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## Non-agency RMBS and Home Price Commentary

- **Jumbo 2.0 outperformed in June while legacy showed mixed results**
- **We continue to think that spreads should continue to improve in RMBS**
- **Fundamental borrower performance is good, home prices outpacing income and solid technical mean that RMBS is in position to outperform other credit sectors**
- **Last week, the FHFA published its Single-Family Credit Risk Transfer Progress Report. The report provides an overview of the primary mortgage insurance and credit risk transfer programs and outlines their roles in sharing credit risk with the private sector**
- **Because of these benefits associated with the CRT programs, we think it is important that the FHFA encourage the growth of STACR and CAS and broaden the investor base. From the GSEs' standpoint, CRT provides an important alternative to the primary mortgage insurance programs in transferring risk to the marketplace**
- **Most investors have received proceeds from the Countrywide settlement on the June distribution date**
- **Since Brexit coincided with the Countrywide payout, it is hard to isolate the impact of the settlement on the broader market. Heading into the distribution date, we had expected the settlement to support the CMBS and CLOs markets in addition to RMBS. Brexit and the ensuing macroeconomic uncertainty changed the outcome. Despite that, anecdotally, we heard of some investors putting in their settlement proceeds to work in the CRT space**
- **A hearing is scheduled on July 13th to hear oral arguments regarding the treatment of settlement proceeds in the remaining 18 contested trusts**

### Exhibit 1: Jumbo 2.0 outperformed in June while legacy showed mixed results

Monthly and year-to-date returns (unannualized)

	Jun Return	2016 YTD Return				
		Total	Price	Factor	Prin.	Coupon
Prime Fixed	0.5%	3.1%	0.4%	-9.9%	9.4%	3.2%
Prime Hybrid	-0.3%	2.2%	-0.3%	-8.7%	9.4%	1.8%
Alt-A Fixed	1.2%	2.7%	-3.1%	-4.9%	7.1%	3.6%
Alt-A Hybrid	0.6%	5.2%	0.5%	-6.8%	9.5%	2.0%
Alt-A Floater	1.2%	5.2%	1.8%	-5.7%	8.7%	0.4%
Option ARM	0.8%	2.8%	1.2%	-5.5%	6.6%	0.6%
Subprime LCF	-1.4%	-2.1%	-3.9%	-1.9%	3.1%	0.6%
Prime.1012	1.9%	4.4%	3.0%	-13.7%	13.6%	1.4%
Prime.13H1	2.4%	5.8%	4.4%	-8.0%	7.9%	1.5%
Prime.14	1.4%	2.7%	2.6%	-14.0%	12.5%	1.6%
Prime.15	1.2%	1.5%	2.9%	-11.2%	8.5%	1.4%
CRT.15.A	0.2%	0.9%	0.1%	-26.1%	26.0%	0.7%
CRT.15.A.HLTV	0.2%	0.9%	0.1%	-23.9%	23.9%	0.7%
CRT.15.BBB	0.3%	2.3%	1.2%	-10.3%	10.2%	1.2%
CRT.15.BBB.HLTV	0.3%	2.7%	1.6%	-10.0%	10.0%	1.2%
CRT.15.BB/B	0.3%	6.4%	4.1%	0.0%	0.0%	2.3%
CRT.15.BB/B.	0.7%	6.3%	3.9%	0.0%	0.0%	2.4%
CRT.15.NR	0.0%	6.4%	3.7%	0.0%	0.0%	2.7%
CRT.15.NR.HLTV	0.2%	5.7%	3.1%	-1.5%	1.4%	2.7%
CRT.15.NR.FIRSTLOSS	0.5%	4.4%	-0.3%	-0.2%	0.0%	4.9%
CRT.15.NR.FIRSTLOSS.HLTV	0.1%	1.4%	-3.6%	-0.2%	0.0%	5.1%
SFR.15.AAA	0.2%	2.2%	1.3%	-0.6%	0.6%	0.9%
SFR.15.AA	0.4%	2.8%	1.7%	0.0%	0.0%	1.1%
SFR.15.A	0.5%	3.0%	1.7%	0.0%	0.0%	1.3%
SFR.15.BBB+	0.8%	3.1%	1.5%	0.0%	0.0%	1.5%
SFR.15.BBB-	0.4%	2.8%	0.8%	0.0%	0.0%	2.1%
SFR.15.BB/NR	0.3%	3.3%	0.9%	0.0%	0.0%	2.4%

Source: J.P. Morgan

### Market Commentary

Returns in the first half of the year show unrated BB/B and unrated CRT up over 6%. Legacy and jumbo 2.0 ranged from 1.5% to 5.8%, except for subprime LCF showing -2.1% year-to-date, largely from price declines.

We continue to think that spreads should continue to improve in RMBS. There is a real lack of AAA supply and jumbo 2.0 should remain closely linked to TBA performance. Negative convexity in the jumbo space has been much less than what models suggest, so OAS is likely better than the headline numbers in our reports.

Fundamental borrower performance is good, home prices outpacing income (see our home price monitor) and solid technicals (Countrywide settlement money and lack of supply) mean that RMBS is in position to outperform other credit sectors. Risk-off volatility may still push spreads around in our space, but the moves should be short-lived and present opportunity.

<sup>AC</sup> Indicates certifying analyst. See last page for analyst certification and important disclosures.

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## HPI Update: Welcome to America

Over the past month, the US housing market has been steady and posted satisfactory performance in recent data releases. The three national home price indices we track have seen decent returns as demand continues to outweigh supply. We expect the US housing market to continue to moderate to 3-4% growth by year-end.

UK's EU membership referendum brought the biggest volatility event in the second quarter. In the near term, the US real estate market may actually see a boost from Brexit for a number of reasons. For domestic investors, as volatility and risk-off sentiment return to the markets, we could see a transfer of wealth and liquidity by domestic investors from more volatile (i.e. stocks) to more stable assets (i.e. real estate). For international investors, it is likely some of them will shift focus away from UK to more stable markets, and the US will emerge as one of the natural alternatives. However, a strong dollar versus the pound could be problematic. For some international corporates, it's reasonable to believe that they could take action early to cope with the uncertainty and limit the downside risk. For example, some companies are already contemplating moving parts of some UK operations overseas. As a result, US and some of UK's neighboring countries may benefit. The good news for domestic mortgage borrowers is the extended periods of lower rates as the global uncertainty forced the Fed to put off rate hikes and flight-to-quality induced rate rally have pushed treasury yields to record lows.

In the longer term, if the UK and the EU fail to manage the breakup, both regions could see a slowing and even negative economic growth. In a worse case scenario, Brexit could lead to a global economic slowdown, and that would certainly impact the US and the housing market.

NAR released their latest annual survey on international buyer activity in US residential real estate market<sup>1</sup>. This past year was characterized by a divergence of economic growth between the US and the rest of the world, and its impact on rates and FX market. This dynamic was certainly reflected in the purchase patterns of foreign buyers. Overall, dollar volume of transactions dropped a smidge, but the total number of properties sold went up

<sup>1</sup> <http://www.realtor.org/reports/profile-of-international-home-buying-activity>

Exhibit 2: J.P. Morgan home price forecasts

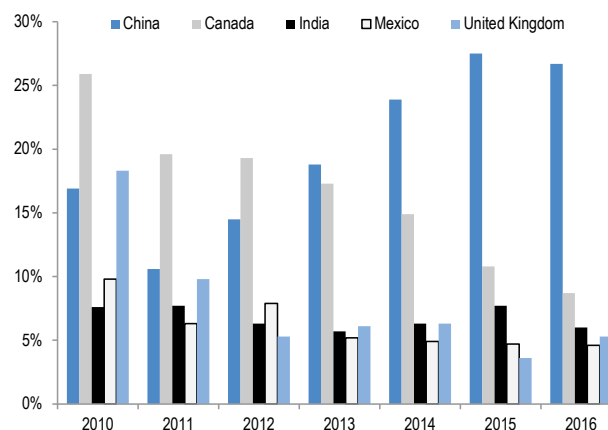
Scenario	2016 HPA	2017 HPA	2018 HPA	2019 HPA
Bullish	11.4%	5.4%	2.8%	1.7%
Positive	9.1%	4.3%	2.5%	1.7%
Benign	6.9%	3.2%	2.2%	1.7%
<b>Base</b>	<b>3.6%</b>	<b>2.6%</b>	<b>2.1%</b>	<b>1.8%</b>
Negative	0.0%	-0.3%	1.9%	2.0%
Severe	-2.4%	-5.8%	1.6%	3.0%
Depression	-5.4%	-10.4%	-0.1%	3.6%
Repeated crisis	-1.6%	-8.3%	-10.1%	-1.4%

Base Forecast Assumptions	2016	2017	2018	2019
Existing Home Sales (NAR, mm)	5.53	5.62	5.66	5.70
Unemployment rate (BLS, %)	4.81	4.61	4.61	4.61
Distressed Sales (NAR, %)	7	7	7	7
Cumulative Lending Index (JPM)	477	477	477	477
Housing Inventory (NAR, mm)	2.25	2.55	2.80	2.95
Net Housing Demand (mm)	3.3	3.1	2.9	2.8

Note: Current is as of 2015Q4. 2016-2019 HPA is yoy % change of Q4 HPI  
Source: CoreLogic, NAR, BLS, Fed, J.P. Morgan

Exhibit 3: In dollar terms, Chinese buyers bought more than the next four biggest participants combined

Dollar volume as a percentage of total international real estate purchases



Source: NAR, J.P. Morgan

by almost 3%. The most notable story is the domination of Chinese buyers. Chinese buyers bought more homes than the next four most active countries combined, in dollar terms (Exhibit 3). Due to the economic and political uncertainty back home, Chinese buyers continued to see the US as a place to grow their wealth and provide better education for their children.

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Going forward, we still think non-US citizens would still have a strong bid for US houses. Even currency adjusted, American real estate market is still relatively affordable for many buyers originally from other counties. However, concerns around a change in immigration policies could weigh on demand, especially with the upcoming US election and a potential change of political regime.

## FHFA's Credit Risk Transfer Progress Report

Last week, the FHFA published its Single-Family Credit Risk Transfer Progress Report<sup>2</sup>. The report provides an overview of the primary mortgage insurance and credit risk transfer programs and outlines their roles in sharing credit risk with the private sector. The primary mortgage insurance program was established before the credit risk transfer programs. As per the GSE charter, loans that have LTV ratios above 80% are required to have MI with coverage levels changing based on LTV thresholds. We have written about MI in the past, and highlighted its benefit for CRT investors.

Despite the benefits of MI, the credit risk transfer program is a welcome development in the GSEs' efforts to offload risk. The CRT transactions have eliminated the counterparty risk for the GSEs that is inherent in MI agreements. This counterparty risk was brought to the forefront during the crisis when many of the mortgage insurance companies came dangerously close to being unable to make their payments. The CRT structure eliminates this risk by getting all of the cash upfront.

CRT also allows the GSEs to share risk with a wide variety of investors. As per the progress report, in 2015, asset managers and hedge funds made up 58% and 30% of the new issue investor base, and the 25 largest investors purchased 70% of the deals. The ACIS and CIRT programs also allow insurance companies to participate in CRT. By attracting such a broad investor base, CRT creates more avenues through which risk can be transferred to the marketplace. The progress report states that "developing broad investor participation in the Enterprises' credit risk transfer programs is a high FHFA priority."

<sup>2</sup> <http://www.fhfa.gov/AboutUs/Reports/ReportDocuments/CRT-Progress-Report-6292016.pdf>

## Exhibit 4: the GSEs detail their estimates for the implied g-fee on the sold tranches of each of the low LTV deals

	Pricing Date	Annualized G-fee Concession
<b>STACR</b>		
2013-DN1	7/26/13	15-18
2013-DN2	11/12/13	9-11
2014-DN1	2/12/14	16-16.5
2014-DN2	4/9/14	12.5-13
2014-DN3	8/11/14	15-17
2014-DN4	10/28/14	18-21
2015-DN1	2/3/15	30-37
2015-DNA1	4/28/15	24-29
2015-DNA2	6/29/15	30-35
2015-DNA3	11/9/15	34-40
<b>CAS</b>		
2013-1	10/24/13	11-12
2014-1	1/27/14	9-10
2014-2 (Group 1)	5/26/14	5-6
2014-3 (Group 1)	7/25/14	6-8
2014-4 (Group 1)	11/25/14	11-13
2015-1 (Group 1)	2/26/15	10-12
2015-2 (Group 1)	5/19/15	12-14
2015-3 (Group 1)	7/22/15	15-18
2015-4 (Group 1)	10/23/15	18-23

Source: J.P. Morgan, FHFA

## Exhibit 5: The GSEs earn on average 66bp of g-fee on the underlying loans; this suggests that the CRT deals create a profit of -4bp to 13bp

Average g-fee	66bp
Allocated to the Treasury (payroll tax)	10bp
Admin and securitization costs	8 - 10bp
Residual risks not transferred through STACR/CAS (operational, legal, etc.)	5 - 10bp
Market implied cost of transferring credit losses	30 - 40bp
Total cost	53 - 70bp

Source: J.P. Morgan, FHFA

Lastly, the CRT programs also gives the FHFA transparency into the cost of the credit risk in conventional loans and allow them to compare it with their earned g-fees. In the progress report, the GSEs detail their estimates for the implied g-fee on the sold tranches of each of the low LTV deals (Exhibit 4). Our own estimates of the implied g-fees are at the lower end of the ranges provided in the progress report.

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After calculating the market implied costs of transferring credit risk, the GSEs add on 10bp for the payroll tax cut, 8 - 10bp for administrative expenses and 5 - 10bp for residual risks (i.e. operational risks, legal risks, counterparty risks, etc.) that have not been transferred via CRT. For the 2015 STACR low LTV deals these charges add up to 53 - 70bp. Comparing this to the 66bp of g-fee earned on the underlying loans suggests that the CRT deals create a profit of -4bp to 13bp (Exhibit 5).

Because of these benefits associated with the CRT programs, we think it is important that the FHFA encourage the growth of STACR and CAS and broaden the investor base. From the GSEs' standpoint, CRT provides an important alternative to the primary mortgage insurance programs in transferring risk to the marketplace. It also allows an investor base that has been starved by a sputtering jumbo 2.0 market to gain exposure to post-crisis mortgage credit risk.

## Countrywide Update

Most investors have received proceeds from the Countrywide settlement on the June distribution date. Judging by the questions we received, most investors spent a fair amount of time trying to calculate the exact dollar amount of the principal payment and/or writeup on their bonds. Unfortunately, the only way to do this calculation is to dig through the remit reports. Distinguishing between scheduled principal payments and the Countrywide payments for senior bondholders in particular is not possible through Intex or Bloomberg alone. Furthermore, performing this analysis on large portfolios can naturally be cumbersome.

Since Brexit coincided with the Countrywide payout, it is hard to isolate the impact of the settlement on the broader market. Heading into the distribution date, we had expected the settlement to support the CMBS and CLOs markets in addition to RMBS. Brexit and the ensuing macroeconomic uncertainty changed the outcome. Despite that, anecdotally, we heard of some investors putting in their settlement proceeds to work in the CRT space.

While most investors have received their settlement proceeds, those in the 18 disputed trusts have yet to get paid. The payments on these 18 trusts are still being disputed as investors have been debating the order of writeups and principal payments. Last week, TIG added a new wrinkle to the dispute by arguing that the settlement

proceeds for CWABS 2006-12 should be treated as "excess cashflow" and not "subsequent recovery." The argument hinges on "subsequent recovery" being specifically related to liquidated mortgage loans. In this treatment, as per TIG's calculation, the subordinate bonds will receive \$17mn of the \$62mn allocated to the trust and the rest will be distributed to the senior bonds. In its response, PIMCO, the other investor in this trust, has argued that TIG did not raise its objection in time and the principal distribution amount should include the settlement proceeds. A hearing is scheduled on July 13th to hear oral arguments on this topic. Stay tuned!

<sup>AC</sup> Indicates certifying analyst. See last page for analyst certification and important disclosures.

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