

BANKING SECTOR REPORT – February 2020

EXECUTIVE SUMMARY

US banks tumbled again in February after very weak performance in January amid spreading COVID-19 around the world. The broad market was underperformed substantially for the second consecutive month after 4 months in a row of leading dynamics. Thus, BKX index decreased by 12.5% MoM in February vs -8.4% MoM of SPX index. Absolute performance on MoM basis was -2 std from the mean and it is in the bottom 4% of absolute MoM performance of BKX index. Relative February performance was -4.5% MoM, it is -1 std from the mean and it is in the bottom 11% of relative MoM performance vs SPX index since 1992. It was the worst start of the year on absolute basis since 2009 year and the third worst start of the year on relative basis over the last 28 years.

Banking quotes slightly increased in the first three weeks of February after relatively weak January dynamics but BKX index lost 15.2% in the last week of the month because of total sell-off amid coronavirus spreading. The worst performing banks lost more than 15% in February or 24-27% ytd.

Spreading of the coronavirus outside China overshadowed all corporate news in February and it led to financial markets collapse in the last week of the month. Nobody still knows the economic impact of the outbreak but fears drive markets. It is obvious that China growth significantly decelerated in 1Q20 – transportation sector, auto and property sales were especially affected. The key question is whether Global recovery will be V-shaped or U-shaped. The risk that it will be U-shaped has increased markedly in recent weeks. At least, majority of China industries operated significantly below normal levels in February. The key reason is unprecedented quarantine but, from our point of view, it was the best choice that the Chinese authorities could make in these circumstances, even at such a huge price. It seems that authorities of developed countries will not be so decisive and this will eventually lead to much more serious consequences for the economy.

Also, **it is very probable that Italy and France, which showed negative GDP qoq growth in 4Q19, will fall into recession if coronavirus problem isn't fixed in the coming weeks,** especially taking into account that most cases are concentrated in the Northern regions which accounts for the lion's share of Italian GDP. At least, European manufactory PMI published in February indicates that supply chains have already disrupted. Unsurprisingly, the worst performers are banks which will suffer from lower rates, loan growth deceleration and higher problem loans. Moreover, some banks have already announced that they curbs their business travels to the most affected regions implying that IB fees will also markedly decline in 2020, at least in 1Q20.

There have been not so many cases in US yet, but supply chain disruption could lead to negative earnings growth which is quite risky for US economy given significant growth of corporate debt and leverage loans in the last cycle. We expect that both banks and nonbank lenders will tighten lending standards in that case and it will be hard to refinance debt for commercial borrowers, especially BBB- and lower rated obligors, while profit will eventually going down markedly. So we could see rating downgrades and further sell-off on the HY market but even markedly lower FF rates could not help these companies because of flight to safety. Rating downgrades could lead to the domino effect on the high yield bonds market. So, we have already seen substantial growth of CDS prices recently.

It is obvious for us that US/EU economy will at least decelerate in the near future. It will depend on monetary/fiscal policy actions whether the deceleration transforms into decline. And it seems that monetary stimulus without any fiscal easing isn't very helpful in the current environment as efficiency of monetary stimulus still remains

questionable. But there is also not very big room for fiscal stimulus in many countries. Currently, key benchmark yields continue to fall sharply while the yield curve again flat/inverted in the middle part, pointing that the central banks could start to act as early as possible. The nearest ECB/FED meetings are scheduled in the middle of March. It is quite possible that rates will be lowered again. At least, according to Bloomberg WIRP, it is implied that rates will be lowered 3.6 times in US and 2.1 times in EU till the end of 2020 (as of February 28). Also, the European yield curve is below 0%, while 10yr US treasury yield continues decline to record lows. Cutting the fed funds rate to 0% this year doesn't look unlikely. But lower rates aren't a panacea, from our point of view, as liquidity is unlikely to reach those who really need it. Nobody wants to be an emergency lender during the perfect storm. From the other hand, it will undoubtedly reduce banking NII, especially regional banks, given relatively high share of C&I loans on their BS. If it is the case, we will see rising corporate defaults and significant growth of problem loans in C&I segment. Consumer segment will also suffer but we don't expect that NCO/NPL ratios will be even close to the peaks of mortgage crisis.

Overall, operating trends of US banks were solid so far but gradually deteriorating because of challenging revenue environment and weak commercial loan growth while consumer business is still strong as well as credit quality. But **it is obvious that EPS estimates will be lowered markedly in the coming weeks as there is no EPS drivers in the near future except for high buybacks**, especially taking into account slowdown of Global economy and significant decline of the key benchmark rates ytd. Unsurprisingly, banks continue to trade with significant discount to historical averages (but it will be partially mitigated by decline of EPS estimates in coming months) and discount to S&P 500 index increased markedly in February due to higher probability of recession. Thus, banks are trading with -2.2/-2.2 std on P/E CY and -2.3/-1.9 on P/E NY (on the basis of samples from 2000 and 2010 yrs to current moment) relative to historical averages (as of February 28). As for relative to S&P 500, banks are currently trading at -2.2 and -2.1 std from the sample mean (2010-current moment) for P/E CY and P/E NY, respectively.

It was very controversial month for European banks with strong performance in the first weeks of February but SX7P ended the month deeply in the red zone because of sell-off in the last week of the month. Notwithstanding, it was flat on relative basis after weak relative dynamics in January, following two years in a row of significant underperformance. On absolute basis, SX7P index tumbled by 8.4% MoM in February or -1.3 std from the mean and this result is in the bottom 9% of absolute monthly performance of SX7P since the index inception. In turn, relative monthly performance was +0.1% MoM or +0.1 std and it is in the top 45% of relative monthly performance.

The key drivers of EU banks in February were relatively good 4Q19 earnings season, expectations of higher M&A volumes and risks of further spreading of coronavirus across the European countries. Contrary to US banks, not all members of SX7P index decreased in February. Thus, UBI Banca skyrocketed by 37% MoM due to ISP's bid of \$5.3 Bn. From the other hand, ABN AMRO lost more than 1/5 of the market cap in February.

EU banks EPS estimates will continue to go down despite some signs of operating trends stabilization during 4Q19 earnings season as risks of recession (primarily in Italy and France) increased, accompanied by significant decline of key benchmark rates. So, EU banks continue to trade with significant discount to historical averages (-25%/-1.5 std from mean P/E CY of SX7P index members, sample from 2010 to the present) but discount to US peers (on median P/E CY of BKX index vs SX7P index) is just 14.3% at the moment vs average of 15.5% since 2010 or +0.2 std, inappropriate, from our point of view, given higher risks associated with EU banks. Moreover, despite SX7P index is just 8% higher than 2011 low, we could see further decline of European banks if coronavirus problem isn't be fixed quickly.

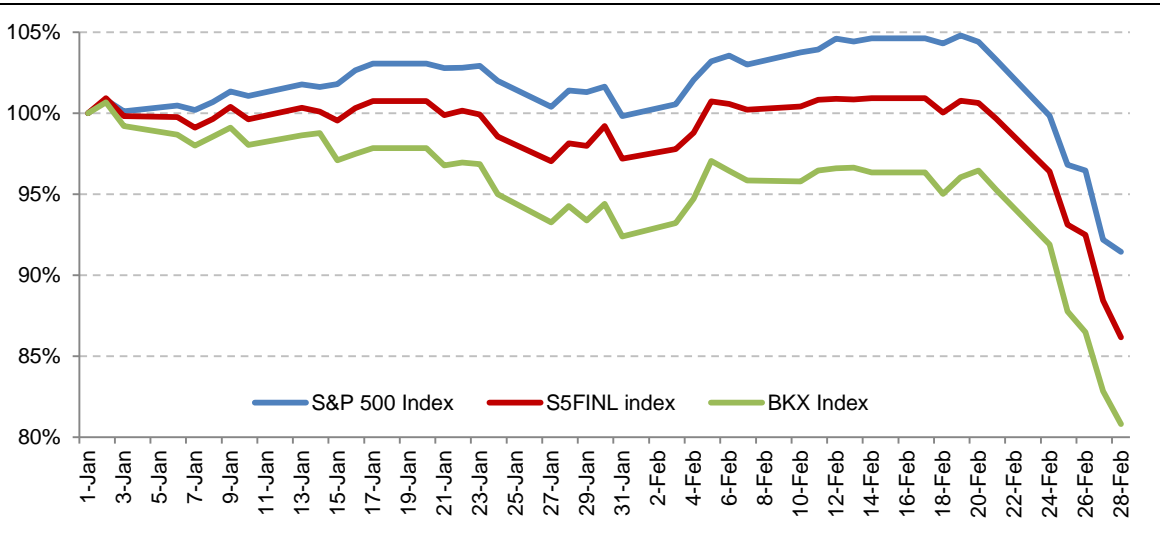
MARKET PERFORMANCE

US

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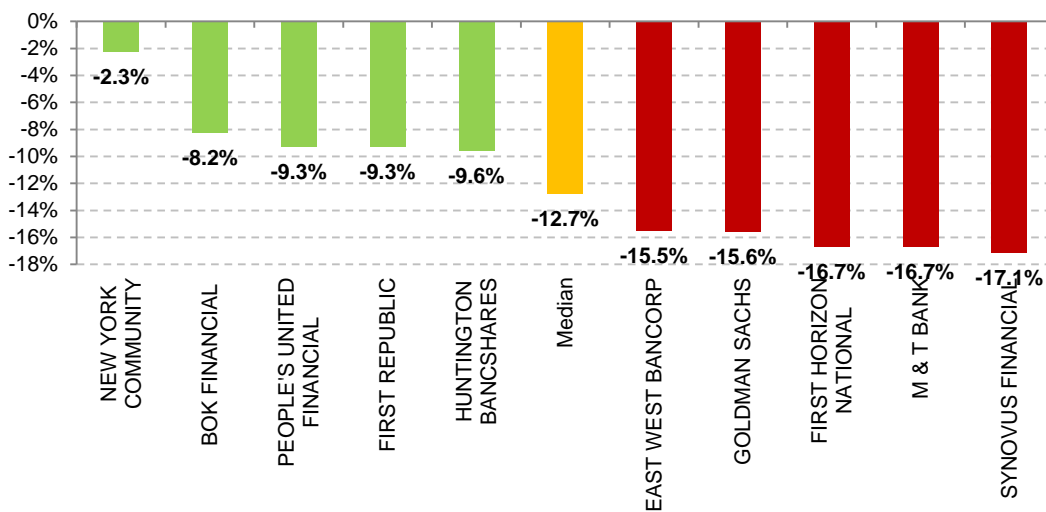
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Chart 1. US Banks Performance. BKX Index vs S&P500 & S5FINL Indexes



Source: Bloomberg

Chart 2. February US Banks Performance. Leaders and Laggards, 1Month Price Change, %



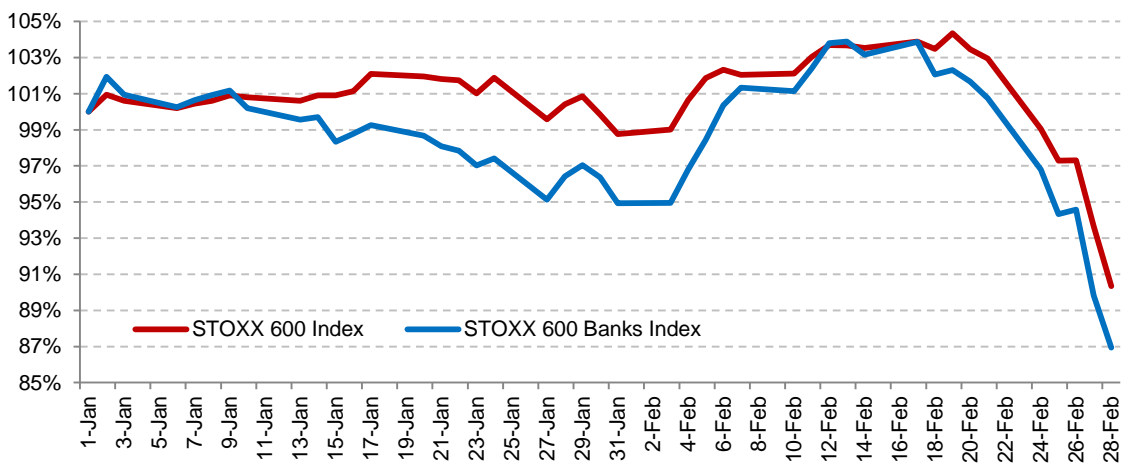
Source: Bloomberg

Europe

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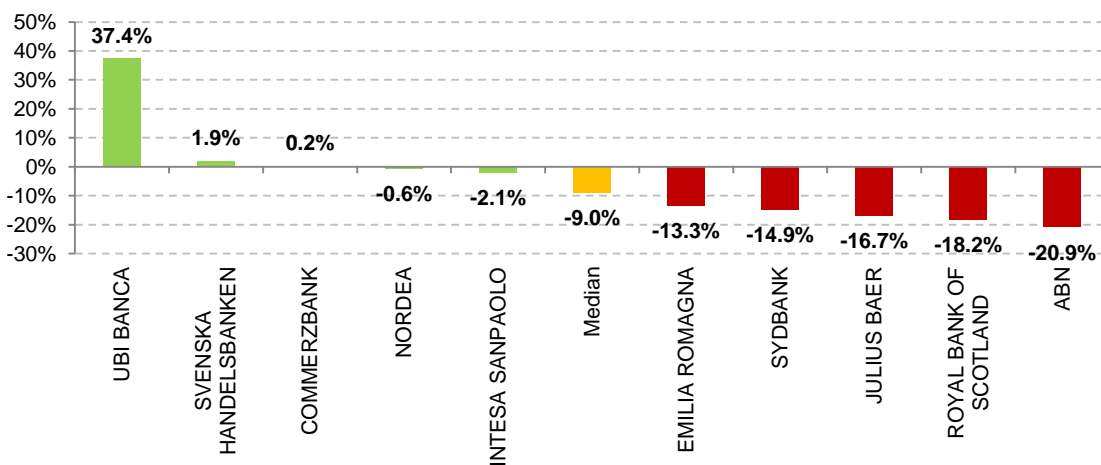
The key drivers of EU banks in February were relatively good 4Q19 earnings season, expectations of higher M&A volumes and risks of further spreading of coronavirus across the European countries. Contrary to US banks, not all members of SX7P index decreased in February. Thus, UBI Banca skyrocketed by 37% MoM due to ISP's bid of \$5.3 Bn. From the other hand, ABN Amro lost more than 1/5 of the market cap in February.

Chart 3. EU Banks Performance. SX7P Index vs STOXX 600 Index



Source: Bloomberg

Chart 4. February EU Banks Performance. Leaders and Laggards, 1Month Price Change, %



Source: Bloomberg

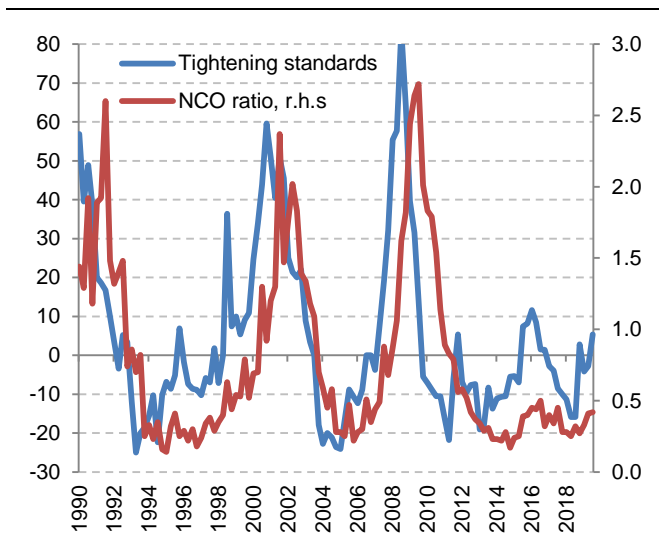
MACROECONOMIC NEWS

US

C&I loans

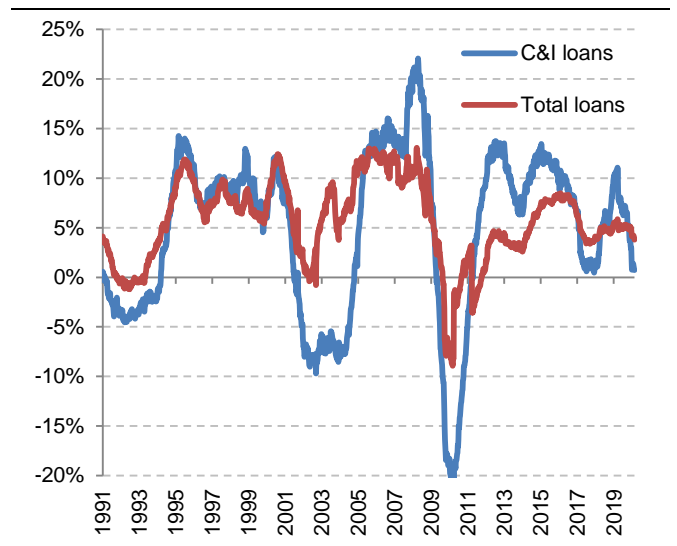
C&I loans were relatively flat in the first months of the year but it significantly decelerated on yoy basis. Thus, C&I loans growth rate is markedly below growth rate of total loans over the last two months. The key reasons of poor C&I loans dynamics are weaker GDP prospects, decelerating manufacturing sector, tightening of lending standards and high nonbank competition. We will not be surprised if C&I loans growth rate turns to being negative in the near future given stagnation of corporate profits, further growth of labour costs and no CapEx rebound because of still high uncertainty in the economy and spreading of coronavirus over the world. According to the Fed H.8 survey, C&I loans increased by 0.8% yoy (as of February 12) vs 10.7% yoy 1 year ago. On ytd basis, C&I loans is flat vs +0.3% ytd of total loans.

Chart 5. C&I. Loan Standards vs NCOs, %



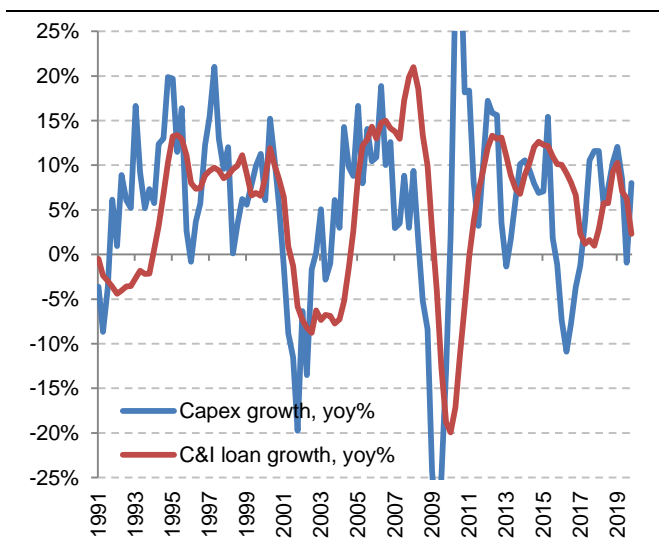
Source: Bloomberg

Chart 6. Loan Growth. C&I vs Total loans, YoY%



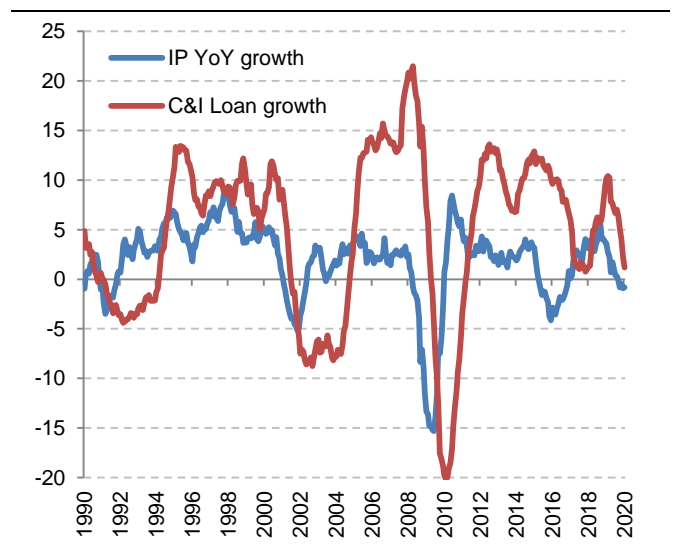
Source: Bloomberg

Chart 7. C&I. Loan Growth vs CAPEX



Source: Bloomberg

Chart 8. C&I. Ind. Production vs Loan Growth YoY%



Source: Bloomberg

Given weaker prospects of the economy and coronavirus risks for the Global economy as well as election uncertainty, we don't see a big room for marked acceleration of loan growth

in the nearest future. Moreover, the probability of the recession has increased recently taking into account spreading of the coronavirus around the world and supply chain disruptions amid the late cycle concerns and high leverage of US corporate sector. Even quick and prominent response doesn't guarantee that the problem will be completely fixed given relatively strict restrictions for both fiscal and monetary stimulus in majority of developed economies. So, it is quite possible that we will see decline of C&I loan portfolio instead of growth and pickup of problem loans amid decline of rates and NIM. At least, banks have already demonstrated more cautious approach to lenders because of the late cycle. Also, it should be noted that economy reacts on the rate cut with a lag, so improvement due to monetary stimulus will be visible at best in 2H20.

Despite recent market concerns about deterioration of C&I credit quality (and total loan portfolio at all), it still remains benign but worsening. According to FDIC data, 30-89 delinquency rate increased by 5 bps yoy but -1 bps qoq to 0.32% in 4Q19. Being a leading indicator of asset quality, it confirms that it remains in a good shape so far despite recent slowdown of US economy. Noncurrent rate also increased by 11 bps yoy to 0.79%, -2 bps qoq. Slightly lower than Fed figures, where delinquency ratio increased by 18 bps yoy or -1 bps qoq to 1.14% in 4Q19. FDIC's NCO ratio increased by 1 bps qoq or +10 bps yoy to 0.42%, still markedly lower than average figures of the last two cycles. According to the Fed data, NCO ratio increased by 8 bps yoy or -7 bps qoq to 0.35% in 4Q19. It is not a reason to panic given relatively good financial health of US corporations at the moment with strong ROA, solid quick ratios and relatively low net debt to EBIT. But it should be noted that corporate debt to GDP ratio has already reached multi-year high while interest coverage ratio continues to decline on yoy basis for the eighth consecutive quarter. It could be flat in the nearest quarters taking into account current market rate cut expectations but it does not negate the fact that the leverage of US corporate sector remains high. At least it is a reason to focus more on the segment, taking into account noticeable deceleration of C&I loan growth and weaker manufacturing figures in the recent months. Moreover, total US corporate profit declined on yoy terms in each of the first three quarters of 2019. But we still don't expect significant deterioration of quality of C&I loans in 1H20 because of relatively low risk of recession in coming months. But this risk continues to go up, given recent inversion of the yield curve, trade tensions and coronavirus outbreaks in many regions. Consequently, we expect that C&I NCO ratio will gradually move to the normalized levels in coming quarters even despite the start of the easing cycle. However, rapid deterioration of credit quality in the segment is unlikely till recession starts. The key risk for corporate credit quality during recession comes from leveraged loans and its spillover effects as it continues to grow rapidly. Currently, corporate debt as a percent of GDP is higher than it was before the Great Recession while the share of covenant-lite leveraged loans issuance remains very high. But recent rate cuts will positively impact on servicing of corporate debt in the near future as spreads remain tight either.

The January 2019 Senior Loan Officer Opinion Survey indicated that C&I lending standards remained basically unchanged on C&I loans of all segments but banks eased some C&I key terms. At least, banks narrowed spreads of loan rates over the cost of funds as well as lower cost of credit lines and easing loan covenants. The key reason of tightening standards was a less favorable or more uncertain outlook as well as reduced tolerance for risk. From the other hand, increased competition from other banks and nonbank lenders continues to be the main reason of easing standards. Banks noted weaker demand for C&I loans from firms of all sizes. Also, the number of inquiries from potential borrowers decreased in 4Q19. The key reasons were decreases in investment plans and lower needs to finance accounts receivables. Also, banks noted that they expect "tighter standards and deterioration in loan performance for most loan categories over 2020".

Manufacturing and macro data published in February were markedly better than expected,

confirming pickup in activity in early 2020 which, however, could be curbed by negative impact of coronavirus. Thus, positive surprises were shown by ISM manufacturing, factory orders, leading indicators and Empire manufacturing while negative surprises were demonstrated by industrial production and PMI figures. Thus, ISM manufacturing index skyrocketed by 3.1 pts to 50.9 pts from revised up December estimate vs expectations of 48.5 pts, after being below 50 pts for three consecutive months and being near the lowest figure since mid-2009. But it seems that index could go again below 50 pts in the nearest months because of supply chain disruptions. So, we still just see signs of stabilization but not any signs of turnaround on the horizon. However, surprise indices markedly increased in February, to the 2yr highs. Thus, Citi economic surprise index increased by 49 pts MoM to 56.2 pts while Bloomberg surprise index added 0.34 pts MoM and grew to 0.38 pts as the end of February. But risks remain to be tilted to the downside. In turn, consensus macro forecasts were revised up in the recent months. Consensus GDP growth rates for the nearest 3 years were revised up by 10 bps MoM to 2.0% yoy for 2021, although it was unchanged at 1.8% yoy for 2020 and 2022 GDP growth is estimated at 1.9% yoy. Manufacturing payrolls decreased by 12K in January vs expectations of -2K, after it decreased by 5K in December (lowered down from initial estimate of -12K). But overall nonfarm payrolls were markedly better than expected. Industrial production decreased by 0.3% MoM in January vs expectation of decline of 0.2% MoM and December growth was slightly revised down, by 10 bps to -0.4% MoM. IP index is still 0.8% lower than it was 1 year ago as well as manufacturing index. Empire manufacturing index was 12.9 pts in February vs expectations of 5 pts, up 8.1 pts MoM. Markit manufacturing PMI decreased by 1.1 pts MoM to 50.8 pts vs expectations of 51.5 pts and it continues to point to relatively weak manufacturing activity in the nearest future. Surprisingly, consensus IP growth forecast slightly increased in February to 0.5%/1.8%/1.7% for 2020/2021/2022, respectively, from 0.5%/1.8%/1.6% in January.

CRE

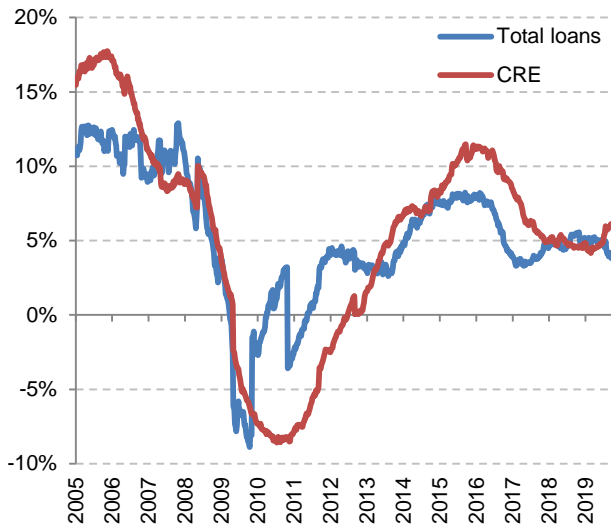
Growth rate of commercial real estate loans on yoy basis continues to accelerate in the recent months after being relatively flat in 2018-2019 hovering around 4.5-5%. Thus, according to the last Fed H8 weekly report, CRE loan growth was +6.1% yoy (as of February 12) vs +4.6% yoy 1 year ago. Main CRE fundamentals remain strong but decelerating in some sub-segments. For example, occupancy rates and same-store NOI growth rates in retail segments has been declining in recent years while in other segments they remained relatively stable in 2019. From the other hand, price growth has accelerated recently as a consequence of significant decline of key benchmark rates and yield seeking behavior despite weaker deal volumes. Banks continue note that competition from non-bank lenders in CRE market was growing and they continue to tighten standards but low rates are currently more important factor for the loan growth. But we don't expect that it will be long lasting given the late cycle concerns and the fact that the key reason of lower rates is worsening economic conditions in US and higher risks of recession. So, it is highly questionable whether we will see further acceleration of CRE loan growth under such conditions in the near future.

Despite ongoing tightening credit standards in CRE, deceleration of NOI growth and higher probability of recession, credit quality of the segment remains very strong. Thus, according to the Fed data, CRE NCO ratio was almost flat on yoy basis at just 0.02% in 4Q19 while delinquency ratio decreased by 3 bps yoy to 0.67%, all-time low. According to FDIC data, NCO ratio for all CRE subsegments (construction, multifamily, commercial mortgage) remains stable, almost 0% during the last year. Non-current ratio is also lower on yoy basis in 4Q19 – commercial mortgage noncurrent ratio is 0.51%, -7 bps yoy; construction one is 0.44%, flat yoy; multifamily noncurrent ratio is 0.11%, -4 bps yoy. Leading indicator of future credit quality, 30-89 days delinquency ratio, is also stable in 4Q19, near multi-year lows.

The figure in commercial mortgage was -1 bps yoy to 0.24%; in construction it was +3 bps yoy to 0.38%; in multifamily it was +3 bps yoy at 0.14%.

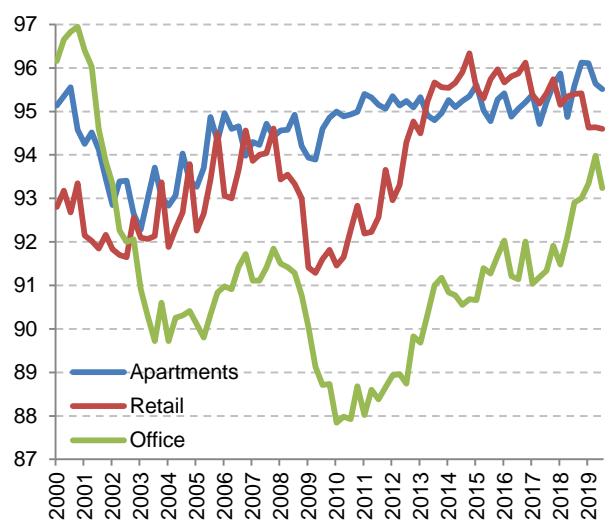
Price growth remains solid and it accelerated from summer 2019 levels but on yoy basis it was almost flat vs 1 year ago levels. The key drivers of acceleration were office and apartment segments while industrial price growth continues to decelerate but it remains the fastest growing one no matter what. Thus, CRE price index has renewed its all-time high again (more than 30% higher than peak of the previous cycle), adding +7% yoy as the end of January 2020 vs +6.8% yoy 1 year ago but it is still not far from the lowest growth rate since the end of 2011.

Chart 9. Loan Growth. CRE vs Total Loans, YoY, %



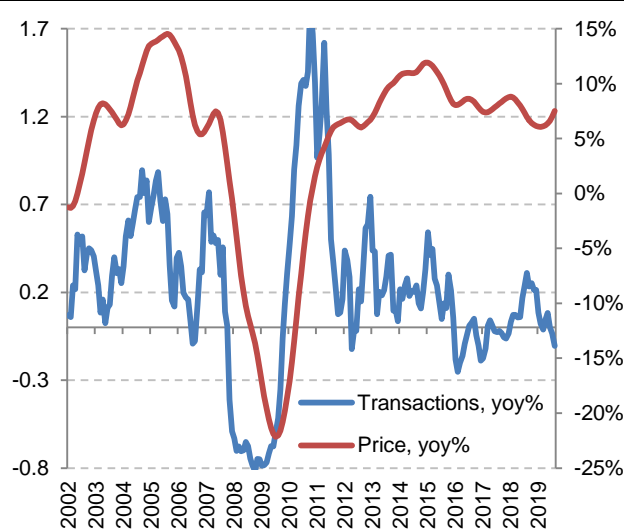
Source: Bloomberg

Chart 10. CRE. Occupancy Rates, %



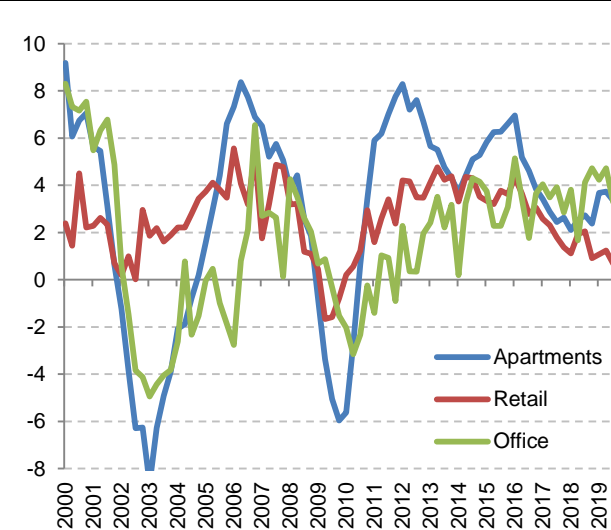
Source: Bloomberg

Chart 11. CRE. Price Growth vs Transactions Volumes



Source: Bloomberg

Chart 12. CRE. Same-Store NOI Growth, %



Source: Bloomberg

Transaction volumes remained relatively weak recently across majority CRE segments but we expect that its growth rate will be slightly improved in the near term due to ongoing monetary easing and searching for yields. According to RCA, "transaction activity across the property types dropped 30% compared with October 2018. Still, for the year-to-date, overall activity is only down 4% and sales of single assets are slightly ahead of the level a year ago". Apartment price index added +9.7% yoy as of end-February, slight acceleration from growth rate in the middle of 2019 but flat vs 1 year ago levels. In turn, price index of

retail CRE increased only by +2.4% yoy vs +2.7% 1 year ago. Growth of prices of industrial CRE decelerated to +10.7% yoy from +12.8% yoy in July 2019 but slightly up from 10% yoy in January 2019. Growth rate of office prices accelerated to 5.6% yoy from 5.2% yoy 1 year ago.

Solid but decelerating growth of US economy and rising employment continue to support CRE fundamentals, especially in office segment where we have seen growth of both same-store NOI and occupancy rates recently. But, from our point of view, it is enough only to keep the quality of the loan portfolio at a high level but it isn't enough for acceleration of CRE loan growth even despite dovish Fed and significant decline of yields in recent months as the latter is associated with the weaker economy prospects and higher risks.

In 4Q19, banks continue to tighten standards for CRE loans, for construction loans (the 19th quarter in a row) while for multifamily loans it was no tightening as well as loosening after 17 quarters in a row of tighter standards. On net, it was slight improvement on the absolute level of tightening vs 3Q19 for majority of loan categories. Credit standards for nonfarm nonresidential loans were also tightened. Banks also mentioned weaker demand for construction and land development loans while demand for multifamily and nonfarm nonresidential properties remained basically unchanged. Answering on the special set of questions, banks reported that they expected tighter standards for all major CRE categories in 2020. Also, banks expect performance deterioration of all CRE categories except for multifamily where it is expected to remain unchanged.

Mortgage

The growth rate of mortgage loans slightly accelerated recently due to significant rates decline from 2018 local high and substantial growth of mortgage activity in 2019. Thus, mortgage loans increased by 4.7% yoy (as of February 12) vs +2.9% yoy 1 year ago and +4.5% yoy as the end of July 2019. Despite affordability ratios has already declined meaningfully from the cycle high, they aren't low from the historical averages point of view and household debt burden isn't either. But we don't expect substantial acceleration of mortgage loan growth from current levels given late cycle and banks' cautious approach to the mortgage lending, especially as the correlation between loan growth and rate decline in the mortgage segment wasn't strong in the recent years. Also, there are some limitations on the demand side (but there were some improvements in the recent months) even despite very strong labour market and significant decline of the long end in 2019. Thus, according to Michigan University, the index of consumers which think that it is good time to buy a home decreased by 1 pts MoM or +8 pts yoy (not far from 10 years low) to 142 pts. The index of consumers which think that it is good time to sell a home was flat MoM but +8 pts yoy to 151 pts, just 7 pts lower all-time high.

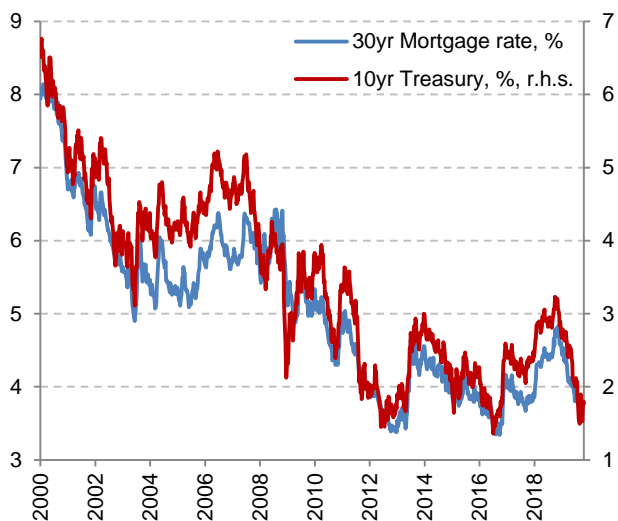
US economy created ample 225K jobs in January, markedly beating consensus estimate of 165K, after slight miss in December which initial estimate was revised up from 145K to 147K. But average monthly payrolls in 4Q19 were 176K. It is significantly lower than FY2019 payrolls of 223K but almost in line with FY2018 average payrolls of 179K, the lowest figure since 2011. So, median forecast of average monthly payrolls for 2020-2022 years were markedly revised up in February to 150K/120K/109K for 2020/2021/2022 years, respectively (from 135K/108K/- in January). Unemployment rate unexpectedly increased by 10 bps MoM to 3.6% in January, vs consensus of 3.5%. It seems that we could see revision down of employment forecasts as soon as possible given spreading of coronavirus.

According to the Fed data, NCO ratio in the segment increased by 1 bps yoy to 0% in 4Q19 while delinquency ratio tumbled by 48 bps to 2.35%, the lowest figure over 12 years. According to FDIC, the quality of mortgage portfolio remains very strong with NCO ratio at +0.01% in 4Q19, +1 bps yoy. 30-89 days delinquency ratio decreased by 7 bps yoy to 0.88%. Noncurrent ratio declined significantly again, -33 bps yoy to 1.76% in 4Q19. MBA's

mortgage delinquencies decreased by 20 bps qoq or -29 bps yoy to 3.77% in 4Q19, the lowest figure in the dataset history. Foreclosures declined by 6 bps qoq or -17 bps yoy to 0.78%, the lowest figure over more than 30 years. The key drivers of very good quality of mortgage portfolio are strong job market, rising home prices and tight underwriting standards which remain markedly tighter than historical averages even despite some easing in recent quarters. In coming quarters, asset quality will continue to be positively impacted by significant decline of the long end.

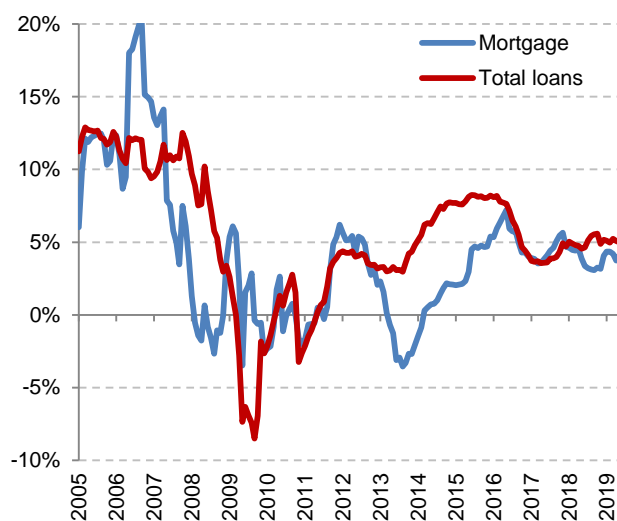
We expect that quality will remain very strong until US economy falls into recession and unemployment starts to grow but it is not a foreseeable event, from our point of view (not earlier than 2H2020). Affordability is still at an acceptable level and financial health of US consumer is very strong. However, it should be noted that affordability ratios aren't uniform across all the US states. In some areas it is too low because of skyrocketing house price growth. At the moment, it should not be a threat to the quality of the portfolio or cause of negative growth rate of loans due to still strong growth of the economy, tight underwriting standards and possible deregulation of the mortgage market.

Chart 13. Mortgage. 30yr Fixed Mrtg vs 10yr Tr yield, %



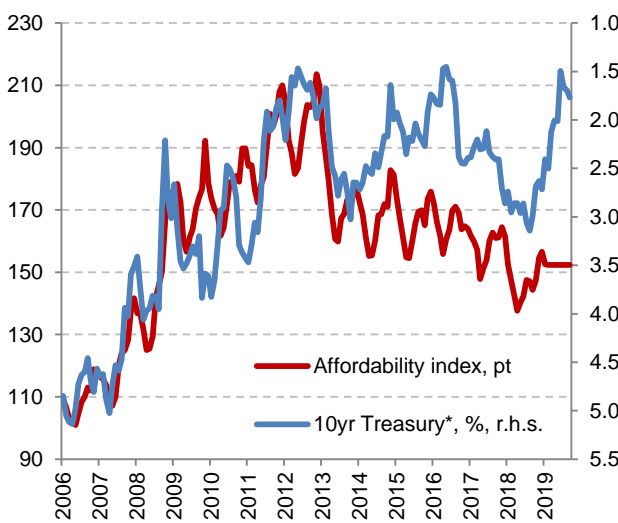
Source: Bloomberg

Chart 14. Loan Growth. Mrtg vs Total Loans, YoY, %



Source: Bloomberg

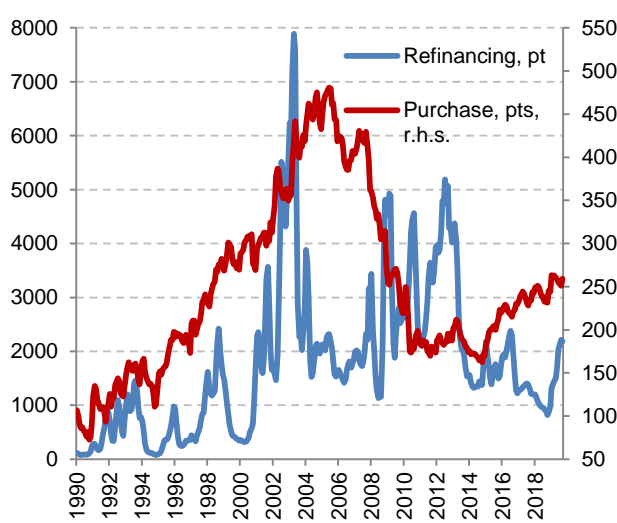
Chart 15. Mortgage. Aff. Index vs 10yr Treasury yield



*reversed order

Source: Bloomberg

Chart 16. Mortgage. MBA Applications Indexes



Source: Bloomberg

Lending standards for majority mortgage segments were basically unchanged in 4Q19 as it was in four previous quarters following a slight easing in 3Q18. Answering on special set of questions in 4Q19, banks reported that they weren't going to tighten standards unlike to most other segments. Also, banks don't expect deterioration of quality of mortgage loans in 2020 as it did for majority other loan segments. Also, banks reported "stronger demand for most mortgage loan categories but weaker demand for HELOCs". According to NY Fed 4Q19 report on HH debt and credit, "credit standards tightened slightly, again, in the fourth quarter. The median credit score of newly originating borrowers increased in the fourth quarter for mortgages, to 770, a 5 point increase from the third quarter, reflecting higher share of refinances".

Demand for mortgage loans strengthened in three recent quarters after several consecutive quarters of weaker demand. But, from our point of view, demand remains relatively weak even despite still solid financial health of US Consumer and ample affordability of US homes which increased recently because of significant decline of mortgage rates. Also, it should be mentioned that more and more consumers noted in various surveys that it wasn't the best time for buying home currently. Previously, banks indicated that they would tighten lending standards if the yield curve will be inverted.

Mortgage rates were relatively resilient in February after significant decline in January despite 10yr treasury yield tumbled to the new lows recently. Thus, 30yr fixed rate mortgage (national average, Bankrate.com) increased by 3 bps MoM to 3.66% (as of February 28), 116 bps lower than the high of November 2018. 30-yr mortgage rate (effective rate, MBA) went up by 1 bps MoM to 3.81% (as of February 28), -152 bps lower than the high of November 2018. But it seems that mortgage yields will continue to go down given 10yr treasury yield decreased by 61 bps ytd or -194 bps from local high of 2018.

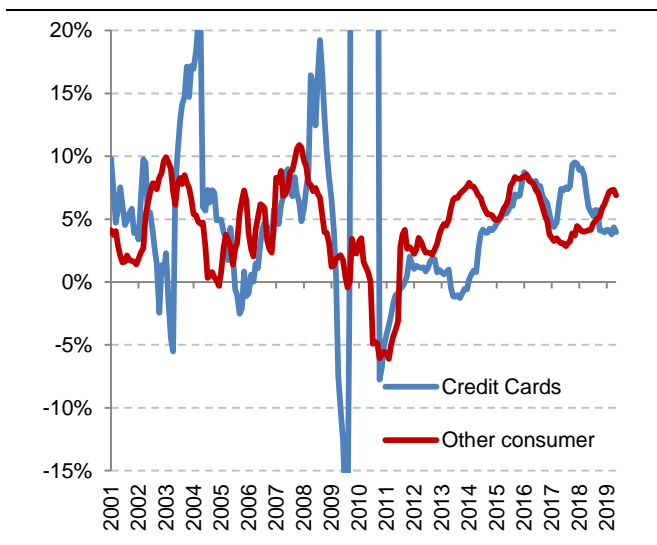
Housing market indicators published in February was noticeably better than expected as it was in the last few months, confirming stronger momentum on the housing market. However, NAHB index decreased by 1 pts MoM to 74 pts, missing consensus of 75 pts. Construction spending decreased by 0.2% MoM in December, markedly missing consensus estimate of +0.5% MoM but initial November estimate was revised up by 10 bps to +0.7% MoM. Forecasts for mortgage originations were raised again in February. Thus, according to Fannie Mae's housing forecast, total 2020 mortgage originations increased by 10.7% MoM for 2020 year and by 1.8% MoM for 2021 year. Also, it was significantly revised up forecast for 2019 originations, +6.1% MoM. In result, it is estimated that 2019 mortgage originations skyrocketed by 31% yoy driven by refinance applications which added more than 90% yoy. Currently, it is expected that total originations will gradually decrease in both 2020 and 2021 years on yoy basis by 1.6% yoy and by 12.1% yoy, respectively. According to MBA's forecast published in February, total mortgage originations will decline by 3.8% yoy in 2020 and by 10% yoy in 2021.

Housing starts were 1567K in January, significantly better than expectations of 1428K. And December figure was revised up from 1608K to 1626K. Also, building permits beat estimates substantially, 1551K vs consensus of 1450K and December figure was also revised slightly up, by 3K to 1701K. In turn, existing home sales slightly exceeded expectations in January – 5.46 mln vs estimate of 5.44 mln, -0.1 mln MoM. New home sales beat expectations, 764K in January vs consensus of 718K, +56K MoM from revised up December estimate (from 694K initially to 708K). Housing prices continue to grow and it has even accelerated recently but remained relatively weak. Thus, FHFA house price index added +0.6% MoM in December vs consensus of +0.4% MoM. Also, S&P CoreLogic home price index for 20 cities went up by 0.43% MoM vs consensus of +0.4% after growth of +0.47% MoM in November. On yoy basis, it was just +2.85% and it remained not far from the lowest level since the end of 2012, significant deceleration from price growth of early 2018 of 6.7% yoy.

Consumer

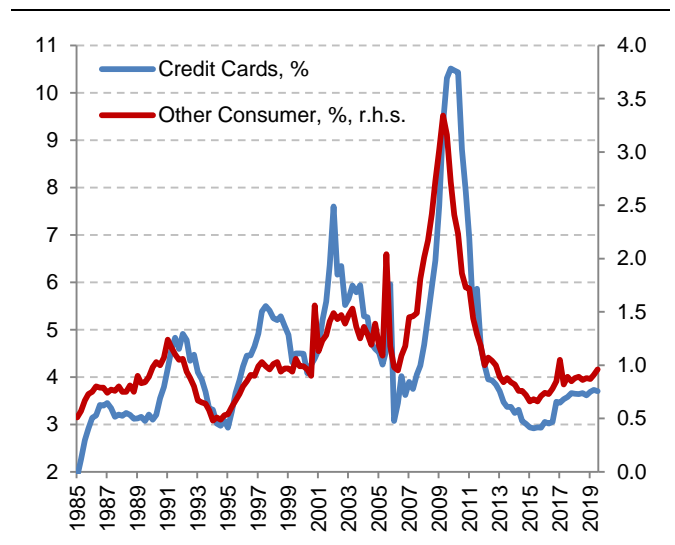
According to Fed H8 data, growth rate of consumer loans is currently +5.9% yoy (through February 12) vs +5.2% 1 year ago. Credit cards segment still negatively impact on overall growth. Thus, growth rate of the segment is just 4.5% yoy at the moment vs +5.6% yoy 1 year ago. Net change of consumer credit in December was +\$22.1 Bn, markedly beating consensus of \$15 Bn and it was significantly higher vs November figure of \$11.8 Bn. In turn, other consumer credits continued to accelerate, adding 7.4% yoy (as of February 12) vs 4.8% yoy 1 year ago. According to 4Q19 HH debt and credit survey by NY Fed, “total household debt increased by \$193 billion, or 1.4 percent, to reach \$14.15 trillion in the fourth quarter of 2019. This marks the twenty-second consecutive quarterly increase, with total household debt now \$1.5 trillion higher, in nominal terms, than the pre-recession peak of \$12.68 trillion, set in the third quarter of 2008. Mortgage originations rose by \$224 billion, or 42 percent, in the fourth quarter of 2019 to reach \$752 billion, the highest volume seen since the fourth quarter of 2005”.

Chart 17. Consumer. Loan Growth Rates, YoY, %



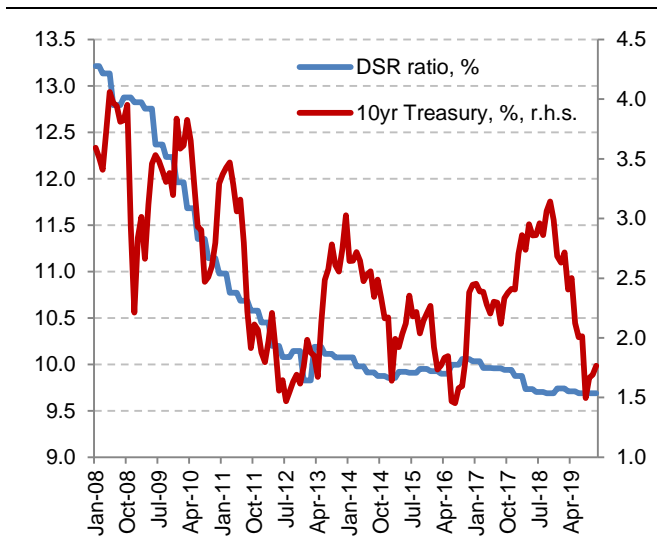
Source: Bloomberg

Chart 18. Consumer. NCOs Ratios, %



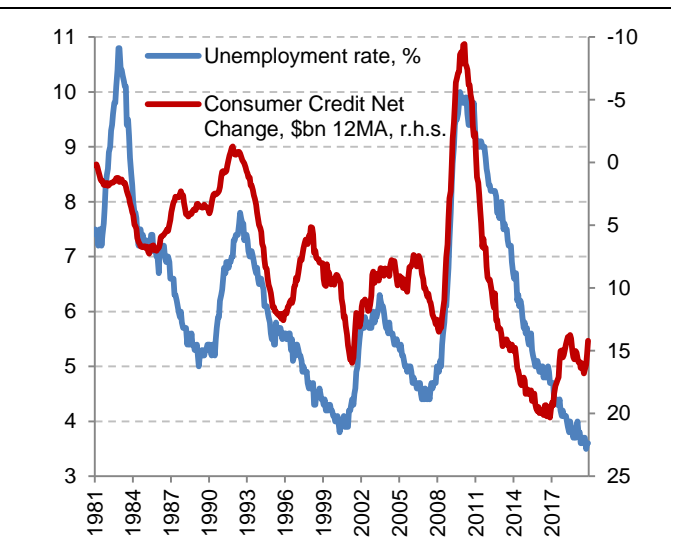
Source: Bloomberg

Chart 19. Debt Service Ratio vs 10yr Treasury Yield, %



Source: Bloomberg

Chart 20. Consumer. Loan Growth Rate, YoY, %



Source: Bloomberg

Despite not very strong loan growth, we still don't expect marked deterioration of the quality of consumer loans (only return to historic averages) until we don't see substantial growth of

unemployment rate. And it is not near-term event, at least currently. Of course, debt burdens aren't uniform across different income brackets. Despite DSR and FOR of median HH is markedly lower than historical averages, the figures of low-income consumer is already at or higher than pre-financial crisis levels. It could be a trigger for reversion of key credit quality indicators to their historical averages. But they remain strong at the moment. According to the Fed data, total consumer NCO ratio decreased by 4 bps qoq but +4 bps yoy to 2.27% in 4Q19, driven by other credit loans where NCO ratio decreased by 4 bps qoq but +3 bps yoy to 0.91%. Total consumer delinquency ratio also increased, +1 bps yoy to 2.34%, driven by credit cards segment where delinquency ratio increased by 7 bps yoy to 2.61%. According to FDIC, credit cards NCO ratio increased by 4 bps yoy to 3.75% in 4Q19; in other consumer loans NCO ratio increased by 4 bps to 1.01%; Auto NCO ratio was flat at 0.93%. 30-89 delinquency ratios (leading indicator of credit quality deterioration) were flat at 4Q19: 1.38% (-1 bps yoy) in credit cards, 1.68% (-2 bps yoy) in other consumer loans and 2.36% (+3 bps yoy) in Auto. Number of bankruptcy filings decreased again in 4Q19, 180.7K vs 182.5K in 4Q18, the lowest figure since the end of 2006.

January 2020 SLOOS survey indicated that “a moderate net share of banks reported tighter standards on credit card loans, and a modest net share of banks reported tighter standards on auto loans, while banks reportedly left standards unchanged for other consumer loans”. As of demand, banks saw weaker demand in auto but unchanged demand in credit cards and other consumer loans. Answering special set of questions, banks mentioned that they expected deterioration of credit quality in consumer segment, especially in auto and credit cards. It is quite consistent with what we had heard before and rising risks of recession because of coronavirus spreading. According to 4Q19 HH debt and credit survey by NY Fed, “auto loans also saw tightening in underwriting standards, with a 4 point increase in the median originating credit score. The volume of subprime auto originations was \$31 billion, a level on par with the last several years”.

Consumer activity data published in February remain very strong but mixed vs expectations. Thus, consumer sentiment indicator published by Michigan University increased by 1.2 pts MoM or +7.2 pts yoy to 101 pts vs expectations of 99.5 pts, just 0.4 pts lower than high of the cycle. In turn, conference board consumer confidence index was lower than expectations of 132.2 pts and it increased just by 0.3 pts MoM but -0.7 pts yoy to 130.7 pts. But it still remains not very far from the cycle high, -7.2 pts.

January employment report was markedly better than expected after weaker report in December. Thus, it was added 225K payrolls vs consensus of 165K and December figure was revised slightly up from 145K to 147K. Unemployment ratio unexpectedly increased by 10 bps MoM to 3.6%, slightly lower than it was expected, still near the lowest level since the end of 1960s. Underemployment rate also increased by 20 bps MoM to 6.9%. In turn, average hourly earnings missed estimates, +0.2% MoM vs expectations of +0.3% MoM and +10 bps MoM. On a year-over-year basis, it was 3.1%, +10 bps MoM and slightly higher than consensus. Average weekly hours were flat at 34.3, in-line with consensus. January ADP employment was 291K (the highest point since mid-2015) vs expectations of 157K but December figure was slightly revised down – from 201K initially to 199K. Moving average (4 week) initial jobless claims slightly decreased in February, -1K MoM to 210K (as of February 21), but it is still near 50-yr lows.

Interest Rates

Powell's testimony before the Senate Banking Committee and January minutes brought us little news compared to what we heard during January FOMC meeting. Maybe, coverage of coronavirus risks was more pronounced but no more than that. It was again confirmed that current stance of monetary policy is appropriate even taking into account higher risks while incoming macro information is consistent with the Fed outlook. Towards the end of the

month, it became obvious that the virus will not pass without a trace for the economy. Consequently, the market has become confident that the rate will be lowered at the next meeting, and, quite likely, by 50 points. The key question remains whether further easing of monetary policy will be sufficient to prevent dumping US economy into recession given the late cycle, supply chains disruptions because of Covid-19 and high leverage of US corporate sector.

As it was widely expected, the Fed held its target range for the federal funds rate unchanged at 1.5%-2.0% at January meeting as it did in December after three consecutive cuts in 2019. It was unanimous decision of all ten voting members of the committee. Notwithstanding, despite wording was almost unchanged we perceive the meeting as dovish one even taking into account that Jerome Powell stressed again that the economy is in a good shape. Two changes of wording related to description of household spending growth (the pace of growth was described as moderate instead of strong one, as it was in December statement). Also, it was noted that inflation is "returning to" inflation target in place of being "near" this level. The Fed raised IOER rate by 5 bps to 1.6% but it was noted that it is just technical adjustment. Also, it was announced that overnight repo operations would last till at least April 2020 (at pace of approximately \$60 Bn per month) and it was noted that the Fed would like to maintain reserves above \$1.5 trillion. It was again emphasized that "as long as incoming information about the economy remains broadly consistent with this outlook, the current stance of monetary policy will likely remain appropriate".

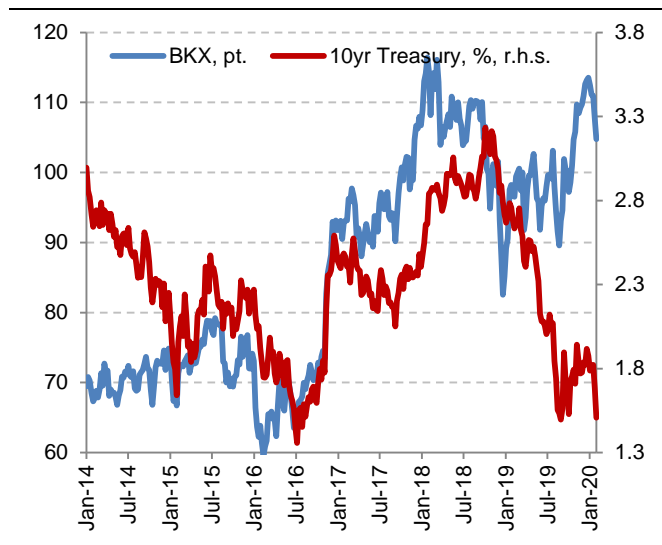
Despite expansion is in its 11th year, growth remains solid given healthy job market, rising income and upbeat consumer confidence but moderated household spending and weakness in the business fixed investments and exports. However, there were some signs of optimism even on business side. Of course, risks remain but it wasn't a big threat to the economic growth, at least till now. New staff projections will be released at the next meeting in March and it is obvious that projections will be lowered meaningfully. In turn, staff estimates in December were unchanged vs September projections except for unemployment expectations. Thus, the median GDP growth forecast is 2.2% yoy for 2019, 2.0% yoy for 2020, 1.9% yoy for 2021, 1.8% for 2022 and 1.9% for longer run estimates. Unemployment forecast for 2019 declined by 10 bps to 3.6%, -20 bps to 3.5%/3.6%/3.7% for 2020/2021/2022 years respectively. Longer run projection also declined by 10 bps to 4.1%. As of inflation expectations, they were markedly revised down in June, but remained unchanged in September and December at 1.5%, 1.9%, 2.0%, 2.0% and 2.0% for 2019/2020/2021/2022/longer term, respectively.

There was no changes related to the Dot plot at January meeting but dots decreased in December vs September when they markedly declined vs June projections which hadn't projected any rate cuts in 2019. At the moment it is implied that there will be no rate changes in 2019 and 2020, one hike in 2021 and another one in 2022. The longer term rate was unchanged at 2.5%. Moreover, polarization of the committee declined materially during the recent months. Notwithstanding, it skewed to the upside as no one member of the committee expects rate cuts in the foreseeable future. But dots are not a good guidance for future fed funds rate dynamics given its failed expectations in 2019.

Despite significant growth of uncertainty in the recent months, US economy continued to be in a good shape, supporting banking fundamentals which should continue to suffer from significant decline of rates and flat/partly inverted yield curve. Ongoing rates rebound from September lows in 4Q19 raised hopes that banks would be able to stabilize NIM in the coming quarters but the situation has changed dramatically in the recent weeks, so NIM will inevitably continue to decline, at least in 1H20. Current expectations imply that the fed funds rate could be cut four times in 2020. Given late cycle and rising risks of recession, not least because of supply chain disruptions due to coronavirus spreading, we don't exclude

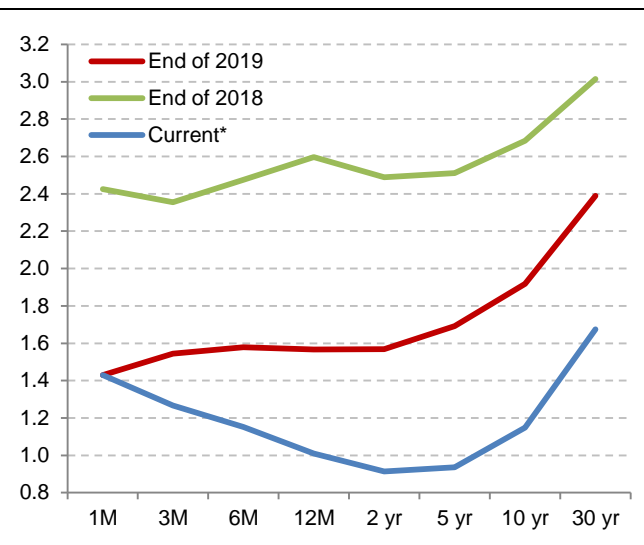
that it could be cut to zero in case of recession begins. And it will be a serious problem for US banks taking into account the fact that rate cuts will be accompanied by lower/negative loan growth, lower fee income as well as rising problem loans and provisions.

Chart 21. BKX Index vs 10yr Treasury Yield



Source: Bloomberg

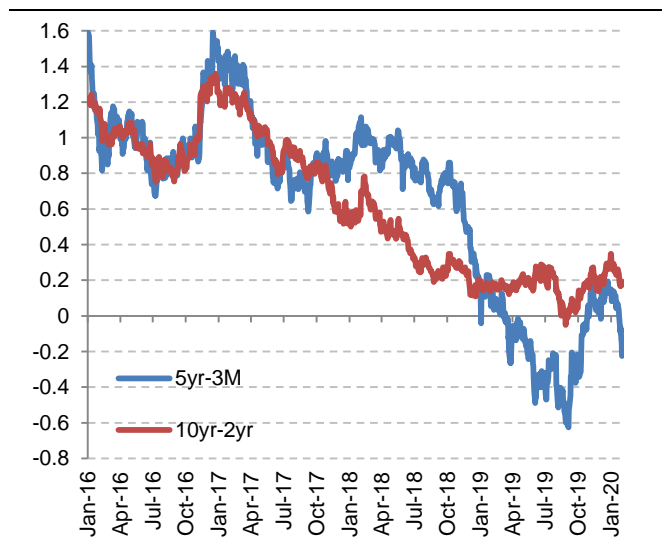
Chart 22. US Yield Curves, %



*As of end-February 2020

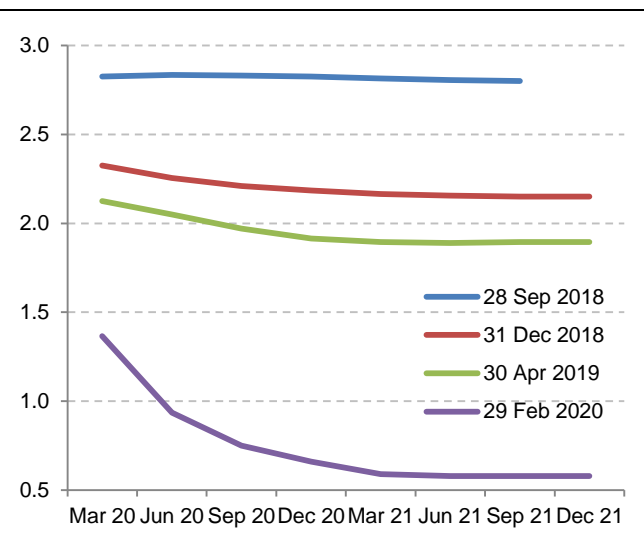
Source: Bloomberg

Chart 23. Treasury Spreads, %



Source: Bloomberg

Chart 24. Futures Implied FF Rate, %



Source: Bloomberg

The hope for the beginning of NIM stabilization turned out to be false. Given current rate expectations and ongoing risk of further spreading of coronavirus around the world, NIM will continue to go down and the decline could be sizeable. Thus, according to the Bloomberg forecasts, the funds rate will be cut at least three times in 2020 (3.6 cuts till the end of 2020 as the end of February 2020 vs 2 cuts as the end of January). In turn, Fed futures (Dec 20/Dec 21) implied rates tumbled by 48 bps MoM (-74 bps ytd) and -45 bps MoM (-80 bps ytd) in February to 0.66% and 0.58%, respectively, implying almost four rate cuts till the end of 2020. 4Q19 NIM was better than expected. 13 out of 24 BKX members showed negative surprise on NII in 3Q19 vs 14 out of 24 BKX members in 3Q19. In turn, 14 out of 24 BKX members showed positive surprise on NIM in 4Q19 vs 10 out of 24 BKX index members in 3Q19. Median NIM of BKX index members decreased by 5 bps qoq or -17 bps yoy to 2.99% vs -8.5 bps qoq or -12.5 bps yoy in 3Q19. So, due to better NIM dynamics in 4Q19 and lagged reaction of NIM forecasts on both benchmark rates and rate expectations

meltdown, Bloomberg consensus estimates of median NIM of BKX index members were almost unchanged ytd but they will inevitably decline considerably as soon as in March. As the end of February, FY20 NIM declined by 2 bps ytd -0.9 bps MoM to 2.95% while FY21 NIM was flat both ytd and MoM at 2.97%.

The yield curve became flatter again in February amid coronavirus spreading around the world, the second month in a row of flattening after four consecutive months of steepening the curve. So, it is again inverted in the middle part of the curve while spread 10yr/2yr remains slightly higher than average level of 2019 year. If the situation doesn't improve in the near term, it will put additional pressure on NIM (other things being equal) despite some signs of the margin stabilization during the last quarter.

Treasury yields decreased markedly in February across the whole yield curve. Thus, 1M yield decreased by 9.4 bps MoM to 1.43% while 3M yield declined by 27.1 bps MoM to 1.27%, 2yr yield went down by 37.1 bps MoM to 0.91% and 5yr yield tumbled by 40 bps MoM (currently at 0.9%). 10yr yield went down by 35.8 bps MoM to 1.15 (-76.7 bps ytd), while 30yr yield tumbled by 32.4 bps to 1.68%.

So, spreads moved in different directions in February after significant decline in January. 5yr/3M spread decreased by 10.7 bps to -0.33%, to the lowest level since mid-October after four months in a row of growth. So it is 130 bps lower than average level of 2017 yr while 10yr-2yr spread is 70 bps lower. Spread (10yr-2yr) increased by 4.2 bps MoM to +0.24%, just 6.8 bps higher than average level of 2019.

According to Bankrate.com data, loan yields continued to go up (except for mortgage rates), the third month in a row, after negative dynamics in August-November, despite rates meltdown in the first two months of 2020. Thus, average 30yr mortgage rate decreased by 11 bps MoM to 3.64% in February, after relatively flat rate over 6 months. Also, average 15yr mortgage rate decreased by 10 bps MoM to 3.14%. Auto loans rate (new loans, 60 mnth) went up by 3 bps MoM to 4.66%, for the second month in a row after 7 consecutive months of decline. In turn, deposit rates continued to decline in February, the fifth month in a row of decline. So, it will continue to positively impact on NIM dynamics in the near quarters but the effect of lower asset yields will be more important and NIM will continue to go down. Thus, national average cost of 6 month deposits decreased by 2 bps MoM to 0.74%; average 3yr CDs cost declined by 2 bps to 1.22%; average 5yr CDs cost decreased by 3 bps MoM to 1.37% while cost of interest checking accounts tumbled by 9 bps MoM to 0.22%. Average cost of money market accounts fell by 2 bps MoM to 0.5%.

Europe

Corporate loan growth in EU on yoy basis markedly decelerated in the recent months as a result of slowdown of EU economy but the latest available data didn't include negative impact of COVID-19. It was negative on MoM basis in December but turned again to the positive territory in January. Loans of all terms increased on MoM basis in January. But yoy corporate loan growth is still near the lowest level over the last 18 months. Thus, loans up to 1 year declined by 2.4% yoy but +0.3% MoM in January. Loans 1-5 yrs decelerated to 4% yoy from +5.1% yoy in August vs +2.6% yoy 1 year ago. Loans over 5yrs were at +2.4% yoy in January vs 2.1% yoy in January 2019, +0.3% MoM. Total corporate loans increased by +1.6% yoy vs +1.4% yoy 1 year ago, +0.3% MoM, after the most significant MoM decline over last 4 years in December. Credit growth in the EU still varies significantly across countries. We see very healthy corporate loan growth in Germany and France (and other Northern countries) while Italian and Spanish corporate loan growth remains poor as it is in majority of other Southern countries. Italian corporate loans increased by 1.1% MoM in January, after five consecutive months of decline, still -5.9% yoy. It declined on MoM basis in 9 months out of 12 in 2019.

European corporations continue to benefit from low interest rate environment but lost momentum and weak external demand could not but affect credit growth. At the end of last year, there was hope for stabilization of the macroeconomic situation, but the coronavirus spreading disrupted these hopes. In November 2019 ECB's Financial Stability Review it was noted that underlying vulnerabilities remain as "slower economic growth has led to a continued deceleration in corporate profits". But financial health of EU corporate sector remains strong as corporate debt burdens declined to new historical lows because of ongoing decline of both front book and back book yields. Due to significant decline of key benchmark rates and lowered rate expectations, higher than historical averages corporate debt-to-GDP ratios still aren't a problem for European companies. Thus, there was no deterioration of borrower creditworthiness despite slowdown/recession in EU economy, the probability of which has increased materially in the recent months. Asset quality of EU banks has been going down yet, especially in countries with high NPL ratios. As we expected earlier, the further slowdown in economic activity cannot but affect the dynamics of asset quality even despite ECB continues to insist that risk of recession is low. But macro data is still worsening while composite PMI figures is almost in contraction territory in Eurozone in recent months, -0.3 pts yoy. Industrial production decreased again on MoM basis in December, the fourth consecutive month of no growth on MoM basis. It decreased on MoM basis in 8 out of 12 months of 2019. On yoy basis, it was -4.1% in December, 14th quarter in a row of negative yoy growth. Also, manufacturing PMI remains very weak with February print of 49.2 pts, more than 1 year below 50 pts. Moreover, according to ECB research, "between July 2018 and June 2019 the global trade factor and all factors associated with developments in China, the United Kingdom and United States explained 37% of the fall in euro area industrial production growth, while domestic factors contributed 63%, although part of this effect may reflect temporary factors linked to the car industry in the second half of 2018". So, the risk that asset quality could worsen in the near term even despite negative rate environment continued to go up, having a double negative effect on banking profits.

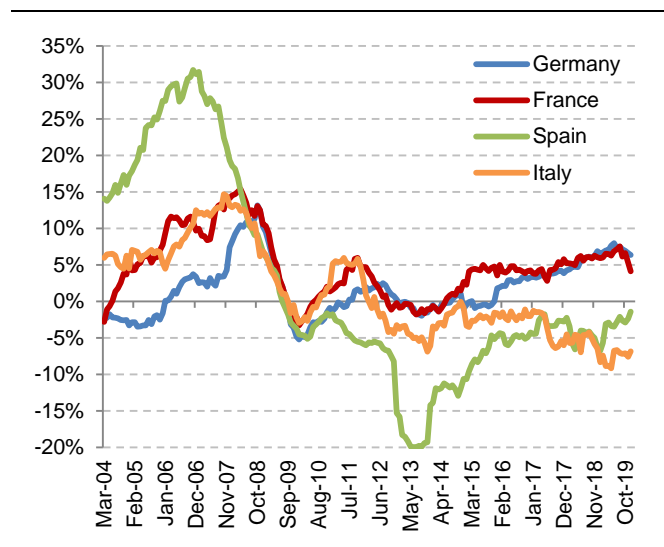
According to January 2020 Euro Area bank lending survey, "net demand for loans to enterprises declined in the fourth quarter of 2019 (the first time this had been seen since the fourth quarter of 2013), despite banks expecting it to remain stable overall". The decline of demand was broad based across European countries. Currently, banks expect that demand will continue to decline in the first quarter of 2020. The key drivers of demand remain low general level of interest rates and other financing needs while positive contribution of fixed investments and M&A activity declined. Credit standards for corporate

loans remained broadly unchanged in 4Q19, +1% vs -2% in 3Q19, in line with expectations of October 2019 BLS. For 1Q20, banks expect that standards will remain unchanged. The key driver of easing standards is still competitive pressure from other banks while risk perceptions influenced in the opposite direction. It was also noted that impact of risk tolerance, cost of funding and BS constraints had a neutral impact overall. Rejection rate for corporate loan applications increased again in 4Q19, reaching the highest rate since the series began in 2015.

Unadjusted EoP corporate loans increased by 1.6% yoy at the end of January, 28st consecutive month of positive growth on yoy basis. In turn, adjusted for sales and securitizations loans increased by 2.6% yoy, the 55th consecutive month of positive yearly growth (marked acceleration from 2017 figure of 1.9% yoy). Deceleration of corporate loan growth is negative for further NII dynamics of EU banks as it was one of main drivers which slightly mitigated negative impact of declining yields, especially taking into account more accommodative monetary policy in coming years which implies significant extension of period of negative rates environment.

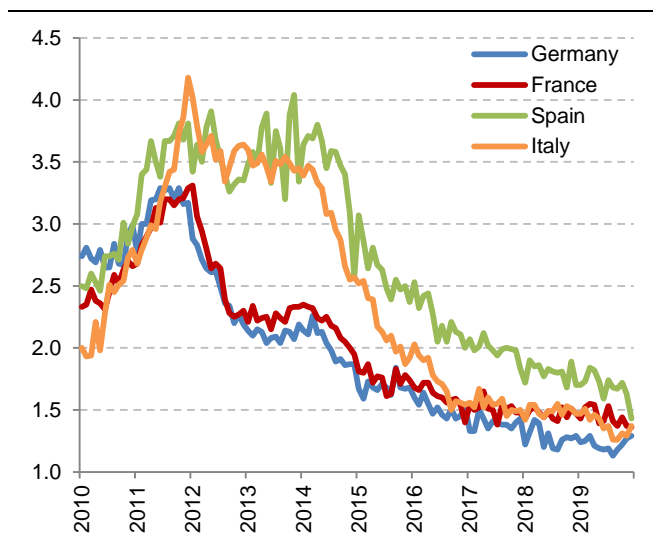
German outstanding corporate loans (unadjusted figures) increased by 5.5% yoy as the end of January or +0.1% MoM vs +8.0% yoy as June 2019. French corporate loans outstanding (unadj) added 4.3% yoy or -0.2% MoM as the end of January (the third consecutive month of MoM decline) vs +5.9 yoy one year ago. As for Spain and Italy, their outstanding corporate loans continue to decrease, -0.8% yoy and -5.9% yoy, respectively, and growth rates on MoM basis in the countries were very different, -0.3% MoM and +1.1% MoM, respectively. Adjusted figures look slightly better, but growth rates in both countries remain weak, just +0.7% yoy in Spain and -4.5% yoy in Italy.

Chart 25. EU Corporate Loan Growth, YoY



Source: Bloomberg

Chart 26. EU Corporate Loan Rates, New Loans, %



Source: Bloomberg

European corporate rates slightly increased in December after tiny decline in November. But rates (new business) are still 4 bps higher than all-time lows showed in August/September due to significant growth of key benchmark rates since then which, however, moved markedly back in recent weeks because of coronavirus risks and weaker macro figures. So, we expect that both corporate and consumer loan yields of European banks could resume its negative dynamics at least in the nearest months. Average EU corporate loan rates (all maturities, new business lending, adjusted for loan sales) increased by 1 bps MoM in December to 1.4% but it is -8 bps yoy. Back book yields of EU banks continuously decreased on yoy basis since April 2014 but rate of decline was flat in the last 6 months. It declined by 1 bps MoM to 1.87% after being flat MoM in November. On

yoy basis, it is -11 bps but it is just 1 bps lower than the lowest yoy decline since mid-2014.

Dynamics of rates within European countries wasn't uniform in December with growth of front book yields in all major European countries except for France and Spain but rates of changes was very different. Thus, German corporate yield on new loans grew by 2 bps MoM to 1.29% (the fourth consecutive month of growth with overall move of +16 bps), flat yoy. Italian yield on new corporate loans increased by 8 bps MoM to 1.37%, +11 bps from September lows but it is 10 bps lower than it was 1 year ago. Spanish yield tumbled by 20 bps MoM to 1.43%, all-time low, -27 bps vs 1 year ago. French one came down by 1 bps MoM to 1.36%, the second month of decline in a row and it is -11 bps on yoy basis. In turn, Dutch yield skyrocketed by 30 bps MoM to 1.64%, the second month in a row of growth and it is 11 bps higher than it was 1 year ago. Back book yields of major European countries declined or were flat in December except for Netherlands where the rate unexpectedly increased. Thus, German yield decreased by 1 bps MoM to 1.89% in December, -14 bps yoy. In turn, French yield was flat MoM at 1.67%, -7 bps yoy. Italian yield was also flat at 2%, -6 bps yoy. Spanish rate declined by 4 bps to 1.77%, -9 bps yoy. Dutch yield increased by 3 bps MoM to 2%, -12 bps yoy. Thus, spread between new and outstanding rates became narrower in December, the lowest level over the last 8 years.

Consumer

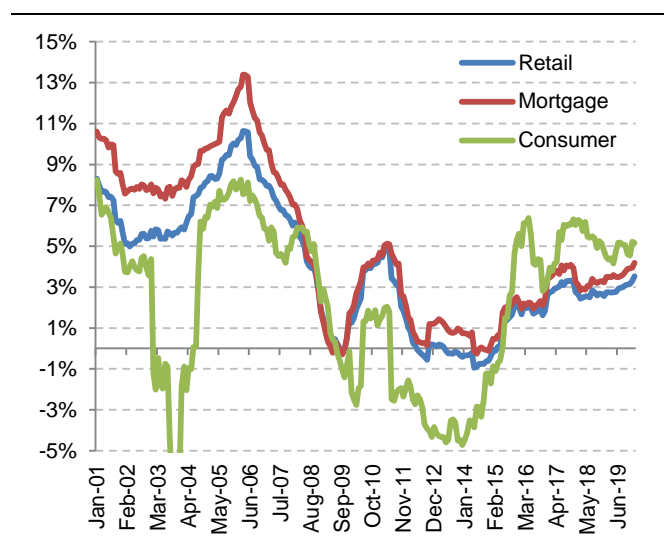
EU consumer still remains the key driver of total loan growth due to ongoing positive dynamics of disposable income (above historical averages) and it even accelerated in recent months despite deceleration of EU GDP growth in 2H19. It was driven by solid wage growth because of relatively tight labour market and strong job creation in service industries even despite manufacturing was weak, especially in Germany. Ongoing growth of property markets also impact positively on wealth of households. Recent weakness of macro data hasn't largely influenced on financial health of EU consumer yet, especially that there were some signs of macro improvement in January. Of course, it takes its toll on indicators of financial health of EU consumers but they still remain strong. Consumer loans growth remains high across major European countries. According to ECB, the indebtedness of euro area households remains relatively low, stabilized near 58% of GDP. Given very low rate environment, household debt burden is also near multi-year lows and it will remain at these levels or even lower in the nearest years because of upcoming rate cuts. Currently, households debt interest burden is 40-50% lower for majority of European countries than it was just before the US mortgage crisis.

EU loans to households increased by 3.5% yoy or +0.3% MoM in January (slight acceleration from 2.6% yoy as the end of 2018). Consumer loans growth remains relatively strong, however the rate of growth of the loan portfolio continues to differ widely across countries (as well as for corporate loans). Thus, German household loans increased by 4.6% yoy in January or +0.2 % MoM, French retail loans added 6.2% yoy or +0.6% MoM (slight acceleration from early 2019 figures), while household loans in Spain declined by 0.5% on yoy basis, the seventh month in a row, after non-negative loan growth rate for 13 months in a row following more than 7 years of negative yoy growth. Italian consumer loans added +0.6% yoy in January, the eighth consecutive month of positive yoy growth after 6 months in a row of negative yoy growth.

Consumer lending (excluding mortgage) still remains the key driver of EU household loan portfolio, adding 5.2% yoy in January, flat MoM. EU mortgage loans increased by 4.2% yoy as the end of January or +0.4% MoM. According to January 2020 bank lending survey from ECB, loan demand continued to go up for both mortgage loans and consumer credit in 4Q19. For more than 3 years, Spain demonstrated double-digit growth of consumer credit, significantly outperforming other major European countries. But the growth substantially decelerated in recent months. Thus, Spanish consumer credit increased only by 6.4% yoy

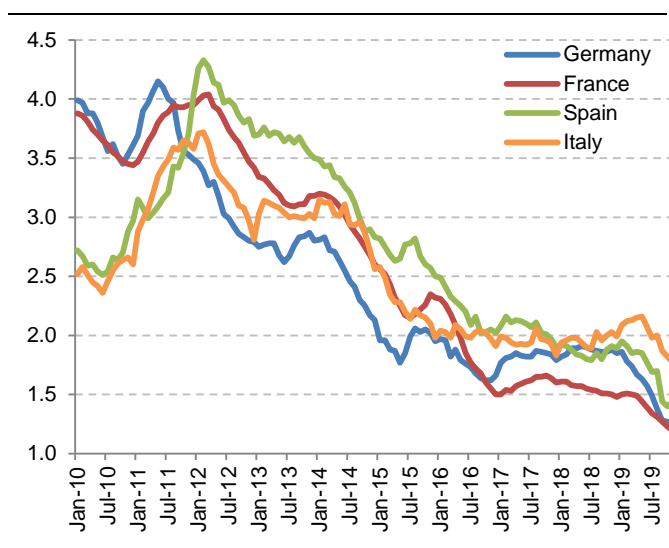
in January vs 12.1% yoy 1 year ago. In turn, Spanish mortgage portfolio continues to stagnate, -0.8% yoy as the end of January vs -1.1% yoy 1 year ago.

Chart 27. EU Consumer Loan Growth, YoY



Source: Bloomberg

Chart 28. EU Mortgage Loan Rates, New Loans, %



Source: Bloomberg

As of mortgage lending standards, it was broadly unchanged in 4Q19 after the slight easing in 3Q19, in line with expectations. But standards remain below historical average since 2003. Notwithstanding, competition pressure and risk perceptions continue to be the main easing factor. In turn, “banks’ risk tolerance, funding costs and balance sheet constraints had a broadly neutral impact”. Standards were tightened in Spain and France, broadly unchanged in Germany and eased in Italy. But banks expect that mortgage standards will be tightened in 1Q20. As of consumer loans, the lending standards were tightened in 4Q19, despite expectations that it would be broadly unchanged. But banks expect that standards will be eased in 1Q20. “The net share of rejected applications for consumer credit and other lending to households continued to increase slightly in the fourth quarter of 2019 according to reporting banks”. As of demand, it increased for both consumer loans and mortgage loans in 4Q19. The key driver of demand remains to be the general level of interest rates. So, banks continue to expect further strengthening of demand in both consumer credit segments.

Average EU rate on new mortgage loans tumbled by 9 bps MoM to 1.42% in November after unexpected growth in November, following nine consecutive month of MoM decline during which the yield decreased by 38 bps. Currently, it is 39 bps lower than it was 1 year ago. The key driver of yoy decline remains to be a significant decline of benchmark yields despite it increased markedly from its September lows but it resumed its decline in recent weeks again. In February, 10yr generic yield tumbled by 17.3 bps to -0.61%, the second month in a row of decline and -42.2 bps ytd after four consecutive months of growth. 30yr yield decreased by 22 bps to -0.15%, the lowest level since early September. So, the entire current yield curve is again below 0%. In December, German mortgage rates on new loans increased by 3 bps MoM to 1.29%, -56 bps yoy. Italian mortgage rate went up by 1 bps MoM to 1.44% but it is 45 bps lower than it was 1 year ago. French yield declined by 3 bps MoM to 1.17%, -31 bps yoy. Spanish mortgage rate decreased by 9 bps to 1.69% and it is 30 bps lower than it was 1 year ago. Because of lower front book yields, we continue to see declining back book rates on year-over-basis, -16 bps yoy, the highest level of decline over more than 1 year. On month-over-month basis, it declined by 3 bps to 1.95% in December after flat dynamics in November following 8 consecutive months of decline.

As for other consumer loans, EU new business rates tumbled by 21 bps MoM to 5.3% in December, the fifth consecutive month of decline with overall movement of -50 bps.

Consumer yields remain too volatile. On year-over-year basis it decreased just by 9 bps. Consumer yields decreased in all major European countries except for Germany and Spain in December. Thus, German yield went up by 2 bps MoM to 5.75% in December, -6 bps yoy. French rate tumbled by 22 bps MoM to 3.49%, after two months in a row of decline, still -7 bps yoy. Spanish rate skyrocketed by 22 bps MoM to 6.66%, -26 bps yoy. Italian consumer yield went down by 14 bps MoM to 6.18%, the fourth month in a row of decline, -4 bps yoy.

Overall Macro

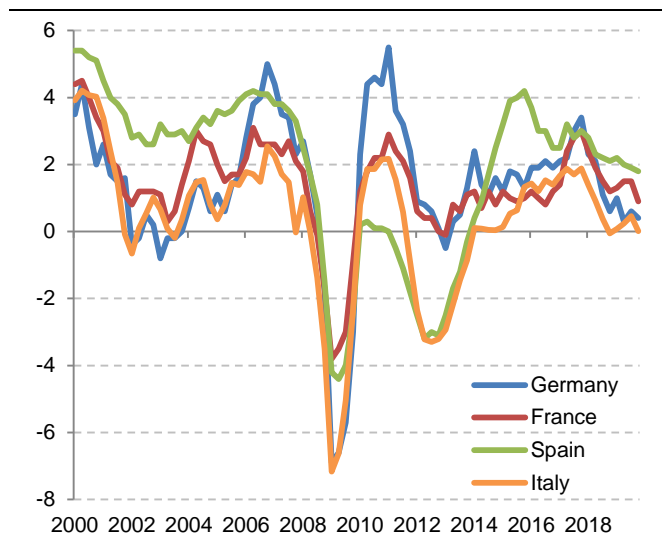
European economy began to demonstrate early signs of stabilization at the end of 2019 but the situation has changed dramatically in the recent weeks because of coronavirus spreading around the world. Taking into account weak GDP growth in EU, especially in France and Italy, which economies contracted in 4Q19, and risks tilted to the downside, it seems that it is the external shock/black swan which could push EU economy into recession. It is quite possible that we will see further easing of monetary policy in EU but it seems that even if it is accompanied by large-scale fiscal stimulus it will not guarantee that EU economy will elude recession taking into account clear signs of supply chain disruptions. So, market participants continue to assess the probability of recession as moderate despite the ECB continues to stand its ground that the probability of a recession is low. A survey of economists conducted by Bloomberg in February suggests that chance of a recession happening over the next 12 months is 17.5% (down from 20% in January). But we think that it is very optimistic estimate.

GDP growth remains relatively weak. And will remain so for the next year at least. Thus, European real GDP increased by 0.1% qoq or 0.9% yoy in 4Q19 vs +0.3% qoq and 1.2% yoy in 3Q19, the lowest qoq growth over more than 6 years. The key drivers of negative surprise were French and Italian GDP which in turn were the main drivers of positive surprise in 3Q19. Thus, French GDP decreased by 0.1% qoq or +0.8% yoy vs expectations of +0.2% qoq or +1.2% yoy (+0.3% qoq or +1.5% yoy in 3Q19) but it was driven by unexpected inventory decline while other components of GDP growth were in-line. In turn, Italian GDP decreased by 0.3% qoq or flat yoy vs expectations of +0.1% qoq or +0.1% yoy (+0.1% qoq or +0.5% yoy in 3Q19). Spanish GDP growth of +0.5% qoq or +1.8% yoy exceeded consensus of +0.4% qoq or +1.7% yoy (+0.4% qoq or +1.9% yoy in 3Q19). German GDP was flat qoq or +0.4% yoy in 4Q19 vs +0.2% qoq or +0.6% yoy in 3Q19. In February, Bloomberg consensus estimates for GDP yoy growth were flat at 1.0%/1.3%/1.3% for 2020/2021/2022 years, respectively.

European macro data published in February was slightly worse than expected after neutral figures in January. Thus, retail sales and industrial production were lower expectations while PMI figures were better than expected but there are some nuances with marked growth of manufacturing PMI. So, economic surprise indices decreased markedly in February. Citi's economic surprise index decreased by 20.7 pts MoM to 0.4 pts after it attained 1.5 year high. In turn, Bloomberg surprise index decreased by 0.22 pts MoM to -0.35 pts. According to ECB's January introductory statement, "the incoming data since our last meeting are in line with our baseline scenario of ongoing, but moderate, growth of the euro area economy". Despite some signs of stabilization, EU economy is very far from being strong with still high risk of negative spillover effect from manufacturing sector to services, especially taking into account spreading of coronavirus. There were some signs of global GDP growth acceleration in 2020 earlier but the base scenario now is further deceleration given Covid-19 outbreak and unprecedented quarantine measures in China. According to ECB January introductory statement, "the ongoing weakness of international trade in an environment of continued global uncertainties, which has particularly affected the euro area manufacturing sector and has also dampened investment growth". But ECB

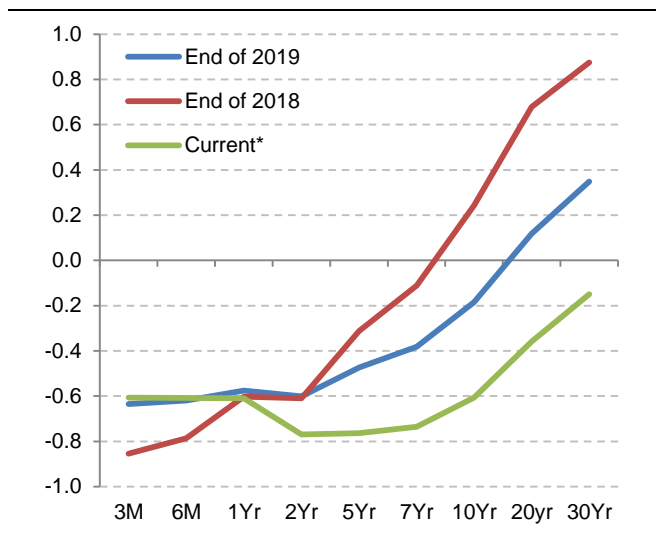
expects that current growth will continue to be driven by “favourable financing conditions, further employment gains in conjunction with rising wages, the mildly expansionary euro area fiscal stance and the ongoing – albeit somewhat slower – growth in global activity”. It seems that wording will change as early as in March introductory statement as EU economy remains very sensitive to external risks even despite new monetary stimulus. So, risk of recessions in EU has increased markedly in recent months. Thus, we could see further deceleration of loan growth and uptick in NPLs what is very negative for EU banks given negative rate environment. We expect that EPS/NI 20/21 estimates will be revised down in the nearest months despite optimistic 4Q19 results.

Chart 29. EU Countries Real GDP Growth, YoY, %



Source: Bloomberg

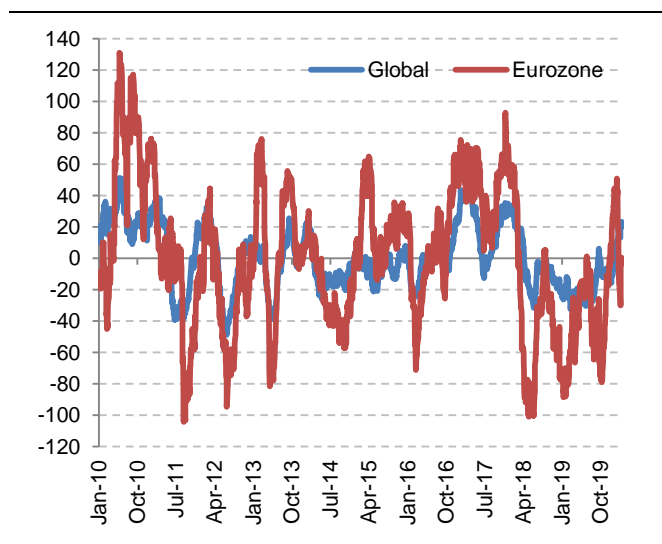
Chart 30. EU Yield Curves, %



*end of February 2020

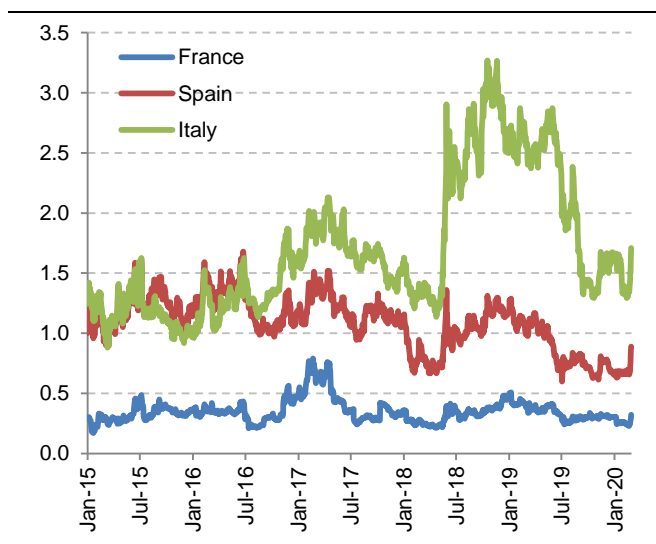
Source: Bloomberg

Chart 31. Citi Economic Surprise Indexes, pt



Source: Bloomberg

Chart 32. EU Countries Sov. Spreads vs Ger, 10Yr, %



Source: Bloomberg

Composite PMI (preliminary figure), which is well correlated with GDP growth slightly beat expectations in February after slight miss in January. It increased by 0.3 pts to 51.6 pts beating consensus of 51 pts, remaining near the lowest level over 6 years. It was driven by manufacturing PMI which is still below 50 pts. Thus, it increased by 1.3 pts MoM to 49.2 pts vs consensus of 47.4 pts. But it went up because of higher time of delivery which could be caused by disruption of supply chains. In turn, services PMI increased only by 0.1 pts to 52.6 pts vs estimate of 52.3 pts. Ongoing but reduced weakness in international trade and

uncertainty because of coronavirus continues to negatively impact on European manufacturing and it remains the key risk for European economy as well as spreading of weakness of manufacturing sector to services sector, especially taking into account the fact that forward looking components of PMI hasn't stabilized yet. Thus, December industrial production was worse than expected, -2.1% MoM vs estimate of -2.0% MoM and it is -4.1% on yoy basis while November initial estimate was revised down from +0.2% MoM to 0.0% MoM, the fourth month in a row of non-positive MoM growth. But consensus estimate of IP was almost flat in February flat yoy in 2020 (-20 bps MoM) and +1.3% in 2021 (flat MoM).

EU consumer remains the key driver of European economy, demonstrating strong growth of consumer spending due to ongoing and broad-based wage growth. But it also began to suffer from the lost momentum. At least, employment growth continues but decelerating. So, household consumption increased by just +1.2% yoy in 3Q19, being almost flat during the last year, a noticeable decline from two-year ago levels. ECB expects that easier borrowing costs will support consumer spending but we think that labour market and wage growth are more important for it. Moreover, ECB noted that the outlook for private consumption has worsened recently because of prolonged presence of uncertainty. And it will continue to go down because restrictions imposed by coronavirus. Thus, unemployment rate was better than expected in December, at 7.4% vs -10 bps MoM from November estimate of 7.5% and it is just 10 bps higher than low of the last cycle. So, Bloomberg consensus of unemployment rates for 2020, 2021 and 2022 years were unchanged MoM in February at 7.5%/7.5%/7.4%. February consumer confidence was markedly better than expected, -6.6 pts vs estimate of -8.2 pts, +2 pts MoM, it's a 15-months high.

Rates

ECB's January policy statement was unchanged vs December one, except for adding that it was officially launched a review of the monetary policy strategy which is expected to be concluded until the end of the year. Key rates were kept unchanged with deposit rate at -0.5% and refinancing rate at 0.0%. Thus, the rate guidance remains the same - "the key ECB interest rates to remain at their present or lower levels until it has seen the inflation outlook robustly converge to a level sufficiently close to, but below, 2% within its projection horizon, and such convergence has been consistently reflected in underlying inflation dynamics". APP at monthly rate of €20 Bn per month which started on 1 November will "run for as long as necessary to reinforce the accommodative impact of its policy rates, and to end shortly before it starts raising the key ECB interest rates". ECB is becoming more and more optimistic about macro outlook. New staff projections will be released in March while December staff projections had minor changes vs September estimates, with inflation being lower 2% at least for the next 3 years, implying that rates will also be not higher than current levels for the nearest three years. The risks are still tilted to the downside but "have become somewhat less pronounced" and "the uncertainty surrounding international trade is receding". As of strategic review, it "will encompass quantitative formulation of price stability, monetary policy toolkit, economic and monetary analyses and communication practices. Other considerations, such as financial stability, employment and environmental sustainability, will also be part of review". Overall, it was widely expected results with no significant changes to rate expectations. So, market reaction was also restrained.

According to introductory statement, incoming information from December meeting was in line with ECB's baseline scenario of ongoing but moderate growth of economy of Euro Area. But it was noted that manufacturing weakness is still a drag for the growth momentum of European economy. In December, staff macroeconomic projections were broadly unchanged vs September forecasts due to some stabilization macroeconomic situation in Euro Area. Thus, GDP growth forecast for 2019 was revised up by 10 bps to 1.2% yoy while 2020 growth was revised down by 10 bps to 1.1% yoy. GDP growth

estimate for 2021 year was unchanged at 1.4% yoy, the same as new forecast for 2022 growth. Current staff projections are almost in-line with January Bloomberg consensus, which implies that EU GDP growth will be 1.2% yoy (flat MoM), 1.0% yoy (flat MoM) and 1.3% yoy (+10 bps MoM) for 2019/2020/2021, respectively. Inflation forecasts were also broadly unchanged at 1.2% in 2019 (flat vs September), 1.1% in 2020 (+10 bps vs September) and 1.4% in 2021 (-10 bps vs September). The new inflation projection for 2022 is 1.6%, markedly below ECB's target but for 4th quarter of 2022 the forecast is 1.7%. It was also noted that "indicators of inflation expectations stand at low levels". At January meeting, it was also mentioned that inflation developments remained subdued overall but "there are some signs of a moderate increase in underlying inflation in line with expectations".

The meeting confirmed our expectations that key rates would remain at the current levels until marked changes in the economic outlook in one or another direction. Taking into account coronavirus spreading across Europe, ECB will decrease the key rate as early as at March meeting. Moreover, according to Bloomberg WIRP, it is expected that ECB will cut rates at least twice till the end of 2020 (as of February 28). Also, stabilization of macro figures in recent months, which was perceived as soundness of September's comprehensive easing policy measures, is under question given the fact that supply chain disruptions is already evident. Euribor futures imply that 3M rate will remain negative for the nearest 5 years at least, remaining a drag for majority of EU banks even taking into account deposit tiering and relaxation of TLTRO terms at September meeting which have just small positive effect on average. But TLTRO funding volumes in September and December were markedly below expectations, confirming the idea of very high liquidity in the system. Overall, rate environment markedly deteriorated ytd while yield curve is becoming flatter and flatter. So, revenue environment remains very challenging and it is highly questionable whether it will markedly improve in the nearest quarters. So, we should see further EPS revisions down as early as in the coming months.

After four consecutive months of relief rally, the key benchmark yields continued to decrease for the second consecutive month amid risks of spreading coronavirus. Thus, 3M Euribor (Dec 2021) decreased by 8 bps MoM to -0.51% (as of February 28) or -21 bps ytd while 3M Euribor (Dec 2022) went down by 8.5 bps MoM to -0.45% and it is -28.5 bps yoy. But EPS/NIM/NII estimates were almost unchanged ytd due to better 4Q19 earnings while coronavirus fears intensified only in the last week of February. So, we expect that estimates will be significantly revised down in the nearest months given that it is expected more than 2 rate cuts till the year end, according to Bloomberg.

The direction of dynamics of generic yields was uniform in February with decline of the short end but more significant decline of the long end. 3M yield decreased by 2.8 bps MoM to -0.61%. 6M yield went down by 2.7 bps to -0.61%. 1yr generic yield declined by 2.9 bps MoM to -0.61% while 2yr yield went down by 9.9 bps MoM to -0.77%. 5yr yield decreased by 12.2 bps to -0.76% while 10yr yield tumbled by 17.3 bps to -0.61%. Overall, the yield curve became markedly flatter for the second month in a row, after steepening for four consecutive months. Thus, spread between 10yr yield and 1yr yield decreased by 14.4 bps MoM to 0.02% while spread between 5yr and 3M yields went down by 9.4 bps MoM to -0.15%, after being positive for 3 months.

THEME OF THE MONTH

Coronavirus threat

Spreading of the coronavirus outside China led to collapse of financial markets in the last week of February. Nobody still knows the economic impact but fears drive the market. It is obvious that China growth significantly decelerated in 1Q20 – transportation sector, auto and property sales were especially affected. The key question is whether Global recovery will be V-shaped or U-shaped. The risk that it will be U-shaped has increased markedly in recent weeks. At least, majority of China industries operated significantly below normal levels in February. The key reason is unprecedented quarantine but, from our point of view, it was the best choice that the Chinese authorities could make in the current circumstances, even at such huge price. It seems that the authorities of developed countries will not be so decisive and this will eventually lead to much more serious consequences for the economy.

Also, it is very probable that Italy and France, which showed negative GDP qoq growth in 4Q19, will fall into recession if coronavirus problem isn't fixed in the coming weeks, especially taking into account that most cases are concentrated in the Northern regions which accounts for the lion's share of Italian GDP. At least, European manufactory PMI published in February indicates that supply chains have already disrupted. Unsurprisingly, the worst performers are banks which suffer from lower rates, weaker loan growth and higher problem loans. Moreover, some banks have already announced that they curbs their business travels to the most affected regions implying that IB fees will also markedly decline in 2020, at least in 1Q20. It should be noted that the start of the year for IB markets wasn't strong even till coronavirus spreading, at least in Europe.

There have been not so many cases in US yet, but supply chain disruption could lead to negative earnings growth which is quite risky for US economy given significant growth of corporate debt and leverage loans in the last cycle. We expect that both banks and nonbank lenders will tighten lending standards and it will be hard to refinance debt for commercial borrowers, especially BBB- and lower rated obligors, while profit will eventually going down markedly. So we could see rating downgrades and further sell-off on the HY market but even markedly lower FF rates could not help these companies because of flight to safety. Rating downgrades could lead to the domino effect in the high yield debt markets. So, we have already seen substantial growth of CDS prices recently.

It is obvious for us that US/EU economy will at least decelerate in the near future. It will depend on monetary/fiscal policy actions whether the deceleration transforms into decline. And it seems that monetary stimulus without any fiscal easing isn't very helpful in the current environment as efficiency of monetary stimulus has remained questionable recently. But there is also not very big room for fiscal stimulus in many developed economies. Currently, key benchmark yields continue to fall sharply while the yield curve again flat/inverted in the middle part, pointing that the central banks could start to act as early as possible. The nearest ECB/FED meetings are scheduled in the middle of March. It is quite possible that rates will be lowered again. At least, according to Bloomberg WIRP, it is implied that rates will be lowered 3.6 times in US and 2.1 times in EU till the end of 2020 (as of February 28). Also, the European yield curve is below 0%, while 10yr US treasury yield continues decline to record lows. Cutting of the fed funds rate to 0% this year doesn't look unlikely. But lower rates aren't a panacea, from our point of view, as liquidity is unlikely to reach those who really need it. Nobody wants to be an emergency lender during the perfect storm. From the other hand, it will undoubtedly reduce banking NII, especially regional banks, given relatively high share of C&I loans on their BS. If it is the case, we will see the rising corporate defaults and significant growth of problem loans in C&I segment. Consumer segment will also suffer but we don't expect that NCO/NPL ratios will be even

close to the peaks of mortgage crisis.

The further dynamics of financial markets will depend on which measures will be taken and how fast these measures will be taken. It also should be noted that previous virus outbreaks are not the best benchmark for the current one given every virus outbreak is a specific case while the world economy has become more interconnected from the last similar virus outbreak.

Overall, operating trends of US banks were solid so far but gradually deteriorating because of challenging revenue environment and weak commercial loan growth but still strong consumer business and high credit quality. But it is obvious that EPS estimates will be lowered markedly in the coming weeks as there is almost no EPS drivers in the near future except for high buybacks, especially taking into account slowdown of Global economy because of coronavirus outbreak and significant decline of the key benchmark rates ytd. Unsurprisingly, banks continue to trade with significant discount to historical averages (but it will be partially mitigated by decline of EPS estimates in coming months) and discount to S&P 500 index has increased markedly in February due to higher probability of recession. Thus, banks are trading with -2.2/-2.2 std on P/E CY and -2.3/-1.9 on P/E NY (on the basis of samples from 2000 and 2010 yrs to current moment) relative to historical averages (as of February 28). As for relative to S&P 500, banks are currently trading at -2.2 and -2.1 std from the sample mean (2010-current moment) for P/E CY and P/E NY, respectively.

EU banks EPS estimates will continue to go down despite some signs of operating trends stabilization during 4Q19 earnings season as risks of recession (particularly in Italy and France) increased, accompanied by significant decline of key benchmark rates. So, EU banks continue to trade with significant discount to historical averages (-25%/ -1.5 std from mean P/E CY of SX7P index members, sample from 2010 to the present) but discount to US peers (on median P/E CY of BKX index vs SX7P index) is just 14.3% at the moment vs average of 15.5% since 2010 or +0.2 std, inappropriate, from our point of view, given higher risks associated with EU banks. Moreover, despite SX7P index is just 8% higher than 2011 low, we could see further decline of European banks if coronavirus problem isn't be fixed quickly.

APPENDIX

Table 1. US Banks: Valuations

Company	Ticker	Price as of 28/02/20, \$			52-week price, \$		RSI	MCap, \$ bn.	Dividend yield			Price/Earnings			Price to book	Price to tang. book	ROE, %			TCE ratio, %	CET1 ratio, %
		Target price, \$	Upside		High	Low			2020E	2021E	2022E	2020E	2021E	2022E			2020E	2021E	2022E		
American Express	AXP	109.9	140.1	27.5%	138.1	106.8	20.2	88.8	1.6%	1.7%	1.9%	12.2	11.0	10.2	3.9	4.6	31.7	32.2	34.5	10.0	10,7
JP Morgan Chase	JPM	116.1	140.8	21.2%	141.1	98.1	18.4	356.9	3.2%	3.6%	3.8%	10.7	10.0	9.4	1.5	1.9	14.2	14.6	14.6	7.0	12,4
PNC Financial	PNC	126.4	161.1	27.4%	161.7	118.7	17.4	54.7	3.8%	4.2%	4.5%	10.7	9.9	9.2	1.2	1.5	11.1	11.5	12.3	9.0	9,5
Bank of America	BAC	28.5	37.4	31.3%	35.7	26.2	18.5	248.8	2.8%	3.3%	3.7%	9.4	8.7	8.1	1.0	1.5	10.9	11.1	11.1	7.2	11,2
Citigroup	C	63.5	91.7	44.5%	83.1	60.1	17.0	133.7	3.4%	3.9%	4.4%	7.4	6.7	5.9	0.8	0.9	9.9	10.4	10.2	7.7	11,8
Trust Financial Corp	TFC	46.1	58.1	26.0%	56.9	44.5	20.5	61.9	4.0%	4.4%	4.8%	10.5	9.7	9.0	1.0	1.9	9.4	9.9	10.4	7.3	9,4
Goldman Sachs	GS	200.8	269.0	34.0%	250.1	180.8	19.5	72.3	2.6%	2.8%	2.9%	8.1	7.3	6.9	0.9	0.9	10.9	11.0	11.2	7.5	13,3
Bank of NY Mellon	BK	39.9	52.4	31.3%	54.3	38.5	20.4	35.5	3.3%	3.6%	3.8%	9.6	8.8	8.5	0.9	2.1	9.7	10.2	9.4	4.8	12,5
Comerica	CMA	52.6	71.4	35.6%	87.8	51.0	20.5	7.4	5.4%	5.7%	6.1%	7.8	7.4	7.1	1.0	1.1	12.9	12.8	12.8	9.2	10,1
Citizens Financial	CFG	31.7	44.3	39.7%	41.3	30.9	20.1	13.5	4.9%	5.2%	5.5%	8.1	7.7	7.1	0.7	1.0	7.9	8.0	8.2	8.5	10,0
Regions Financial	RF	13.5	18.1	34.1%	17.5	13.2	19.2	12.9	4.8%	5.2%	5.4%	8.4	7.9	7.6	0.9	1.3	10.0	10.1	10.2	8.1	9,6
Discover Financial	DFS	65.6	89.0	35.8%	93.0	63.2	18.4	20.2	2.8%	3.0%	3.2%	7.4	6.8	6.2	1.8	1.9	25.3	25.8	25.6	9.6	11,2
M&T Bank	MTB	140.4	178.6	27.2%	175.7	136.4	18.4	18.3	3.2%	3.4%	3.6%	10.1	9.5	8.8	1.3	1.9	12.1	12.3	12.7	8.5	9,7
Fifth Third Bancorp	FITB	24.4	32.6	33.8%	31.6	23.7	20.5	17.3	4.5%	4.8%	5.2%	8.2	7.8	7.3	0.9	1.2	10.5	10.6	11.9	9.1	9,8
Huntington Bancorp	HBAN	12.3	15.3	24.3%	15.6	11.9	21.8	12.5	5.0%	5.4%	5.7%	9.5	9.0	8.7	1.2	1.5	12.4	12.3	12.2	7.8	9,9
Northern Trust	NTRS	87.8	110.1	25.5%	110.5	83.3	23.8	18.4	3.3%	3.5%	3.6%	12.5	11.6	12.6	1.7	1.8	15.0	15.5	14.2	7.6	13,2
People's United	PBCT	14.0	17.4	24.4%	18.0	13.7	21.9	6.2	5.1%	5.2%	5.3%	10.3	10.0	9.4	0.8	1.4	7.6	7.7	7.9	8.0	10,2
Synchrony Financial	SYF	29.1	38.9	33.8%	38.2	28.1	19.6	17.9	3.2%	3.7%	4.0%	7.3	6.3	5.6	1.3	1.5	19.1	20.4	20.0	11.7	14,1
KeyCorp	KEY	16.4	21.4	31.1%	20.5	14.8	21.4	15.9	4.8%	5.3%	5.6%	8.6	8.1	7.3	1.0	1.3	11.7	11.8	12.7	9.0	9,4
State Street Corp	STT	68.1	89.0	30.7%	85.9	48.6	25.4	24.1	3.2%	3.5%	3.6%	10.0	9.0	8.5	1.2	2.2	11.0	11.3	11.5	4.7	11,9
US Bancorp	USB	46.4	58.2	25.3%	61.0	44.9	14.8	70.7	3.8%	4.0%	4.2%	10.7	10.1	9.4	1.6	2.0	14.0	14.3	15.6	7.3	9,1
Zions Bancorp	ZION	40.0	52.8	32.3%	52.5	39.1	22.6	6.6	3.6%	3.8%	4.5%	9.2	8.7	8.0	1.0	1.1	10.9	10.8	11.0	8.5	10,2
Morgan Stanley	MS	45.0	61.0	35.4%	57.6	38.8	21.7	69.0	3.3%	3.8%	4.3%	8.3	7.6	6.7	1.0	1.1	11.0	11.7	12.3	7.2	16,4
Capital One Financial	COF	88.3	118.7	34.5%	107.6	78.5	22.1	40.3	1.9%	2.0%	2.0%	7.5	6.8	6.5	0.8	1.1	8.9	9.6	9.7	10.2	12,2
Wells Fargo	WFC	40.9	50.5	23.7%	54.8	39.8	16.6	167.5	5.1%	5.4%	5.6%	10.1	9.0	7.8	1.0	1.2	10.1	10.8	11.8	7.3	11,1
First Republic Banks	FRC	100.6	117.7	17.0%	122.3	87.4	21.8	17.2	0.8%	0.8%	0.9%	18.8	17.1	15.6	1.9	2.0	10.0	10.0	9.8	7.3	9,9
NY Commercial Bancshares	NYCB	10.8	12.1	12.1%	13.8	9.4	34.7	5.1	6.3%	6.3%	6.3%	12.8	11.4	11.0	0.8	1.3	6.2	6.9	7.1	7.4	9,9
SVB Financial	SIVB	208.2	279.3	34.2%	271.0	183.0	25.8	10.7	0.0%	0.0%	0.0%	10.6	10.0	9.2	1.8	1.8	15.3	14.2	14.0	8.4	12,6
Signature Bank	SBNY	125.1	162.3	29.7%	148.6	111.9	22.3	6.8	1.8%	1.8%	2.1%	10.9	9.9	9.4	1.4	1.4	12.2	12.2	11.7	9.4	11,6
East West Bancorp	EWBC	38.7	55.6	43.5%	55.3	37.3	23.1	5.6	3.0%	3.3%	3.6%	8.2	7.8	7.0	1.1	1.2	13.2	12.8	12.9	10.4	12,9
Synovus Financial	SNV	29.0	41.3	42.2%	40.3	28.1	17.0	4.3	4.5%	4.8%	5.0%	8.4	7.8	7.2	1.0	1.1	11.1	11.4	N.A.	8.1	9,0
First Horizon National	FHN	13.3	19.1	43.1%	17.4	13.1	18.1	4.2	4.6%	5.0%	5.7%	8.0	7.3	6.5	0.9	1.3	9.1	11.6	11.4	7.5	9,2
BOK Financial	BOKF	72.4	88.4	22.1%	91.1	70.9	21.9	5.1	2.9%	3.0%	3.1%	10.3	9.8	9.0	1.1	1.5	10.0	9.7	9.9	9.0	11,4
Median				31.3%			20.5		3.3%	3.8%	4.2%	9.5	8.8	8.1	1.0	1.4	11.0	11.4	11.7	8.1	10.7

Source: Bloomberg

APPENDIX

Table 2. EU Banks: Valuations

Company	Ticker	Currency	Price* (28/02/20)	Target price*	Upside	52-week price*		RSI	MCap, € bn.	Dividend yield			Price/Earnings			Price to book	Price to tang. book	ROE, %			TCE ratio, %	CET1 ratio, %
						High	Low			2020E	2021E	2022E	2020E	2021E	2022E			2020E	2021E	2022E		
Erste Group	EBS AV	EUR	31.0	37.8	21.7%	35.8	27.9	27.9	13.3	5.5%	5.9%	7.3%	8.6	8.4	7.9	0.9	1.0	10.2	9.7	9.6	5.2	13.8
Raiffeisen Bank	RBI AV	EUR	18.7	26.7	42.8%	24.4	18.1	19.6	6.1	6.7%	8.0%	11.1%	5.4	5.3	8.5	0.5	0.6	9.9	9.4	10.1	7.1	13.9
KBC Groep	KBC BB	EUR	60.0	73.6	22.6%	73.6	48.7	25.4	25.0	6.2%	6.4%	6.6%	10.4	10.2	9.9	1.3	1.5	12.6	12.2	12.0	6.0	16.1
Komerční Banka	KOMB CK	CZK	707.0	910.4	28.8%	964.5	707.0	17.6	5.3	7.0%	7.0%	7.2%	9.5	9.4	9.2	1.3	1.4	12.9	12.4	11.7	9.0	19.1
Jyske Bank	JYSK DC	DKK	231.9	265.9	14.6%	285.4	185.6	26.9	2.4	2.8%	3.3%	3.5%	8.8	8.1	8.3	0.5	0.5	6.0	5.9	5.6	5.0	17.4
SydBank	SYDB DC	DKK	125.0	134.3	7.4%	162.3	90.3	21.4	1.0	5.0%	5.3%	5.8%	8.8	8.5	8.9	0.7	0.7	7.4	7.3	6.7	7.3	17.8
Danske Bank	DANSKE DC	DKK	104.7	127.0	21.4%	135.7	85.9	32.3	12.1	5.3%	6.5%	7.5%	9.5	7.9	7.1	0.6	0.6	5.9	7.2	7.7	3.9	17.3
BNP Paribas	BNP FP	EUR	43.8	56.7	29.6%	54.2	38.9	20.8	54.7	7.4%	7.5%	7.7%	6.9	6.6	6.5	0.6	0.6	7.9	7.8	7.5	4.0	12.1
Natixis	KN FP	EUR	3.7	4.4	19.8%	4.8	3.3	25.9	11.6	9.4%	9.2%	9.6%	8.8	8.2	7.6	0.6	0.7	7.2	7.8	7.8	3.0	10.4
Societe Generale	GLE FP	EUR	25.6	32.9	28.5%	32.2	20.8	18.3	21.8	7.4%	7.8%	7.6%	6.6	6.3	5.9	0.3	0.4	5.8	6.0	5.8	4.2	12.7
Credit Agricole	ACA FO	EUR	10.8	14.6	35.3%	13.8	9.7	19.1	31.2	6.7%	6.9%	7.0%	7.9	7.6	7.1	0.5	0.8	6.5	6.5	7.7	2.2	12.1
Virgin Money	VMUK LN	Gbp	151.9	208.0	37.0%	222.1	102.3	30.2	2.5	0.0%	0.0%	0.1%	7.0	6.2	5.3	0.4	0.5	6.3	7.4	8.5	5.0	13.3
HSBC	HSBA LN	Gbp	523.9	591.4	12.9%	687.7	511.5	33.5	123.4	0.1%	0.1%	0.1%	8.2	7.8	7.1	0.8	1.0	7.6	7.9	8.7	5.3	14.7
Royal Bank of Scotland	RBS LN	Gbp	178.7	238.3	33.4%	265.0	173.4	18.3	25.0	0.1%	0.1%	0.1%	8.3	7.3	7.0	0.6	0.7	6.2	7.2	7.8	4.5	16.2
Barclays	BARC LN	Gbp	148.7	204.9	37.7%	193.0	134.7	23.0	29.9	0.1%	0.1%	0.1%	6.3	5.9	5.7	0.5	0.6	7.4	7.6	8.0	4.0	13.8
Standard Chartered	STAN LN	Gbp	562.6	668.5	18.8%	742.6	544.0	20.2	20.8	0.1%	0.1%	0.1%	6.8	5.8	5.1	0.5	0.6	6.0	6.9	7.3	5.5	13.8
Lloyds	LLOY LN	Gbp	50.2	63.2	25.8%	70.0	47.9	21.9	41.0	0.1%	0.1%	0.1%	7.3	7.4	7.2	0.8	1.0	11.2	11.1	11.1	4.3	13.6
Commerzbank	CBK GY	EUR	5.2	6.2	19.3%	8.3	4.7	34.5	6.5	2.9%	3.8%	4.3%	9.9	8.4	7.1	0.2	0.3	2.1	2.6	3.1	5.4	13.4
Deutsche Bank	DBK GY	EUR	7.9	7.1	-10.4%	10.4	5.8	34.3	16.3	0.0%	1.2%	2.4%	79.6	13.4	8.3	0.3	0.3	-1.0	0.6	2.5	4.0	13.6
Unicredit	UCG IM	EUR	11.5	16.5	42.6%	14.4	9.1	28.9	25.8	5.6%	5.8%	6.5%	6.6	6.3	5.7	0.4	0.4	5.2	6.1	6.7	6.9	13.2
Mediobanca	MB IM	EUR	8.2	11.0	34.3%	11.0	8.1	21.7	7.3	6.3%	6.6%	7.0%	8.5	8.4	8.0	0.7	N.A.	8.7	8.5	8.5	11.5	14.1
Intesa Sanpaolo	ISP IM	EUR	2.2	2.6	18.1%	2.6	1.8	32.6	38.5	8.7%	8.0%	8.0%	9.4	8.9	8.8	0.7	0.9	8.1	7.8	7.7	5.4	13.9
Emilia Romagna	BPE IM	EUR	3.6	4.8	32.7%	4.7	3.0	28.4	1.9	4.0%	4.8%	5.6%	6.5	5.4	5.2	0.4	0.4	5.8	6.6	6.3	5.5	13.9
UBI Banca	UBI IM	EUR	3.7	3.9	5.6%	4.5	2.0	57.7	4.3	4.1%	4.8%	5.5%	10.3	8.8	7.8	0.4	0.5	3.4	4.9	5.2	6.2	12.3
ING Groep	INGA NA	EUR	8.6	12.2	41.9%	12.1	8.2	19.2	33.5	8.2%	8.4%	8.4%	7.0	6.8	6.7	0.6	0.6	9.0	8.7	8.7	5.8	14.6
ABN Amro	ABN NA	EUR	12.4	18.0	44.7%	22.0	12.3	15.1	11.7	10.1%	10.4%	10.6%	6.6	6.8	6.5	0.5	N.A.	8.3	8.3	8.5	5.6	18.1
DNB	DNB NO	NOK	155.9	180.4	15.7%	178.1	141.5	27.7	23.7	6.1%	6.3%	6.8%	9.6	9.4	8.8	1.1	1.2	11.6	11.2	11.2	7.5	18.6
BBVA	BBVA SQ	EUR	4.3	5.5	26.0%	5.7	4.2	23.8	28.9	6.2%	6.3%	6.3%	6.8	6.6	6.3	0.6	0.7	8.6	8.3	8.2	6.0	12.0
Santander	SAN SQ	EUR	3.3	4.4	31.9%	4.7	3.3	28.8	55.3	6.8%	7.1%	7.2%	7.0	6.7	6.3	0.6	0.8	8.0	8.1	8.1	4.8	11.7
Bankia	BKIA SQ	EUR	1.4	1.8	25.6%	2.7	1.4	19.5	4.4	9.9%	8.2%	8.2%	8.2	8.0	7.9	0.3	0.3	4.1	4.1	4.0	6.3	14.3
Bankinter	BKT SQ	EUR	5.3	6.7	26.3%	7.4	5.1	20.3	4.8	5.5%	5.5%	5.4%	9.2	9.1	9.0	1.0	1.1	10.8	10.3	10.1	5.3	11.6
Sabadell	SAB SQ	EUR	0.8	1.0	27.9%	1.1	0.7	31.1	4.5	5.6%	7.1%	7.7%	7.2	6.5	6.2	0.3	0.4	6.1	5.4	5.7	4.7	12.4
CaixaBank	CABK SQ	EUR	2.3	3.1	33.9%	3.1	2.0	24.4	13.9	7.6%	7.8%	7.6%	6.9	6.9	6.9	0.6	0.7	7.8	7.6	7.5	5.5	12.0
SEB	SEBA SS	SEK	91.4	102.2	11.7%	104.9	78.9	34.8	18.9	7.1%	7.3%	7.4%	10.0	9.7	9.4	1.3	1.3	12.6	12.4	12.3	5.2	17.6
Handelsbanken	SHBA SS	SEK	96.5	103.3	7.1%	113.8	82.0	35.1	18.0	6.0%	6.4%	6.6%	10.9	10.5	10.0	1.2	1.3	10.8	10.6	10.7	4.9	18.5
Swedbank	SWEDA SS	SEK	144.8	164.9	13.9%	181.1	120.8	39.3	15.4	5.8%	6.1%	6.4%	8.7	8.4	8.1	1.2	1.3	12.9	12.7	12.4	5.1	17.0
Nordea	NDA SS	SEK	75.7	85.1	12.4%	86.7	57.2	32.7	28.8	0.6%	0.7%	0.7%	10.9	9.0	8.1	0.9	1.1	8.8	9.1	9.2	4.9	16.3
Julius Baer	BAER SW	CHF	40.2	51.2	27.2%	51.8	36.4	20.4	8.4	4.0%	4.4%	4.8%	10.0	9.0	8.3	1.4	2.6	13.1	13.7	13.7	3.3	14.0
Credit Suisse	CSGN SW	CHF	10.8	15.1	39.9%	13.9	10.7	19.6	25.9	2.7%	2.9%	3.0%	7.2	6.5	5.8	0.6	0.7	8.1	8.4	8.5	4.9	12.7
UBS	UBSG SW	CHF	10.6	13.7	29.1%	13.3	9.9	20.7	38.4	7.1%	7.3%	7.3%	7.9	7.6	7.1	0.7	0.8	8.7	8.7	9.0	5.0	13.7
Median					26.1%			24.9		5.7%	6.3%	6.6%	8.3	7.8	7.2	0.6	0.7	7.9	7.9	8.1	5.2	13.9

Source: Bloomberg

APPENDIX

Table 3. Calendar

Date	Region	Section	Event	Period
2-Mar	US	Macro	Construction Spending	Jan
2-Mar	US	Macro	ISM Manufacturing	Feb
3-Mar	EU	Macro	PPI	Jan
3-Mar	EU	Macro	CPI	Feb
3-Mar	EU	Macro	Unemployment Rate	Jan
4-Mar	EU	Macro	Retail Sales	Jan
4-Mar	US	Macro	ADP Employment Change	Feb
5-Mar	US	Macro	Factory Orders	Jan
6-Mar	US	Macro	Trade Balance	Jan
6-Mar	US	Macro	Employment Report	Feb
10-Mar	EU	Macro	GDP	4Q
11-Mar	US	Macro	CPI	Feb
12-Mar	EU	Macro	Industrial Production	Jan
12-Mar	EU	Macro	ECB Main Refinancing Rate	Mar 12
12-Mar	US	Macro	PPI	Feb
13-Mar	US	Macro	U. of Mich. Sentiment	Mar
16-Mar	US	Macro	Empire Manufacturing	Mar
17-Mar	EU	Macro	Construction Output	Jan
17-Mar	EU	Macro	ZEW Survey Expectations	Mar
17-Mar	EU	Corporate	Danske Bank. Annual General Meeting	
17-Mar	US	Macro	Retail Sales	Feb
17-Mar	US	Macro	Industrial Production and Capacity Utilization	Feb
17-Mar	US	Macro	NAHB Housing Market Index	Mar
18-Mar	EU	Macro	Trade Balance	Jan
18-Mar	US	Macro	Building Permits and Housing Starts	Feb
18-Mar	US	Macro	FOMC Rate Decision	Mar 18
19-Mar	US	Macro	Leading Index	Feb
20-Mar	US	Macro	Existing Home Sales	Feb
23-Mar	EU	Macro	Consumer Confidence	Mar
24-Mar	EU	Macro	Markit Eurozone Manufacturing, Services and Composite PMI	Mar
24-Mar	EU	Corporate	Banco Bilbao Vizcaya Argent. Investor Day	
24-Mar	US	Macro	Markit US Manufacturing, Services and Composite PMI	Mar
24-Mar	US	Macro	New Home Sales	Feb
25-Mar	US	Macro	Durable Goods Orders	Feb
25-Mar	US	Macro	FHFA House Price Index	Jan
26-Mar	US	Macro	GDP	4Q
26-Mar	US	Macro	Bloomberg Consumer Comfort	Mar 22
27-Mar	US	Macro	Personal Income and Spending	Feb
30-Mar	EU	Macro	Economic and Business Confidence	Mar
30-Mar	EU	Macro	Industrial Confidence	Mar
30-Mar	US	Macro	Pending Home Sales	Feb
31-Mar	EU	Macro	CPI	Mar
31-Mar	US	Macro	Conf. Board Consumer Confidence	Mar