This position benefits if – as occurred in 2017 – there is a moderate upward drift in EUR swap rates. If this leads to a return of payer activity at the long end, a steepener on the 10/30 curve spread could offset the risks of a steeper curve at the ultra-long end. With rates at the short end firmly anchored, the curve is ultimately likely to follow a bear steepening trend.

Against the backdrop of moderate movements in rates, the correction of last summer's rise in implied interest rate vols is likely to continue for the time being. The uncertainty surrounding the effectiveness of the ECB's measures sparked elevated hedging activity in August this year, sending option prices higher, especially as option sellers were simultaneously becoming more cautious amidst rising realised volatility. However, in light of the ECB's new forward guidance we forecast a growing supply of volatility when trading on the new account gets underway in January 2020, as we saw at the start of 2019. This is likely to be especially true of vega volatilities with longer expiries, which could diminish the relative appeal of callable interest rate structures as the year goes on. But implied volatility still looks elevated in the gamma segment comprising option expiries of up to one year. This primarily reflects what is still a heightened level of realised volatility. If, as we anticipate, this falls over the coming months, implied volatility will follow suit. We will therefore probably have to wait until later on in 2020 before interest rate structures on a steeper curve become more attractive.

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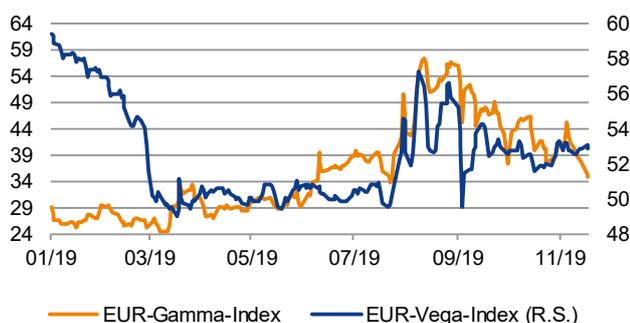
2/5/10 EUR butterfly positions for upward drift in EUR swap rates

10/30 steepener strategies to counteract risks of a steeper curve at the ultra-long end

In the absence of any sharp movement in rates, implied interest rate volatility is also set to fall

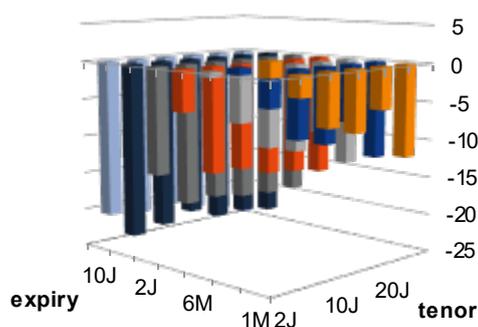
Near-term exposure to callable interest rate structures recommended; patience advised when it comes to curve steepness structures

IMPLIED VOLS UNUSUALLY VOLATILE RECENTLY IN BASIS POINTS



Source: DZ BANK Research, Bloomberg

HIGH REALISED VOLATILITY SET TO FALL IN THE NEAR TERM VOL RISK PREMIUM (IMPLIED MINUS REALISED VOL) IN BASIS POINTS



Source: DZ BANK Research, Bloomberg

^{1) - 12)} Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

EMU sovereigns

- » Opportunities to enter the market after profit-taking – strategy remains offensive
- » Outperformers: **Italy¹¹⁾, Greece¹⁰⁾**
- » Marketperformers: **Belgium^{10,11)}, France¹¹⁾, Portugal¹¹⁾, Ireland¹¹⁾, Spain¹¹⁾**
- » Underperformers: **Germany^{10,11)}, Finland¹¹⁾, Austria^{10,11)}, Netherlands^{10,11)}**

Long credit and long duration were the most successful strategies in eurozone government bonds in 2019. The combination of bullish flattening of the Bund curve and spread narrowing were the main drivers of an extremely successful year for investors. While the political situation in Italy prompted nervousness early in the year, spreads narrowed markedly from the spring as the outlook began to improve (see right-hand chart below). Meanwhile neither fears of an escalation in the trade war nor Brexit had a sustained adverse impact on spreads. Instead investors sought out alternatives in a negative-yielding world and moved into both longer maturities and higher risks, which led to marked spread convergence within the eurozone bond segment. The net result was that all eurozone issuers posted a comfortably positive total return. However, given their higher carry together with spread compression, the peripheral countries outperformed. Greece's total return of around 30% was comparable with some of the leading performers on the stock market. Belgium was the only non-peripheral country to outperform the market as a whole, which primarily reflected its significantly higher duration than the other iBoxx country indices. The core markets all underperformed by a clear margin owing to their low carry (see left-hand chart below).

This exceptional performance is unlikely to continue in the same vein next year owing to the yield and spread levels the market has now reached. Nonetheless, the backdrop for eurozone sovereign bonds is not too unfavourable for the coming year either. We expect the economy to remain sluggish against the backdrop of a continuing trade war between the US and China, but believe the eurozone economy will escape recession. Inflation should remain muted and we therefore expect the ECB to keep its current monetary policy strategy unchanged.

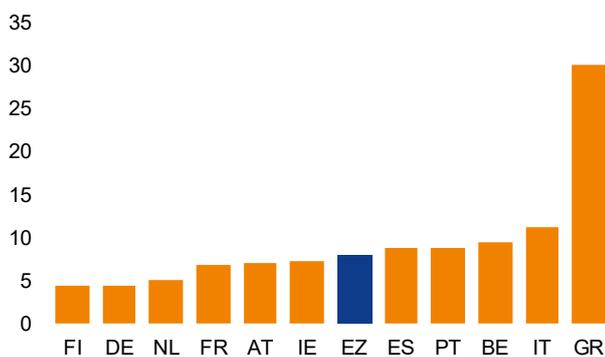
Since we also anticipate further rate cuts in the US and thus further declines in US Treasury yields, we expect yields on eurozone sovereign bonds to remain at a low level in the coming year and even decline slightly over the course of the year.

Long credit and duration were the most successful strategies in eurozone sovereign bonds in 2019

Even if not as outstanding as this year, the backdrop for 2020 is still reasonably good

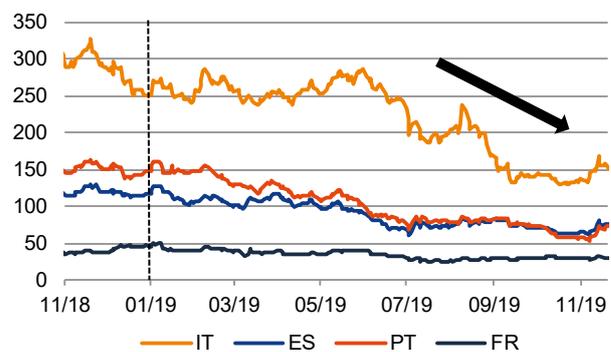
Yields on EMU sovereign bonds to remain low and even fall further

PERIPHERAL COUNTRIES WAY AHEAD IN 2019
IBOXX TOTAL RETURN (SINCE BEGINNING OF YEAR) IN PERCENT



Source: DZ BANK Research, Refinitiv

SIGNIFICANT SPREAD NARROWING AFTER CHANGE OF GOVERNMENT IN ITALY
10Y BUND SPREADS IN BASIS POINTS



Source: DZ BANK Research, Bloomberg

^{1) - 12)} Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

Given continued widespread negative rates in the core segment, the yield-driven market environment and investors' "hunt for yield" are likely to continue, particularly at the beginning of the year. We are therefore maintaining our long risk strategy and continue to rate the issuers with the highest carry, Greece and Italy, as Outperformers. As long duration positions within the core segment also look attractive (see charts below), we have upgraded Belgium to Marketperformer again, after having temporarily downgraded it against the backdrop of the recent upward correction in Bund yields. We also rate the semi-core countries of Ireland and France as Marketperformers. Meanwhile we expect the core countries, which now include Finland, to Underperformer on a six-month horizon.

Long risk and duration strategies attractive at the beginning of the year

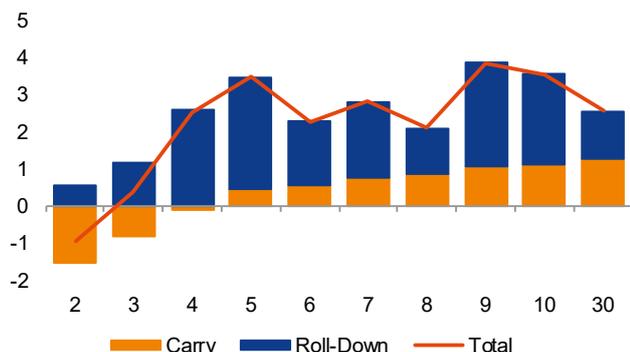
Spread risks for eurozone government bonds could increase again towards the middle of the year, driven by Italy. The three-party coalition in Rome is an inherently unstable construction. Although we do not expect the government to fall over the 2020 budget, given the deep-seated differences between the parties there is likely to be further conflict which could lead ultimately to a premature breakup of the alliance. We expect these conflicts to intensify over the course of the year and for the market to become increasingly sensitive to this as concerns about fresh elections and a victory by the League grow. However, even if the government remains in place there is a risk that Italy's credit standing will continue to decline on account of its rising debt levels (see right-hand chart on next page). The negative rating trend is therefore likely to continue. We thus expect BTP-Bund spreads to trade well above current levels at times during the course of the year. Given the low starting point for spreads, there could also be a contagion effect to the other peripheral countries, at least to some degree. Owing to Italy's high weighting in the iBoxx, spread widening in Italy would also probably lead to a slightly negative performance of spreads in the overall eurozone index. If this occurs, it would be an opportune time to take profits and move to a more defensive strategy.

Spread risks for eurozone sovereigns could increase again towards the middle of the year driven by Italy

Other familiar political risks should have less market impact. If the grand coalition between the centre-right and centre-left collapses in Germany and there are fresh elections, this would probably only briefly boost safe haven flows. The centre-right parties are currently ahead in the polls and if they won the elections to the Bundestag again, there would probably be little change in Germany's fiscal policy or European policy, irrespective of who succeeded Angela Merkel as chancellor. Only if the left-wing parties gained a majority in the Bundestag would Germany be likely to soften its opposition to greater mutualisation of financial risks and government debt.

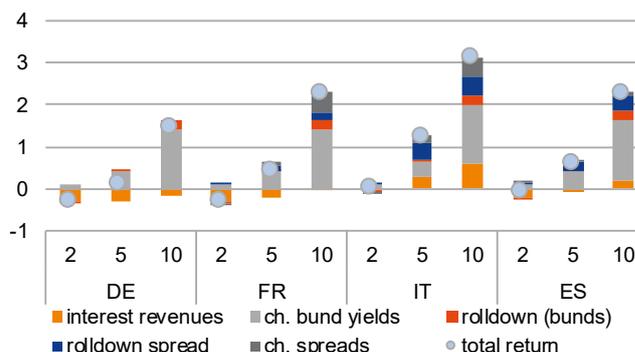
Collapse of the grand coalition in Germany should at most lead to short-term safe haven flows

LONG DURATION STRATEGIES REMAIN ATTRACTIVE
Y AXIS: 3M OAT ROLLDOWN AND CARRY IN BASIS POINTS
X AXIS: MATURITY IN YEARS



Source: DZ BANK Research, Bloomberg

POSITIVE TOTAL RETURN OUTLOOK ACROSS THE EUROZONE
6M TOTAL RETURN EXPECTATIONS IN PERCENT



Source: DZ BANK Research, Bloomberg

¹⁾ – ¹²⁾ Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

After the election victory of the Socialist Party in Spain and talks with Catalan separatists about a possible toleration of the government, the risk of a further escalation in the Catalan conflict has eased for now. However, if the spiral of political confrontation and violence ratchets up again, we would expect this to primarily affect SPGBs and to have no more than a marginal knock-on effect on the rest of the periphery.

If the Catalan conflict escalates, SPGBs would likely be hit

An upside surprise with a stronger-than-expected economic recovery and possible rise in inflation in the eurozone would not necessarily represent a risk to our current offensive strategy. In this case Bund yields would rise and the total return outlook of the eurozone countries as a whole would deteriorate. However, as a rise in Bund yields due to a stronger economy is usually associated with a decline in risk aversion and therefore spread narrowing, the periphery should still outperform on a relative basis.

A sharper-than-expected rise in yields due to an economic recovery should not undermine the offensive strategic orientation

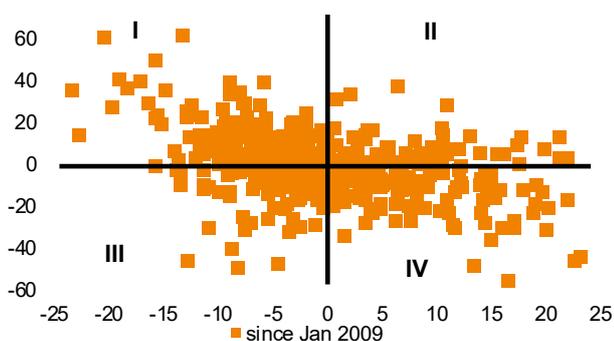
It would be a different story if risk aversion increased, for example due to an exogenous shock. If the trade talks between the US and China were to collapse completely, this could have a more severe adverse impact on the peripheral countries than has been seen so far. A leftward political shift in the US, for example as a result of the election of Elizabeth Warren as US president, could hit the stock markets and then European credits. However, political developments in Italy from here on will probably remain the greatest uncertainty for the spreads of EMU sovereign bonds.

Increasing risk aversion would harbour greater risks

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IF BUND YIELDS RISE UNEXPECTEDLY, THIS IS MORE LIKELY TO BE ASSOCIATED WITH SPREAD NARROWING

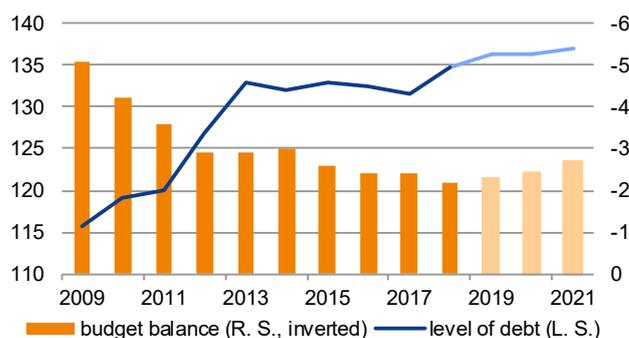
Y AXIS: 1W DELTA 10Y BTP-BUND SPREAD IN BASIS POINTS
X AXIS: 1W DELTA 10Y BUND YIELD IN BASIS POINTS



Source: DZ BANK Research, Bloomberg; Quadrant I lower bund yields & higher spreads; II higher yields & higher spreads; III lower yields & lower spreads; IV higher yields & lower spreads

ITALY'S BUDGET DEFICIT AND DEBT TO GDP RATIO RISING AND LIKELY TO HAVE A NEGATIVE IMPACT ON RATINGS

AS A PERCENT OF GDP (L.S. AND R.S.)



Source: DZ BANK Research, Bloomberg

¹⁾ – ¹²⁾ Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

Covered bonds

- » Reactivation of CBPP3 has sparked a wave of issuance
- » Outlook for 2020: new issuance volume of EUR 135 billion and swap spread at zero basis points

The ECB’s resumption of net asset purchases under its third covered bond purchase programme (CBPP3) on 30 October 2019 paved the way for a raft of new issues following several weeks in which there had been very little primary market activity. November to date has seen the issuance of 16 euro benchmark covered bonds worth a total volume of EUR 11.8 billion (as at 27 November). However, there are unlikely to be many more issues between now and the end of the year as the primary market tends to start winding down for Christmas from early December onwards. Demand for these new covered bonds has generally been good to very good, and take-up would have been sufficient even without the ECB’s order under CBPP3 running to 40% of planned issue volumes. That said, interest on the part of investors has waned again somewhat of late as some market participants may be more interested in safeguarding their gains than building substantial new holdings as the end of the year approaches.

Relaunch of CBPP3 has released issuance logjam

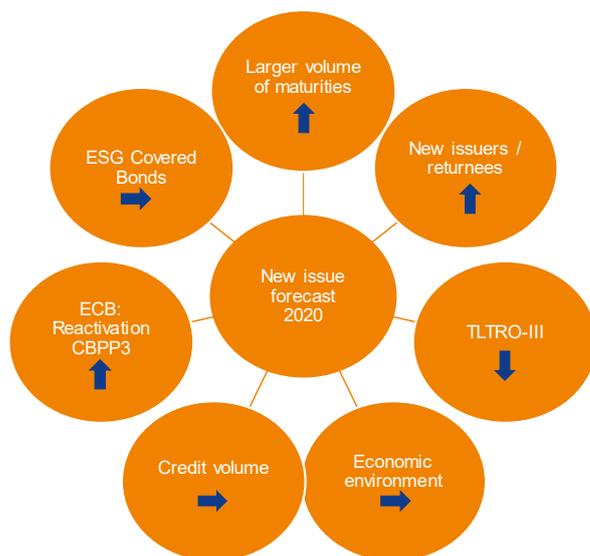
How will the covered bond market perform in 2020? We expect new issuance volumes for euro benchmark covered bonds to total EUR 135 billion and look for the swap spread of the iBoxx € Covered Index to fall to zero basis points next year. The forecast new issuance volume of EUR 135 billion should therefore ultimately come in slightly below this year’s level (2019 to date: EUR 137.6 billion). After deducting maturities of some EUR 118 billion, this would leave net new issuance of EUR 17 billion next year (2019 to date: EUR 34.0 billion). Our issuance forecast is based mainly on the factors shown in the chart at the bottom of the page.

Outlook for 2020: new issue volume worth EUR 135 billion and swap spread of zero

Alongside the funding requirements owing to the high level of covered bond maturities next year, we see other key factors that may lead to a rise in issue volumes in the shape of the CBPP3’s reactivation and the growing appeal of covered

On balance, we see positive factors in the ascendant

KEY FACTORS UNDERPINNING OUR NEW ISSUANCE FORECAST FOR 2020



Source: DZ BANK Research; blue arrow indicates the expected impact of the factor on new issuance volumes next year

^{1) - 12)} Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

bonds as a funding option for banks. Conversely, there are other factors that could spark a fall in new issuance activity, such as the alternative funding option available to banks via TLTRO III as well as the sluggish state of economic growth, which could in turn prompt weaker credit growth. Nevertheless, all in all we take the view that the positive factors outweigh the negatives. As a result, 2020 should ultimately see the covered bond market come close to matching the high issue volumes posted both this year and last.

The growing importance of ESG covered bonds is also worthy of note. Even though these bonds account for a relatively small proportion of total new euro benchmark covered bond issuance volumes, given the ever-increasing awareness of sustainability in politics and society and the resulting demand from investors we expect to see further growth in ESG covered bonds as a share of overall benchmark volumes. However, we do not view this as a growth factor for the market as a whole. Instead we believe that ESG creates an additional marketing opportunity for issuers. For further information on our primary market forecast, please refer to our report entitled “New issue volume remains strong in 2020” of 5 November 2019.

Growing significance of ESG covered bonds

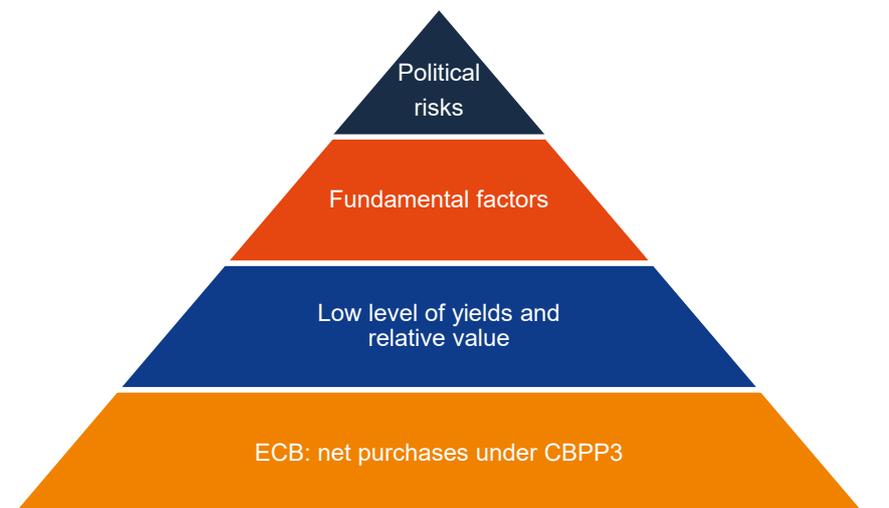
Turning to the secondary market, we expect covered bond spreads to narrow appreciably in 2020. From our perspective, the four key factors that we expect to influence swap spreads over the coming year are as follows: (1) net purchases under CBPP3, (2) low level of yields and relative value, (3) fundamental factors and (4) political risks (see chart below). The recent resumption of CBPP3 will entail a marked increase in the ECB’s role on the covered bond market, and we foresee average purchases of at least EUR 4.5 billion per month over the year ahead. In our view this strong central bank influence is the key factor pointing to compression in covered bond swap spreads next year.

Strong ECB presence should spark spread narrowing

The low level of rates including negative new issue yields has already sparked a drift of covered bond investors away to other asset classes in recent months. In the view of our interest rate strategists, the generally low level of yields is set to be maintained over the coming year as well. However, together with growing ECB demand this may consolidate the shift on the part of investors away from covered bonds and subdue the anticipated spread tightening on the covered bond market triggered by the ECB.

Low level of yields may put the brakes on spread narrowing

KEY INFLUENCES ON COVERED BOND SWAP SPREADS IN 2020

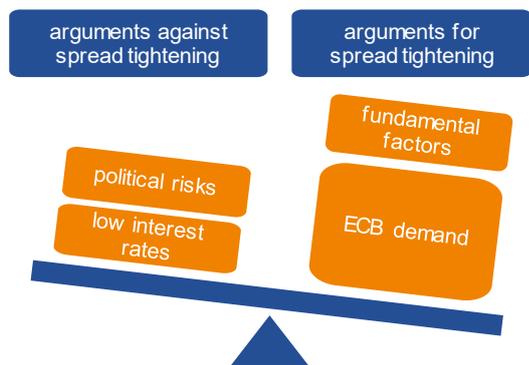


Source: DZ BANK Research

Given the anticipated effect of the four factors already mentioned, we expect the swap spread of the iBoxx € Covered Index to fall from its current level of 8 basis points to zero over the next six months (up to May 2020) and to trade around this level until the end of next year (see right-hand chart below). The relaunch of net purchases under CBPP3 for what is likely to be more than two years, in tandem with a systematic rise in reinvestments of maturing bonds as time goes on, will lead to sustained strong demand for covered bonds from the ECB. In our view, this is the key argument in support of our forecast of spread narrowing. Although fundamental factors are unlikely to add fuel to this compression trend, they should at least support it. The continued low level of yields is likely to prevent an even more pronounced fall in spreads. Against the backdrop of the anticipated spread tightening, we are sticking with our offensive country weighting recommendation and continue to favour covered bonds from nations that are still offering relatively high spreads. At present, these countries include Australia, Austria, Belgium, Canada, Denmark, France, Italy, New Zealand, Portugal, Singapore and Spain. Conversely, we recommend underweighting relatively expensive country segments such as Germany and most of the Nordics. With the Brexit issue still unresolved, we continue to recommend underweighting UK covered bonds. For further details of our secondary market forecast, please see our report “Will the ECB send swap spreads to zero in 2020?” of 8 November 2019.

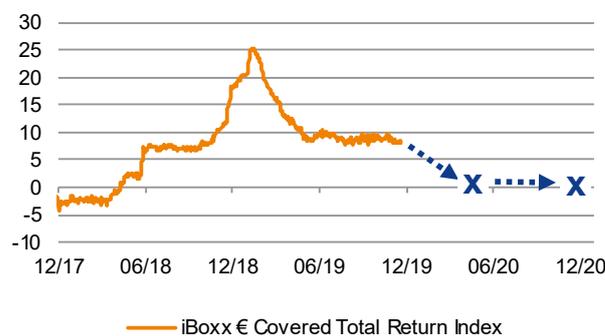
Offensive country weighting recommendations remain in place due to the anticipated spread compression

ECB DEMAND KEY ARGUMENT IN FAVOUR OF SPREAD NARROWING



Source: DZ BANK Research

WE EXPECT COVERED BOND SPREADS TO TIGHTEN
SWAP SPREAD IN BASIS POINTS



Source: Markit, blue = DZ BANK Research forecast

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¹⁾ – ¹²⁾ Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

Financials

» Bank spreads heading sideways on a one-year view; ECB purchase programmes will prevent spreads from moving out

» We remain offensively positioned and favour bank bonds with a higher carry

Based on the forecasts of our colleagues, growth in the euro area economy is set to stabilise at a muted level, while the prospect of a marked recovery is not on the horizon. Obviously, this partly depends on how the trade disputes ultimately play out between the US and China – and potentially also between the US and the EU. If the trade tensions escalate to a degree not envisaged in our forecasts, the growth outlook could become even gloomier. For banks operating in the eurozone, this means that earnings will continue to be dented by the low-interest environment, although the new deposit tiering should provide slight relief despite the renewed rate cut. Meanwhile, credit growth is likely to remain in the region of 4%. Banks' earnings are set to come under added pressure from the normalisation of loan loss provisions, which thanks to low interest rates have shrunk to historically low levels in some countries in spite of subdued economic growth. While we expect the average NPL ratio in the EU to continue falling at a modest pace thanks to further portfolio disposals, securitisations and writedowns – especially in Italy – the days of releasing provisions, which some banks in the core European countries were still able to do until recently, are probably over. All in all, earnings in the banking sector are generally expected to be a little lower than in 2019. In terms of capital ratios, we assume that leverage ratios will drift sideways in the main, while risk-weighted ratios will tend to drop due to a rise in risk-weighted assets in response to the ECB's targeted review of internal models (TRIM).

On the primary market front the new TLTRO III, which has become more attractive since it was first announced due to its extended term of three years and improved conditions, and the muted lending growth as the economic outlook worsens should put downward pressure on funding requirements. On the other hand, the volume of senior bonds maturing in 2020 will be around EUR 15 billion more than in 2019, which suggests a higher refinancing requirement. We also expect the demand side to provide some stimulus to the primary market. The unattractive yields in other bond classes and increased competition for bonds from the ECB should be indirectly supportive of the demand for unsecured bank bonds. While we do not think that this will spark a sharp surge in issuance volumes, it should alleviate the pressure from primary market activity on the spreads of outstanding bonds. We see supply-side factors as the dominant driver of issuance in 2020, which we expect to be stable at a level of some EUR 290 billion. Owing to the higher volume of maturing bonds next year, we therefore estimate a net issuance volume of EUR 30 billion, which amounts to a decline of EUR 15 billion from this year's level. The proportion of SNP issues is set to increase, with SNP material from Italy accounting for a higher share of issued senior paper in addition to the offerings from Nordic banks. Meeting the MREL criteria should increasingly become a priority for issuers from these countries as their funding requirements tend to be lower. We project that SNPs will represent around 45% of the total issuance volume for senior European bank bonds in 2020, up from 38% in 2019.

While the spread of the iBoxx Banks Senior ended last year in the region of its peak levels as market players fretted about possible recessions in the US and the eurozone, not to mention a disorderly Brexit, there has been a noticeable tightening trend this year. After trading at around 93 basis points at the end of 2018, the asset swap spread of the iBoxx Banks Senior marked its annual low of 51 bp in late July.

Challenging year ahead on the fundamental front, with earnings likely to dip

Stable issuance volume in 2020 – share of SNP material should rise

Little scope for spread compression, but ECB purchase programmes should put the brakes on any widening

Since then, the spread has edged up to just over 60 basis points. Barring any further escalation of the trade tensions, we assume that the ECB’s bond buying programmes will have a stabilising effect and prevent spreads from moving out too sharply. At the same time, as we do not see any compelling reasons for spreads to narrow given the fundamental challenges facing banks, we expect the asset swap spread of the iBoxx Banks Senior to hover close to current levels at 60 basis points by the end of 2020.

Given our forecast of spreads moving sideways on a one-year horizon, a carry strategy still seems an appropriate option, with preference given to generally weaker credits. However, it is vital to keep a close watch on any relevant newsflow. While we are continuing to rate Italian bank bonds as outperformers, for example, any signs that the ruling coalition in Rome is in danger of collapsing are likely to trigger a prolonged period of spread widening and would lead us to adjust our investment recommendation accordingly. It is also difficult to provide a reliable assessment of British and Irish bank bonds. We expect a clear win for the Conservatives under Boris Johnson’s leadership in the upcoming election, which should pave the way for the UK leaving the EU at the end of January 2020. Although this will be positively received by the financial markets, it will leave the UK just under a year to hammer out a trade deal with the EU. As this is clearly not enough time and Johnson has categorically ruled out an extension of the transition period beyond late 2020 so far, fears that the UK will be heading for a hard Brexit on 1 January 2021 are likely to resurface. While we assume that the prime minister will ultimately give in and request an extension to the transition period from the EU, British and Irish bank bonds may feel the strain after seeing their Brexit risk premia subside in recent months. As a result, we still expect these bonds to underperform on a six-month view. Otherwise, as spreads generally trend sideways, we see the bonds of banks with strong credit ratings underperforming, including paper from Nordic, Dutch and Belgian institutions.

Offensive positioning still advisable

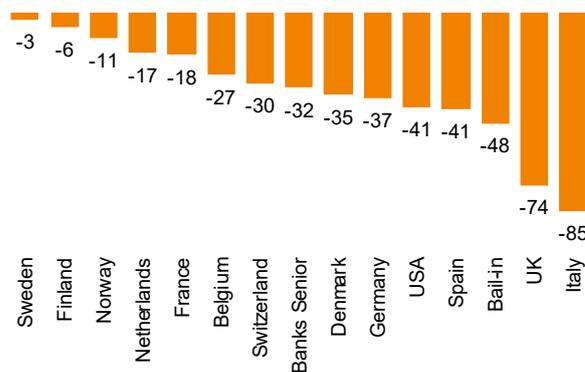
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SHARP SPREAD NARROWING IN THE YEAR TO DATE
ASSET SWAP SPREADS IN BASIS POINTS



Source: Markit, DZ BANK Research

ITALIAN AND BRITISH BONDS HAVE BEEN THE MAIN WINNERS
SPREAD MOVEMENTS IN THE YEAR TO DATE, IN BASIS POINTS



Source: Markit, DZ BANK Research

^{1) - 12)} Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

Corporates

- » Potential for spreads to narrow in the short term, as the positives are not sufficiently priced in at current levels
- » On a one-year view we expect spreads to be almost unchanged from current levels, as the ECB effect is likely to fade in the course of the year
- » Due to the downside economic risks we are retaining our negative view on cyclical sectors (automotive and chemicals)

There have been two major trends on the iBoxx € Non-Financial Senior, the benchmark index for corporate bonds, this year. Starting from a high for the year of 99 basis points set in the second week of January, spreads initially fell rapidly. After a 40-basis point rally, the index briefly dipped below the 60 basis point level at the beginning of May. The European and US central banks were mainly responsible for this move, as they responded to negative economic signals at the beginning of the year with easier monetary policy. Thereafter the benchmark index shifted into a broad sideways trend demarcated by lower limit of 60 basis points and an upper limit of 80 basis points (see left-hand chart). Against the backdrop of a catalogue of geopolitical risks, even the resumption of the ECB asset purchase programme later in the year, while it did lead to a fall in spreads, did not push spreads below 60 basis points on a sustained basis. In recent weeks doubts about an imminent deal in the trade war, or even a "phase one" deal, have gained the upper hand over the positive impact of the ECB's bond purchases, which have so far been higher than expected (see details below). This has caused spreads to drift out slightly to their current level of around 71 basis points. In spite of the slightly weaker trend recently and the volatility since May, 2019 has so far been a good year for corporate investors overall.

In spite of considerable volatility in spreads, 2019 has been a good year for corporate bond investors overall

While the US tax reform led US issuers to be less active on the eurobond market last year than in 2017 (EUR 37 billion of issuance in 2018 versus EUR 70 billion in 2017), US-based corporates have increased their issuance of eurobonds again this year (2019 YTD: EUR 420 billion). This is one of the main factors that has put new issuance back on its long-term growth trajectory. By the end of November, new issuance had already reached EUR 420 billion (full year 2018: EUR 319 billion), which represents a new all-time high (see right-hand chart).

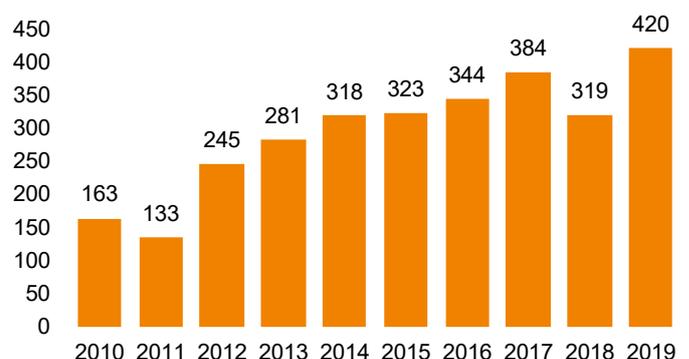
New issuance back on its long-term growth path

SPREAD NARROWING TREND AT THE BEGINNING OF THE YEAR FOLLOWED BY A BROAD SIDWAYS TREND
SWAP SPREAD (MID) IN BASIS POINTS



Source: DZ BANK Research, data from Dealogic, data as at 25 November 2019

AFTER A FALL LAST YEAR, NEW ISSUANCE REACHED A NEW HIGH IN 2019
NEW ISSUANCE IN EUR BILLION



Source: DZ BANK Research, own calculations, data from Dealogic, data as at 22 November 2019

In terms of the sector ranking, automotives have again led the way with issuance of EUR 59 billion, just ahead of their fellow large-scale issuers in the telecom sector with EUR 55 billion. The healthcare sector was a little way behind in third place, with bonds to the value of EUR 45 billion issued.

Primary market: automotive with the highest volumes ahead of telcos and healthcare

Looking ahead, it is worth noting on the economic backdrop that the emerging countries should see faster growth overall in 2020. However, this will be offset by slower growth in the US, China and the eurozone. While the strong labour market means that consumer spending is supporting economic growth on both sides of the Atlantic, business confidence in manufacturing industry remains weak as a result of the trade tensions and swing to protectionism. The generally sluggish economic growth we have seen this year should therefore continue in 2020, with some further weakening in the core markets. Even if the overall backdrop therefore remains somewhat constructive, growth looks fragile and the downside risks are elevated. All of this suggests that, on a stand-alone basis, the economic backdrop might be expected to have a slightly negative impact on the performance of corporate bonds in 2020.

Economy: fragile world economy and further weakening in the core markets

In terms of corporate debt sustainability, the trend has generally been robust over the past year. Looking ahead, the consensus forecasts paint a positive picture for aggregate earnings performance. Assuming debt levels remain constant, this continued positive earnings momentum should increase flexibility on future debt sustainability. If we assume that net debt continues to grow at its average rate of the last five years, this still leads to a slight reduction in net debt/EBITDA ratios in coming years when combined with the consensus earnings forecasts for European corporates. For US corporates, however, earnings growth would be more than offset by the increased borrowing, leading to a further rise in leverage. Unsurprisingly, debt sustainability would deteriorate markedly if earnings momentum slowed and the borrowing trend of recent years continued in both Europe and the US. The probability of the latter scenario should not be underestimated given the uncertain economic backdrop we have discussed. However, in this case we would expect companies to take corrective action to improve their financial positions. Against this backdrop we can say that in both Europe and the US we are in a period of "positive stagnation" within the expansion phase of the classic credit cycle, although the increased susceptibility to growth and earnings disappointments needs to be borne in mind. However, we believe it would be premature to infer a negative impact on corporate bond spreads from this.

Debt sustainability robust, looking ahead the earnings trend and financial policies will be key

Still in growth phase of the cycle

The European Central Bank has been buying corporate bonds since November as part of the revived asset purchase program (APP), which includes the corporate sector purchase programme (CSPP). Looking back to 2018, the CSPP accounted for an average of 15.2% of all APP purchases. With monthly APP purchases of EUR 20 billion, we would therefore expect the ECB to buy up to a net EUR 3 billion of corporate bonds per month if the programme was largely unchanged. In the first three full weeks of the programme, however, the central bank bought a surprisingly large amount of corporate bonds. The average currently stands at just under 22% of the overall APP purchases. A high level of maturities in the CSPP portfolio, an above-average number of issues on the primary market and frontloading of purchases ahead of the pause in ECB bond-buying over the Christmas period (19 December to 31 December) may have led volumes to be temporarily distorted upwards. Nonetheless, we believe that the central bank was probably aware of the signalling effect of its high initial purchases under "CSPP 2.0", and therefore of its impact on market expectations. Moreover, the order books for recent new issues point to very active subscription and allocation volumes for the CSPP. Together with

Monetary policy: ECB pressing the monetary gas pedal harder than initially expected

reinvestments of maturing bonds averaging EUR 1.2 billion per month we therefore now expect slightly higher CSPP purchases of around EUR 5 billion monthly. We believe the ECB's bond-buying represents a marked support for spreads. As the global economic picture suggests that a normalisation of monetary policy is unlikely in the near term, we expect both the purchases and the positive impact on spreads to continue in the early part of next year, although the market impact is likely to fade a little as the year goes on.

ECB programme to have a temporary supportive impact on bond spreads

The increase in new issuance on the primary market in 2019 is unlikely to be repeated in 2020 in our view. A significant proportion of the growth this year was due to a catch-up effect on the part of US issuers owing to the US tax reform and the current favourable funding conditions via cross-currency swaps. We expect this catch-up effect to fade next year and the relative funding benefits to reduce due to cuts in US federal funds interest rates and a substantial fall in US Treasury yields. Furthermore, the growth slowdown in key regions and uncertainty about the outlook for the many geopolitical hotspots is likely to lead to investment restraint, which may lead to reduced funding via bonds. Overall we expect issuance slightly below this year's record levels in 2020, which should at most have a marginally positive effect on the spreads of corporate bonds.

We expect issuance volumes slightly below this year's level in 2020

At best slightly positive effect on spreads from lower issuance

Comparing the factors expected to influence the spreads of euro-denominated corporate bonds, the positives slightly outweigh the negatives in the short to medium term due to the initially supportive impact of monetary policy. Looking ahead one year, the positive and negative factors are largely in balance. In line with this assessment, we see corporate bond spreads falling slightly on a three- and six-month view. On a one-year view, on the other hand, we expect spreads to be almost unchanged from current levels. Against this backdrop we are forecasting a fall in the spread on the benchmark iBoxx € Non-Financial Senior index from the current level of 71 basis points to 60 basis points on a three- and six-month horizon. On a 12-month horizon, looking to the end of 2020, we expect the index to rise again to 70 basis points and so roughly to the current spread level.

The positives slightly outweigh the negatives for now

Longer-term picture already largely priced in

In spite of the recent rise in spreads, which has been caused by renewed uncertainty about the hopes that a deal, or at least a phase one deal, would be struck in the trade dispute, we recommend retaining the defensive portfolio stance we have been recommending for some time. Our unchanged sector weighting, where we are overweight in less cyclical sectors, reflects this.

Continue to favour less cyclical sectors

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SECTOR RECOMMENDATIONS SUMMARY

Sector	Comments
» Automotive (⬇)	<ul style="list-style-type: none"> » The global sales picture has darkened, with the outlook for the Chinese market from here a major uncertainty for global automotive demand » Risk of punitive US tariffs on EU imports could dampen sentiment towards the sector » High capital spending requirements on new technologies with simultaneous uncertainty about market viability of electric vehicles
» Chemicals & agrochemicals (⬇)	<ul style="list-style-type: none"> » No turnaround in the chemicals business yet. It is not an easy situation at present according to the trade association, as the main customers in German and European industry are facing major challenges » A trend towards specialisation points to further M&A activity, but so far this has only led to rating pressure for individual issuers » The predominant risks for companies in the chemicals sector lie in weaker global economic growth and structural changes in international trade prompted by US trade disputes and the UK's departure from the EU
» Retail (➡)	<ul style="list-style-type: none"> » Continued intense competition from established players, online competitors and discounters. Along with ongoing low inflation there is therefore little scope for raising prices » Fast-changing shopping preferences of customers (hypermarkets are "out", organic, convenience stores and delivery services "in"). The resultant need to adapt and invest heavily is reducing the scope to improve margins » The retail subindex features relatively high spreads, but the proportion of bonds rated BBB or even BBB- is also high
» Food & beverages (⬆)	<ul style="list-style-type: none"> » Growing nutritional awareness (trend towards health & wellness/organic products) a challenge for the sector » Price/mix effects (premiumisation) driving organic growth; profitability well supported, particularly by increases in efficiency and cost cutting » M&A risks still exist, but many index heavyweights in the iBoxx Food & Beverage have already been active
» Oil & gas (➡)	<ul style="list-style-type: none"> » Respectable crude oil prices should enable oil and gas companies to continue generating robust cash flows in 2020 » Oil & gas groups are increasingly opting for shareholder-friendly measures, although these should not put too much pressure on their balance sheets » Palpable risks to the oil price (rising US production, slowdown in demand due to factors such as the trade dispute) could weigh on spreads of oil credits, but OPEC seems to be taking its corrective role seriously
» Pharma & healthcare (➡)	<ul style="list-style-type: none"> » Following large-scale M&A activity, especially in medtech, credit ratings are only slightly above average and spread levels only moderately below the iBoxx; the sector will probably also benefit less than others from a reactivation of the CSPP due to the high proportion of non-European issuers » Demand for healthcare is largely impervious to cyclical variations and remains on a steady long-term growth trend. Predominantly high profitability and strong and stable free cash flows ensure solid liquidity positions » Patent expiries, heightened pressure on prices and the US tax reform have recently led to a flurry of M&A activity. Oncology and gene therapy are preferred segments, while animal and consumer health and generics/LOE (drugs with expired patents) are being divested. The takeovers, some of which have been on a large scale, have already caused ratings to deteriorate
» Telecoms (➡)	<ul style="list-style-type: none"> » High investment levels due to booming demand for faster data services as well as 5G spectrum purchases and network investments. Debt levels are already relatively high; scepticism about the extent to which the investments, especially in 5G, will actually pay off » Growth prospects are being dampened by fierce competition and weaker GDP growth in Europe » Telecom bonds should benefit from the new asset purchase programme (CSPP), as they did from the previous one
» Utilities (⬆)	<ul style="list-style-type: none"> » Significant recovery in wholesale electricity prices almost throughout Europe in recent months » Utilities focused on electricity generation (which increasingly means renewable energy) should keep reporting solid growth rates » Utilities bonds set to benefit disproportionately from the relaunch of the APP/CSPP, as the iBoxx utilities subindex contains a relatively high proportion of ECB-eligible bonds

Source: DZ BANK Research

The **sector recommendation** indicates whether a sector is seen as outperforming, underperforming or performing in line with the other sectors over the next three months. Our recommendation is "positive" (⬆) if we expect a sector to outperform and "negative" (⬇) if we expect it to underperform. If we do not foresee performance differing significantly from the other sectors, we put a "neutral" (➡) recommendation on the sector.

Asset Backed Securities

- » Primary market issuance up slightly, but marketing ratio heading downwards
- » Preferred investments in 2020: consumer ABS, AAA senior tranches of European CLOs and selective CMBS with a maximum WAL of 5 years

October was a strong month for issuance, with the volume on the European ABS primary market running to some EUR 27 billion. As a result, the aggregate volume for the year to date has climbed to EUR 167.1 billion, but remains 13% down on the prior-year level. We do not expect last year's total of EUR 258 billion to be matched by the end of 2019 as we look for a full-year volume of EUR 230 billion, which amounts to a year-on-year decline of some 10%. As far as 2020 is concerned, we see the overall issuance volume remaining on a par with or moderately surpassing this year's level in a range of EUR 230 to 260 billion. We expect this modest growth to stem from increased issues of green/ESG material, UK securitisations and auto ABS. Another crucial driver of this trend is likely to be a rise in issuance of transactions retained as collateral under TLTRO III. Although this will bolster the overall issuance volume, the placement ratio looks set to fall significantly. We expect a marketing ratio of 50% to 55% in 2020, compared to 60% at end-October 2019.

Spreads have narrowed substantially across all asset classes this year so far, except in the UK NC RMBS and CMBS segments. From the beginning of 2019 to mid-November, spread tightening averaged 15 basis points, or 30.7%. In absolute terms, this trend was most pronounced for consumer ABS (-31 bp), Dutch RMBS (-26.5 bp) and lease ABS (-26 bp). From a relative perspective, Dutch RMBS benefited most at -70.7%, followed by auto ABS at -69.2% and lease ABS at -68%. The majority of spread narrowing occurred in the first half of the year. The ECB's announcement in September that it was reactivating the ABS purchase programme (ABSPP) sparked some further tightening, particularly in the spreads of Dutch RMBS, auto ABS, lease and consumer ABS.

While spreads are now appreciably tighter than they were at the beginning of this year, we expect them to continue narrowing until mid-2020 before moving out modestly in the second half of the year, albeit not beyond the prior-year level. Our house view at DZ BANK is that the ECB will not step up its asset buying programme and we therefore see the APP continuing at a monthly purchase volume of EUR 20 billion throughout next year. Initially, we expect the ABS purchase programme to be one of the core drivers of spread movements on both the primary and secondary markets. As the general backdrop has changed since the ABSPP was launched in 2014, we assume that spreads in the asset classes eligible for purchase will drift towards their early 2018 lows and may even fall below these levels by the middle of next year. For auto ABS and Dutch RMBS, which feature most prominently in the ABSPP portfolio to date, this suggests further narrowing potential of more than four and five basis points respectively. While this is only a marginal degree of spread compression in absolute terms, it equates to a relative decline of at least 40% for auto ABS and 46% for Dutch RMBS from current levels. We also expect spreads for lease ABS to narrow by more than six basis points. However, spread compression is likely to be even more pronounced for consumer ABS in 2020. Spreads in this segment widened fairly significantly in 2018 and are now further away from their lows than other ABSPP-eligible asset classes, which makes consumer ABS one of our preferred investments in the ABSPP sphere. Moreover, we cannot rule out further spread narrowing for Spanish and Italian RMBS. At the same time, spread movements in these sectors will be more vulnerable to political imponderables which, if they escalate, could even outweigh the ABSPP effect.

Volume of new ABS issues forecast at EUR 230-260 billion in 2020

Average spread compression of 15 bp across all asset classes in the year to date

Spread narrowing likely to continue until mid-2020

Besides the direct spread implications of the ABSPP due to increased demand for the eligible asset classes, we also expect spill-over effects of the programme to have an indirect impact on spreads. In this regard, we are thinking of investors who make the move from other bond segments to the realm of securitisations in a bid to avoid negative interest rates given the coupon floor that ABS usually offer, which makes this segment more appealing than other asset classes. As we assume that new investors in ABS are generally more risk-averse, we see AAA tranches of RMBS from core European countries and auto ABS benefiting from this trend. However, in our view AAA senior tranches of European CLOs are more attractive due to the higher spreads on offer, which makes them one of our preferred investments for 2020. The spread compression in ABSPP-eligible asset classes is also likely to trigger a renewed flight to higher-yielding segments, including asset classes that do not qualify for the programme. After the ABSPP was originally launched in November 2014, CLOs and UK prime RMBS in particular benefited from spill-over effects a year later. While CLOs will continue to be bolstered by these effects, we assume that CMBS will outpace CLOs in terms of spread compression as their spread levels are considerably more attractive and CLO spreads have already tightened substantially since the programme resumed. We expect CMBS from continental Europe to be one of the main beneficiaries of the measures taken by the ECB in September 2019, as the effects will endure for many years to come. Continental European CMBS – except those with German collateral – are therefore also one of our favoured investments for next year. As the spreads of Dutch RMBS narrowed on the back of the ABSPP in 2015, some investors switched to higher-yielding UK prime RMBS, although this was before the Brexit referendum. Whether we will see any similar reactions next year should largely depend on what form Brexit ultimately takes and how talks between the EU and the UK on their future relationship unfold as the year progresses.

Direct and indirect spread implications of the ABSPP

According to our house view at DZ BANK, we expect the Brexit process to be resolved in an orderly fashion, which as things stand will be followed by a very brief transition period until the end of 2020. British ABS spreads are likely to remain steady for the time being. However, in the wake of a soft Brexit they look set to narrow in response to portfolio adjustments by institutional investors who initially remained underweight in UK securitisations as they were expecting a hard Brexit. Uncertainty will probably resurface as the negotiations on future relations between the UK and the EU progress, pushing the spreads of British securitisations to wider levels. Besides Brexit, we also see heightened volatility stemming from other headline risks and the diminishing novelty effect of the APP. In light of these factors, we project a modest rise in spreads during the second half-year.

Slight uptick in spreads in the second half of the year

With regard to banks, only STS (simple, transparent and standardised) securitisations in accordance with the EU Securitisation Regulation will be eligible as LCR assets as of 1 May 2020. Due to the funding advantages of STS securitisations, which need to be backed with lower levels of capital, we therefore expect to see greater differentiation between lower STS spreads and higher non-STS spreads in 2020.

Greater spread differentiation between STS and non-STS spreads from 2020 onwards

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ECONOMIC FORECASTS

EUROZONE

	2018	2019	2020	2021
GDP	1.9	1.2	0.9	1.2
Private consumption	1.4	1.2	1.1	1.2
Government consumption	1.1	1.5	1.6	1.5
Investment	2.4	7.1	3.1	2.0
Export	3.3	2.6	1.5	1.9
Import	2.7	4.7	3.1	2.3
Other Indicators				
Inflation	1.8	1.2	1.3	1.3
Unemployment rate	8.2	7.6	7.4	7.4
Balance of current account (in % of GDP)	3.8	3.4	3.3	3.3
Budget balance (in % of GDP)	-0.5	-1.0	-1.0	-1.1
Individual country GDP				
Germany	1.5	0.6	1.0	1.1
France	1.7	1.2	1.0	1.3
Italy	0.7	0.2	0.3	0.7
Netherlands	2.6	1.7	1.2	1.4
Spain	2.4	2.1	1.7	1.5
Inflation rate individual countries (HICP)				
Germany	1.9	1.3	1.4	1.4
France	2.1	1.2	1.3	1.3
Italy	1.3	0.6	0.8	1.2
Netherlands	1.6	2.7	1.5	1.5
Spain	1.7	0.8	1.0	1.2

	2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
GDP												
Y/Y (in %)	1.3	1.2	1.2	1.1	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.3
Q/Q annualized (in %)	1.7	0.8	0.9	0.9	0.9	1.0	1.1	1.2	1.2	1.2	1.4	1.5
Inflation	1.4	1.4	1.0	1.0	1.3	1.1	1.3	1.4	1.4	1.2	1.3	1.4

UNITED STATES

	2018	2019	2020	2021								
GDP	2.9	2.3	1.9	1.8								
Inflation	2.4	1.8	2.0	2.0								
Quarterly breakdown												
	2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
GDP												
Y/Y (in %)	2.7	2.3	2.0	2.3	1.9	2.0	2.0	1.9	1.8	1.8	1.7	1.8
Q/Q annualized (in %)	3.1	2.0	1.9	2.0	1.7	2.3	2.1	1.5	1.5	2.0	2.0	1.7
Inflation	1.6	1.8	1.8	2.1	2.2	1.7	2.1	2.0	2.0	2.0	2.0	2.0

Source: DZ BANK

DZ BANK FORECASTS

BUND YIELDS

	Current	+3 months	+ 6 months	+12 months	31.12.2020
refi rate	0.00	0.00	0.00	0.00	0.00
prior value		0.00	0.00	0.00	0.00
deposit rate	-0.50	-0.50	-0.50	-0.50	-0.50
prior value		-0.50	-0.50	-0.50	-0.50
1 year	-0.63	-0.64	-0.64	-0.58	-0.58
2 years	-0.63	-0.65	-0.70	-0.60	-0.60
3 years	-0.66	-0.64	-0.70	-0.60	-0.60
4 years	-0.65	-0.61	-0.68	-0.59	-0.59
5 years	-0.59	-0.60	-0.67	-0.59	-0.59
6 years	-0.58	-0.58	-0.66	-0.58	-0.58
7 years	-0.54	-0.52	-0.64	-0.57	-0.57
8 years	-0.51	-0.44	-0.60	-0.55	-0.55
9 years	-0.45	-0.36	-0.55	-0.53	-0.53
10 years	-0.37	-0.30	-0.50	-0.50	-0.50
prior value		-0.50	-0.50	-0.50	-0.50
15 years	-0.23	-0.12	-0.36	-0.36	-0.36
30 years	0.14	0.25	0.00	0.00	0.00

UNITED STATES

upper Fed rate	1.75	1.75	1.50	1.50	1.25
prior value		2.00	1.75	1.50	1.25
lower Fed rate	1.50	1.50	1.25	1.25	1.00
prior value		1.75	1.50	1.25	1.00
3-Monats-Libor	1.92	1.85	1.60	1.55	1.30
10 Jahre Treasuries	1.75	1.70	1.40	1.20	1.20
prior value		1.50	1.40	1.20	1.20

Source: DZ BANK Research; Bloomberg

SWAPS

	Current	+3 months	+ 6 months	+12 months	31.12.2020
1 month Euribor	-0.45	-0.47	-0.47	-0.47	-0.47
3 month Euribor	-0.40	-0.45	-0.45	-0.45	-0.45
6 month Euribor	-0.34	-0.35	-0.35	-0.35	-0.35
12 month Euribor	-0.28	-0.30	-0.30	-0.30	-0.30
1 year	-0.35	-0.35	-0.37	-0.24	-0.24
2 years	-0.35	-0.30	-0.32	-0.22	-0.22
3 years	-0.32	-0.27	-0.28	-0.18	-0.18
4 years	-0.28	-0.24	-0.26	-0.17	-0.17
5 years	-0.24	-0.20	-0.22	-0.14	-0.14
6 years	-0.19	-0.13	-0.18	-0.11	-0.11
7 years	-0.14	-0.06	-0.15	-0.09	-0.09
8 years	-0.08	0.01	-0.12	-0.07	-0.07
9 years	-0.02	0.08	-0.07	-0.04	-0.04
10 years	0.04	0.15	0.00	0.00	0.00
prior value		-0.05	0.00	0.00	0.00
15 years	0.29	0.40	0.21	0.21	0.21
30 years	0.46	0.55	0.30	0.30	0.30

Source: DZ BANK Research. Bloomberg

I. IMPRINT

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II. MANDATORY DISCLOSURES FOR FINANCIAL ANALYSES AND FURTHER REMARKS

1. Responsible Company

1.1 This **Financial Analysis** has been prepared by **DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main (DZ BANK)** as an investment firm.

Financial analyses are **independent client information** containing **generic investment recommendations** regarding **specific issuers** or **specific financial instruments**, but they do not make allowance for any individual investment criteria.

1.2 The **mandatory disclosures** for **Research Publications** (Financial Analyses and Other Research Information) as well as **further remarks**, especially the **Conflicts of Interest Policy** of **DZ BANK Research**, regarding **used methods**, **procedures**, and **statistics**, can be **read** and **downloaded free-of-charge** under www.dzbank.com/disclosures.

2. Competent Supervisory Authorities

DZ BANK is supervised as a credit institution and as an investment firm by:

– **European Central Bank** - www.ecb.europa.eu

Sonnemannstraße 20 in 60314 Frankfurt / Main and

– **Federal Financial Supervisory Authority (BaFin)** - www.bafin.de

Marie-Curie-Straße 24 - 28 in 60439 Frankfurt / Main

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– **Federal Financial Supervisory Authority (BaFin)** - www.bafin.de

Marie-Curie-Straße 24 - 28 in 60439 Frankfurt / Main

3. Independent Analysts

3.1 The **Research Publications** (Financial Analyses and Other Research Information) of DZ BANK are independently prepared by its employed analysts or by competent analysts commissioned in a given case on the basis of the binding **Conflicts of Interest Policy**.

3.2 Each analyst involved in the preparation of the contents of this Research Publication confirms that

- this Research Publication represents his independent specialist evaluation of the analysed object in compliance with the Conflicts of Interest Policy of DZ BANK and
- his compensation depends neither in full nor in part, neither directly nor indirectly, on an opinion expressed in this Research Publication.

4. Definitions of the Categories for Investment Recommendations in Financial Analyses

The **categories for investment recommendations in Financial Analyses** of DZ BANK are defined as follows:

4.1 Shares:

- Fundamental Analysis:

"Buy" means that the absolute appreciation expected in the next twelve months is greater than 10%.

"Sell" means that the absolute depreciation expected in the next twelve months is greater than 10%.

"Hold" means that the absolute *price* volatility expected in the next twelve months lies between +10% and -10%.

4.2 Fixed Income Instruments:

The terms "outperformer", "market performer" and "underperformer" are used in the assessment of individual issuers. These are relative estimates, i.e. they are independent of their respective peer groups and therefore independent of any overriding allocation recommendations for market segments (cf. mandatory disclosures on other research information).

The basis for the assessment is the expectation of the credit return/total return of an issuer's bonds - defined differently depending on the segment - over the next six months (cf. DZ BANK method studies at www.dzbank.com/disclosures). As a rule, the analyst's main scenario is assumed. In cases where an issuer is exposed to high idiosyncratic risks, alternative spread scenarios are also taken into account when calculating the expected credit turn/total return. Since issuers have generally issued a large number of bonds, the expected credit return/total return cannot naturally be quantified.

The expected credit return/total return is compared with the expected credit return/total return of a relevant peer group, usually the respective coverage/peer group. If it is significantly higher than that of the peer group, the assessment is **"outperformer"**. Normally, a higher weighting in the portfolio than in the benchmark should be applied here.

If the credit return/total return is significantly lower than that of the peer group, the assessment is **"underperformer"**. Normally, a lower portfolio weighting should be applied here than in the benchmark.

If the expected credit return/total return essentially corresponds to that of the peer group or if the risk profile includes strong fluctuations in both directions so that no active positioning against the benchmark should be taken, the assessment is **"market performer"**.

1. Government bonds

The issuer-specific investment recommendation for government bonds of a country in the covered peer group is based on whether DZ BANK estimates that the performance resulting from the total return will be better, worse or similar to the peer group of the relevant segment in the following six months.

The basis for the assessment is the expectation of the total return of the issuer's bonds on the basis of national law in the coming six months (cf. DZ BANK method studies at www.dzbank.com/disclosures).

2. Financials (senior unsecured)

The issuer-specific investment recommendation for an issuer's euro-denominated unsecured senior bonds relative to its peer group (iBoxx Banks Senior Index) is based on whether DZ BANK estimates that the performance resulting from the credit return will be better, worse or similar to the peer group in the following six months.

The basis for the assessment is the expected credit return on the issuer's bonds over the next six months (see DZ BANK methodological studies at www.dzbank.com/disclosures).

3. Corporate Bonds (senior unsecured)

The issuer-specific investment recommendation for the euro-denominated unsecured senior bonds of an issuer relative to its peer group (sector/rating class) is based on whether DZ BANK estimates that the performance resulting from the credit return will be better, worse or similar to that of the peer group over the next six months.

¹⁾ – ¹²⁾ Important: Please read the references to possible conflicts of interest and disclaimers/disclosures at the end of this report.

The basis for the assessment is the expected credit return of the issuer's bonds over the next six months (see DZ BANK method studies at www.dzbank.com/disclosures).

4. Covered Bonds

The investment recommendation for a covered bond programme of an issuer is based on DZ BANK's assessment as to whether the covered bonds can move better, worse or in step with bonds of comparable covered bond programmes in the following six months. The recommendation categories relate to covered bonds ("collateralised bank bonds" or "covered bonds") denominated in euros and apply only to the publication date.

The basis for the assessment is the expectation of the credit return of the bonds from an issuer's covered bond programme over the next six months (validity of the recommendation: one trading day) (cf. DZ BANK Methodologies at www.dzbank.com/disclosures).

4.3 Categories for isolated statements without investment recommendation

Statements on the **isolated evaluation of specific aspects that precede an investment recommendation** on a financial instrument and / or an issuer - **especially** according to the **sustainability criteria** defined by DZ BANK, its defined **value approach**, its defined **asset allocation** (DZ BANK Sample Portfolio), its defined sector strategy Euro-Stoxx (**DZ BANK Sector Favorites**), its defined valuation of payments to beneficiaries (**DZ BANK Dividend Aristocrats**), their **weighting recommendations for market segments** or otherwise defined groups of different issuers, i.e. their **weighting recommendations in the overall market strategy Fixed Income**, in the *sector strategy Corporates* and their **weighting recommendations for covered bond jurisdictions** - are **not investment categories** and therefore **do not contain any investment recommendations**.

These isolated statements **alone** are **not sufficient** to form the basis of an investment decision. Reference is made to the explanation of the used relevant methods.

5. Scheduled Updates and Validity Periods of Investment Recommendations

5.1 The frequency of **updates of Financial Analyses** depends in particular on the underlying macroeconomic conditions, current developments on the relevant markets, the current development of the analyzed companies, measures undertaken by the issuers, the behavior of trading participants, the competent supervisory authorities and the competent central banks as well as a wide range of other parameters. The periods of time named below therefore merely provide a **non-binding indication** of when an updated investment recommendation may be expected.

5.2 **No obligation exists to update an investment recommendation.** If an investment recommendation is updated, this update **replaces** the previous **investment recommendation with immediate effect**.

If no update is made, investment recommendations **end / lapse on expiry** of the **validity periods** named below. These periods **begin** on the **day** and at the **time** the investment recommendation is **completed**.

5.3 The **validity periods** for investment recommendations (**financial analyses**) are as follows:

Shares:

Fundamental analysis six months

Fixed income instruments:

Government bonds six months

Financials (senior unsecured) six months

Corporate Bonds (senior unsecured) six months

Covered Bonds one trading day

5.4 **Evaluations of isolated aspects without investment recommendation** have the following validity periods:

Sustainability analyses: one month

Analyses according to the **value approach:** one month

Asset allocation analyses (**DZ BANK Sample Portfolio**): one month

Euro Stoxx sector strategy (**DZ BANK Sector Favorites**): one month

Dividends (**DZ BANK Dividend Aristocrats**): three months

Credit Trend Issuers twelve months

Share indices (fundamental): three months

Currency areas: six to twelve months

Weighting recommendations for market segments six months

Overall market strategy six months

Sector strategy Corporate Bonds six months

Strategy Covered Bonds: six months

Derivatives:

(Bund futures, Bobl futures, treasury futures, Buxl futures): one month

Commodities: one month

5.5 In a given case, updates of analyses may also be **temporarily suspended without prior announcement** on account of compliance with supervisory regulations.

5.6 If **no updates are to be made in the future** because the analysis of an object is to be discontinued, notification of this shall be made in the final publication or, if no final publication is made, the close of the analysis shall be given in a separate note.

6. General Overview of Investment Recommendations on Financial Instruments and Issuers

Each working day DZ BANK prepares a **general overview of all investment recommendations** on financial instruments and / or issuers disseminated in the last **twelve months**, containing all details specified by the supervisor. This list can be **read and downloaded free-of-charge** under www.dzbank.com/disclosures.

7. Avoiding and Managing Conflicts of Interest

7.1 DZ BANK Research has a binding **Conflicts of Interest Policy** which ensures that the relevant conflicts of interest of DZ BANK, the DZ BANK Group, the analysts and employees of the Research and Economics Division and persons closely associated with them are avoided, or - if such interests are effectively unavoidable - are appropriately identified, managed, disclosed and monitored. Material aspects of this policy, which can be **read and downloaded free-of-charge** under www.dzbank.com/disclosures are summarized as follows.

7.2 DZ BANK organizes its Research and Economics Division as a confidentiality area and protects it against all other organizational units of DZ BANK and the DZ BANK Group by means of Chinese walls. The departments and teams of the Division that produce Financial Analyses are also protected by Chinese walls and by spatial separation, a closed doors and clean desk policy. Beyond the limits of these confidentiality areas, communication may only take place in both directions according to the need-to-know principle.

7.3 The Research and Economics Division does not disseminate Research Publications on issues of DZ BANK or on financial instruments issued by companies of the DZ BANK Group.

7.4 **In principle, employees of the Research and Economics Division and persons closely associated with them may not unrestrictedly invest in financial instruments covered by them in the form of Financial Analyses. For commodities and currencies, DZ BANK has also defined an upper limit based on the annual gross salary of each employee which, in the opinion of DZ BANK, also excludes the possibility of personal conflicts of interest among employees in the preparation of Other Research Information.**

7.5 Other theoretically feasible, information-based personal conflicts of interest among employees of the Research and Economics Division and persons closely associated with them are avoided in particular by the measures explained in **sub-paragraph 7.2** and the other measures described in the policy.

7.6 The remuneration of employees of the Research and Economics Division depends neither in whole nor in the variable part directly or materially on the earnings from investment banking, trade in financial instruments, other securities related services and / or trade in commodities, merchandise, currencies and / or on indices of DZ BANK or the companies of the DZ BANK Group.

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7.8 **Investment recommendations for the same financial instrument / issuer that have deviated in the last 12 months are stated in the respective current Financial Analysis together with the relevant investment recommendation category and date.**

7.9 The **quarterly information** on the share of the investment categories stated in **sub-paragraph 4.1** and **4.2** for **shares** and **fixed income instruments** in the total number of investment recommendations of DZ BANK and the **information** on the share of these categories relating to the

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7.10 The following **definitions** explain the potential conflicts of interest (so-called **'keys'**) of DZ BANK and / or the companies of the DZ BANK Group that must be stated in accordance with supervisory regulations in respect of the issuers and / or financial instruments analyzed in a Financial Analysis:

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10. FIXED INCOME RESEARCH: RECOMMENDATION CHANGES WITHIN THE LAST 12 MONTHS

ABN AMRO Bank	18.09.2019	Underperformer	Finland	05.12.2018	Underperformer	Siemens	10.05.2019	Outperformer
ABN AMRO Bank	24.01.2019	Marketperformer	France	29.08.2019	Marketperformer	Société Générale	18.09.2019	Marketperformer
Aegon	07.10.2019	Marketperformer	France	25.06.2019	Outperformer	Société Générale	24.01.2019	Underperformer
AIB Group	18.09.2019	Underperformer	France	05.12.2018	Marketperformer	South Africa	12.04.2019	NR
AIB Group	11.09.2019	Marketperformer	Fraport	31.05.2019	Marketperformer	Spain	05.12.2018	Marketperformer
AIB Group	23.05.2019	Underperformer	Fraport	28.05.2019	NR	Sparebank 1 Østlandet	13.03.2019	NR
AIB Group	07.05.2019	Marketperformer	Fraport	04.04.2019	Marketperformer	Svenska Handelsbanken	18.09.2019	Underperformer
AIB Group	24.01.2019	Outperformer	Fresenius SE & Co. KGaA	31.07.2019	Marketperformer	Svenska Handelsbanken	25.06.2019	Outperformer
Akzo Nobel	24.04.2019	Underperformer	Fresenius SE & Co. KGaA	20.02.2019	Outperformer	Svenska Handelsbanken	24.01.2019	Underperformer
Allianz	30.10.2019	Underperformer	Fresenius SE & Co. KGaA	10.12.2018	Marketperformer	Swiss Re	13.11.2019	Underperformer
America Movil	17.07.2019	Outperformer	General Electric	11.11.2019	Marketperformer	Telefónica	10.05.2019	Marketperformer
Anglo American PLC	22.02.2019	Underperformer	General Electric	16.08.2019	Underperformer	Telefónica	27.02.2019	Outperformer
Australia and New Zealand Banking Group	18.09.2019	Marketperformer	General Electric	25.02.2019	Outperformer	Tesco	24.04.2019	Marketperformer
Australia and New Zealand Banking Group	22.01.2019	Underperformer	General Electric	01.02.2019	Marketperformer	Tesco	10.04.2019	Outperformer
Austria	29.08.2019	Underperformer	Germany	29.08.2019	Underperformer	thyssenkrupp	10.05.2019	Underperformer
Austria	25.06.2019	Marketperformer	Germany	25.06.2019	Marketperformer	Total	11.09.2019	Marketperformer
Austria	05.12.2018	Underperformer	Germany	05.12.2018	Underperformer	Turkey	12.04.2019	NR
Banca Monte dei Paschi di Siena	30.08.2019	Outperformer	GlaxoSmithKline	09.09.2019	Marketperformer	UBS Group	18.09.2019	Underperformer
Banca Monte dei Paschi di Siena	03.06.2019	Underperformer	Goldman Sachs Group	25.06.2019	Marketperformer	UBS Group	25.06.2019	Outperformer
Banca Monte dei Paschi di Siena	27.03.2019	Marketperformer	Greece	29.08.2019	Outperformer	Unicredit	30.08.2019	Outperformer
Banca Monte dei Paschi di Siena	24.01.2019	Outperformer	Greece	25.06.2019	Marketperformer	Unicredit	03.06.2019	Underperformer
Banco Santander	24.01.2019	Outperformer	Greece	05.12.2018	Outperformer	Unicredit	27.03.2019	Marketperformer
Bank of America	18.09.2019	Marketperformer	GREENKE	03.09.2019	Marketperformer	Unicredit	24.01.2019	Outperformer
Bank of America	25.06.2019	Outperformer	Hannover Rück	21.11.2019	Underperformer	Vale	09.04.2019	Outperformer
Bank of America	24.01.2019	Underperformer	Hochtief	09.09.2019	Outperformer	Vale	28.01.2019	Underperformer
Bank of Ireland Group	18.09.2019	Underperformer	HSBC Holdings	18.09.2019	Marketperformer	Vodafone Group	14.06.2019	Marketperformer
Bank of Ireland Group	11.09.2019	Marketperformer	HSBC Holdings	23.05.2019	Underperformer	Vodafone Group	27.02.2019	Underperformer
Bank of Ireland Group	23.05.2019	Underperformer	HSBC Holdings	03.05.2019	Marketperformer	Westpac Banking Corp.	18.09.2019	Marketperformer
Bank of Ireland Group	08.05.2019	Marketperformer	Hungary	12.04.2019	NR	Westpac Banking Corp.	22.01.2019	Underperformer
Bank of Ireland Group	24.01.2019	Outperformer	Iberdrola	25.04.2019	Underperformer			
Banque Féd. du Crédit Mutuel	24.01.2019	Marketperformer	IBM	24.07.2019	NR			
Barclays PLC	23.05.2019	Underperformer	Indonesia	12.04.2019	NR			
Barclays PLC	25.04.2019	Marketperformer	ING Groep	18.09.2019	Underperformer			
BASF	27.02.2019	Underperformer	ING Groep	24.01.2019	Marketperformer			
BayWa	06.05.2019	NR	Intesa Sanpaolo	30.08.2019	Outperformer			
BBVA	24.01.2019	Marketperformer	Intesa Sanpaolo	03.06.2019	Underperformer			
Belfius Bank	18.09.2019	Underperformer	Intesa Sanpaolo	27.03.2019	Marketperformer			
Belfius Bank	25.06.2019	Outperformer	Intesa Sanpaolo	24.01.2019	Outperformer			
Belfius Bank	24.01.2019	Underperformer	Ireland	05.12.2018	Marketperformer			
Belgium	19.11.2019	Marketperformer	Israel	12.04.2019	NR			
Belgium	29.08.2019	Underperformer	Israel	09.01.2019	Outperformer			
Belgium	25.06.2019	Outperformer	Italy	29.08.2019	Outperformer			
Belgium	05.12.2018	Marketperformer	Italy	03.06.2019	Underperformer			
Berlin Hyp	25.06.2019	Marketperformer	Italy	27.03.2019	Marketperformer			
Berlin Hyp	24.01.2019	Underperformer	Italy	05.12.2018	Outperformer			
BNP Paribas	02.05.2019	Underperformer	Jefferies Group LLC	12.02.2019	NR			
BNP Paribas	24.01.2019	Marketperformer	JPMorgan Chase & Co.	18.09.2019	Marketperformer			
BP	06.02.2019	Outperformer	JPMorgan Chase & Co.	25.06.2019	Outperformer			
BPCE	25.06.2019	Marketperformer	JPMorgan Chase & Co.	24.01.2019	Underperformer			
BPCE	24.01.2019	Underperformer	KBC Groep	18.09.2019	Underperformer			
Brazil	12.04.2019	NR	KBC Groep	25.06.2019	Outperformer			
BT Group	11.09.2019	Underperformer	Koninklijke KPN	24.07.2019	Marketperformer			
Bulgaria	12.04.2019	NR	Linde PLC	06.05.2019	Underperformer			
Carrefour	29.10.2019	Marketperformer	Lloyds Banking Group	23.05.2019	Underperformer			
Carrefour	11.09.2019	Outperformer	Lloyds Banking Group	02.05.2019	Marketperformer			
Carrefour	18.07.2019	Marketperformer	Merck KGaA	28.02.2019	Underperformer			
Carrefour	27.05.2019	Outperformer	Mexico	12.04.2019	NR			
Carrefour	01.02.2019	Marketperformer	Mondelez International	31.07.2019	Marketperformer			
Casino Guichard-Perrachon	19.03.2019	Underperformer	Mondelez International	01.02.2019	Underperformer			
Chile	12.04.2019	NR	Morgan Stanley	22.01.2019	Marketperformer			
Colombia	12.04.2019	NR	National Australia Bank	18.09.2019	Marketperformer			
Commonwealth Bank of Australia	18.09.2019	Marketperformer	National Australia Bank	22.01.2019	Underperformer			
Commonwealth Bank of Australia	22.01.2019	Underperformer	Nationwide Building Society	22.11.2019	Underperformer			
Cooperatieve Rabobank UA	18.09.2019	Underperformer	Netherlands	29.08.2019	Underperformer			
Cooperatieve Rabobank UA	25.06.2019	Outperformer	Netherlands	25.06.2019	Marketperformer			
Cooperatieve Rabobank UA	24.01.2019	Underperformer	Netherlands	05.12.2018	Underperformer			
Crédit Agricole	25.06.2019	Marketperformer	Nordea Bank Abp	18.09.2019	Underperformer			
Crédit Agricole	24.01.2019	Underperformer	Nordea Bank Abp	25.06.2019	Outperformer			
Crédit Mutuel Arkéa SACC	25.06.2019	Outperformer	Nordea Bank Abp	24.01.2019	Underperformer			
Credit Suisse Group	18.09.2019	Underperformer	OP Corporate Bank	18.09.2019	Underperformer			
Credit Suisse Group	25.06.2019	Outperformer	OP Corporate Bank	25.06.2019	Outperformer			
Croatia	12.04.2019	NR	OP Corporate Bank	24.01.2019	Underperformer			
Czech Republic	12.04.2019	NR	Pemex	10.01.2019	Marketperformer			
Danone	25.07.2019	Underperformer	Peru	12.04.2019	NR			
Danske Bank	28.11.2019	Underperformer	Petrobras	02.08.2019	Marketperformer			
Deutsche Bahn	01.04.2019	Outperformer	Peugeot SA	30.10.2019	Marketperformer			
Deutsche Bank	08.07.2019	Outperformer	Pfizer	18.10.2019	Marketperformer			
Deutsche Bank	25.06.2019	Marketperformer	Philippines	12.04.2019	NR			
Deutsche Bank	24.01.2019	Outperformer	Poland	12.04.2019	NR			
Deutsche Pfandbriefbank	25.06.2019	Marketperformer	Portugal	25.06.2019	Marketperformer			
Deutsche Pfandbriefbank	13.05.2019	Outperformer	Portugal	05.12.2018	Outperformer			
Deutsche Pfandbriefbank	24.01.2019	Underperformer	Procter & Gamble	30.09.2019	Marketperformer			
De Volksbank	18.09.2019	Underperformer	Raiffeisenlandesbank Oberösterreich	23.10.2019	Marketperformer			
De Volksbank	25.06.2019	Outperformer	Renault	21.10.2019	Underperformer			
De Volksbank	24.01.2019	Underperformer	Renault	15.02.2019	Marketperformer			
DNB Bank	18.09.2019	Underperformer	Repsol	20.11.2019	Marketperformer			
DNB Bank	25.06.2019	Outperformer	Romania	12.04.2019	NR			
DNB Bank	24.01.2019	Underperformer	Romania	19.03.2019	Marketperformer			
E.ON	17.09.2019	Marketperformer	Romania	31.01.2019	Underperformer			
EnBW	28.01.2019	Marketperformer	Royal Bank of Scotland Group	23.05.2019	Underperformer			
Enel	03.06.2019	Underperformer	Royal Bank of Scotland Group	26.04.2019	Marketperformer			
ENI	03.06.2019	Underperformer	Royal Bank of Scotland Group	24.01.2019	Outperformer			
ENI	25.04.2019	Marketperformer	Russia	12.04.2019	NR			
ENI	15.02.2019	Outperformer	Saint-Gobain	01.10.2019	Marketperformer			
Equinor	26.09.2019	Marketperformer	SAP	06.12.2018	Marketperformer			
Erste Group Bank	18.09.2019	Underperformer	SEB	18.09.2019	Underperformer			
Erste Group Bank	24.01.2019	Marketperformer	SEB	25.06.2019	Outperformer			
Finland	19.11.2019	Underperformer	SEB	24.01.2019	Underperformer			
Finland	25.06.2019	Marketperformer	Siemens	01.08.2019	Marketperformer			

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	Head of Derivative Solutions Small Caps	+49 – (0)69 – 74 47 – 44 26	Evelyne Thiessen
	Head of Derivative Solutions Small Caps, West	+49 – (0)2 11 – 7 78 – 21 55	Ralf Vogt
Debt Capital Markets	Head of Debt Capital Markets	+49 – (0)69 – 74 47 – 38 11	Friedrich Luithlen
	Head of SSA DCM	+49 – (0)69 – 74 47 – 17 10	Kai Poerschke
	Head of FIG DCM	+49 – (0)69 – 74 47 – 48 00	Joerg Mueller
	Head of Corporate DCM	+49 – (0)69 – 74 47 – 71 45	Bettina Streiter
	Head of MTN-Desk	+49 – (0)69 – 74 47 – 62 19	Maximilian Lainer