

SECTOR IN-DEPTH

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Cross-Sector – US

Market, Financial Hurdles Will Weigh on Bank Balance Sheet RMBS Issuance

JPMorgan Chase Bank NA's recent \$1.9 billion residential mortgage-backed security (RMBS) transaction may not spur widespread demand for similar transactions from other US banks in the next few years.

Not all banks have the same mix of benefits and costs from securitizing loan portfolios. While the Chase Mortgage Trust 2016-1 transaction likely provided JPMorgan Chase Bank risk-weighted regulatory capital relief, banks will also consider the impact of the deal on other metrics such as return on shareholders' equity (ROE), and unweighted leverage ratio capital requirements before embarking on programmatic balance sheet RMBS issuance.

- » Balance sheet securitizations could reduce banks' ROEs unless they return capital to shareholders or redeploy deal proceeds into assets that yield more than the non-retained securitization bonds.
- » Banks can reduce risk weights on a mortgage portfolio through securitization under Basel III, reducing regulatory capital requirements, but must also consider the impact of securitization on other capital constraints, including the Fed's supplementary leverage ratio (SLR) requirements.

Furthermore, weak secondary market liquidity and continued RMBS governance concerns will keep large-scale investor interest in bank balance sheet transactions like Chase's at bay until these issues are resolved.

- » Liquidity in secondary markets has decreased recently and, if US banks are subject to greater market-risk capital rule requirements, it will likely remain a concern among investors hesitant to enter the non-agency RMBS market.
- » Although originators and investors have improved RMBS governance framework, important issues such as the need for a deal agent and compensation for such a role remain unresolved.

Not all banks have the same mix of benefits and costs from securitizing loan portfolios

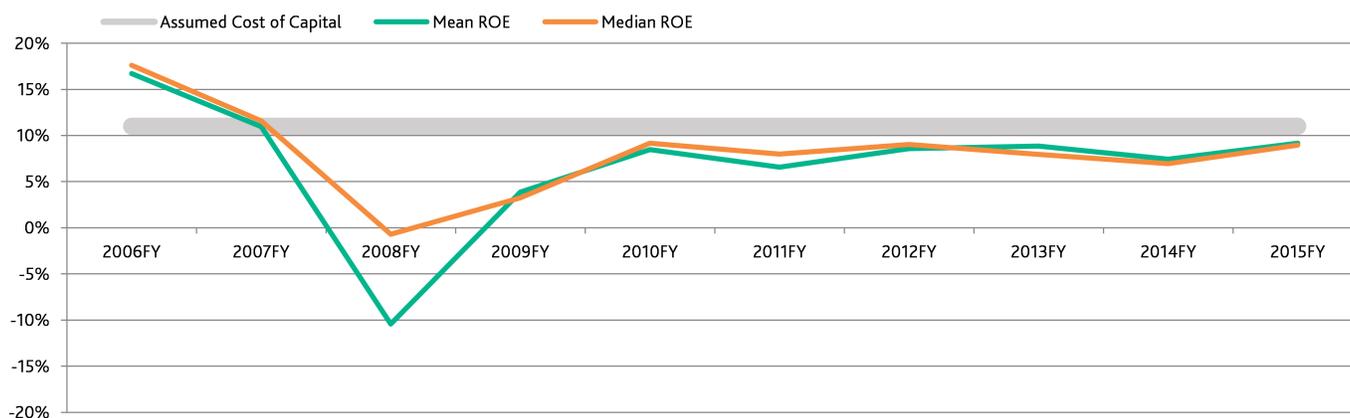
Securizations similar to the Chase transaction could lower bank ROEs

Some banks are likely hesitant to securitize loan portfolios because securitizations could reduce ROE at a time when banks are already struggling to meet shareholders' ROE expectations. Major US banks' ROE have remained below their cost of capital since 2007, as Exhibit 1 shows. And securitizations similar to the Chase transaction could reduce banks' revenues and profits, driving ROE even lower, unless banks (1) return capital to shareholders, or (2) redeploy deal proceeds into loans and other investments yielding more than the non-retained securitization bonds.

Exhibit 1

Major Banks' ROE Has Remained Below Their Cost of Capital Since 2007

Adjusted return on equity and assumed cost of capital for major banks*



*Firms included in sample are Bank of America, Citigroup, JP Morgan and Wells Fargo. See [Financial Statement Adjustments in the Analysis of Financial Institutions](#), 12 February 2016, for adjustment methodology. We estimate bank's cost of capital using a modified capital asset pricing model.

Source: Moody's Banking Financial Metrics

However, US banks do not have full control of the capital return process. The Federal Reserve governs the amount of capital banks larger than \$50 billion in assets may return to shareholders under its annual stress testing process known as the Comprehensive Capital Analysis and Review (CCAR).¹ In many cases these stress tests have imposed binding capital constraints on banks, as Exhibit 2 shows, to ensure adequate capitalization remains after periods of varying levels of stress.

In addition, reinvesting released deal proceeds into assets yielding more than the non-retained securitization bonds could alter banks' investment portfolios and risk profiles, something they might be unwilling, or unable, to do.

Exhibit 2

US Bank Capital Ratios Are Close to the Fed's Minimum Requirements*

Ratio	Minimum Stressed Ratios With Planned Capital Actions (CCAR 2015)								
	Min. Requirement	Bank of America	Citigroup	Goldman Sachs	JP Morgan Chase	Morgan Stanley	Wells Fargo	Avg	Median
Common equity tier 1 ratio (%)	4.5%	6.1%	6.4%	5.4%	5.3%	5.9%	5.5%	5.8%	5.7%
Tier 1 capital ratio	6.0%	7.7%	6.6%	6.4%	6.5%	6.2%	7.1%	6.8%	6.6%
Total risk-based capital ratio (%)	8.0%	10.8%	9.4%	8.1%	8.8%	8.2%	10.5%	9.3%	9.1%
Tier 1 leverage ratio	4.0%	4.9%	4.4%	4.8%	4.1%	4.2%	5.6%	4.7%	4.6%

*Figures represent projected capital ratios under the severely adverse supervisory scenario for 2015-16 for all firms other than Bank of America. Bank of America figures represent projected capital ratios under the severely adverse supervisory scenario for Q2 2015 to Q2 2017 under their 2015 CCAR resubmission. Figures represent submissions under the original planned capital actions unless adjusted planned capital action plans were submitted.

Source: *Comprehensive Capital Analysis and Review 2015: Assessment Framework and Results*, March 2015

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Securitization will not necessarily help banks meet leverage ratio requirements

Although transactions like Chase's might increase return on risk-weighted regulatory capital for banks, they would also likely decrease return on regulatory capital required under Basel III leverage ratio requirements.

Most large US banks currently have strong regulatory capital positions, indicating that reducing capital requirements may not be a primary driver behind bank balance sheet securitizations. The large US banks have built their regulatory capital positions as Basel III started phase-in two years ago, and are currently in excess of fully phased-in requirements (set for 2019). On a risk-weighted basis, the banks maintain sound common equity tier 1 (CET1) ratios compared with minimum required levels, plus required buffers of 7%-10.5%.² CET1 ratios for the major banks are as follows: Bank of America (10.1%), JP Morgan (11.7%), Wells Fargo (10.6%), and U.S. Bancorp (9.2%). In addition, the banks are already in excess of their 5% SLR requirement, with their most recently reported, fully phased-in ratios as follows: Bank of America (6.8%), JP Morgan (6.6%), and Wells Fargo (7.6%). U.S. Bancorp does not disclose its SLR level, but indicates in its 31 March 2016 10Q filing that its "SLR exceeds the applicable minimum SLR requirement."

The Chase transaction reduces capital requirements after securitization significantly under the risk-weighted regulatory capital measure, but not under unweighted measures of capital such as the SLR.³ Under the risk-weighted ratio, assuming 10% required common equity, a bank may reduce its regulatory capital from a mortgage portfolio that has a risk-weighting of 50% (assuming a standardized calculation) to a securitized position with a weighted average risk weight of 20%. In this case, assuming a \$2.0 billion mortgage portfolio, the capital requirement declines 61% to \$39 million (\$2 billion x 10% x 19.5%) from \$100 million (\$2 billion x 10% x 50%).⁴ However, the leverage ratio capital requirement, as an unweighted measure, does not decline: pre- and post-securitization, assuming a 5% leverage ratio capital requirement, the capital charge is unchanged at \$100 million (\$2 billion x 5%).⁵

Investors remain hesitant to reenter the non-agency RMBS market

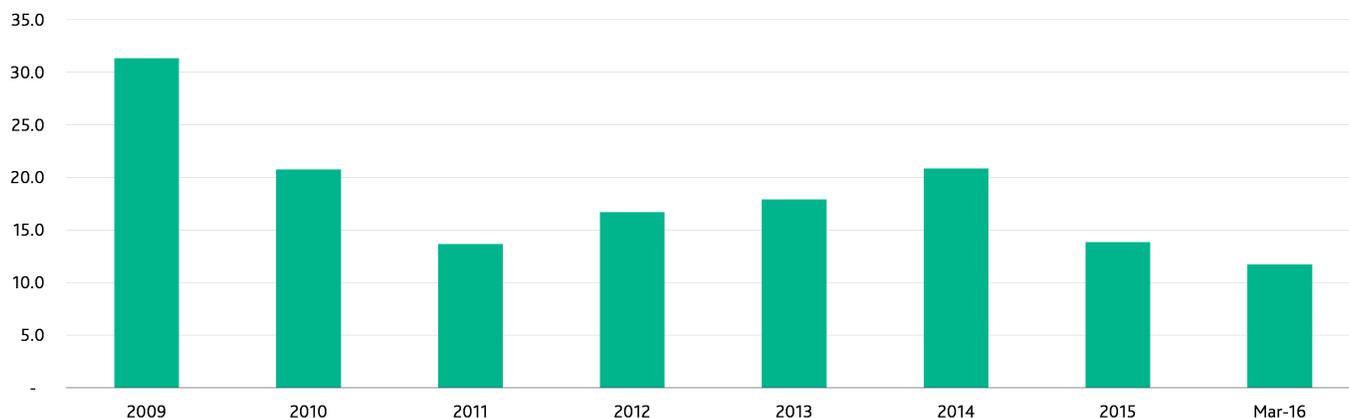
Lack of secondary market liquidity discourages potential non-agency RMBS investors

Secondary market liquidity has decreased recently, reflected in lower trading volumes and reductions in bank trading inventories.⁶ Illiquidity will likely remain a concern for investors if US banks are subject to greater market-risk capital rule requirements as recently proposed by the Basel Committee for Banking Supervision (BCBS). The BCBS in a press release noted that, according to their impact analysis based on a survey of banks globally, the revised market risk standard would result in median and average increases of approximately 22% and 40% in total market risk capital requirements. However, the impact on US banks if adopted is unclear.

Anecdotal evidence from investors indicates that a lack of secondary market liquidity is giving investors pause before they invest in subordinate tranches of RMBS securitizations. Investors have asked for yield premium to account for lower market liquidity, but determining how much that should be is likely to be challenging.

Exhibit 3

Large Banks' Non-Agency RMBS Trading Inventories Have Declined Since 2008* (In \$ billions)



*Includes Bank of America, Citigroup, Goldman Sachs, Morgan Stanley, JP Morgan and Wells Fargo

Source: Moody's Investors Service, FR Y9-C Reports for Bank of America, Citigroup, Goldman Sachs, Morgan Stanley, JP Morgan and Wells Fargo

Transaction governance needs to improve to entice investors

Non-agency RMBS governance has been a concern among investors since the crisis, and remains a major impediment to the market's restart. In particular, investors are asking for better alignment of interests between servicers and all investors, clearer and more predictable cash flows, and more loan-level performance transparency. Investors have also expressed interest in an independent deal agent that would monitor servicers' performance and decisions, and enforcing representations and warranty breaches.⁷

The Chase transaction includes features that address some, but not all of these concerns. For example, it does not allow servicer advances of principal and interest, which will make cash flows more predictable. Second, servicers under the Chase transaction have the authority to mitigate losses on loans in a manner consistent with maximizing net present value, and to act in the best interests of all investors rather than any particular class of investors. Third, servicers in the transaction must maintain records of actions to permit full review by the trustee or other representatives of the investors thereby facilitating better monitoring of servicers' performance.

Moody's Related Research

- » [Prime-Jumbo Market Gradually Recovers as Transaction Governance, Investment Strategies and Capital Requirements Evolve](#), 2 February 2016
- » [Financial Statement Adjustments in the Analysis of Financial Institutions](#), 12 February 2016
- » [Pre-Sale Report: Chase Mortgage Trust 2016-1](#), 14 March 2016
- » [FDIC Safe Harbor Requirements Strengthen Chase 2016-1 Prime RMBS Transaction](#), 4 April 2016

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Endnotes

- [1](#) This is a nine-quarter, forward-looking stress test that measures banks' ability to withstand a severe systemic stress under a number of regulatory capital metrics, including risk-weighted and on-balance-sheet leverage ratios under Basel III. Banks must estimate how their loan and investment portfolios perform under stressed conditions and what amount of capital they must retain to meet the Federal Reserve's minimum requirements.
- [2](#) Minimum levels plus buffers of CET1 of 7-10.5% include: minimum requirement (4.5%), capital conservation buffer (2.5%), and global systemically important bank (G-SIB) surcharge for Bank of America (3.0%), JP Morgan (3.5%) and Wells Fargo (2.0%). Reported CET1 ratio is the lower of the ratio under the Standardized or Advanced Approach.
- [3](#) Under the current Basel III capital and liquidity framework, large banks are subject to multiple capital requirements: a risk-weighted capital ratio, which banks calculate under an internal model based method and under a standardized method, and an unweighted balance sheet based leverage ratio constraint, known in the US as the SLR.
- [4](#) Assumes the bank retains a 5% vertical slice of the securitized loan pool and 85% of senior tranches of deal. The bank then applies a 50% risk-weight against the vertical slice and a 20% risk-weight against the senior tranches. The weighted average risk-weight on the portfolio of 19.5% is equal to $85\% \times 20\% + 5\% \times 50\% + 10\% \times 0\%$.
- [5](#) Under GAAP accounting, all of the assets in the deal would remain on the bank balance sheet post-securitization because the transaction is not deemed a sale.
- [6](#) See [Prime-Jumbo Market Gradually Recovers as Transaction Governance, Investment Strategies and Capital Requirements Evolve](#), 2 February, 2016.
- [7](#) Ibid.

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