

Housing under COVID-19

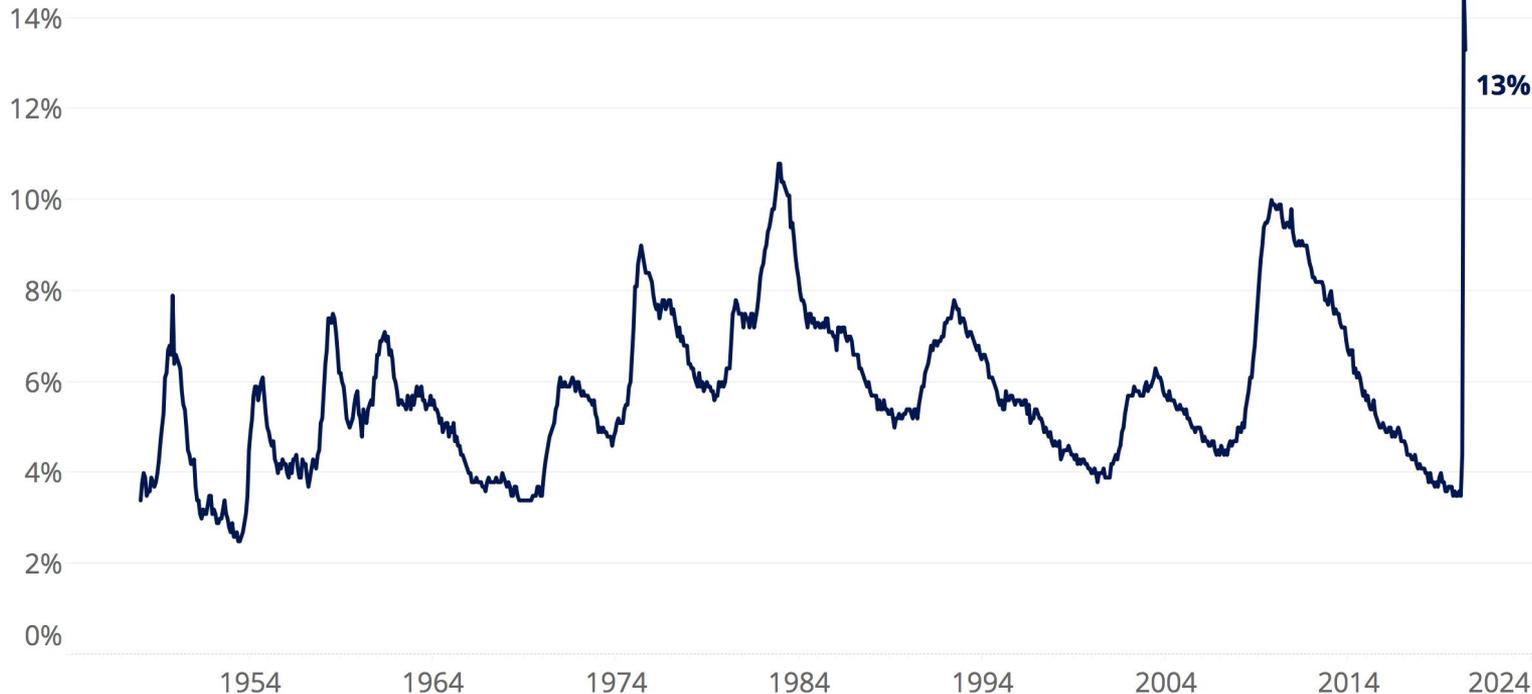
Watching the recovery happen or waiting for the other shoe to drop?
Unprecedented times bring wild uncertainty and a touch of hope.



ZILLOWGROUP

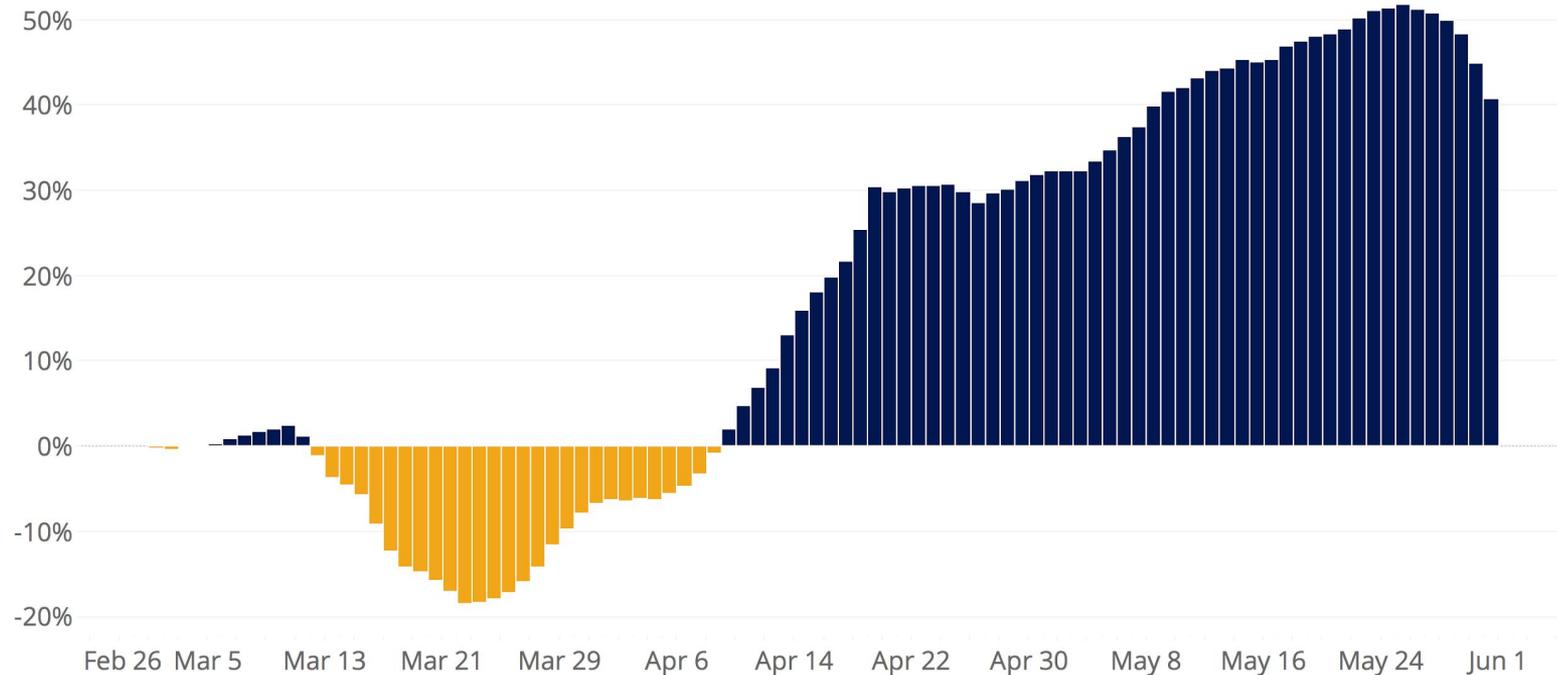
Coronavirus pandemic pushes U.S. into deepest "recession" since Great Depression

U.S. Nonfarm Unemployment Rate



Search on Zillow shows housing is top of mind

Zillow.com **FOR-SALE** visits, 7-day moving average versus baseline



**Unprecedented
crisis meets
for-sale market
is resilience**

The pull back was huge, activity returns as we speak

Buyers return faster than sellers, pushing inventory down to historic lows.

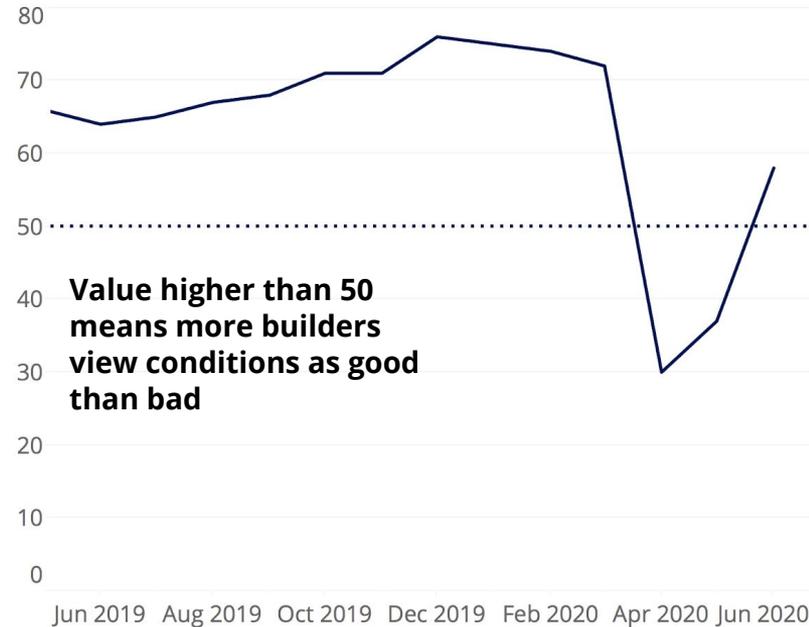


Zillow Economic Research | Source: Zillow Inventory Metrics

Supply side also walloped

Builder confidence recovers some, but still down significantly from early season highs

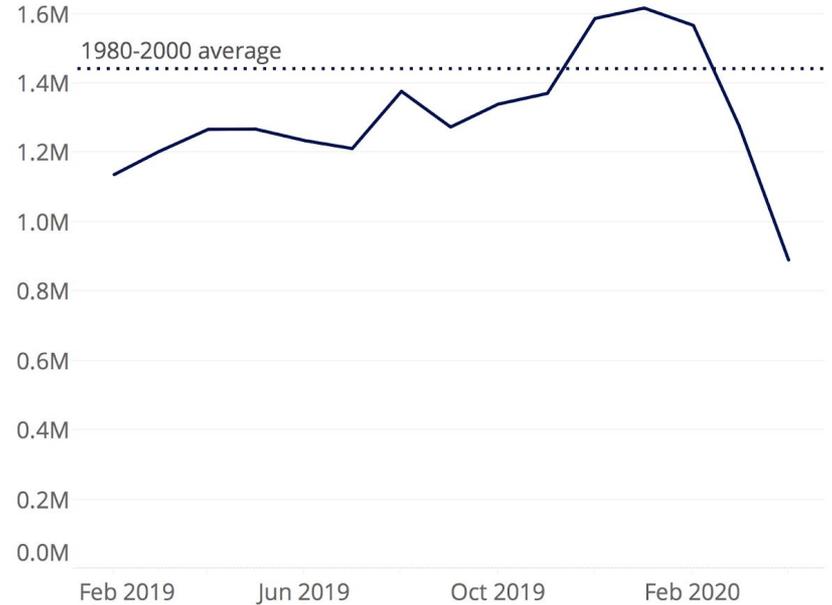
Homebuilder sentiment more than halved in April



Source: National Association of Homebuilders Market Index

March housing starts fell 25% from Jan high

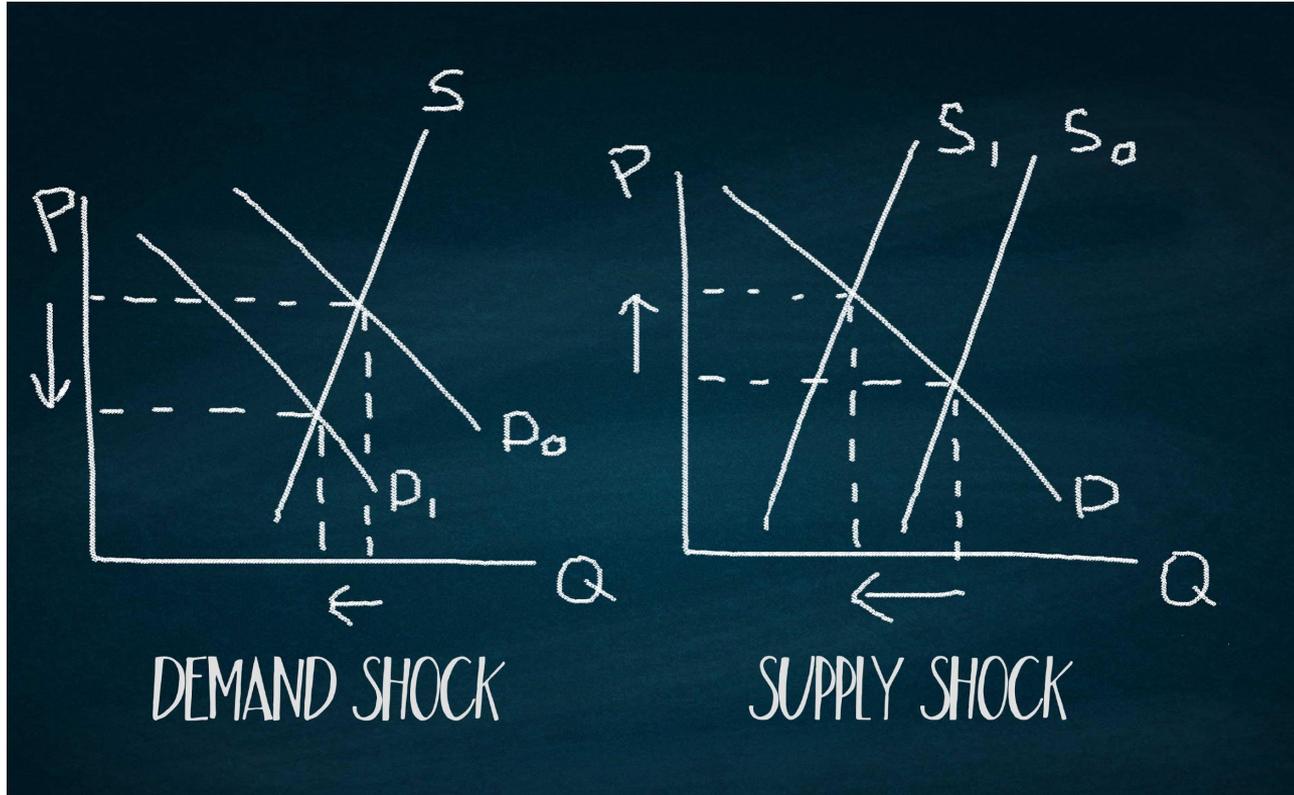
Jan starts numbers reached levels not seen since late 2006 before the Global Financial Crisis



Source: U.S. Census, Survey of New Residential Construction

Simultaneous supply and demand shock

Opposing effect on prices, reinforcing impact on quantities (leases or sales)



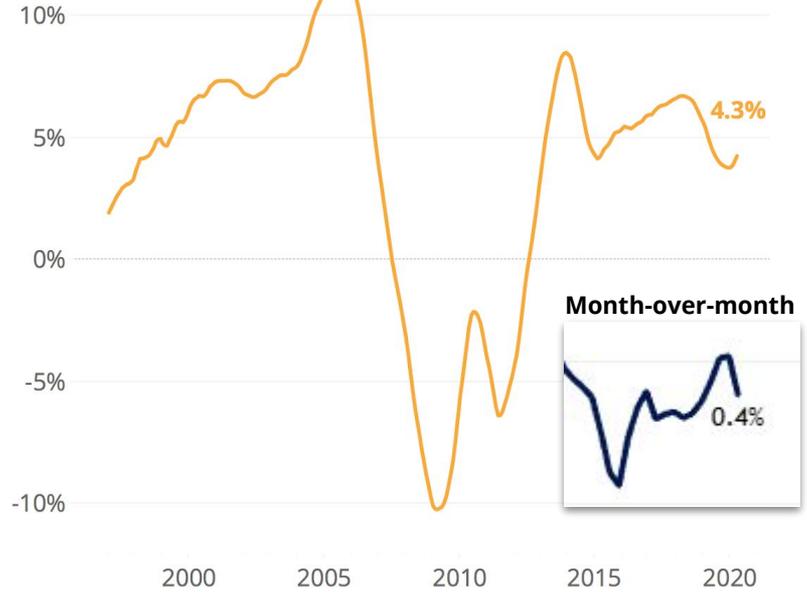
Inventory loss helps stabilize home prices

Buyers expecting to find a discount aren't finding it. The mortgage rate is the deal.

Median list price, Year-Over-Year

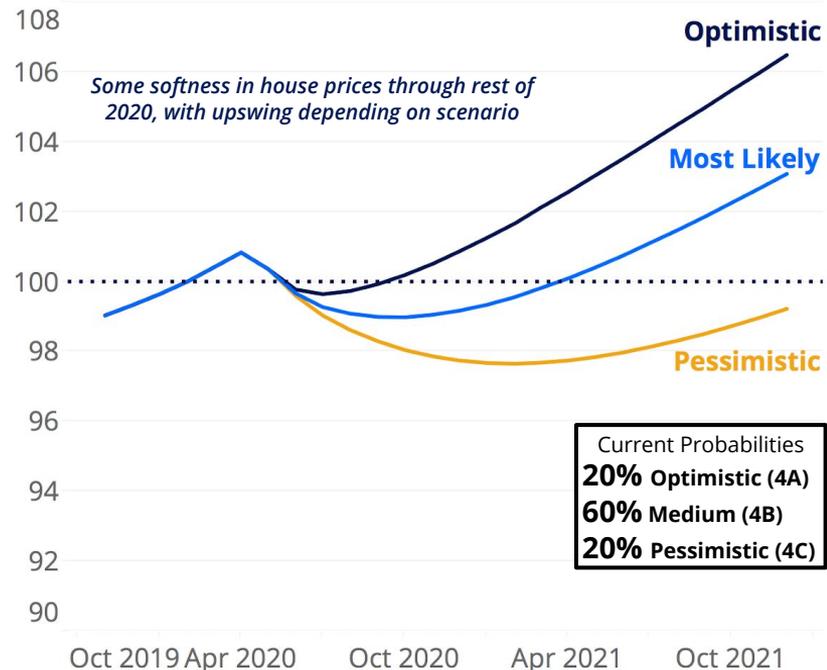


Typical home value, Year-Over-Year



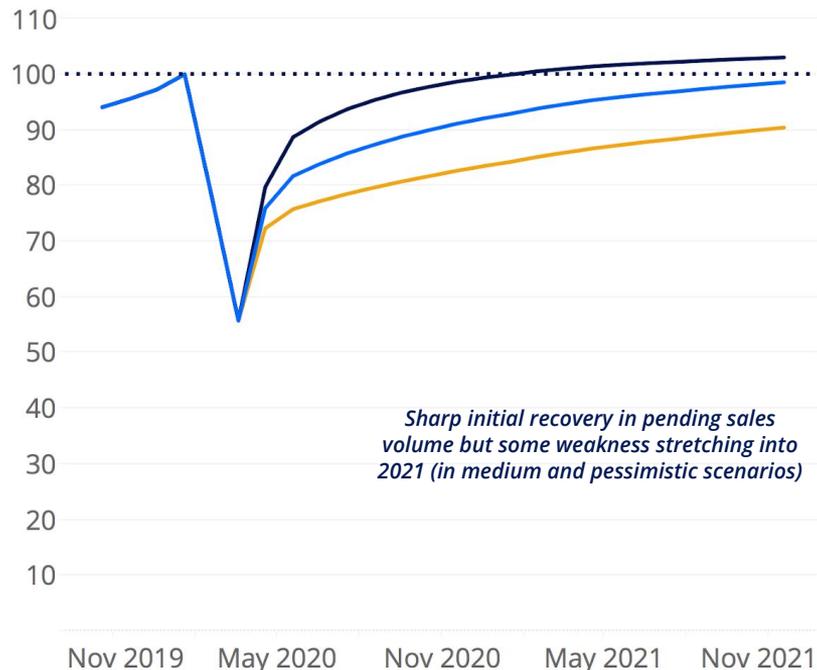
Zillow's formal home price and sales forecast

Home price change by scenario (Index Feb 2020 = 100)



Estimated Monthly Home Prices, by Scenario (normalized relative to Feb 2020 = 100)
 Source: Zillow Economic Data

Sales volume by scenario (Index Feb 2020 = 100)

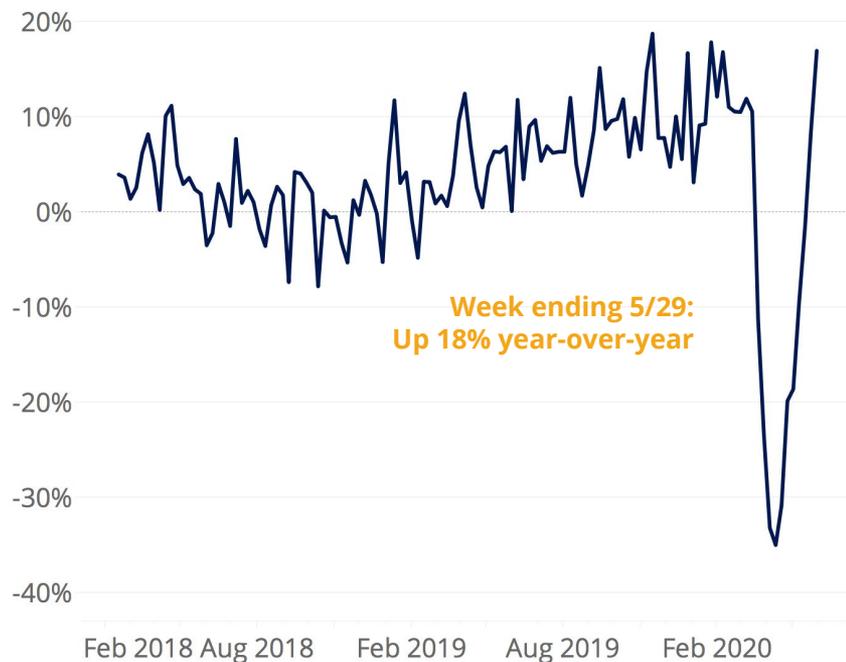


Estimated Pending Sales Volume, by Scenario (normalized relative to Feb 2020 = 100)
 Source: Zillow Economic Data

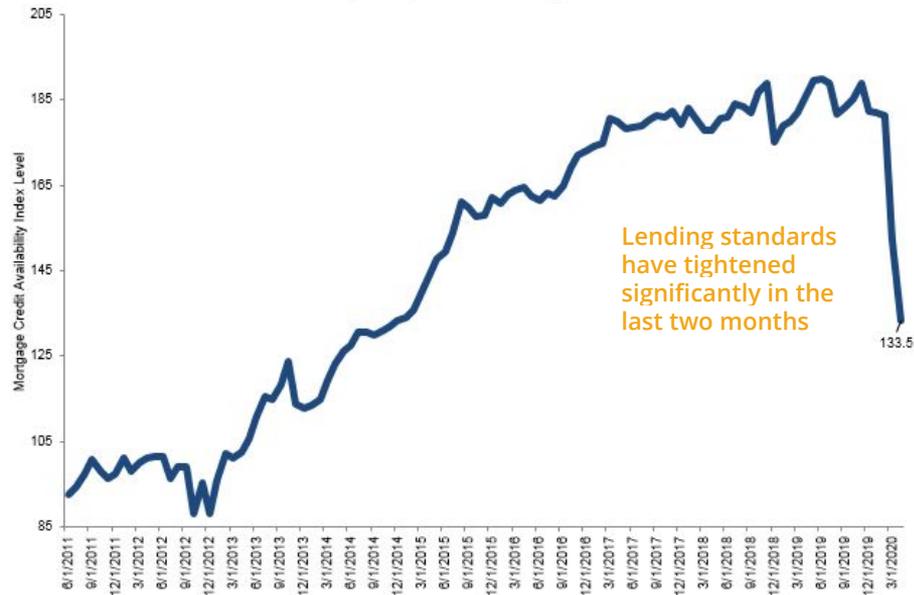
Tight credit could slow the recovery

For-purchase mortgage applications fell sharply in April but have improved very strongly since

Annual change (%)



Mortgage Credit Availability Index, Index Level by Month
(NSA, 3/2012=100)



Mortgage Credit Availability Index
Measured monthly
Source: Mortgage Bankers Association

The government support is record breaking

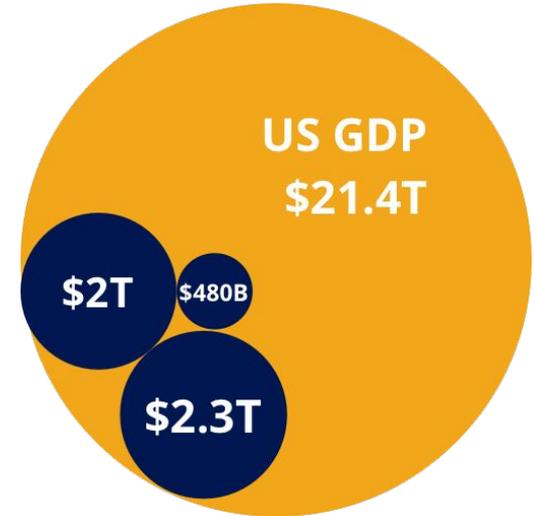
\$2.48 trillion in aid, up to \$2.3 trillion in Fed loans

Mar 27: CARES act providing **\$2T** in aid signed into law

- Direct cash payments (\$1200/adult or \$2400 married + \$500/kid)
- Extra \$600/WEEK of unemployment benefit (39 week max and only available April 1- July 31)
- Small business loans: \$350B (gone in 2 weeks)

Apr 9: Fed announces **\$2.3T** in loans to support recovery

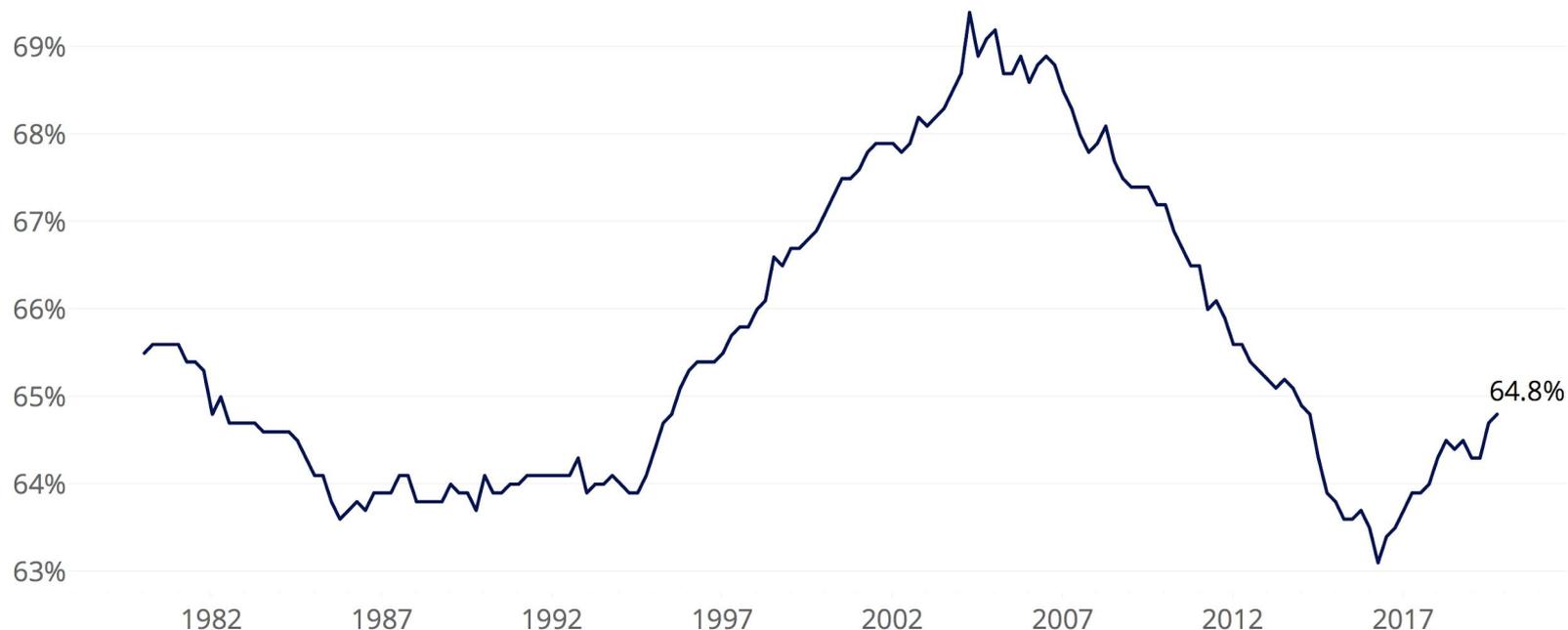
April 23: **\$480B** for small business support, hospitals, and virus testing capabilities



Creditworthiness of recent buyers high

Tight credit, tight inventory, and prohibitive down payments were major barriers

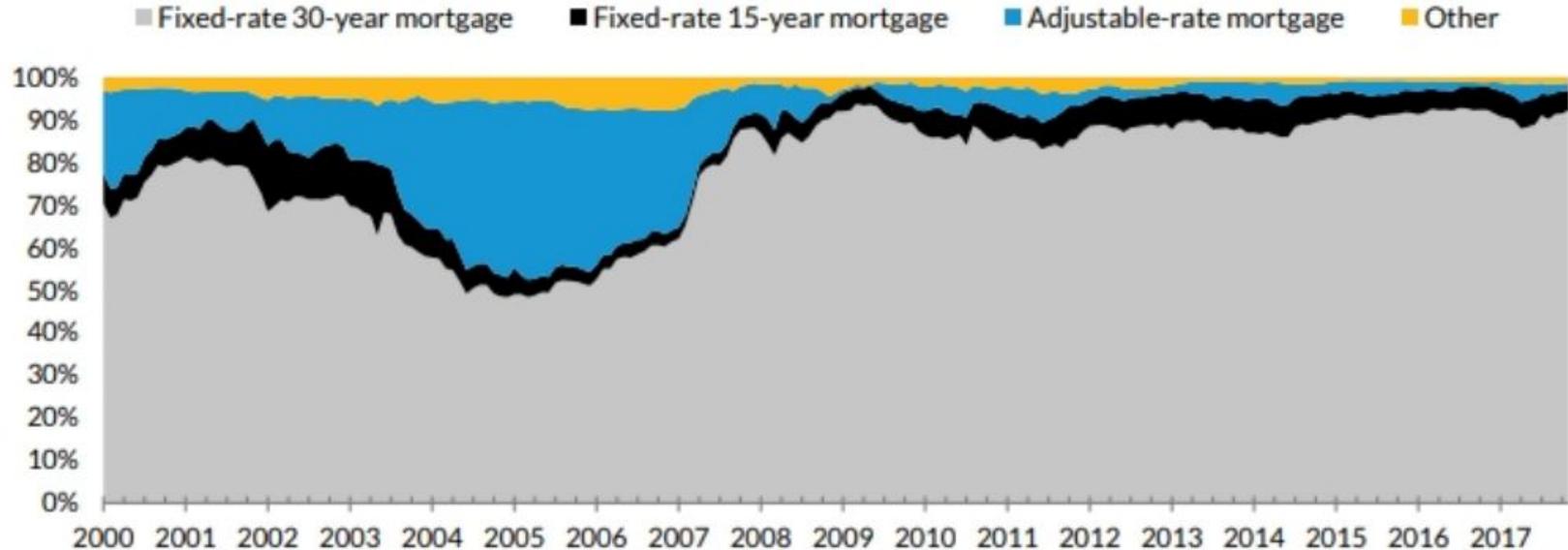
Homeownership rate



Reform after GFC reduced predatory lending

Strong home value appreciation drive by fundamentals, not excess credit.

Figure 7: Purchase Mortgage Originations by Type



Source: CoreLogic, eMBS, HMDA, SIFMA and Urban Institute.

Last time we had too much inventory at the start

Leading up to this cycle, inventory was at record lows

Housing starts only JUST recovered to average

Single-family housing starts



Inventory driven down by strong demand + anemic building

For-sale, existing inventory



Source: NAR Existing Inventory

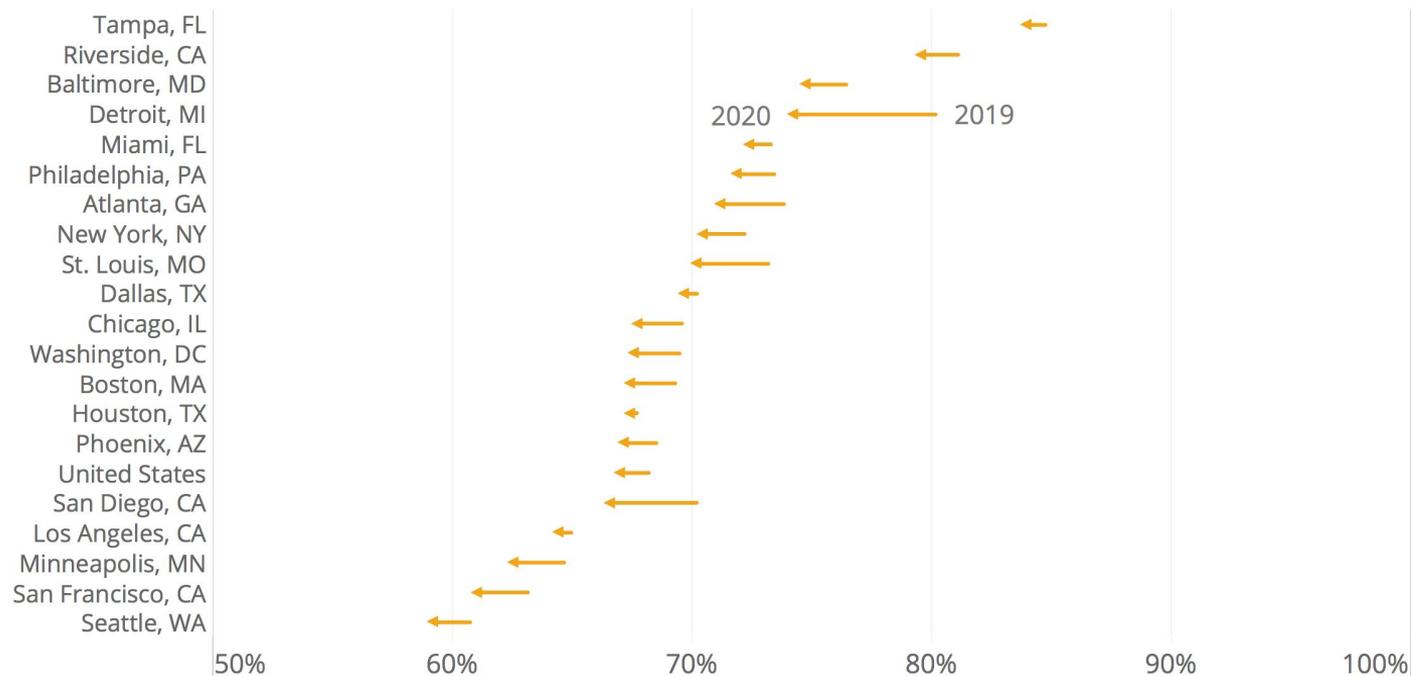
Keeping our minds on the future

Widespread adoption of remote work could bring many moves in coming years

- About two-thirds of Zillow survey respondents say they're working from a room that's not a dedicated home office.
- Two-thirds say they would consider moving if working from home at least a few days a week in the future
- Listings mentioning a home office have jumped about 10% YOY
- Search on New Construction listings up 73% YOY (All for-sale 42%)

Contrary to popular imagination, share of search heading to the suburbs is falling

Share of total page views to suburban ZIPs from 2019 to 2020



Housing adult children delays downsizing

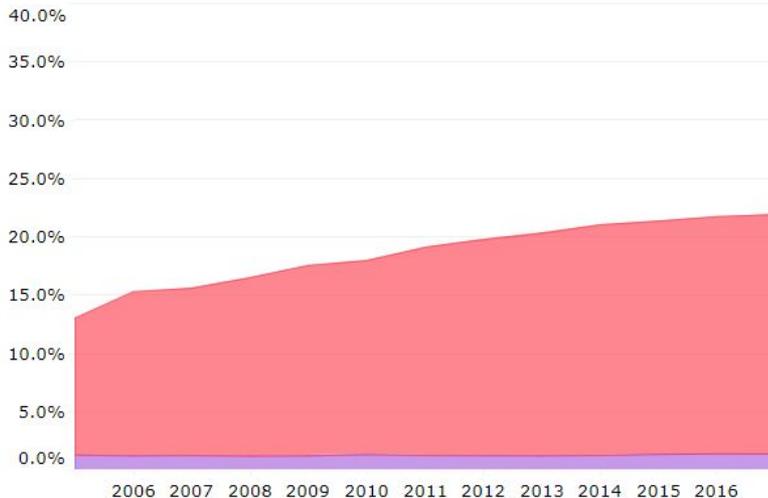
And so was another dynamic we use to explain low inventory pre-crisis. Now....

More young adults live with mom – in her house

Share of young adults living with mom and share of young adults that have mom living with them

Region Name

United States



Zillow Economic Research | Source: Zillow analysis of U.S. Census, American Community Survey, 2005-2017, made available by the University of Minnesota, IPUMS-USA.

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The number of adults living with a parent or grandparent is at an all-time high
Annual change in number of adults living in a parent's or grandparent's home



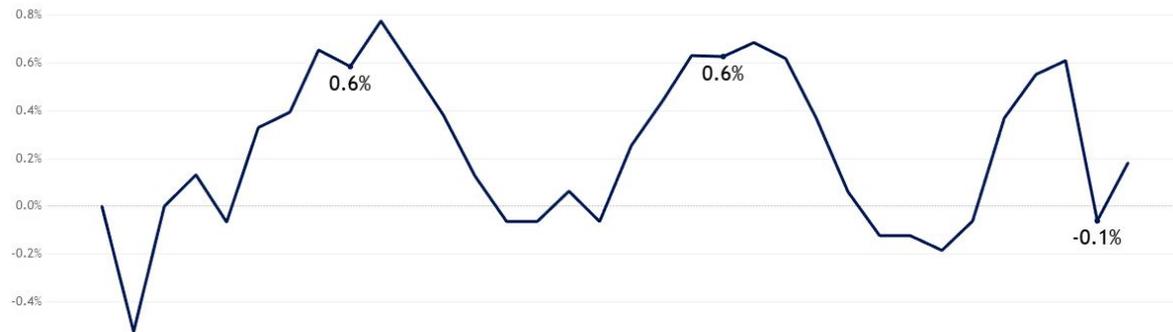
Zillow Economic Research | Source: U.S. Census Bureau, Current Population Survey.

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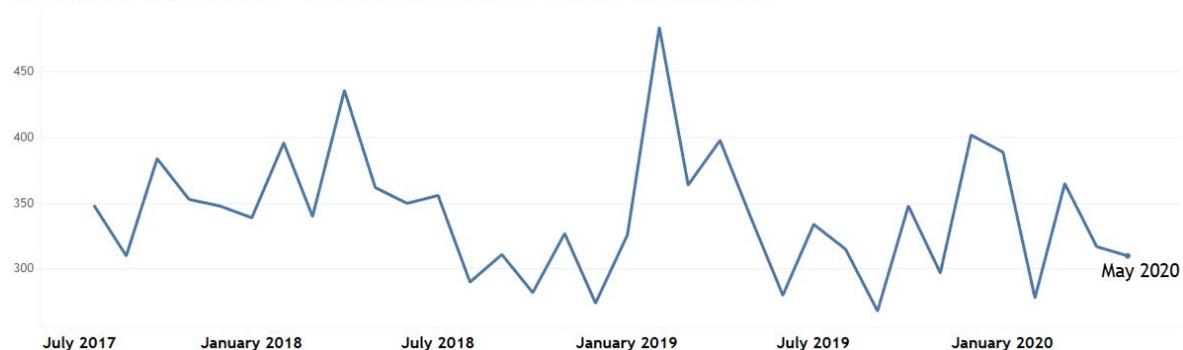
Trouble in the rental market

Rent softening reflects vulnerability of renters. Implications for homeowner pipeline.

Zillow Observed Rent Index, Month-over-month



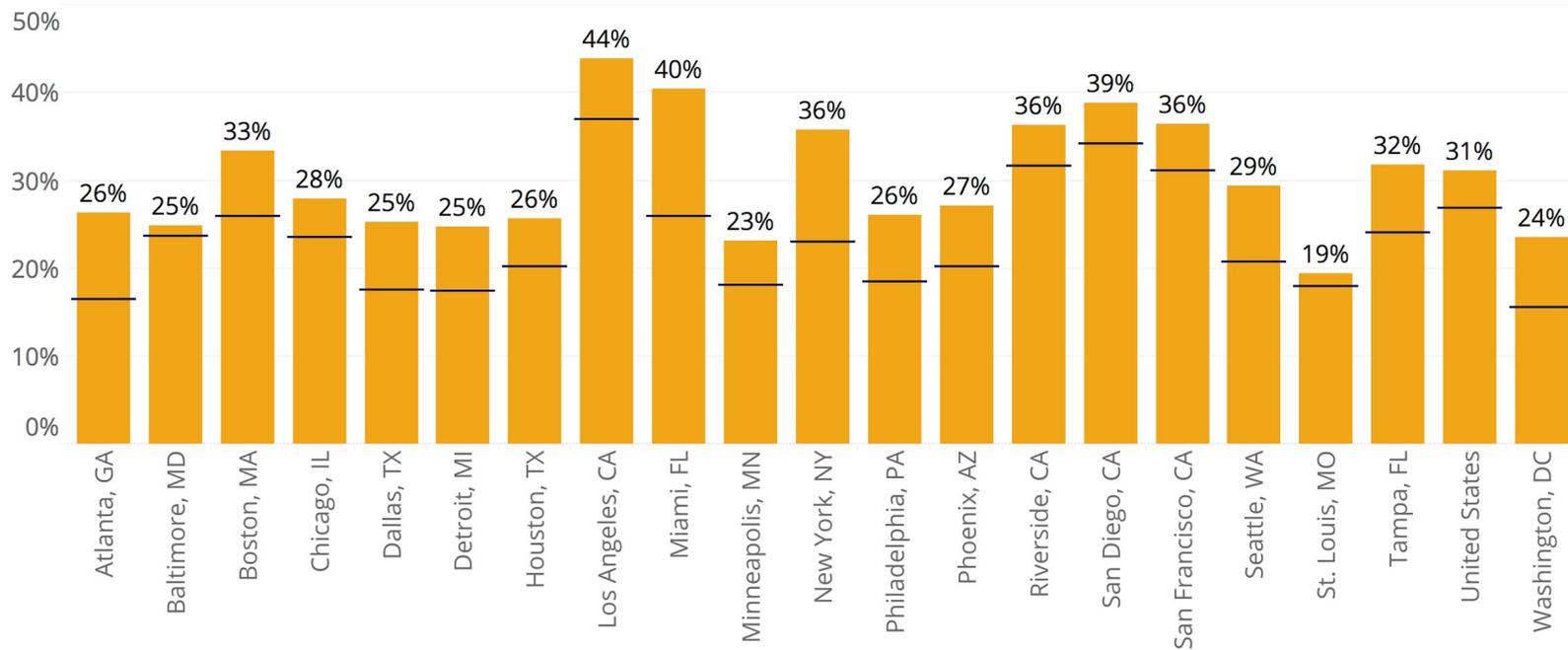
Housing units completed in 5+ unit buildings, seasonally adjusted annualized rate



Affordability pre-crisis worse for renters

Rent softness means fewer apartment projects. Long-run rent burdens could get worse.

Share of income spent on rent



Housing demand powered by demographic waves

Record long expansion: gone. Demographics: still there. Tipping point ages: more delay?

