

Freddie Mac ACIS® 2020 Recap and 2021 Outlook

Thursday | December 17 | 2020

Freddie Mac ACIS® 2020 Recap and 2021 Outlook

Host

Jeff Shue

Director, Single-Family Credit Risk Transfer



Freddie Mac ACIS® 2020 Recap and 2021 Outlook

Opening Remarks

Mike Reynolds

Vice President, Single-Family Credit Risk Transfer



Freddie Mac ACIS® 2020 Recap and 2021 Outlook

Economic and Housing Market Updates

Sam Khater

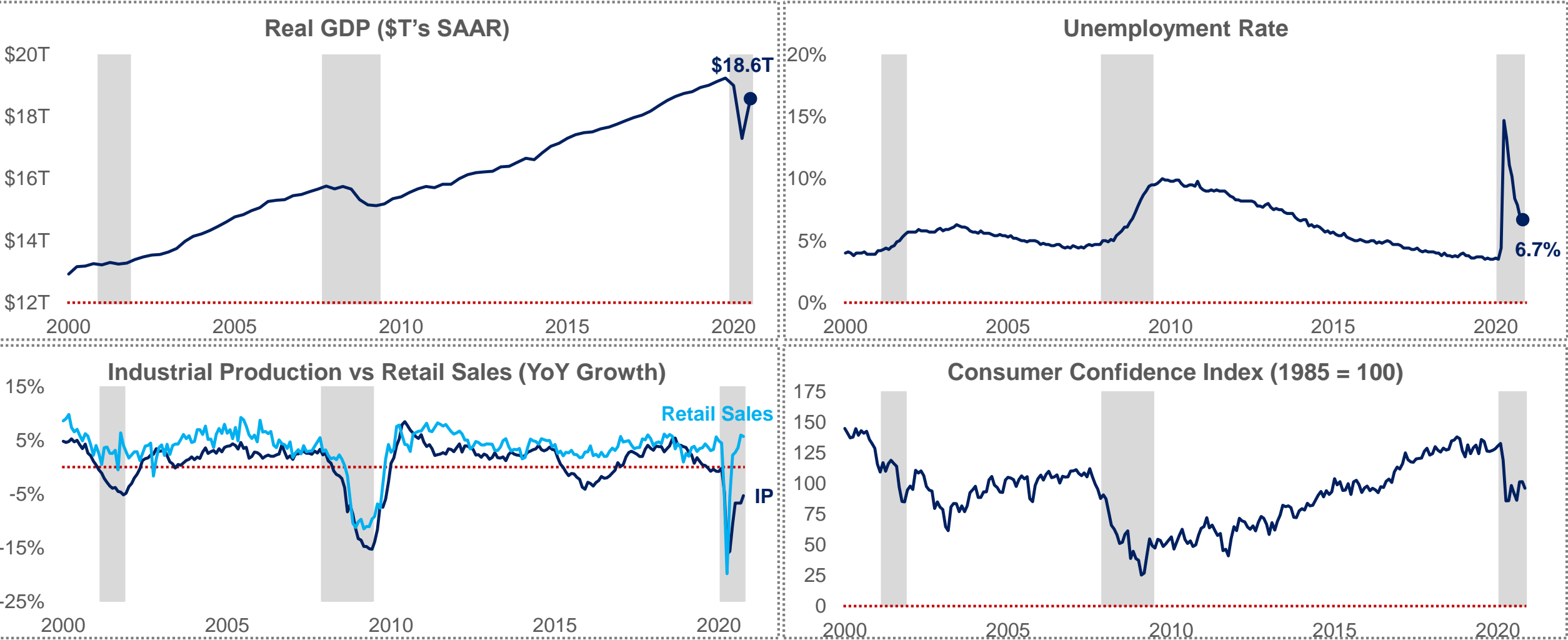
Vice President and Chief Economist,
Economic and Housing Research



Summary

- The economy has stalled the last two months and daily economic data suggests some segments of the economy are contracting again due to COVID spike
- Growth in the labor market has ground to a halt, incomes are at risk of declining again and despite the rapid initial recovery the economy remains deep in the hole
- Despite the stagnation of the economy, housing is red hot with very high home sales, rapid home price increases and record home equity levels

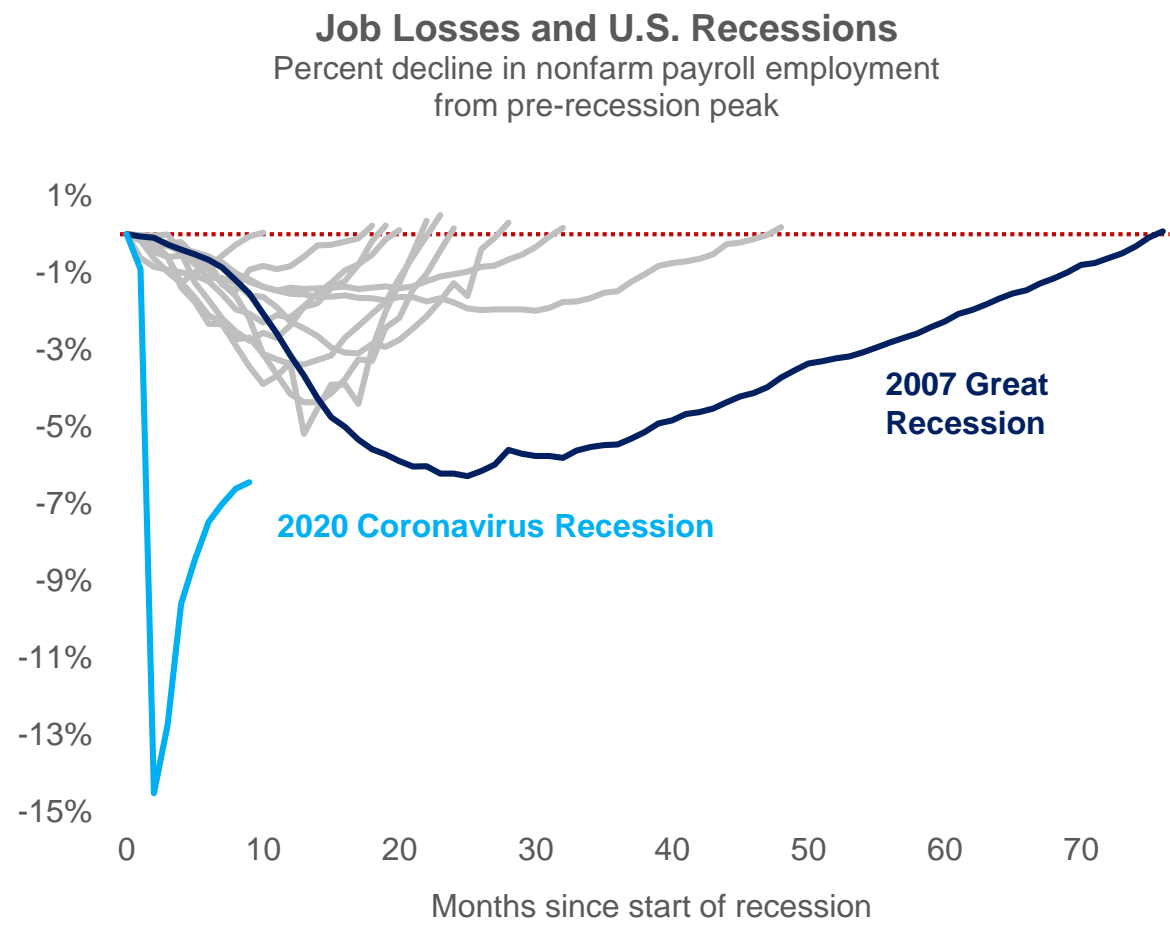
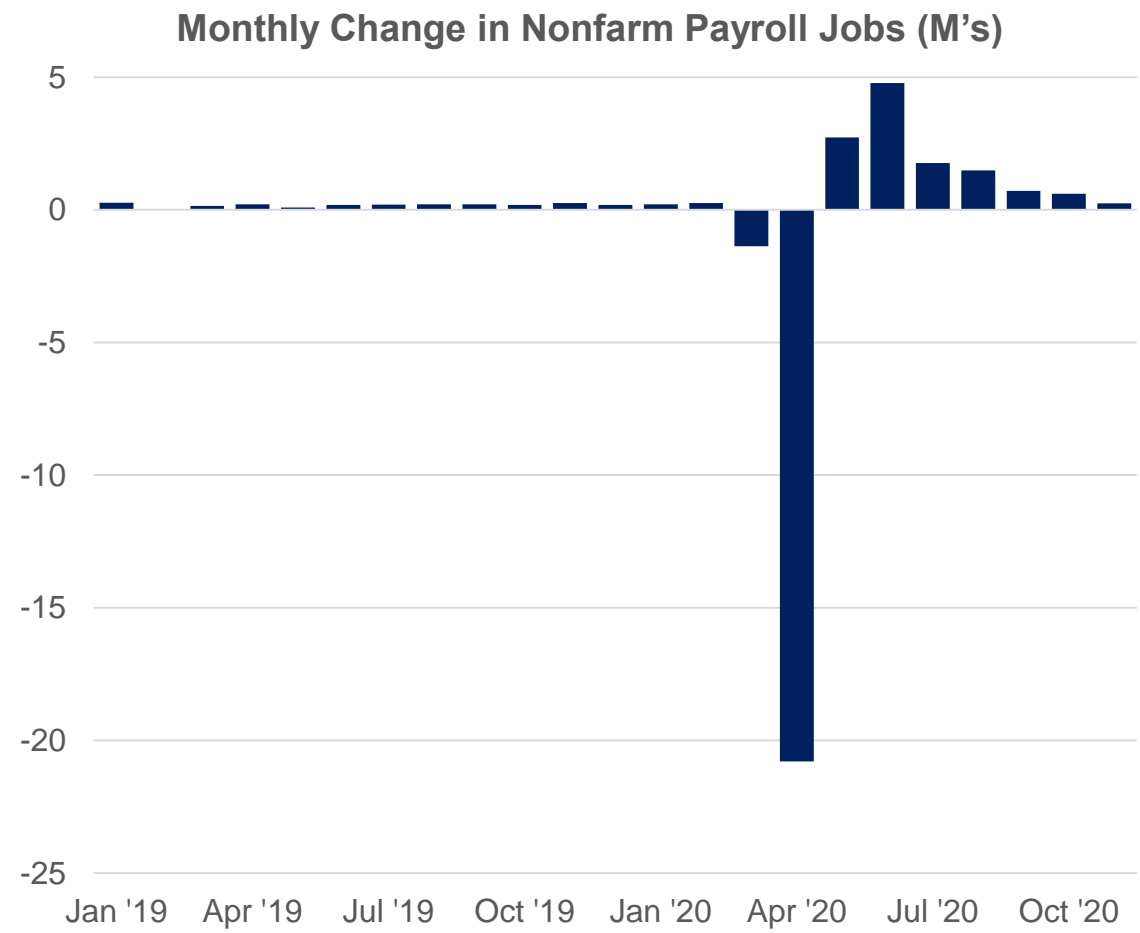
Economy Remains Deep in the Recession Hole



Source: BEA; BLS; FRB; Census; The Conference Board.

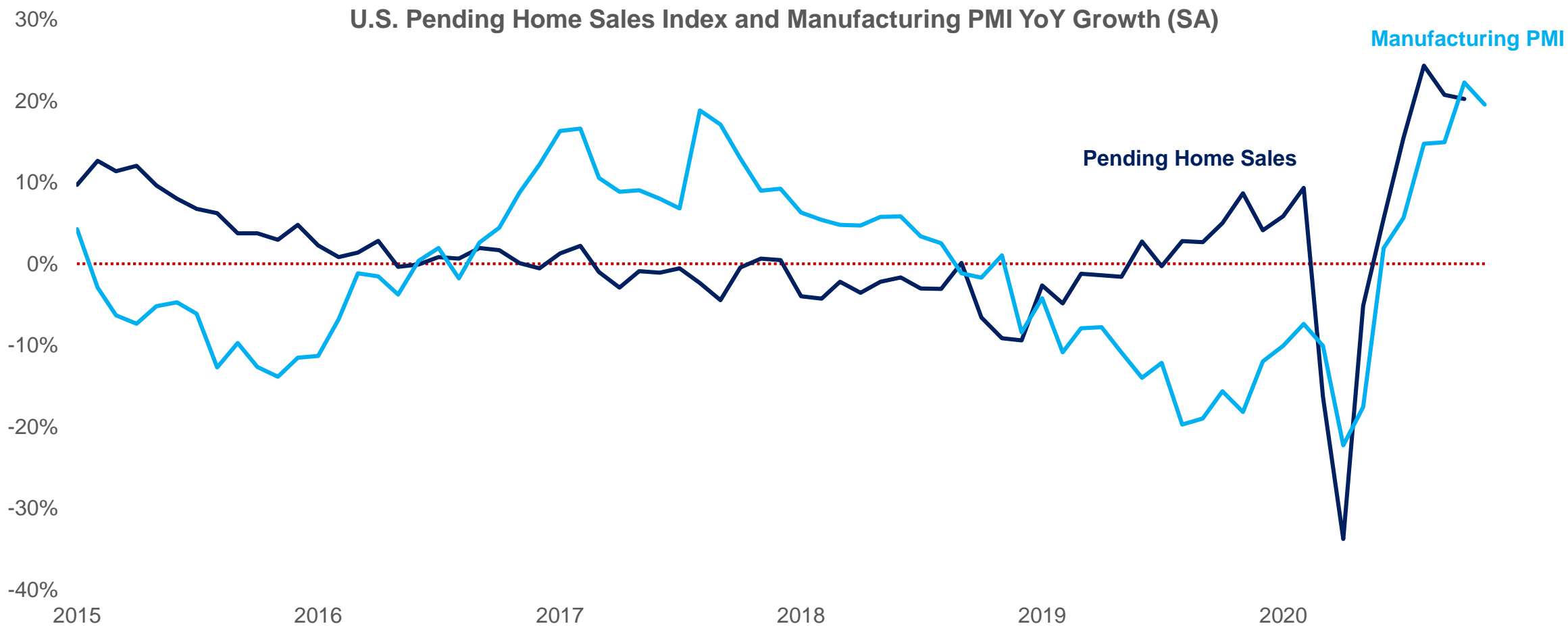


Employment Growth Stalled in November



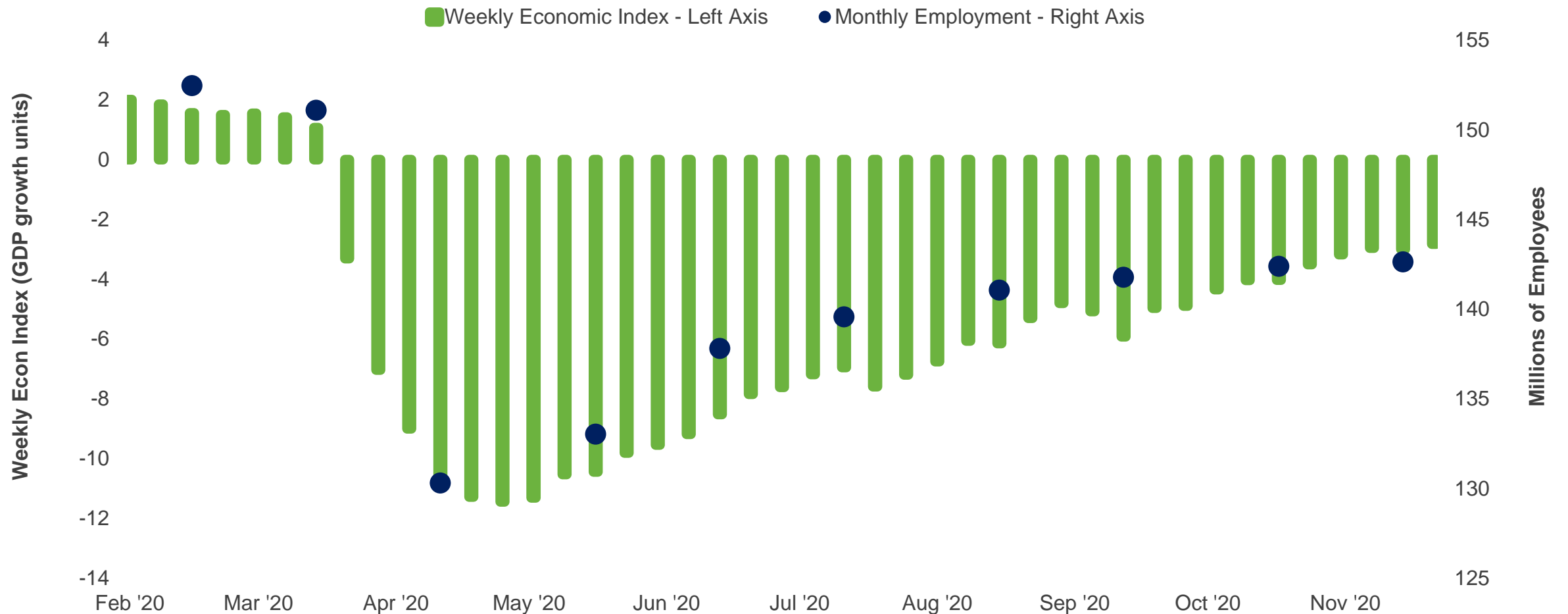
Source: BLS; Business Insider.

Leading Cyclical Indicators Have Hit an Inflection Point



Source: NAR; Institute for Supply Management.

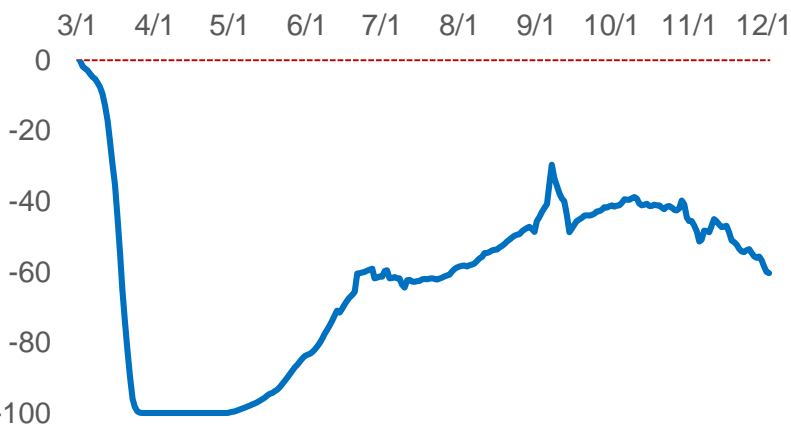
Stall in Labor Market is Consistent With the Slowdown in Weekly Economic Data That Began Two Months Ago



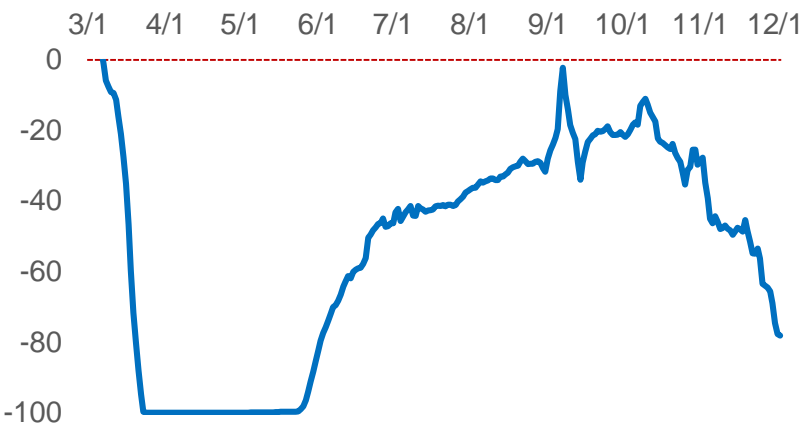
Source: BLS and Federal Reserve Bank of New York.

Restaurant Spending Is Declining Across All States...

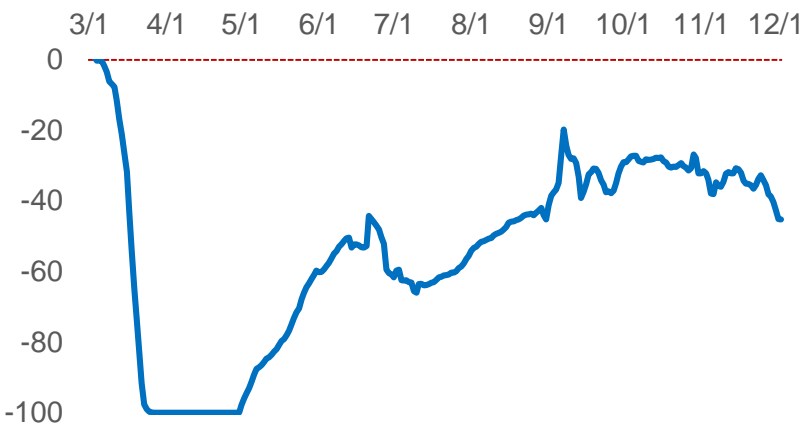
United States



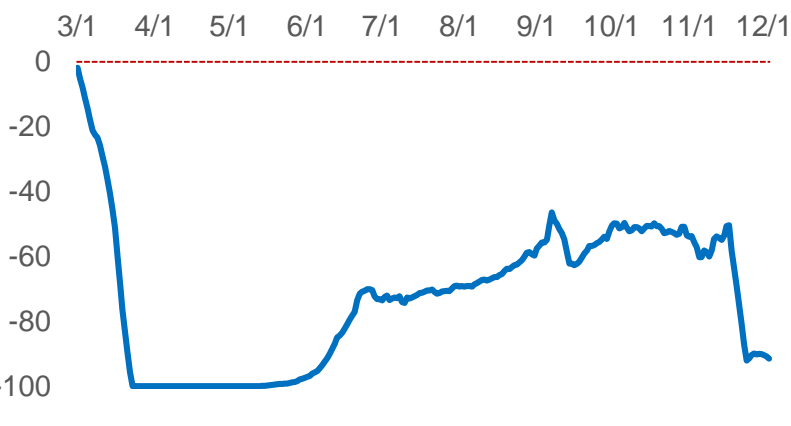
Colorado



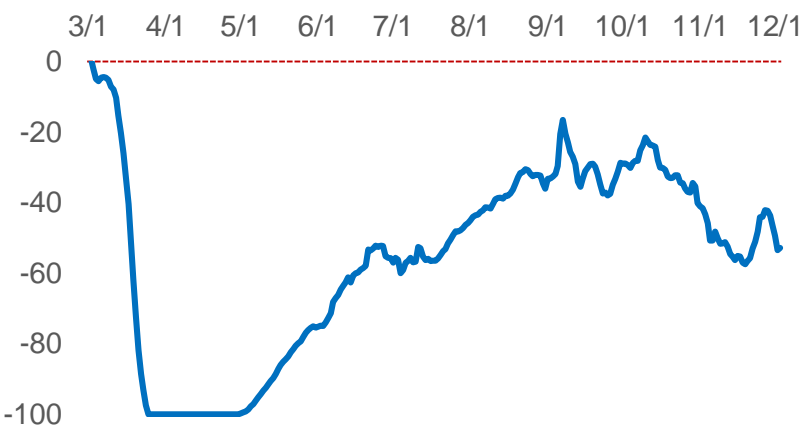
Texas



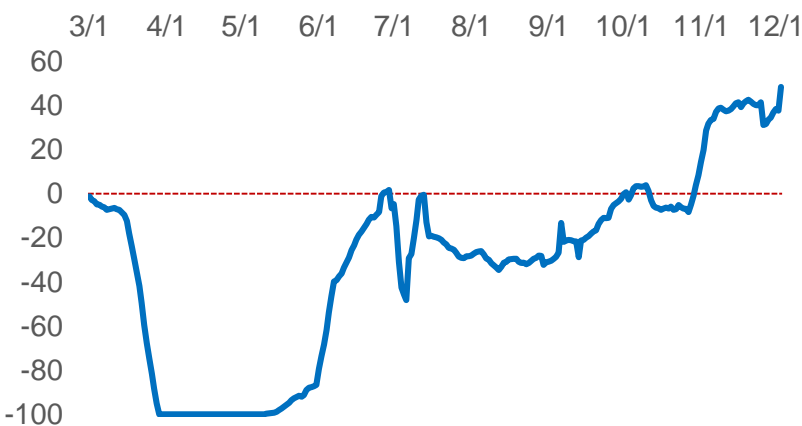
Washington



Utah



Australia

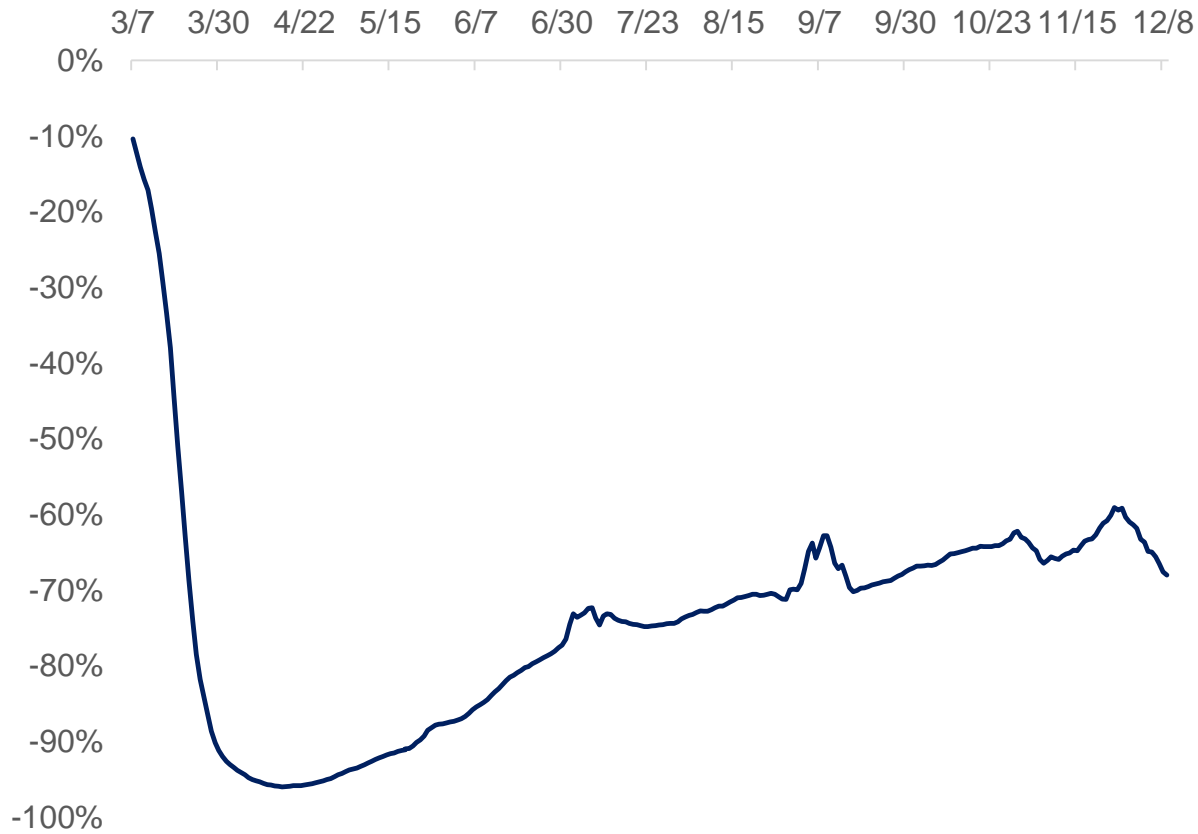


Source: OpenTable.

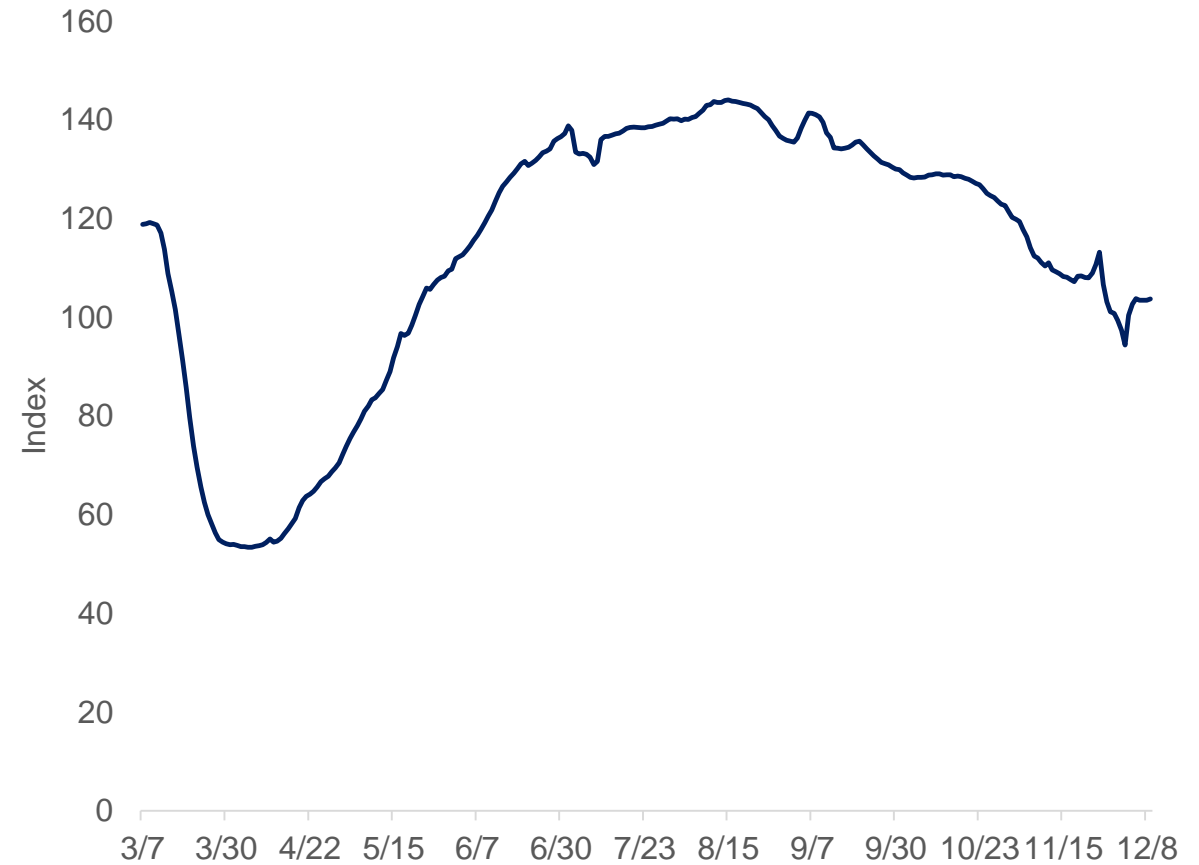


...and Americans Are Increasingly Staying at Home More Due to COVID Spike

Daily Airline Passenger Activity
(Percent Change from Year Ago)



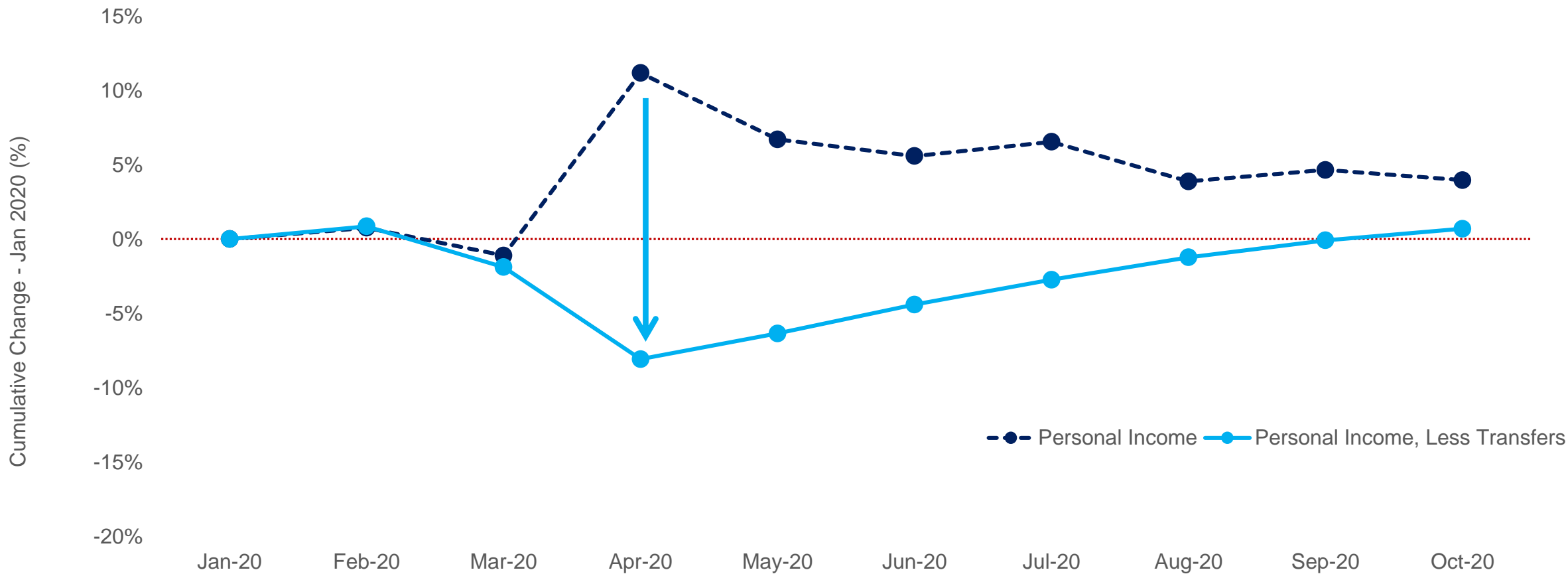
U.S. Driving (1/13/2020=100)



Source: TSA and Apple.

The Economic Stimulus Led to Higher Incomes...

Personal Income - Cumulative % Change Since Jan 2020

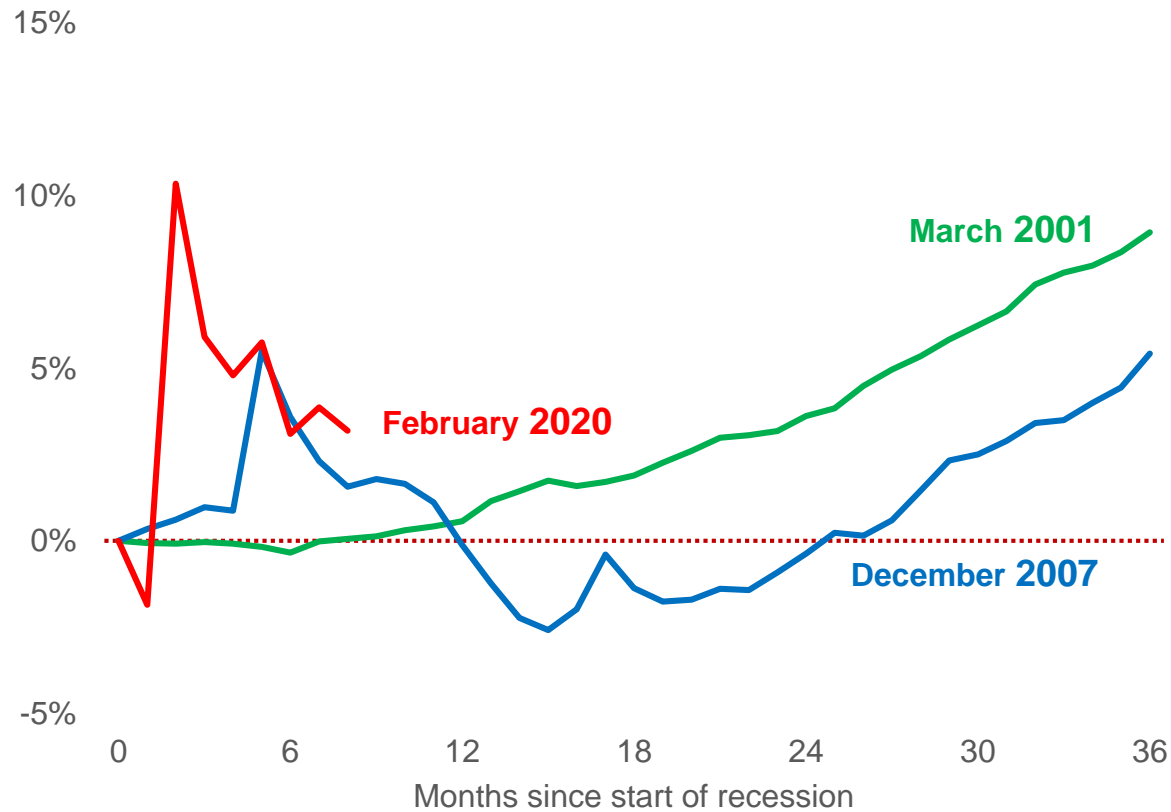


Source: ETA.

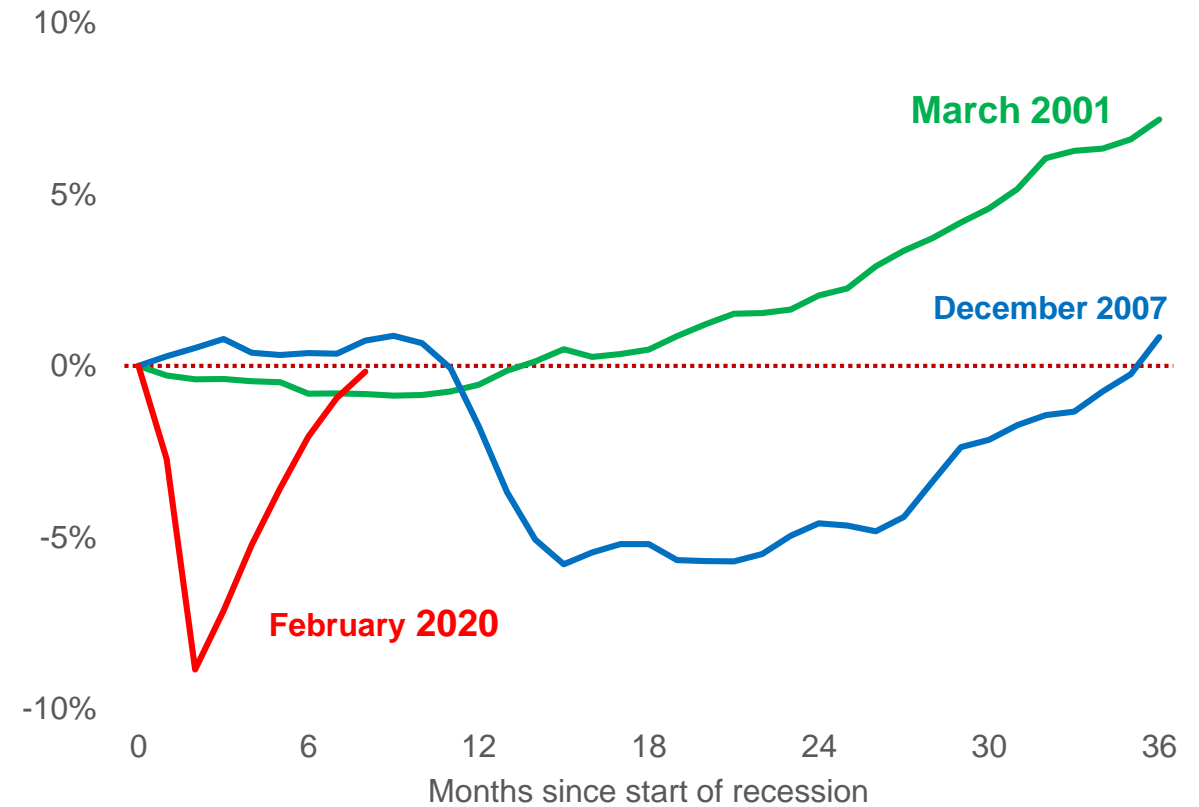


...But if the Employment Picture Remains Weak, Incomes May Fall Over Next 12 to 18 Months Similar to Last Recession

Cumulative Change in Personal Income
Since Start of Recession (Includes Stimulus)

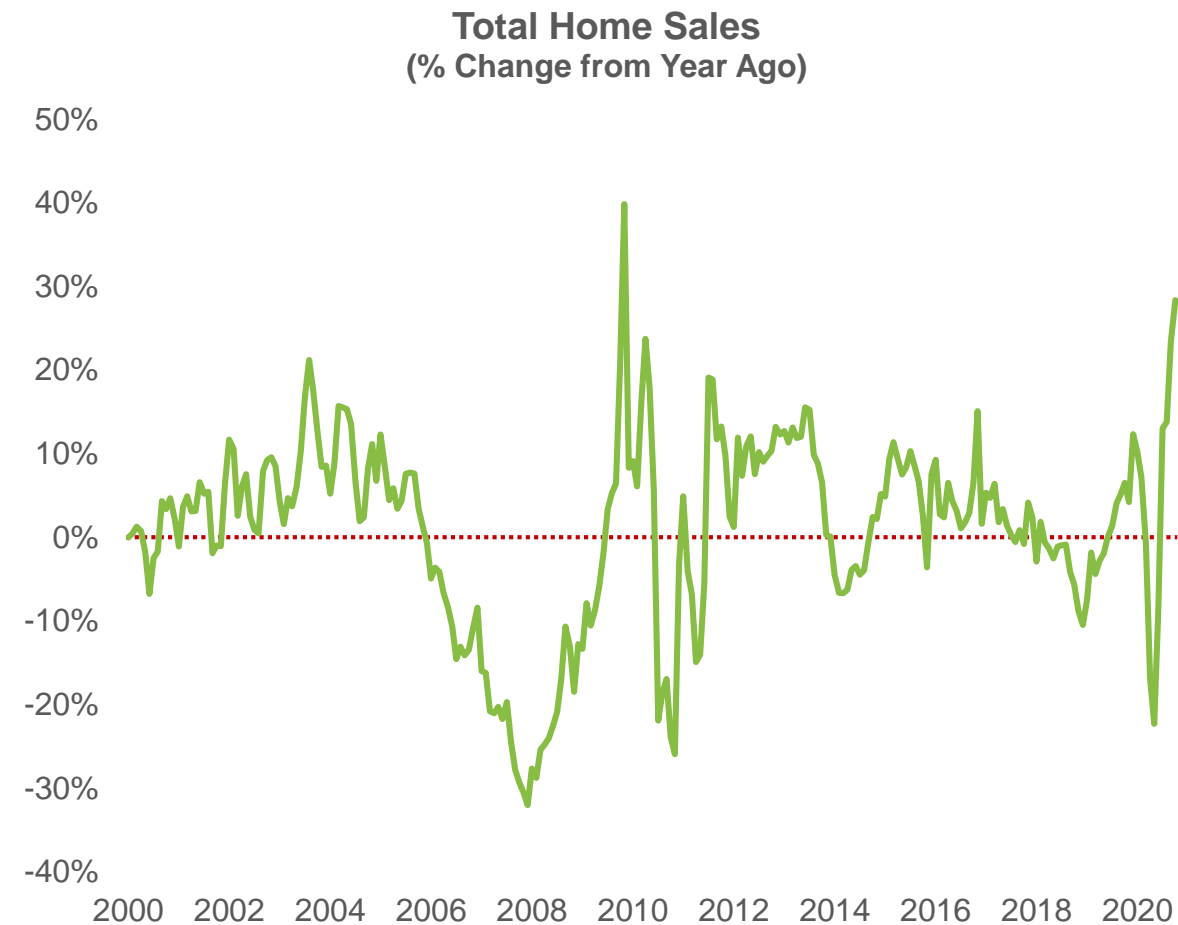
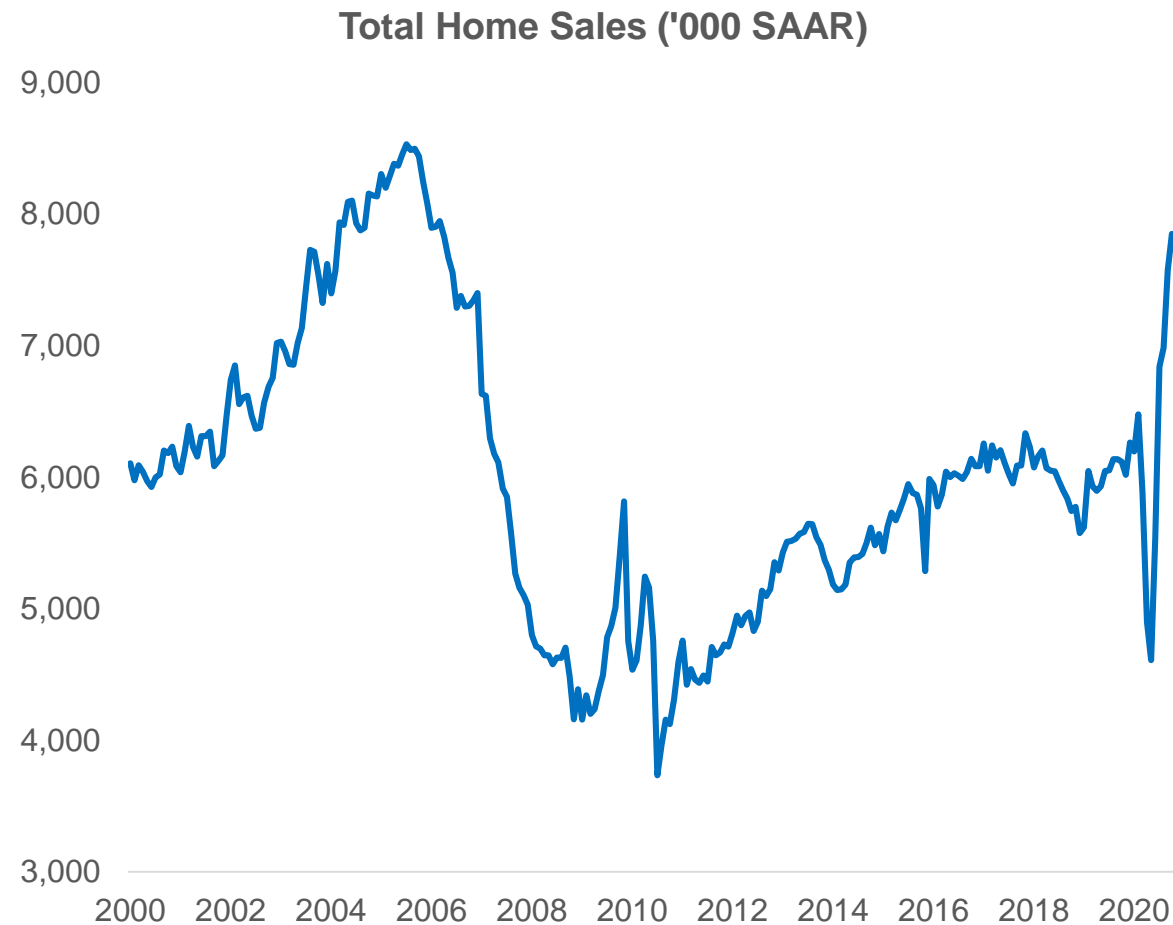


Cumulative Change in Personal Income
Since Start of Recession (Excludes Stimulus)



Source: ETA.

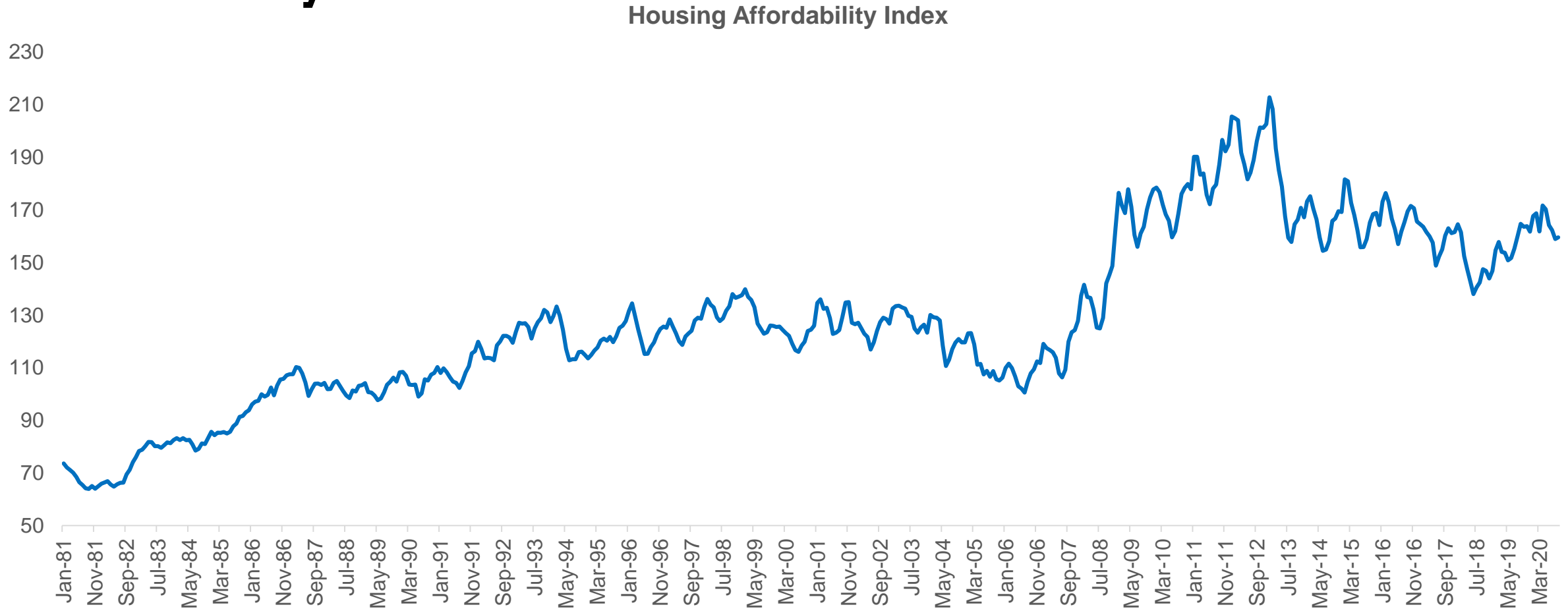
Home Sales Surge to Highest Level Since the Mid-2000s Boom But Going Forward Sales Should Not Rise



Source: NAR, US Census Bureau.

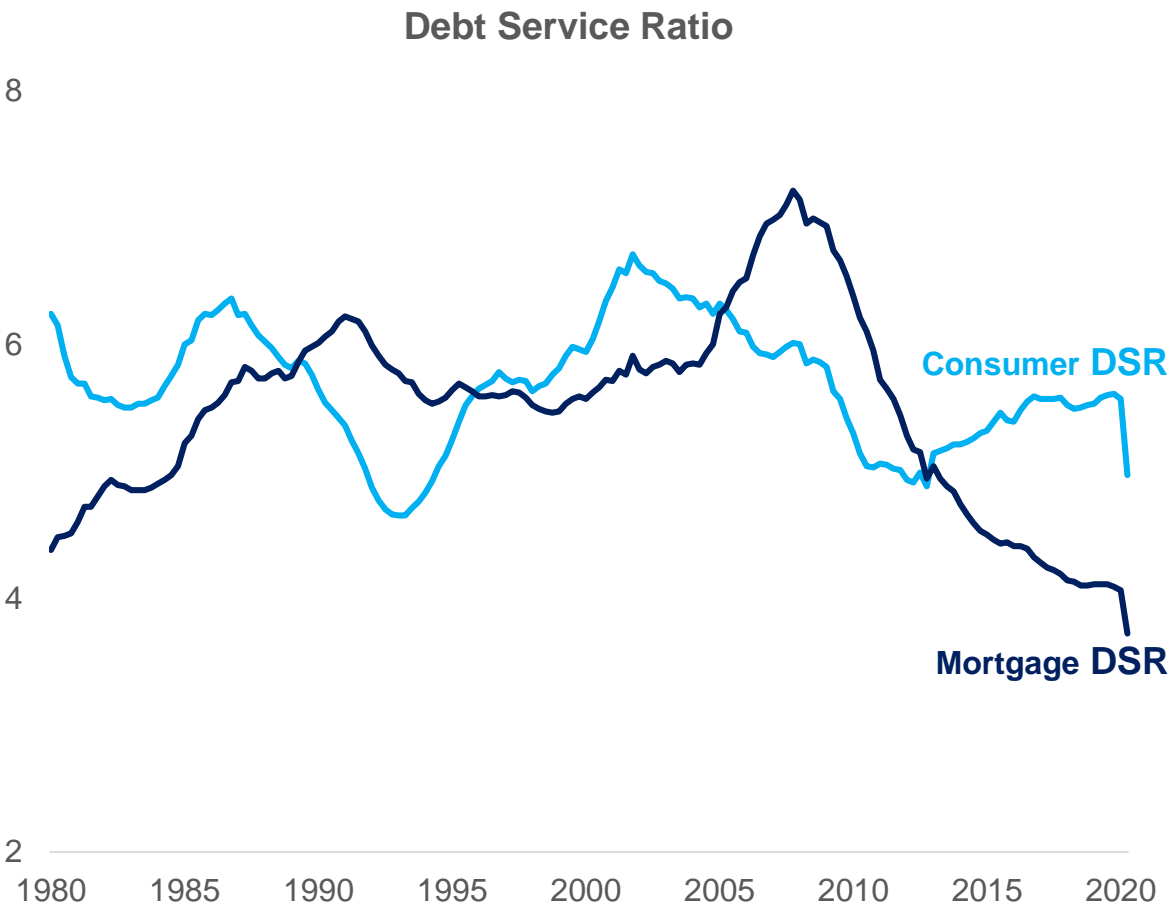
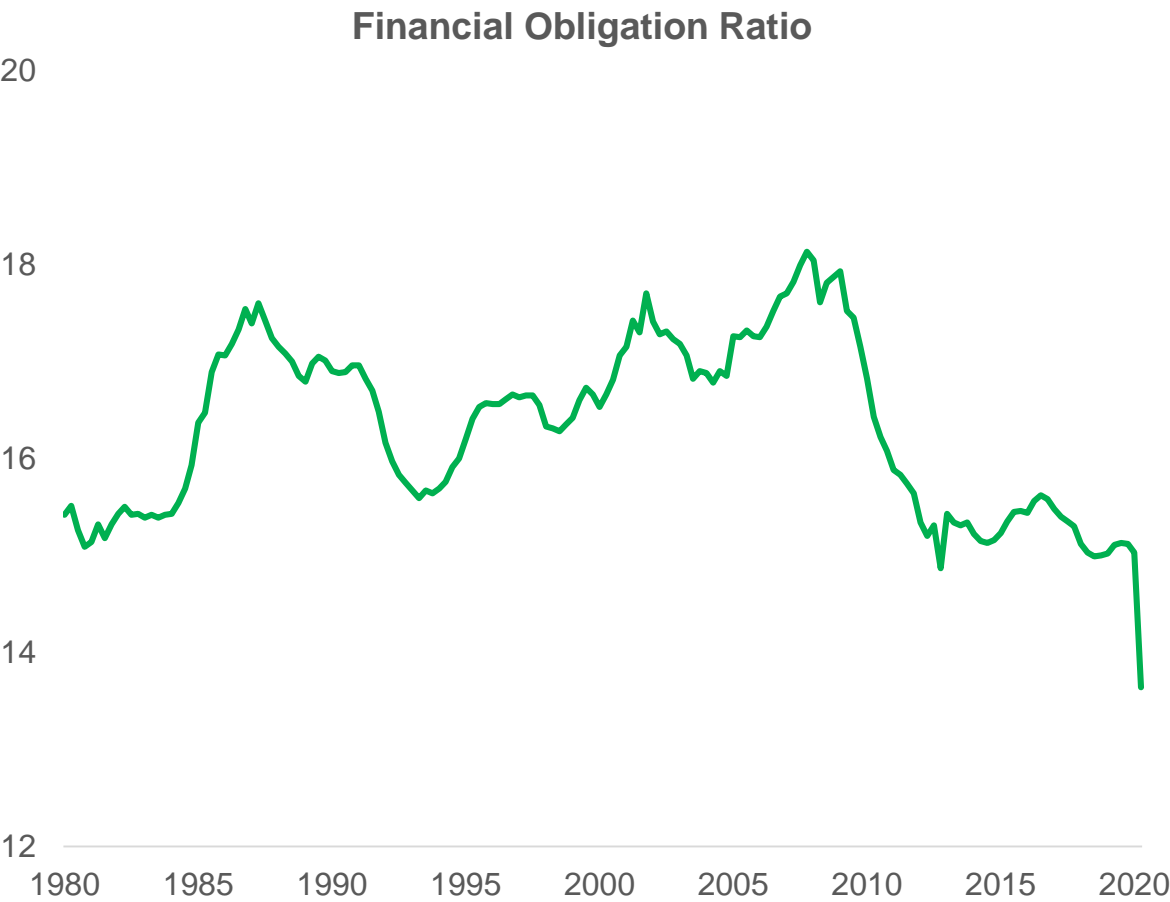


While Housing Affordability is High, the Recent Declines in Mortgage Rates to Record Lows Have Not Led to Higher Affordability



Source: National Association of Realtors (NAR).

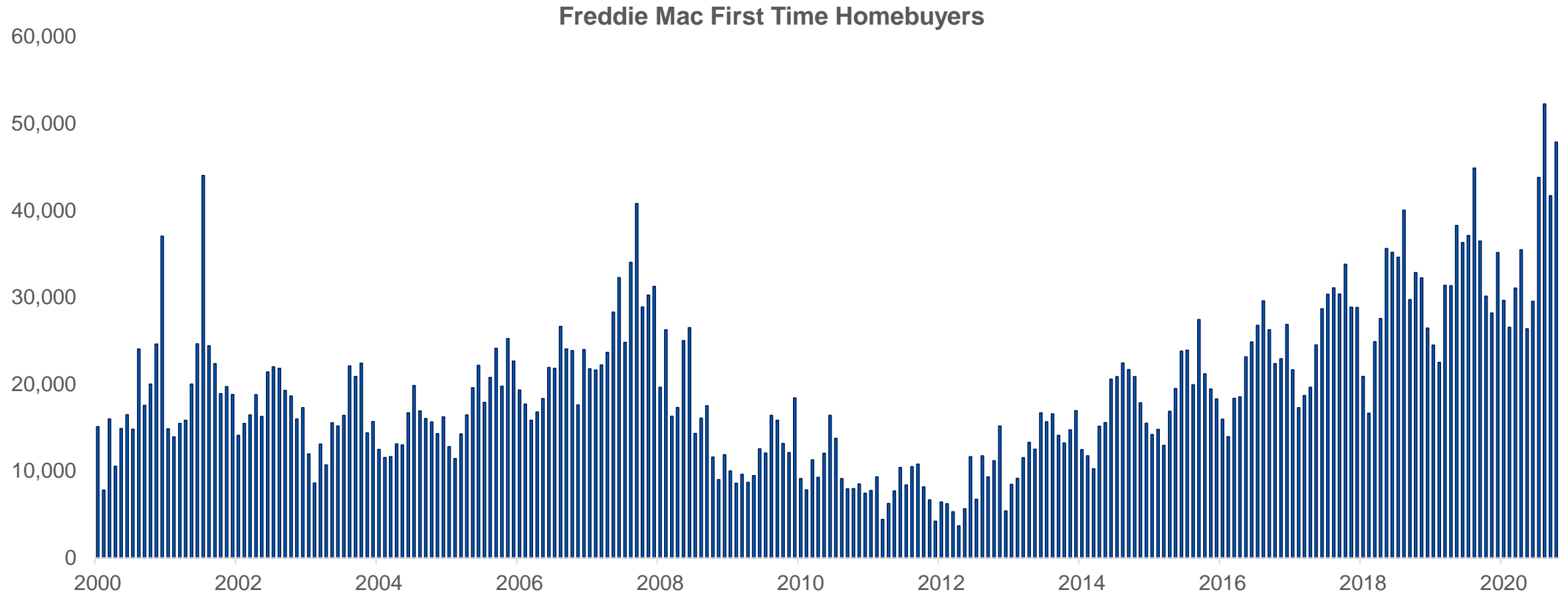
Unlike Previous Recessions Where a Build up of Leverage Occurred, Financial Obligations Today are Much Lower than the Past



Source: FRB.



First Time Home Buyer Purchases are High and Rising

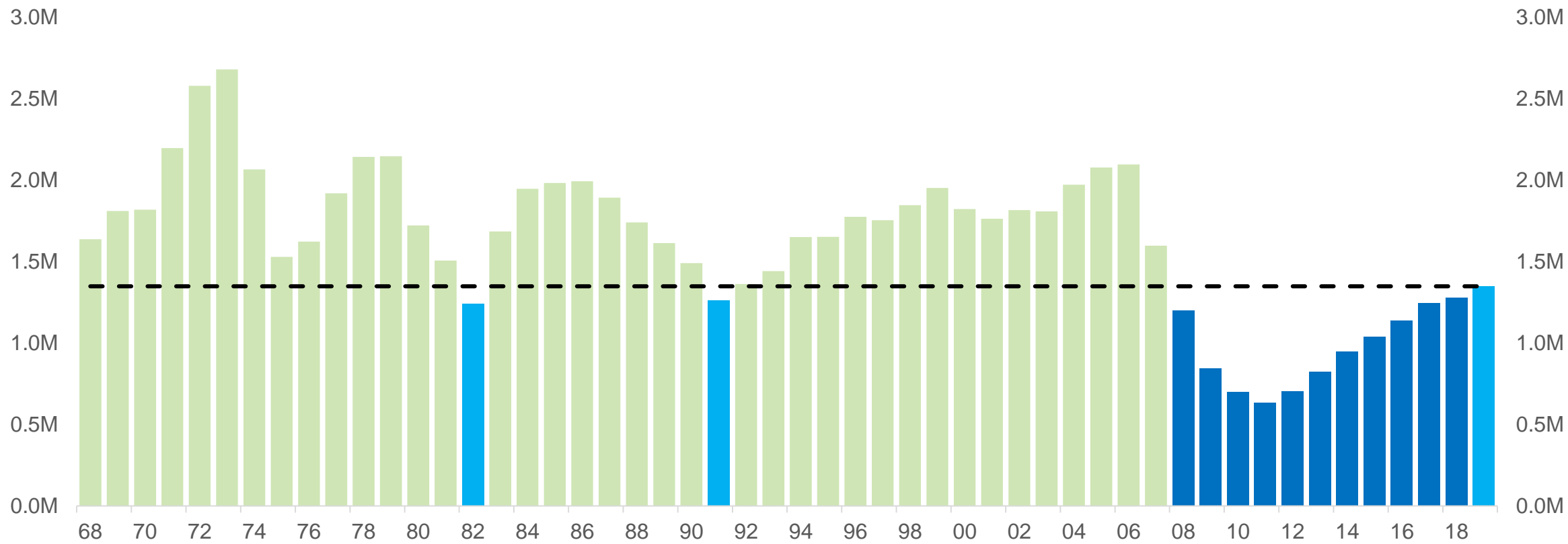


Source: Freddie Mac.

Note: Date represents funding date.

Coming Into the Recession, New Supply of Homes was Low

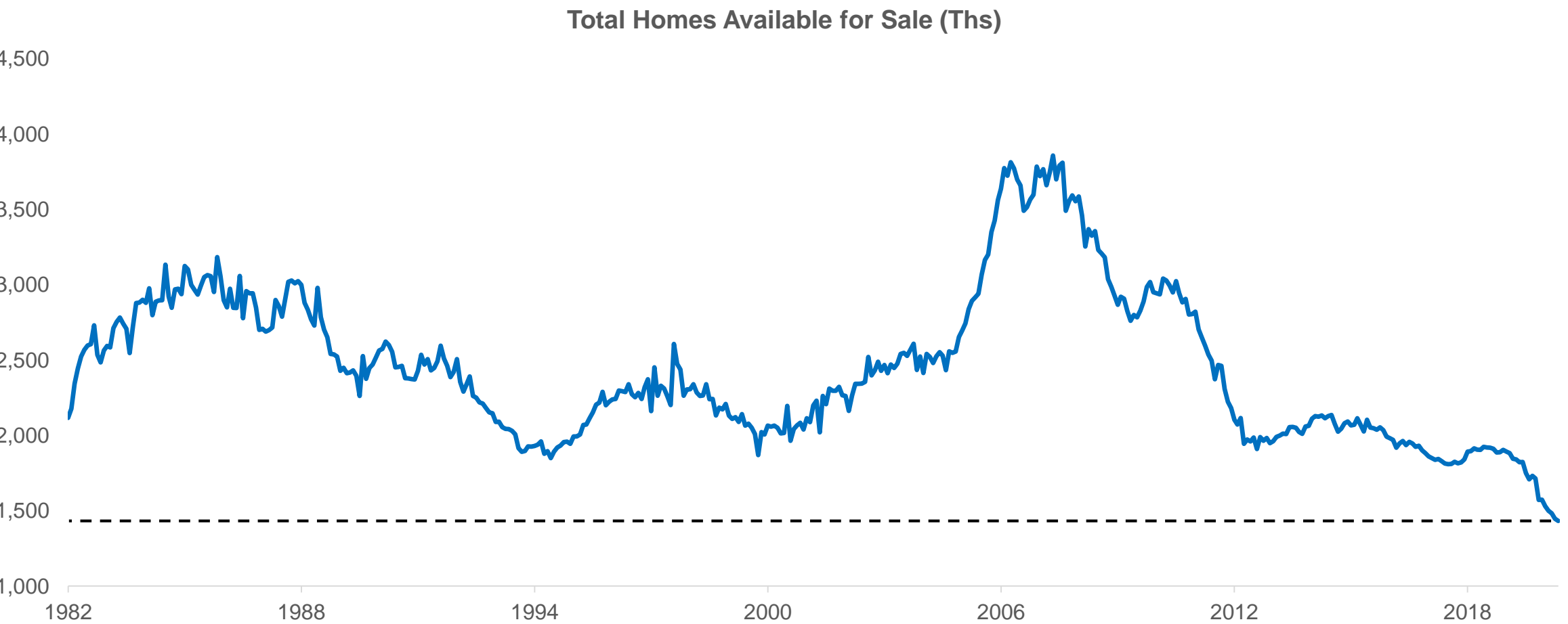
U.S. Annual Housing Completions and Manufactured Home Shipments



Source: U.S. Census Bureau and Department of Housing and Urban Development, Institute for Building Technology & Safety.



Unsold Inventory of Homes is at Record Lows

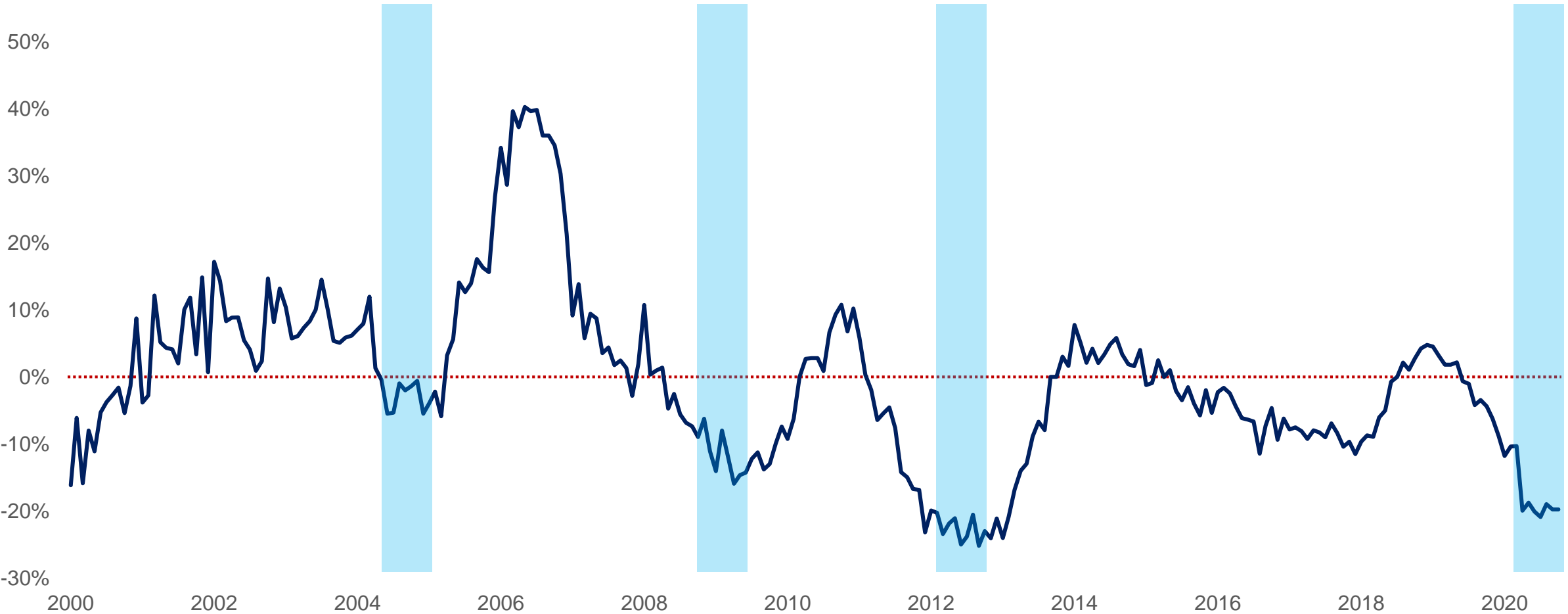


Source: US Census Bureau, NAR; HVS.



Decline in Unsold Inventory of Homes is Large

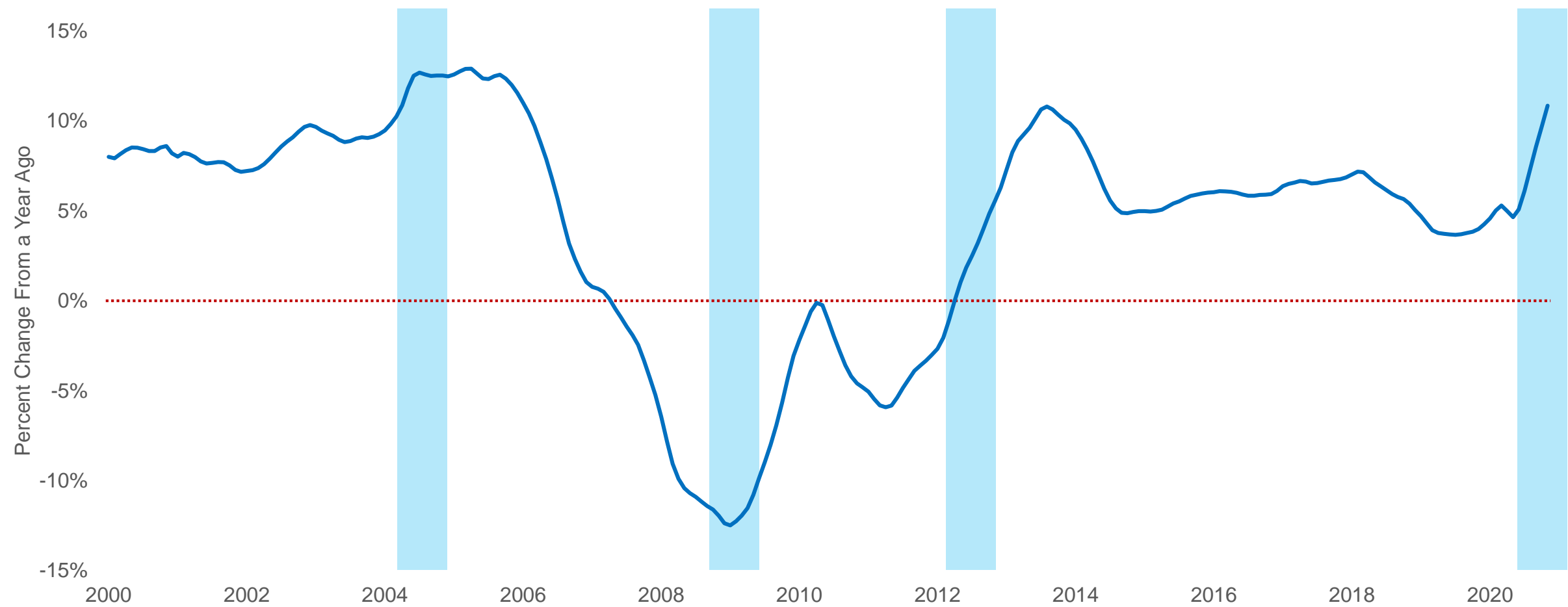
Single-Family Homes for Sale - Percent Change from Year Ago



Source: National Association of Realtors (NAR).

Rise in Demand and Very Tight Supply Leads to a Surge in Home Price Growth

Freddie Mac Home Price Index - Percent Change from Year Ago

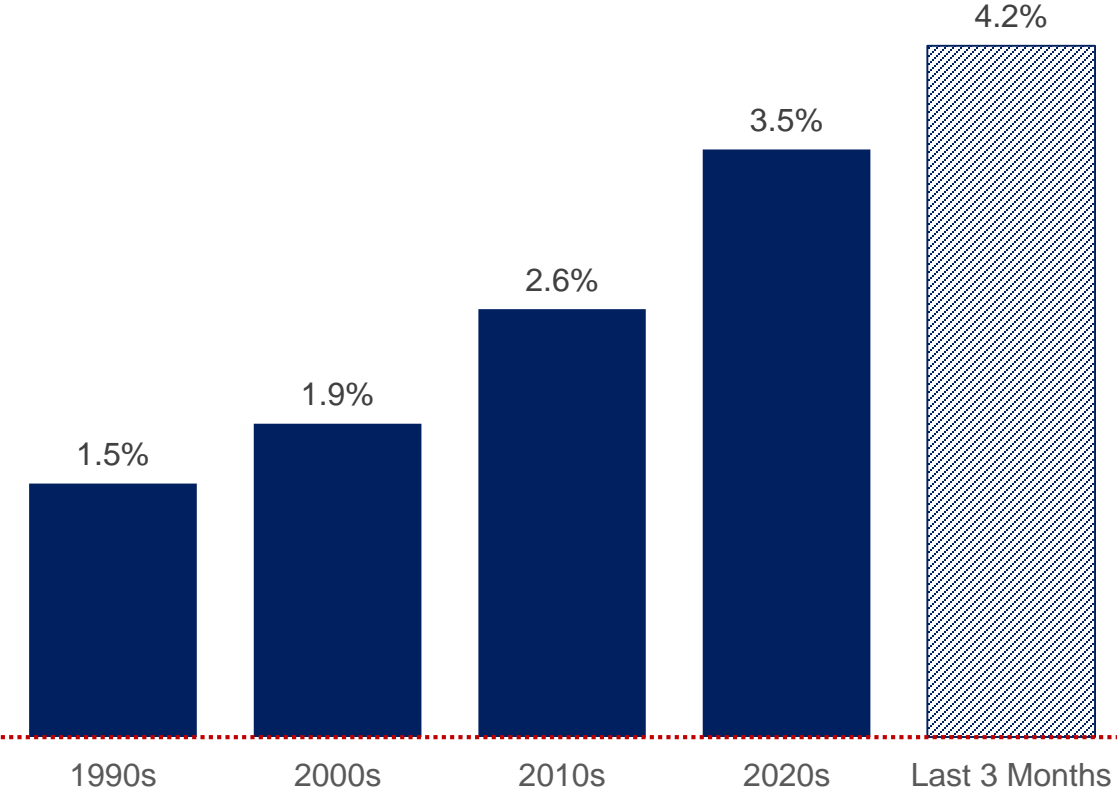


Source: Freddie Mac House Price Index, NSA.

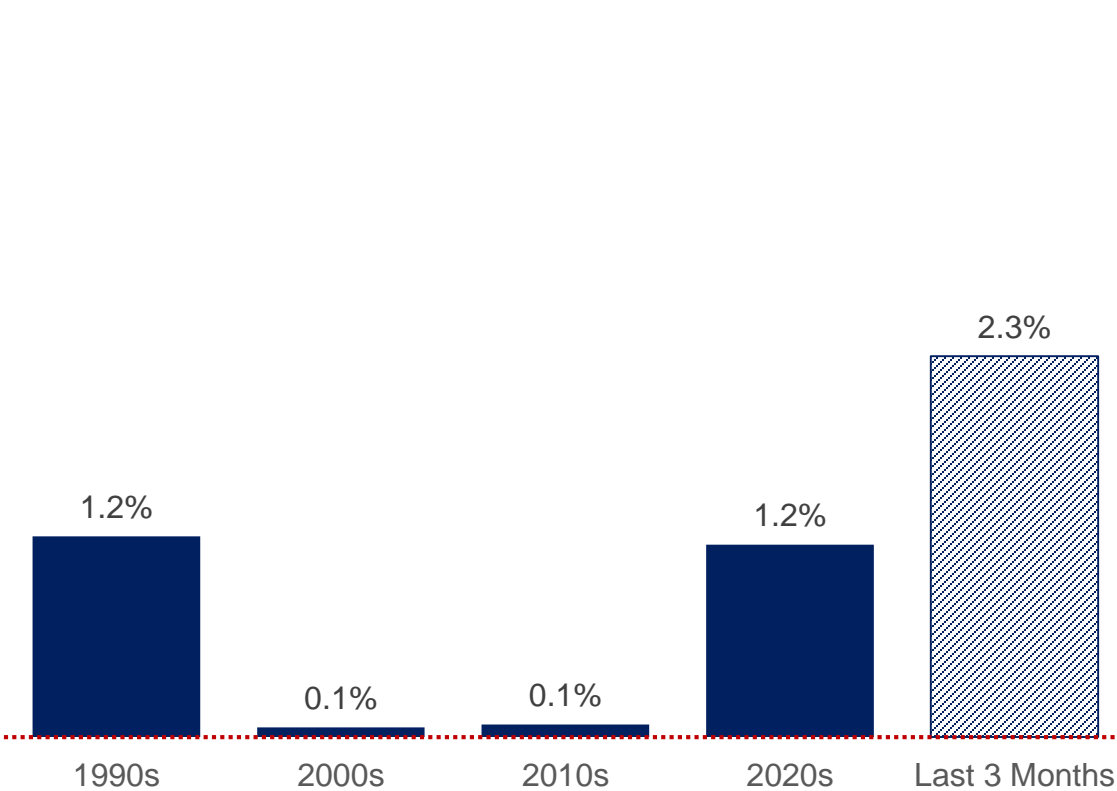


Low Priced and Detached Homes are Leading the Home Price Recovery

Low-Price Tier vs High-Price Tier **Average Difference**
in Price Appreciation by Decade



Detached Home vs Attached Home **Average Difference**
in Price Appreciation by Decade



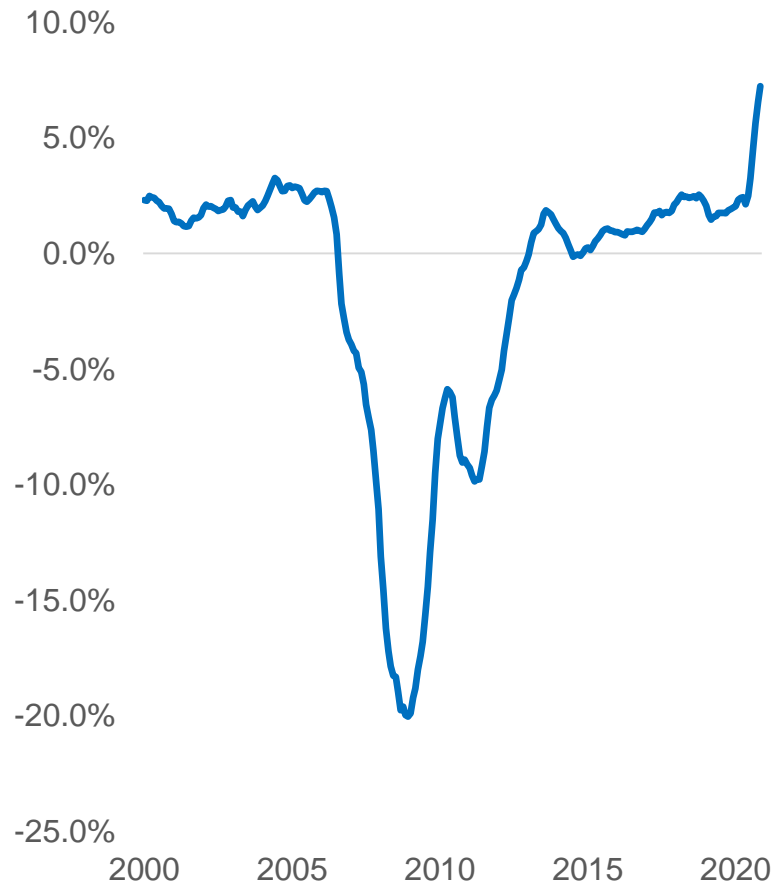
Source: Corelogic.



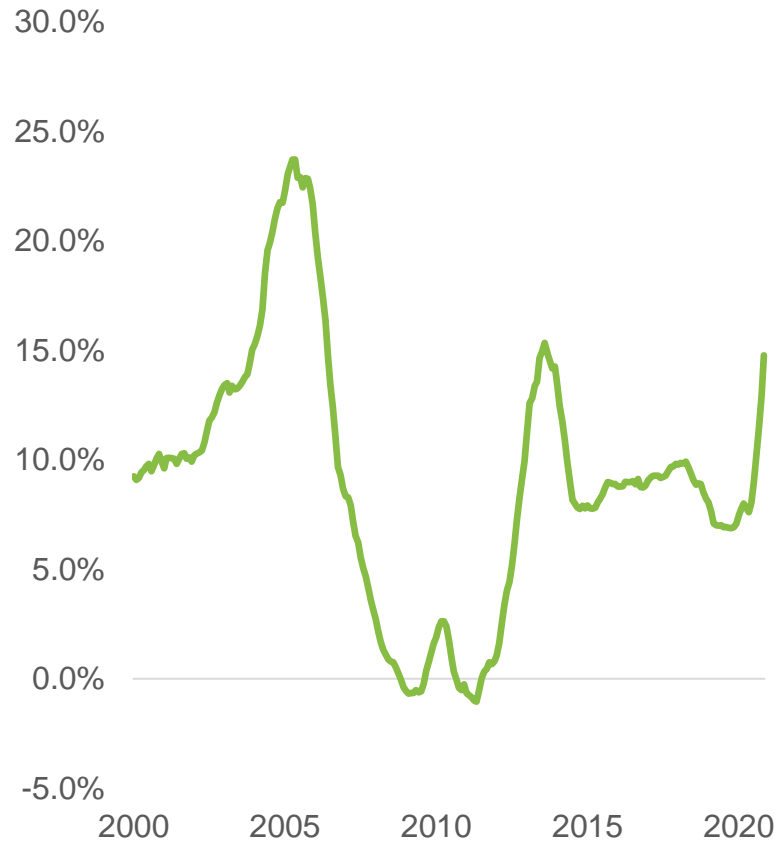
Home Price Growth is Driven By the Bottom of the Price Distribution

Distributional Year Ago Home Price Growth by MSA

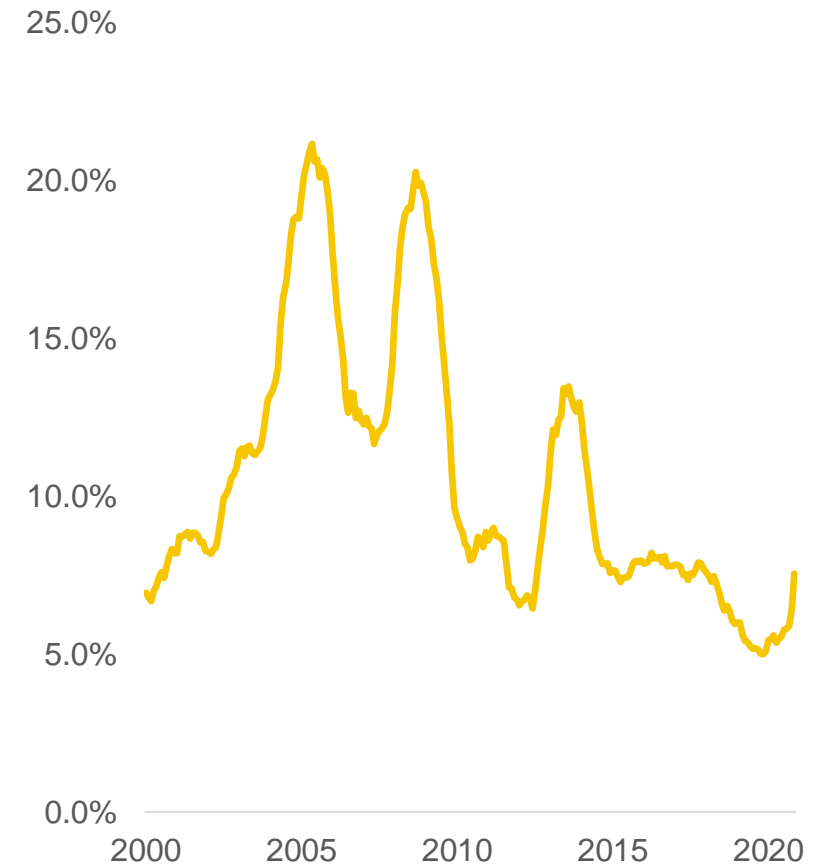
10th Percentile



90th Percentile



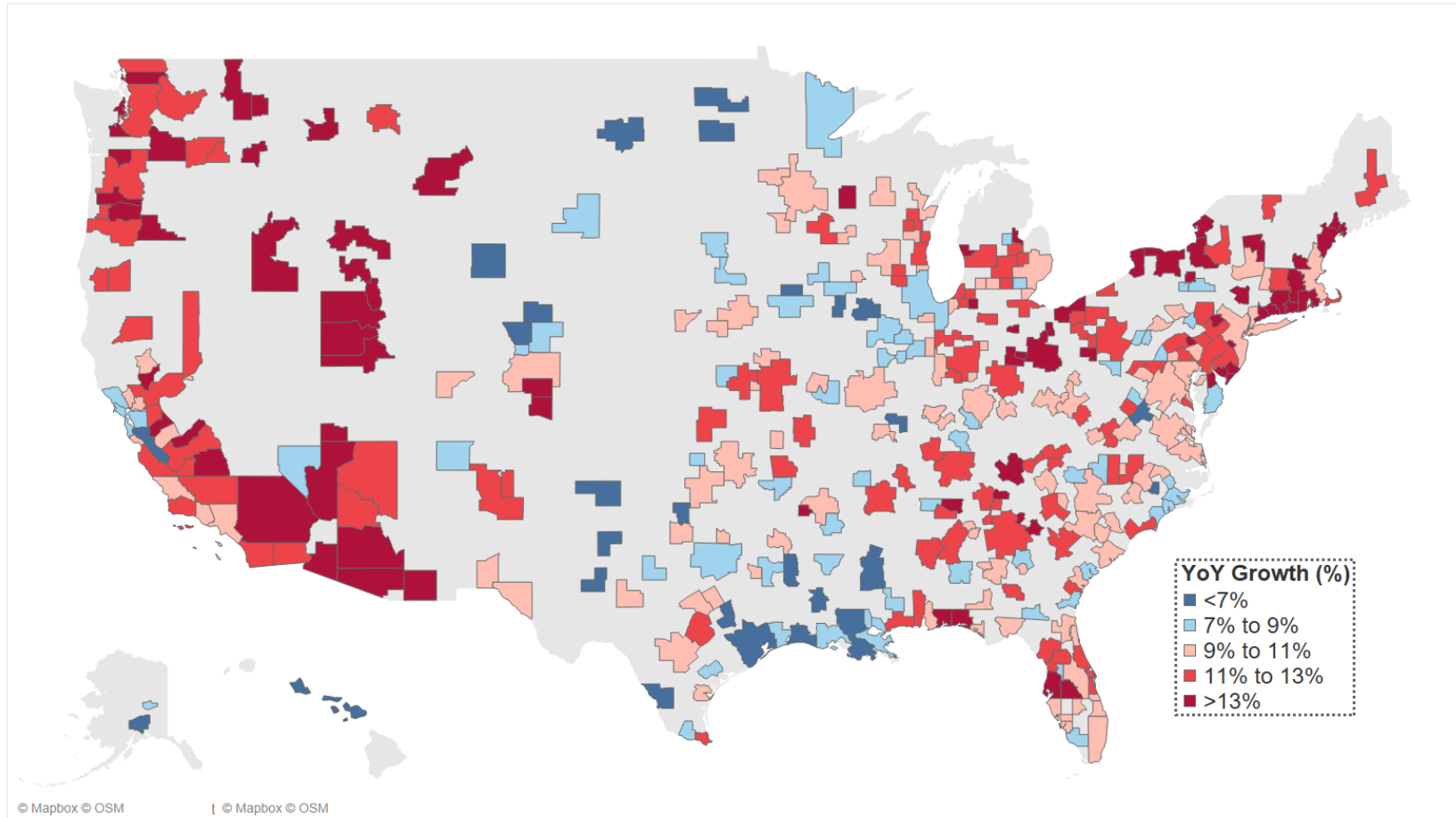
90th & 10th Percentile Spread



Source: Freddie Mac House Price Index, SA. Data as of Nov, 2020.

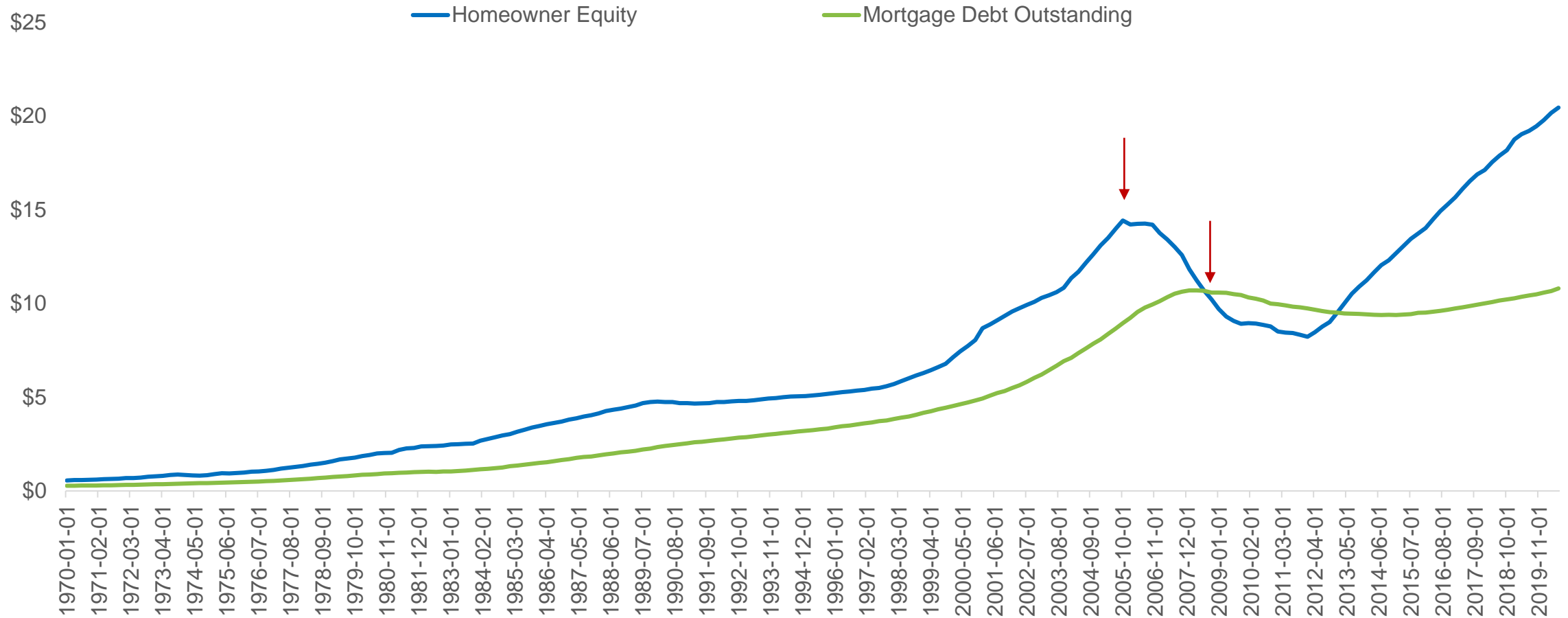
Rebound in Home Prices Occurring Primarily in Interior Parts of the U.S. Especially in the Open West, South and Midwest

Percent Change in Home Prices from Year Ago by MSA



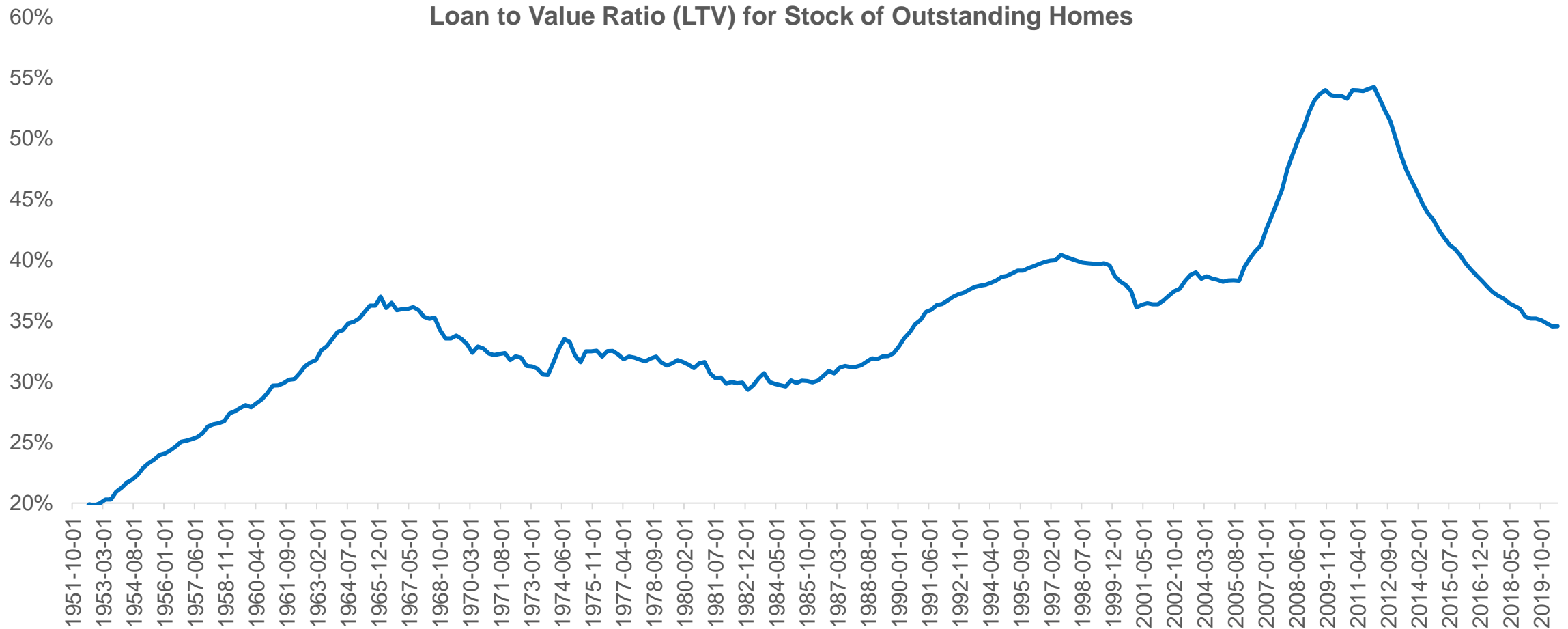
Source: Freddie Mac House Price Index, NSA. Data as of Nov, 2020.

High Home Price Increases Have to Record and Rapidly Rising Homeowner Equity in Real Estate...



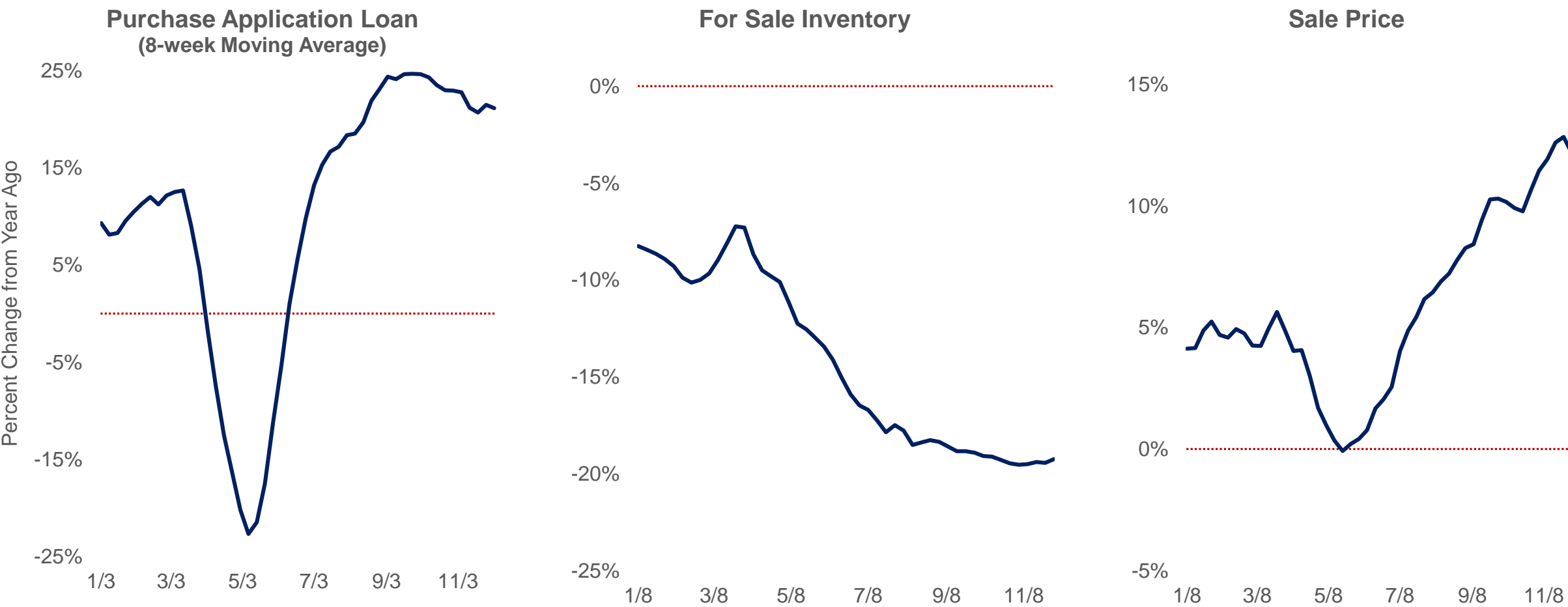
Source: FRB.

...Which Has Led to Low and Declining LTVs for Homeowners



Source: FRB.

As of Mid-December the Housing Market Remains Red Hot But is Peaking



Source: CoreLogic, MBA.
Note: Inventory and Sale Price is a two-week moving average.

Freddie Mac ACIS® 2020 Recap and 2021 Outlook

Servicing and Business Updates

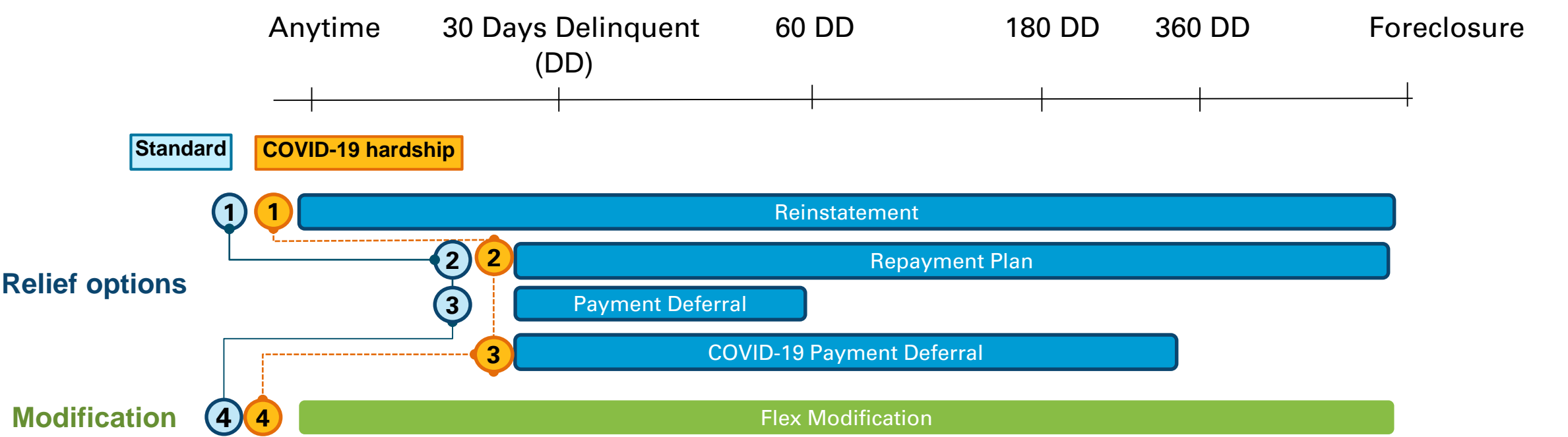
Benjamin Gottheim

Senior Director, Single-Family Mortgage Servicing Policy



How to evaluate a borrower after forbearance

After forbearance, a borrower must be evaluated for a workout to bring the loan current, whether it be a relief option or a modification. There are two evaluation hierarchy tracks – it depends if the hardship is related to COVID-19.



Freddie Mac ACIS® 2020 Recap and 2021 Outlook

ACIS Recap and 2021 Strategy

Jeff Shue

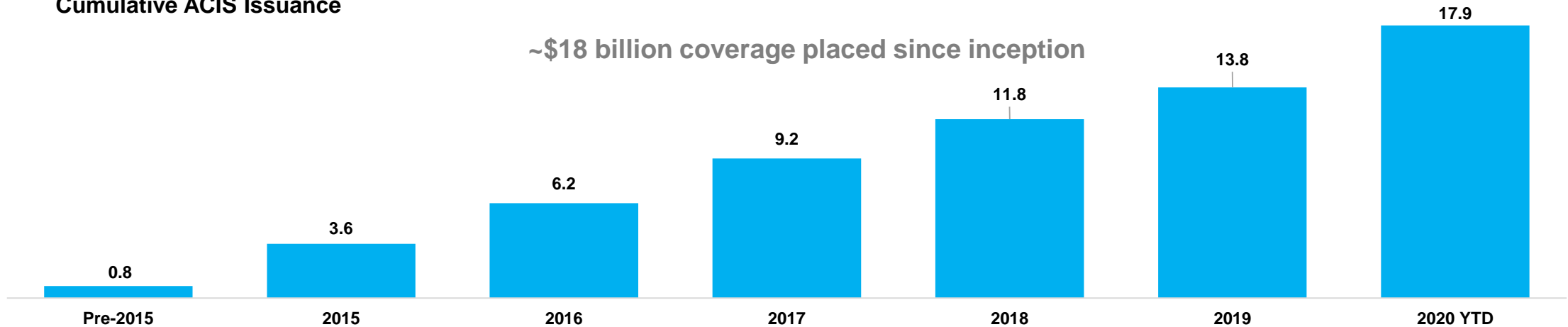
Director, Single-Family Credit Risk Transfer



ACIS Program History

“Credit risk transfer (CRT) has become, in relatively quick order, a core component of the business model of the two Government-Sponsored Enterprises (GSEs), Freddie Mac and Fannie Mae, and very substantially improves that business model.” - Don Layton

Cumulative ACIS Issuance



Pre 2016

- Pioneered first reinsurance transactions in GSE CRT market – offered both direct and indirect means of participation
- Developed key relationships with global reinsurers, brokers, and service providers
- Established legal, counterparty and ops framework that prudently manages these growing insurance relationships

2016-2019

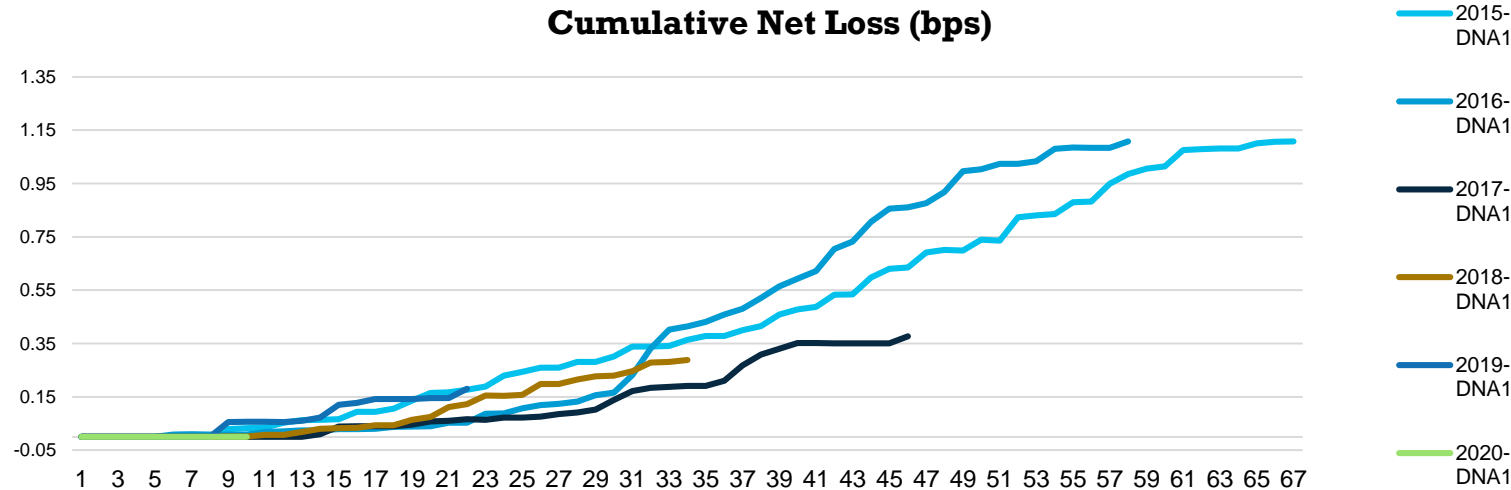
- Diversified reinsurer panel
- Launched ACIS Standalone (SAP), ACIS Forward (AFRM), ARMR series (HARP), and sold seasoned B2 risk (FTR)
- Introduced 5-year call option

2020

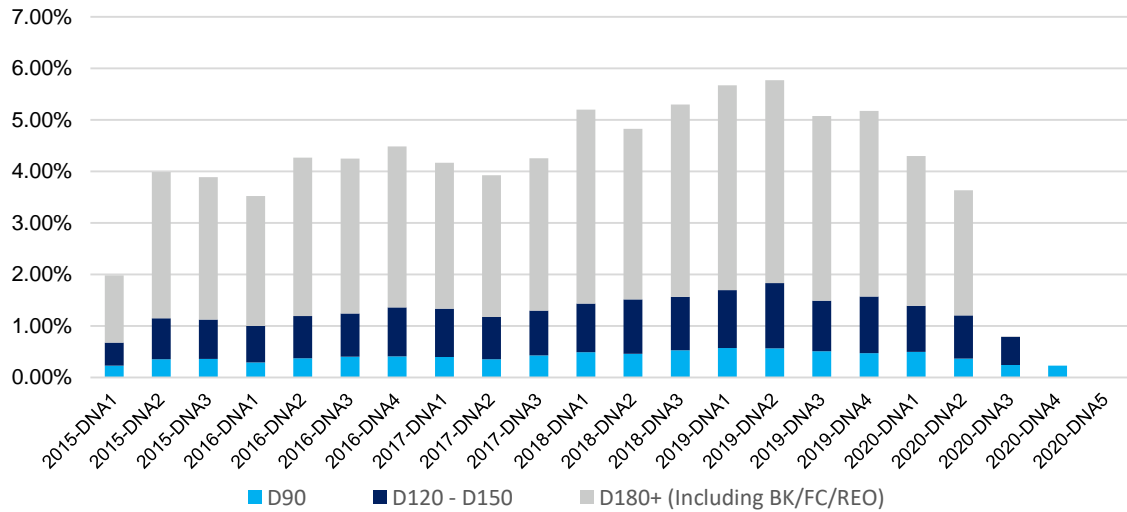
- 2nd largest quarter of issuance in program history (\$1.7 B in Q3)
- Priced ACIS 2020-AFRM1 in June 2020, restarting ACIS issuances after COVID-19 pandemic hit
- 60+ Transactions in 8 years

Portfolio Performance

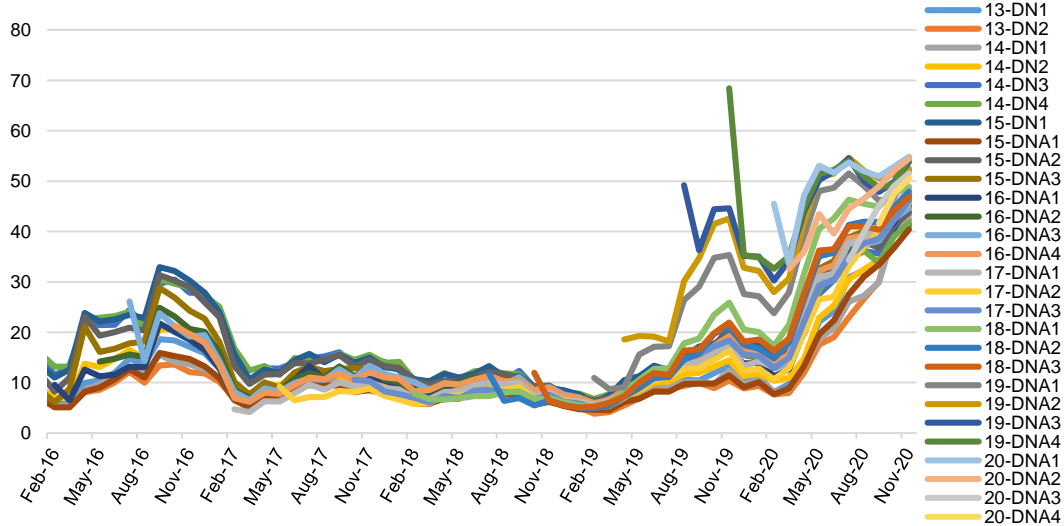
Cumulative Net Loss (bps)



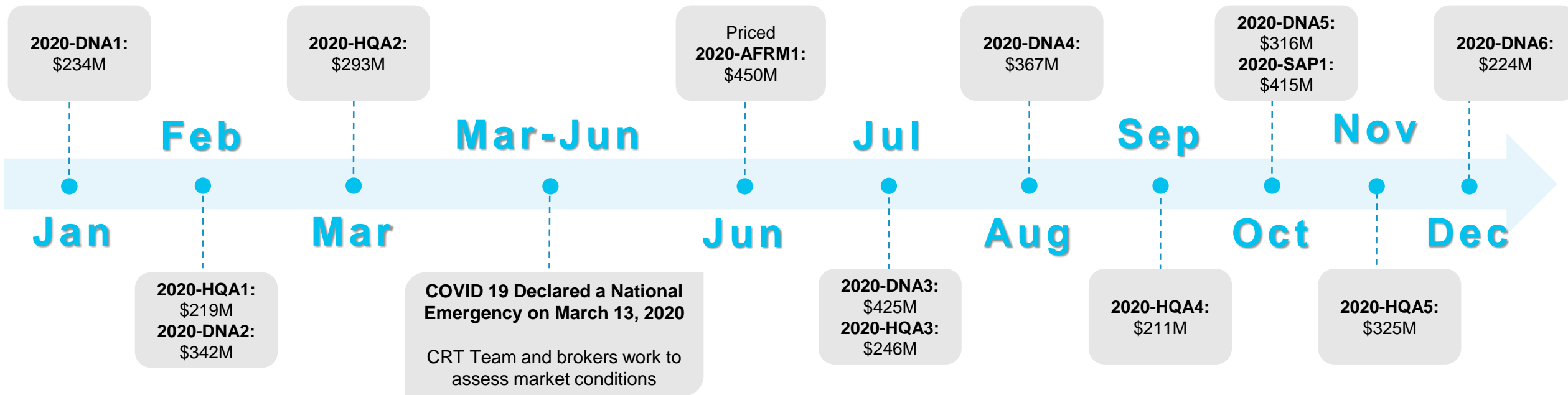
Delinquent Status (% of Current Balance)



Voluntary Prepayment Rate (% by Balance)



ACIS Timeline



2020 Reference Pool Characteristics

	ACIS 2020-DNA1	ACIS 2020-DNA4	ACIS 2020-DNA6
UPB at Closing	\$29,640,725,052	\$41,931,751,930	\$38,814,518,840
Current UPB*	\$16,251,880,261	\$35,582,385,908	\$38,814,518,840
PC Securitization Period	April 1, 2019 – June 30, 2019	January 1, 2020 – March 31, 2020	May 16, 2020 – June 30, 2020
Number of Loans	117,581	157,160	129,438
Average Balance	\$252,088	\$266,809	\$299,870
Weighted Average Original LTV (%)	76	75	74
Original LTV Distribution (%)	61 to 65 ... 6 66 to 70 ... 12 71 to 75 ... 22 76 to 80 ... 59	61 to 65 ... 7 66 to 70 ... 16 71 to 75 ... 26 76 to 80 ... 51	61 to 65 ... 9 66 to 70 ... 21 71 to 75 ... 28 76 to 80 ... 41
Weighted Average Coupon (%)	4.536	3.942	3.434
Weighted Average Credit Score	752	754	757
Credit Score Distribution (%)	<680 ... 7 680 to 719 ... 16 720 to 759 ... 27 760 to 779 ... 18 ≥780 ... 32	<680 ... 5 680 to 719 ... 15 720 to 759 ... 28 760 to 779 ... 19 ≥780 ... 32	<680 ... 4 680 to 719 ... 14 720 to 759 ... 26 760 to 779 ... 20 ≥780 ... 36
Weighted Average Debt-to-Income Ratio (%)	36 (1 to 50)	36 (1 to 51)	34 (1 to 50)
Debt-to-Income Distribution (%)	0 to 30 ... 29 31 to 40 ... 34 41 to 50 ... 38	0 to 30 ... 30 31 to 40 ... 33 41 to 60 ... 37	0 to 30 ... 38 31 to 40 ... 34 41 to 50 ... 29

*STACR 2020-DNA6 values indicated are as-of the Cut-Off Date; other values indicated are as of the November 2020 remittance report.

ACIS 2021 Calendar

2020

24
Returning
Accounts

3
New Accounts

\$4.1B
Cumulative
Issuance

2021 STACR® and ACIS® Issuance Calendar

	Q1	Q2	Q3	Q4
2021 STACR ISSUANCES	DNA1 HQA1 DNA2	DNA3 HQA2 DNA4	DNA 5 HQA3	DNA6 HQA4
2021 ACIS ISSUANCES	DNA1 HQA1 DNA2	DNA3 HQA2 DNA4	DNA5 HQA3	DNA6 HQA4

Freddie Mac retains sole discretion over whether or not the issuances come to market and the timing thereof, which may be impacted by market conditions. As such, the information contained in this calendar does not guarantee the timing of any future Freddie Mac offerings or the type of such offerings, or the amount of such offerings. Freddie Mac may, pending market conditions, bring additional off-the-run deals to market. This calendar may be amended, superseded or replaced. Please use this issuance calendar for informational purposes only. This calendar is not an offer to sell any Freddie Mac securities.

Freddie Mac ACIS® 2020 Recap and 2021 Outlook

Deal Performance Update

Charlotte Gladwin

Director, Single-Family Credit Risk Transfer



Panel Discussion: State of the Market



JEFF SHUE

Director
Single-Family Credit Risk Transfer
Freddie Mac



JEFF KROHN

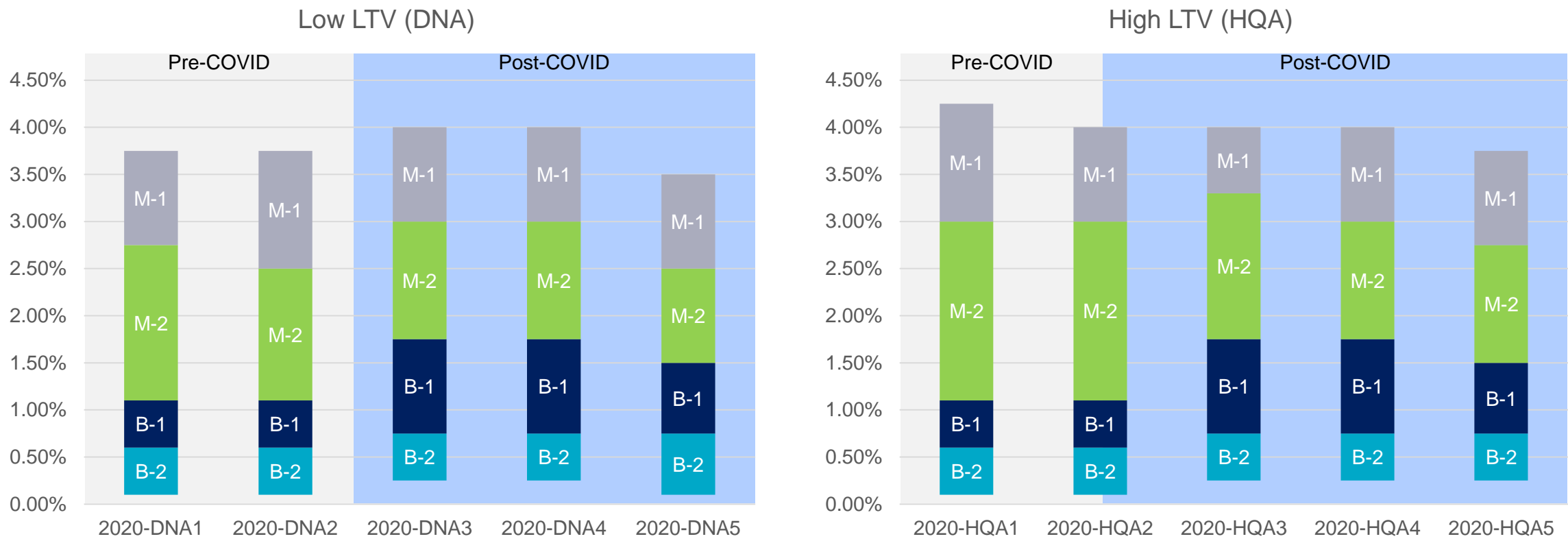
Managing Director
Guy Carpenter



**JOE
MONAGHAN**

Chief Executive Officer
Public Sector Partnership
Aon

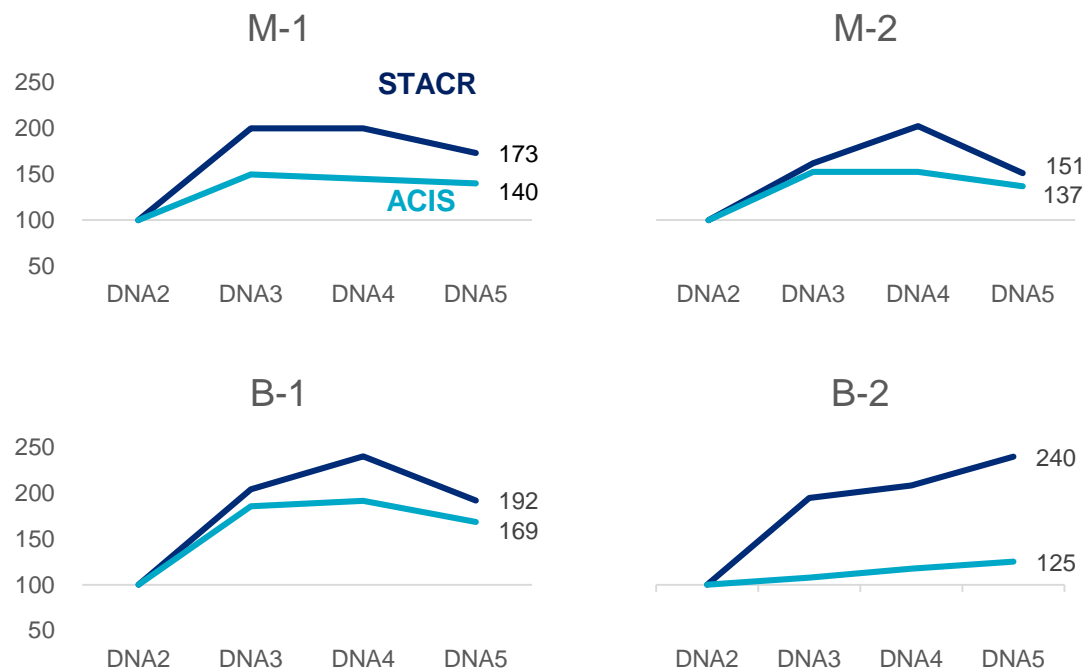
Attachment Points Generally Higher in Post-COVID Placements



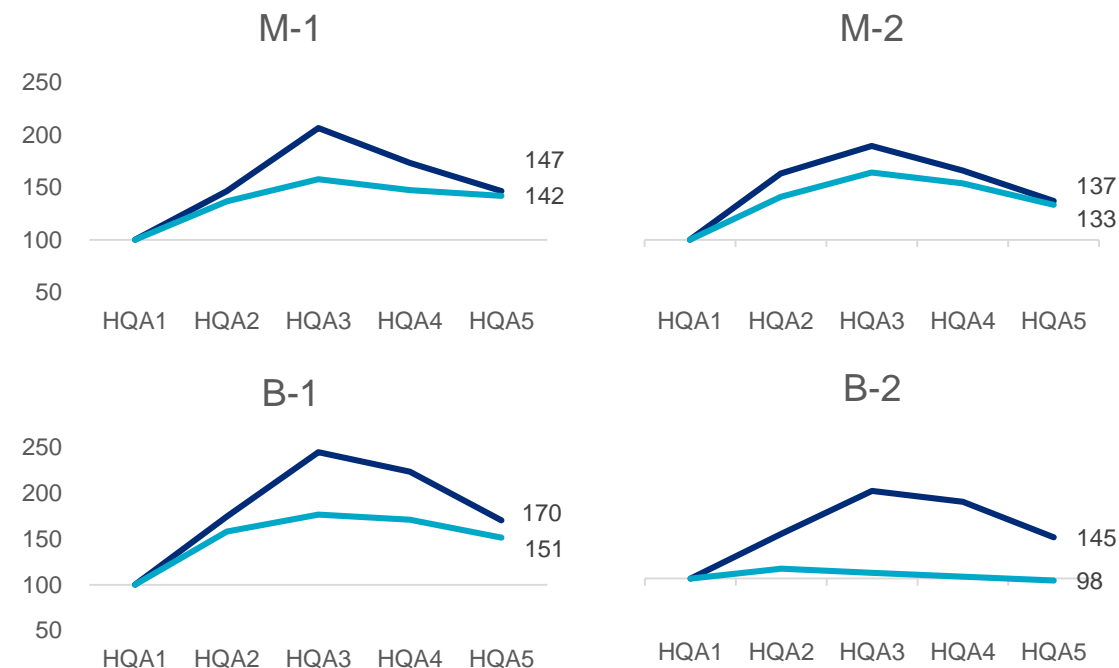
Note: ACIS 2020-HQA2 was bound March 13th as the COVID-19 crisis was unfolding. STACR 2020-HQA2 had priced earlier in the week, March 10, 2020

ACIS Pricing Less Volatile Following COVID

Low LTV (DNA)



High LTV (HQA)

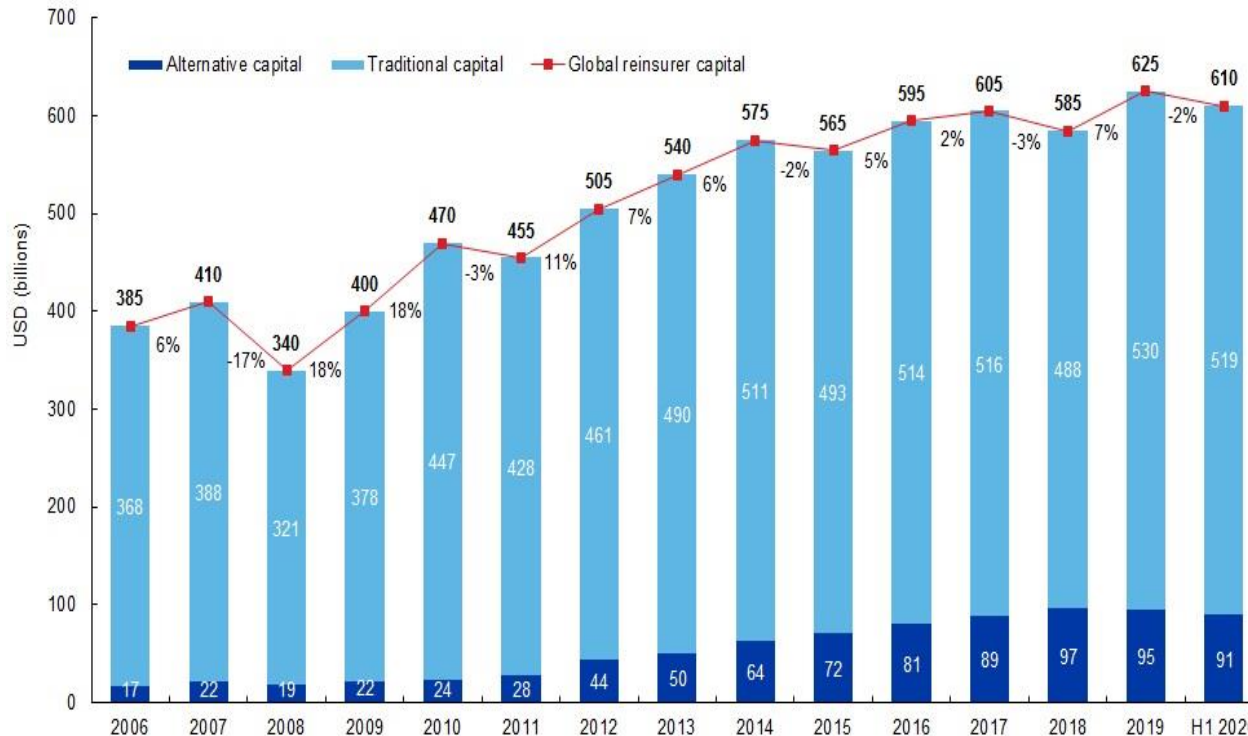


- Higher STACR spreads driven in part by the loss of leveraged investors reliant on short term financing that dried up following COVID
- Reinsurers (buy-and-hold investors) not impacted by the same exogenous factors as capital markets and fundamentally guided more by their view of risk

Source: GC Analytics, Freddie Mac; Base of 100.0 reflects spread at issuance for the last placement pre-COVID (DNA2 and HQA1)
 Analysis makes no attempt to adjust for changes in attachment and detachment points. Nominal spreads used for STACR and nominal ROLs used for ACIS (i.e., option-adjusted spreads not used)

Overview of Global Reinsurer Capital

Global Reinsurer Capital



Figures in \$ Billions

Sources: Company financial statements, Aon Business Intelligence, Aon Securities Inc.

Impact of Covid-19

- According to S&P, the top 20 global reinsurers reported about \$12B in COVID-19 losses year-to-date in 2020
 - S&P also forecasts that the top 20 reinsurers will generate:
 - Combined ratios of 103%-108% in 2020 and 97%-101% in 2021
 - ROEs of 0%-3% in 2020 and 5%-8% in 2021
- Global reinsurers continue to remain well capitalized with \$610B in capital as of Q2 2020
 - Aon estimated global reinsurer capital dropped by a modest 2% over the first half of 2020

Source: S&P Global Ratings. (September 8, 2020). Black Swan Or Not, COVID-19 Is Disrupting Global Reinsurers' Profitability
<https://www.spglobal.com/ratings/en/research/articles/200908-black-swan-or-not-covid-19-is-disrupting-global-reinsurers-profitability-11639467>

Questions?



Corporate HQ
1551 Park Run Dr
McLean VA 22102

Freddie Mac ACIS® 2020 Recap and 2021 Outlook

Closing Remarks

Jeff Shue

Director, Single-Family Credit Risk Transfer



Thank you!



Corporate HQ
1551 Park Run Dr
McLean VA 22102

Speaker Biographies



Credit Risk
Transfer

ACIS Recap and 2021 Strategy/Closing Remarks



JEFF SHUE

Director, Single-Family Credit Risk Transfer

Jeff Shue is a director in the Credit Risk Transfer division within the Single-Family business. His work includes leading the product development and management efforts for Agency Credit Insurance Structure (ACIS), Freddie Mac's reinsurance credit risk transfer vehicle. The program has transferred risk on \$1.5 trillion of Single-Family loans across 57 transactions since inception in 2013.

Mr. Shue has 19 years of experience in mortgage finance and credit risk management. Since 2002, he has held several positions at Freddie Mac in the pricing, costing, capital and credit modeling groups, and led the development of the ACIS program from 2012 to 2016. Between 2016 and prior to returning to Freddie Mac in 2019, Mr. Shue worked as a managing director in Aon Plc's Credit Guaranty and Government group, focused on building new reinsurance-based CRT solutions for commercial and public entity clients.

Mr. Shue holds degrees from Cornell University and American University.

Business Overview



MIKE REYNOLDS

Vice President, Single-Family Credit Risk Transfer

Mike Reynolds is the vice president of Freddie Mac's Single-Family Credit Risk Transfer (CRT) program. CRT comprises capital markets, reinsurance, and mortgage insurance, including the Structured Agency Credit Risk (STACR®) and Agency Credit Insurance Structure (ACIS®) family of credit securities – multi-billion dollar programs that transfer mortgage credit risk to private investors.

Mr. Reynolds has over 20 years of GSE experience and joined Freddie Mac in 2012 to help launch the Single-Family CRT program. Prior to Freddie Mac, he was vice president of strategic initiatives at Fannie Mae. Earlier in his career, he worked on automated underwriting.

Mr. Reynolds holds a Bachelor of Science in business administration from Northeastern University and a Master of Science in finance from George Washington University.

Economic and Housing Market Update



SAM KHATER

Vice President and Chief Economist, Economic and Housing Research

Sam Khater is vice president, chief economist and head of Freddie Mac's Economic and Housing Research division. He is responsible for research, analysis and forecasts of the macroeconomy, with a special focus on housing and mortgage markets.

Mr. Khater came to Freddie Mac from CoreLogic, where he served as vice president of research and deputy chief economist. His responsibilities included producing original research and advising clients, regulators, policymakers and investors on real estate and mortgage market trends. As a compelling spokesperson with a unique ability to translate complicated subjects, he is regularly quoted in national, local and real estate trade media outlets.

Prior to joining CoreLogic, Mr. Khater was a senior economist at Fannie Mae and an economist at the National Association of Realtors®.

Servicing and Business Update



BENJAMIN GOTTHEIM

Senior Director, Single-Family Mortgage Servicing Policy

Ben Gottheim is director of mortgage servicing policy in Freddie Mac's Single-Family division. He and his team are responsible for creating policy regarding all aspects of mortgage servicing – this includes updates to the Freddie Mac *Single-Family Seller/Servicer Guide* and other terms of business. Prior to his current role, he spent his first two years at Freddie Mac managing a department responsible for foreclosure performance, timelines and compensatory fees.

Before joining Freddie Mac, Mr. Gottheim was an NPL buyer at a small mortgage company in Albany, New York, where he was responsible for purchasing and servicing non-performing mortgage assets and REO.

He earned his B.S. in management from Binghamton University (SUNY) with a double concentration in finance and MIS.

Clarity Demonstration



CHARLOTTE GLADWIN

Director, Single-Family Credit Risk Transfer

Charlotte Gladwin is a director of Credit Risk Transfer in Freddie Mac's Single-Family division, specifically a champion for and curator of data transparency. Ms. Gladwin and her team built Clarity, the Freddie Mac Data Intelligence Portal for the CRT community. She has also been an integral contributor to evolving Freddie Mac's flagship STACR® (Structured Agency Credit Risk) program through its seven-year history, including moving issuances from fixed severity to actual loss.

An industry veteran with 17 years of experience in capital markets, Ms. Gladwin began her career at Freddie Mac as a senior operations analyst before becoming a senior vice president of Brokerage Operations at FBR Capital Markets. She returned to Freddie Mac in her current position in 2013.

Ms. Gladwin holds an MBA in Investment and Financial Services Management and a B.S. in Biochemistry from Virginia Polytechnic and State University.

Market Update



JEFF KROHN

Managing Director, Guy Carpenter

Jeff Krohn leads Guy Carpenter's Global Mortgage Credit Specialty Practice and has more than 25 years of experience in the insurance and reinsurance industry. Jeff's expertise in the mortgage insurance sector has been independently recognized. He was named Risk & Insurance magazine's list of Reinsurance Power Brokers. Guy Carpenter's clients include the Government Sponsored Enterprises and private mortgage insurers across the globe.

Prior to joining Guy Carpenter in 2002, Jeff was with PricewaterhouseCoopers where he worked as a management consultant in the Corporate Strategy Practice for the firm's Insurance Sector. Jeff received his MBA in Finance from Carnegie Mellon's Tepper School of Business and BA in Speech Communications and Mathematics from the University of Maryland

Market Update



JOE MONAGHAN

Chief Executive Officer Public Sector Partnership, Aon

Joe is CEO for Aon's Public Sector Partnership (PSP) which focuses on developing innovative solutions to help governments and other public institutions reduce volatility and increase the resiliency of their mission. The PSP is a global team of talented colleagues that have deep experience serving in government, insurance, reinsurance, and the capital markets.

Prior to his role leading the PSP, Joe was the Strategic Growth Leader for Aon's US reinsurance platform responsible for growth across all lines of insurance. He was also the founder of the Credit & Guaranty, and Government practice which led the development of innovative (re)insurance solutions for Fannie Mae and Freddie Mac to reduce exposure in future housing downturns, FEMA/NFIP to reduce exposure to catastrophic flood loss, and the EXIM Bank of the US to reduce exposure to export finance volatility.

Joe joined Aon in 1998, working initially in Aon Analytics, Aon's actuarial and financial modeling unit, before moving into the brokerage division. Joe graduated from the University of Chicago and is also a Registered Representative of Aon Securities, a member of the FINRA and SIPC.