BANKING SECTOR REPORT – April 2020

EXECUTIVE SUMMARY

US banks increased significantly in April after very weak performance in the first 3 months of 2020. However, the broad market was only slightly outperformed after 3 months in a row of lagging dynamics. Thus, BKX index increased by 13.6% MoM in April vs +12.7% MoM of SPX index. Absolute performance on MoM basis was +1.9 std from the mean and it is in the top 4% of absolute MoM performance of BKX index. Relative April performance was +0.8% MoM, it is +0.2 std from the mean and it is in the top 42% of relative MoM performance vs SPX index since 1992. It was the worst first four months of the year on both absolute and relative basis over more than 28 years with the total absolute performance of -34.4% ytd and relative performance of -27.2% ytd.

Due to relief rally, all banks ended April in the green zone but variance of growth rates was substantial caused by earnings season results. So, banks with better quarterly figures demonstrated markedly better dynamics. However, banks which missed expectations lagged considerably. Thus, Wells Fargo added just +1.2% MoM.

April FOMC meeting brought us little news – forward guidance remained unchanged and there were no more details for QE program. However, Powell noted that corporate credit facilities were near being finalized but the Fed could only make loans to solvent entities. Powell also said that the Fed would be patient and would not hurry to move rates up. Given expectation that the economy will likely drop at an unprecedented rate in 2Q20 and that unemployment could be surged into double-digit, it is obvious for us that there will be no rate hike for a very long time. And it will get worse at first before it gets better as even such massive fiscal and monetary stimuli can't save US economy from falling into very deep recession.

US banks reported highly mixed figures with the lowest number of positive EPS surprises among our group of banks since 4Q08, the worst quarter during GFC, but relatively solid revenues given current challenging revenue environment. Underlying trends were better than feared while key reason of large number of negative EPS surprises was large loan-loss reserve build which will remain elevated in coming quarters. From the other hand, NIM/NII dynamics were better than expected, capital markets revenues were very strong again and OpEx remained controlled while dividends were affirmed but buybacks were postponed. Thus, just 6 out of 24 of our group of banks demonstrated positive EPS surprises vs median number of positive quarterly EPS surprises of 17 over the last 52 quarters and the lowest figure so far of 5 in 4Q08. Thus, median EPS surprise for our group of banks was -29.6% vs median quarterly figure over the last 13 years of +3.5%. In turn, revenue surprise was positive, the 22nd quarter over the last 23 quarters, +1.7% vs median quarterly figure over the last 13 years of +0.8%. 14 companies of our group of banks or 58% demonstrated positive surprise on revenue, in-line with the median quarterly figure since Q107. Unsurprisingly, market perception of the results was negative for the second quarter in a row with median percent change in price around the earnings date of our group of banks of -0.8%, markedly lower than median figure since Q107 of -0.36% but better than 4Q19 figure of -1.8%. BKX index increased by 2.9% since the start of the earnings season till the end of April while S&P 500 index added 5.5% over the same time as COVID-19 fears eased somewhat recently. Notwithstanding, consensus estimates continued to go down. Thus, 2Q20 EPS estimates were revised down by 56.7% ytd / -28.6% since 13 April (median of BKX index members), FY20 EPS estimates were -49.3% ytd / -23.9% since the start of the earnings season while median change of FY21 EPS estimates was -29.3% ytd / -2.9% since 13 April.

Overall, underlying trends of US banks were strong so far but significant

deterioration is inevitable under current conditions. The key uncertainty is related to credit quality which will worsen meaningfully in coming quarters but questions about how much it will deteriorate and how long provisions will remain elevated are open. Relatively strong 1Q20 revenues don't look sustainable, from our point of view, taking into account significant decline of key benchmark rates ytd and lower consumer spending because of COVID19 impact but median decline of revenue 20E was just 3.8% ytd for BKX index members. So, banks will continue underperform the broad market, from our point of view. Due to meaningful decline of EPS estimates, banks is no more trading with significant discount to historical averages (it isn't relevant for 21E) but excessive discount to S&P 500 index remains because of significant intensification of credit quality concerns. Thus, banks are trading with +0.5/+0.5 std on P/E CY and -1.6/-1.3 on P/E NY (on the basis of samples from 2000 and 2010 yrs to current moment) relative to historical averages (as of May 1st). As for relative to S&P 500, banks are currently trading at -1.4 std and -2.1 std from the sample mean (2010-today) for P/E CY and P/E NY, respectively. On P/B, banks are trading with -2.1 std from the sample mean (2010-today) vs SPX with +0.9 std.

Despite stocks are still trading at significant discount to S&P 500 index, we remain cautious on US banks given severity of upcoming recession and high level of uncertainty about the speed of US economic recovery. Absence of outperformance of US banks vs SPX index during recent rally despite high beta indicates that investors still prefer not to get involved with banks. So, we still remain on the sidelines until we see the first signs of fundamentals improvement.

EU banks finally increased in April after 3 consecutive months of negative absolute performance. However, on relative basis it underperformed the broad market again, the 4th month over the last 6. On absolute basis, SX7P index increased by 2.2% MoM in April or 0.3 std from the mean and this result is in the top 41% of absolute monthly performance of SX7P since index inception. Also, relative monthly performance was -3.8% MoM or -1 std and it is in the bottom 13% of relative monthly performance. Despite weak relative dynamics in two previous years when SX7P index underperformed the broad market by 12.1% and 17.1% in 2019 and 2018, respectively, EU banks continue to lag broad market considerably. On ytd basis, SX7P underperformed by 23% as the end of April.

Despite relief rally, only 2/3 members of SX7P managed to end April in the green zone while key underperformers lost around 20% of market cap. The main driver of significant variance of price performance was the start of earnings season which was less optimistic than US one.

EU economy contracted at a record pace in 1Q20 but the speed of decline will be significantly higher in 2Q20. According to ECB's introductory statement, "euro area GDP could fall by between 5% and 12% this year, depending crucially on the duration of the containment measures and the success of policies to mitigate the economic consequences for businesses and workers". Notwithstanding, ECB kept rates unchanged at April meeting as well as terms of asset purchase programs. But Christine Lagarde noted during press conference that PEPP might be extended further than the end of 2020 and its size also could be adjusted if necessary. Anyway, we still expect that fundamentals of EU banks will remain weak in coming years. As the end of April, median decline of FY20 EPS of SX7P index members is 46.6% ytd, FY20 revenue -5.1% ytd, FY20 NII -3.8% ytd, FY20 provision +115% ytd. EU banks continue to trade with noticeable discount to historical averages (-16% / -0.9 std from mean P/E NY of SX7P index members, sample from 2010 to the present) but discount to US peers (on median P/E NY of BKX index vs SX7P index) is just 20.6% at the moment, in-line with average since 2010, out of synch with reality, from our point of view, given higher risks associated with EU banks which have not fully recovered from the previous crisis yet.

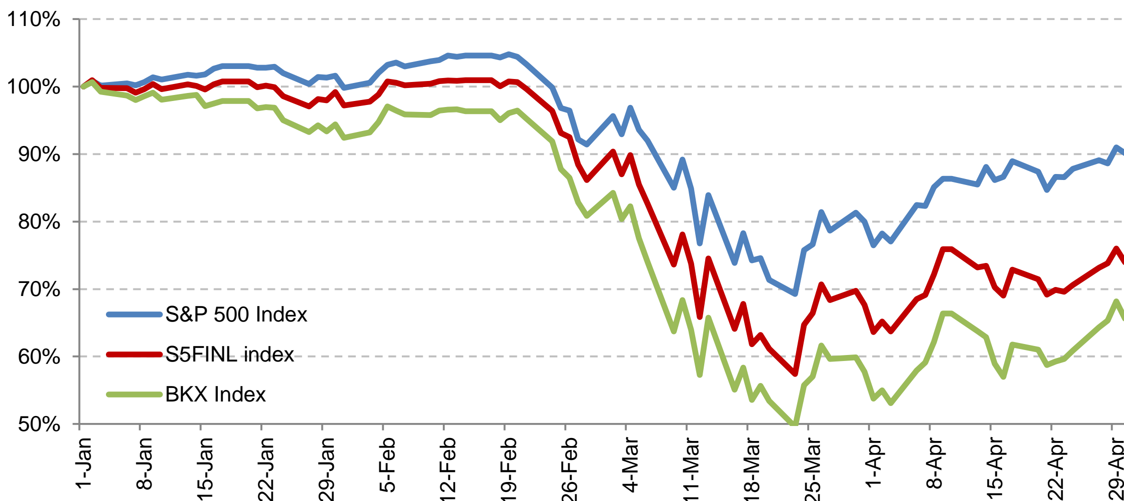
MARKET PERFORMANCE

US

US banks increased significantly in April after very weak performance in the first 3 months of 2020. However, the broad market was only slightly outperformed after 3 months in a row of lagging dynamics. Thus, BKX index increased by 13.6% MoM in April vs +12.7% MoM of SPX index. Absolute performance on MoM basis was +1.9 std from the mean and it is in the top 4% of absolute MoM performance of BKX index. Relative April performance was +0.8% MoM, it is +0.2 std from the mean and it is in the top 42% of relative MoM performance vs SPX index since 1992. It was the worst first four months of the year on both absolute and relative basis over more than 28 years with the total absolute performance of -34.4% ytd and relative performance of -27.2% ytd.

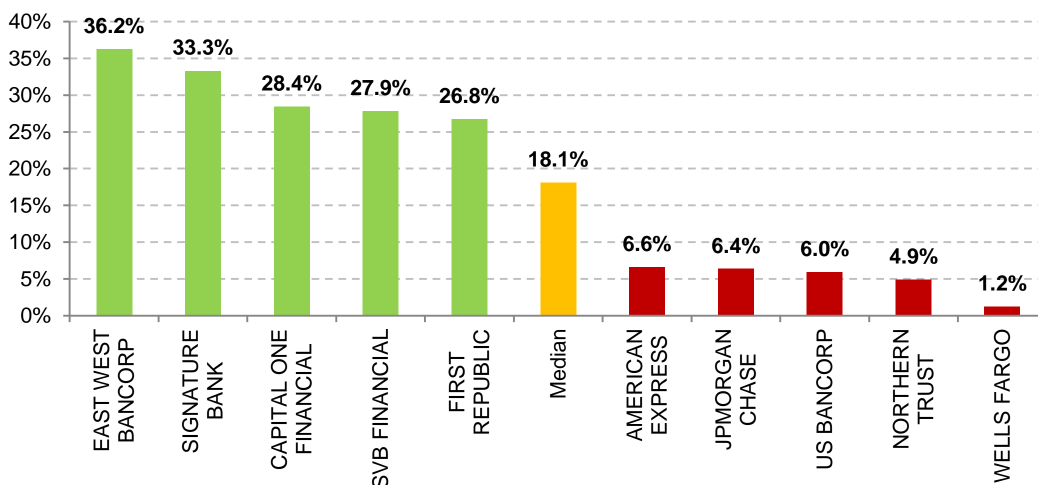
Due to relief rally, all banks ended April in the green zone but variance of growth rates was substantial caused by earnings season results. So, banks with better quarterly figures demonstrated markedly better dynamics. However, banks which missed expectations lagged considerably. Thus, Wells Fargo added just +1.2% MoM.

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



Source: Bloomberg

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



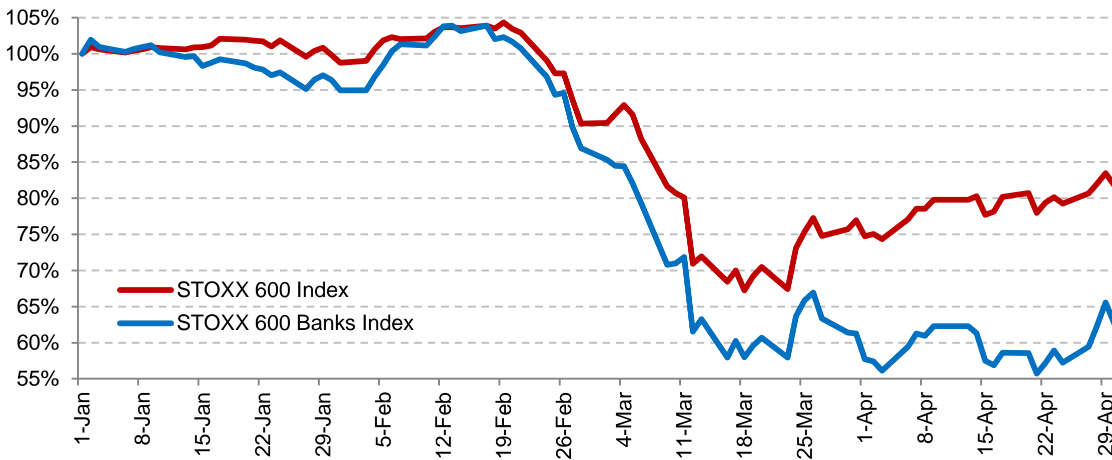
Source: Bloomberg

Europe

EU banks increased in April after 3 consecutive months of negative absolute performance. On relative basis, it underperformed the broad market again, the 4th month over the last 6. On absolute basis, SX7P index increased by 2.2% MoM in April or 0.3 std from the mean and this result is in the top 41% of absolute monthly performance of SX7P since index inception. Also, relative monthly performance was -3.8% MoM or -1 std and it is in the bottom 13% of relative monthly performance. Despite weak relative dynamics in two previous years when SX7P index underperformed the broad market by 12.1% and 17.1% in 2019 and 2018, respectively, EU banks continue to lag broad market considerably. On ytd basis, SX7P underperformed by 23% as the end of April but it lagged the broad market by 43% over the last two years.

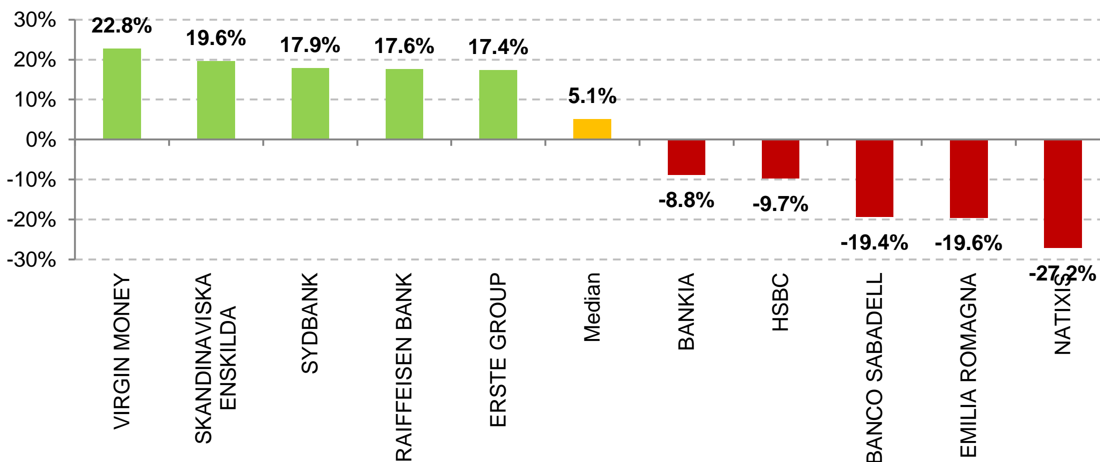
Despite relief rally, only 2/3 members of SX7P managed to end April in the green zone while key underperformers lost around 20% market cap in April. The main driver of significant variance of price performance was the start of earnings season which was less optimistic than US one.

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



Source: Bloomberg

Chart 4. April EU banks performance. Leaders and Laggards, 1Month Price Change,%



Source: Bloomberg

COMPANY NEWS

US

JP Morgan Chase 1Q 2020 Earnings

JP Morgan (JPM) reported 1Q20 EPS of $0.78, significantly missing Bloomberg mean consensus estimate of $2.14 (min $1.10 / max $2.72), driven by massive reserve build. JPM's 1Q20 revenue adj. was $29.1 Bn. vs consensus of $29.5 Bn. (min $28.3 Bn / max $30.3 Bn), missed despite strong NII and trading revenues. Guidance for 2020 for majority lines was withdrawn except for NII and expense forecasts because of high uncertainty and significantly changed economic conditions. Reported figures themselves weren't bad, from our point of view, especially taking into account a number of one-time items. Moreover, reserve build will return as a profit if losses don't be realized. But keynote is that it could be much worse in the near future with unknown duration of imminent recession and its severity. So, despite initial reaction was positive, JPM ended the reporting day in the red zone, declining by 2.7% vs -1.4% of BKX index and +3.1% of SPX index.

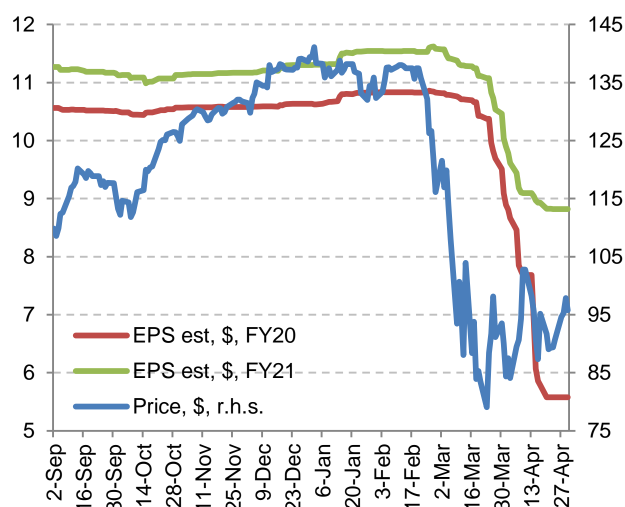
Non-interest revenue was weaker than expected despite very strong trading fees as a result of strong client activity and higher volatility across products. Thus, it declined by 5.8% yoy to $13.8 Bn, driven by $951 mln loss in CIB division because of "funding spread widening on derivatives". Also, card fees decreased by 17% yoy as spending on cards slowed significantly. In turn, FICC trading revenue increased by 34% yoy to $4.99 Bn, significantly beating consensus of $4.11 Bn. Equity trading increased by 28% yoy to $2.24 Bn vs consensus estimate of $2.05 Bn. IB fees of $1.91 Bn slightly beat consensus of $1.79 Bn., adding 3% yoy despite very challenging environment in March. From the other hand, bank expects that IB revenues could be significantly lower in coming quarters if DM economies remained "closed" longer. And, it seems that it is the base case for JPM's management, at least now.

Table 1. JPM 1Q20 Earnings. Actual vs Estimates

	Actual	Estimates
EPS, $	0.78	2.14
Revenue, $ bn	29.1	29.5
NII (FTE), $ bn	14.5	13.9
FICC Trading Rev, $ bn	4.99	4.11
Equity Trading Rev, $ bn	2.24	2.05
IB Revenue, $ bn	1.91	1.79
Non-Interest Expense, $ bn	16.9	17.0
Provision, $ bn	8.3	2.9
NIM	2.37%	2.34%

Source: Bloomberg

Chart 5. JPM price vs EPS estimates



Source: Bloomberg

NII increased by 1.8% qoq or just -0.3% yoy, despite significant decline of benchmark yields. 1Q20 NII was $14.5 Bn vs expectations of $13.9 Bn. The beat was driven by better NIM and strong growth of interest-earning assets. NIM decreased by 20 bps yoy but just -1 bps qoq to 2.37% (-3 bps qoq in 4Q19 and -8 bps qoq in 3Q19), beating consensus of 2.34%. Average earning assets added 7.3% yoy or +3.7% qoq vs +5.5% yoy or +0.5% qoq in 4Q19. Growth was driven by investment securities and trading assets while average

loans added just 1.5% qoq or -0.5% yoy. NIM was pretty resilient in 1Q20 even despite FF rate was reduced by 150 bps in March but it will remain a headwind in the coming quarters. According to current JPM's guidance, negative impact of lower rates on FY20 NII (other things being equal) is $5 Bn. Due to mitigation factors, overall FY20 NII was lowered just to ~$55.5 Bn from previous guidance of $57+ Bn. 2Q20 NII is expected at $13.7 Bn.

Total yield of interest-earning assets decreased by 21 bps qoq or -66 bps yoy to 3.14% after the same qoq decline in 4Q19. In turn, loans yield decreased only by 11 bps qoq or -41 bps yoy to 5%. Total cost of interest-bearing liabilities went down by 25 bps qoq or -58 bps to 0.97%. Interest-bearing deposits went down by 15 bps qoq or -82 bps yoy to 0.52% after decline of 18 bps qoq in 4Q19.

Noninterest expenses increased by 2.8% yoy to $16.9 Bn, slightly beating consensus estimate of $17.0 Bn, "driven by higher volume- and revenue-related expense and investments, as well as higher legal expense, partially offset by lower structural expense". So, operating leverage turned being negative at more than -5% while efficiency ratio increased by 3.1% yoy to 58%. But, JPM guided previously that 1Q20 expenses would be higher because of seasonality. Current FY20 expense guidance is ~$65 Bn.

Key credit quality indicators remained strong in 1Q20, but they will inevitably worsen as early as in 2Q20, so JPM have already built significant reserve. Thus, JPM's net build of reserve is $6.8 Bn, driven by impact of COVID-19 and CECL. Consumer net build of reserve was $4.4 Bn, predominantly driven by cards. Wholesale reserve added $2.4 Bn in 1Q20, driven by multiple impacted sectors, including Oil & Gas. So, provision expense of $8.3 Bn was significantly higher than consensus estimate of $2.9 Bn, skyrocketing by 454% yoy. Management also expects that net reserve build in 2Q20 and next several quarters, in aggregate, could be meaningfully higher relative to 1Q20 build if economic outlook doesn't improve. In turn, nonperforming exposure increased only by 17% yoy while nonaccruals loans ratio added just 4 bps yoy to 0.59%. NCO ratio even declined by 1 bps qoq but +4 bps yoy to 0.62% in 1Q20. Even Cards NCO ratio was almost flat on yoy basis.

The CET1 ratio decreased by 91 bps qoq or -59 bps yoy to 11.4% due to noticeable RWA growth and still strong capital return to shareholders. Thus, JPM distributed more than $8.8 Bn to shareholders in 1Q20, including $6 Bn of net repurchases through March 15. But it was also announced suspension of repurchases through 2Q20.

JPM remains being best in class among money markets, from our point of view, with diversified model and entering in the crisis with strong capital and liquidity position. Moreover, it could be even stronger after recession with higher market share given skyrocketing deposit balances during March. But forthcoming significant growth of credit losses and imminent decline of incomes aren't best arguments for buying banking stocks, at least as long as the uncertainty is so high. So, it is unsurprisingly that banks continue to trade with significant discount to the broad market but JPM isn't cheap vs industry due to its higher profitability. Thus, JPM is trading at 17.2x consensus 2020 EPS forecast and 10.9x 2021 EPS vs industry median of 14.8x and 10.1x, respectively. Currently, JPM is at 1.3x P/B with ROE 2020E forecast of 6.8% and ROE 2021E of 11.1% vs median P/B of industry of 0.9x with both ROE 2020E and 2021E at 6.2% and 8.1%, respectively.

Citigroup 1Q 2020 Earnings

Citigroup reported 1Q20 EPS of $1.05 vs average Bloomberg consensus of $1.44 (min $0.61 / max $2.00). Reported revenue is $20.7 Bn vs consensus estimate of $19.0 Bn (min $17.5 Bn / max $20.3 Bn), +12% yoy and +13% qoq. Overall, it was strong quarter for revenues and operating efficiency but outlook deteriorated significantly, especially taking into account significant decline of key benchmark rates. Moreover, there is no certainty how long this period will last. Obviously, credit costs will remain elevated in the coming quarters

while revenues will decline. C's RoTCE declined to 6% in 1Q20 vs previous FY20 RoTCE guidance of 12-13% which is no longer expect to be delivered. Unsurprisingly, market perception of results was clearly negative and shares ended the day deeply in the red zone. C tumbled by -5.6% vs -6.3% of BKX index and -2.2% of SPX index.

Trading revenues were significantly better than estimates, the third quarter in a row. Thus, FICC revenue increased by 39% yoy to $4.8 Bn (with strong activity across majority of segments) vs consensus estimate of $3.7 Bn. Unlikely to 4Q19, equity trading revenue increased by 39% yoy to $1.17 Bn due to strong performance in derivatives, markedly higher than consensus of $0.95 Bn. IB fees were flat on both qoq and yoy basis at $1.35 Bn, slightly exceeding consensus of $1.28 Bn, as growth in ECM and M&A was offset by DCM.

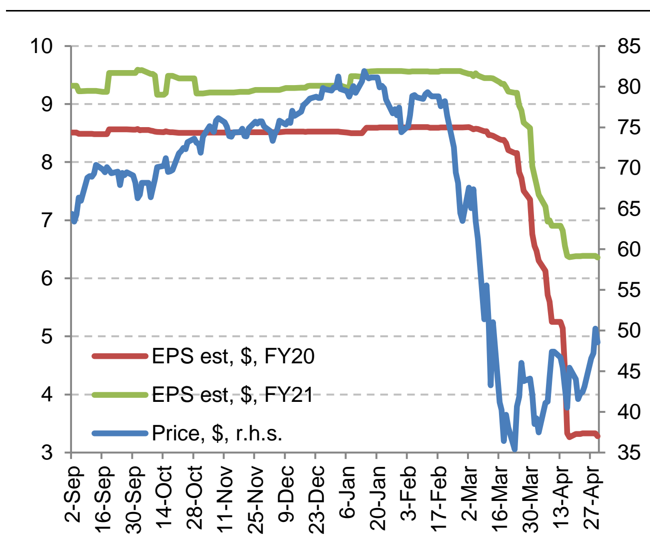
NII 1Q20 of $11.5 Bn was markedly higher than consensus of $11.8 Bn. It decreased by 2% yoy or -4% qoq as it was driven by significant decline of NIM. Thus, NIM tumbled by 15 bps qoq or -24 bps yoy to 2.48% due to significant and broad based decline of interest-earning assets yield. Thus, total yield of EA declined by 38 bps qoq to 3.69%, -71 bps yoy. Loan yield decreased by 26 bps qoq to 6.52%, -64 bps yoy. Total cost of interest-bearing liabilities decreased by 27 bps qoq or 61 bps yoy to 1.49% while cost of interest-bearing deposits lost only 16 bps qoq or -33 bps yoy, at 1.13% in 1Q20. Management noted that US rate cuts will have pronounced impact going forward. But there was no specific guidance for NII/NIM because of significant uncertainty. Previous guidance was removed.

Table 2. C 1Q20 Earnings. Actual vs Estimates

	Actual	Estimates
EPS, $	1.05	1.44
Revenue, $ bn	20.7	19.0
NII (FTE), $ bn	11.5	11.8
FICC Trading Rev, $ bn	4.79	3.7
Equity Trading Rev, $ bn	1.17	0.95
IB Revenue, $ bn	1.35	1.28
Non-Interest Expense, $ bn	10.6	10.8
Provision, $ bn	7.0	3.6
NIM	2.48%	2.57%

Source: Bloomberg

Chart 6. C price vs EPS estimates



Source: Bloomberg

Credit quality still remains strong so far but C increased provision expense meaningfully as a result of changes in economic outlook on estimated lifetime losses under CECL. Thus, provision expense of $7 Bn was substantially higher than consensus of $3.6 Bn, +255% yoy. Notwithstanding, 30-89 days delinquency ratio remains relatively stable in the recent quarters (as well as 90+ delinquency ratio), 1.09% in 1Q20, +2 bps both yoy and qoq. But nonaccrual assets ratio increased by 4 bps yoy to 0.58%, while absolute NALs increased by 12% yoy. Obviously, credit quality indicators will worsen markedly in coming quarters because of decline of the economy and skyrocketing growth of unemployment. But C's credit portfolio is less risky than it was before the 2008 crisis. According to management (with notification that it is not a guidance), "when we stress today's card portfolios to the same level as 2008, our pro forma loss rates are 25% to 30% lower than experienced in the last crisis".

Operating expenses of $10.6 Bn in 1Q20 were slightly lower than consensus of $10.8 Bn,

flat yoy or +1% qoq, "continued investments in the franchise, higher compensation and volume-related expenses were offset by productivity savings and the wind-down of legacy assets". Thus, operating leverage remains positive unlike other money-centers, the 14th quarter in a row. So, efficiency ratio markedly decreased both qoq and yoy to 55%.

Unsurprisingly, C continues trading at significant discount to the industry multipliers. Current C's P/B is 0.6x with consensus 2020/21E ROE of 4% and 7.6%, respectively vs 0.9x of US banks and 6.2% / 8.1% ROE estimates. P/E 20E & 21E are 14.8x and 7.6x respectively vs 14.8x and 10.1x for US banks. But this discount is reasonable given lower than peers operating efficiency of Citigroup.

Wells Fargo 1Q 2020 Earnings

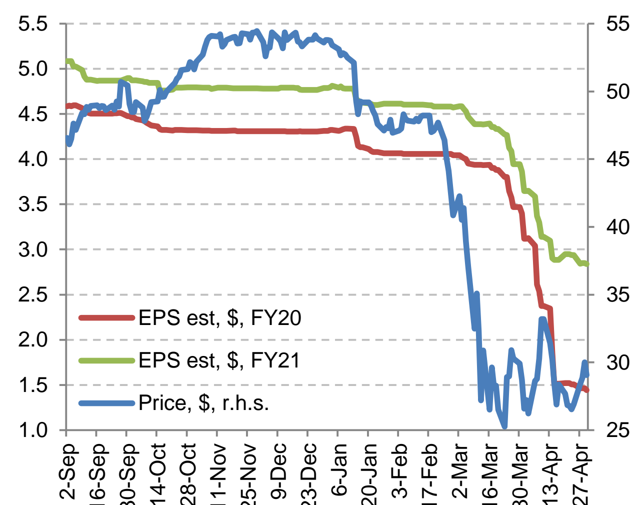
Wells Fargo (WFC) reported 1Q20 EPS of just $0.01, significantly lower than Bloomberg consensus of $0.54 (min $0.15 / max $0.96). As usual for WFC lately, results included too many one-time items but core figures weren't very strong in any case. Reported revenue of $17.7 Bn was significantly lower than consensus estimate of $19.4 Bn (min $18.2 Bn / max $20.2 Bn) driven by losses of equity securities. Unsurprisingly, given weaker figures, high uncertainty and no clear guidance from management, WFC tumbled by 4% on the day of report vs -1.4% of BKX index and +3.1% of S&P 500 index.

Table 3. WFC 1Q20 Earnings. Actual vs Estimates

	Actual	Estimates
EPS adj, $	0.01	0.54
Revenue, $ bn	17.7	19.4
NII (FTE), $ bn	11.3	11.1
Non-Int. Revenue, $ bn	6.4	8.3
Expenses, $ bn	13.05	13.8
Provision, $ bn	4.0	2.3
NIM	2.58%	2.48%
Total loans, $ bn	1010	973

Source: Bloomberg

Chart 7. WFC price vs EPS estimates



Source: Bloomberg

NII of $11.3 Bn was markedly higher than consensus estimate even despite significant decline of key benchmark rates ytd. NIM increased by 5 bps qoq to 2.58% vs consensus of 2.48%, -33 bps yoy. The key drivers of better NII/NIM were "the benefit of hedge ineffectiveness accounting results and lower MBS premium amortization, which was largely offset by balance sheet repricing driven by the impact of the lower interest rate environment and one fewer day in the quarter". Yield of total earning assets declined by 16 bps qoq to 3.35% (-65 bps yoy) driven by loan yield which decreased by 17 bps qoq to 4.2% (-64 bps yoy). In turn, cost of interest-bearing deposits decreased by 14 bps qoq to 0.71% (-18 bps yoy) while cost of IBL also decreased by 21 bps qoq to 0.77% (-32 bps yoy). Bank withdrew its FY20 NII guidance because of current market volatility and uncertainty. Unsurprisingly, it was noted that low rate environment continued to put pressure on NII but no more accurate forecast.

Total loans (period-end) increased by 4.9% qoq or +6.5% yoy to $1009.8 Bn, driven by C&I loans which added 14.4% qoq because of active using of revolving credit lines amid spreading of coronavirus. In turn, consumer loan portfolio decreased by 1% qoq. Average loans increased just by 0.9% qoq as uncommon demand on liquidity appeared only in

March.

1Q20 fee income of $6.4 Bn were substantially lower than consensus of $8.3 Bn, -31% yoy or -26% qoq, driven by $1.7 Bn of lower qoq market sensitive revenue, $404 mln lower mortgage revenue and $128 mln decline of card revenues because of seasonality and COVID-19 impact. Core fee income wasn't weak, from our point of view, with strong growth of DSR fees, +10.5% yoy, and solid growth of trust and IB fees, +6%. But it seems that core fees will be lower near term with some mitigation from mortgage fees.

Reported 1Q20 expenses of $13.05 Bn were markedly lower than consensus estimate of $13.8 Bn, -16% qoq and -6% yoy driven by $1.5 Bn lower litigation accruals. But all key lines of OpEx except for salaries were markedly lower on yoy basis. In result, efficiency ratio decreased by 5% qoq to 73.6% but it still remains markedly higher on yoy basis. Management didn't give any outlook for expenses but it was noted that work at home put some pressure on costs.

Credit quality still remains benign across all segments but WFC (as other banks because of CECL) is proactive, so provisions have already increased meaningfully. Provision expense was substantially higher than expected at $4 Bn vs consensus of $2.3 Bn, +380% yoy. NCOs increased by 31% yoy to $909 mln, driven by corporate segment, which added 120% yoy. NCO ratio increased by 8 bps to 0.38%. Moreover, NPA decreased by 14% yoy but +13% qoq while NPA ratio declined by 14 bps yoy to 0.63%. WFC revealed details on the most affected industries by pandemic – Oil &Gas, Retail, Entertainment and Transportation – $69.7 Bn in loans or 17% of C&I portfolio. Among closely monitored industries are also CRE mortgage and CRE construction which in total is $143 Bn or more than 14% of total portfolio. Criticized loans increased by $4 Bn and almost all growth related to March.

CET1 ratio decreased by 40 bps to 10.7%, still remaining 170 bps higher than hurdle rate. Decline was driven by returning $5 Bn to shareholders, including $2.9 Bn of buybacks. In result, shares outstanding declined by 38 mln in 1Q20 or -1%.

WFC continues to report disappointing quarterly figures, being under pressure of various regulatory issues. WFC's profitability remains lower than industry average while uncertainty related to WFC's business is still high. Unsurprisingly, WFC is trading with discount to peers and it is still underperforming BKX index. Current WFC's P/B is 0.7x with consensus 2020E ROE of 3.8% vs 0.9x of US banks and 6.2% ROE estimates. P/E 20E & 21E are 20.1x and 10.2x respectively vs 14.8x and 10.1x for US banks.

Bank of America 1Q 2020 Earnings

Bank of America (BAC) reported 1Q20 EPS of $0.40 vs consensus of $0.54 (min $0.19 / max $0.69), -43% yoy. Miss was driven by substantially higher provision expense, as well as other reporting banks, even despite very strong trading revenues and markedly lower effective tax rate. Reported revenue was $22.8 Bn in 1Q20, slightly higher than consensus forecast of $22.7 Bn (min $21.7 Bn / max $23.5 Bn). Given rates dynamics and management expectations, revenues will markedly decline in 2Q20 while provision expense remains elevated. But the key unknown is the length of recession, adding much uncertainty to current estimates. So, market perception of the quarterly report was clearly negative and BAC ended the day of report loosing 6.5% vs -6.3% of BKX index and -2.2% of S&P 500 index.

NII decreased by 2% yoy to $12.3 Bn, substantially higher than estimate. Decline was driven by lower interest rates, partially offset by loan and deposit growth. On qoq basis, it was almost flat despite FF rate was lowered by 150 bps in March. NIM declined by 18 bps yoy but just -2 bps qoq to 2.33%, beating consensus meaningfully, "as lower asset yields and one less interest accrual day were partially offset by lower funding costs as well as benefits of loan and deposit growth". Yield of interest-earning assets decreased by 17 bps

qoq to 3.08%, -43 bps yoy. Cost of interest-bearing liabilities also decreased by 23 bps qoq to 1.01%, -59 bps yoy. Total loans yield decreased by 19 bps qoq to 4.06% driven by commercial loans which yield lost 24 bps qoq to 3.36%. Cost of interest-bearing deposits decreased by 14 bps qoq to 0.47% (-29 bps yoy). It was noted that "asset sensitivity increased compared to 4Q19". According to management comments during 1Q20 conference call, NII could fall to $11 Bn in 2Q20 as a result of the virus impact on the economy and lower interest rates and then it should begin stabilize "with loan and deposit growth mitigating the negative impacts of longer-term asset repricing". Also, bank estimates that an instantaneous parallel drop of 100 bps will reduce NII by $6.5 Bn over the following 12 months.

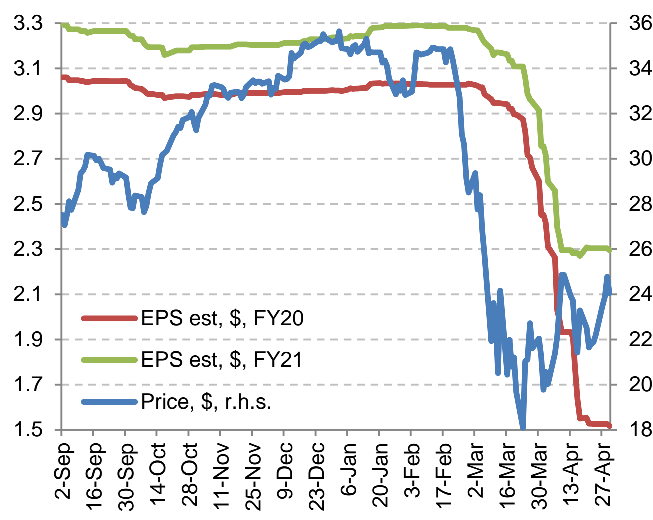
Noninterest income was $10.6 Bn in 1Q20, markedly lower than consensus of $11 Bn, being flat yoy despite very strong trading revenues. Thus, FICC trading was $2.67 Bn in 1Q20 vs consensus of $2.52 Bn, +13% yoy, driven by strong client activity and higher volatility. Equity trading revenue decreased by 39% yoy to $1.66 Bn, meaningfully higher than consensus. IB fees went up by 10% yoy to $1.39 Bn vs consensus of $1.31 Bn, driven by DCM while advisory was lower yoy.

Table 4. BAC 1Q20 Earnings. Actual vs Estimates

	Actual	Estimates
EPS adj, $	0.4	0.54
Revenue, $ bn	22.8	22.7
NII (FTE), $ bn	12.3	11.6
Non-Int. Revenue, $ bn	10.6	11.0
Expenses, $ bn	13.5	13.4
Provision, $ bn	4.76	2.1
NIM	2.33%	2.22%
Total loans, $ bn	1035	1016
FICC Trading Revenue, $ bn	2.67	2.52
Equity Trading Revenue, $ bn	1.66	1.37
IB Fees, $ bn	1.39	1.31

Source: Bloomberg

Chart 8. BAC price vs EPS estimates



Source: Bloomberg

Expenses of $13.5 Bn increased by 1.9% yoy missing consensus of $13.4 Bn, driven by investments in the franchise and seasonally elevated payroll tax costs (as it was guided during 4Q19 reporting). It was noted that there was no significant COVID-19 impact in 1Q20 OpEx. Efficiency ratio was flat yoy at 59% in 1Q20, but 2% higher yoy. Operating leverage was negative again, the second month in a row after 5 years of positive operating leverage. Period-end loans increased by 6.8% qoq or +11.1% qoq to $1050 Bn driven by corporate loans which skyrocketed by 13% qoq ("driven primarily by commitment funding activity"). It seems that loan growth will decelerate significantly near term given that most of corporate loan growth related to revolvers on existing lines while economic situation deteriorates while consumer spending has already decelerated. At least, loan production in consumer segment decreased by 40-60% (depending on the product) in the first two weeks of April comparing with avg. February level.

Credit quality remains very strong so far with low and relatively stable NCO ratio (for both consumer and corporate) but provisions were meaningfully higher than expected given inevitable deterioration of asset quality as early as in 2Q20. Thus, NCO ratio increased by 7 bps qoq or +3 bps yoy at 0.46%. NPLs ratio continues to go down, -13 bps yoy to 0.39%, +3 bps qoq. Total loans past due 30+ days and still accruing increased only by 2.4% yoy but it was lower on qoq basis. But commercial criticized exposure skyrocketed by 50% qoq

in absolute terms and the growth was broad based across industries. So, provision expense increased by 406% qoq to $4.8 Bn vs consensus of $2.1 Bn, including a reserve build of $3.6B due primarily to deteriorating economic outlook related to COVID-19.

Capital remains solid but CET1 ratio declined by 41 bps qoq driven by growth of RWA and $8 Bn returned to shareholders in 1Q20, including $6.4 Bn of buybacks and $1.6 Bn of dividends. In result, outstanding shares declined by 9% yoy.

BAC remains optimistic at the crisis' door, having strong balance sheet, ample liquidity ($700 Bn) and being well capitalized (130 bps above required minimum). It enables to go through even significantly deeper than it is currently expected crisis without any dilution and even paying dividends. But high uncertainty and upcoming recession isn't a good point of time for buying banking stocks, from our point of view. But it is no longer trading with discount to the industry, which in turn looks cheap vs S&P 500 index. BAC is trading at 15.9x consensus 2020 EPS forecast and 10.5x 2021 EPS vs industry median of 14.8x and 10.1x, respectively. Currently, BAC is at 0.9x P/B with ROE 2020E forecast of 6.2% and ROE 2021E of 8.1, in-line with industry median for all figures.

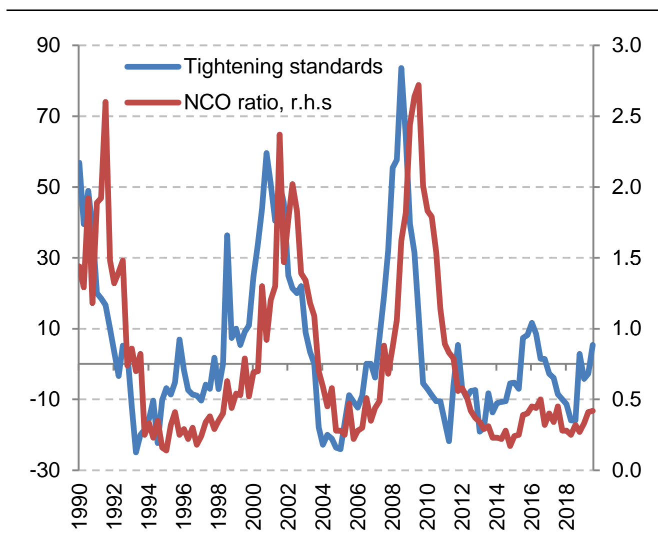
MACROECONOMIC NEWS

US

C&I loans

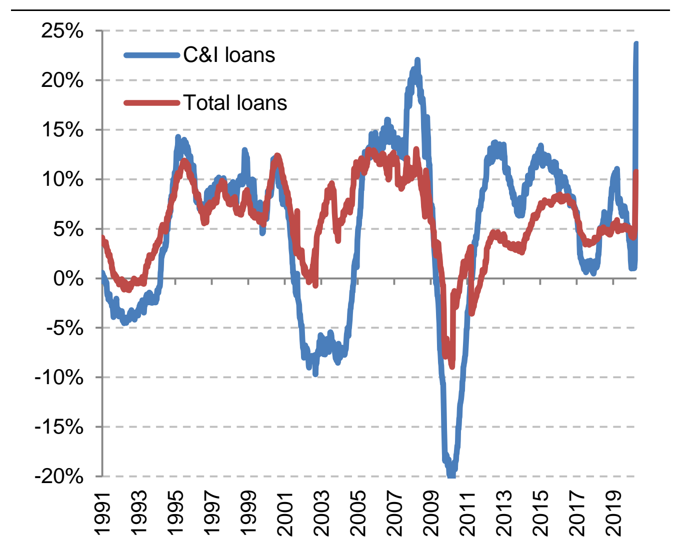
C&I loans growth accelerated to unbelievable figures on yoy basis in March and April after anemic growth in the first two months of the year, fluctuating around 1% on yoy basis, as corporates started to actively use undrawn credit lines and revolvers because of liquidity needs. In result, C&I loans increased by $486 Bn in March but the growth decelerated significantly in April. So, C&I loans added just $51 Bn in the first two weeks of April. We expect that growth will continue to decelerate and C&I loans will inevitably go down in coming months given imminent severe recession, accompanied by significantly higher number of bankruptcies and tighter lending standards. According to the Fed H.8 survey, C&I loans increased by 23.7% yoy (as of April 15) vs 7.9% yoy 1 year ago and +1% yoy as the start of 2020. On ytd basis, C&I loans added 23.5% vs +7.5% ytd of total loans.

Chart 9. C&I. Loan Standards vs NCOs, %



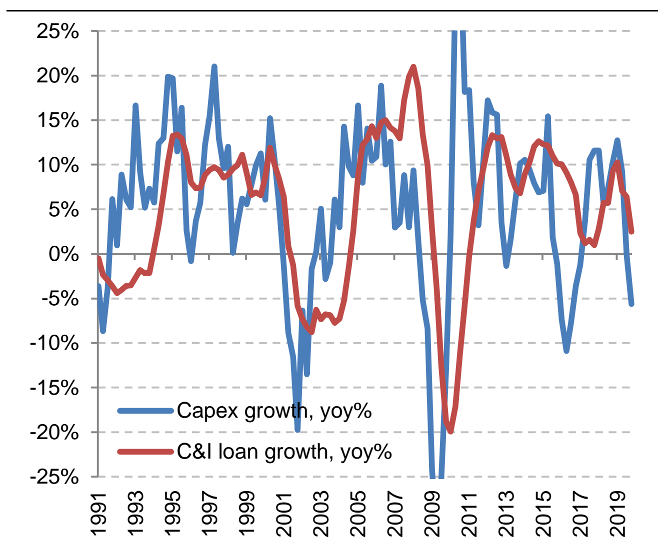
Source: Bloomberg

Chart 10. Loan Growth. C&I vs Total loans, YoY%



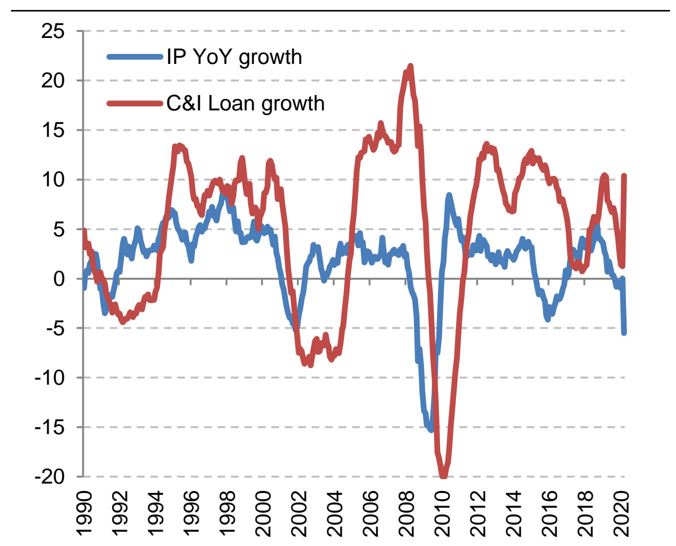
Source: Bloomberg

Chart 11. C&I. Loan Growth vs CAPEX



Source: Bloomberg

Chart 12. C&I. Ind. Production vs Loan Growth YoY%



Source: Bloomberg

Despite unprecedented support measures from both the Fed and the government, it will be difficult to avoid decline of C&I loans in coming quarters even taking into account banking

forbearance and willingness to provide liquidity and restructure loans. We have already seen bankruptcies in the Energy sector because of significant decline of oil price while tourism, restaurants and nonfood retailers are still almost closed, meaning that bankruptcies in these industries are not far off even despite support measures. At least, just earnings recession, which was our base case for 2020 even before spreading coronavirus around the world, looks the best, from possible options now, but currently the base case is full-fledged recession with the open question how long it will last. We don't expect that it will be V-shaped recovery, taking into account recent macro data, U-shaped at best. But it shouldn't be a big threat for banks given significantly higher capital levels, lower leverage and more cautious approach to borrowers during the cycle while non-bank lenders may be hit hard.

Despite concerns about deterioration of C&I credit quality over the recent years (and total loan portfolio at all), it remains benign so far (even in 1Q20 in spite of significant growth of provision expense), but it will undoubtedly worsen in the coming quarters. 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 yoy to 0.35% in 4Q19.

So far, financial health of US corporate sector was solid even despite relatively high leverage. Thus, ROA was high, quick ratios were solid while interest expense coverage was strong but deteriorated as total profit of the sector was flat in recent quarters. Situation changed considerably in March and it continued to deteriorate in April. Given high leverage of US corporate sector and coming decline of revenues because of imminent recession in US, accompanied by skyrocketing growth of corporate spreads, especially for non-investment grade companies, we will see significant drop of interest coverage ratios as early as in 2Q20 even despite the fed funds rate was cut to zero. Moreover, interest coverage ratios have already been declining for eight months in a row despite relatively low benchmark rates and declining corporate spreads (to record lows). Nevertheless, the Fed acted quickly and it implemented an unprecedented set of measures to ease the negative impact of the perfect storm of financial markets on the economy. But it will just slow down somewhat growth of NPLs and NCOs but don't prevent it. The magnitude of the problem will depend on how long the recession last. And the key risk for corporate credit quality during recession comes from leveraged loans and its spillover effects on the economy as it grew rapidly during the cycle. 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 remained very high in recent years.

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 a deterioration in loan performance for most loan categories over 2020".

Manufacturing macro data published in April were very weak but the real situation is even worse. And it will continue worsening in coming months. There were even few positive surprises but it doesn't mean anything given GDP tumbled by 4.8% qoq in 1Q20 despite strong January and February while industrial production meltdown in March was the worst one since the WWII. Unsurprisingly, forecasts tumbled in April either, while Citi's economic surprise index moved to its multi-year low. Thus, ISM manufacturing index decreased just by 1 pts to 49.1 pts vs expectations of 44.5 pts, still remaining near the expansion territory but it was significantly overstated by supplier input which interpret longer time delivery in the wrong way. Orders and employment inputs pointed to deeper contraction. In any case, risks undoubtedly remain to be tilted to the downside. Consensus GDP growth rates for the nearest 3 years were revised down significantly in April but it could continue to be revised down in coming months if economy remains on pause. Thus, according to Bloomberg April survey, GDP growth was revised down from 1.4%/1.9%/2.1% for 2020/2021/2022, respectively, in March to -3.3%/3.4%/2.3% in April. But the most pessimistic forecasts imply that GDP could decreased by more than 10% yoy in 2020. Manufacturing payrolls decreased by 18K in March vs expectations of -10K, while February initial estimate was revised down from +15K to +13K. Industrial production tumbled by 5.4% MoM in March vs expectation of growth of -4% MoM while capacity utilization decreased by 4.3% in absolute terms to just 72.7% in March, the lowest level since 2010. Empire manufacturing index tumbled by more than 56 pts MoM to -78 pts vs expectations of -35 pts. Markit manufacturing PMI decreased 11.6 pts MoM to 36.9 pts vs expectations of 35 pts. Unsurprisingly, consensus IP growth forecast was revised down significantly in April vs March to -5.7%/2.1%/3.0% for 2020/2021/2022, respectively, from -0.1%/1.7%/1.7%.

CRE

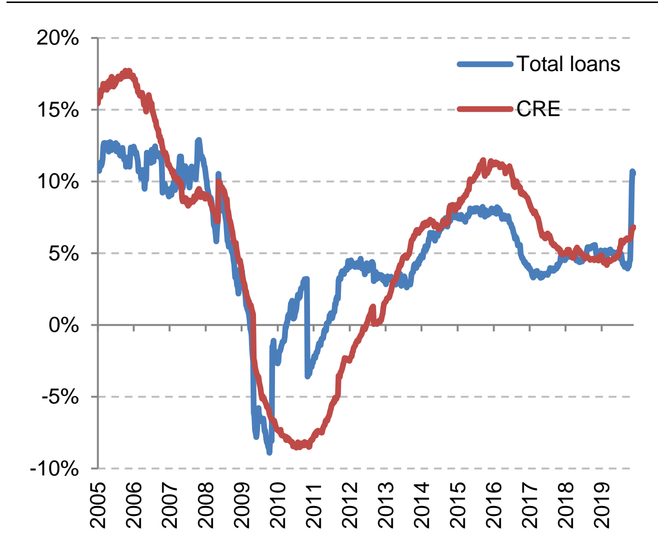
Growth rate of commercial real estate loans on yoy basis continues to accelerate in the recent months after being relatively flat in 2018-2019 hovering around 4.5-5.0%. Thus, according to the last Fed H8 weekly report, CRE loan growth was +6.8% yoy (as of April 15) vs +4.5% yoy 1 year ago. But recent uptick is temporary, from our point of view, given upcoming recession and imminent deterioration of fundamental characteristics of the sector which were relatively healthy so far. We have already seen deceleration of NOI growth in some subsegments, but this is nothing compared to what the sector expects in the near future taking into account recent efforts to counter the spread of the virus. Properties in many CRE segments still remain closed, meaning not only that tenants can't pay rent now but also that some of them will be on the verge of bankruptcy in the future even despite support measures from the government, especially in the most affected retail segment. Unsurprisingly, REITs quotes remain markedly lower ytd after collapse in the second half of March. Thus, BBREIT index decreased by 18.1% ytd. Even significant decline of key benchmark rates didn't support REITs as the risk of substantial deterioration of fundamentals is markedly higher at the moment.

Despite ongoing tightening credit standards in CRE, deceleration of NOI growth and higher probability of recession, credit quality of the segment remains very strong so far. 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 bps 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%. Even during 1Q20 earnings season, we didn't see material deterioration of key quality characteristics of CRE loan

portfolio, but it will be as soon as in 2Q20 across almost all segments.

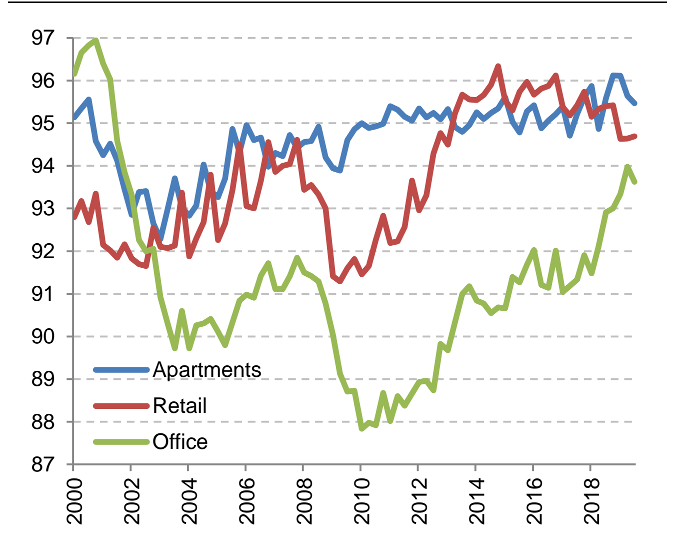
Price growth remains solid so far and it even accelerated in the recent months but yoy growth rate still remains lower than it was 1 year ago. Obviously, prices will start to go down in the nearest future, especially in the most affected segments, such as retail and hotels. The key drivers of recent price acceleration were apartments and offices while industrial and retail were almost flat. Thus, CRE price index has renewed its all-time high again (more than 30% higher than peak of the previous cycle), adding +7.2% yoy as the end of March 2020 vs +6.8% 1 year ago but not far from the lowest growth rate since the end of 2011.

Chart 13. Loan Growth. CRE vs Total Loans, YoY, %



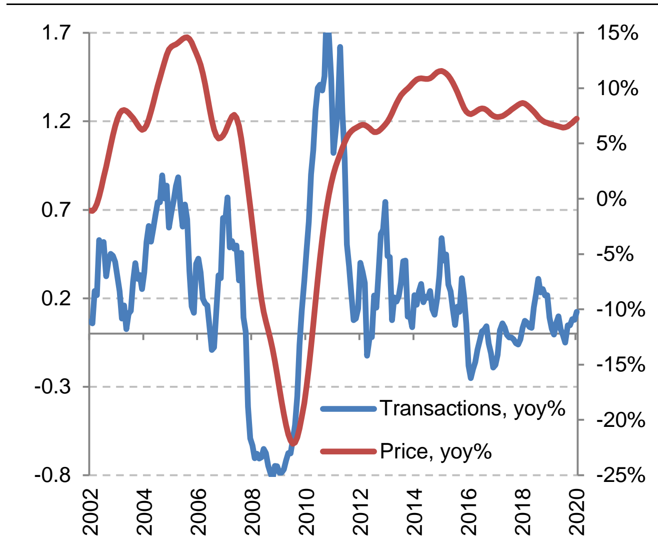
Source: Bloomberg

Chart 14. CRE. Occupancy rates, %



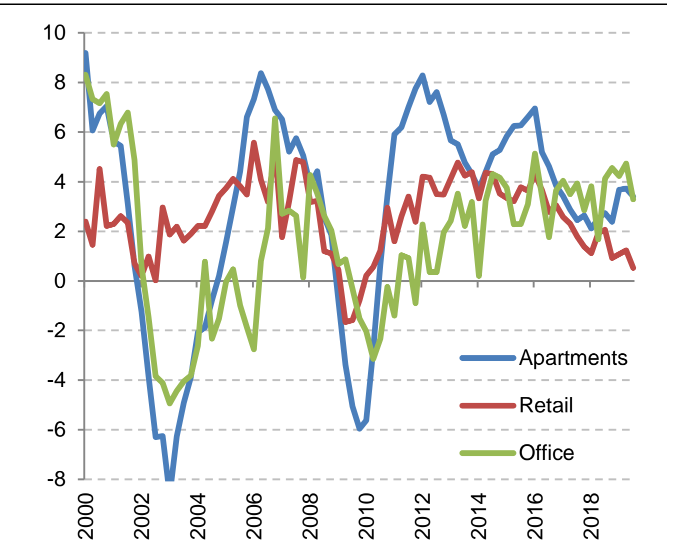
Source: Bloomberg

Chart 15. CRE. Price Growth vs Transactions Volumes



Source: Bloomberg

Chart 16. CRE. Same-Store NOI Growth, %



Source: Bloomberg

Transaction volumes remained relatively solid in the first two months of the year across majority CRE segments but it tumbled already in March. According to RCA, “total sales of commercial properties in Q1 2020 rose 11% year-over-year, aided by entity-level transactions including two multibillion-dollar deals in the industrial sector. In March, deal activity for each property type dropped at a double-digit rate as the financial and economic implications of the COVID-19 pandemic started to unfold”. But prices remained resilient. Thus, apartment price index added +11% yoy as of end of March, marked acceleration from growth rate in the middle of 2019. In turn, price index of retail CRE increased only by +2.8%

yoy, relatively flat growth rate for the last year and a half. Growth of prices of industrial CRE decelerated to +8.9% yoy from +12.5% yoy in July 2019 and slightly down from 10.4% yoy in March 2019. In turn, growth rate of office prices accelerated to 5.7% yoy from 4.5% yoy 1 year ago and just 2.9% in August 2019.

Solid but decelerating growth of US economy and rising employment supported CRE fundamentals so far, especially in office segment where we have seen growth of both same-store NOI and occupancy rates recently. But the situation has changed dramatically in recent months with skyrocketed growth of unemployment, closed malls and stores, social distancing and home working. All of this suggests difficult times for the sector in the near future, accompanied by lower occupancy rates, lower rents and so on. Moreover, some REITs (with high leverage) have already announced suspension of dividends because of liquidity concerns. Of course, it currently applies to the most levered companies but it may spread to the other companies in the industry over time and the problem is that we won't see normalization of the situation in the coming months, accompanied by significant deterioration of key CRE fundamentals, lower credit quality and negative loan growth.

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.

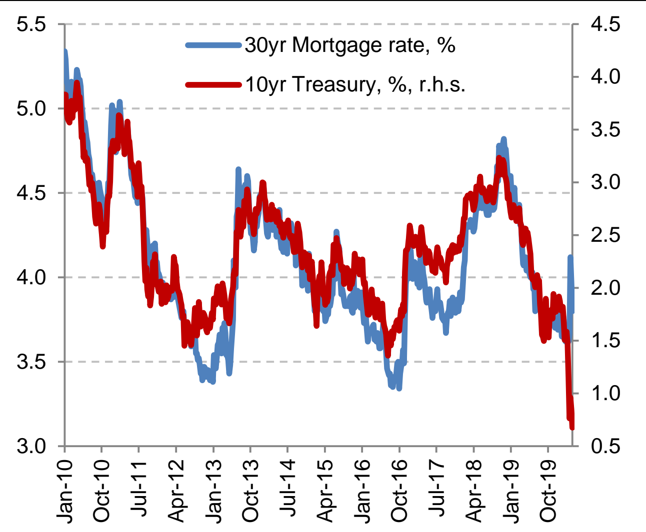
Mortgage

The growth rate of mortgage loans decelerated slightly in recent weeks vs the start of the year, given significant deteriorations of economic situation. But it still remains solid ytd even despite a number of banks has already announced tighter lending standards for mortgage loans. Thus, mortgage loans increased by 4.5% yoy (as of April 15) vs +3.1% yoy 1 year ago and +5.3% yoy as the end of 2019. Affordability ratios have already declined meaningfully from the cycle high buts they should increase in the near future because of substantial decline of key benchmark rates. Notwithstanding, even a current level of affordability ratios isn't low from the historical averages point of view, as well as a household debt burden isn't either. But banks prefer to remain on the sidelines (at least for new mortgage borrowers) given significant growth of unemployment ratio in the near future and as a consequence forthcoming growth of problem loans. We don't expect that NPL and NCO ratios will even approach the values that we saw in the last crisis due to more cautious approach of US banks to the mortgage lending during all recent cycle and more strong financial health of US Consumer now vs 2007-2008 yrs. Housing market also looks significantly healthier with no obvious imbalances as it was just before the last recession when it was a key engine of economic contraction.

US economy lost 701K payrolls in March, significantly outnumbering consensus estimate of -100K. And it seems that situation will worsen significantly in the coming months given recent dynamics of jobless claims. Initial February estimate of 273K was revised up to 275K. So, median forecast of average monthly payrolls for 2020-2022 years were significantly revised down in April, to -511K/225K/187K for 2020/2021/2022 years, respectively (from 146K/131K/100K) and we expect that it will continue to be revised down in the near future. Unemployment rate skyrocketed by 90 bps MoM to 4.4%, markedly worse than consensus estimate of 3.8% but current dynamics of jobless claims has already

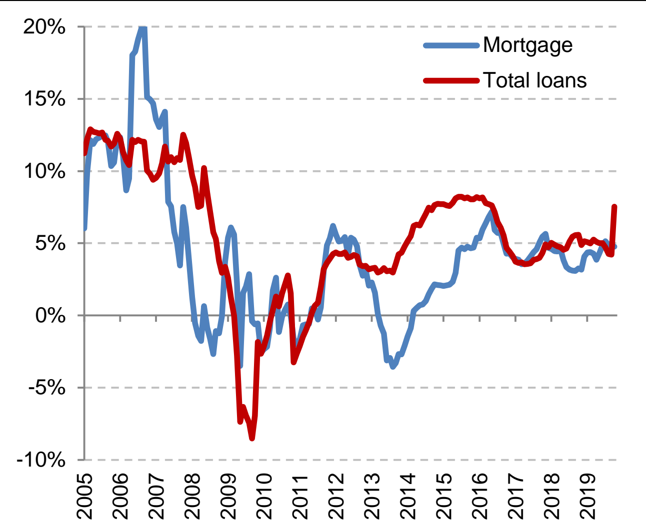
pointed to unemployment significantly higher than 10%. Unsurprisingly, unemployment projections were revised down meaningfully in April, to 8.2%/6.8%/5.4% for 2020/2021/2022 years, respectively, from February estimates of 3.7%/3.8%/4.0%, with the most pessimistic estimates for the end of 2Q20 as high as 25%.

Chart 17. Mortgage. 30yr Fixed Mrtg vs 10yr Tr yield, %



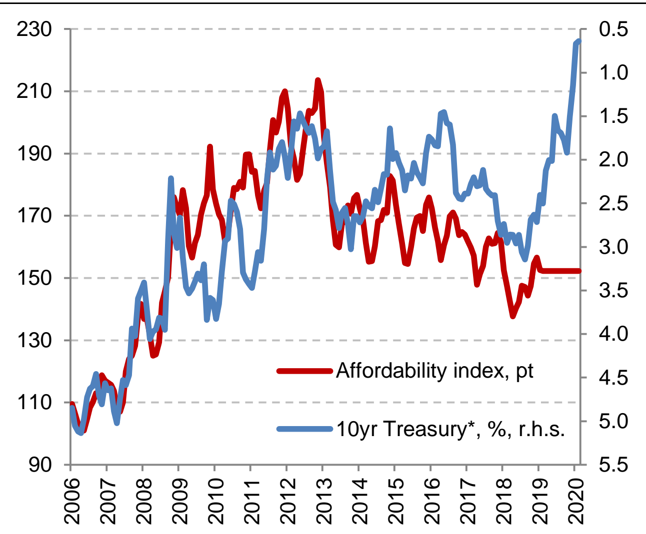
Source: Bloomberg

Chart 18. Loan Growth. Mrtg vs Total Loans, YoY, %



Source: Bloomberg

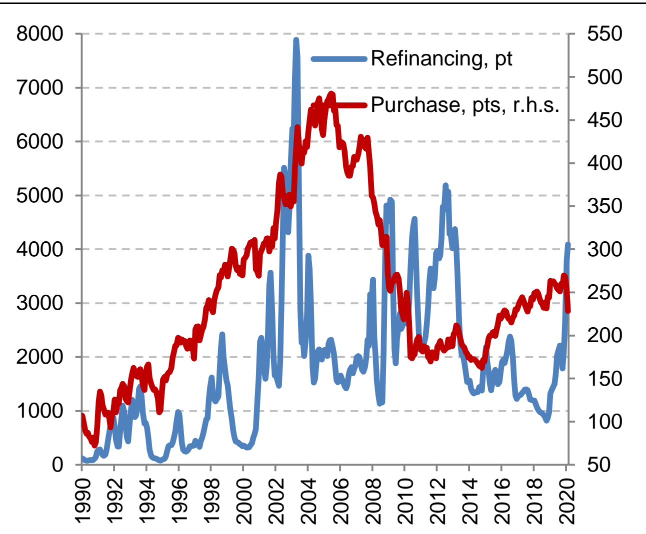
Chart 19. Mortgage. Aff. Index vs 10yr Treasury yield



*reversed order

Source: Bloomberg

Chart 20. Mortgage. MBA Applications Indexes



Source: Bloomberg

Mortgage credit quality was very strong so far. 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 were 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 undoubtedly worsen as situation has changed dramatically. We expect that credit

quality deterioration will be seen as early as in 2Q20 earnings season but we don't expect that quality of mortgage portfolio will be as bad as it was during the GFC even despite it seems that unemployment rate will be much higher during the current cycle.

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".

Mortgage demand strengthened for three recent quarters after several quarters in a row of weaker demand. But, from our point of view, demand remains relatively weak given 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 tumbled in April after marked growth in March because of spreads widening while key benchmark yields declined to multi-decades low. Thus, 10yr treasury yield was relatively flat in April, ending the month at 0.64% after decline by 48 bps MoM in March. In turn, 30yr fixed rate mortgage (national average, Bankrate.com) went down by 33 bps MoM to 3.53% (as end of April), -33 bps ytd. 30-yr mortgage rate (effective rate, MBA) decreased by 4 bps MoM to 3.53% (as of April 24), -51 bps ytd.

Housing market indicators published in April were markedly worse than expected and significantly lower MoM after relatively strong start of the year. Thus, NAHB index tumbled by 42 pts MoM to 30 pts, significantly missing consensus of 55 pts, the lowest level over last 7.5 years. Construction spending decreased by 1.3% MoM in February after growth of two previous months. Surprisingly, mortgage origination forecasts didn't decline in total in April. Thus, according to Fannie Mae's April housing forecast, total 2020 mortgage originations decreased by 2.3% MoM for 2020 year and increased by 7.8% MoM for 2021 year. Currently, it is expected that total originations will increase by 9.7% yoy in 2020 but it will decrease only by 2.4% yoy in 2021. The key drivers of growth will be refinance originations for 2021 and purchase originations for 2022. According to MBA's forecast published in April, total mortgage originations will increase by 11.6% yoy in 2020 (-7% vs March forecast) driven by refinancing which is estimated to increase by 31% yoy in 2020 but total originations will decrease by 21.7% yoy in 2021 (-1.4% MoM). The key driver of originations remains significant decline of 10yr treasury yield but we disagree that it will be more important than significant deterioration of financial health of US consumer in 2020 and tightening of lending standards.

Housing starts were just 1216K in March, markedly worse than expectations of 1300K, -348K MoM. February figure was revised down from 1599K to 1564K. In turn, building permits beat estimates, 1353K vs consensus of 1296K. Existing home sales were in-line with estimates but markedly lower on MoM basis: 5.27 mln vs estimate of 5.25 mln, -0.49 mln MoM. New home sales also missed expectations, at 627K in March vs consensus of 642K, -114K MoM from revised down February estimate (from 765K initially to 741K). Housing prices continue to grow and growth rate increased significantly in February but it related to pre-COVID period of time. Thus, FHFA house price index added +0.7% MoM in

February vs consensus of +0.3% MoM and revised up January figure of +0.5% MoM. Also, S&P CoreLogic home price index for 20 cities went up by 0.45% MoM vs consensus of +0.35% after growth of +0.35% MoM in January (revised up from initial estimate of +0.3% MoM). On yoy basis, it was just +3.5% and it is not far from the lowest level since the end of 2012, significant deceleration from price growth of early 2018 of 6.7% yoy.

Consumer

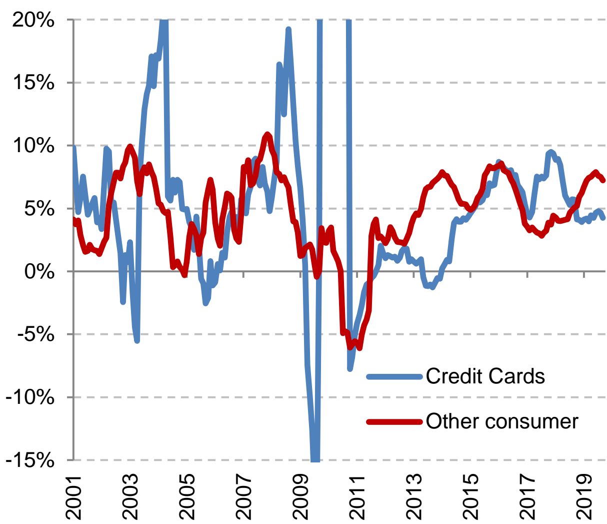
Consumer loan growth decelerated significantly in the recent months both in credit card segment and other segments of consumer credit. According to Fed H8 data, growth rate of consumer loans is currently +1.7% yoy (through April 15th) vs +4.6% yoy 1 year ago and +6.2% yoy as the end of 2019. On ytd basis, it has declined by 2.4%, driven by credit cards. Thus, CC growth rate was 2.1% yoy (as of April 15) vs +5% yoy as the end of 2019. On ytd basis, CC loans decreased by 5% as credit cards limits were markedly cut because of rapid deterioration of US economy. Net change of consumer credit in February was +$22.3 Bn, noticeably beating consensus of $14 Bn but it will decline markedly as early as in March. Other segments of consumer credit also decelerated significantly, adding just 6.1% yoy (as of April 15) vs 7.6% yoy as the end of 2019, just +0.7% ytd. 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”. But “the March 2020 Survey of Consumer Expectations shows a significant deterioration in households’ expectations regarding their labor market and financial situation, a decline seen across all age, education, and income groups”.

We didn’t expect marked deterioration of the quality of consumer loans (only return to historic averages) until the recent times but the situation has changed dramatically recently. Thus, GDP forecasts for the coming quarters were revised almost every week (of course, in the downward direction). According to Bloomberg compiled estimates in April, the most pessimistic GDP growth forecast is decline more than 10% yoy for 2020 US GDP while median figure is -3.3% yoy. As of unemployment, it could be as high as 13% during 2020. So, it is undoubtedly that quality characteristics of consumer portfolio will worsen significantly in the coming quarters even despite DSR and FOR of median HH is still markedly lower than historical averages. But the figures of low-income consumer, which is usually suffer the most during recession, are already at or higher than pre-financial crisis levels. Even despite quality characteristics of consumer loan portfolio were resilient in 1Q20, banks have already provisioned more than $25 bn in total for future credit losses in 1Q20, and the most of reserve built-up was related to credit cards segment. But we still don’t expect that highs of the previous crisis will be reached in the coming recession as financial health of US Consumer is much stronger today than it was then but, of course, it will depend on how long the restrictions related to controlling the virus spread will last. The longer the higher losses will be. And the dependence of losses on the time of restrictions will also be somewhat exponential. So, our expectations deteriorated significantly during the last month.

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%. 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

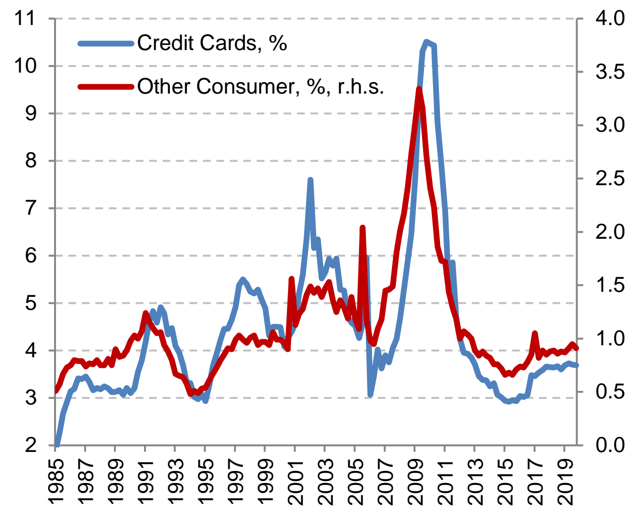
0.93%. 30-89 delinquency ratios (leading indicator of credit quality deterioration) were flat at 4Q19: 1.38% (-1 bps yoy) in credit cards, 1.68% (-2 bps yoy) in other consumer loans and 2.36% (+3 bps yoy) in Auto. Number of bankruptcy filings decreased again in 1Q20, 189K vs 192K in 1Q19, the lowest figure since the end of 2006.

Chart 21. Consumer. Loan Growth Rates, YoY, %



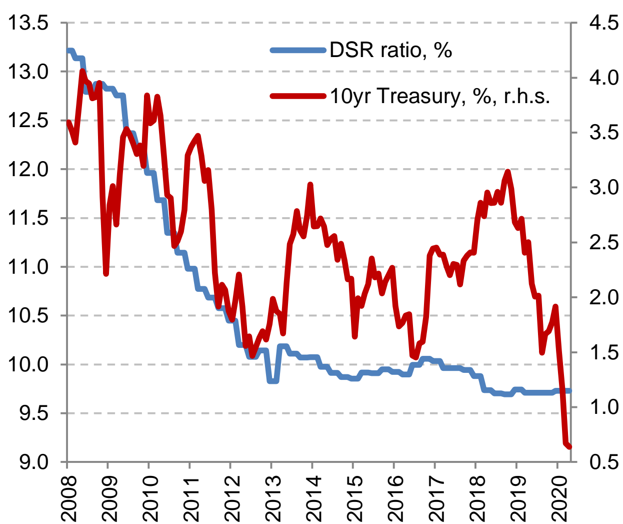
Source: Bloomberg

Chart 22. Consumer. NCOs Ratios, %



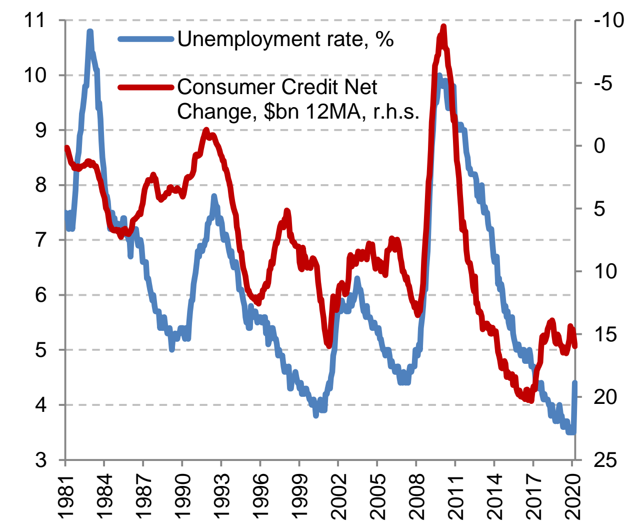
Source: Bloomberg

Chart 23. Debt Service Ratio vs 10yr Treasury Yield, %



Source: Bloomberg

Chart 24. Unemployment vs Net Change of Cons Credit



Source: Bloomberg

January 2019 SLOOS survey indicated that “over the fourth quarter, 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”. But during 1Q20, banks noted that they had already started to tighten standards for consumer loans, especially for credit cards, and tightening would be continue in the near future. As of demand, banks noted that demand was unchanged for credit cards and other consumer loans but it was indicated that demand for auto loans weakened in 4Q19. Undoubtedly, it weakened significantly in 1Q20.

Consumer activity data published in April was worse than expected for majority prints even despite estimates were significantly lowered. Moreover, one-month drop of many readings was the biggest on record. Thus, consumer sentiment indicator published by Michigan University tumbled by 17.3 pts MoM to 71.8 pts vs expectations of 75 pts, driven by current

conditions index while expectations index was better than expected. It is still 16.5 pts higher than low of the last cycle but it seems that 2Q20 consumer spending decline will be the biggest on record either. The only thing that adds to optimism is the fact that expectations remain relatively resilient. Conference board consumer confidence index also showed record monthly decline, plunging by 33.1 pts MoM to 86.9 pts, in line with estimates. But it is still significantly higher than 2009 low of 24.8 pts.

March employment report was significantly worse than expected after better figures in January and February. But the key problem is that the real situation is much worse than March employment figures given recent dynamics of jobless claims. Thus, it was lost 701K payrolls in March vs consensus of -100K. Unemployment ratio skyrocketed by 90 bps MoM to 4.4%, markedly worse than consensus of 3.8% and it will continue to grow fast in the near term. Underemployment rate increased by 170 bps MoM to 8.7%. In turn, average hourly earnings were higher than estimates, +0.4% MoM vs +0.3% MoM in March. On a year-over-year basis, it was 3.1%, +10 bps MoM and vs consensus. Average weekly hours were -0.2 MoM at 34.2, slightly beating consensus. March ADP employment was -27K vs expectations of -185K and February figure was slightly revised down – from 183K initially to 179K. Initial jobless claims slightly decreased as of April 18 vs high of April 4 but it remains being at unprecedented high level. Thus, 4.4 mln people filed for unemployment insurance for the week ended April 18. It was 800K lower w/w and only slightly below estimates. But overall number of initial jobless claims over last few weeks exceeded 26 mln, or 16% of pre-COVID workforce.

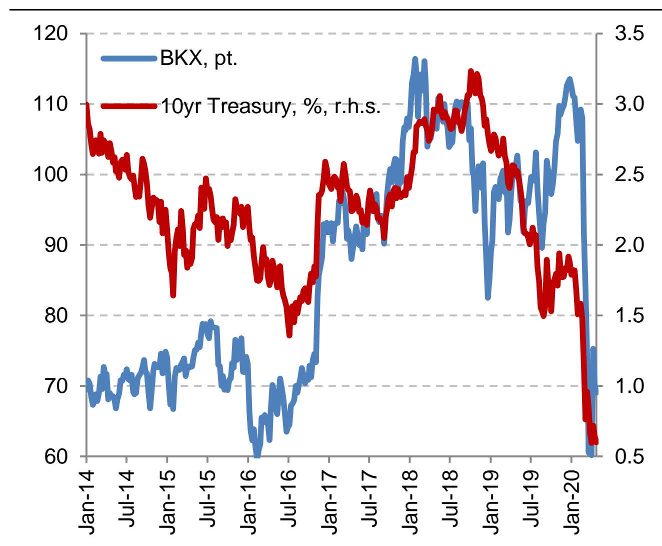
Interest Rates

April FOMC meeting brought us little news but it was expected given restrained market reaction after the meeting. Forward guidance remained unchanged – “the Committee expects to maintain this target range until it is confident that the economy has weathered recent events and is on track to achieve its maximum employment and price stability goals”. Taking into account economic outlook of the chairman, it means that rates will not be hiked at least in coming 2-3 years, even more so Powell noted that the Fed would be patient and would not hurry to move rates up. At least, expectation that the economy will likely drop at an unprecedented rate in 2Q20 and that unemployment could be surged into double-digit area means that it will be hardly achieved unemployed rate less than 5% earlier than mid-2023. Possibly, the guidance will be modified to clearer message at June meeting when uncertainty should diminish. Also, there were no more details for QE program – “the Federal Reserve will continue to purchase Treasury securities and agency residential and commercial mortgage-backed securities in the amounts needed to support smooth market functioning, thereby fostering effective transmission of monetary policy to broader financial conditions”. However, Powell noted that corporate credit facilities were near being finalized but that the Fed could only make loans to solvent entities. The long story short, the Fed does all it can but it will do more if necessary and there is high probability that it will be necessary given “the depth and the duration of the economic downturn are extraordinarily uncertain and will depend in large part on how quickly the virus is brought under control”. But all further monetary stimuli should be accompanied by more fiscal stimuli to return economy to sustainable path as fast as possible. Market participants hope that more clear guidance will be announced at the next meeting when economic projections should be released.

The key takeaway for banks is that challenging revenue environment will persist for a long time. And it will get worse at first before it gets better as even such massive both fiscal and monetary stimuli can’t save US economy from falling into very deep recession. Thus, US GDP declined by 4.8% annualized pace in 1Q20 and 2Q20 GDP decline is expected to be double-digit while total number of initial jobless claims exceeded 30 mln over the last 6

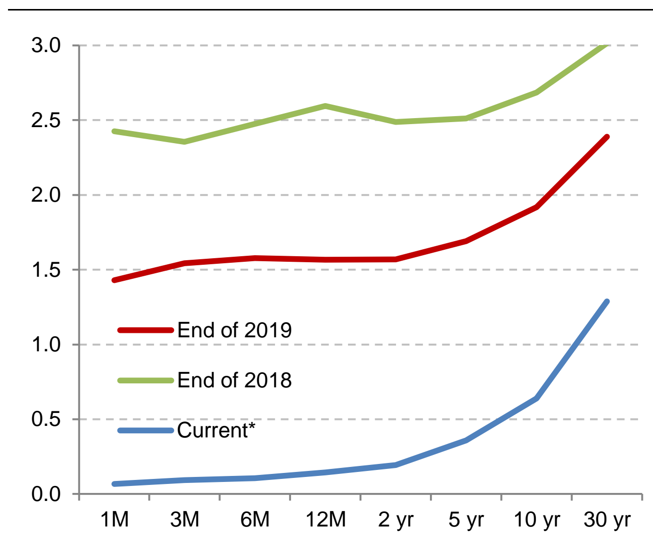
weeks, implying that unemployment rate could exceed 20% in the current cycle (twice as much as the high of the GFC). So, we do not exclude that new measures to support the economy will be announced in the near future as considerable downside risks still persist. Implying the wave of bankruptcies, banks have already started to build reserves but we expect that provision expense will be even higher in 2Q20. The longer the lockdown of the economy the longer recovery will be and it is obvious for us that probability of V-shaped recovery tends to zero. The situation is also complicated by high leverage of US corporations and relatively short period of time during which companies could survive being shut down.

Chart 25. BKX Index vs 10yr Treasury Yield



Source: Bloomberg

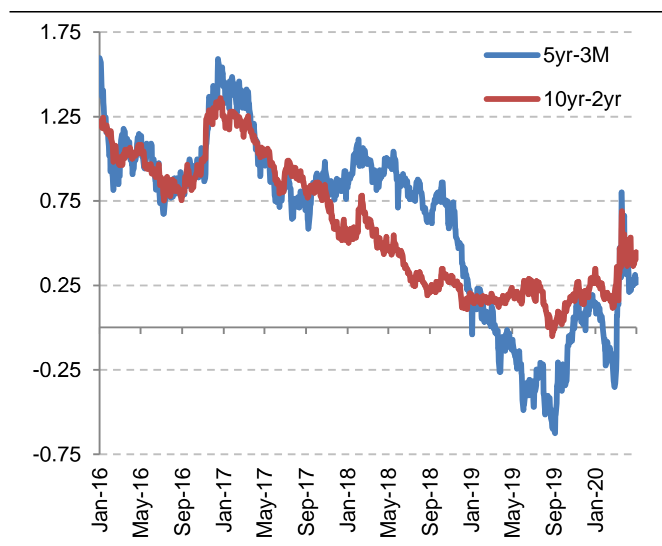
Chart 26. US Yield Curves, %



*As of end-April 2020

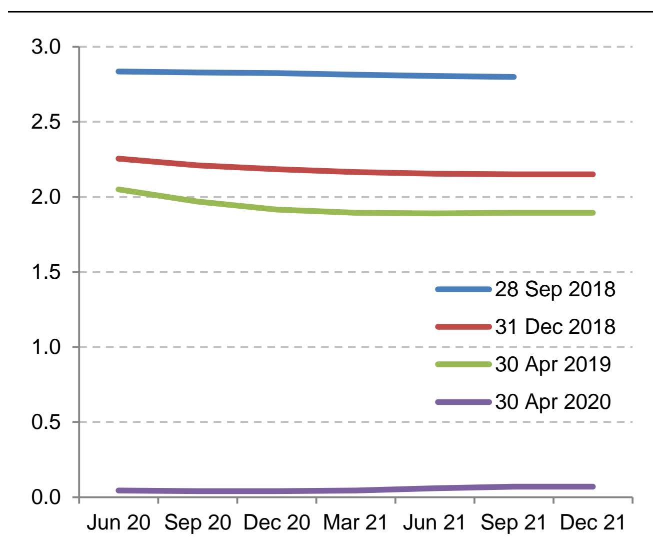
Source: Bloomberg

Chart 27. Treasury Spreads, %



Source: Bloomberg

Chart 28. Futures Implied FF Rate, %



Source: Bloomberg

As we expected, wording about economic situation changed dramatically but it seems that real situation could be even worse given recent economic data. Consumer spending plunged by 7.6% in 1Q20 despite relatively strong figures in the first two months of the year. Composite PMI fell below 30 pts in April while business investment tumbled by 8.6% in 1Q20. So, GDP consensus forecasts continue go down every week. Thus, according to Bloomberg April survey, GDP growth will be -3.3%/+3.4%/+2.3% yoy for 2020/2021/2022 years, respectively, vs +1.4%/+1.9%/+2.1% yoy in March, while most pessimistic forecasts

imply that US GDP could shrink by more than 10% yoy in 2020. Unemployment forecasts increased from 3.7%/3.8%/4% for 2020/2021/2022 years, respectively, in March to 8.2%/6.8%/5.4% in April and we expect that projections will continue to go up in coming months given recent dynamics of jobless claims.

Median NII growth of BKX index members was 0.7% qoq in 1Q20 but -0.6% yoy vs -0.4% qoq or -2.3% yoy in 4Q19, the first qoq growth after 4 consecutive quarters of decline. Also, median NII surprise of BKX index members was +1.5% (vs estimates for April 13), after two consecutive quarters of missed expectations. The key driver of positive sequential NII dynamics was strong growth of earning assets and relatively resilient NIM but it seems both drivers are unsustainable at the moment and we will see further decline of NII in coming quarters especially taking into account rate cut to zero in March. Median NIM of BKX index members decreased by 3.5 bps qoq or -21 bps yoy to 2.96% (the lowest figure since 2Q17) vs -5 bps qoq or -17.5 bps yoy in 4Q19. So, despite better NIM in 1Q20 and stabilization of key benchmark rates in April, Bloomberg consensus estimates of median NIM of BKX index members decreased significantly. Thus, median NIM 20E of BKX index member decreased by 12.2 bps MoM or -20.9 bps ytd to 2.76% in April while NIM 21E declined by 8.8 bps MoM or -26.4 bps ytd to 2.7%.

Median growth of NII income of BKX index members was positive on qoq basis despite lower day count but it is not a good guidance for coming quarters given significant growth of earning assets due to strong deposit inflow and emergency liquidity demand from C&I segment, primarily by utilizing revolvers. But its growth decelerated significantly in April while deposit inflow still remains strong. The key driver of future decline of NII is significant drop of NIM due to full impact of March cuts in 2Q20. But it will be partly mitigated by lower deposits costs and wider spreads. The key risk for NIM is that it will remain low for prolonged time. At least, current futures imply that there will be no rate hike in two nearest years while the last cycle example tell us that this period could be much longer.

Treasury yields were little changed in April after significant drop in March but it remained significantly lower ytd. Thus, 1M yield increased by 6.1 bps MoM to 0.07% while 3M yield went up by 3.3 bps MoM to 0.09%, 2yr yield went down by 5.2 bps MoM to 0.19% and 5yr yield decreased by 2.1 bps MoM (currently at 0.36%). 10yr yield declined by 3 bps MoM to 0.64% (-128 bps ytd), while 30yr yield went down by 3.3 bps to 1.29%.

So, spreads also changed insignificantly in April after substantial growth in March, remaining at multi-month high but markedly lower than average levels of 2017 year. Thus, 5yr/3M spread decreased by 5.4 bps to +0.26% but it is still 71 bps lower than average level of 2017 yr while 10yr-2yr spread is 49 bps lower (as the end of April). Spread (10yr-2yr) increased by 2.2 bps MoM to +0.47%.

According to Bankrate.com data, loan yields continue to decline following significant drop of key benchmark rates ytd, but decline of loan yields is much lower because of spreads widening. Thus, average 30yr mortgage rate decreased by 33 bps MoM to 3.53% as the end of April after significant growth in March but its decline is 95 bps lower ytd than decline of 10yr treasury yield. Average 15yr mortgage rate also decreased by 25 bps MoM to 3.06%, -35 bps ytd. Auto loans rate (new loans, 60 mnth) went down by 5 bps MoM to 4.52%, the second consecutive month of decline but it is just 11 bps lower ytd. Deposit rates continued to decline in April and its decline even accelerated in March and April following rate cuts in March, the 7th month in a row of decline. So, it will continue partially mitigate the negative impact of significant decline of key benchmark rates but NIM will continue to decline in coming quarters.

Thus, national average cost of 6 month deposits decreased by 5 bps MoM to 0.44%, -35 bps ytd; average 3yr CDs cost declined by 6 bps to 0.75%, -50 bps ytd; average 5yr CDs cost decreased by 6 bps MoM to 0.85% while cost of interest checking accounts decreased

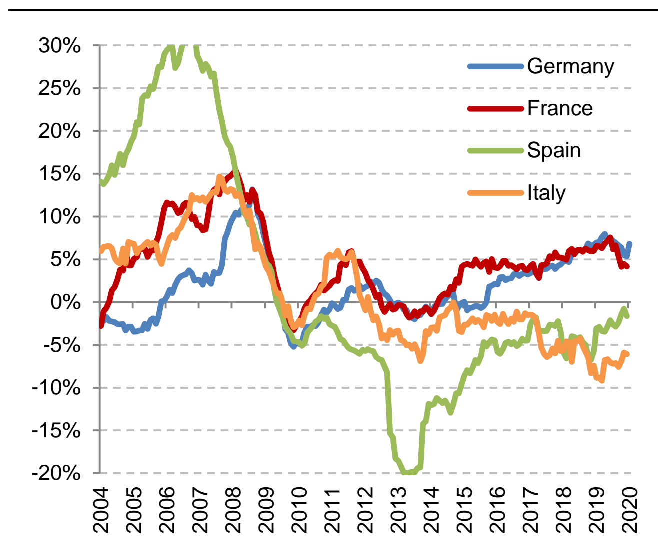
by 3 bps MoM to 0.22%, -40 bps ytd. Average cost of money market accounts fell by 3 bps MoM to 0.31%, -27 bps ytd.

Europe

Corporate

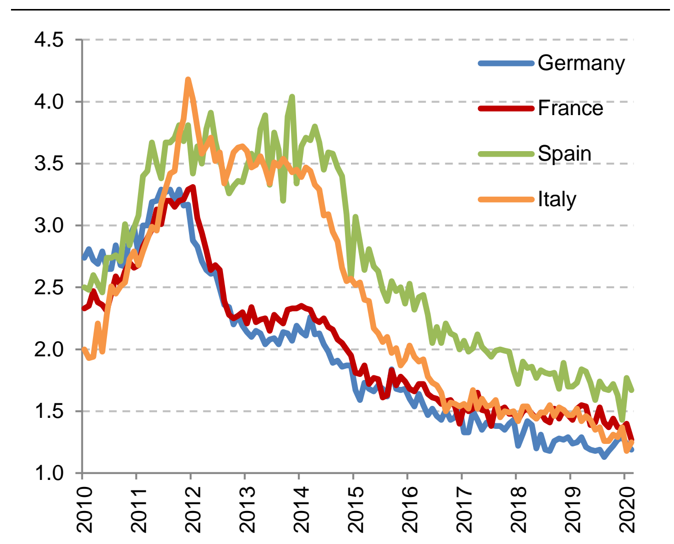
Corporate loan growth markedly accelerated in recent weeks driven by emergency liquidity needs but it seems that the growth is unsustainable given significant decline of economic activity across majority of EU countries. So, EU corporate loans growth was positive on MoM basis in March, the third consecutive month of growth after significant decline in December. Even on yoy basis it markedly accelerated due to active use of credit lines because of liquidity needs after deceleration in previous months. Thus, loans up to 1 year increased by 2.1% yoy or +5.3% MoM in March. Loans 1-5 yrs accelerated to 7.5% yoy from +3.4% yoy in February and +3.5% yoy 1 year ago. Loans over 5yrs were +3.5% yoy in March vs +2.6% yoy 1 year ago, +1.1% MoM. Total corporate loans increased by +3.9% yoy vs +1.7% yoy 1 year ago, +2.5% MoM, the highest monthly growth on record. But 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 continue to shrink on yoy basis, -2%, despite growth of +2.5% MoM.

Chart 29. EU Corporate Loan Growth, YoY



Source: Bloomberg

Chart 30. EU Corporate Loan Rates, New Loans, %



Source: Bloomberg

European corporations benefited from low interest rate environment so far but this will be little consolation in a recession time given imminent decline of revenues. At the end of last year, there was a 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". At least, companies from the most affected industries (for example, airlines) have already requested some assistance from the states. And the number of such companies will inevitably go up in the near future. So, financial health of EU corporate sector will worsen even despite negative rate environment. Unprecedented decline of both European and global economies cannot but affect the quality of corporate loan portfolio. And how deep these problems will be depends on how quickly the economy starts to recover. We think that probability of V-shaped recovery tends to zero, taking into account recent macroeconomic data. At least, PMI figures tumbled again in April to unprecedented levels, pointing to very deep recession in EU in 1H20. Industrial production was negative even in February when there were no quarantine restrictions. Even ECB admits that EU GDP decline may be double-digit in 2020, paying attention that uncertainty still remains very high, despite significant decline of daily

confirmed COVID-19 cases in majority of European countries as the end of April.

According to April 2020 Euro Area bank lending survey, demand for corporate loans surged in 1Q20 after decline in 4Q19, reflecting "firms' emergency liquidity needs to cover ongoing payment needs (e.g. for rents or employees) during the lockdown period" as well as drawing previously committed credit lines. Loan demand was heterogeneous across European countries and banks expect that it will increase further in 2Q20. In turn, credit standards were tightened in 1Q20, reflecting significant uncertainty related to COVID-19 spreading. The net percentage was still below the historical average since 2003 but banks noted that "they were not yet able to fully evaluate the effects of the coronavirus pandemic". The key driver of tightening standards was risk perception while competitive pressure was the main driver of easing. Rejection rate increased but banks expect that "a considerable net easing of credit standards for firms (a net percentage at -11%) in the second quarter of 2020, probably on account of the liquidity support measures and loan guarantees introduced by governments". But we don't expect that there will be long-lived effect if there is any at all.

Unadjusted EoP corporate loans increased by 3.9% yoy at the end of March, the 30th consecutive month of positive growth on yoy basis. In turn, adjusted for sales and securitizations loans increased by 4.8% yoy, the 57th consecutive month of positive yearly growth (the highest growth on yoy basis since 2009 year). Despite March acceleration, we expect that loan growth will be relatively weak in 2H20 because of imminent recession. We don't exclude that it will be negative, accompanied by challenging rate environment for a long period of time, having double negative effect on NII and banking profits.

German outstanding corporate loans (unadjusted figures) increased by 6.8% yoy as the end of March or +2.1% MoM vs +8.0% yoy as June 2019. French corporate loans outstanding (unadj) added 6.3% yoy or +3.3% MoM as the end of March vs +6.5% yoy one year ago. Due to significant MoM growth, Spanish loans are higher than it was 1 year ago but corporate loan growth in the Southern countries remains weak. Thus, Spanish outstanding corporate loans added 0.9% yoy or +3.6% MoM vs -3.1% 1 year ago. Italian loans continue to decrease, -2% yoy but +2.5% MoM vs -8.9% 1 year ago.

European corporate rates continue its negative dynamics, following the key benchmark yields, after marked growth in October 2019 and being flat in two consecutive months. So, rates (new business) is just 1 bps higher than all-time lows showed in August/September and it could go even lower, given the current rate environment in Europe, if spreads won't increase because of higher risks caused by recession. Average EU corporate loan rates (all maturities, new business lending, adjusted for loan sales) decreased by 2 bps MoM to 1.36% in February, or -10 bps yoy. Back book yields of EU banks continuously decreased on yoy basis since April 2014 and rate of decline went up in February after being relatively flat over the last year. It declined by 1 bps MoM to 1.85%. On yoy basis, it is -14 bps vs the lowest yoy decline since mid-2014 of 10 bps.

Dynamics of rates within European countries wasn't uniform in February with decline of front book yields in all major European countries except for Italy and Netherlands. Thus, German corporate rate on new loans decreased by 5 bps MoM to 1.19%, -10 bps ytd after four consecutive months of growth with overall move of +16 bps. French yield on new corporate loans tumbled by 13 bps MoM to 1.27%, new all-time low. Spanish yield decreased by 10 bps MoM to 1.67%, after skyrocketing growth in January, -6 bps vs 1 year ago. Italian one came up by 7 bps MoM to 1.25%, from all-time low, but it is -27 bps yoy. Dutch yield also increased in February, +6 bps MoM after significant drop in January, still +4 bps yoy. Back book yields of major European countries declined in all European countries except for France and Spain. Thus, German yield decreased by 1 bps MoM to 1.87% in February, -14 bps yoy. In turn, French yield increased by 1 bps MoM to 1.65%,

-13 bps yoy. Italian yield declined by 2 bps to 1.99%, -13 bps yoy. Spanish rate was flat MoM at 1.78%, -7 bps yoy. Dutch yield decreased by 2 bps MoM to 1.97%, -17 bps yoy. Thus, spread between new and outstanding rates remains relatively flat over the last 4 months, near the lowest level over the last 8 years.

Consumer

EU consumer was the main driver of total loans growth so far but situation changed dramatically in recent months. So, growth rates of both mortgage and other consumer loans decelerated considerably in March while banks started to tighten credit standards in 1Q20. There were quite predictable actions given rapid deterioration of EU economy, which will inevitably lead to a significant deterioration of financial health of EU consumer. At least, unemployment rate has already started to grow while consumer confidence decline to the levels unseen from the last crisis. It should be noted that sustained growth of property markets which positively impacted on household wealth during recent years will be inevitably replaced by a fall in coming quarters. But a positive moment is that the indebtedness of euro area households remains relatively low, stabilized near 58% of GDP. Given very low rate environment, household debt burdens are also near multi-year lows and it will remain at these levels or only slightly higher in the nearest years because of prolonged negative rate environment. Currently, households debt interest burden is 40-50% lower for majority of European countries than it was just before the US mortgage crisis. But in the event of a significant increase in unemployment, this will be a little help for people who lost a job. Notwithstanding, overall quality of consumer credit portfolio of European banks should be better in the current crisis vs GFC levels unless it will be L-shaped recovery rather than U-shaped one.

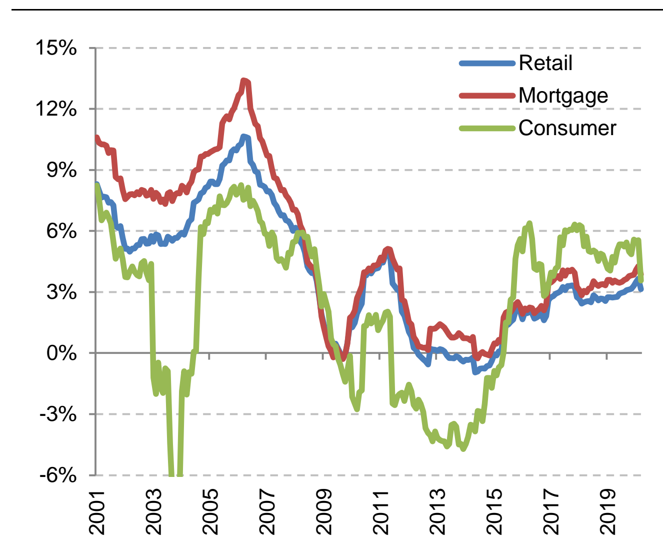
EU loans to households increased by 3.1% yoy but -0.1% MoM in March (the first MoM decline since January 2018). Consumer loan growth remained relatively strong so far but it will continue to decelerate in the near term given more strict lending standards and imminent recession. Moreover, it will continue to differ widely across countries (as well as for corporate loans), German household loans increased by 4.6% yoy in March or +0.3 % MoM, French retail lending added 5.4% yoy but -0.2% MoM (slight deceleration vs December 2019 figures), while household loans in Spain declined by 0.9% on yoy basis, the 9th 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 +0.3% yoy in March, the 10th consecutive month of positive yoy growth after 6 months in a row of negative yoy growth.

Consumer lending (ex. mortgage) remained the key driver of EU household loan portfolio but it was negative on MoM for two consecutive months. It still remains positive on yoy basis, adding 3.6% yoy in March, -1% MoM after non-negative MoM dynamics over 11 months in a row. EU mortgage loans increased by 3.9% yoy as the end of March, being flat on MoM basis. According to April 2020 bank lending survey from ECB loan demand for consumer credit was lower as well as net increase for housing loans because of worsening outlook. 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 5.2% yoy in March vs 14.1% yoy 1 year ago. In turn, Spanish mortgage portfolio continues to stagnate, -1.9% yoy as the end of March vs -1.3% yoy 1 year ago.

As of mortgage lending standards, it was tightened in 1Q20 after being broadly unchanged in 4Q19. Net percentage was above the historical average level since 2003 but it still remained overall moderate vs GFC. "Banks referred to a lower risk tolerance and a worsening creditworthiness of households as relevant factors for the tightening. By contrast, banks' cost of funds and balance sheet situation had a neutral impact".

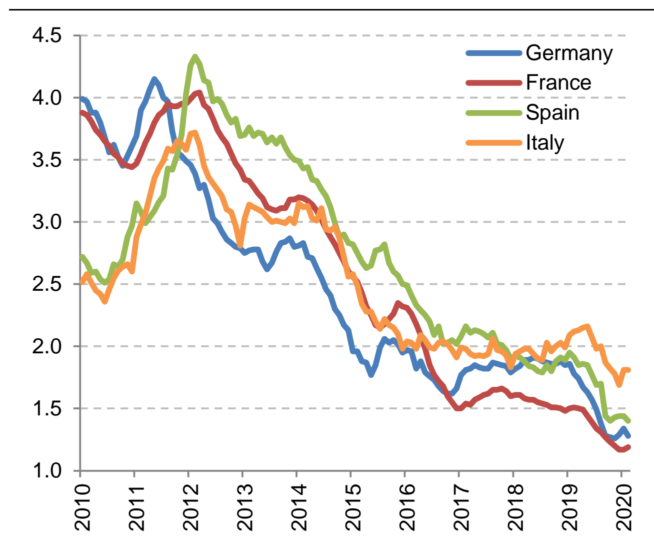
Unsurprisingly, banks expect that standards will tighten in 2Q20 while demand will be strongly negative. "The net tightening was mainly related to a tightening impact of loan-to-value ratios and collateral requirements, while margins on average loans continued to narrow and margins on riskier loans remained broadly unchanged". It was also noted that rejection rate for housing loans increased. As of consumer loans, the lending standards continued to tighten in 1Q20 and it was "the strongest net tightening since 1Q13". "Higher risk perceptions related to the general economic outlook and a lower risk tolerance of banks were the most important factors contributing to the net tightening of credit standards on consumer credit in the first quarter of 2020". Rejection rate was also higher.

Chart 31. EU Consumer Loan Growth, YoY



Source: Bloomberg

Chart 32. EU Mortgage Loan Rates, New Loans, %



Source: Bloomberg

Average EU rate on new mortgage loans decreased by 3 bps MoM to 1.39% in February after being flat in January, new all-time low, -41 bps yoy. It was hovering around 1.82-1.83% over 8 months from July 2018 to February 2019 but it declined by more than 40 bps since then because the key benchmark yields for mortgage rates declined markedly ytd, except for the short end which is slightly higher than it was 3 months ago. In March, 10yr generic yield increased by 13.6 bps to -0.47% after significant decline in February. In fact, it just returned to the end of January level, but still -0.29% ytd. 30yr yield added 18 bps MoM but it is just +0.03% as the end of March. So, almost the entire current yield curve still remains to be below 0%. In February, German mortgage rates on new loans decreased by 6 bps MoM to 1.28%, -50 bps yoy. Italian mortgage rate went down by 4 bps MoM to 1.44% and it is 51 bps lower than it was 1 year ago. French yields increased by 2 bps MoM to 1.19%, -32 bps yoy. Spanish mortgage rate was flat MoM at 1.81% and it is 31 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-year basis, -18 bps yoy. On month-over-month basis, it increased by 1 bps to 1.94, after three consecutive months of decline. The rate of decline increased from 4.5 years low of -12 bps yoy which was shown in May-July of 2019 due to significant decline of benchmark rates.

As for other consumer loans, EU new business rates decreased by 12 bps MoM to 5.56% in February after significant growth of 38 bps MoM in January. Consumer yields remain too volatile. On year-over-year basis it decreased by 10 bps. Consumer yields decreased in all major European countries except for France. German yield tumbled by 23 bps MoM to 5.8% in February, -3 bps yoy. French rate increased by 11 bps MoM to 3.8%, -11 bps yoy. Spanish rate decreased by 45 bps MoM to 6.84% -38 bps yoy. Italian consumer yield went down by 2 bps MoM to 6.52% after growth of 36 bps MoM in January, -13 bps yoy.

Average European new consumer deposits rate (with agreed maturity) unexpectedly

increased by 4 bps MoM to 0.36 bps in February, the second consecutive month of growth despite significant decline across the whole yield curve. Cost of outstanding deposits (with agreed maturity) also increased by 2 bps MoM to 1.19% but it remains relatively flat over last year hovering around 1.2%. Total cost of deposits declined by 1 bps MoM to 0.24% in February, second consecutive month of decline. On yoy basis, it is just 5 bps lower than it was 1 year ago. But spread between total loans yield and cost of total deposits remains relatively flat over the last 5 months, hovering around 2%, -9 bps lower than it was 1 year ago. Consumer deposits growth remains healthy, adding 5.2% yoy as the end of February, slight deceleration vs +5.9% as the end of November 2019. The growth rates of deposits are around 5-6% yoy for all major European countries despite increasingly clear threats by banks to start shuffling off the burden of negative rates on to consumers.

Overall Macro

European economy contracted at a record pace in 1Q20 but the speed of decline will be significantly higher in 2Q20. High level of uncertainty remains. Thus, according to ECB's introductory statement, "euro area GDP could fall by between 5% and 12% this year, depending crucially on the duration of the containment measures and the success of policies to mitigate the economic consequences for businesses and workers". Even despite some countries have already announced gradual easing of quarantine restrictions, economic activity will remain very weak for some time. Majority of key economic indicators were at the worst or so levels in history recently. Massive monetary and fiscal stimuli have already help EU economy somewhat but it needs more while fiscal stimulus capacity of some countries is very restrained. We agree with ECB's president that "an ambitious and coordinated fiscal stance is critical, in view of the sharp contraction in the euro area economy", but we don't expect it to be made in the near future, if at all. At least, the speed of consensus-building by European politicians has not been very high so far. The longer decision-making process, the longer time of economic recovery.

European real GDP tumbled by 3.8% qoq or -3.3% yoy in 1Q20, in-line with consensus, after tiny growth in 4Q19, +0.1% qoq or +0.9% yoy. It was the biggest decline of EU GDP in history but 2Q20 plunge will be double-digit given still closed economies and April PMI's. French GDP decreased by 5.8% qoq or -5.4% yoy vs expectations of -4.0% qoq or -3.6% yoy, after decline of -0.1% in 4Q19, implying technical recession in the country. Italian GDP decreased by 4.7% qoq or -4.8% yoy vs expectations of -5.4% qoq and -5.4% yoy, after decline by 0.3% qoq in 4Q19. Spanish GDP declined by 5.2% qoq or -4.1% yoy in 1Q20 vs expectations of -4.3% qoq or -3.2% yoy, after growth of +0.4% qoq or +1.8% yoy in 4Q19. German GDP hasn't announced yet, but it should be slightly better than expected given weaker figures of Spain and France but in-line EU GDP decline. But it will also be a significant drop. In April survey, Bloomberg consensus estimates for GDP yoy growth were significantly lowered to -5.2%/4.4%/1.6% yoy for 2020/2021/2022 years, respectively (vs 1.0%/1.3%/1.4% yoy in March). But the most pessimistic estimates imply that GDP will decline by more than 10% yoy in 2020 with the high of unemployment of almost 12%. ECB expects that GDP could decline by 15% on a quarterly basis in 2Q20, but it is the severe scenario.

European macro data published in April was clearly negative as well as it was in March with negative surprises on majority of the most important macro data. Macro data related to February and March were slightly better than expected but estimates had been revised down significantly. Unsurprisingly, economic surprise indices moved down substantially in the recent months. Thus, Citi's economic surprise index tumbled by 219 pts MoM in April after decline by 50 pts MoM in March, to unbelievable -269 pts, the lowest figure on the record. Bloomberg surprise index declined by 0.51 pts MoM to -0.62 pts, multi-year low. It seems that both figures will begin to improve in the coming months due to less quarantine

restrictions in EU as early as in May but the speed of recovery remain highly uncertain. And, from our point of view, risks remained tilted to downside. So, we will see further deceleration of loan growth (after emergency liquidity needs demand will decline) and growth of NPLs what is very negative for EU banks given prolonged negative rate environment. We expect that EPS/NI 20/21 estimates will continue to be revised down in the coming months and it is quite possible that profit of some European banks will be again negative.

Composite PMI (preliminary figure), which is well correlated with GDP growth, markedly missed expectations in April again, after clearly weak figures in March. It tumbled by 16.2 pts MoM to unprecedented 13.5 pts in April vs consensus of 25 pts, to new all-time low. The previous one was showed in March. It was again driven by services PMI, which decreased by 14.7 pts MoM in April to 11.7 pts vs consensus of 22.8 pts. Manufacturing PMI decreased by 10.9 pts MoM to 33.6 pts vs consensus of 38 pts. Even longer supply time didn't help the figure at this time. In turn, February industrial production was pretty resilient and in-line with expectations, -0.1% MoM or -1.9% yoy, but it was February when composite PMI was above 50 pts. According to current estimates, it will decline by 8.8% yoy in 2020 and increased by 6.4% in 2021 vs expectations of flat / +1.3% yoy dynamic just 1 month ago. The most pessimistic forecasts imply that it will decline by more than 10% in 2020.

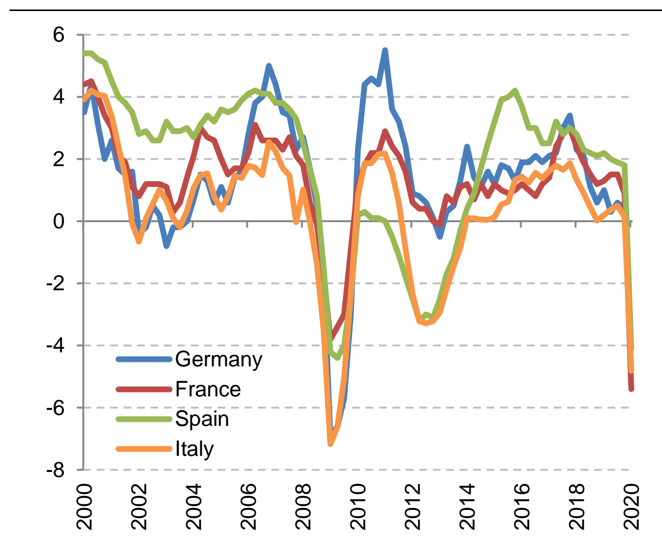
EU consumer remained the key driver of European economy, demonstrating strong growth of consumer spending due to ongoing and broad-based wage growth so far. But the situation has changed dramatically and difficult times are ahead for EU consumers. According to April Bloomberg survey, household consumption will decline by 6% yoy in 2020. Unemployment will increase significantly in 2020 even despite massive support measures for employment. Unsurprisingly, consumer confidence has already decline significantly while companies have announced more and more job cuts. According to ECB, "If you look at labour forces, 718,000 companies in Germany have applied for the short-term special work programme. In France the number of companies that have applied for the chômage partiel – the unemployment special schemes – went from 24,000 to 425,000, covering over 10 million employees. In Italy it's 4.6 million employees that are covered". In turn, unemployment rate was slightly better in February, -10 bps MoM to 7.3% vs consensus of 7.4%, but Bloomberg consensus of unemployment rates for 2020, 2021 and 2022 years were revised up markedly in April to 9.0%/8.5%/8.4% vs March estimates at 7.5%/7.4%/7.4%. February retail sales were also strong, adding +0.9% MoM or +3% yoy vs estimates of +0.1% MoM or +1.6% yoy. April preliminary consumer confidence tumbled by 11.1 pts to -22.7 pts vs consensus of -20 pts, the lowest figure since early 2009, just 1.2 pts higher than low of the last cycle.

Rates

At April meeting ECB kept rates unchanged as well as terms of asset purchase programs which were announced in March. But Christine Lagarde said during press conference that PEPP might be extended further than the end of 2020 and its size also could be adjusted if necessary. "The Governing Council is fully prepared to increase the size of the PEPP and adjust its composition, by as much as necessary and for as long as needed. In any case, it stands ready to adjust all of its instruments, as appropriate, to ensure that inflation moves towards its aim in a sustained manner, in line with its commitment to symmetry". ECB announced that TLTRO III conditions were eased further. "The Governing Council decided to reduce the interest rate on TLTRO III operations during the period from June 2020 to June 2021 to 50 basis points below the average interest rate on the Eurosystem's main refinancing operations prevailing over the same period". It was also announced "a new series of non-targeted pandemic emergency longer-term refinancing operations

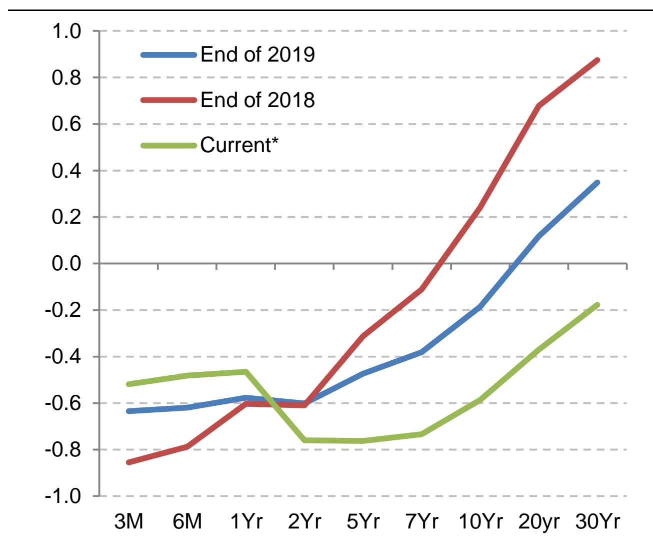
(PELTROs)" which would consist of 7 additional rounds with interest rate of -0.25% now. It was quite sensible decision given surged demand for corporate loans in March and April because of companies' emergency liquidity needs. Once again it was noted the importance of fiscal stimuli to overcome the crisis – "an ambitious and coordinated fiscal stance is critical, in view of the sharp contraction in the euro area economy", which could decline by 5-12% yoy in 2020, according to ECB staff estimates. But it seems that the market expected more asset purchases rather than promises for more asset purchases if necessary – STOXX 600 declined by 2% on the day of meeting.

Chart 33. EU Countries Real GDP Growth, YoY, %



Source: Bloomberg

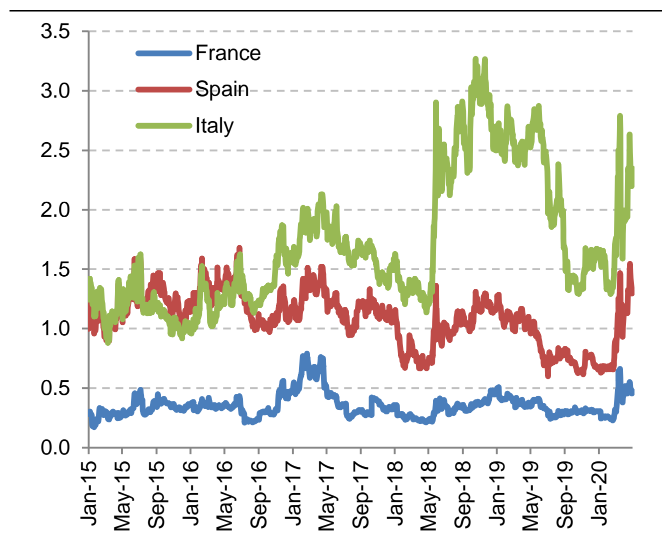
Chart 34. EU Yield Curves, %



*end of April

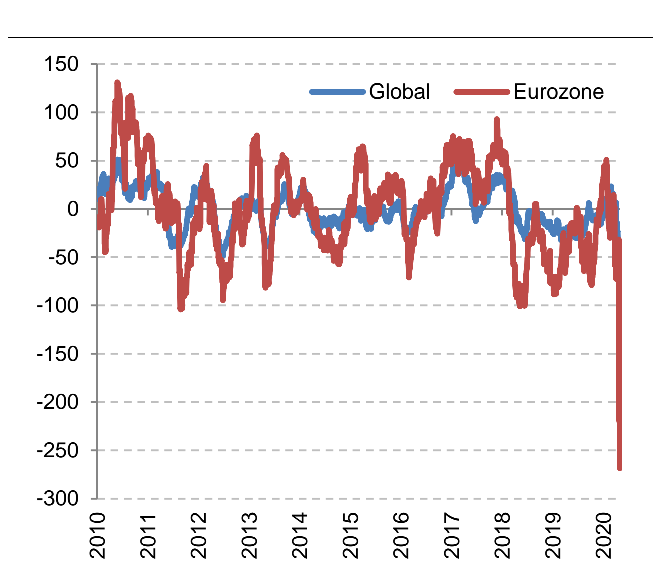
Source: Bloomberg

Chart 35. EU Countries Sov. Spreads vs Germany, 10Yr, %



Source: Bloomberg

Chart 36. Citi Economic Surprise Indexes, pts



Source: Bloomberg

ECB remains as flexible as it can and it is ready to expand its facilities but efficiency of these measures will be relatively low without strong joint fiscal response, from our point of view, given sharp deterioration of economic activity. Thus, EU GDP tumbled by 3.8% qoq in 1Q20, the worst decline on a record, and it will decline even more significantly in 2Q20 while uncertainty remains high. So, it is quite possible that monetary easing decisions will be announced as early as at June meeting. And the key positive for EU banks is decline of cost of TLTRO funding which positively impact on both bottom line and willingness to extend a credit. Accompanied by previous ECB's liquidity and capital relief measures, it

could ease some pressure on banking quotes and reduce the risk of dilution but fundamentals will remain weak in coming quarters given double-digit figures of GDP decline in 2Q20. As the end of April, median decline of FY20 EPS of SX7P index members is 46.6% ytd, FY20 revenue -5.1% ytd, FY20 NII -3.8% ytd, FY20 provision +115% ytd.

Key benchmark rates decreased markedly again in April after a short relief rally in the second half of March following two consecutive months of decline earlier. But the main drop was shown on the last day of the month after the ECB meeting. Thus, 3M Euribor (Dec 2021) decreased by 9.5 bps MoM to -0.48% (as the end of March) or -20 bps ytd while 3M Euribor (Dec 2022) went down by 12 bps MoM to -0.44% and it is -30.5 bps yoy.

The direction of dynamics of generic yields was almost uniform in April but decline of the long end was more significant. Notwithstanding, it remains markedly lower than it was at the end of 2019. 3M yield decreased by 2.5 bps MoM to -0.52%. 6M yield went up by 1.8 bps to -0.48%. 1yr generic yield declined by 0.7 bps MoM to -0.47% while 2yr yield lost 7.1 bps MoM to -0.76%. 5yr yield went down by 10.9 bps to -0.76% while 10yr yield tumbled by 18.4 bps to -0.59%. Overall, the yield curve remains being flat and inverted in the middle part of the curve. And spreads decreased markedly on MoM basis. Thus, spread between 10yr yield and 1yr yield decreased by 10.8 bps MoM to -0.12% while spread between 5yr and 3M yields went down by 8.4 bps MoM to -0.24%.

THEME OF THE MONTH

US Banks 1Q20 Overview

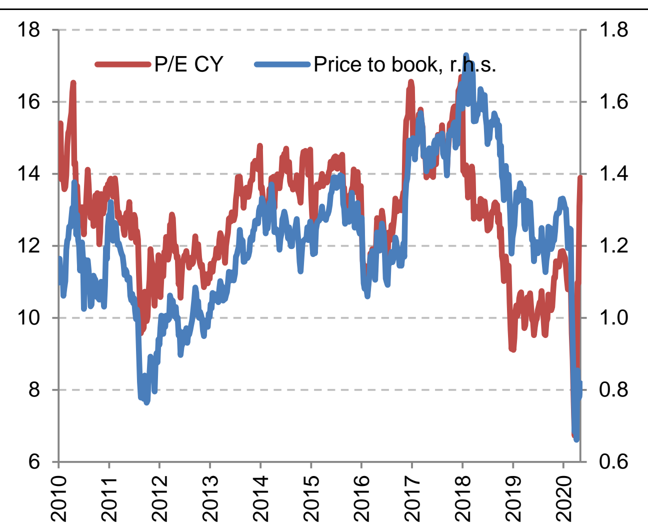
US banks reported very mixed figures with the lowest number of positive EPS surprises among our group of banks since 4Q08, the worst quarter during the GFC, but relatively solid revenues given current challenging revenue environment. Underlying trends were better than feared while key reason of large number of negative EPS surprises was considerable loan-loss reserve build which will remain elevated in coming quarters. From the other hand, NIM/NII dynamics were better than expected, capital markets revenues were very strong again, OpEx remained controlled while dividends were affirmed but buybacks were postponed. Thus, just 6 out of 24 of our group of banks demonstrated positive EPS surprises vs median number of positive quarterly EPS surprises of 17 over the last 52 quarters and the lowest figure so far of 5 in 4Q08. Thus, median EPS surprise for our group of banks was -29.6% vs median quarterly figure over the last 13 years of +3.5%. In turn, revenue surprise was positive, the 22th quarter over the last 23 quarters, +1.7% vs median quarterly figure over the last 13 years of +0.8%. 14 companies of our group of banks or 58% demonstrated positive surprise on revenue, in-line with the median quarterly figure since Q107. Unsurprisingly, market perception of the results was negative for the second quarter in a row with median percent change in price around the earnings date of our group of banks of -0.8%, markedly lower than median figure since Q107 of -0.36% but better than 4Q19 figure of -1.8%. BKX index increased by 2.9% since the start of the earnings season till the end of April while S&P 500 index added 5.5% over the same time as COVID-19 fears eased somewhat recently. Notwithstanding, consensus estimates continued to go down. Thus, 2Q20 EPS estimates were revised down by 56.7% ytd / -28.6% since 13 April (median of BKX index members), FY20 EPS estimates were -49.3% ytd / -23.9% since the start of the earnings season while median change of FY21 EPS estimates was -29.3% ytd / -2.9% since 13 April.

Overall, underlying trends of US banks were strong so far but significant deterioration is inevitable under current conditions. The key uncertainty is related to credit quality which will worsen meaningfully in coming quarters but questions about how much it will deteriorate and how long provisions will remain elevated are open. Relatively strong 1Q20 revenues don't look sustainable, from our point of view, taking into account significant decline of key benchmark rates ytd and lower consumer spending because of COVID19 impact but median decline of revenue 20E was just 3.8% ytd for BKX index members. So, banks continue underperform the broad market. Due to significant decline of EPS estimates, banks is no more trading with significant discount to historical averages (it isn't relevant for 21E) but excessive discount to S&P 500 index remains because of significant deterioration of credit quality concerns. Thus, banks are trading with +0.5/+0.5 std on P/E CY and -1.6/ -1.3 on P/E NY (on the basis of samples from 2000 and 2010 yrs to current moment) relative to historical averages (as of May 1st). As for relative to S&P 500, banks are currently trading at -1.4 std and -2.1 std from the sample mean (2010-current moment) for P/E CY and P/E NY, respectively. On P/B, banks are trading with -2.1 std from the sample mean (2010-current moment) vs SPX with +0.9 std.

Median NII growth of BKX index members was 0.7% qoq but -0.6% yoy vs -0.4% qoq or -2.3% yoy in 4Q19, the first qoq growth after 4 consecutive quarters of decline. The key driver of positive sequential NII dynamics was strong growth of earnings assets and relatively resilient NIM but it seems both drivers are unsustainable at the moment and we will see further decline of NII in coming quarters especially taking into account rate cut to zero in March. So, median NII surprise of BKX index members was +1.5% (vs estimates for April 13), after two consecutive quarters of missed expectations. Just 6 out of 24 BKX members showed negative surprise on NII in 1Q20 vs 13 out of 24 BKX members in 4Q20.

Also, just 6 out of 24 BKX members showed negative surprise on NIM in 1Q20 with median positive surprise of 3.1 bps vs 10 out of 24 BKX index members in 4Q19. Median NIM of BKX index members decreased by 3.5 bps qoq or -21 bps yoy to 2.96% (the lowest figure since 2Q17) vs -5 bps qoq or -17.5 bps yoy in 4Q19. On yoy basis, it was the 4th consecutive decline of median NIM after nine quarters of growth in a row and it will inevitably accelerate its decline in coming quarters, reflecting significant decline of key benchmark rates ytd. The most impressive NIM decline was demonstrated by CIT, -28 bps qoq, and C, -17 bps qoq, while TFC managed to increase NIM by 17 bps qoq. So, despite better NIM in 1Q20 and stabilization of key benchmark rates in April, Bloomberg consensus estimates of median NIM of BKX index members decreased significantly. Thus, median NIM 20E of BKX index member decreased by 12.2 bps MoM or -20.9 bps ytd to 2.76% in April while NIM 21E declined by 8.8 bps MoM or -26.4 bps ytd to 2.7%.

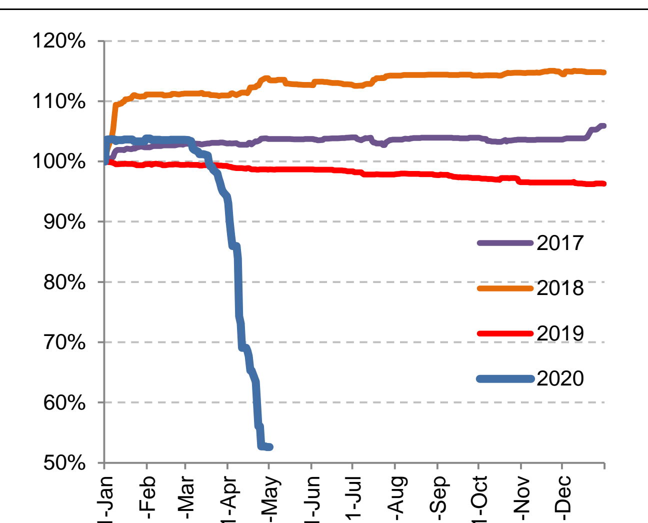
Chart 37. US Banks. Multipliers, Median*



*a sample of 34 banks which we are monitoring

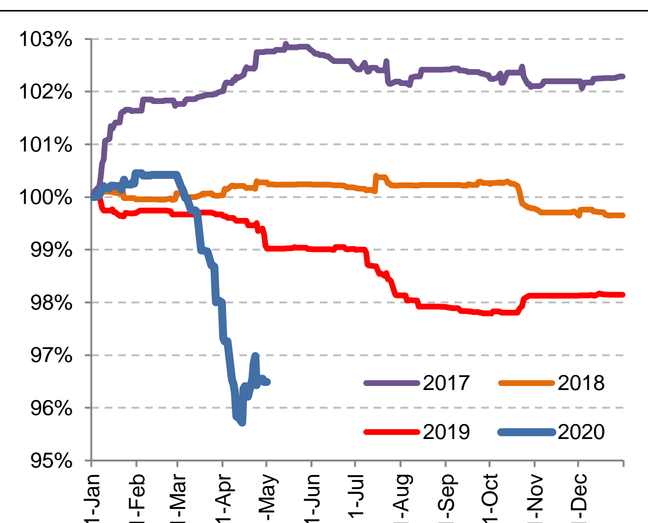
Source: Bloomberg

Chart 38. BKX Index. Median CY EPS Est. Dynamics



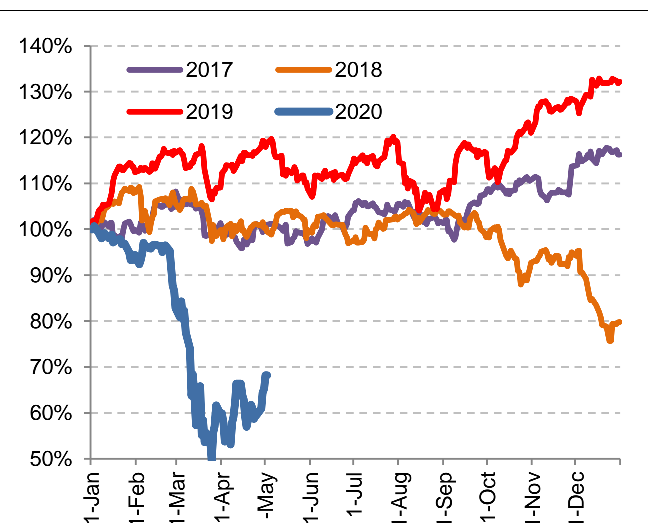
Source: Bloomberg

Chart 39. BKX Index. Median CY Rev Est. Dynamics



Source: Bloomberg

Chart 40. BKX Index. Price dynamics



Source: Bloomberg

The key driver of negative NIM dynamics remained ongoing decline of loan yields. However it was largely mitigated by significant decline of cost of interest-bearing liabilities in two recent quarters. Thus, median earning yield of BKX index members decreased by 13 bps qoq to 3.76% in 1Q20, -46 bps yoy vs -23 bps qoq and -22 bps yoy in 4Q19 while median securities yield of BKX index members decreased by 13 bps qoq to 2.43% vs -2.6 bps qoq

in 4Q19. Median loan yield declined by 18 bps qoq or -53 bps yoy to 4.29% vs -23 bps qoq or -29 bps yoy in 4Q19. Median cost of IBD decreased by 16 bps qoq or -24 bps yoy to 0.71% in 1Q20 vs -12.5 bps qoq but +1.5 bps yoy in 4Q19. Median cost of interest-bearing liabilities of BKX index members decreased 20.5 bps qoq or -38 bps yoy to 1.02% in 1Q20 vs -19.5 bps qoq or -8.5 bps yoy in 4Q19.

Median growth of NII income of BKX index members was positive on qoq basis despite lower day count but it is not a good guidance for coming quarters given significant growth of earning assets due to strong deposit inflow and emergency liquidity demand from C&I segment, primarily by utilizing revolvers. But its growth decelerated significantly in April while deposit inflows still remain strong. The key driver of future decline of NII is significant drop of NIM due to full impact of March cuts in 2Q20. But it will be partly mitigated by lower deposits costs and wider spreads. The key risk for NIM is that it will remain low for prolonged time. At least, current futures imply that there will be no rate hike in two nearest years while the last cycle example tell us that this period could be much longer.

Median decline of non-interest revenue of BKX index members was -2.7% qoq but +7% yoy, still solid after the strongest growth on yoy basis in 4Q19 since 4Q12. The key drivers of fee income were capital markets revenues which were driven by trading with broad based beats across majority of subsegments. Mortgage fees also remained strong due to still elevated mortgage activity, wider spreads and higher gain on sale. It should remain elevated due to higher refinancing activity but purchase activity might decline significantly because of deep recession. DSR and cards were relatively weak because of seasonality and early sings of negative impact of COVID19 on consumer spending. The latter one will be even much lower in 2Q20. Notwithstanding, 12 out of 24 BKX index members demonstrated positive surprise on non-II with median surprise figure of +0.7% in 1Q20 vs 18 out of 24 and +3.3%, respectively, in 4Q19. Capital markets revenues and IB fees (of major US banks – BAC, C, JPM, GS, MS) increased markedly even from the highest revenue over last 10 years showed in 4Q19. Thus, FICC trading revenue increased by 35% yoy or +64% qoq. Equity trading added 30% yoy or +53% qoq. IB revenue increased by 4% yoy but -7% qoq, driven by ECM and DCM fees, while advisory decreased by 13% yoy. Start of 2Q20 wasn’t strong for some IB areas, but trading remains solid due to still high volatility and wider but narrowing spreads.

Loan growth significantly accelerated in 1Q20 due to active use of C&I drawdowns. And it seems that loan growth remains elevated in 2Q20 even despite substantial deterioration of economic activity. At least, recent Fed H8 data pointed on it. Thus, median growth of EOP loans of BKX index members was +6.2% qoq or +9.5% yoy in 1Q20 vs 1.1% qoq and +3.9% yoy in 4Q19, the highest qoq growth of the last cycle. As of average loans, median growth was +1.8% qoq and +4.5% yoy in 1Q20 vs +0.8% qoq and +3.9% yoy in 4Q19. And total loan growth even slightly accelerated in early April. According to the Fed H8 data, total loans increased by 10.7% yoy (as of April 15) vs 4.2% yoy as the end of 2019 and +4.9% one year ago. In turn, C&I loans skyrocketed by 23.7% yoy vs just +1% yoy as the end of 2019 and +7.9% yoy one year ago. CRE added +6.8% yoy vs +5.9% as the end of 2019, mortgage loans increased by 4.5% yoy vs 5% yoy as the end of 2019 while credit cards went down by 2.1% yoy vs 4.9% yoy as the end of 2019 and other consumer loans increased by 6.1% yoy (vs 7.6% as the end of 2019). On ytd basis, credit cards loans decreased by 5% because of lower consumer spending and tighter credit standards. We expect that all segments will begin to decline sooner or later given deep recession but it will remain strong at least in 2Q20.

Despite positive revenue surprises and better OpEx, median operating leverage was negative again, for the third quarter in a row. Notwithstanding, banks continue demonstrate good cost control. OpEx of 14 out of 24 members of BKX index members was lower than consensus estimates (vs just 4 in 4Q19). But, median operating leverage of BKX index

members was -0.03% in 1Q20 vs -1.7% in 4Q19 and -0.7% in 3Q19. Median decline of operating expenses was -2.1% qoq but +3.8% yoy vs +0.7% qoq or +1.5% yoy in 4Q19. So, median efficiency ratio of BKX index members decreased by 45 bps qoq in absolute terms to 59.6% in 1Q20 vs 58.9% in 4Q19. We don't expect that banks will be able to demonstrate significant positive operating leverage further in 2020 even despite still good expense control given challenging revenue environment and inevitable growth of expenses driven by COVID19 related costs and higher expenses because of worsening credit quality.

Key credit metrics of US banks still remained pretty resilient while provision expense of all banks increased considerably as a result of CECL adoption and credit quality outlook worsening. The key drivers of reserve build were credit cards. In result, 20 out of 24 members of BKX index demonstrated provision expense worse than expected in 1Q20 vs just 8 banks in 4Q19. Median excess of actual provisions over estimates is 87% for BKX index members. Total provisions of BKX index members increased by 3.5x sequentially. In turn, median NCO ratio of BKX index members increased by 8 bps yoy or -1 bps qoq to 0.38%. Median NPL ratio of BKX index members increased by 12 bps qoq but just + 6bps yoy to just 0.53% in 1Q20. From the other hand, total C&I NPLs increased by 44% for BKX index in 1Q20 driven mainly by Energy sector which has already suffered from significant decline of oil price. Given speed of deterioration of economic activity, we expect that significant growth of NPLs and NCOs will begin as early as in 2Q20 but how long elevated levels of both ratios will remain is highly uncertain, as well as peak levels of both indicators. It will depend on how fast economy will start its recovery, when workers will return to work, whether there will be a second wave of the epidemic. We can only say with certainty that banks will continue to actively build their reserves up in coming quarters. Median Texas ratio of BKX index members slightly increased recently but it was just 3.2% as the end of 1Q20 with the maximum indicator of BKX index members of 10.1% for MTB. Also, reserve to annualized NCO ratio increased by 110% qoq in absolute terms to 430% as the end of 1Q20, the highest level over almost 5 years.

Capital ratios remain relatively strong but they have been declined meaningfully in recent years. To preserve capital during recession and significant growth of problem loans, banks postponed buybacks but confirmed dividends. Notwithstanding, a number of banking shares outstanding went down in 1Q20 and median decline of number of shares outstanding of BKX index members was -0.9% qoq or -5.6% yoy as the end of 1Q20 (vs -1.4% qoq in 4Q19 and -1.6% in 3Q19). While median dividend yield FY20 est. of BKX index members is currently 4.2% and dividend yield FY21 estimate is 4.4%. Median Basel III CET1 ratio of members of BKX index decreased by 33 bps qoq or -113 bps yoy in absolute terms to 9.9%, the lowest level over almost 7 years. Median TCE ratio decreased by 47 bps qoq or -44 bps yoy to 7.43%, the lowest figure since mid-2011 but still meaningfully higher than median figure of 5.7% as the end of 4Q07.

Despite stocks are still trading at significant discount to S&P 500 index, we remain cautious on US banks given severity of upcoming recession and high level of uncertainty about the speed of US economic recovery. Absence of outperformance of US banks vs SPX index during recent rally despite relatively high beta indicates that investors still prefer not to get involved with banks.

APPENDIX

Table 1. US Banks: Valuations

Company	Ticker	Price as of 30/04/20, $	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		
American Express	AXP	91.3	101.9	11.6%	138.1	67.0	57.8	73.5	1.9%	2.0%	2.1%	25.7	12.6	10.4	3.5	N. A.	13.7	27.3	31.8	10.0	10.7
JP Morgan Chase	JPM	95.8	106.0	10.7%	141.1	77.0	53.7	291.7	3.8%	3.9%	4.2%	17.2	10.9	9.3	1.3	1.6	6.8	11.1	12.7	7.0	12.4
PNC Financial	PNC	106.7	112.2	5.2%	161.7	79.5	58.3	45.2	4.3%	4.4%	4.6%	18.3	12.3	9.9	0.9	1.1	5.8	8.1	9.6	9.8	9.5
Bank of America	BAC	24.1	26.6	10.6%	35.7	18.0	57.2	208.6	3.1%	3.3%	3.8%	15.9	10.5	8.6	0.9	1.2	6.2	8.1	10.0	7.2	11.2
Citigroup	C	48.6	60.0	23.5%	83.1	32.0	57.9	101.1	4.2%	4.5%	5.1%	14.8	7.6	5.6	0.6	0.7	4.0	7.6	9.6	7.7	11.8
Truist Financial Corp	TFC	37.3	41.1	10.2%	56.9	24.0	61.5	50.3	4.9%	4.9%	5.1%	12.7	10.2	8.5	0.8	1.5	6.2	7.8	8.8	7.3	9.5
Goldman Sachs	GS	183.4	213.1	16.2%	250.1	130.9	59.9	65.8	2.8%	2.9%	3.0%	13.6	8.4	7.3	0.8	0.9	6.2	9.0	9.6	7.5	13.3
Bank of NY Mellon	BK	37.5	42.7	13.7%	51.6	26.4	58.5	33.2	3.3%	3.4%	3.6%	10.3	10.0	8.9	0.9	1.9	8.7	8.1	8.3	4.8	12.5
Comerica	CMA	34.9	36.1	3.6%	79.1	24.3	59.0	4.8	7.9%	8.0%	9.1%	26.2	9.6	6.8	0.7	0.7	3.6	6.9	10.2	9.2	10.1
Citizens Financial	CFG	22.4	27.3	21.8%	41.3	14.1	57.5	9.6	6.9%	6.9%	7.4%	19.5	7.8	6.1	0.5	0.7	3.7	5.5	7.6	8.5	10.0
Regions Financial	RF	10.8	12.0	11.9%	17.5	7.0	59.4	10.3	5.9%	6.0%	6.4%	14.7	8.5	6.6	0.6	0.9	4.7	7.3	8.9	8.1	9.6
Discover Financial	DFS	43.0	51.4	19.7%	93.0	23.3	61.3	13.1	4.2%	4.2%	4.6%	19.1	6.9	4.7	1.4	1.4	11.7	20.0	23.1	9.6	11.2
M&T Bank	MTB	112.1	124.4	11.0%	174.9	87.7	58.5	14.6	3.9%	4.0%	4.2%	13.6	10.5	9.1	1.0	1.4	7.9	9.1	10.4	8.5	9.7
Fifth Third Bancorp	FITB	18.7	21.3	13.8%	31.6	11.1	60.7	13.3	5.8%	5.9%	6.3%	14.8	8.5	6.8	0.7	0.8	5.1	7.2	9.4	9.0	9.8
Huntington Bancorp	HBAN	9.2	9.7	5.1%	15.6	6.8	59.5	9.5	6.5%	6.7%	7.2%	22.2	9.8	7.3	0.9	1.1	3.7	8.8	11.5	7.8	9.9
Northern Trust	NTRS	79.2	81.1	2.5%	110.5	60.7	55.7	16.5	3.6%	3.7%	3.7%	14.6	14.3	13.2	1.6	1.8	11.3	11.3	12.1	7.6	13.2
People's United	PBCT	12.7	12.3	-3.5%	17.7	9.4	60.3	5.4	5.7%	5.7%	5.8%	11.7	11.3	9.3	0.7	1.3	6.0	6.3	7.2	8.0	10.2
Synchrony Financial	SYF	19.8	23.3	17.8%	38.2	12.2	62.1	11.6	4.5%	4.6%	5.1%	17.4	6.3	4.8	1.0	1.3	4.9	14.4	15.9	11.7	14.1
KeyCorp	KEY	11.7	13.3	14.4%	20.5	7.5	56.5	11.4	6.4%	6.7%	7.1%	14.3	8.3	6.5	0.7	0.9	5.3	7.7	10.9	9.0	9.4
State Street Corp	STT	63.0	65.6	4.1%	85.9	42.1	63.0	22.2	3.3%	3.4%	3.6%	11.2	11.0	9.4	1.1	1.9	9.3	8.9	9.6	4.7	11.9
US Bancorp	USB	36.5	41.6	14.1%	61.0	28.6	57.3	55.0	4.6%	4.7%	4.8%	16.6	11.4	9.8	1.2	1.7	8.0	10.7	13.1	7.3	9.1
Zions Bancorp	ZION	31.6	33.7	6.7%	52.5	23.6	59.5	5.2	4.4%	4.5%	5.2%	15.3	10.5	7.8	0.7	0.9	5.3	7.0	9.3	8.5	10.2
Morgan Stanley	MS	39.4	47.1	19.6%	57.6	27.2	57.8	62.1	3.6%	3.9%	4.2%	10.8	8.5	7.4	0.9	1.0	7.5	8.8	9.9	7.2	16.4
Capital One Financial	COF	64.8	78.9	21.9%	107.6	38.0	63.3	29.5	2.5%	2.5%	2.6%	-80.7	7.3	5.5	0.6	0.8	0.5	6.5	9.4	10.2	12.2
Wells Fargo	WFC	29.1	32.3	11.1%	54.8	25.1	51.5	119.0	7.0%	7.1%	7.3%	20.1	10.2	7.5	0.7	0.9	3.8	7.1	9.3	7.3	11.1
First Republic Banks	FRC	104.3	102.2	-2.0%	122.3	70.1	62.7	17.9	0.8%	0.8%	0.9%	21.9	20.4	18.2	1.9	2.0	9.1	9.0	9.6	7.3	9.9
NY Commercial Bancshares	NYCB	10.9	11.9	9.7%	13.8	8.2	62.7	5.0	6.3%	6.3%	6.3%	12.9	11.0	10.1	0.8	1.4	5.5	6.8	7.9	7.4	9.9
SVB Financial	SIVB	193.2	197.2	2.1%	271.0	127.4	62.9	9.9	0.0%	0.0%	0.0%	15.4	13.1	10.3	1.5	1.5	9.7	10.4	12.8	8.4	12.6
Signature Bank	SBNY	107.2	110.2	2.9%	148.6	69.1	65.3	5.8	2.1%	2.1%	2.5%	11.7	10.1	8.6	1.2	1.2	10.2	10.6	11.0	9.4	11.6
East West Bancorp	EWBC	35.1	33.7	-3.9%	52.9	22.6	64.6	5.0	3.2%	3.3%	4.0%	9.8	9.4	7.6	1.0	1.1	10.1	9.7	11.3	10.4	12.9
Synovus Financial	SNV	21.0	23.9	13.8%	40.3	10.9	61.8	3.1	6.3%	6.5%	6.7%	16.0	9.1	6.1	0.7	0.8	5.6	6.3	12.5	8.1	8.9
First Horizon National	FHN	9.1	11.1	22.1%	17.4	6.3	55.8	2.8	6.6%	6.9%	7.3%	10.9	6.6	5.4	0.6	0.9	3.5	10.0	10.8	7.5	9.2
BOK Financial	BOKF	51.8	52.7	1.7%	88.5	34.6	58.0	3.6	4.0%	4.0%	4.0%	10.7	10.4	7.8	0.7	0.9	6.6	6.4	8.1	9.0	11.4
Median				**11.0%**			**59.4**		**4.2%**	**4.4%**	**4.6%**	**14.8**	**10.1**	**7.8**	**0.9**	**1.1**	**6.2**	**8.1**	**9.9**	**8.1**	**10.7**

Source: Bloomberg

APPENDIX

Table 2. EU Banks: Valuations

Company	Ticker	Currency	Price* (30/04/20)	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	19.8	29.0	46.5%	35.8	15.2	58.1	8.5	4.4%	5.7%	6.7%	9.3	7.8	6.7	0.6	0.6	6.4	6.6	7.3	5.2	13.8
Raiffeisen Bank	RBI AV	EUR	15.7	20.7	31.3%	24.4	10.7	60.2	5.2	5.1%	6.0%	6.0%	8.4	6.3	6.4	0.4	0.5	5.9	7.3	7.1	7.3	13.9
KBC Groep	KBC BB	EUR	49.3	59.8	21.4%	73.6	33.4	60.7	20.5	5.3%	5.7%	6.5%	13.5	10.8	9.8	1.1	1.2	8.6	9.8	10.1	6.0	17.1
Komercni Banka	KOMB CK	CZK	524.0	738.8	41.0%	908.5	465.0	43.5	3.7	6.8%	7.3%	8.3%	9.8	8.9	8.7	0.9	1.0	10.2	10.2	9.7	9.0	19.1
Jyske Bank	JYSK DC	DKK	184.0	195.1	6.0%	285.4	150.5	60.8	1.9	3.9%	3.2%	4.1%	18.1	7.8	6.9	0.4	0.4	2.4	5.2	5.5	5.0	17.4
SydBank	SYDB DC	DKK	113.3	111.1	-1.9%	162.3	83.0	68.9	0.9	3.6%	5.0%	5.8%	15.3	9.1	8.1	0.6	0.6	4.9	6.2	6.8	7.3	17.8
Danske Bank	DANSKE DC	DKK	80.8	102.2	26.5%	125.5	68.0	60.1	9.3	3.7%	6.8%	8.1%	14.0	7.5	6.1	0.5	0.5	3.2	5.9	7.0	3.9	17.3
BNP Paribas	BNP FP	EUR	28.7	42.0	46.3%	54.2	24.5	56.1	35.8	7.4%	8.6%	9.8%	8.5	5.6	5.1	0.4	0.4	4.4	5.4	6.2	4.0	12.1
Natixis	KN FP	EUR	2.2	3.1	42.8%	4.8	1.5	48.9	6.8	7.1%	10.1%	11.8%	9.2	8.1	6.4	0.4	0.5	3.5	4.5	5.9	2.5	11.3
Societe Generale	GLE FP	EUR	14.3	21.2	48.9%	32.2	12.8	51.2	12.2	7.0%	8.4%	10.4%	8.4	5.5	4.4	0.2	0.2	2.3	3.7	4.1	4.2	12.7
Credit Agricole	ACA FO	EUR	7.3	10.6	46.2%	13.8	5.7	58.6	21.0	4.5%	8.2%	9.3%	9.0	6.4	5.5	0.4	0.5	4.1	4.7	6.2	2.2	12.1
Virgin Money	CYBG LN	GBp	76.1	135.9	78.6%	222.1	46.1	57.2	1.3	0.0%	0.0%	0.1%	9.2	4.9	3.3	0.2	0.2	-0.1	4.0	7.3	5.0	13.3
HSBC	HSBA LN	GBp	410.0	499.4	21.8%	687.7	387.7	47.5	96.0	0.0%	0.1%	0.1%	11.4	8.0	7.1	0.6	N. A.	4.1	5.5	6.5	5.3	14.7
Royal Bank of Scotland	RBS LN	GBp	110.6	174.4	57.8%	265.0	101.2	52.1	15.4	0.1%	0.1%	0.1%	15.1	6.9	5.4	0.3	0.4	0.3	4.2	6.2	4.5	16.2
Barclays	BARC LN	GBp	105.9	151.2	42.8%	193.0	73.0	60.5	21.1	0.0%	0.1%	0.1%	12.8	6.5	4.9	0.3	0.4	1.1	4.9	6.1	4.0	13.8
Standard Charted	STAN LN	GBp	407.5	520.3	27.7%	742.6	376.0	52.4	14.8	0.0%	0.1%	0.1%	8.9	6.5	4.8	0.4	0.4	2.0	4.3	5.5	5.3	13.8
Lloyds	LLOY LN	GBp	32.2	46.1	42.9%	70.0	27.7	54.7	26.1	0.0%	0.1%	0.1%	11.1	6.6	5.7	0.5	N. A.	4.2	8.6	9.4	4.3	13.6
Commerzbank	CBK GY	EUR	3.4	4.3	28.7%	8.2	2.8	55.3	4.2	1.2%	2.8%	3.9%	78.5	12.4	5.7	0.1	0.2	0.1	1.5	2.9	5.5	13.4
Deutsche Bank	DBK GY	EUR	6.8	5.5	-18.9%	10.4	4.4	63.3	14.0	0.0%	0.6%	2.4%	-11.9	65.2	9.9	0.3	0.3	-2.8	0.1	3.0	3.8	13.6
UniCredit	UCG IM	EUR	7.0	11.2	59.0%	14.4	6.4	48.9	15.7	3.2%	5.1%	7.0%	7.7	6.5	4.5	0.3	0.3	1.0	3.3	4.7	6.2	13.2
Mediobanka	MB IM	EUR	5.3	8.4	58.2%	11.0	4.1	52.6	4.7	7.4%	7.7%	9.1%	6.7	7.7	6.2	0.4	0.5	6.4	5.8	6.7	11.5	14.1
Intesa Sanpaolo	ISP IM	EUR	1.4	2.1	44.2%	2.6	1.3	49.7	24.9	8.6%	9.3%	10.3%	8.9	8.1	7.0	0.5	0.6	4.9	5.7	5.7	5.2	13.9
Emilia Romagna	BPE IM	EUR	2.3	3.6	59.5%	4.7	2.1	43.3	1.2	4.0%	4.0%	6.0%	46.9	6.5	4.3	0.2	0.3	-0.1	2.7	4.1	5.5	13.9
UBI Banca	UBI IM	EUR	2.6	3.0	16.4%	4.5	2.0	55.0	3.0	3.3%	4.6%	6.7%	21.4	11.0	6.8	0.3	0.4	1.8	3.9	4.9	6.2	12.3
ING Groep	INGA NA	EUR	5.0	8.2	64.5%	11.4	4.2	51.4	19.5	7.0%	9.7%	10.4%	6.3	5.5	4.7	0.4	0.4	6.2	6.7	7.3	5.8	14.6
ABN Amro	ABN NA	EUR	7.0	12.1	72.3%	21.1	6.2	47.7	6.6	7.5%	11.0%	14.1%	8.6	5.5	4.6	0.3	0.3	4.3	5.8	6.7	5.7	18.1
DNB	DNB NO	NOK	124.2	137.5	10.7%	178.1	94.3	57.6	17.5	5.6%	6.5%	7.1%	11.6	9.4	8.6	0.9	0.9	8.1	8.7	9.2	7.5	18.6
BBVA	BBVA SQ	EUR	3.0	3.8	27.3%	5.5	2.5	56.3	19.9	3.7%	6.2%	7.0%	8.9	6.5	5.7	0.4	0.4	5.6	6.2	6.3	6.0	12.0
Santander	SAN SQ	EUR	2.0	2.8	37.3%	4.6	1.9	49.0	33.9	3.6%	7.1%	8.2%	9.3	6.4	5.4	0.4	0.5	4.3	5.1	5.6	4.8	11.7
Bankia	BKIA SQ	EUR	0.9	1.1	21.7%	2.5	0.9	47.1	2.9	3.0%	5.6%	7.9%	116.1	11.3	7.8	0.2	0.2	0.7	2.1	2.8	6.2	14.3
Bankinter	BKT SQ	EUR	3.8	4.4	15.7%	7.2	3.0	57.3	3.4	2.4%	4.0%	5.6%	12.5	11.1	8.7	0.7	0.8	7.8	7.2	7.8	5.3	11.6
Sabadell	SAB SQ	EUR	0.4	0.5	41.5%	1.1	0.3	34.0	2.1	4.8%	6.9%	10.1%	31.5	7.3	5.2	0.2	0.2	0.7	1.9	2.9	4.7	12.4
CaixaBank	CABK SQ	EUR	1.6	2.2	33.8%	2.9	1.5	50.4	9.8	4.5%	6.9%	8.3%	11.1	7.5	6.3	0.4	0.5	3.6	5.3	5.9	5.5	12.0
SEB	SEBA SS	SEK	80.3	86.0	7.0%	104.9	59.8	64.9	16.5	5.6%	6.8%	7.4%	11.2	9.5	8.9	1.1	1.2	9.5	10.9	11.0	5.2	17.6
Handelsbanken	SHBA SS	SEK	90.3	92.9	2.9%	113.8	71.8	63.2	16.8	4.9%	5.9%	6.3%	11.9	11.1	10.3	1.1	1.2	8.9	9.5	9.6	4.9	18.5
Swedbank	SWEDA SS	SEK	115.4	147.1	27.5%	162.7	101.4	54.7	12.2	4.0%	6.4%	7.5%	9.7	7.7	7.2	0.9	1.1	7.1	11.0	11.0	5.1	17.0
Nordea	NDA SS	SEK	63.2	71.3	12.7%	86.7	48.0	62.5	24.0	0.5%	0.7%	0.7%	12.0	9.2	9.9	0.8	0.9	5.9	7.4	8.1	4.9	16.3
Julious Baer	BAER SW	CHF	37.8	41.0	8.3%	51.8	24.3	64.3	8.0	4.1%	4.4%	4.8%	11.8	10.7	9.5	1.3	2.5	10.7	11.5	11.3	3.3	14.0
Credit Suisse	CSGN SW	CHF	8.7	11.0	25.9%	13.8	6.2	60.7	21.1	2.9%	3.4%	3.6%	8.7	7.0	5.9	0.4	0.5	5.9	6.6	7.0	4.9	12.7
UBS	UBSG SW	CHF	10.3	11.6	11.9%	13.3	7.0	65.6	37.7	5.8%	6.8%	7.0%	10.0	9.2	8.3	0.7	0.7	7.1	7.7	8.1	5.0	13.7
Median					**30.0%**			**55.7**		**4.0%**	**5.8%**	**6.8%**	**10.5**	**7.7**	**6.3**	**0.4**	**0.5**	**4.3**	**5.7**	**6.6**	**5.2**	**13.9**

Source: Bloomberg

APPENDIX

Table 3. Calendar

Date	Region	Section	Event	Period
1-May	US	Macro	Construction Spending	Mar
1-May	US	Macro	ISM Manufacturing	Apr
4-May	EU	Macro	Sentix Investor Confidence	May
4-May	US	Macro	Factory Orders	Mar
5-May	EU	Corporate	BNP Paribas. Earnings Announcement	1Q20
5-May	EU	Corporate	Intesa Sanpaolo. Earnings Announcement	1Q20
5-May	EU	Macro	PPI	Mar
5-May	US	Macro	Trade Balance	Mar
6-May	EU	Macro	Retail Sales	Mar
6-May	US	Macro	ADP Employment Change	Apr
8-May	EU	Corporate	ING Groep. Earnings Announcement	1Q20
8-May	**US**	**Macro**	**Employment Report**	**Apr**
12-May	US	Macro	CPI	Apr
13-May	EU	Corporate	Commerzbank. Earnings Announcement	1Q20
13-May	EU	Macro	Industrial Production	Mar
13-May	US	Macro	PPI	Apr
14-May	EU	Corporate	KBC Group. Earnings Announcement	1Q20
15-May	EU	Macro	Trade Balance	Mar
15-May	EU	Macro	Employment	1Q
15-May	**EU**	**Macro**	**GDP**	**1Q**
15-May	US	Macro	Retail Sales	Apr
15-May	US	Macro	Empire Manufacturing and Capacity Utilization	May
15-May	US	Macro	U. of Mich. Sentiment	May
18-May	US	Macro	NAHB Housing Market Index	May
19-May	EU	Macro	Construction Output	Mar
19-May	EU	Macro	ZEW Survey Expectations	May
19-May	US	Macro	Building Permits and Housing Starts	Apr
20-May	EU	Macro	Consumer Confidence	May
21-May	US	Macro	Markit US Manufacturing, Services and Composite	May
21-May	US	Macro	Leading Index	Apr
21-May	US	Macro	Existing Home Sales	Apr
22-May	EU	Macro	Markit Eurozone Manufacturing, Services and	May
26-May	US	Macro	FHFA House Price	Mar
26-May	US	Macro	S&P CoreLogic CS 20-City	Mar
26-May	US	Macro	Conf. Board Consumer Confidence	May
26-May	US	Macro	New Home Sales	Apr
26-May	US	Macro	Dallas Fed Manf. Activity	May
27-May	US	Macro	Richmond Fed Manufact. Index	May
28-May	EU	Macro	Economic and Industrial Confidence	May
28-May	**US**	**Macro**	**GDP**	**1Q**
28-May	US	Macro	Durable Goods Orders	Apr
28-May	US	Macro	Pending Home Sales	Apr
29-May	EU	Macro	CPI	May
29-May	US	Macro	Personal Income and Spending	Apr