FALCON BRIDGE Capital

December 18th, 2019

Credit Risk Transfer Performance & 2020 Outlook

Background

In 2012, the Federal Housing Finance Agency (FHFA) announced the single-family credit risk sharing program intended to reduce future default risk to the taxpayers. In 2013, Fannie Mae and Freddie Mac implemented their Credit Risk Transfer ("CRT") programs to transfer a substantial amount of the credit risk of new single family mortgages through their CRT deals. **Through the second quarter of 2019, Fannie Mae and Freddie Mac have transferred a portion of credit risk on $3.1 trillion of unpaid principal balance (UPB), with a combined Risk in Force (RIF) of about $102 billion, or 3.3 percent of UPB**. The Agencies are expected to issue $16 billion to $18 billion in new CRT securities in 2020.

Key Themes for Investors seeking Mortgage Credit Exposure in 2020 through CRT

- Tight underwriting and re-build of borrower equity continue to result in exceptional credit performance. *(See slides 2,3,7)*
- Strong prepayments de-risking the collateral pool observed in 2019 may re-appear in certain 2020 CRT deals. *(See slides 4,5,6)*
- Projections of low unemployment support low delinquencies & defaults when comparing to pre-crisis vintage collateral. (Federal Reserve projections of U3 unemployment for 2020, 2021, and 2022 are 3.5%, 3.6%, and 3.7%, respectively).

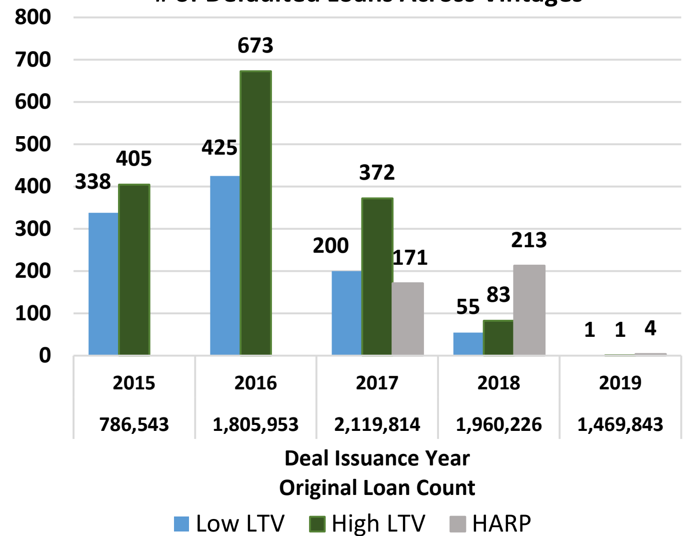
1999 Harrison Street, Suite 1575, Oakland, CA 94612 https://www.falconbridgecapital.com/

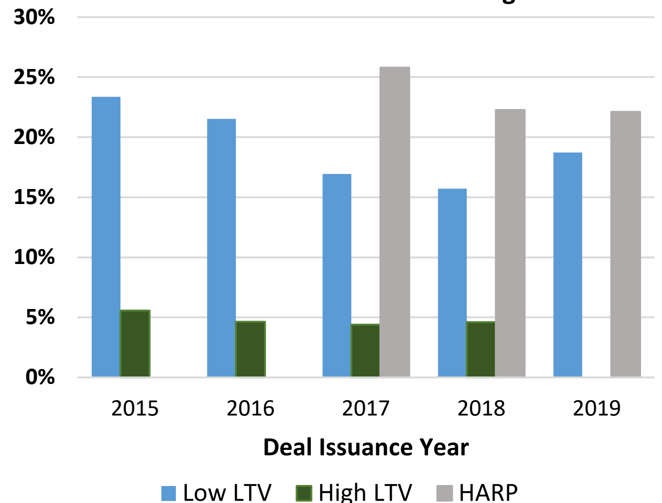
2019 and Recent Issuance Performance Review

- **The CRT market continued to diversify and grow in 2019 as GSEs transferred risk on over 90% of their 30yr fixed rate acquisitions with terms over 20 years and LTV ratios above 60%.**
- **Solid credit performance, fast prepays and healthy investor appetite dominated CRT sector performance.**
- **Low unemployment and dovish Fed provide support to U.S. housing market affordability.**

Cumulative losses experienced in post-crisis collateral are much lower relative to pre-crisis collateral as a result of the following:

- Improved underwriting guidelines and processes, and resulting stronger credit profile of the reference collateral exhibits lower propensity to become delinquent and higher rates of self-cure.
- Reference pools continue to have very limited exposure to loans with layered risk that historically observe higher levels of delinquencies and defaults.
- Streamlined servicing and improved modification processes focused on timely and effective loss mitigation efforts.
- Principal forgiveness in **NOT** offered, therefore immediate losses to investors are reduced.
- Performance of modified loans remains very strong with recidivism rates below 15%; significantly improved relative to 40% observed pre-crisis.



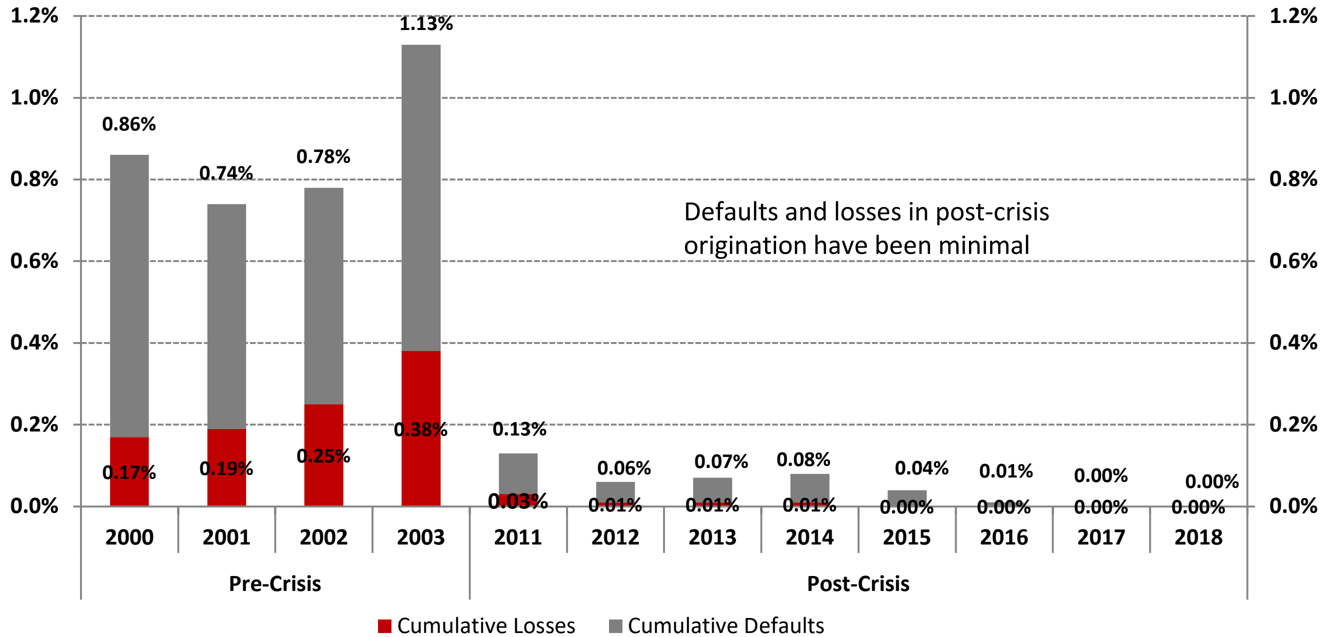


FALCONBRIDGE Capital

Sources: Fannie Mae, Freddie Mac, 1010data, FBC

Pre-Crisis vs. Recent Origination Collateral Performance

CRT collateral continues to exhibit superior credit performance relative to pre-crisis vintages.



Vintage Year, Cumulative Default / Loss %

1.20%
1.10%
1.00%
0.90%
0.80%
0.70%
0.60%
0.50%
0.40%
0.30%
0.20%
0.10%
0.00%

2000-2003, 1.06%/0.24%

Default trajectories of post-crisis collateral are much lower relative to early 2000 vintages that represent normal housing environment

2015, 0.05%/0.00%
2016, 0.02%/0.00%
2017, 0.01%/0.00%
2018, 0.00%/0.00%
2011, 0.17%/0.03%
2014, 0.10%/0.01%
2013, 0.09%/0.01%
2012, 0.08%/0.01%

1 7 13 19 25 31 37 43 49 55 61 67 73 79 85 91 97 103 109 115 121 127 133 139 145 151 157 163 169 175 181 187 193 199 205 211

2000-2003 2014 2016 2017 2018 2015 2011 2012 2013

Loan Age

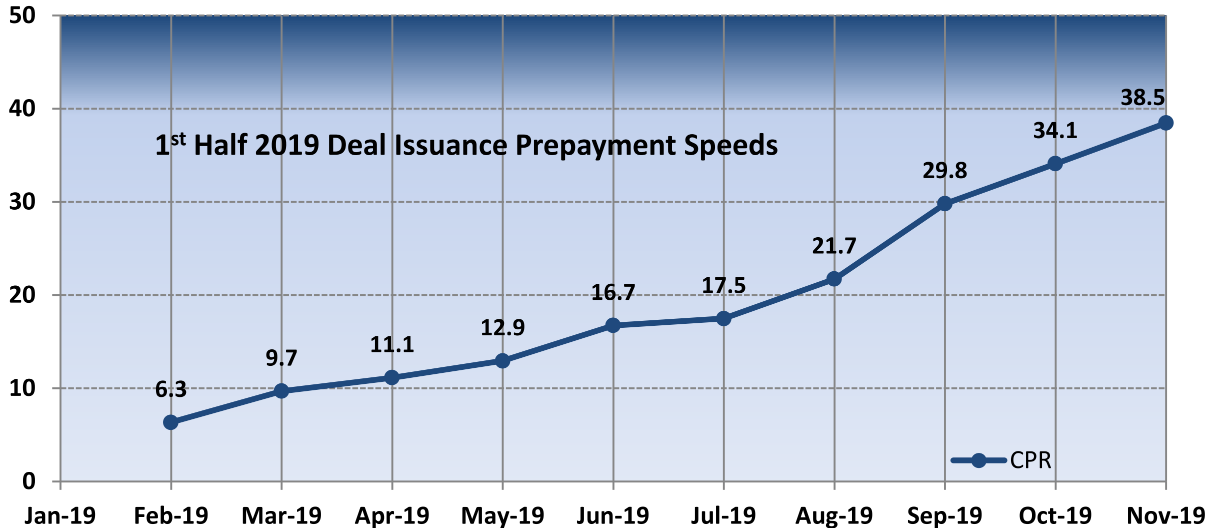
FALCONBRIDGE Capital

Sources: Fannie Mae Data Dynamics, FBC

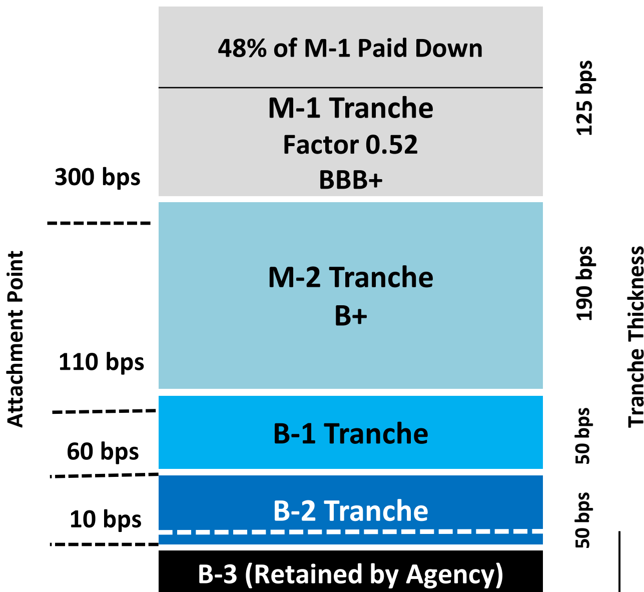
Refinancing in 2019 De-Risks Collateral

A sharp drop in mortgage rates resulted in:

- High prepayment speeds across CRT collateral and de-leveraging of the CRT capital structure,
- Rapid credit enhancement build-up across capital structure,
- Lowered loss expectations due to payoff of loans with riskier credit profile.

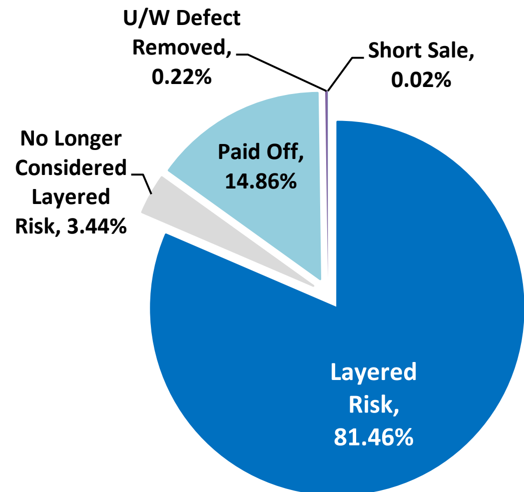


Example: STACR 2019-DNA1
Issued January 2019
Total Risk in Force 2.90%



As the deal de-levered, credit enhancement to the 1st loss B2 tranche increased from <u>10 bps at deal issuance to 12.4 bps.</u>

Current Status of 5,232 loans or 4.60% of original deal with Layered Risk at Issuance



Exposure to loans with layered risk decreased 19.78% to 3.69% of the original deal balance, as shown above. Layered Risk % is defined as share of loans with original LTV above 75% <u>**and**</u> FICO below 680. Home price appreciation observed in 2018/2019 is not reflected in the current LTV calculation; the loan transition to "No Longer Considered Layered Risk" cohort is solely a reflection principal amortization.

FALCONBRIDGE Capital

Sources: Fannie Mae, Freddie Mac, Bloomberg, FBC. Analysis as of Nov 2019.

Positive Impact from Prepayments to Continue in 2020

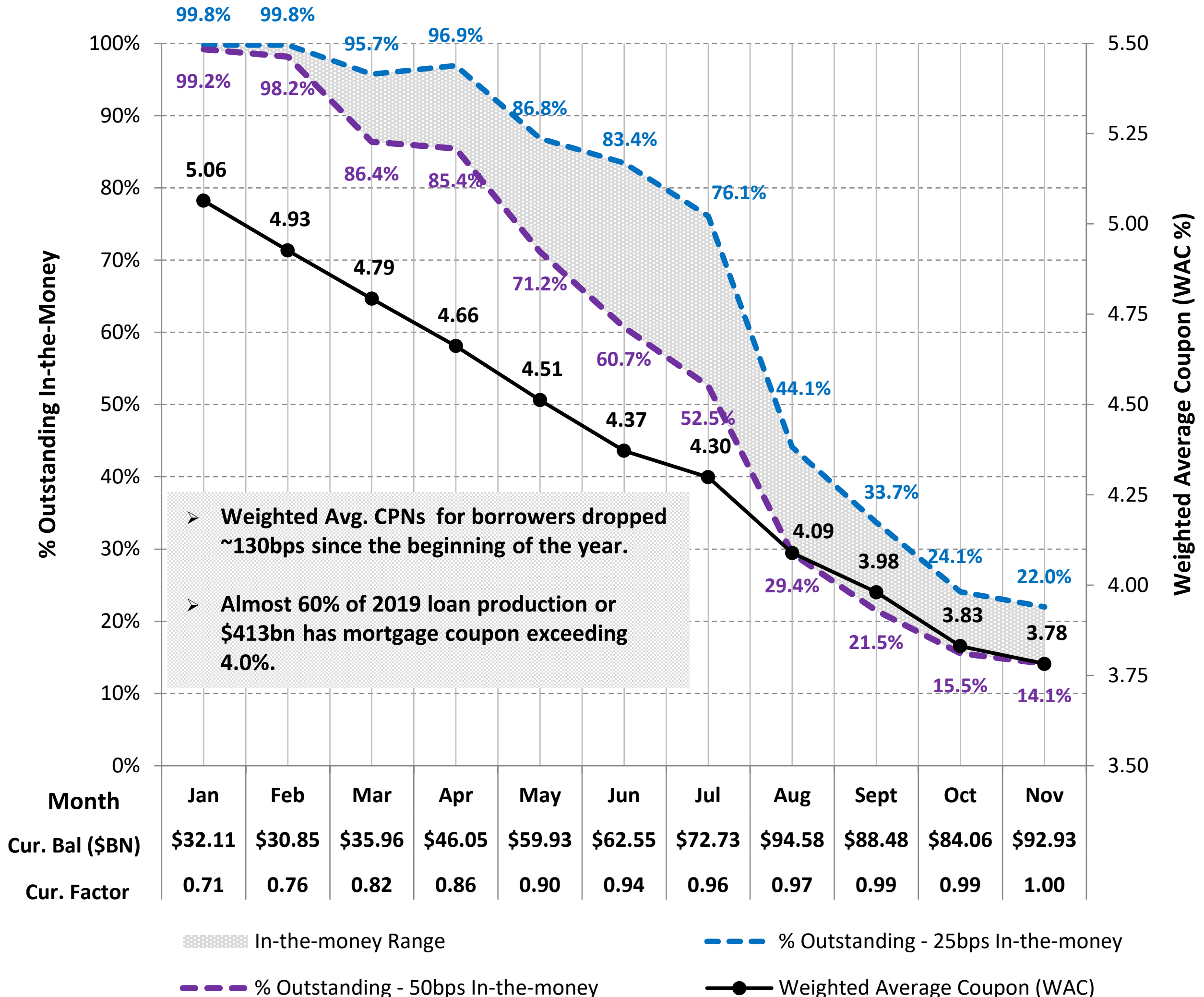
- **Prepayments may continue as many borrowers remain in-the-money**
- **Strong prepayments are positive for CRT valuation in the subordinate tranches.**

➢ Loans originated in 2019 that will comprise 2020 CRT issuance have a relatively wide distribution across mortgage coupons given a significant drop in rates over the year.

➢ Many of the borrowers who refinanced or obtained their loans in early 2019 may still have an incentive to refinance if rates remain range-bound or decrease slightly.

➢ Faster mortgage prepay activity results in quicker capital structure de-leveraging, credit enhancement build-up, and shorter weighted average life (WAL) across the coupon stack, which historically has led to spread tightening and price appreciation for B1 and B2 tranches in CRT deals.

GSEs 2019 Origination
Pending Risk-Transfer in 2020



Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov
Cur. Bal ($BN)	$32.11	$30.85	$35.96	$46.05	$59.93	$62.55	$72.73	$94.58	$88.48	$84.06	$92.93
Cur. Factor	0.71	0.76	0.82	0.86	0.90	0.94	0.96	0.97	0.99	0.99	1.00

FALCON BRIDGE Capital

Note: The percentage of loans "In-the-money" is estimated based on the current coupon of ***3.75%.***
Sources: Freddie Mac, Fannie Mae, JPMorgan, FBC

2020 CRT Credit Profile Improvement & Stable Housing

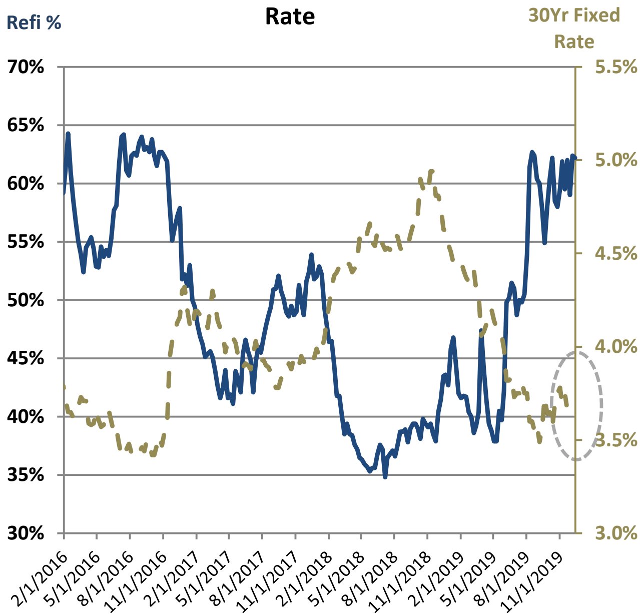
Share of refi loans to increase

Low mortgage rates and the resulting refi wave is changing the profile of reference pools that will be risk transferred in 2020. The higher share of refinance applications should be **credit positive to CRT deals** that will be issued in the coming 3 to 12 months.

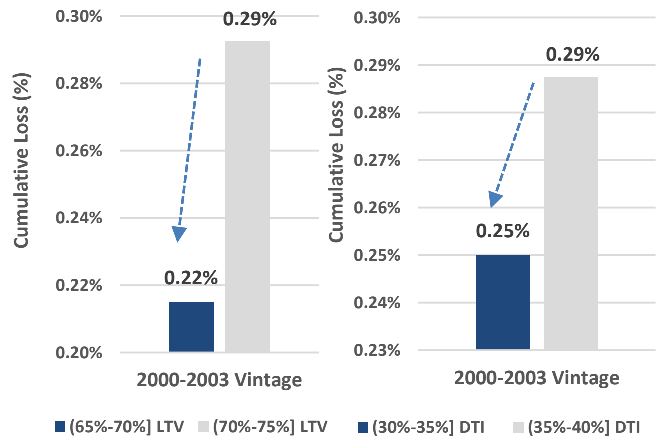
Collateral quality to improve

Refinanced loans tend to have slightly better FICO scores as a result of continuous mortgage payments prior to refinancing, improved LTVs due to loan amortization, minimal home price appreciation, and improved DTIs due to lower mortgage rates (assuming no changes to borrower(s) income and other debts). Example*: For a refinanced loan, the LTV and DTI would improve by 3.0% to 5.0%.

Refinance Share of Total Mortgage Applications and Freddie Mac Mortgage Rate



Empirical data suggests that a 5 point improvement in LTV or DTI may cut cumulative losses by 15% - 25%.



Cumulative Loss (%) for 2000-2003 Vintage represents the average of cumulative losses experiences by 2000-2003 origination in these LTV and DTI Cohorts.

Note: ** Credit Profile Improvement based on the following scenario: Original Loan of $250,000 originated in Q4 of 2018 at a 30yr fixed rate of 4.75% with a LTV of 70% & DTI of 38%. It assumes the borrower makes 12 months of payments before the refinance, home price appreciation (HPA) of 3% and new refinanced interest rate @ 4.00%.*

Stable Housing Market

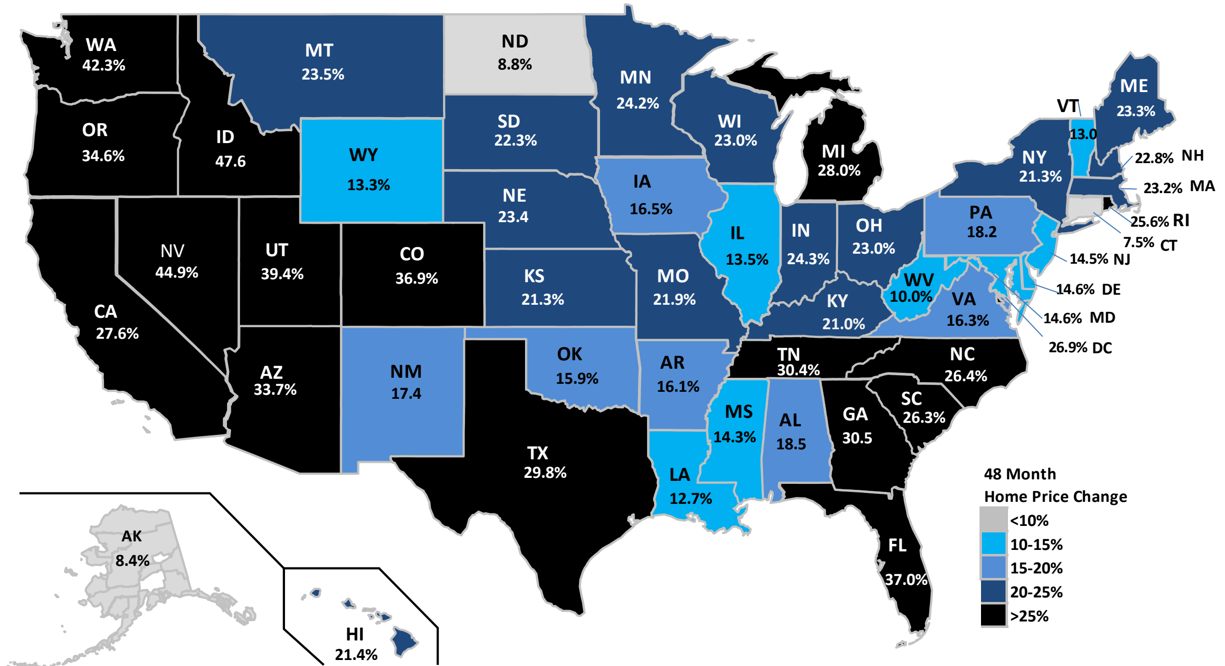
Record low unemployment and interest rates, as well as housing inventory shortages in many markets will continue to support credit performance and home valuations across the country. Additionally, aging millennials are finally starting to make a switch from renting to owning and are expected to support housing demand, especially for starter homes.

FALCON BRIDGE Capital

Sources: Mortgage Bankers Association, Freddie Mac, Fannie Mae, Bloomberg, FBC

Re-build of homeowner equity resulting in low delinquencies

➢ **Growth in home prices over the past 48 months has contributed to the increase in home equity across the country.**



As of Q3, 2019
Sources: Federal Housing Finance Agency, FBC

INVESTORS

Capitalize on FBC's insight and product knowledge of the U.S. Securitized market

For complete analysis, research, loss modeling, sensitivity analysis, and detailed projections please contact:

Contact & Principal Office Address:

Sunil Chowdry, CFA
President / CEO
1999 Harrison St., Suite 1575
Oakland, CA 94612
Telephone No: (925) 289-7601
Fax No: (925) 289-7613
schowdry@falconbridgecapital.com

Jessica Huang
Chief Financial Officer
Telephone No: (925) 289-7602
jhuang@falconbridgecapital.com

Aga Linsky
Portfolio Management & Research
Telephone No: (925) 204- 6188
alinsky@falconbridgecapital.com