BAML | Barclays | Citi | CS | Deutsche | JPM | MS | Nomura | Wells

**Takeaways:**

1. **BAML on primary/secondary spreads:** Industry capacity is often pointed as a reason for temporary widening in p/s spreads. BAML thinks that there are no capacity issues and believes that we could be witnessing a longer lasting shift in p/s spread levels as banks become more sensitive to NIM in the current low-profitability, low loan growth environment.
2. **BAML - Origination shifts back to 3s:** In the week of July 4, 2.5s accounted for 30% of origination flow, whereas this week there has been virtually no volume in that coupon, despite comparable mortgage rates. BAML attributes the shift to updated buy-up/buy-down grids
3. **Citi on 2H 2016 supply outlook - watch out for bank retention:** 2Q net issuance trails year-ago levels on bank loan retention. Bank loan retention over the last three quarters has been very strong at $20-34bn, which signals downside risk to net supply if the trend continues.
4. **MS on money center banks and high LTV programs away from FHA:** MS summarized the recent high LTV purchase programs that have emerged, and noted that while small and still new, they are unlikely to grow to the size of the multi-billion dollar origination shares the money center banks had on the FHA side.
5. **Deutsche Bank - Home prices hit new highs in more CBSAs (statistical areas):** As of May 2016, the top ten large CBSAs with the largest increase in HPI above pre-crisis peaks are: San Francisco (39.9%), Denver (36.2%), San Jose (29.2%), Austin (27.8%), Dallas (25.2%), Houston (21.5%), Honolulu (17.7%), Nashville (15.9%), New Orleans (10.7%), and Boston (10.3%).

**JP Morgan:** No commentary as of Sunday morning.

**BAML:**

1. **Basis:** stay overweight. Positives: risk-on environment; MBS spreads have actually lagged corporates since July 7, suggesting room for more tightening; cross sector spreads suggesting room for up to five basis points of tightening.
2. **Origination shifts back to 3s:** In the week of July 4, 2.5s accounted for 30% of origination flow, whereas this week there has been virtually no volume in that coupon, despite comparable mortgage rates.
   a. BAML attributes the shift to updated buy-up/buy-down grids.
   b. The GSEs have lowered multiples for August, pushing best execution back into 3s on loans bearing 3.5% note rates and higher.
   c. Even at 3.38%, lower than the 3.45% survey rate reported by Freddie Mac, only a $0.30 advantage is likely insufficient compensation for the liquidity risk of executing into the 2.5 coupon.

**Table 2: Indicative updated buyup/buydown grids shift origination volumes into 3s**

| Note Rate | July Grid Buyup multiple | July Grid Buydown multiple | July Grid 2.50% | July Grid 3.00% | July Grid 2.50% Advantage | August Grid Buyup multiple | August Grid Buydown multiple | August Grid 2.50% | August Grid 3.00% | August Grid 2.50% Advantage |
|---|---|---|---|---|---|---|---|---|---|---|
| 3.00% | 4.8 | 7.1 | 100.09 | 98.94 | 1.16 | 4.5 | 6.9 | 99.40 | 98.60 | 0.80 |
| 3.13% | 4.7 | 7.0 | 100.98 | 99.85 | 1.14 | 4.4 | 6.8 | 100.27 | 99.51 | 0.76 |
| 3.25% | 4.7 | 7.0 | 101.81 | 100.75 | 1.06 | 4.3 | 6.6 | 101.07 | 100.45 | 0.62 |
| 3.38% | 4.6 | 6.9 | 102.39 | 101.63 | **0.76** | 4.3 | 6.6 | 101.60 | 101.30 | **0.30** |
| 3.50% | 4.6 | 6.9 | 102.96 | 102.51 | **0.44** | 4.2 | 6.3 | 102.11 | 102.18 | **-0.07** |
| 3.63% | 4.4 | 6.7 | 103.45 | 103.39 | 0.06 | 4.0 | 6.1 | 102.57 | 102.98 | -0.42 |
| 3.75% | 4.2 | 6.5 | 103.90 | 104.18 | -0.28 | 3.9 | 6.0 | 102.99 | 103.70 | -0.72 |
| 3.88% | 4.0 | 6.0 | 104.31 | 104.68 | -0.37 | 3.7 | 5.8 | 103.36 | 104.16 | -0.80 |
| 4.00% | 3.8 | 5.8 | 104.66 | 105.13 | -0.47 | 3.5 | 5.6 | 103.71 | 104.58 | -0.87 |

Source: BofA Merrill Lynch Global Research

3. **Primary/secondary spreads:** Industry capacity is often pointed as a reason for temporary widening in p/s spreads. BAML thinks that there are no capacity issues and believes that we could be witnessing a longer lasting shift in p/s spread levels as banks become more sensitive to NIM in the current low-profitability, low loan growth environment.
    a. Mortgage banking employee counts have been rising from sharp cutbacks immediately after the crisis.
    b. Even further underscoring this, BAML's favorite and objective measure of industry capacity, loan processed to employee count, suggests no capacity issues.
4. **A toolkit for servicer selection:** BAML took a close look at the value of the new production ramp and comparisons across servicers and prepayment stories in 3.5s and 4s. Using Wells Fargo as a benchmark, BAML provided theoretical carry differentials for each servicer. These metrics provide a useful key for tiering bids by servicer during the origination cycle.
    a. **Generic FN3.5 new production story:** Based on the speeds observed over the last three months, non-bank and smaller FN3.5 originators carry about 2 ticks worse over a six-month period.
        i. United shore, Amerihome, Franklin, Freedom, and Roundpoint particularly stand out with meaningfully faster speeds.
        ii. Few major Fannie originators have a better profile than Wells, with only Suntrust outperforming Wells by about a tick.
    b. **Generic 3.5 Golds:** Unlike in Fannies, Roundpoint performance in Golds has been quite good.
    c. **Generic 4s new production story:** In 4s, Wells Fargo appears as one of the faster servicers in Fannies and one of the slower ones in Golds. US banks, Nationstar, PennyMac, and Pingora appear slower in Fannies. In Gold 4s, Quicken stands out as a particularly fast servicer.

__Citi:__

1. **Basis.** Modest underweight. Mortgage valuations look stretched.

2. **Large funds increased their overweights from 1.4% to 2.1% in Q2:** The fifteen largest total return funds and 2 largest ETFs Citi tracks increased their overweights by 0.7% in Q2 2016 – from 1.4% to 2.1%. The funds added $16bn of Agency MBS in Q2.
    a. Citi thinks money managers are unlikely to increase their MBS allocation further given that vega is already at its past crisis lows and valuations on MBS look stretched.
3. **Corporate spreads** are on the tighter end of their 1-year trading range versus MBS. The difference between Corp AA OAS (77bp) and PC Treasury ZVOAS (76bp) is 1 bp. This difference was 40bp in February.
4. **Overseas bond demand** from Japanese investors was very strong in the first two weeks of July. The yen has weakened versus the dollar and the euro in the last week and this may slow down Japanese purchases of overseas bonds in the short term.
5. **Domestic banks have been quiet after the surge in holdings in April:** Domestic banks reduced their holdings of agency MBS modestly in June after adding aggressively in the first five weeks of April.
    a. The recent selloff in rates could once again lead to a pickup in domestic bank demand.
6. **2H 2016 supply outlook: watch out for bank retention:** 2Q net issuance trails year-ago levels on bank loan retention. Bank loan retention over the last three quarters has been very strong at $20-34bn, which signals downside risk to net supply if the trend continues.
    a. Federal Reserve H.8 data suggests that bank loan portfolios increased by about $15bn more in 2Q this year compared to last year.
        i. The larger increase in bank loan holdings in 2Q this year could have been a result of greater portfolio retention or simply a seasonal increase in their HFS loan account.
        ii. The increase in HFS occurs due to an increase in monthly MBS issuance and securitization pipeline reasons.
        iii. If HFS loans drove the increase in loan holdings in 2Q then they could decline over 3Q and 4Q as monthly supply declines, resulting in a flush of net supply late in the year.
7. **Supply forecast:** Citi maintains net supply projection for the year at $225bn in the base case and closer to $250bn if mortgage rates hold at or below 3.5% through the end of the year.
    a. Majority of this net supply will hit the market in September-November.
    b. Gross supply is projected at $1.5 trillion for the year at current rates, with monthly supply reaching above $150bn in September and October.
8. **Strong foreign purchase in May, driven by Japan and Europe:** The latest TIC data indicates that foreign investors net purchased $9.5bn of agency MBS in May, a modest decline from the last two months.
    a. This is the fourth consecutive month that foreign investors were net buyers of MBS.

   b. Net purchase from Europe have accounted for over 40% of the total purchases from March to May. However, the ultimate buyer behind the strong demand from Europe is unclear due to the nature of the transaction data.
      i. For instance, when a German resident buys a U.S. security through a London broker, the transactions data will record a sale to the UK rather than Germany.
      ii. Holdings data only shows a modest increase from Europe so far.

**Nomura**:

1. **Basis:** Nomura continues to suggest a neutral stance on the MBS basis at current spread levels.
2. **Potential impact of HARP expiration:** Nomura's base-case expectation is that, when HARP expires in December 2016, it will likely be replaced by a new post-HARP high-LTV refi program.
   a. Nomura expects prepay driven by HARP for <80 LTV loans to vanish while prepays driven by HARP for >80 LTV loans continue at the current pace.
   b. However, it is possible that the new post-HARP high-LTV program is not as effective as the current HARP > 80 LTV program, thereby causing prepays driven by HARP for >80 LTV loans to also vanish.
3. **Key recent trends in GNMA HMBS issuance:** One notable trend in GNMA HMBS (Reverse MBS) has been an increase in the securitization of pools backed by 1-yr CMT rate loans over the past few quarters.
   a. These pools are primarily backed by seasoned loans, most of which were originated prior to 2009.
   b. Fannie appears to be reducing its holdings of HECM loans and it is likely that the loans are being wrapped into GNMA HMBS pools.
   c. Most of these pools to date have been securitized by RMF.
4. **MBS weekly application indices:** The MBA conventional seasonally adjusted (SA) refi index reported this week increased 0.5% w-o-w at 2783. Note that the MBS index is near the highs observed in early 2015 now. After increasing continuously since the beginning of June, the average loan size of conventional refi applications decreased by 7k to 303k.
5. **Prepayment speed projections:** Nomura expects July aggregate conventional prepays to almost unchanged month over month, with the increase in refi activity offsetting a sharp drop in daycount and a slight decline in turnover.
   a. Nomura expects the majority of prepay impact associated with the recent rally to show in August, with August prepays increasing 26% month-over-month.

**Morgan Stanley:**

1. **Basis:** MS still advocates a short mortgage basis position but recognizes that conviction levels and information ratios around this trade is low.

2. **G2 Rolls** (pg. 3)**:**

   a. **G2 4 roll** is currently pricing to about 39cpr, and while there are few pools that will pay faster than that, MS doesn't believe the roll has much downside from the current levels.

   b. While the **G2 3.5** roll has come off some, it is still the largest float in the mortgage universe and MS is projecting 2015 G2 3.5s to pay 30cpr as a cohort for the relevant print, so that the roll has more downside from the current ~23CPR.

3. **15yr mortgages:** MS took a look at the 15yr mortgage landscape, surveying for possible trades, themes, and areas of interest.

   a. Given the shorter amortization schedule, the 15yr borrower has almost always been a better credit borrower than the 30yr borrower.

   b. The choice of when to purchase or refi into a 15yr mortgage has traditionally been a function of the borrower's ability to pay a higher monthly payment and the rate differential between 15s and 30s.

   c. The primary rate differential between 15s and 30s has traditionally been quite correlated to the shape of the yield curve.

   d. **15yr rolls:** Delivery on the 15yr TBA is barbelled; there is approximately $10bn in short WAM (<75) DW 2.5s-3.5s outstanding that is not locked up on Fed balance sheet or in CMO structures, which makes defining and trading the TBA challenging.

      i. Unlike in 30s, where burnout makes seasoned paper pay slower, speeds are more persistent in 15s and rise at really low WAM levels. This short WAM paper contributes to a weaker roll.

      ii. Another factor weighing on the roll and affective 15yr valuations is waning REIT demand for 15s, which after a period of persistently high demand, has been declining over the past 4-5 quarters.

      iii. Unfortunately, bank holdings data does not break out by tenor, but anecdotally, while banks are still buying 15s, given the weaker roll, support for 15yrs from banks has been declining, too.

   e. To summarize, after looking at valuations using regression and OAS analysis, 15yr look a little overbought vs 30s, though given negative net issuance and low floats, MS is hesitant to recommend a short TBA position.

4. **Money center banks and high LTV programs away from FHA** (pg. 19)**:** MS summarized the recent high LTV purchase programs that have emerged, and noted that while small and still new, they are unlikely to grow to the size of the multi-billion dollar origination shares the money center banks had on the FHA side.

   a. The money center banks, which have all lost considerable market share within FHA the last few years, have introduced high LTV purchase programs on the conventional side as an FHA alternative.

**Exhibit 35:** Summary of Conventional High LTV Programs

| Bank | Program | Partnership with | Max LTV under program | Min FICO | Start Date | Income Req | Description |
|---|---|---|---|---|---|---|---|
| Quicken | Home Possible Advantage | Freddie Mac | 97% | 660 | 10/19/15 | Yes | • Only Purchase loans for owner occupancy of 1-unit properties; no cashouts<br>• No Cash Reserve requirement<br>• Homebuyer education compulsory for FTHBs |
| Bank of America | Affordable Loan Solution Plan | • Self Help Ventures<br>• Freddie Mac | 97% | 660 | 2/22/16 | No | • No PMI; Self-Help acts as insurer, servicer<br>• No Cash Reserve requirement<br>• Max Loan amount is $417K<br>• Establishing credibility by using unconventional sources like credit card bills, etc<br>• Annual production capped at $500mm<br>• Homebuyer education compulsory for FTHBs |
| Wells Fargo | yourFirst Mortgage | Fannie Mae | 97% | 620 | 5/26/16 | No | • Alternate sources of examining credit history used, like tuition, utility bills, etc.<br>• Homebuyer education may qualify for rate reduction of up to .125%<br>• DPs and closing costs can be obtained from gift funds or assistance programs |
| Chase | Standard Agency 97% | Fannie Mae | 97% | 680 | 5/26/16 | No | • Only FTHBs eligible for Purchases<br>• No restrictions on owning other residential properties<br>• Includes standard risk-based LLPAs<br>• Homeownership education recommended for FTHBs<br>• Gifts or grants can be used to finance both downpayment and closing costs |
| Guaranteed Rate | Chicago Home Buyer Assistance | • Chicago Infrastructure Trust<br>• Freddie Mac | 99% | 640 | 6/27/16 | Yes | • Downpayment of lesser of 1% of home purchase price or $1,000<br>• No FTHB requirement<br>• Forgivable grant of upto 7% for downpayment and closing costs<br>• Must be occupied as primary residence for at least 5 years<br>• Loan will be purchased by Freddie via its Home Possible Advantage program |

Source: Morgan Stanley Research, Company Filings

5. **2Q origination landscape: Nonbank share rises further:**
   a. **Conventional** origination increased by 35% in 2Q, largely from higher purchase seasonals and lower interest rates.
      i. Money centers lost marginal market share, but their share has hovered around 20% the last few quarters, and MS thinks it is unlikely they lose more from here.
      ii. Cash window issuance has increased to its highest level, at 40% of overall origination.
      iii. Wells and Quicken retain the top origination spot, while Amerihome continues to gain the most.
      iv. TPO origination has gained share within refis, while retail origination has gained more share in purchase.
      v. TRID normalization continues as timelines are closer to where they were before TRID and pull-through rates have gone up.
   b. In **Ginnies,** money center share dropped further in 2Q, declining to 11% of overall origination. MS expects this trend to continue in the coming quarters. A large part of this is due to the big banks' step away from FHA due to litigation concerns and putback risk.
      i. Nonbanks continue to dominate FHA origination and Freedom has become a top producer in FHA and VA, and also RHS, as the RHS origination platform sale is finalized in 3Q.
6. **Speed forecast:** MS forecasts speeds for conventionals to slow down in July but then speed up 27% in August. The biggest pickup percentage-wise should be in 2015 FNCL 3s, projected to go from 11 in June to 20 in August.

7. **May TIC data update:** Overseas investors increased agency MBS (net of paydowns) by $9.5bn.

**Wells Fargo:**

1. **Basis:** Overweight. Positives: reinvestment demand from Fed and other investors; demand for MBS from overseas investors.
2. **A view from the Japanese side:** Wells combed through Bank of Japan (BoJ) data on foreign investment portfolios of Japanese investors and believes that as long as Fed policy remains dovish, we are likely to experience continuing reallocation from Euro to USD fixed income by Japanese investors.
    a. Given all the competing factors, the increase in Japanese investments in MBS is likely to continue.
        i. Treasury yields are largely negated by FX costs.
        ii. Corporate bonds, while compelling as well, need appropriate staffing given the analysis needed in analyzing single-name securities.
    b. A hawkish turn, which would cause U.S. yields to sell off versus the rest of the world is a risk to Japanese/overseas demand.
        i. As U.S. yields sold off in 2013 and the Fed focused on tapering QE3, Japanese investors turned their attention to Euro government bonds.
        ii. The premise behind that allocation was that the US was in a recovery post-QE, whereas the Eurozone would need QE to recover. This would cause the spread USTs to underperform versus EGBs.
3. **A deeper look at G2 30yr Jumbos (MJM):** The overall environment for G2 30-yr Jumbo (MJM) collateral has been less than favorable given the heightened call risk from recent lows in mortgage rates. This, in turn, has caused payups to drop to the lows of the year, as the current pricing reflects expectations of high speeds for the collateral. MS is "cautiously optimistic" on MJMs.

**Credit Suisse:**

1. **TIC data show continued strong foreign buying of Agency MBS in May:** The May 2016 Treasury International Capital (TIC) report shows inflows of $23.2B in Agency MBS or an estimated $9.5B adjusted for paydowns, marking the fourth consecutive monthly increase.
    a. Paydown-adjusted May inflows were highest for Japan, at $7.0B. Financial centers such as Bahamas, Luxembourg, and Cayman Islands also registered large changes of $1.7B, $1.4B, and -$2.8B, respectively. CS notes that these changes typically represent hedge funds and third country investments.
    b. CS estimates that the face value of foreign holdings of Agency MBS increased by $41.6B during the first four months of 2016 based on reported market value holdings changes. Adding in the May flows data suggests a $51.2B increased YTD through May.

c. CS maintains forecast for full-year 2016 foreign Agency MBS demand at $85B, supported by the continued negative rate regime in global yields.

2. **Bond funds reduce MBS underweight in Q2:16:** Overall bond funds have increased MBS holdings by an estimated $32B YTD.

   a. CS estimates that active bond funds hold a 22.8% MBS weighting as of Q2 end, up from 21.5% at the end of 2015. This translates to a 4.9% underweight now, down from a 7.1% underweight at yearend.

   b. The current MBS underweight translates to $62B, unchanged from yearend.

   c. CS estimates that the PIMCO Total Return fund reversed Q1's roughly 2% weighting reduction during Q2, leaving its positioning roughly unchanged at 35.6%. This leaves the fund $7B overweight in Agency MBS.

3. CS increased gross issuance forecasts by roughly $25B, to $1436B, to reflect roughly 7bp-13bp lower mortgage rate expectations compared to CS's forecast from last month.

**Figure 7: Projected excess net supply of $51B in H2:16 and $35B for full-year**

| Institutional Demand ($B) | Q1:16 | Q2:16 | Q3:16 | Q4:16 | 2016 | 2015 |
|---|---|---|---|---|---|---|
| Organic supply (net issuance) | (43) | (51) | (74) | (55) | (224) | (166) |
| GSEs | (4) | (3) | (3) | (3) | (14) | (42) |
| Fed | 4 | 4 | 5 | 4 | 17 | 6 |
| Banks | 8 | 25 | 20 | 12 | 65 | 155 |
| Money managers | 13 | 12 | 15 | 5 | 45 | 23 |
| Foreign investors | 30 | 25 | 15 | 15 | 85 | 27 |
| REITs | (1) | (3) | (3) | (3) | (10) | (30) |
| **Net excess demand / (supply)** | **7** | **9** | **(26)** | **(25)** | **(35)** | **(28)** |

Source: Credit Suisse, US Treasury, US Federal Reserve, SNL, Fannie Mae, Freddie Mac, CPRCDR, Company data

**Barclays:**

1. **Basis:** Neutral. Negative: continued rally in lower coupon mortgages. Positives: given the sell-off in rates, supply and prepayment concerns have declined; as we move past the summer months, MBS net issuance is likely to decline; Overseas and real-money domestic demand remains strong, helping to provide a floor.

2. **An update on Fed purchase activity:** Barclays reviewed recent Fed MBS purchase activity.

   a. Monthly Fed purchases have averaged about $30bn over the past few months, with the allocation to Ginnie mortgages increasing.

   b. The Fed has been allocating more than 100% of its GN pay-downs into G2SF mortgages over the past year.

   c. Despite the Fed's increase in G2SF purchases over the past year, it still buys a lower share of 30y Ginnie gross issuance than it does of 30y conventional issuance.

d. As expected, the Fed has been steadily increasing its purchase allocation toward lower coupon as lower coupon supply rises.

    i. The Fed's purchase of 30y conventional and G2 3s have risen as issuance has grown.

e. Barclays' estimates that the Fed may purchase $32bn, $42bn, and $35bn of MBS in the August, September, and October purchase periods.

**<u>Deutsche Bank:</u>**

1. **Home prices hit new highs in more CBSAs (statistical areas):** The US housing market is on track for sustained and broad-based growth as more and more regions have fully recovered from the downturn during the housing crisis.
    a. HPI in 398 of all 953 CBSAs in the U.S. have surpassed their respective pre-crisis peaks as of May 2016.
    b. As of May 2016, the top ten large CBSAs (statistical areas) with the largest P2C (peak-to-current) are: San Francisco (39.9%), Denver (36.2%), San Jose (29.2%), Austin (27.8%), Dallas (25.2%), Houston (21.5%), Honolulu (17.7%), Nashville (15.9%), New Orleans (10.7%), and Boston (10.3%).
    c. DB expects that the growth of the current U.S. housing market is sustainable as more CBSAs should experience new highs in HPI.
2. **Agency MBS outlook at mid-year:** DB examined how some mortgage market fundamentals and technicals are shaping up and what the rest of 2016 holds:
    a. Supply remains largely elevated versus prior years but issuance is ramping in line with DB's forecasts.
    b. Demand so far falls short of supply, with large domestic banks lagging but mid-tier and overseas picking up some of that slack.
        i. YTD, large domestically charted commercial banks added $35.5bn in agency MBS compared to full year estimate of $160bn.
        ii. Overseas agency MBS portfolios have grown $54bn (net of prepayments) in the first four months of the year, already exceeding DB's full year estimate of +30bn.
    c. DB expects 2016 gross and net issuance to be $1.2 trillion and $217 billion respectively.