2022 EXPERIAN EDGE

Economic Chartbook

Setting the stage for the year to come

December 2022

Welcome to our inaugural release

The **2022 Experian Edge Economic Chartbook** is a look at some of the hottest economic and credit trends our team covered over the last 12 months. From the reopening of the economy and the return of travel to the Russian invasion of Ukraine and the reemergence of decades-high inflation, 2022 was a year of ups and downs. And all along the way our economists, credit experts and analytics professionals consistently brought deep insight and our unique, credit-focused view to the market. By distilling the key themes from our industry-leading webinars, client conversations and special reports from the past year, we hope to provide you with a stage-setting resource that you will turn to again and again in the months ahead.

We look forward to another wonderful year of conversation, successes and of tackling the challenges that meet us head-on, together.

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More resources for you

As part of our commitment to demystifying the current economic environment and giving our partners the best tools in the business, we have launched the Experian Edge Hub — a landing zone for all our economic and credit thought leadership, interactive labor market data, and tools for navigating the business cycle. If you are a client and are looking for additional in-depth analysis, contact us for access to our Economic Analysis and Readiness Report, which provides more granular analysis on the economy, credit and attribute trends, and fraud.

Panny Park, Creative Designer

2022 in Review

For many, 2022 was a year of transition — a transition out of the grips of the pandemic and toward a more normal way of life. People went back to work, began traveling in earnest and resumed family get-togethers. However, even with the optimism that vaccinations and the strength of economic momentum brought us at the beginning of the year, challenges arose.

The Russian invasion of Ukraine in February 2022 shocked the world and continues to drive significant humanitarian hardship and cloud the global economic outlook. The sugar rush of stimulus that got us through the darkest periods of the pandemic added fuel to the inflationary fire, challenging consumers (especially those who can least afford it), businesses and policymakers. As a result, the Federal Reserve, which has struggled for years to get interest rates up, is responding to the rapid rise in prices with the most aggressive path of interest rate hikes since the Volcker period in the 1980s - the effects of which are being felt most acutely in the housing market.

But even as these difficulties linger, there are pockets of resilience and improvement within the U.S. economy that will follow us into the new year. The labor market remains on solid footing with very low unemployment, a large number of job openings and robust wage growth. The cash cushion built up over the last couple of years is, to some extent, still with us, giving many households the ability to spend and stave off delinquency. Additionally, inflationary pressures are beginning to moderate as supply chain challenges ease and commodity prices come off their highs.

While much of what will happen in the economy in 2023 will depend on the Federal Reserve's ability to coax down inflation without causing a major disruption to the labor market, it will also be driven by how deeply entrenched pandemic-era trends have become. Is higher inflation a new fixture in the world? Are labor shortages and job hopping here to stay? Has the life-altering experience brought on by COVID-19 reshaped consumer spending habits? We hope you will join us in the new year as we navigate these trends and work to make sense of this new, post-pandemic economy.

Cheers and happy reading.

Joseph Mayans | Director of U.S. Economics

Key themes from 2022 in the words of our webinar attendees

Over the last year, our economic team participated in six economic and credit-focused webinars that reached 2,675 attendees and generated 208 comments and questions. The word cloud below highlights the key themes that were top of mind for participants (the more frequently a word was mentioned the larger it appears).

Want to be part of the conversation in 2023? Register here to join our next economic webinar.

Play along as we cover key economic and credit trends

Clue	Scrambled	Answer
1. He was sworn in to serve his second four-year term as the Federal Reserve chairman in May 2022.	meoerj lepwlo	
2. This anecdotal account features economic highlights from the 12 Federal Reserve Districts.	gibee kobo	
3. This market has been most acutely impacted by rising rates.	nushoig	
4. Roughly this percentage of days are worked from home.	rhtiyt	
5. This many states have recovered their pandemic job losses.	itnyxwest	
6. This census region has the lowest inflation rate.	troansthe	
7. This hit a 40-year peak of 9.1% YOY change in June 2022.	oeumrsnc ecpir xeidn	
8. This generation is the largest and entering their prime home-buying years.	lmanelnlii	
9. This city hosted the 2022 Winter Olympics.	iijengb	
10. Standing at an estimated $1.7T at the end of Q2, this has supported spending despite high inflation.	eescxs giassnv	

2022 economic timeline

Q1 GDP change: -1.6%

January

February

Feb. 4
Beijing Winter Olympics begins

Feb. 13
LA Rams win Super Bowl

Feb. 24
Russia invades Ukraine, prompting escalation of Russo-Ukrainian War

March

March 16
25bps fed funds rate hike by Federal Reserve

Q2 GDP change: -0.6%

April

May

May 4
50bps rate hike by Federal Reserve

May 23
Jerome Powell sworn in for second four-year term

June

June 13
U.S. average gas price peaks at $4.96

June 15
75bps rate hike by Federal Reserve

June 16
Golden State Warriors win NBA Championship

YOY inflation peaks at 9.1%

Q3 GDP change: +2.9%

July

Unemployment falls to half-century low of 3.5%

Official recoup of pandemic job losses

July 27
75bps rate hike by Federal Reserve

August

Aug. 24
Student loan forgiveness up to $20K announced (pending court approval)

September

Sept. 21
75bps rate hike by Federal Reserve

Q4 GDP change: TBA January 26

October

Oct. 27
Average long-term U.S. mortgage rate surpasses 7% for first time in two decades

November

Nov. 2
75bps rate hike by Federal Reserve

Nov. 5
Houston Astros win World Series

Nov. 20
World Cup kickoff

December

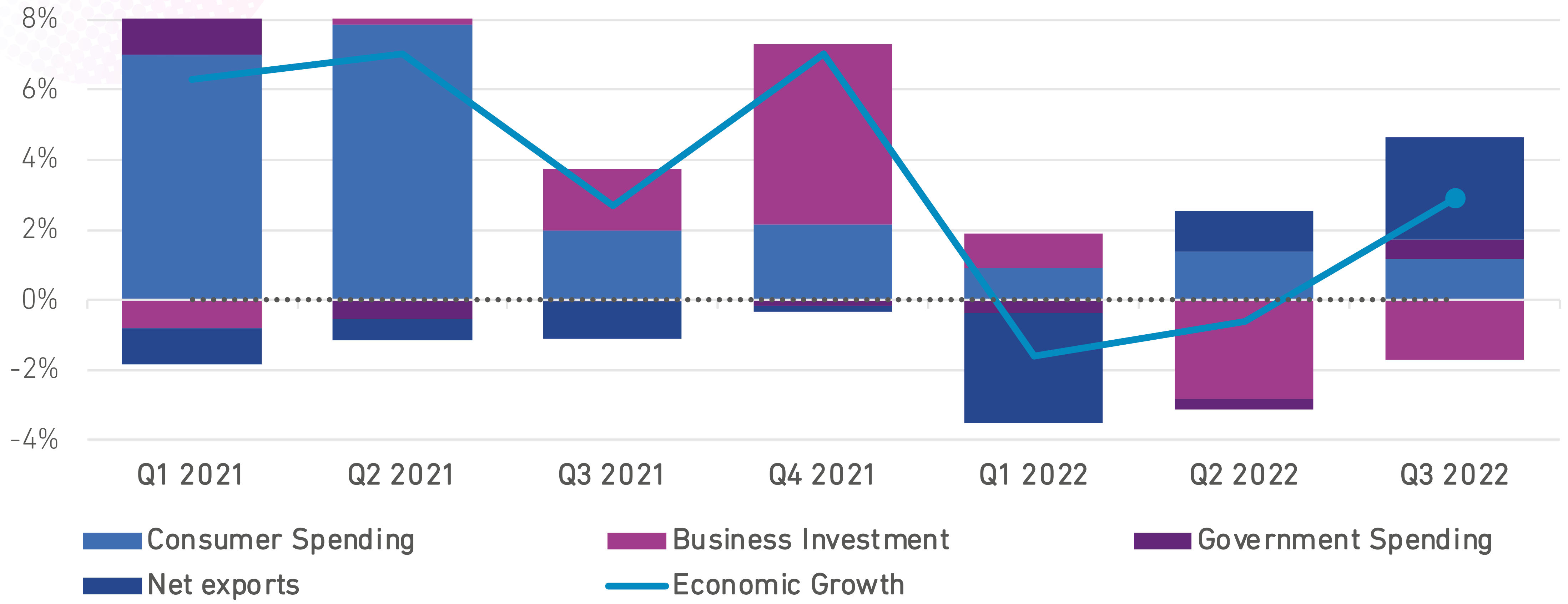
Source: Federal Reserve Board of Governors, U.S. Bureau of Labor Statistics, U.S. Energy Information Association, Freddie Mac

ECONOMIC GROWTH

2021 post-lockdown surge gives way to slowdown in 2022

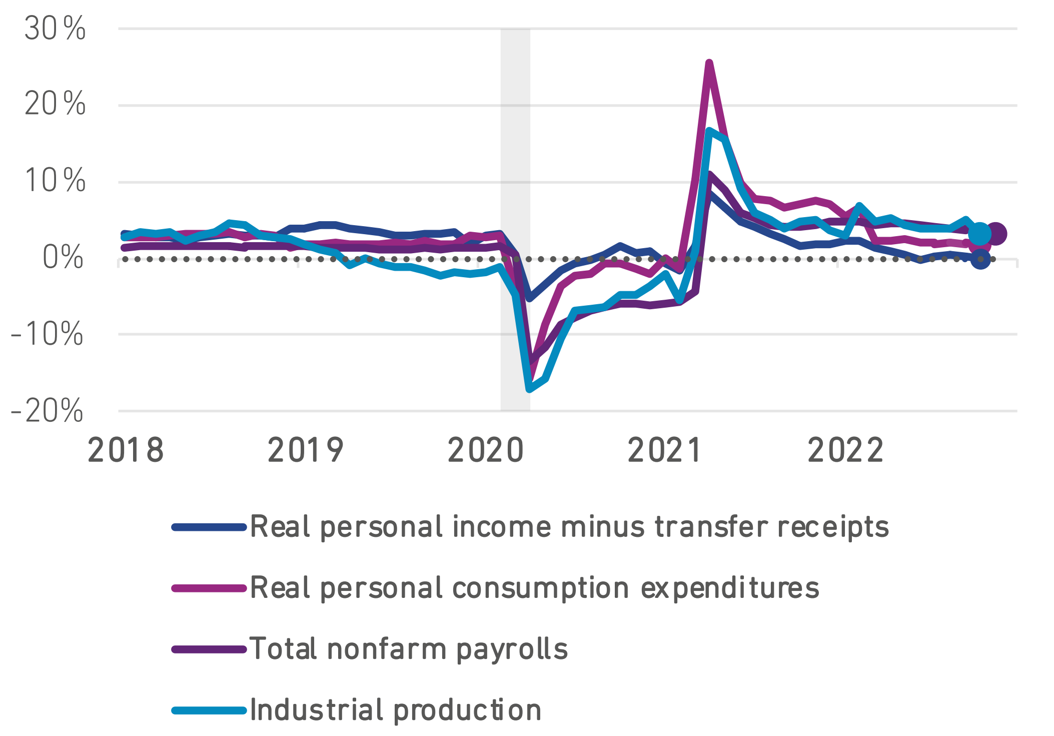
Economic growth fell in the first half of 2022 as the impact of stimulus waned and inflation, rising rates and the war in Ukraine weighed on the economy

Contributions to economic growth (Quarterly gross domestic product % change SAAR)



Key indicators used to determine recessions are moderating but still in the positive

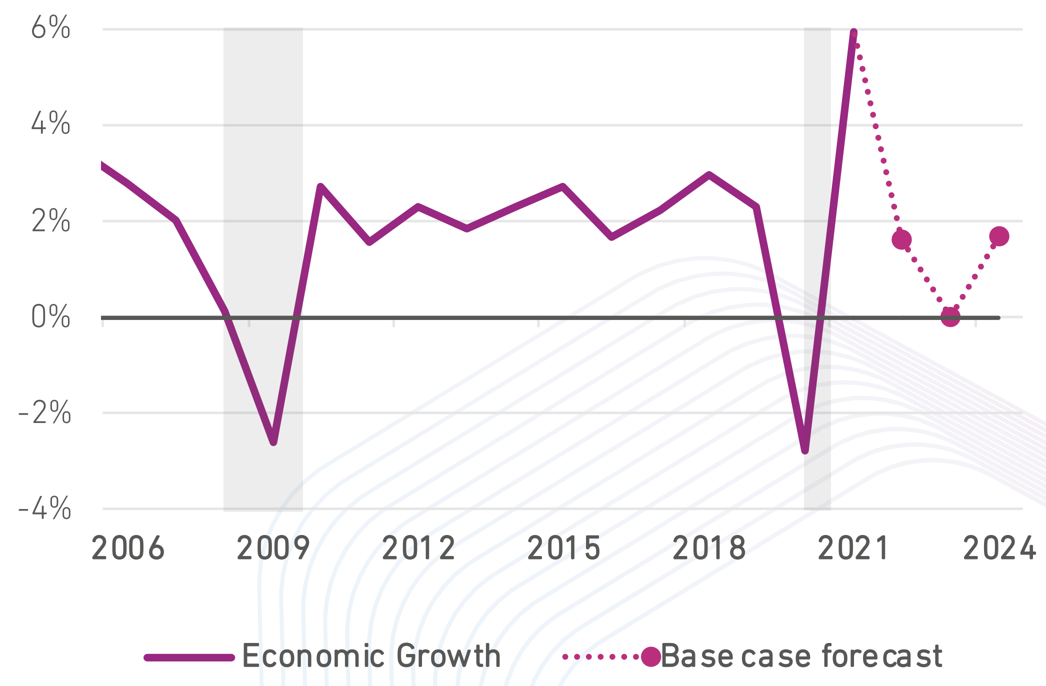
NBER recession indicators, YOY % change



Source: National Bureau of Economic Research (NBER), Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve Board of Governors and author's calculation

Our base case forecast is for the economy to expand by 1.6% in 2022 and remain flat in 2023

Real gross domestic product annual % change

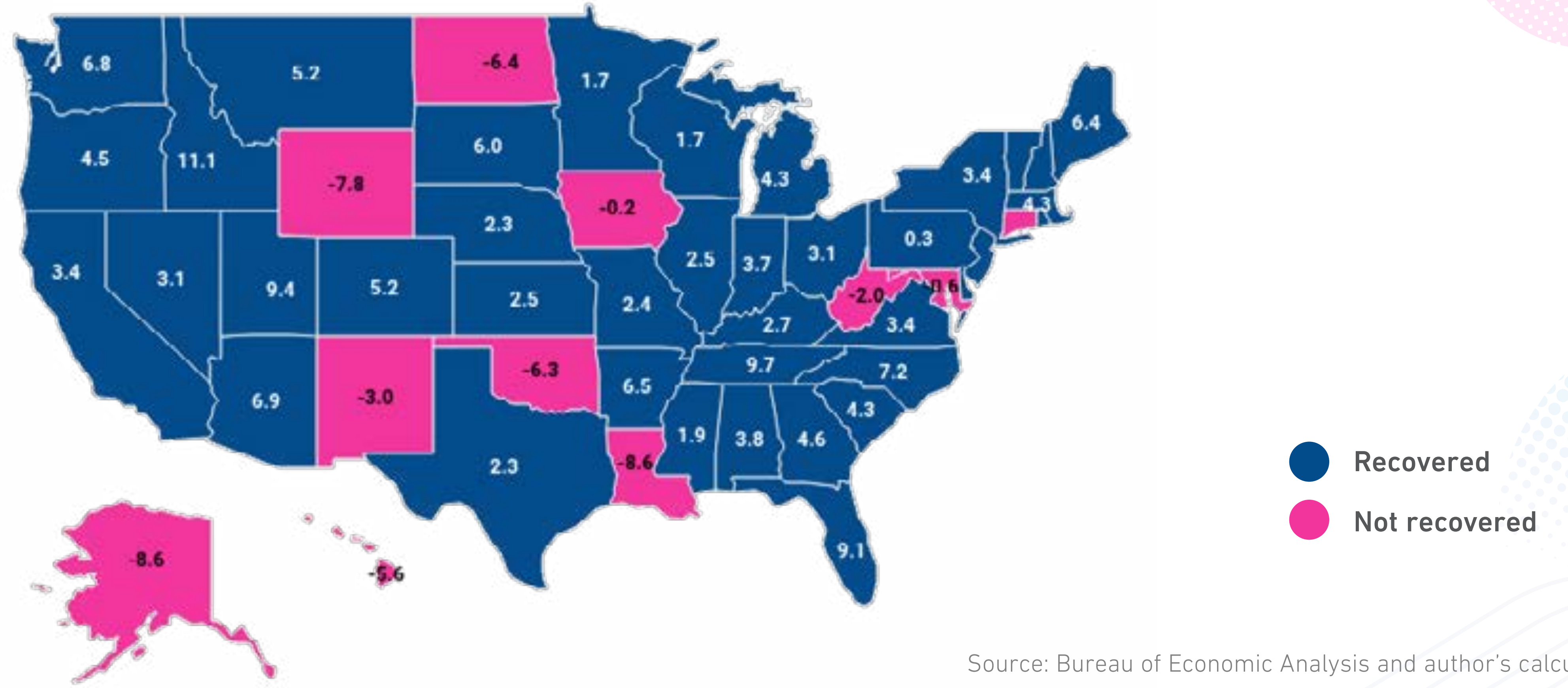


Source: Bureau of Economic Analysis and Experian's October 2022 Macroeconomic Scenarios Forecast

Some divergence in state-level recoveries

By the end of the first half of 2022, most states had returned to their pre-pandemic level of economic activity ...

Gross domestic roduct % change: Q4 2019–Q2 2022



Source: Bureau of Economic Analysis and author's calculations

... but anecdotes in Q4 2022 suggest that Federal Reserve Districts are experiencing a mixed bag of growth.

Select anecdotes from the Federal Reserve's November 2022 Beige Book

Boston

Business activity softened slightly amid mixed results. Employment levels and prices were mostly unchanged. Wage growth was steady at a moderate pace. Restaurant owners enjoyed robust demand.

New York

Economic activity declined modestly. While job growth picked up slightly and labor shortages eased somewhat, hiring plans weakened. Wage growth slowed, while the pace of input and selling price increases remained elevated and was little changed.

Kansas City

Real economic activity in the Tenth District declined slightly. Job growth was subdued as labor demand cooled. Prices continued to rise at a robust pace, but several contacts noted growth in prices of construction materials and other manufacturing inputs slowed.

Dallas

Modest economic growth continued, though persistent declines were seen in retail spending, home sales and lending activity. Job growth was solid, but there were reports of layoffs and a slowdown in hiring. Input and labor cost increases continued, prompting cost cutting and downsizing for some firms.

San Francisco

Economic activity expanded modestly. Employment levels grew at a modest pace amid tight labor market conditions. Wages and prices rose at a slower pace relative to the previous reporting period. Demand for retail goods and services trended up.

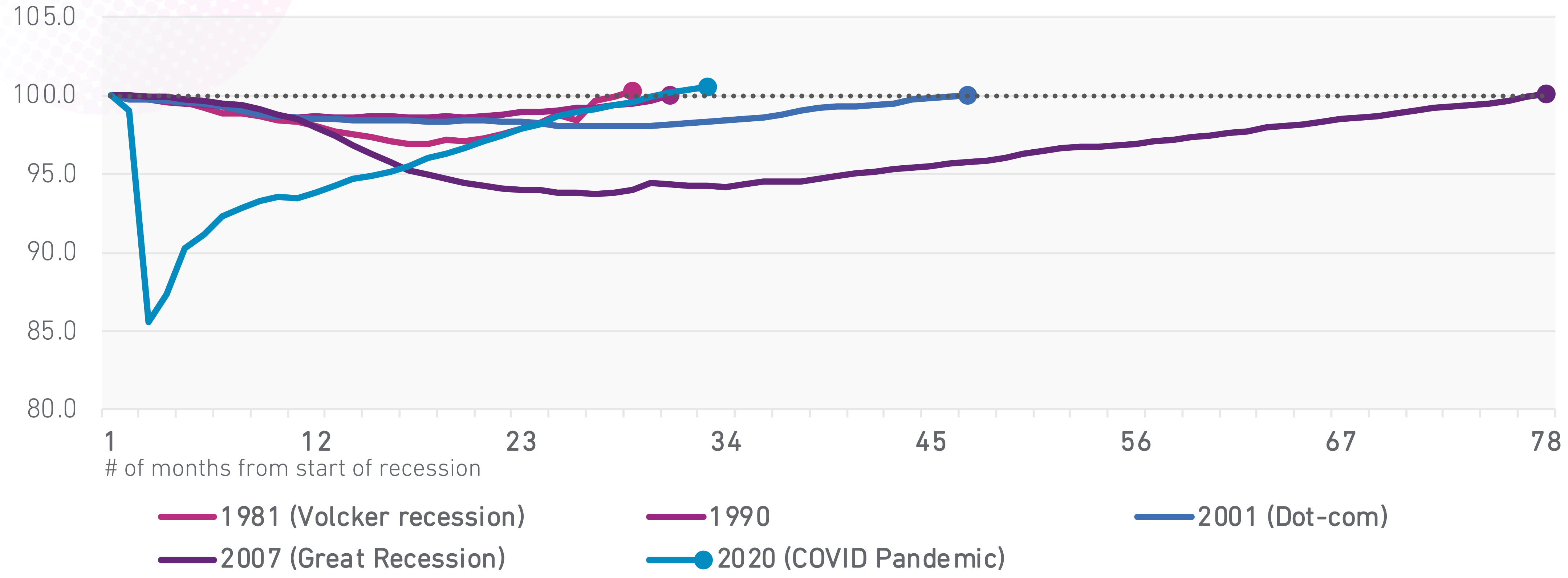
Atlanta

Economic activity grew slightly. Labor market tightness eased, but wage pressures continued. Most nonlabor costs moderated. Retailers reported stable consumer demand. Demand for new autos was robust. Leisure travel activity was steady and business travel improved.

Job creation was hot in 2022, will moderate in 2023

Pandemic job losses were recouped in July 2022, making the pandemic recovery one of quickest in modern history

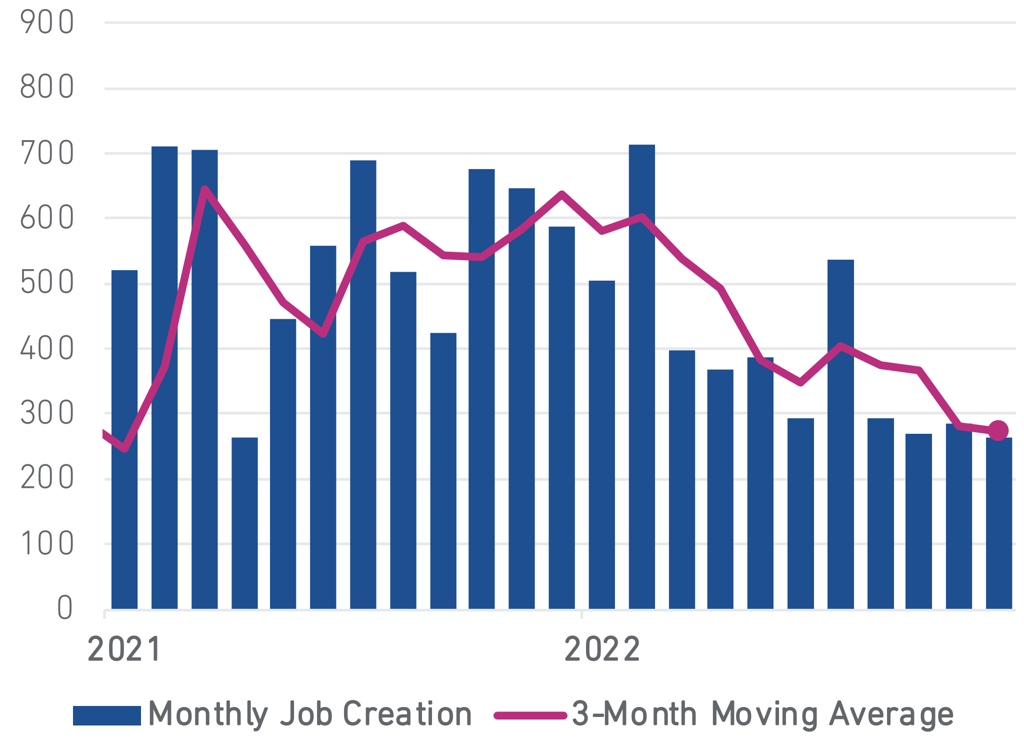
Months from start of recession to employment recovery. Index: Recession start = 100



Source: Bureau of Labor Statistics and author's calculation

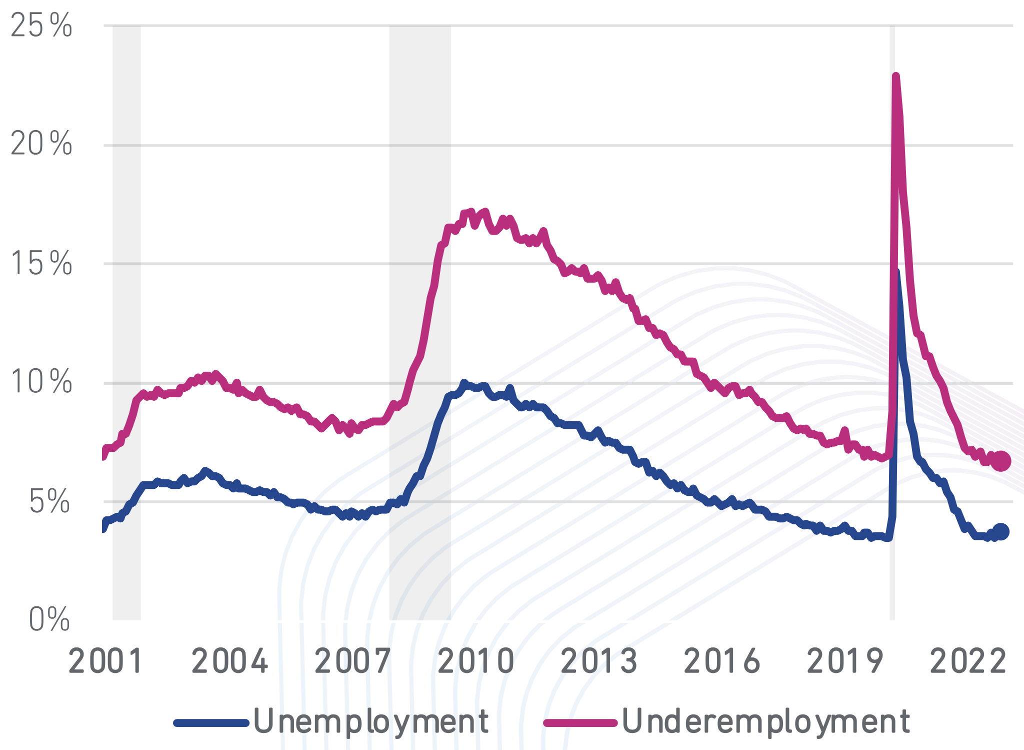
Job creation is still solid, but moderating (left chart), while measures of unemployment remain historically low (right chart)

Employment gain (in thousands)



Source: Bureau of Labor Statistics and author's calculation

Unemployment rates

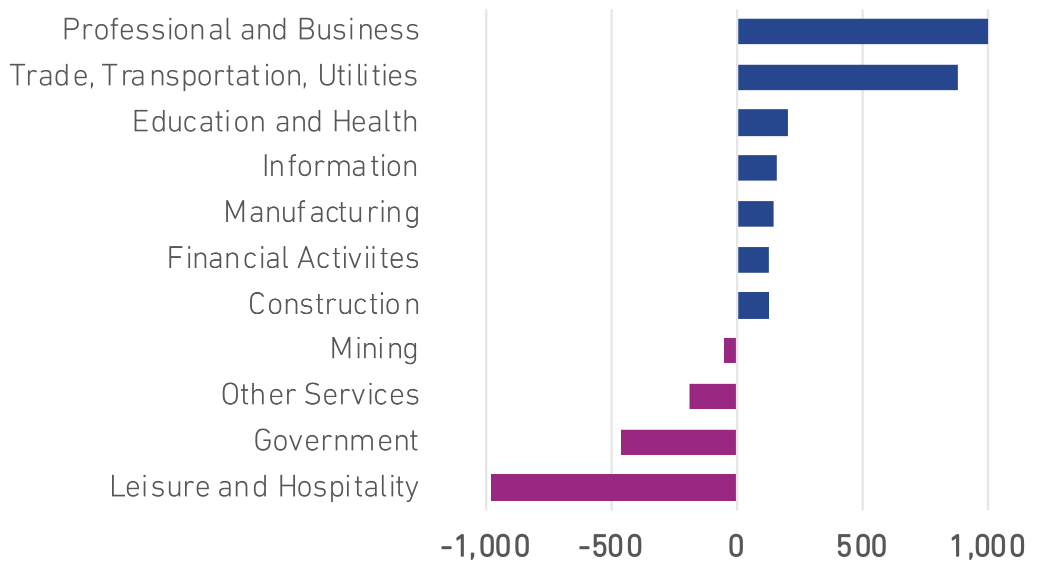


Source: Bureau of Labor Statistics

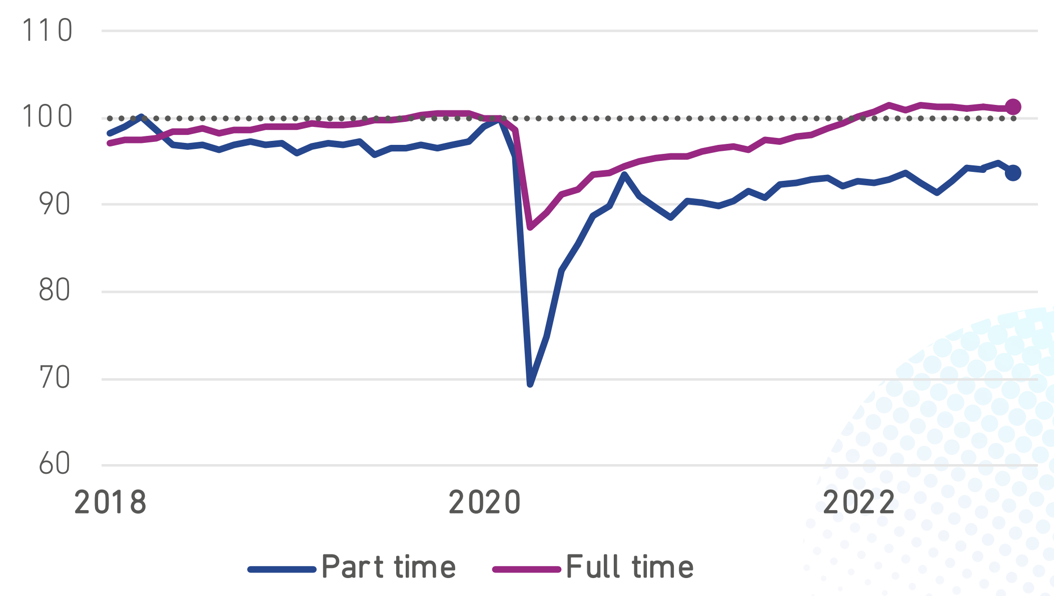
Pandemic changed job composition and shortages continue

Leisure and hospitality employment is still roughly a million jobs shy of its pre-pandemic level (left chart) and part-time workers have been hard to come by as people have had better employment opportunities (right chart)

Job gains: February 2020–October 2022 (in thousands)



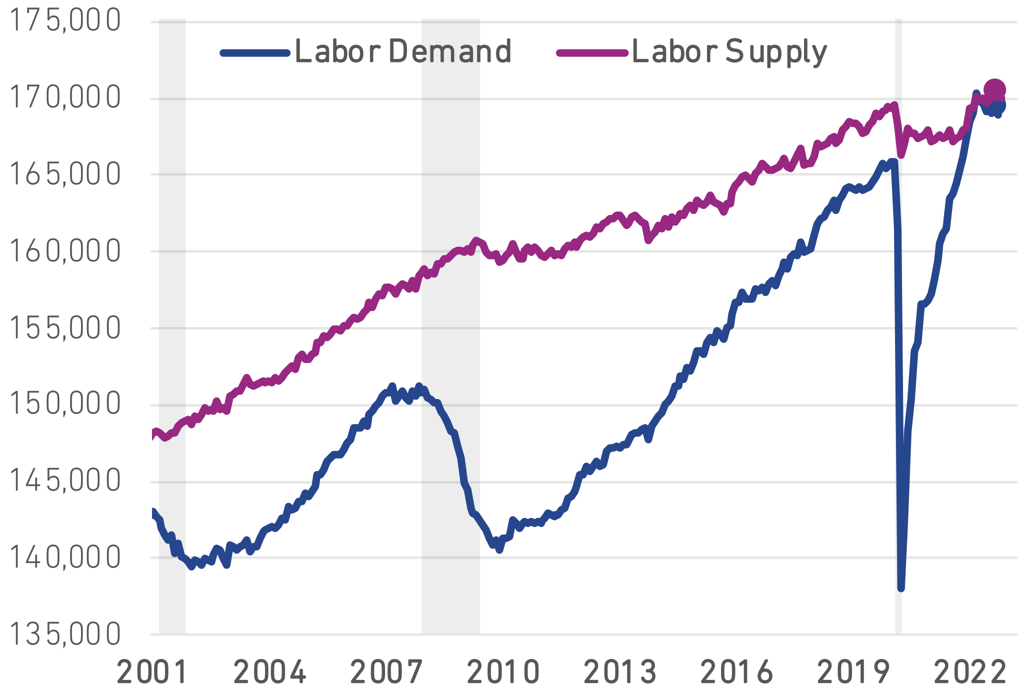
Part-time versus full-time worker employment: Feb. 2020 = 100



Source: Bureau of Labor Statistics and author's calculation

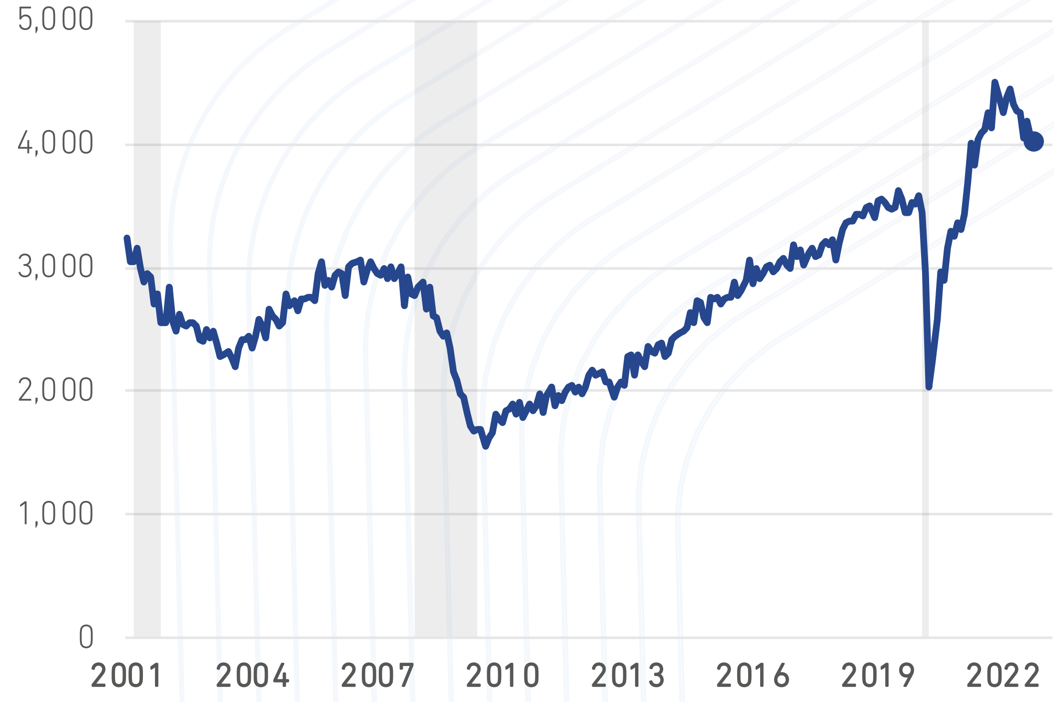
The labor market remains historically tight with high demand and a below-trend supply of workers (left chart) at the same time people continue to quit at a high rate (right chart)

Relationship between labor supply and demand (in thousands)



Source: Bureau of Labor Statistics and author's calculations (labor demand = total employment + job openings, labor supply = labor force level + not in labor force but want job now)

Quit level (in thousands)

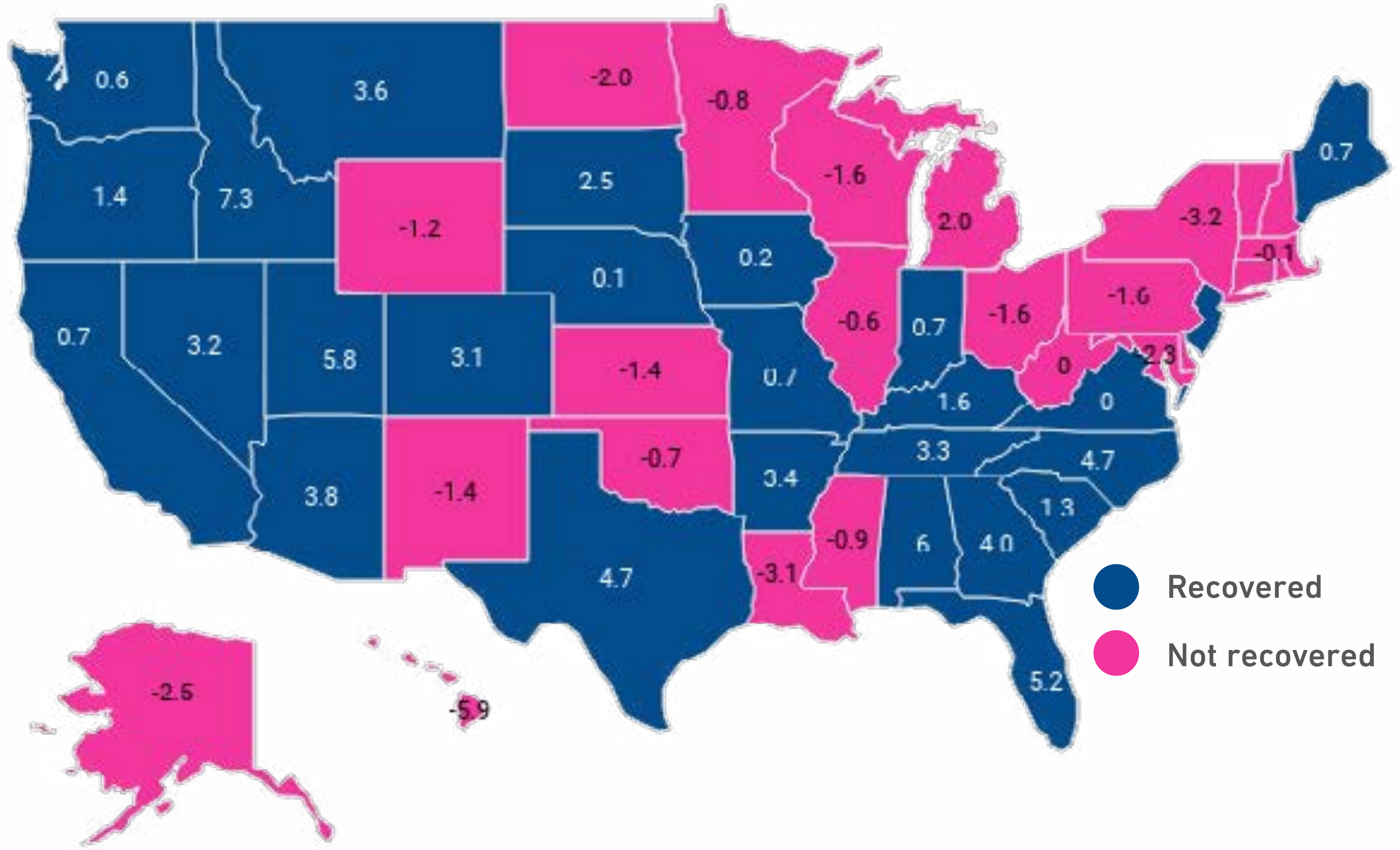


Source: Bureau of Labor Statistics

Some states boom as others remain below pre-pandemic levels

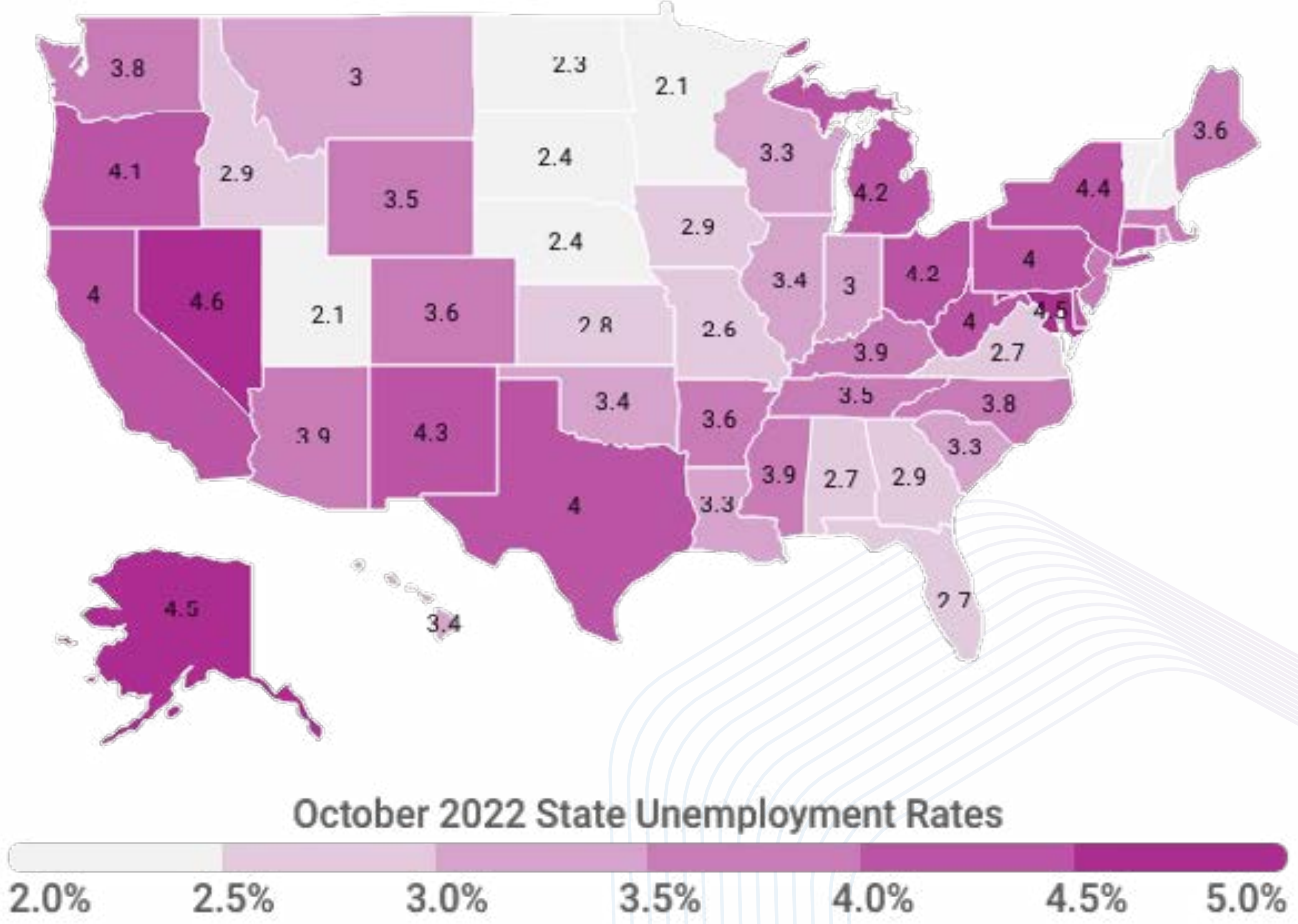
Twenty-six states have recovered their pandemic job losses

Employment % change:
February 2020–October 2022



Unemployment remains near record lows in many states

North-central and south-eastern states have the lowest jobless rates

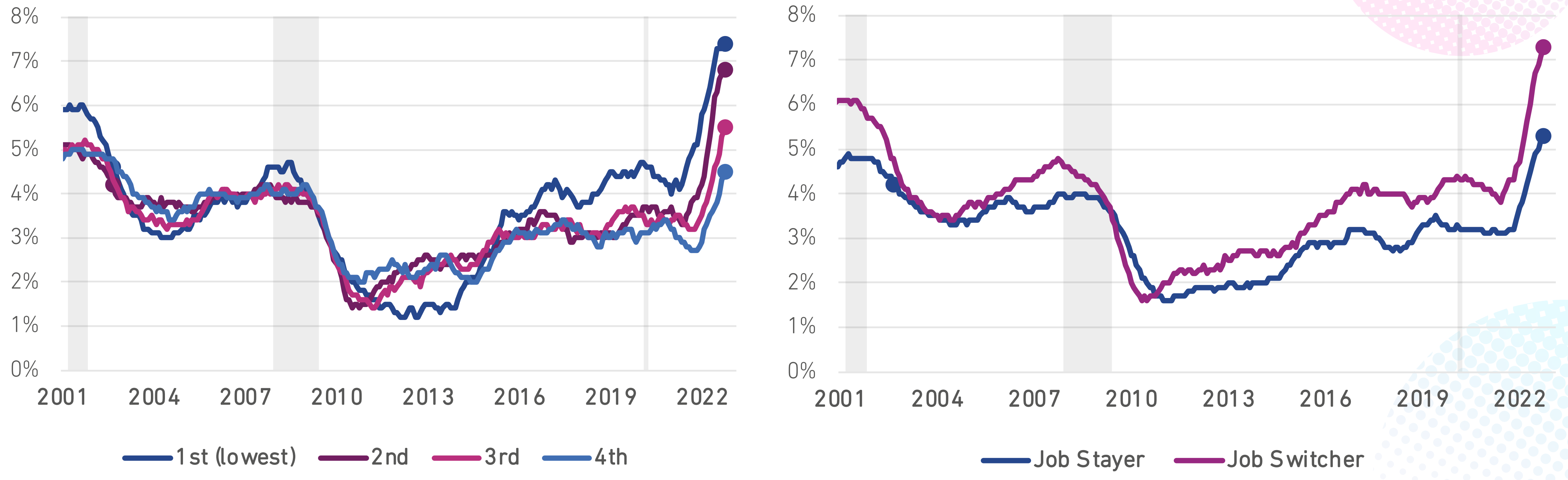


Source: Bureau of Labor Statistics

Wage growth booms for lower income workers and job switchers

Shortages in the service sector have driven up wages for the lower wage groups and for job switchers

12-month change in average wage growth by income quartile (left chart) and job stayers and switchers (right chart)

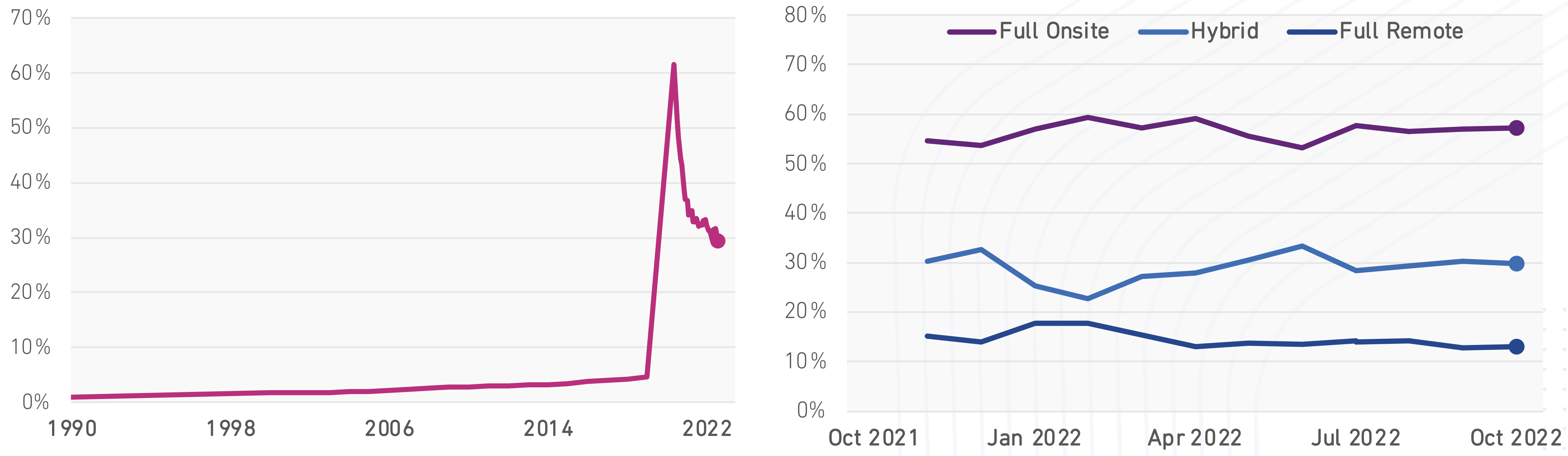


Source: Federal Reserve Bank of Atlanta, Wage Growth Tracker

Remote work has come off its peak, but remains in vogue with nearly 30% of days worked from home (left chart), but the rate of full-remote workers is waning (right chart)

Percentage of paid full days worked from home

Work-from-home arrangements for full-time workers



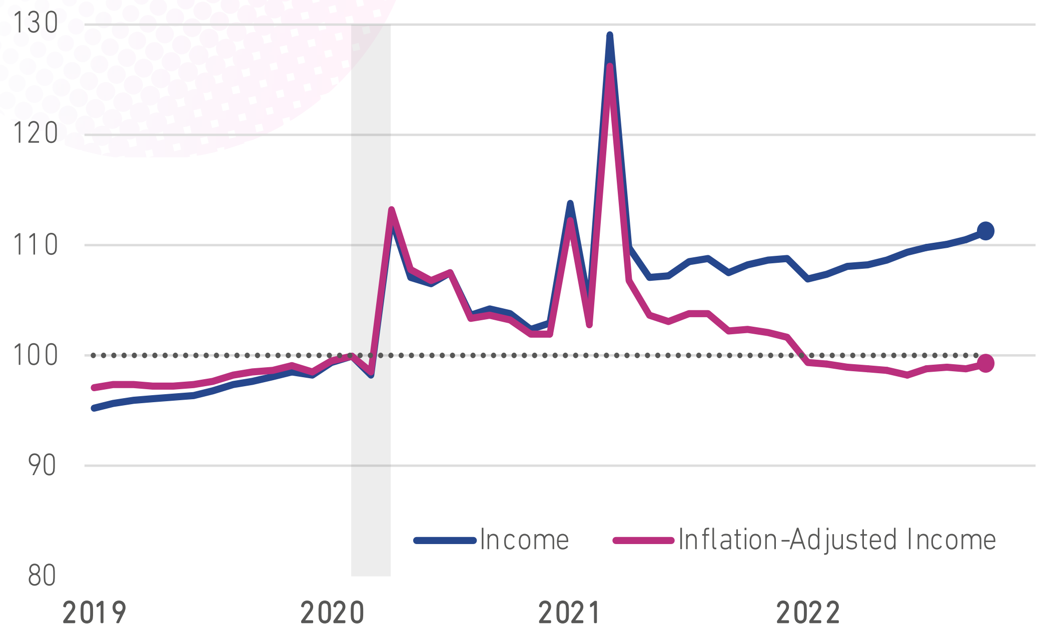
Source: Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis, "Why working from home will stick," National Bureau of Economic Research

CONSUMER HEALTH

Inflation has hit incomes, but spending continues

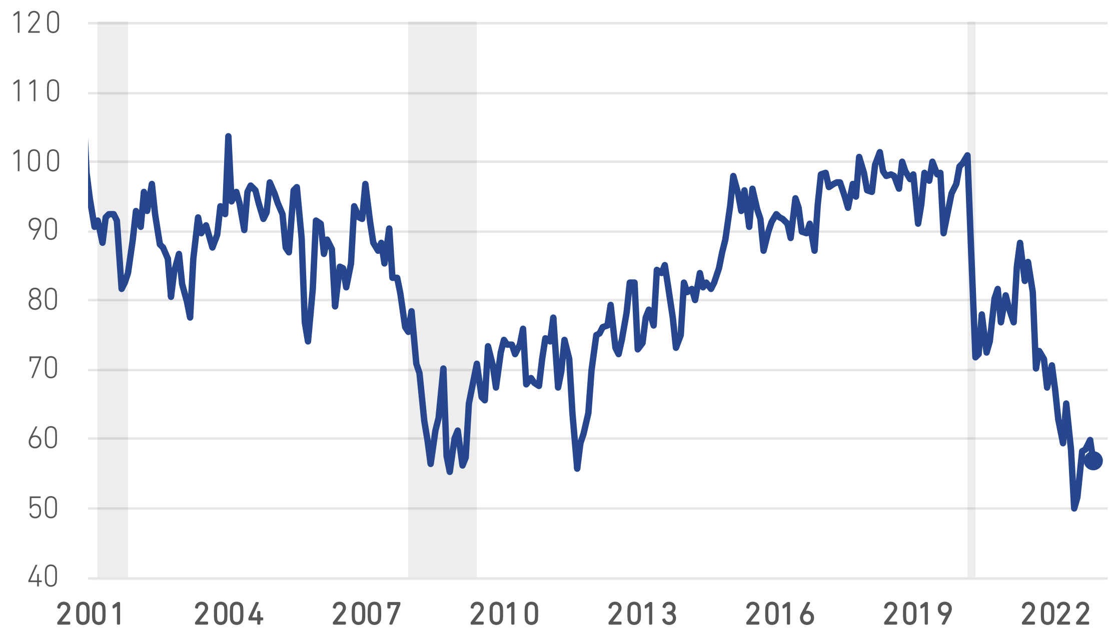
Inflation has eroded household incomes (left chart) and contributed to poor consumer attitudes (right chart) ...

Disposable personal income, Index: Feb 2020 = 100



Source: Bureau of Economic Analysis and Author's calculation

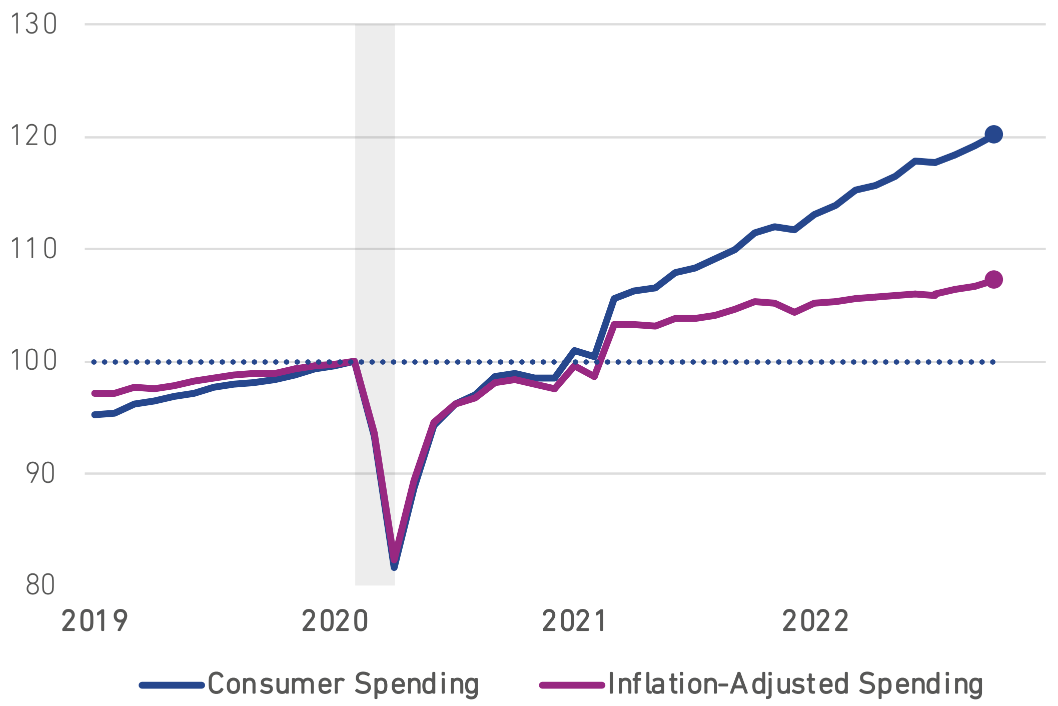
University of Michigan Consumer Sentiment Index



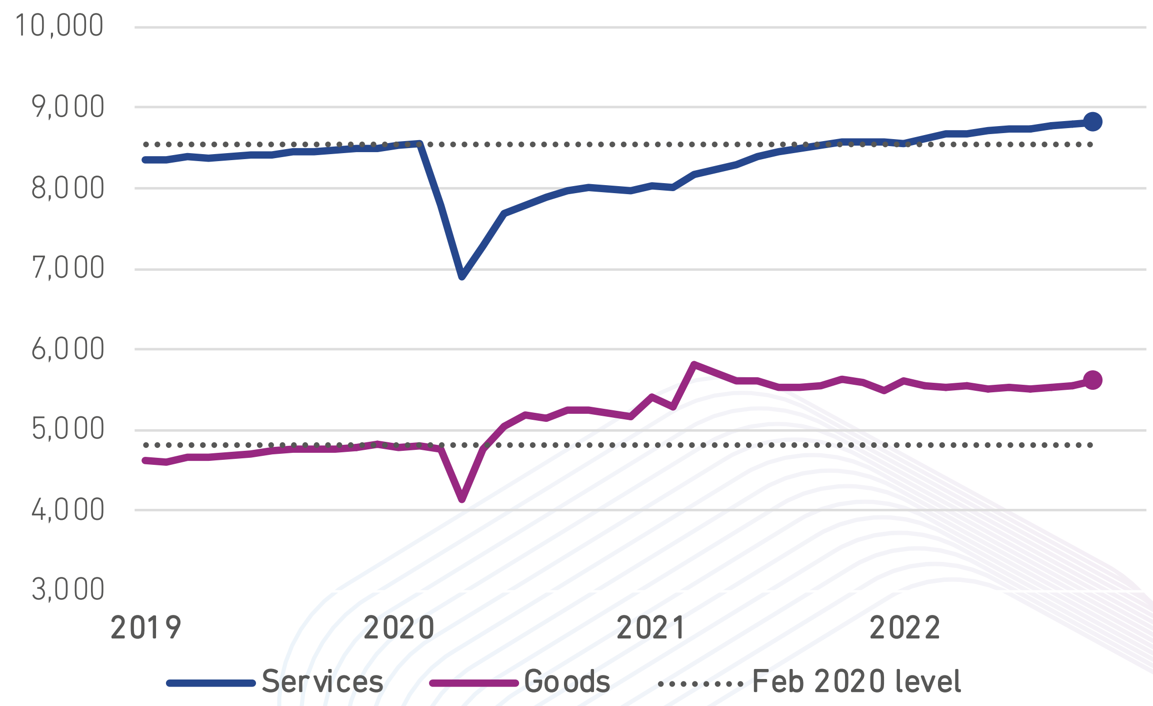
Source: University of Michigan

... but spending has remained resilient (left chart) as consumers continue to buy lots of goods and increase their spending on experiences in the service sector (right chart)

Personal consumption, Index: Feb 2020 = 100



Inflation-adjusted personal consumption (in $ billions, SAAR)

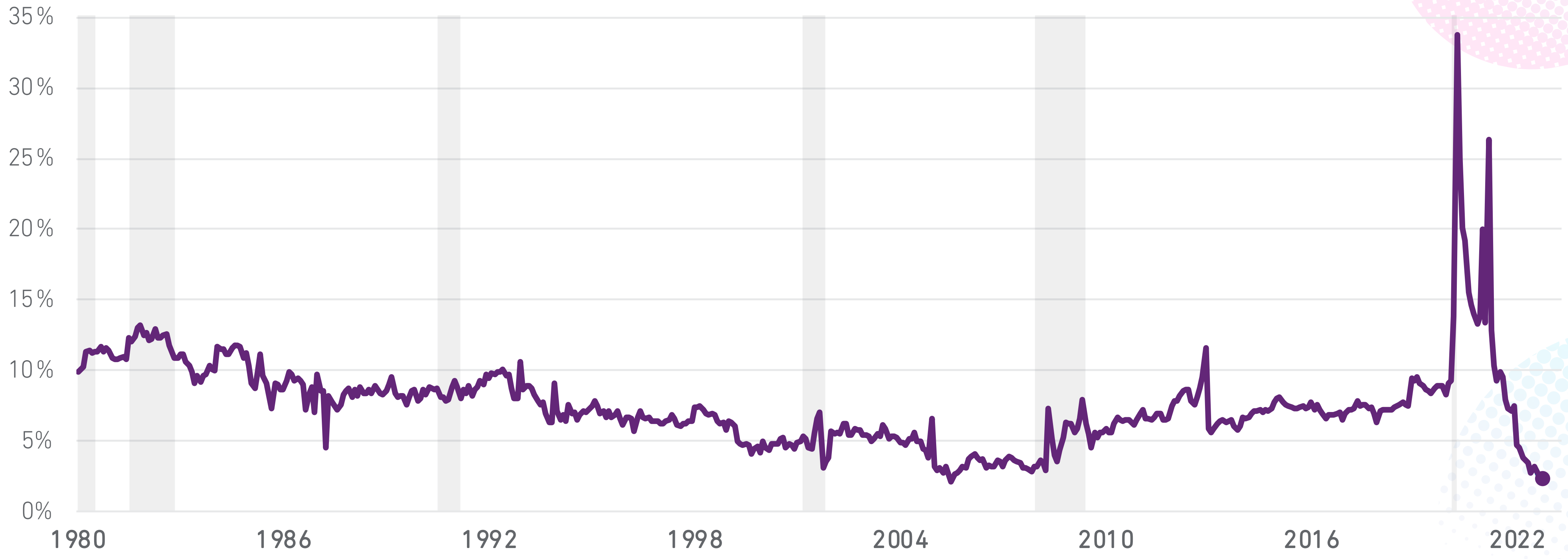


Source: Bureau of Economic Analysis and author's calculation

Consumers are saving less but have cushion of cash

Higher levels of spending coupled with waning incomes means the savings rate is near-record lows

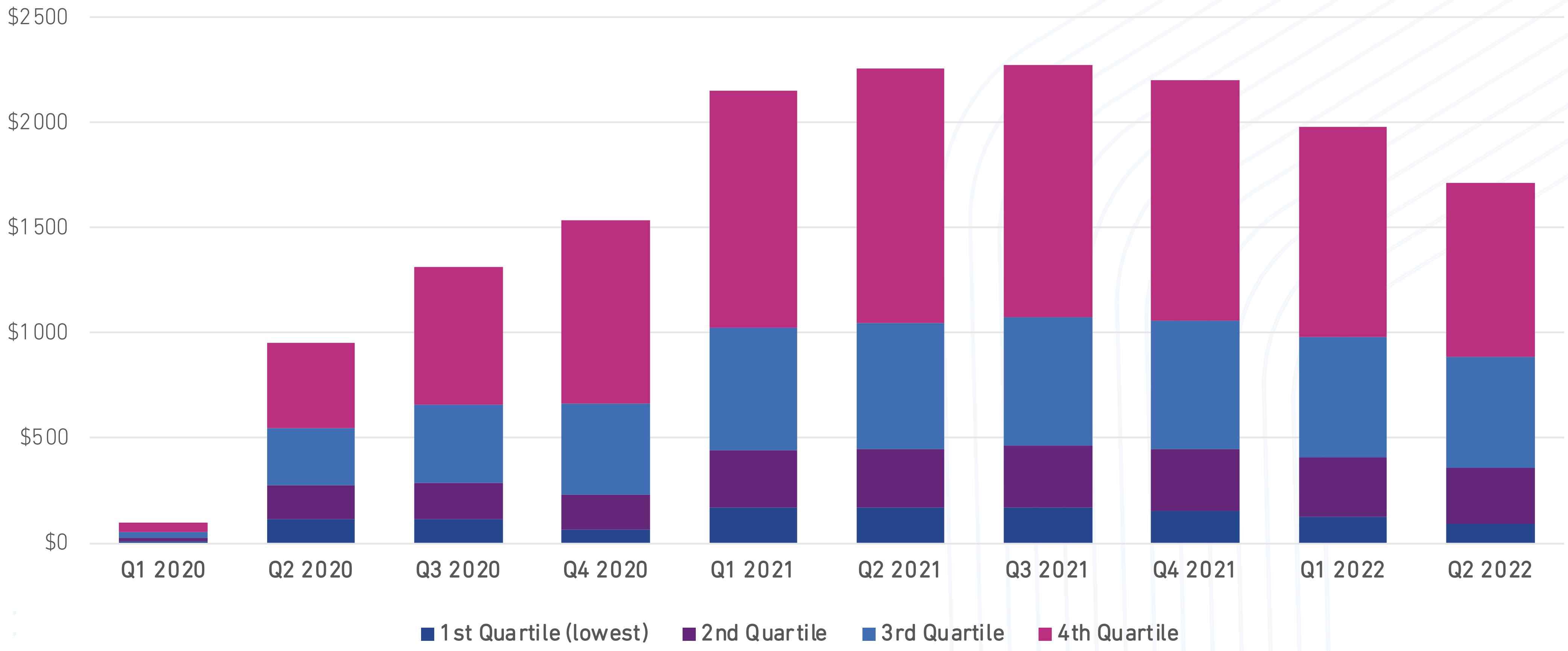
Personal savings rate, personal savings as a percentage of disposable income, SAAR



Source: Federal Reserve Bank of Atlanta, Wage Growth Tracker

However, consumers still – especially, higher-income households – have a large cushion of pandemic-era savings

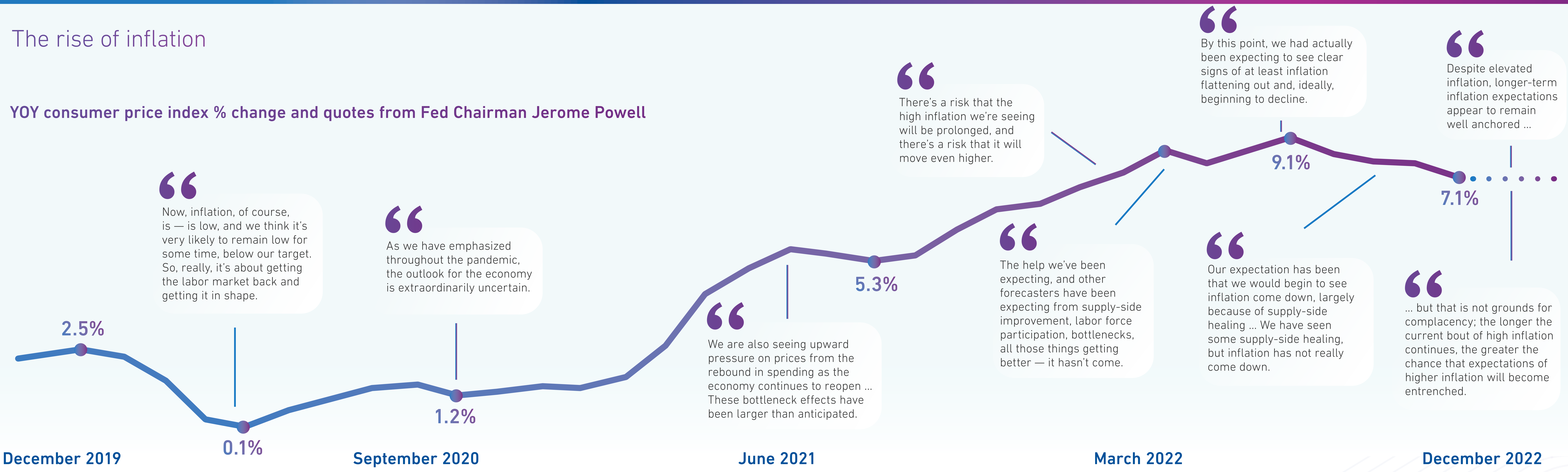
Level of excess savings by income quartile (in $ billions)



Source: Federal Reserve Board of Governors, "Excess Savings during the COVID-19 Pandemic" Aditya Aladangady, David Cho, Laura Feiveson, and Eugenio Pinto

The rise of inflation

YOY consumer price index % change and quotes from Fed Chairman Jerome Powell

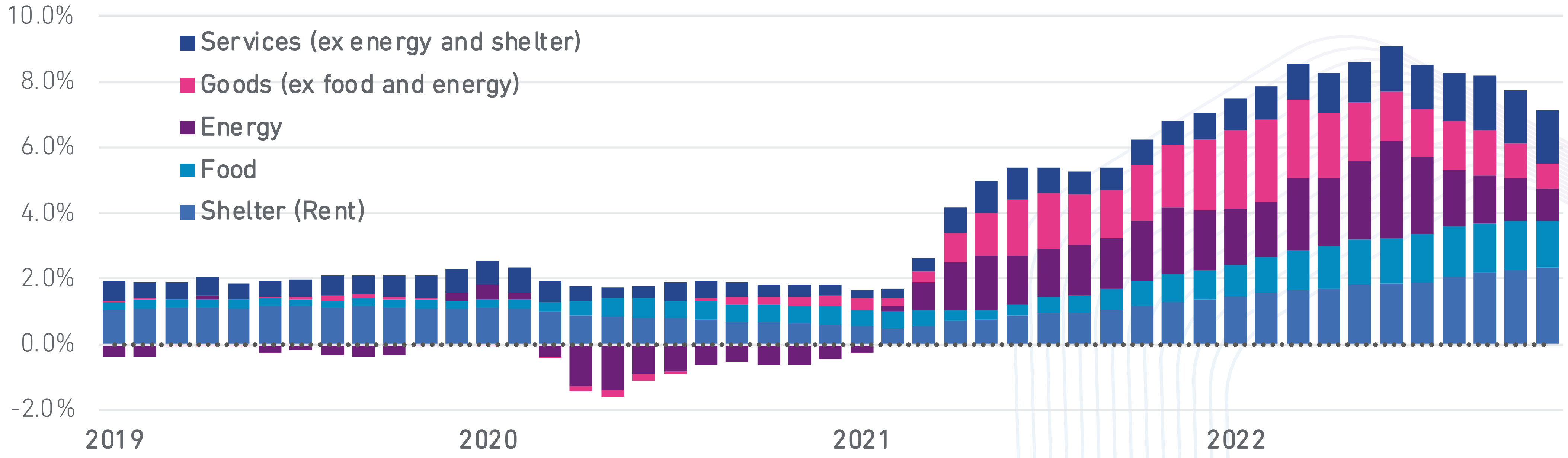


Source: Federal Reserve Board of Governors and Bureau of Labor Statistics

High prices hit consumers and impact interest-rate policy

Inflation appears to be moderating from its peak but continues to run hot in key household essentials

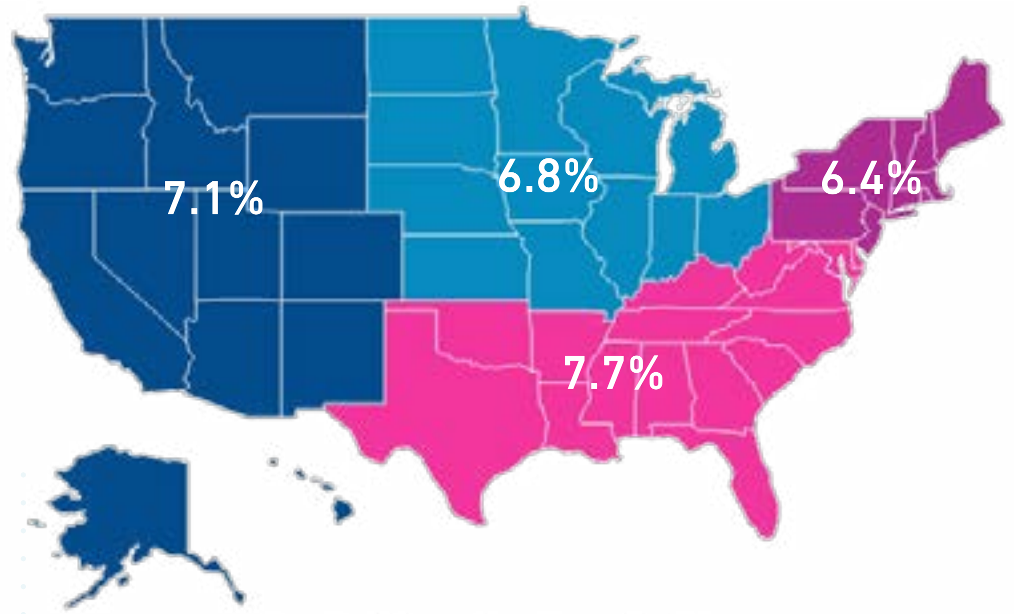
Select contributions to YOY % change in the Consumer Price Index



Source: Bureau of Labor Statistics and author's calculation

Prices have risen the most in the West and South

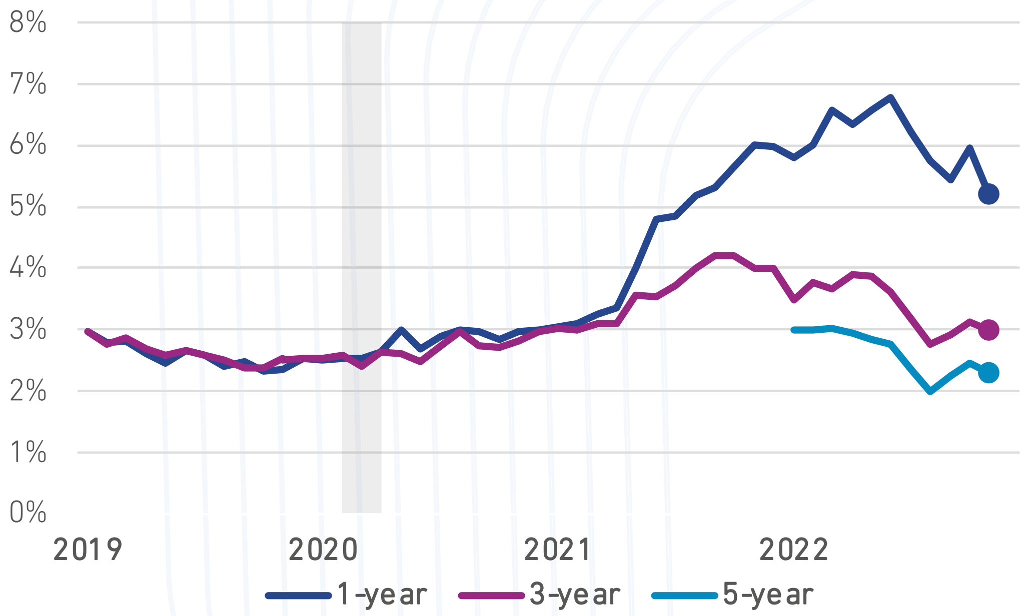
Consumer Price Index YOY % change by region



Source: Bureau of Labor Statistics

Consumers still see short-term price pressures

Median 1, 3, and 5-year ahead expected inflation rate

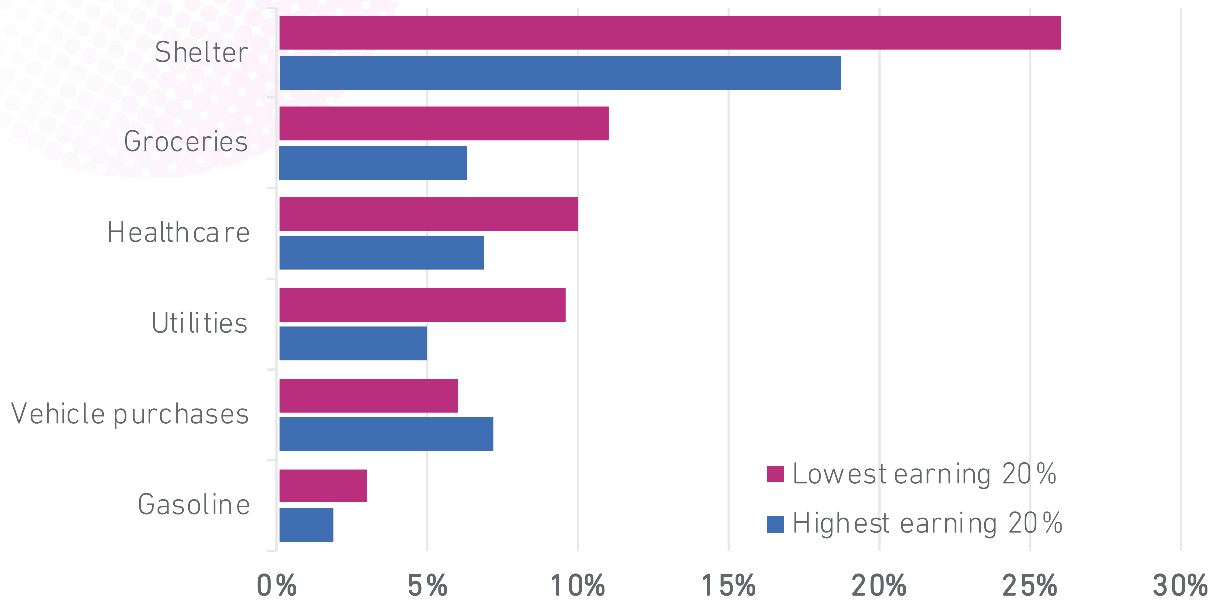


Source: Federal Reserve Bank of New York

Impact of inflation falls on those who can least afford it

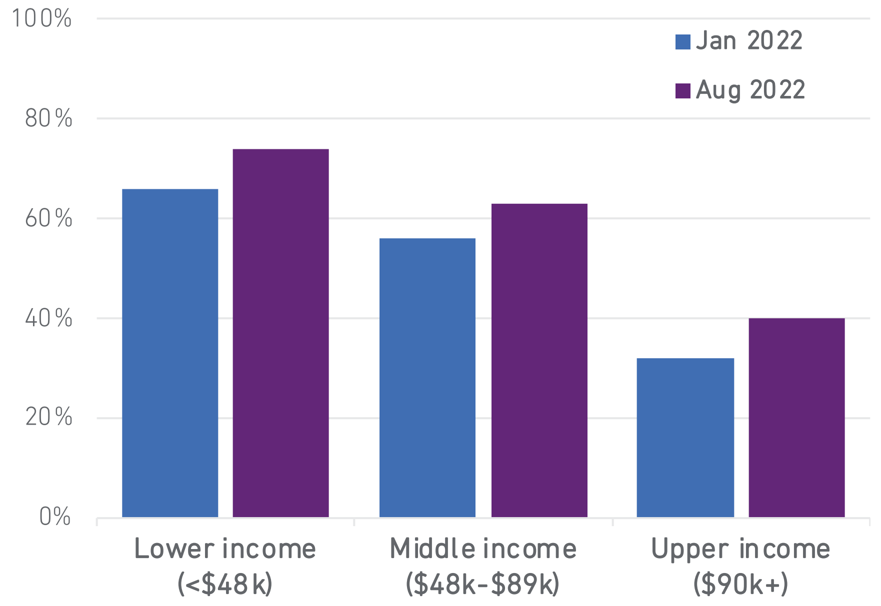
Lower-income groups are the most exposed to inflation (left chart), but more hardship is being reported across the board (right chart)

Share of spending by select income group



Source: Bureau of Labor Statistics

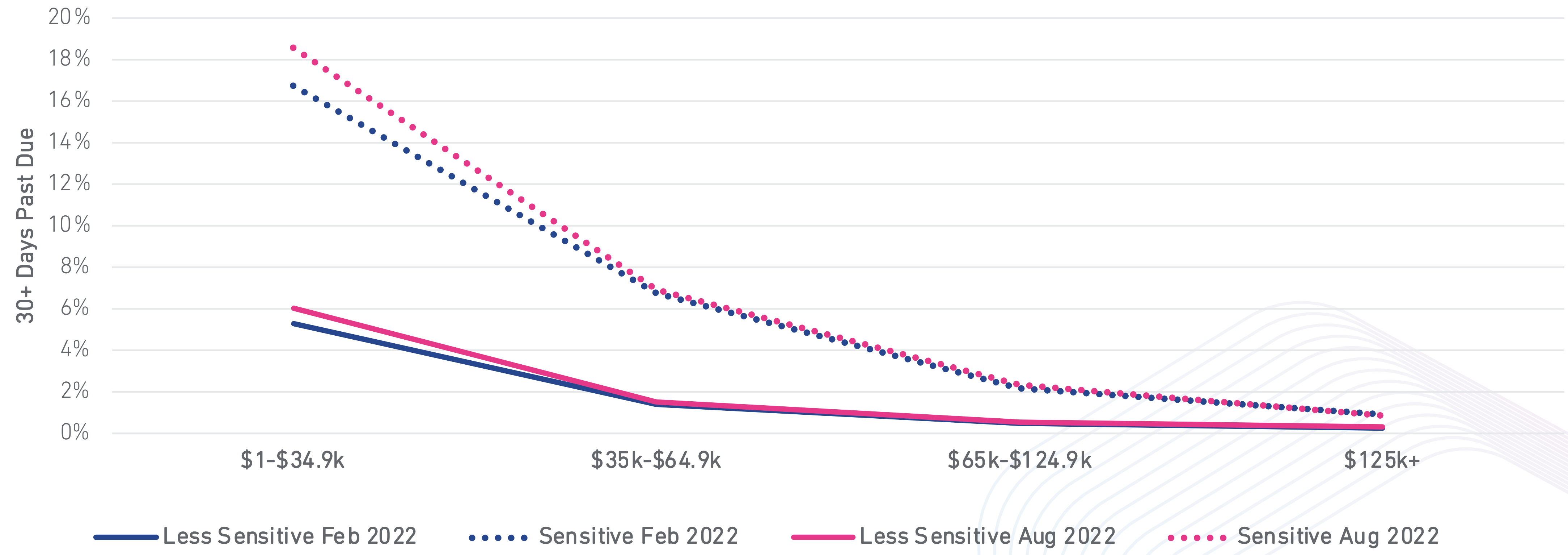
Price increases causing financial hardship by income



Source: Gallup, "Inflation Now Causing Hardshipfor Majority in US"

Lower-income consumers — especially those designated as "sensitive" to inflation — are seeing delinquency rates rise

30+ days past due by income and sensitivity (to the inflationary environment) group

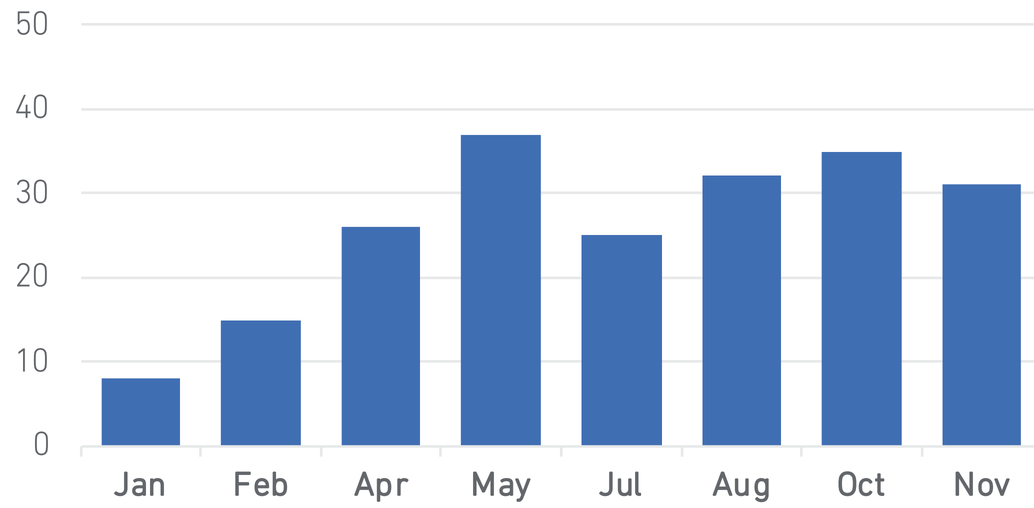


Source: Experian internal calculations. Consumers are segmented into "sensitive" and "less sensitive" groups based on their payment pattern, balance activity and card usage behavior.

Some signals inflation has peaked but pressures remain

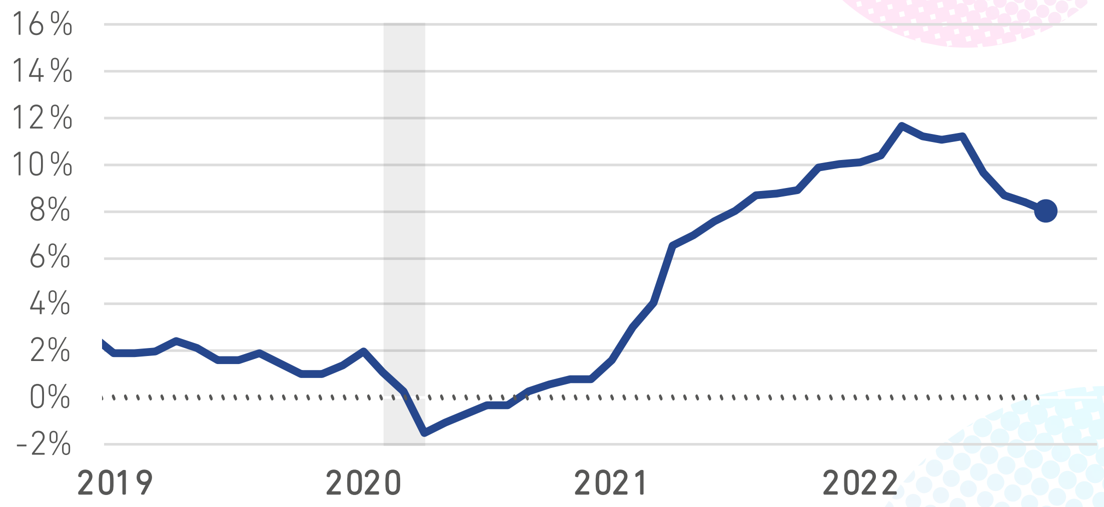
Businesses continue to discuss inflation impact (left chart). but input costs are starting to ease (right chart) ...

Beige Book mentions of "inflation" in 2022



Source: Federal Reserve Beige Book and Author's tabulation

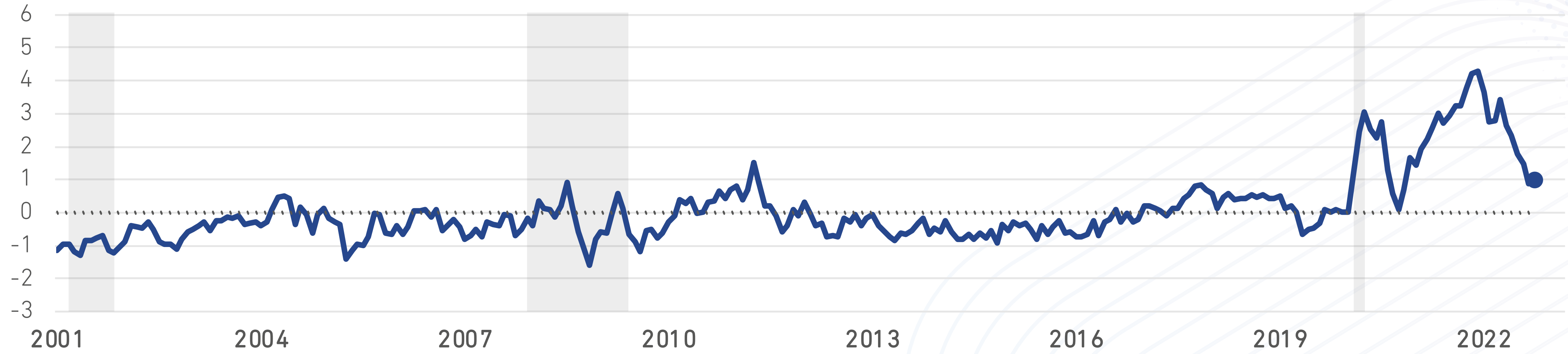
Producer Price Index, final demand, YOY % change



Source: Bureau of Labor Statistics

... and global supply chain issues are being resolved

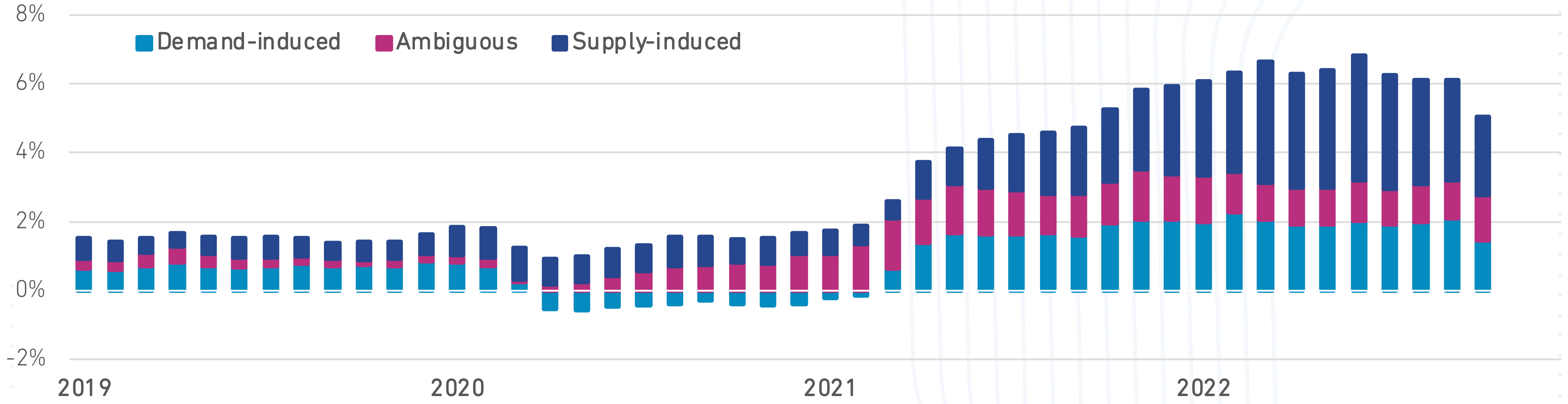
Global Supply Chain Pressure Index



Source: Federal Reserve Bank of New York

The big question is how long supply-induced inflation will last

Supply and demand contribution to YOY % change in PCE

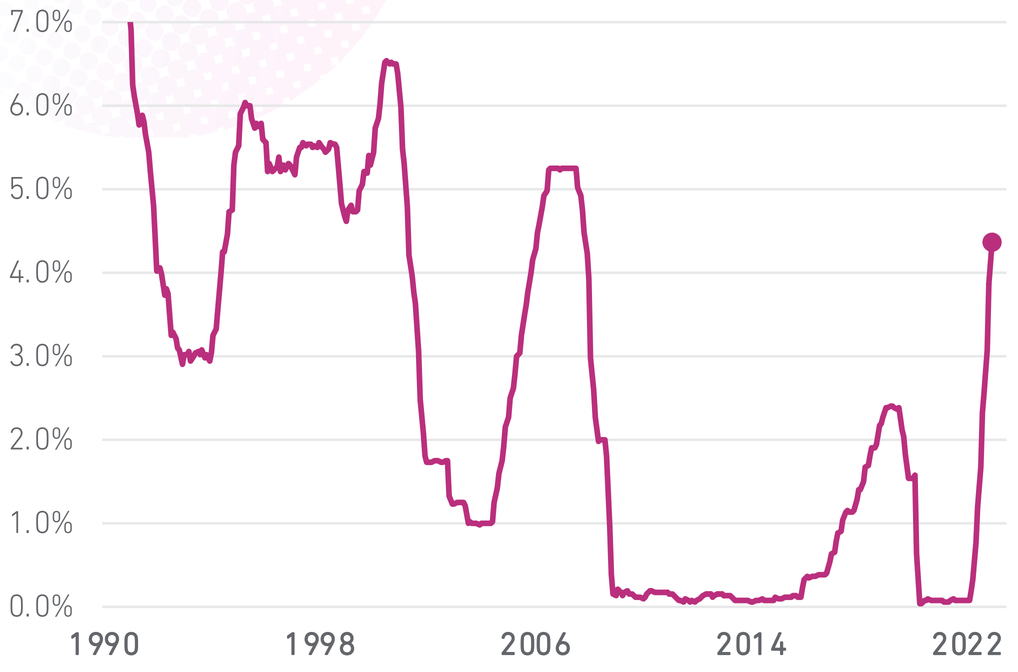


Source: Federal Reserve Bank of San Francisco

2022 was a year of playing catch-up to inflation

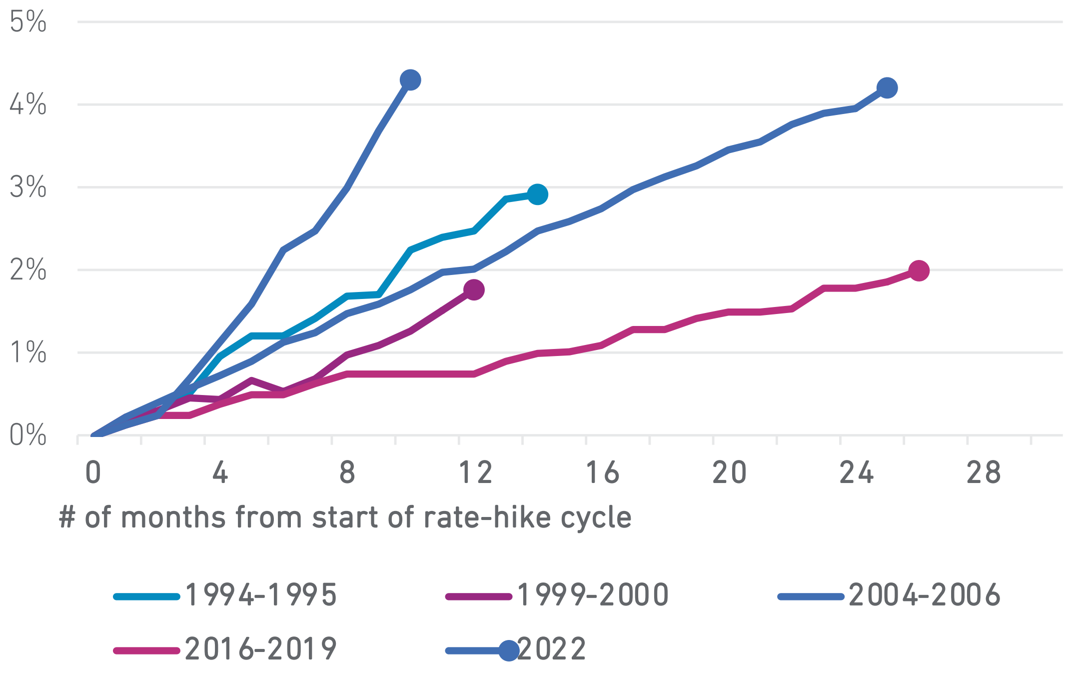
Fed officials have gone all in to rein in inflation in 2022 (left chart) with the most aggressive path of rate hikes since 1980s (right chart)

Effective federal funds rate (monthly)



Source: Federal Reserve

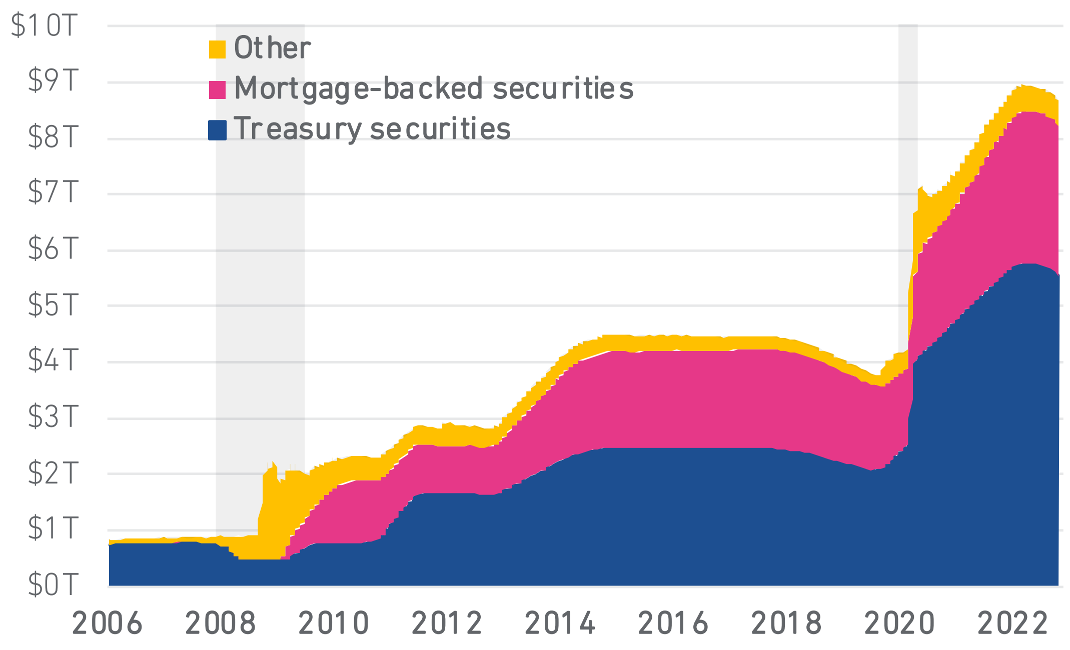
Increases in the federal funds rate during rate-hike cycles



Source: Federal Reserve and author's calculation

The Fed is also shrinking its balance sheet, which ballooned to ~$9 trillion during the pandemic

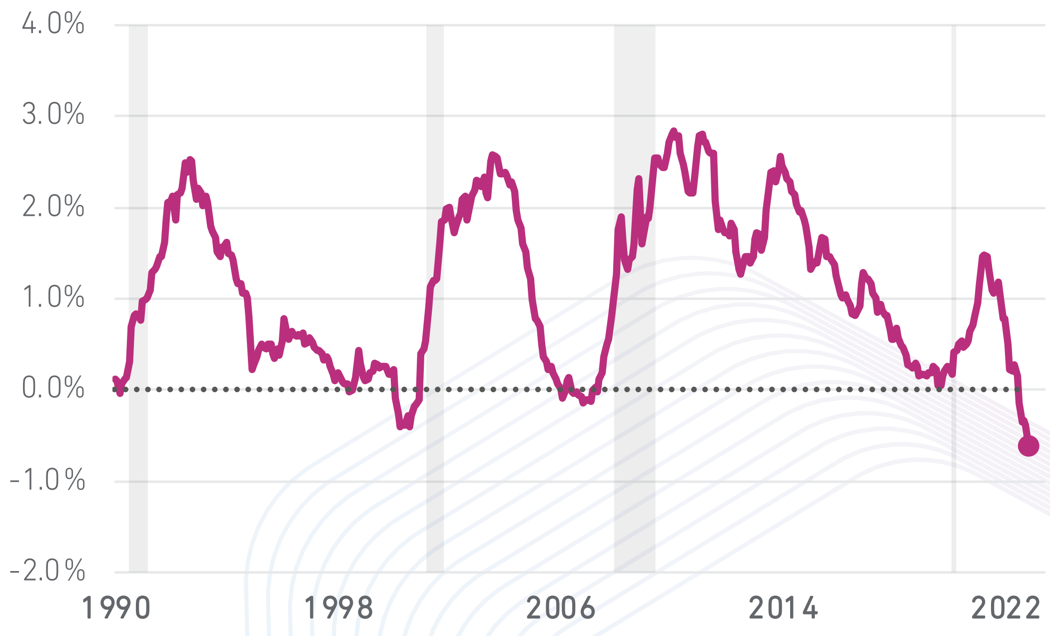
Federal Reserve balance sheet assets



Source: Federal Reserve Board of Governors

The Fed's actions have pushed short-term rates above long-term, a dynamic that has preceded prior recessions

10-year treasury minus 2-year treasury



Source: Federal Reserve Bank of St. Louis

Federal Open Market Committee members and calendar

FOMC voting members in 2023

Jerome Powell – Fed Chair
Lael Brainard – Board of Governors
Lisa Cook – Board of Governors
Philip Jefferson – Board of Governors
Michael Barr – Board of Governors
Michelle Bowman – Board of Governors
Christopher Waller – Board of Governors
John Williams – New York
Austan Goolsbee – Chicago
Patrick Harker – Philadelphia
Neel Kashkari – Minneapolis
Lorie Logan – Dallas

FOMC meeting calendar

January 31–February 1
March 21–22**
May 2–3
June 13–14**
July 25–26
September 19–20**
October 31–November 1
December 12–13**

**Summary of Economic Projections to be released

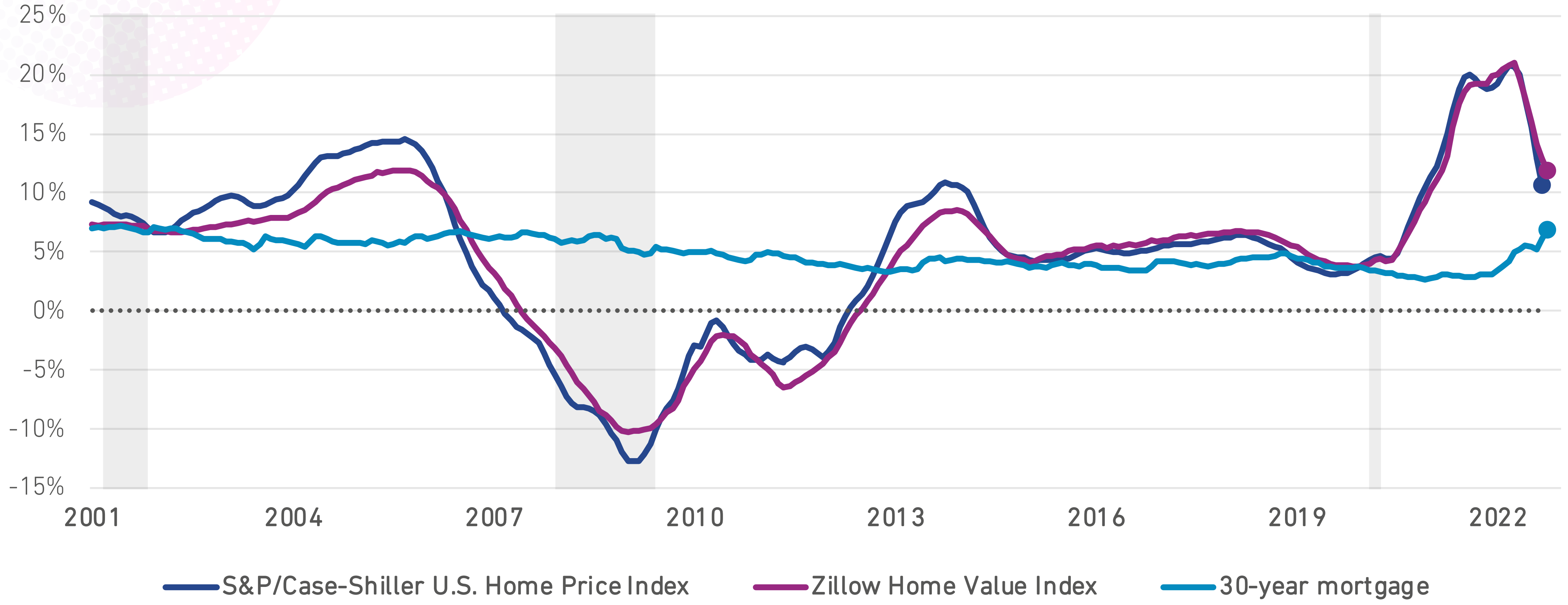
> The Federal Open Market Committee (FOMC) consists of 12 members — the seven members of the Board of Governors of the Federal Reserve System; the president of the Federal Reserve Bank of New York; and four of the remaining 11 Reserve Bank presidents, who serve 1-year terms on a rotating basis.
>
> The FOMC holds eight regularly scheduled meetings per year. At these meetings, the Committee reviews economic and financial conditions, determines the appropriate stance of monetary policy, and assesses the risks to its long-run goals of price stability and sustainable economic growth.
>
> **— Federal Reserve Board of Governors**

HOUSING

After a historic boom, the housing market is coming back to earth

Home prices grew rapidly across the country during the pandemic, but growth has quickly cooled as rates have risen

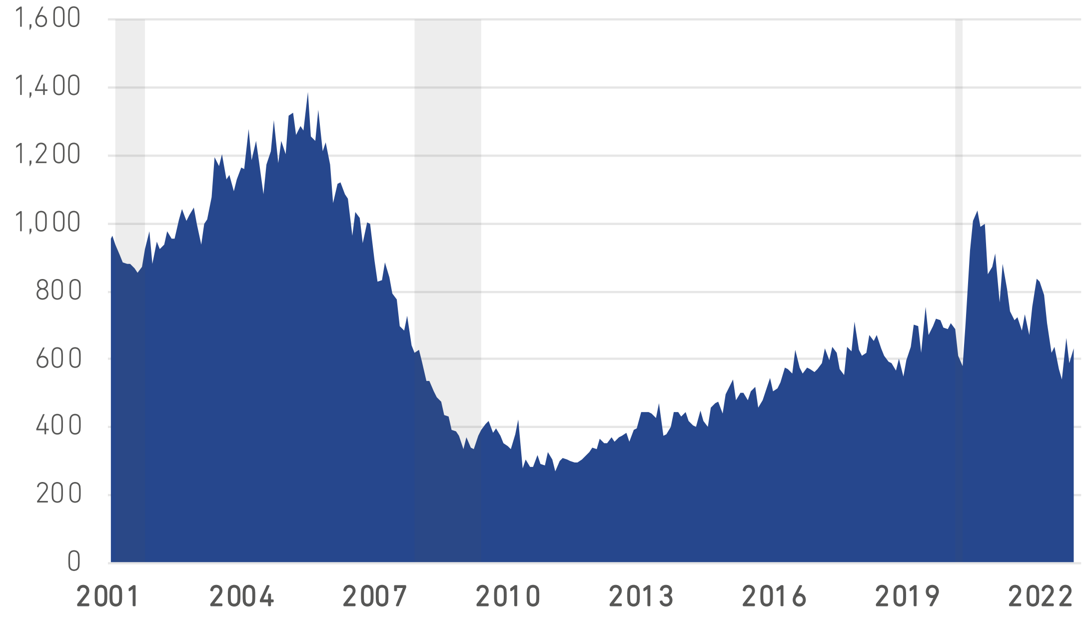
12-month % change in home values and 30-year fixed-rate mortgage (monthly)



Source: S&P/Case-Shiller National Home Price Index, Zillow Home Value Index, and Freddie Mac

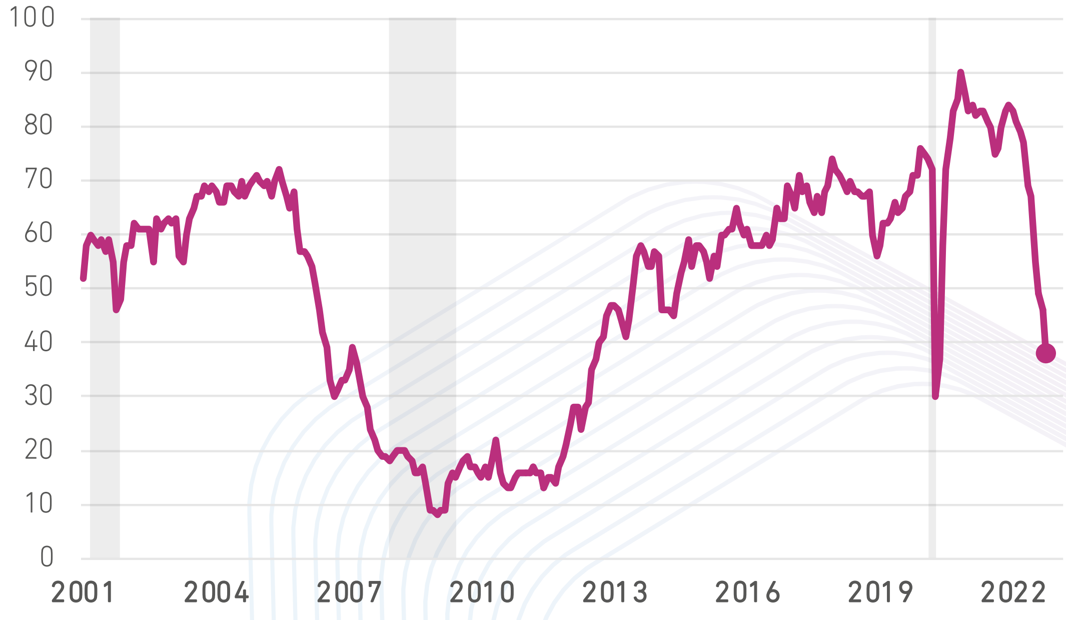
New home sales have slowed to pre-pandemic levels (left chart) and homebuilder sentiment has fallen for 11-straight months as affordability has constrained buyers (right chart)

New one-family houses sold (in thousands, SAAR)



Source: Census Bureau

Homebuilder sentiment

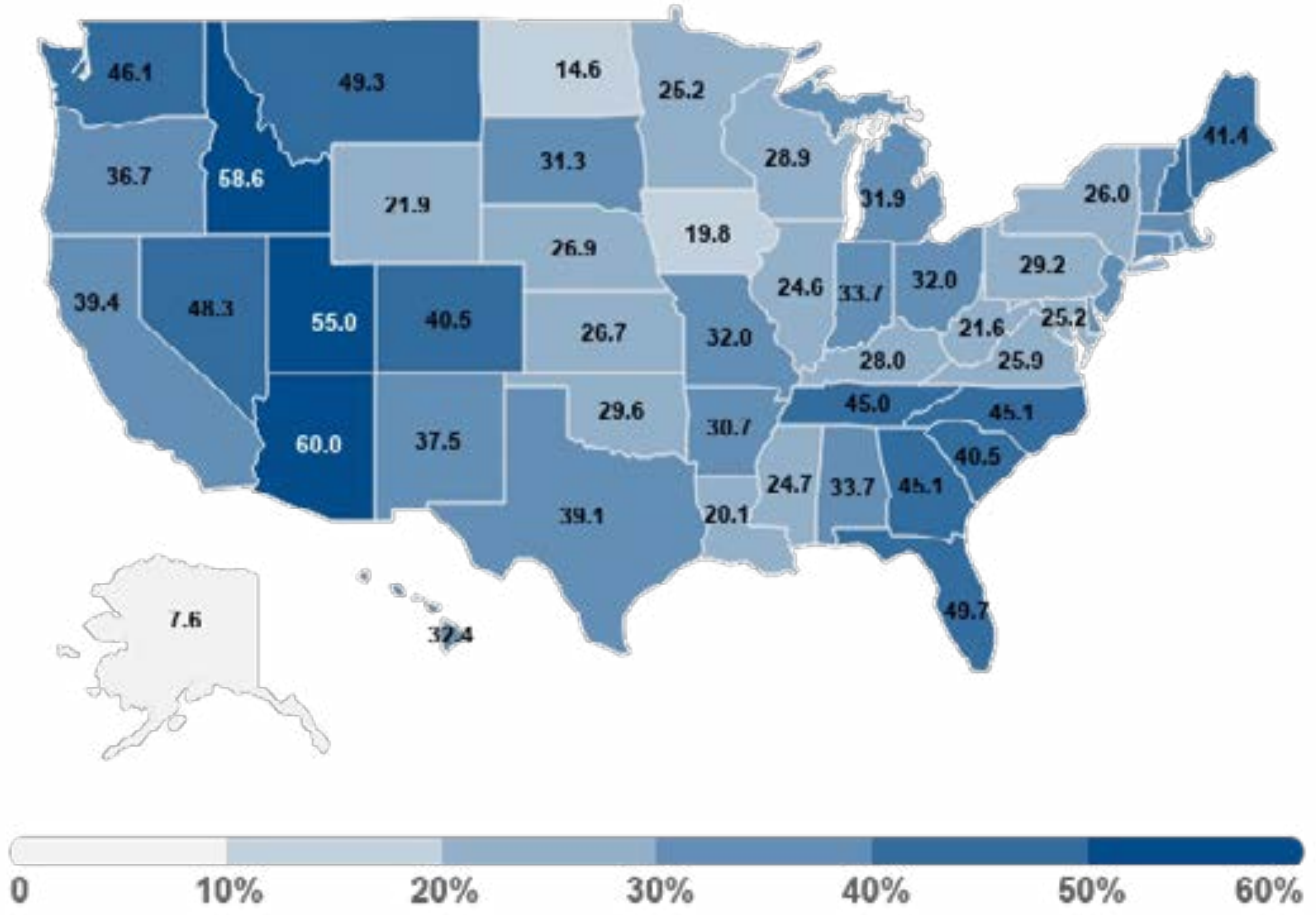


Source: National Association of Homebuilders/Wells Fargo

Every state participated in the pandemic-era housing boom

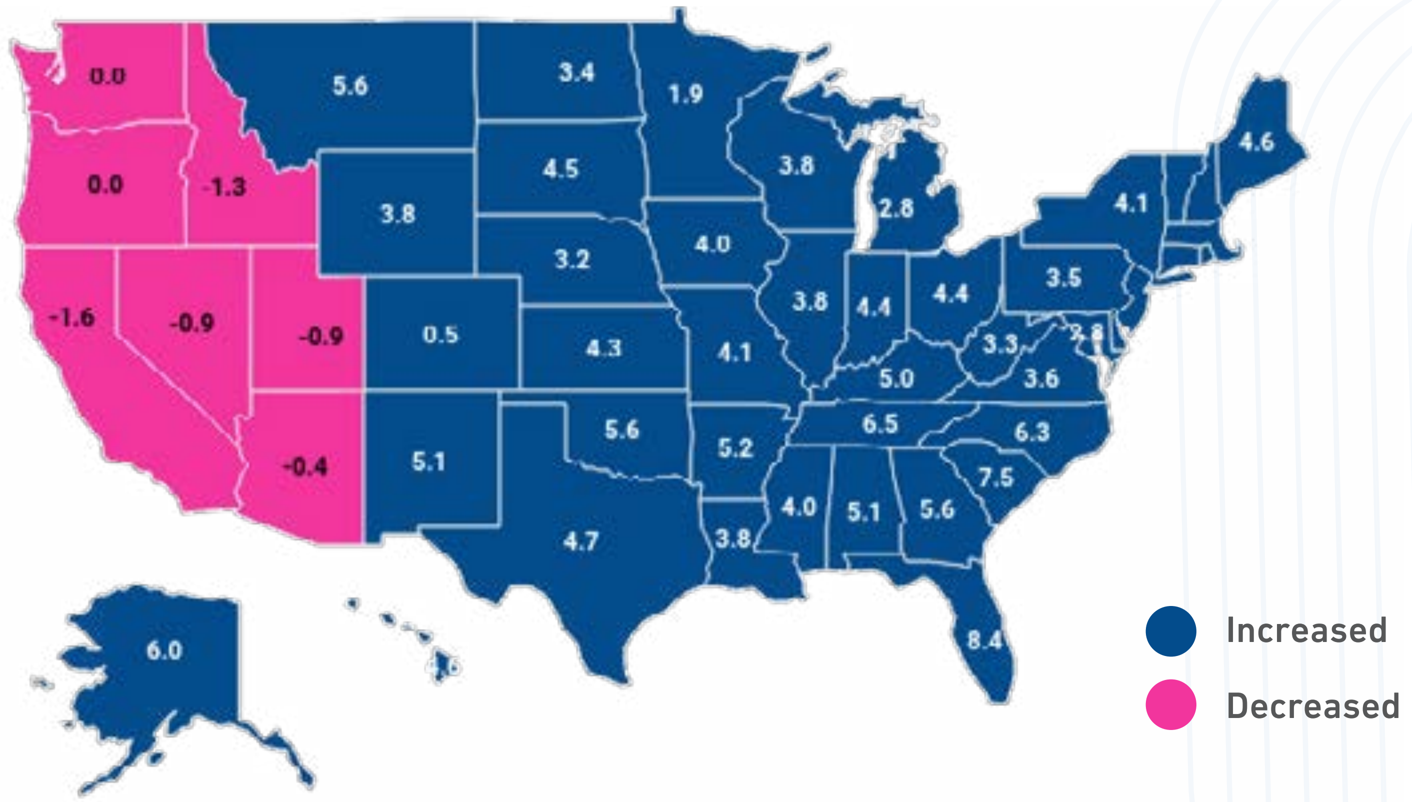
Largest price gains during the boom period were in the west and southeast ...

Home value % change **February 2020–April 2022** (the peak of national price growth)



... but over the last six months, home values have begun to come down in some of the biggest boom states

Home value % change **April 2022–October 2022**



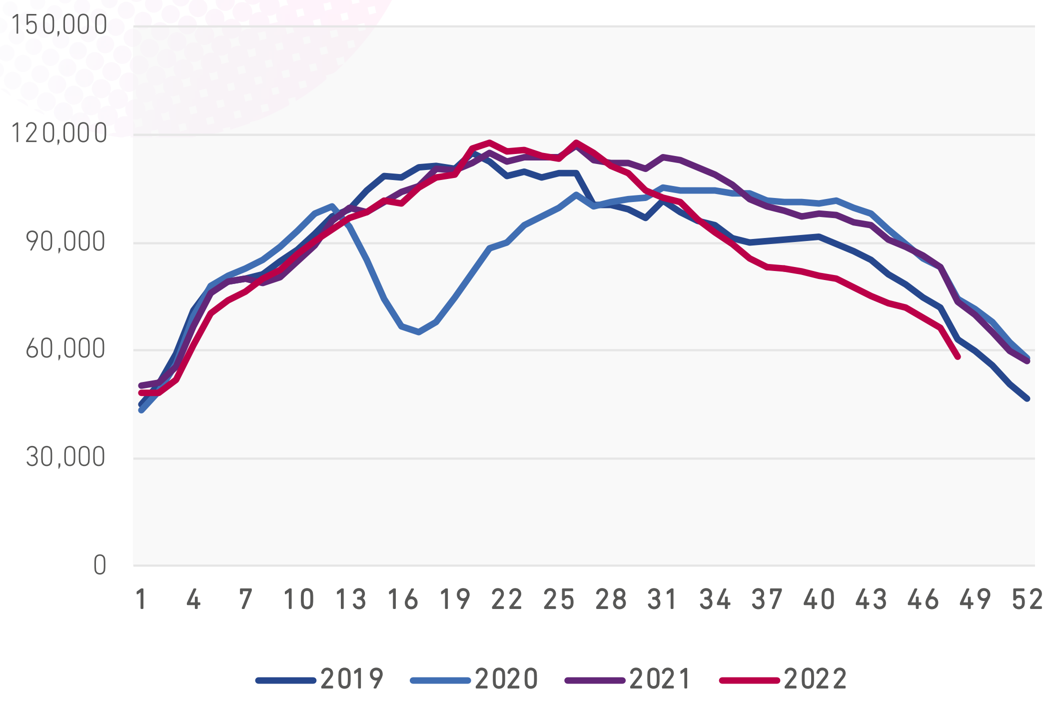
Source: Zillow Economic Research

HOUSING

High prices, high rates, and big equity cushions are limiting sales

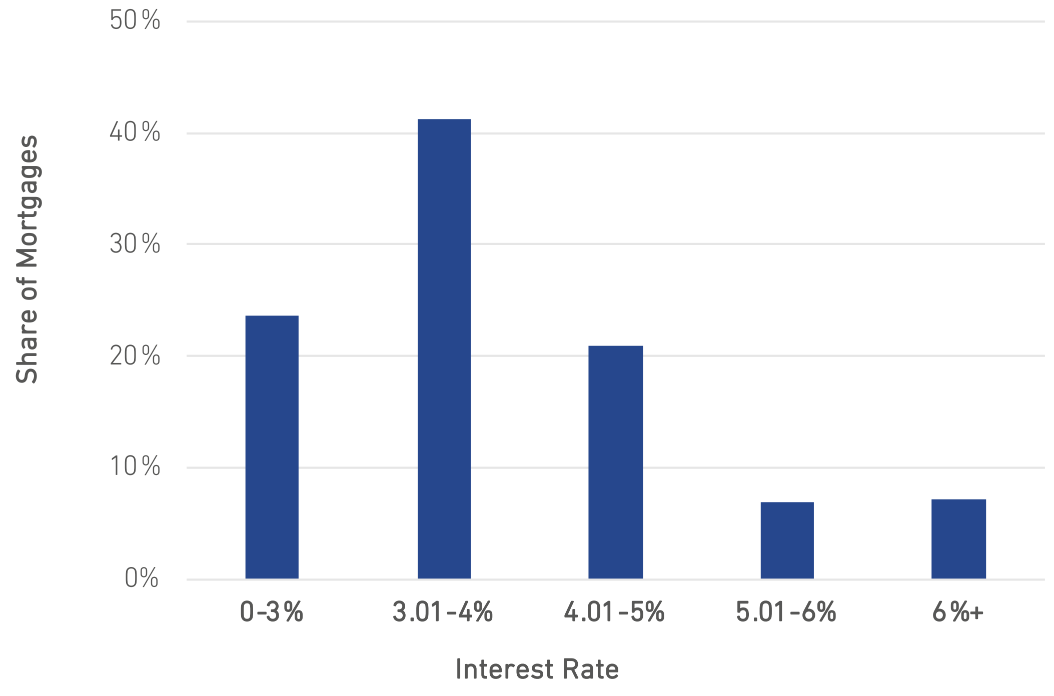
Even as prices have eased, there's been a reluctance to sell (left chart) given the high price to buy another house and since most homeowners' current mortgage is under 4% (right chart)

New listings of homes for sale



Source: Redfin Housing Market Data

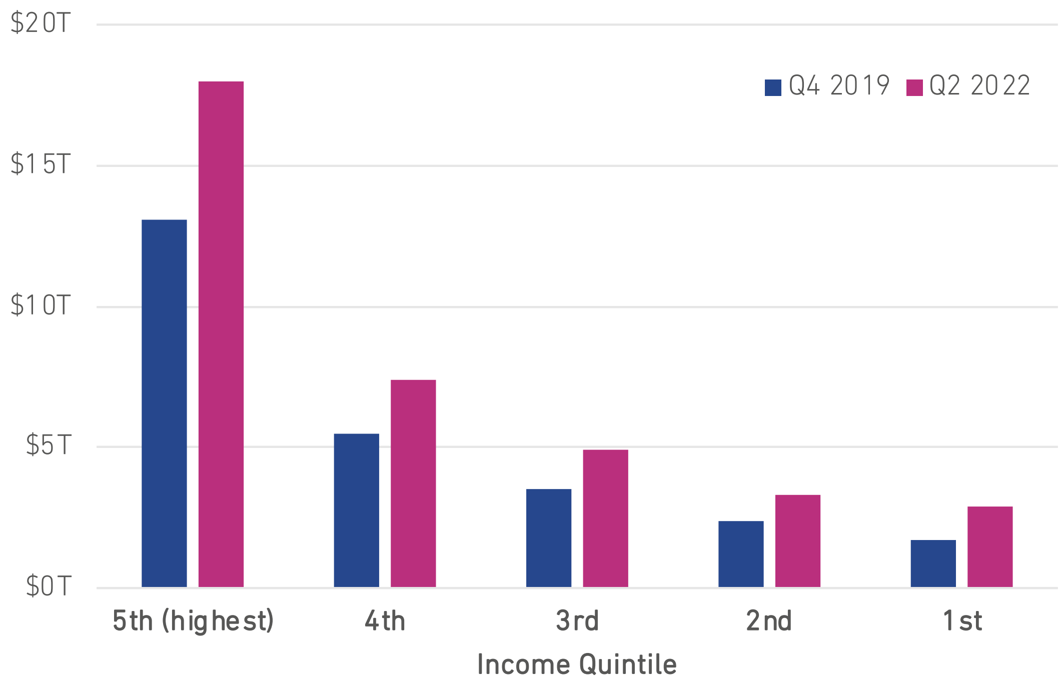
Share of outstanding mortgages at contracted rate



Source: FHFA National Mortgage Database

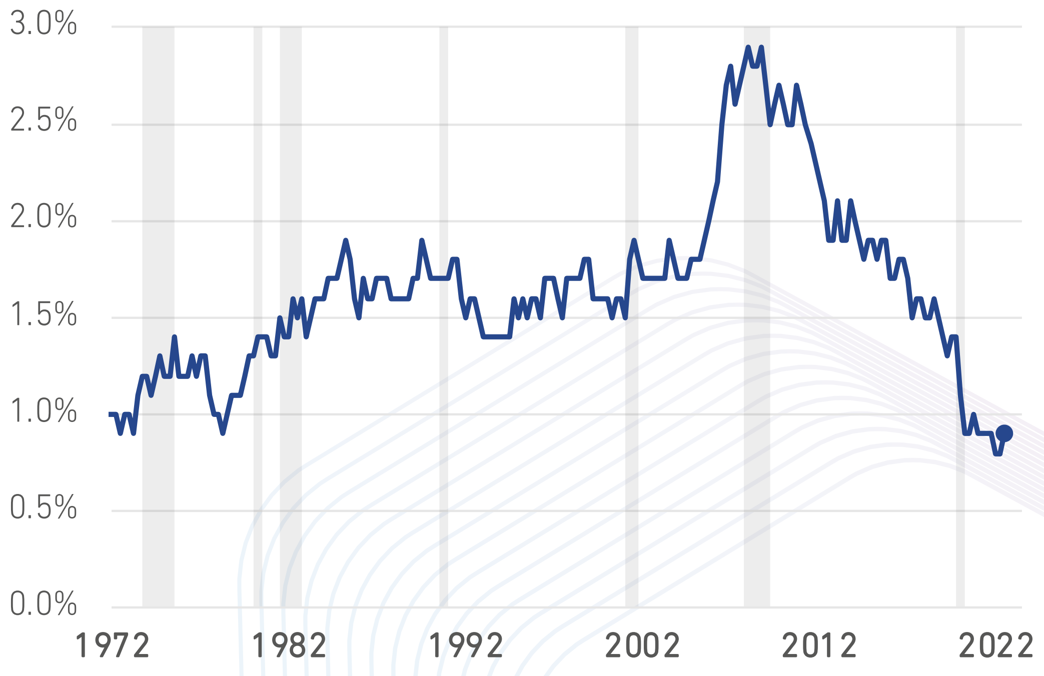
The pandemic boom has given many homeowners a large equity cushion, which reduces the need to stress sell (left chart), and the overall lack of available housing may provide an additional buffer to price declines (right chart)

Real estate assets by income in Q4 2019 vs. Q2 2022



Source: Federal Reserve Distributional Accounts

Percent of homeowner inventory vacant for sale

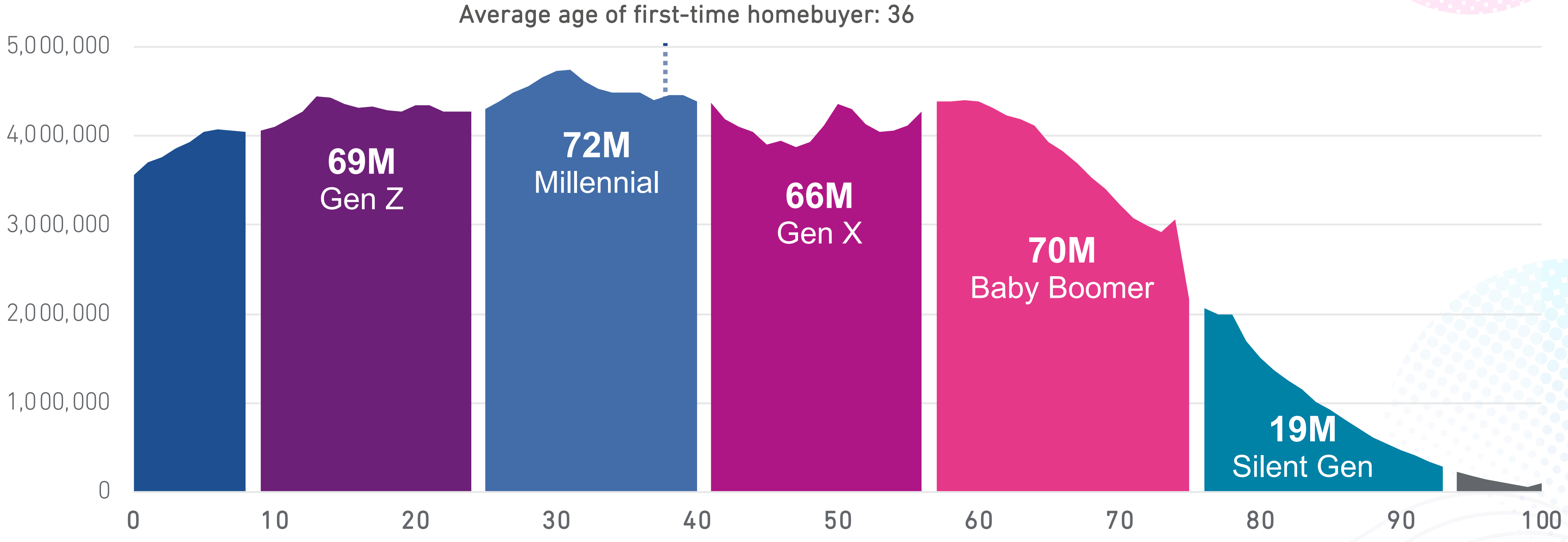


Source: Census Bureau

Generational tailwind for housing

Demographics to support the housing market as millennials are reaching their prime homebuying years

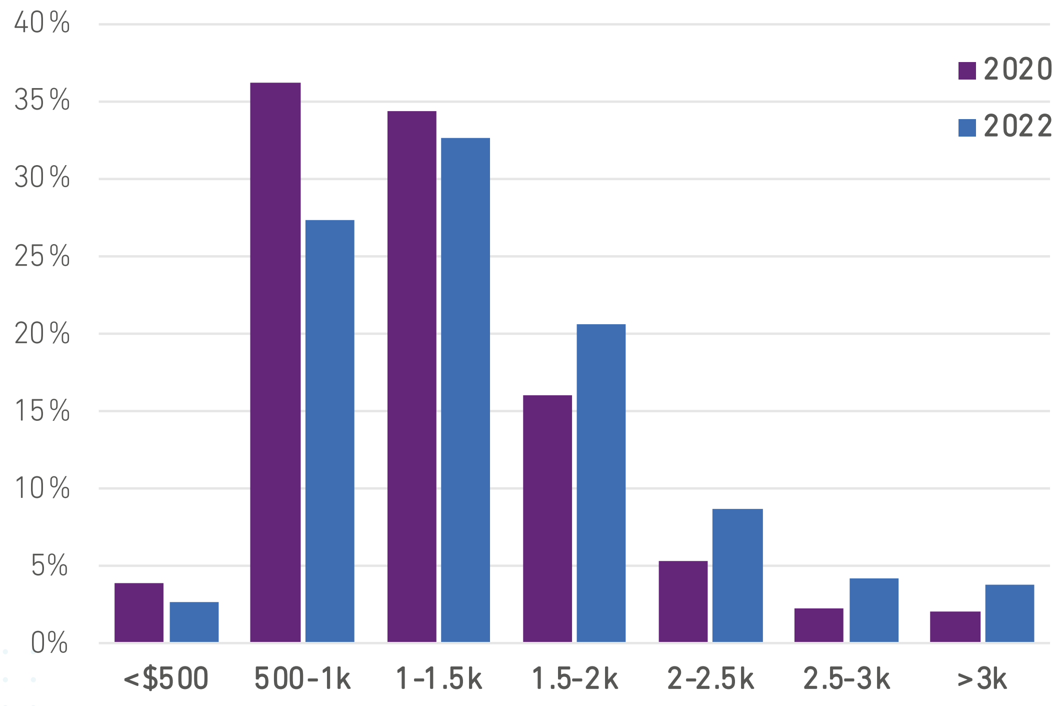
U.S. population by age and generation



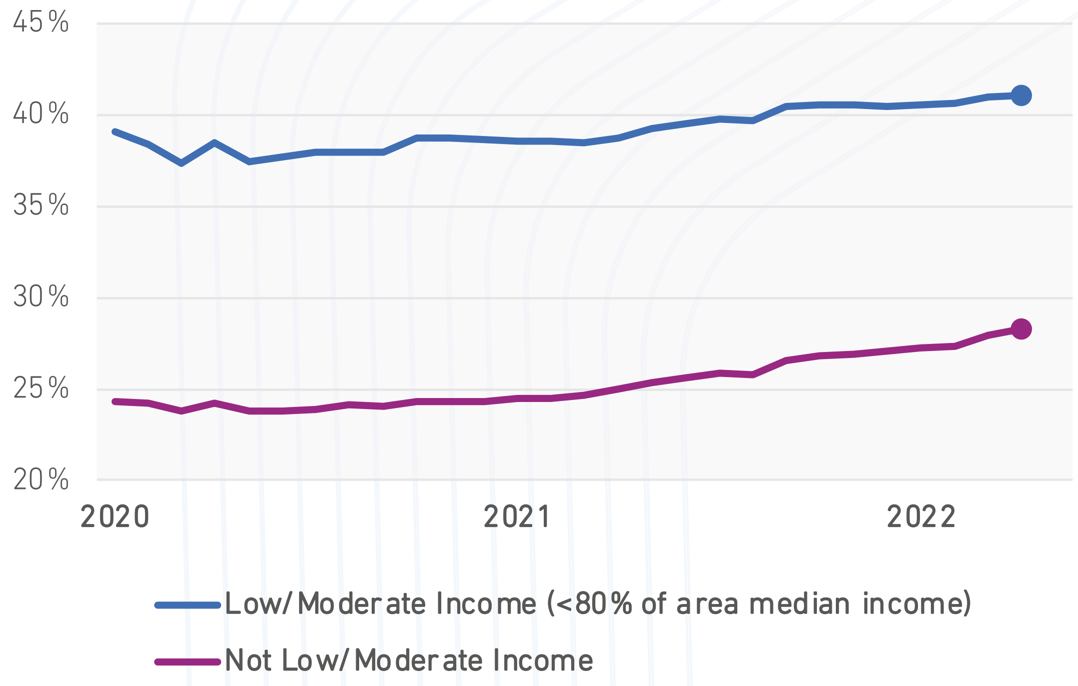
Source: Census Bureau and author's calculation, Pew Charitable Trust and National Association of Realtors

The home price boom and changing work-from-home patterns also fueled a rise in the cost to rent (left chart), which has challenged consumers, especially those who can least afford it (right chart)

Distribution of average rent paid 2020 vs. 2022



Share of rent to income

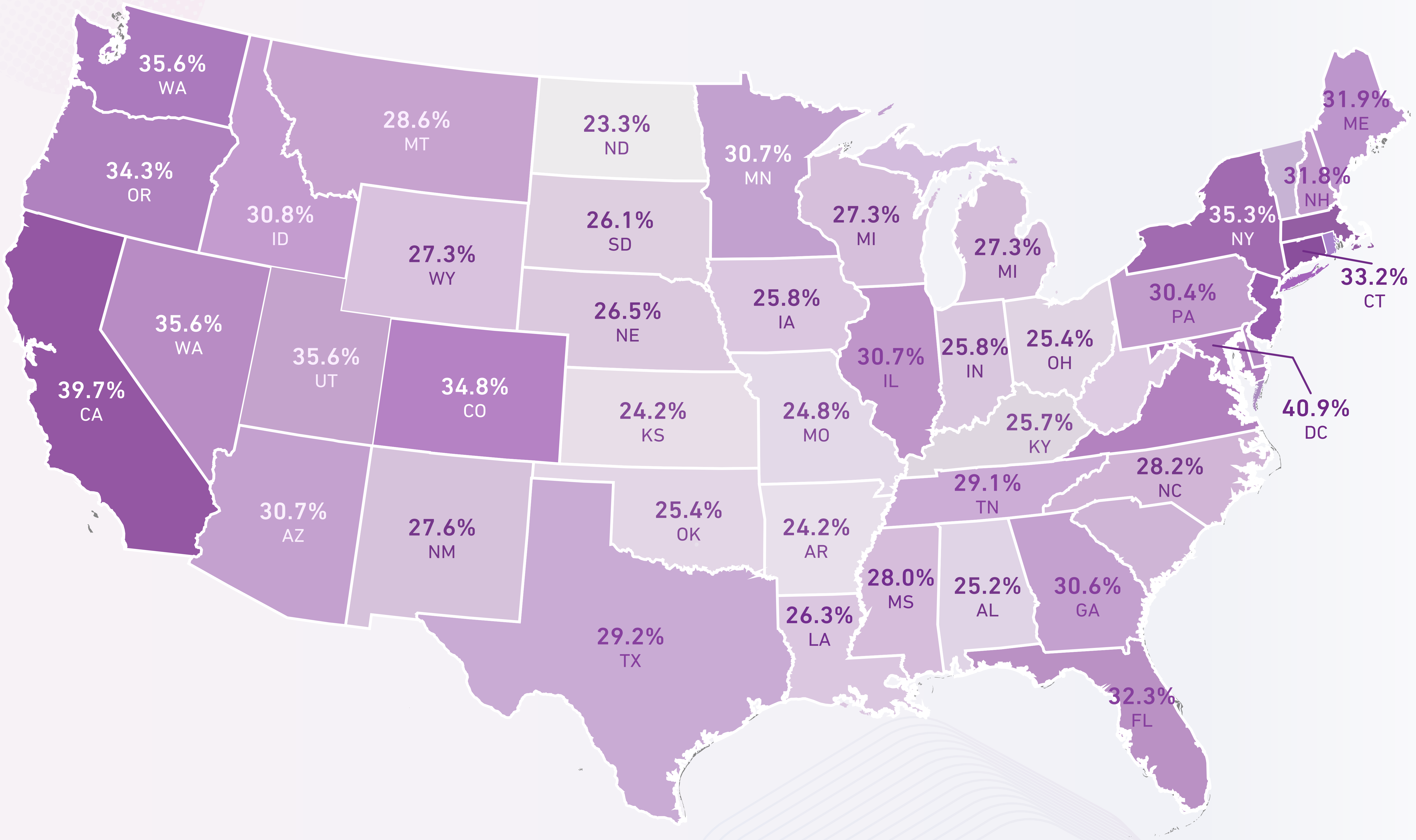


Source: Experian® RentBureau® and Income Insights data

Rental crunch could ease in 2023 as more properties come online

Rent-to-income ratio is the most challenging in the west and northeast

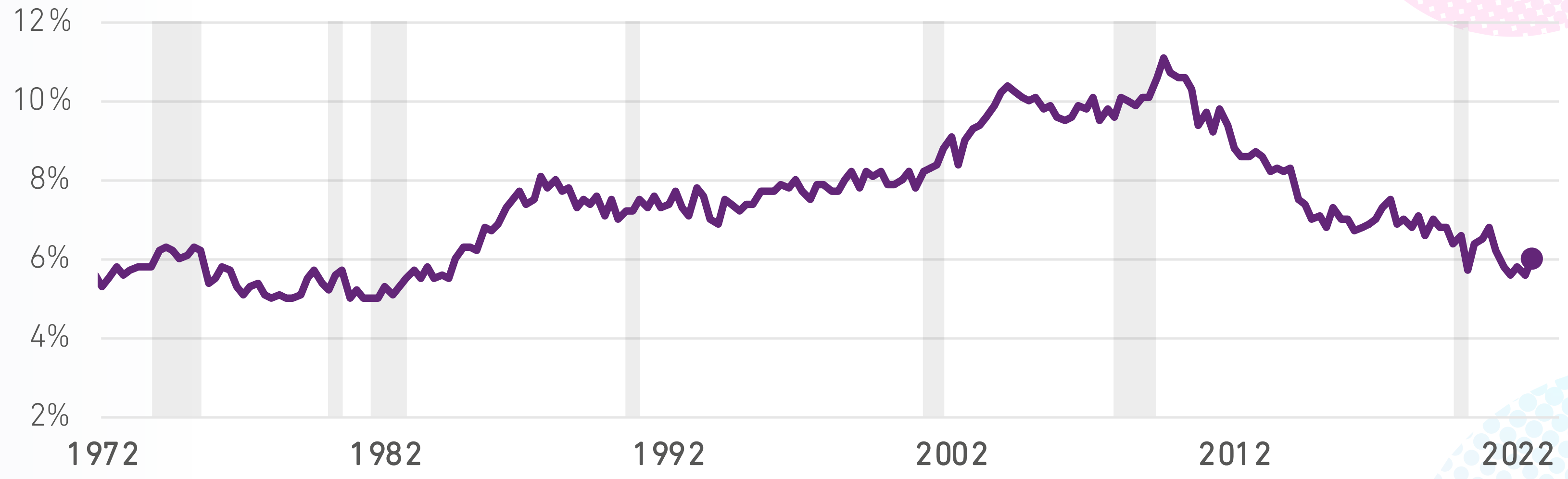
Share of rent-to-income ratio by state



Source: Experian Rent Bureau and Income Insights data

Similar to the for-sale housing market, rental has also suffered from an inventory supply crunch ...

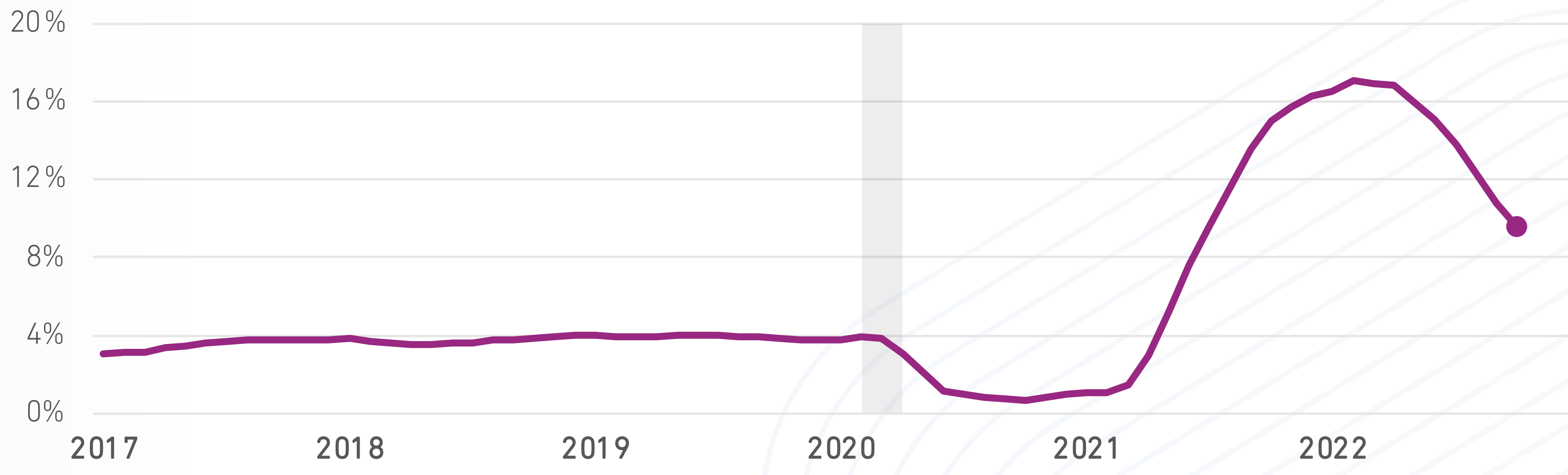
U.S. population by age and generation



Source: Census Bureau

... but rents are starting to ease in tandem with the broader housing market

12-month % change in Zillow Observed Rent Index



Source: Zillow Housing Market Data

And a record number of multifamily units are under construction

Multifamily (5+units) under construction (in thousands)

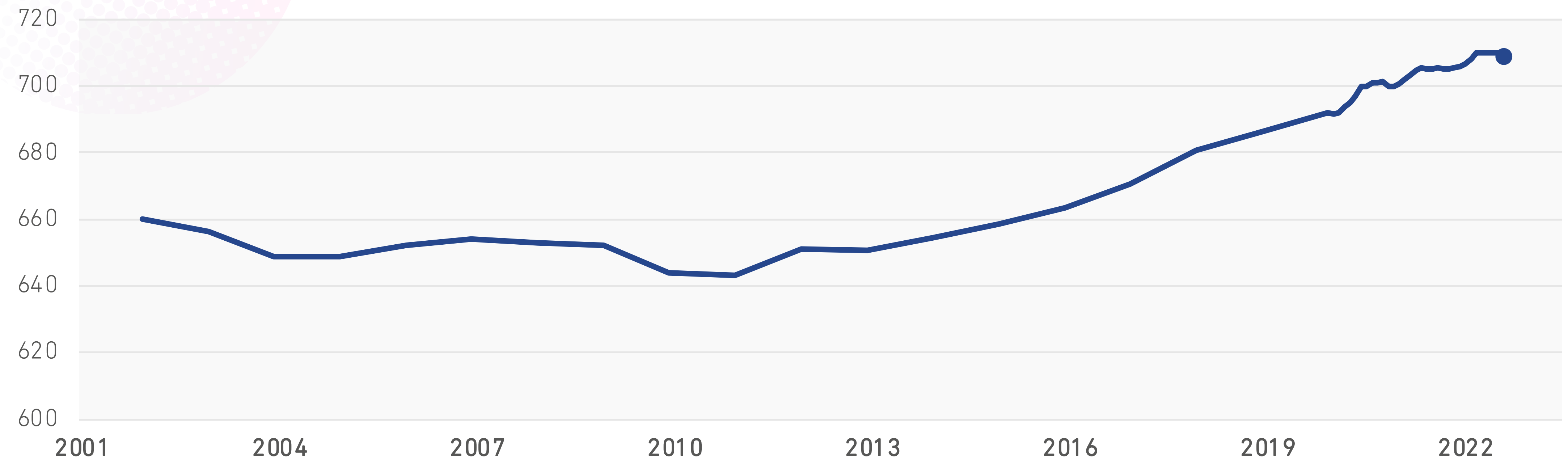
Source: Census Bureau

CREDIT TRENDS

Pandemic-era stimulus and consumer behavior lifted credit scores and lowered debt burdens

Credit scores rose as consumers used stimulus to pay down debt and save, but the trend is starting to normalize

Median VantageScore® version 4

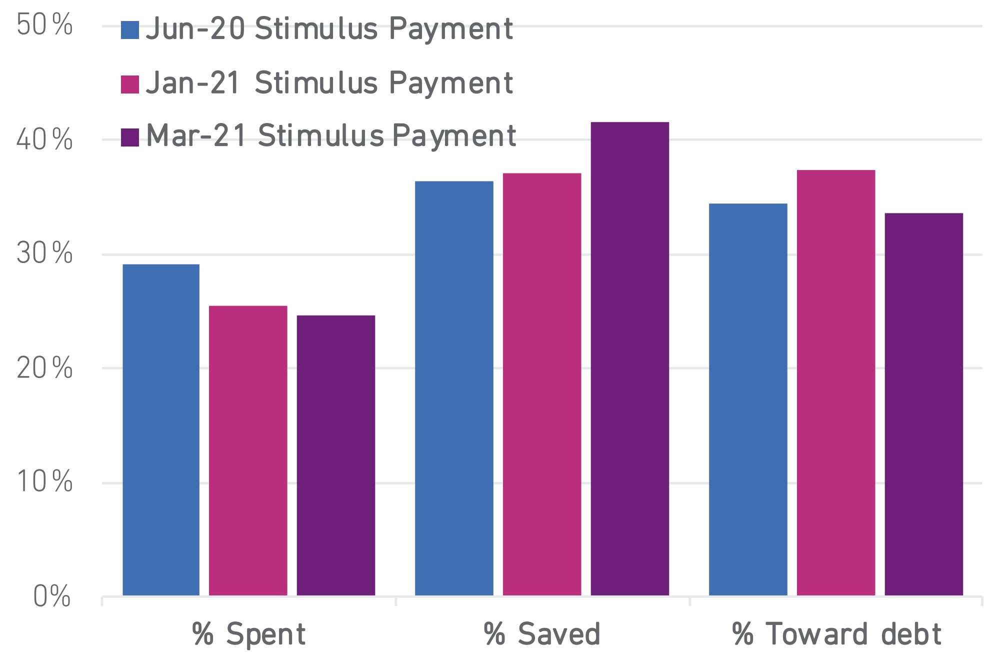


Source: Experian's Ascend Analytical Sandbox™

* VantageScore is a registered trademark of VantageScore Solutions, LLC.

Consumer actions during the pandemic mean that many are still in solid shape heading into 2023

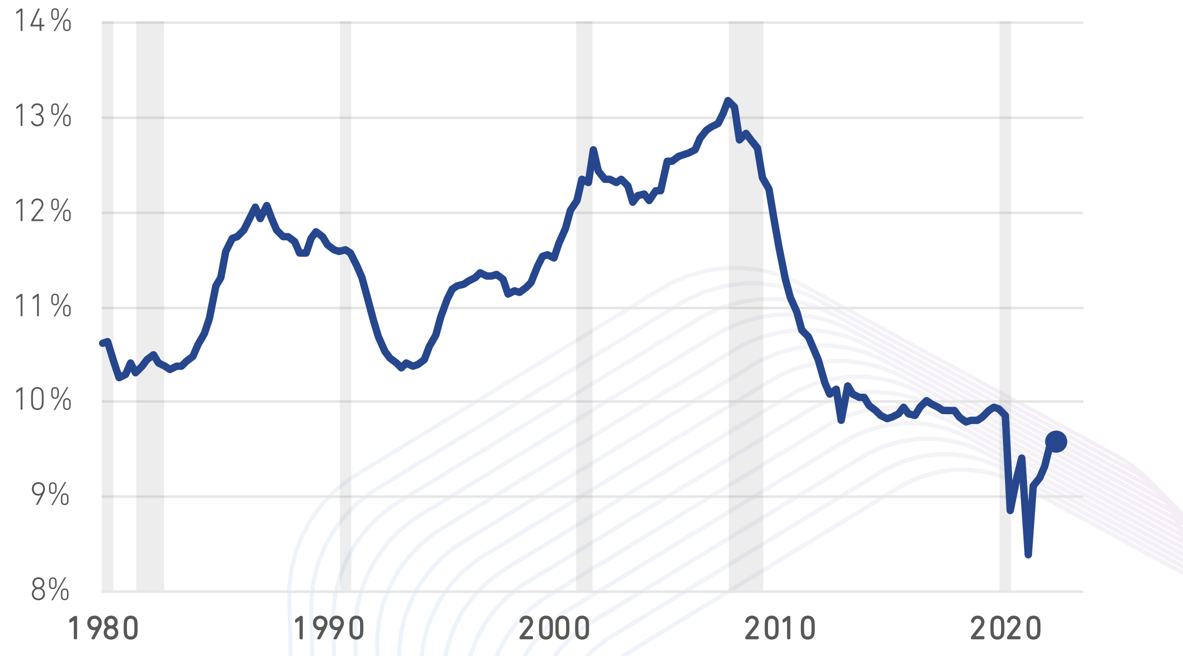
How households used their stimulus checks



Source: New York Fed and Survey of Consumer Expectations

Overall debt loads remain subdued, even as they have risen off their pandemic lows

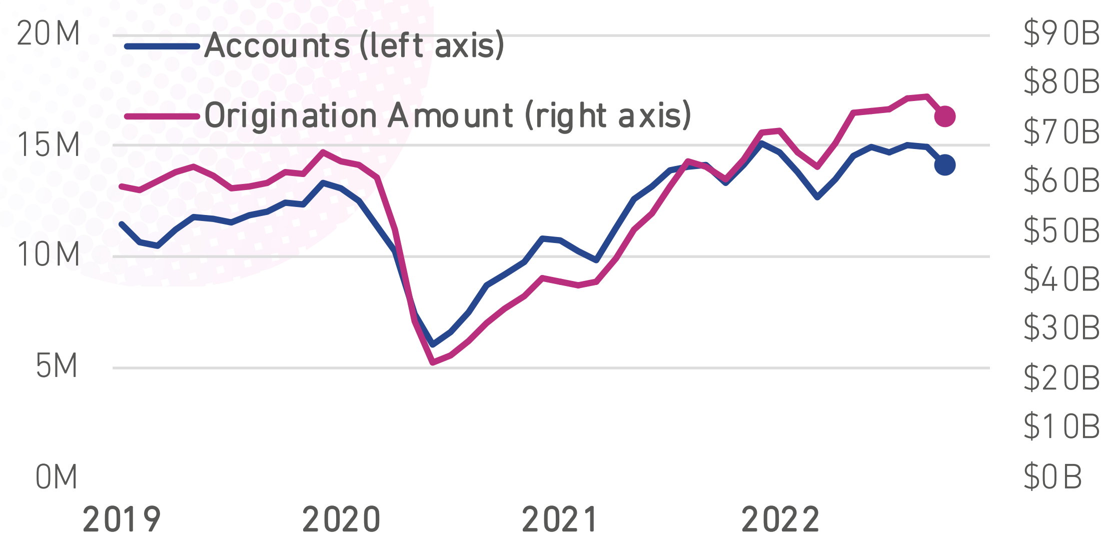
Household debt service payments as a percent of disposable personal income



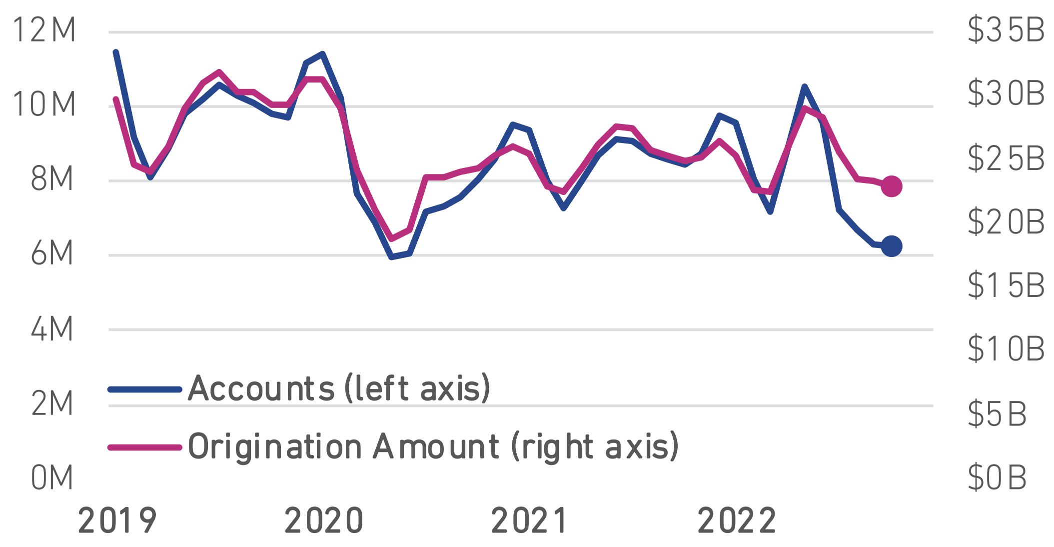
Source: Federal Reserve Board of Governors, Household Debt Service Ratio

Origination roundup

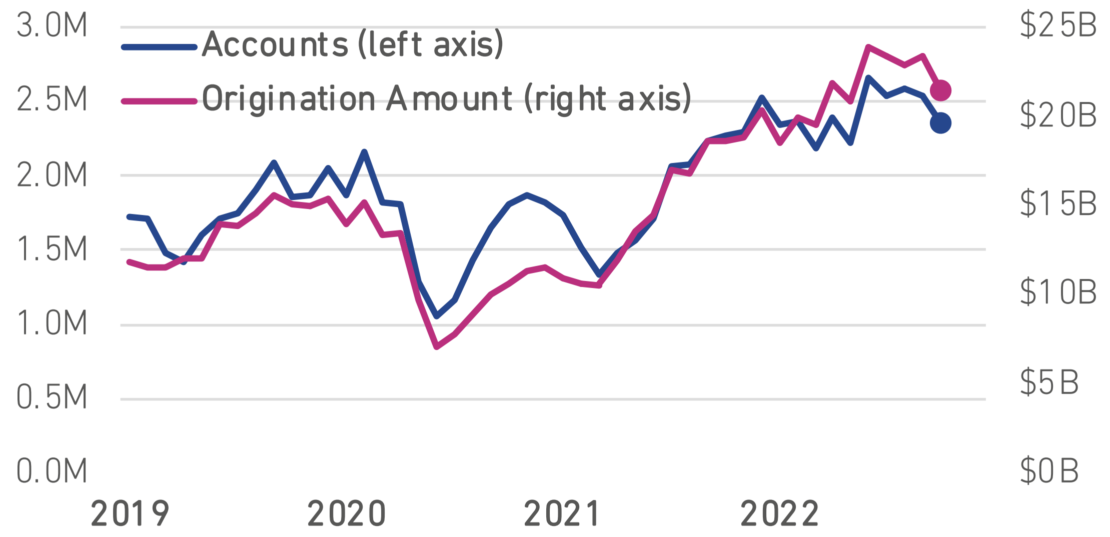
Bankcard



Retail card



Unsecured Personal Loan



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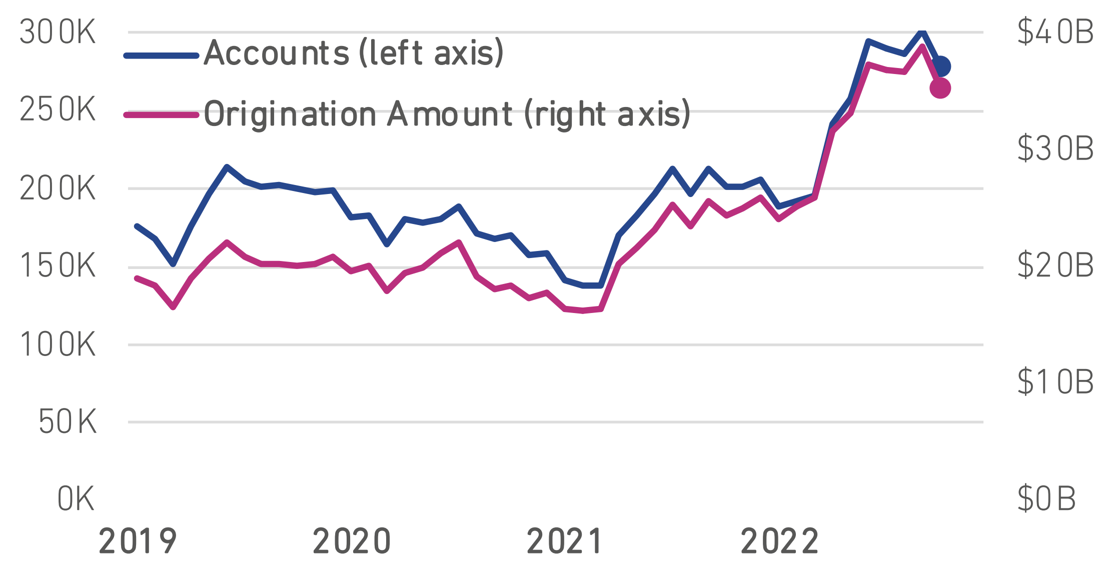
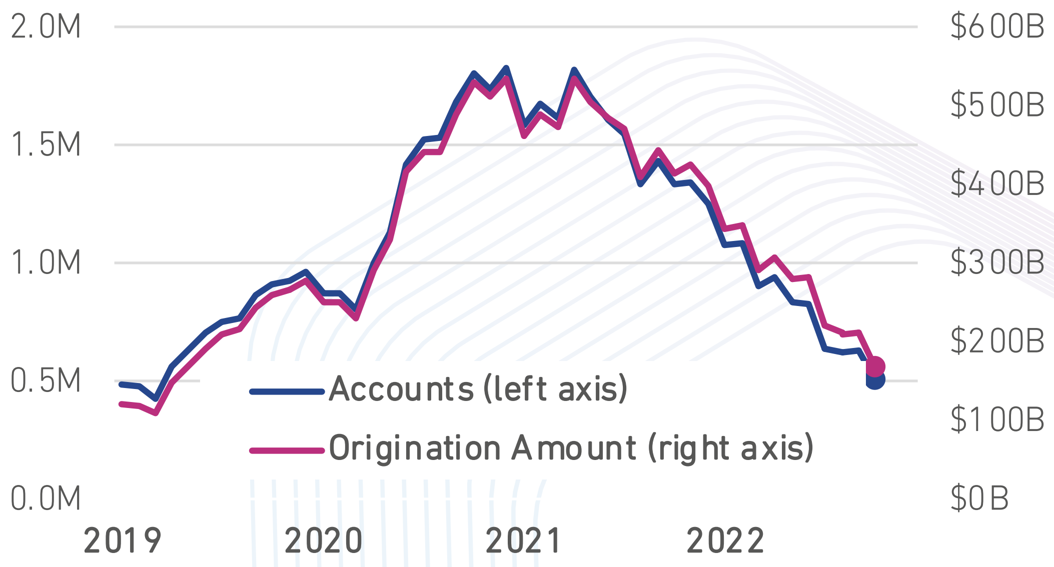


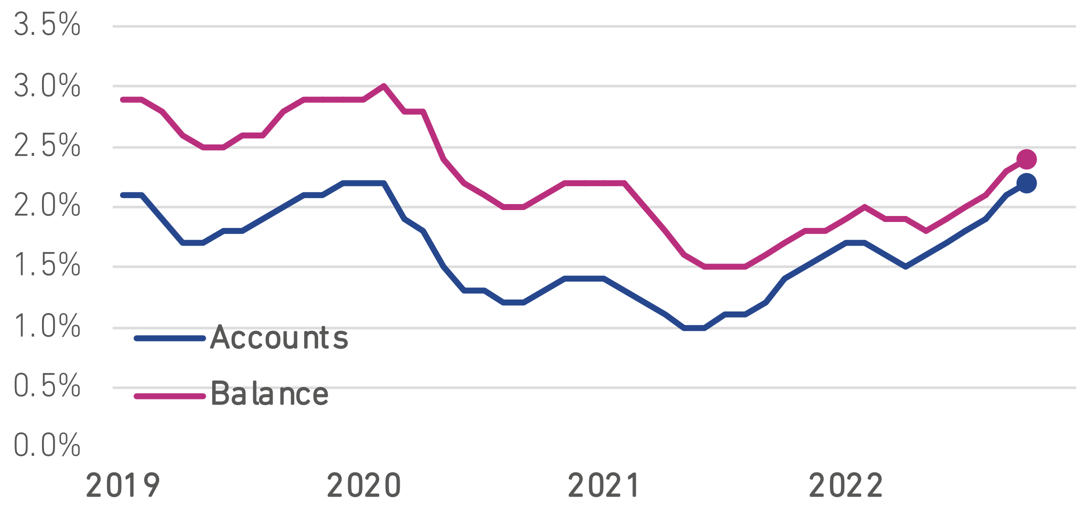
Mortgage (Purchase and Refi)



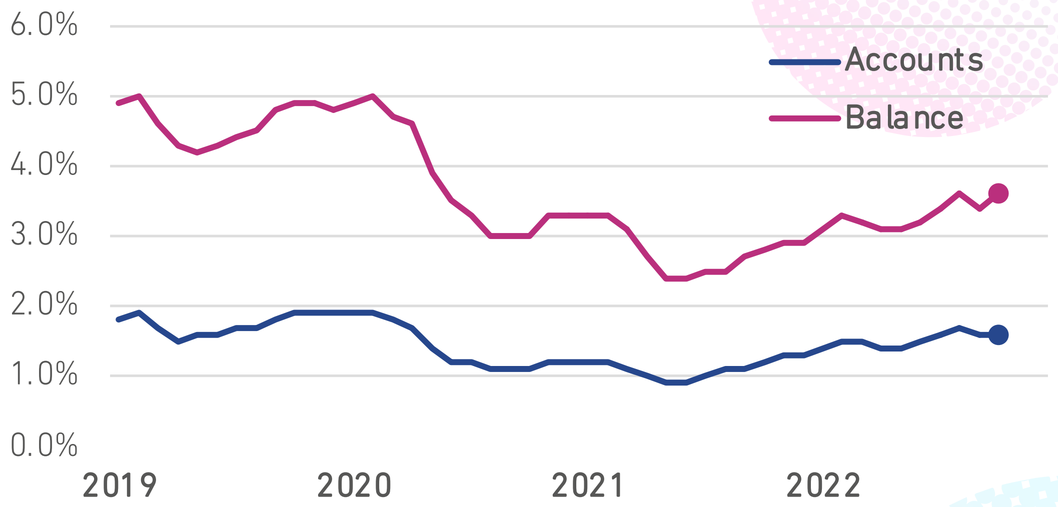
Source: Experian Ascend™ market insights dashboard

Delinquency roundup (30+ days past due)

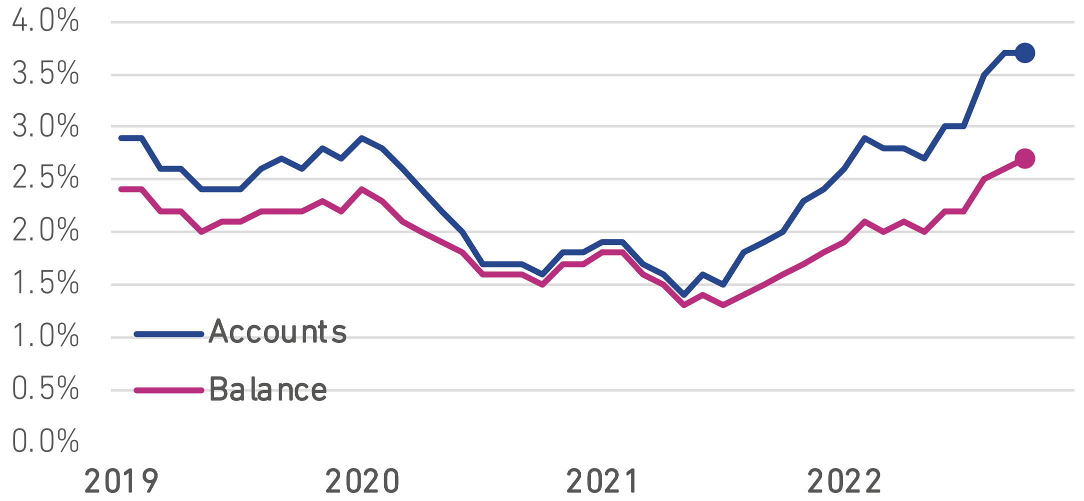
Bankcard



Retail Card



Unsecured Personal Loan



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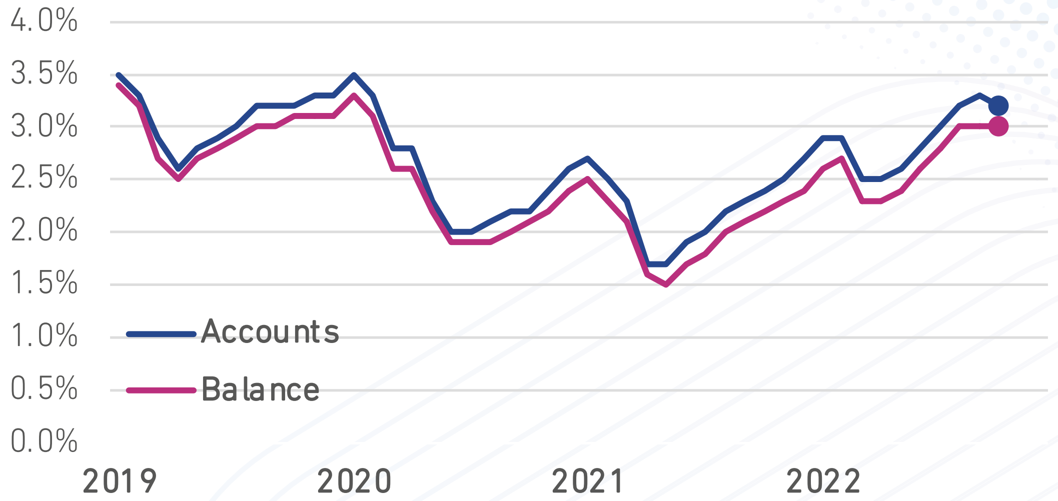

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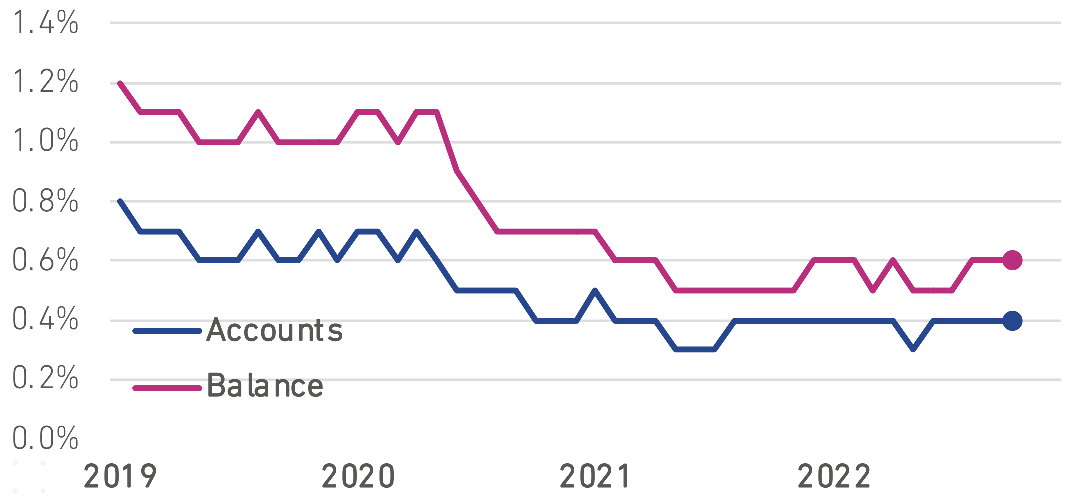
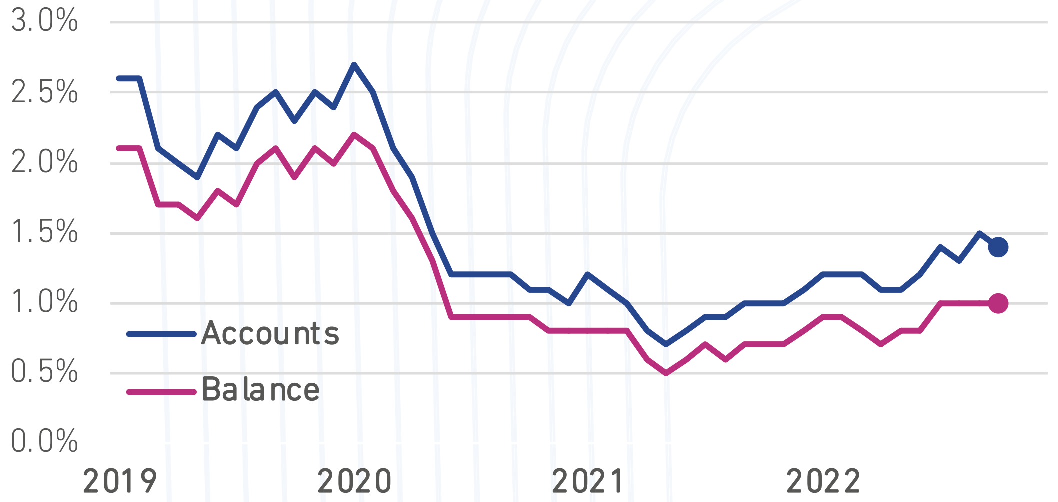


Mortgage



Source: Experian Ascend™ market insights dashboard