



# Bad news sells, but data tells

Are we racing toward a recession?

**June 7, 2022**

## KPMG Economics

**Tim Mahedy**  
Senior Economist

Twitter: @tmahedy  
tmahedy@kpmg.com

**Henry Rubin**  
Economist  
henryrubin@kpmg.com

**Meagan Martin**  
Economist  
meaganmartin1@kpmg.com

**Kenneth Kim, CBE**  
Senior Economist

Twitter: @KenKim\_1  
kennethkim2@kpmg.com

**George Rao, CBE**  
Economist  
Twitter: @seek\_equilibria  
georgerao@kpmg.com



# We are not forecasting a recession, but the risks are rising for 2023

**Consumer spending is not expected to contract in 2022, making a recession this year unlikely.**

**Why?** Consumption is the primary economic engine, constituting roughly two thirds of all economic activity. While consumers face the dual threat of persistent inflation and rising interest rates, the tailwinds are expected to overpower the headwinds in 2022.

**Recession risks are likely to rise in 2023 unless inflationary pressures ease. Why?** We simulated what might happen to consumption if inflation remains near current levels through the summer and the Fed takes an even more active monetary policy path. Our model shows that while consumption is unlikely to contract over all of 2022, conditions may weaken markedly in Q4 and 2023 recession risks may rise appreciably.

**Activity in the housing market could contract by year end. Why?** High prices and rising interest rates are expected to curb demand for housing. But that reaction may be delayed until the second half of the year as inventories need to be rebuilt from historically low levels. Delinquencies are still very low, signaling that a turn in the housing market won't create broader financial stability concerns.

## Key Insights:

- Businesses should plan for cooling consumer demand and undertake scenario planning to understand how to react to a potential recession next year.
- Increasing liquidity buffers should be considered to absorb potential revenue declines.

## Table of Contents:

In this chartbook, we look at how consumer spending and the housing market may react to high inflation and rising rates, and whether the U.S. economy is on the precipice of a recession:

[A federal funds rate above neutral increases the risk of a recession in 2023](#)

[Labor market and balance sheets support consumption](#)

[Risks to consumer spending are rising](#)

[Housing market slowdown likely, but doesn't pose contagion risk](#)

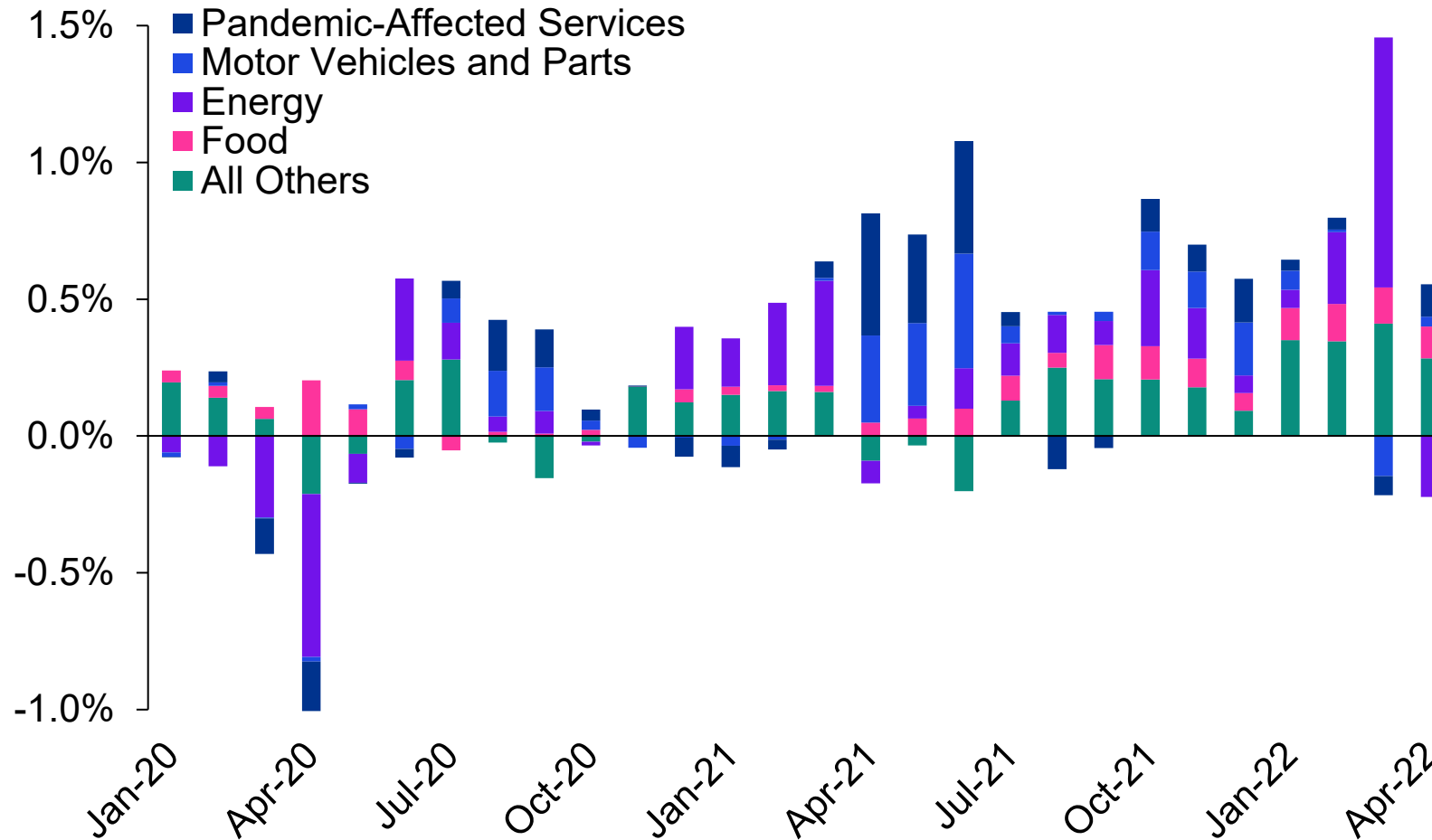




Recession risks increase if  
monetary policy moves beyond  
neutral.

# Inflation mix changing, but pressures should start to ease

## Contributions to Month-Over-Month CPI Growth



Source: KPMG Economics, Bureau of Labor Statistics (April 2022), Haver Analytics

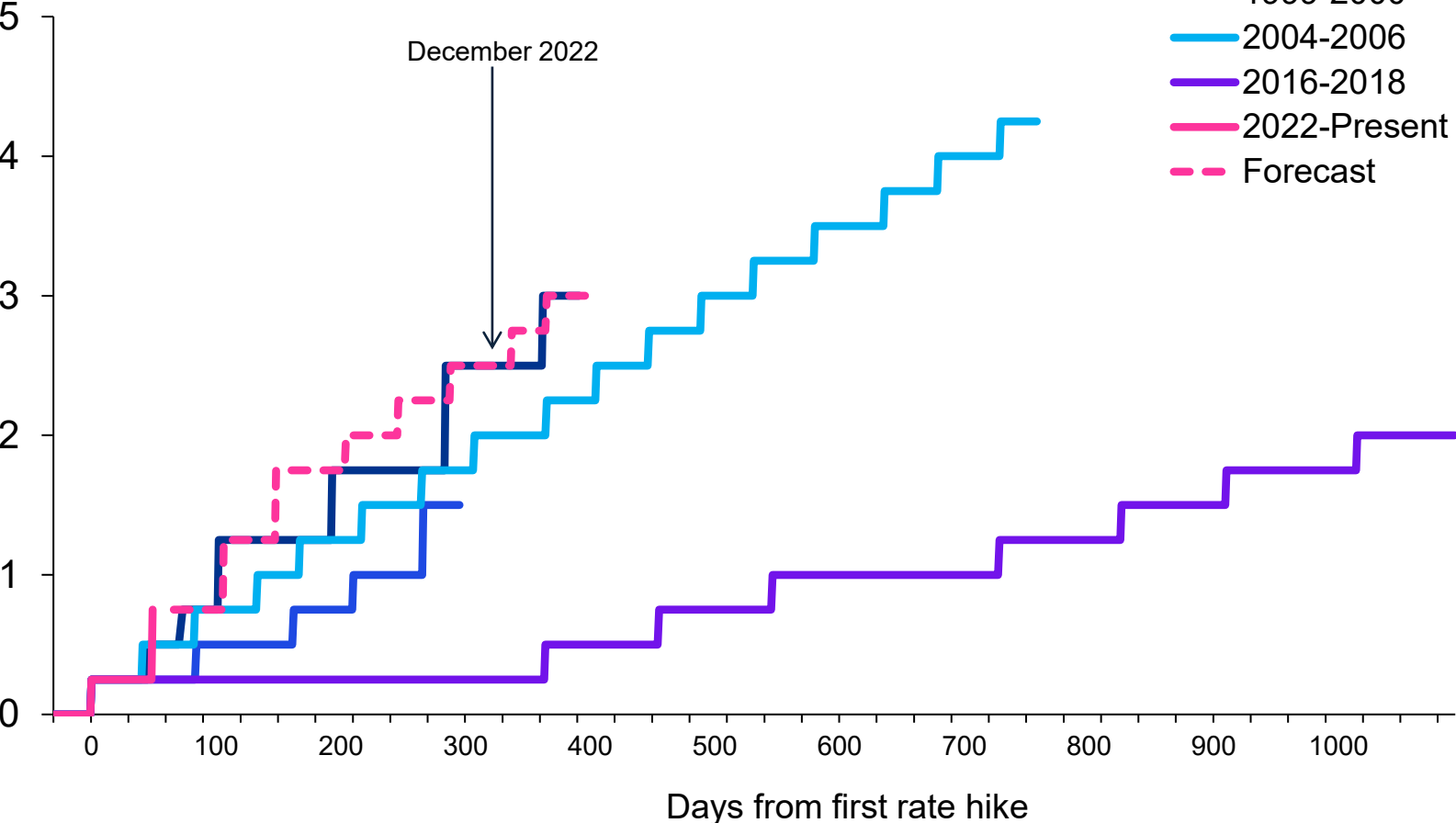
### Growth in energy prices should slow, but summer travel will likely boost inflation for many leisure services

- Inflationary pressures are expected to remain elevated this year. We anticipate that year-over-year headline CPI will end 2022 at 5.4% in Q4, with core coming in at 4.6%.
- The course of inflation over the summer will determine whether the Federal Reserve lays off the gas in the fall. We estimate that a slowing in headline CPI inflation to around 6.5% would be sufficient for policymakers to slow the pace of increases in September.

# Rate hike cycle expected to be quickest since mid-90s

## Federal Reserve Rate Path

Percentage Point Change from First Rate Hike



### The Fed will likely raise the policy rate by 50bps in June and July

- The federal funds rate is likely to reach 2.25%-2.50% by year end. This is the level that we estimate is associated with a neutral policy stance, and would signal that monetary policy is no longer a tailwind to economic growth.
- We anticipate that the economy can handle a neutral policy stance and that the risks of a recession in 2022 are relatively low. However, the risk of a recession rises significantly in 2023 should rates move past neutral.

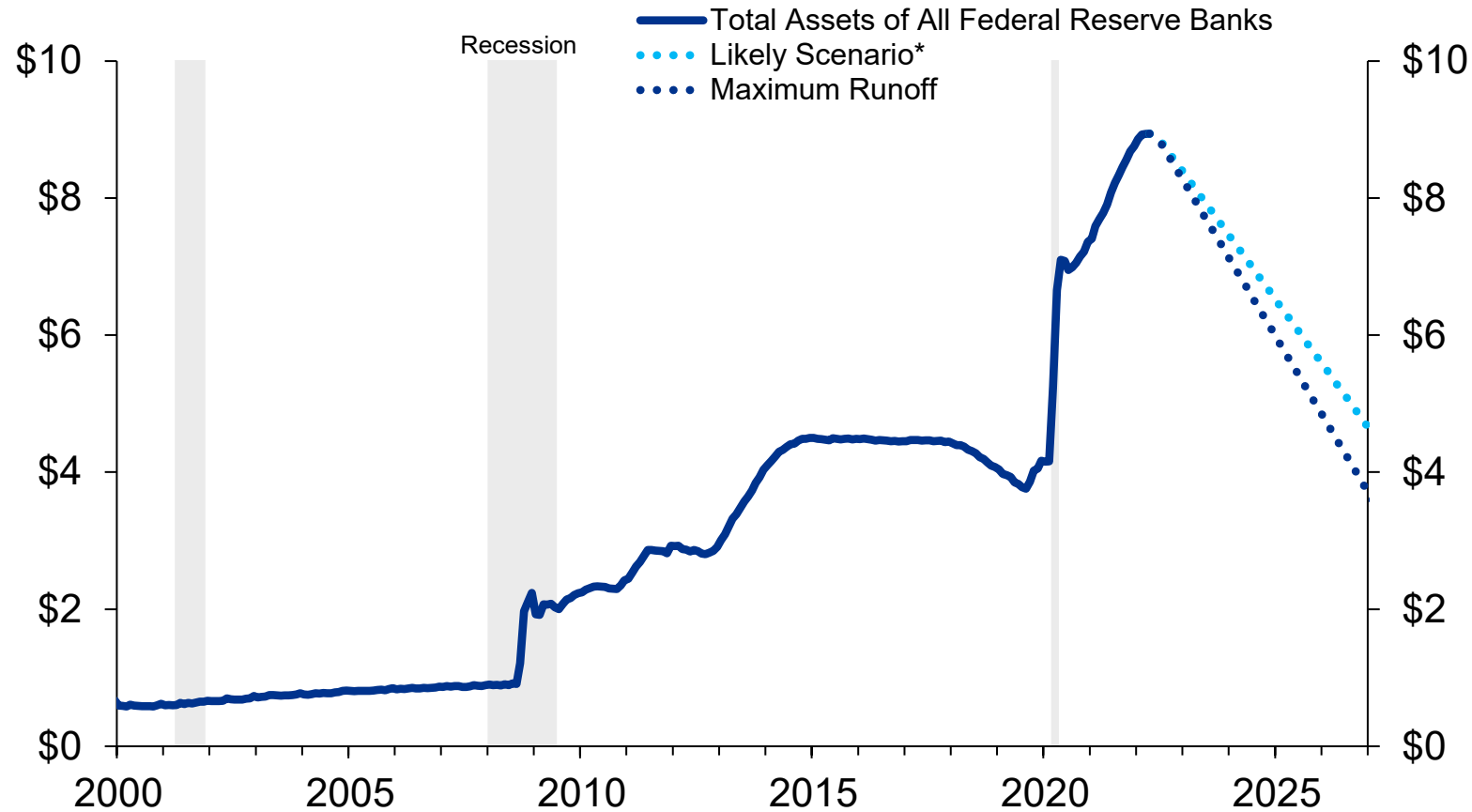
Source: KPMG Economics, FOMC



# Balance sheet will be back to pre-pandemic level by 2025

## Federal Reserve Balance Sheet Reduction

Trillions of U.S. Dollars



\*Likely scenario represents 82% of maximum runoff cap  
Source: KPMG Economics, Federal Reserve Board, Haver Analytics (May 2022)

### The Fed's balance sheet runoff will further tighten financial conditions and cool the housing market

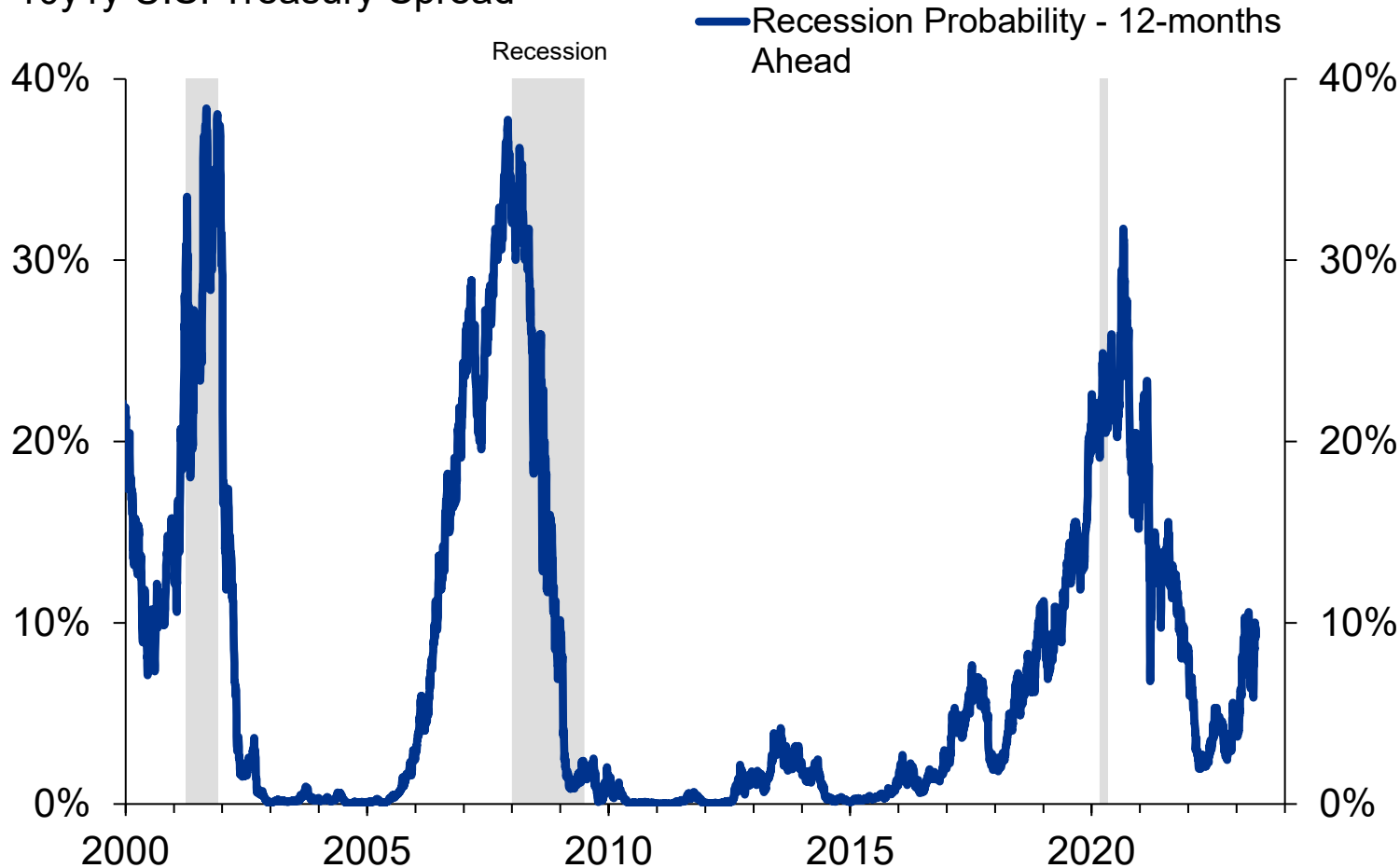
- The balance sheet runoff will be faster than during the last cycle, causing financial conditions to tighten.
- The pace of the runoff for Treasuries will start at \$30 billion per month in June of this year, jumping to \$60b per month beginning in September.
- For mortgage-backed securities, the Fed will reduce its holdings by \$17.5b from June to August, reaching a pace of \$35b by September.
- Research by the Federal Reserve suggests that a \$2.5 trillion dollar reduction in the balance sheet is equivalent to a 50bps hike in the federal funds rate.

Source: Federal Reserve Board, "Plans for Reducing the Size of the Federal Reserve's Balance Sheet," (04 May 2022) and "Substitutability between Balance Sheet Reductions and Policy Rate Hikes," FEDS Notes (03 June 2022).

# Yield curve measures are flashing yellow, not red

## Implied Probability of U.S. Recession

10y1y U.S. Treasury Spread



Source: KPMG Economics, Federal Reserve Board, Haver Analytics

**Risks of a recession over the last twelve months are elevated, but not yet at a level that indicates a recession is inbound.**

- The yield curve is an important barometer of where markets think the economy is headed. An inversion – long rates below short rates – suggests that a recession is likely to occur in the next one to two years.
- Our model currently indicates that the risk of a recession in the next 12 months is less than 10%.
- Current economic conditions are volatile, and the risk could rise significantly over the summer if inflationary pressures don't ease and the Fed signals a more aggressive rate path.



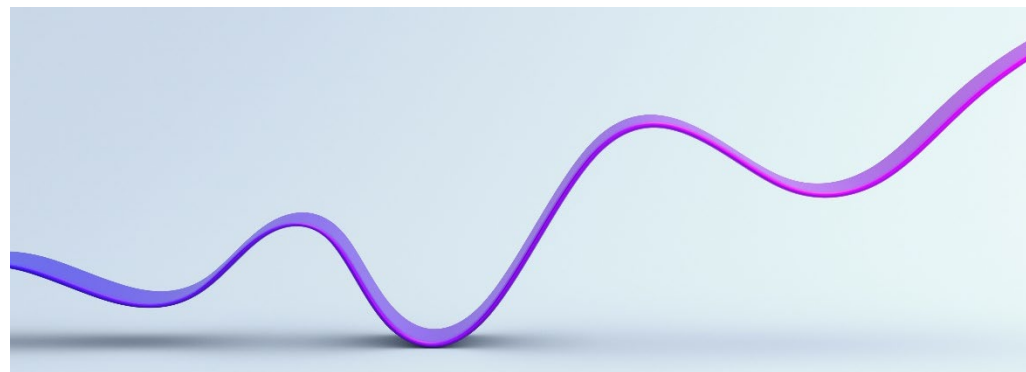
A strong labor market and healthy household balance sheets are likely to support consumer spending growth in 2022.







# Headwinds & tailwinds for U.S. consumption



## Headwinds

High inflation

▶ **8.3%**

**Consumer price inflation in April 2022**

Inflation is eroding consumer purchasing power and accelerating a tightening of monetary policy.

Rising interest rates

▶ **7**

**Rate hikes in 2022**

Higher interest rates will dampen housing demand and create new costs for borrowers.

## Tailwinds

Strong household balance sheets

▶ **\$31tn**

**In asset growth over 2 years**

Pandemic stimulus, a strong labor market, and a surge in house prices have driven a historic rise in household balance sheets

Resilient labor market

▶ **3.6%**

**Unemployment rate in May 2022**

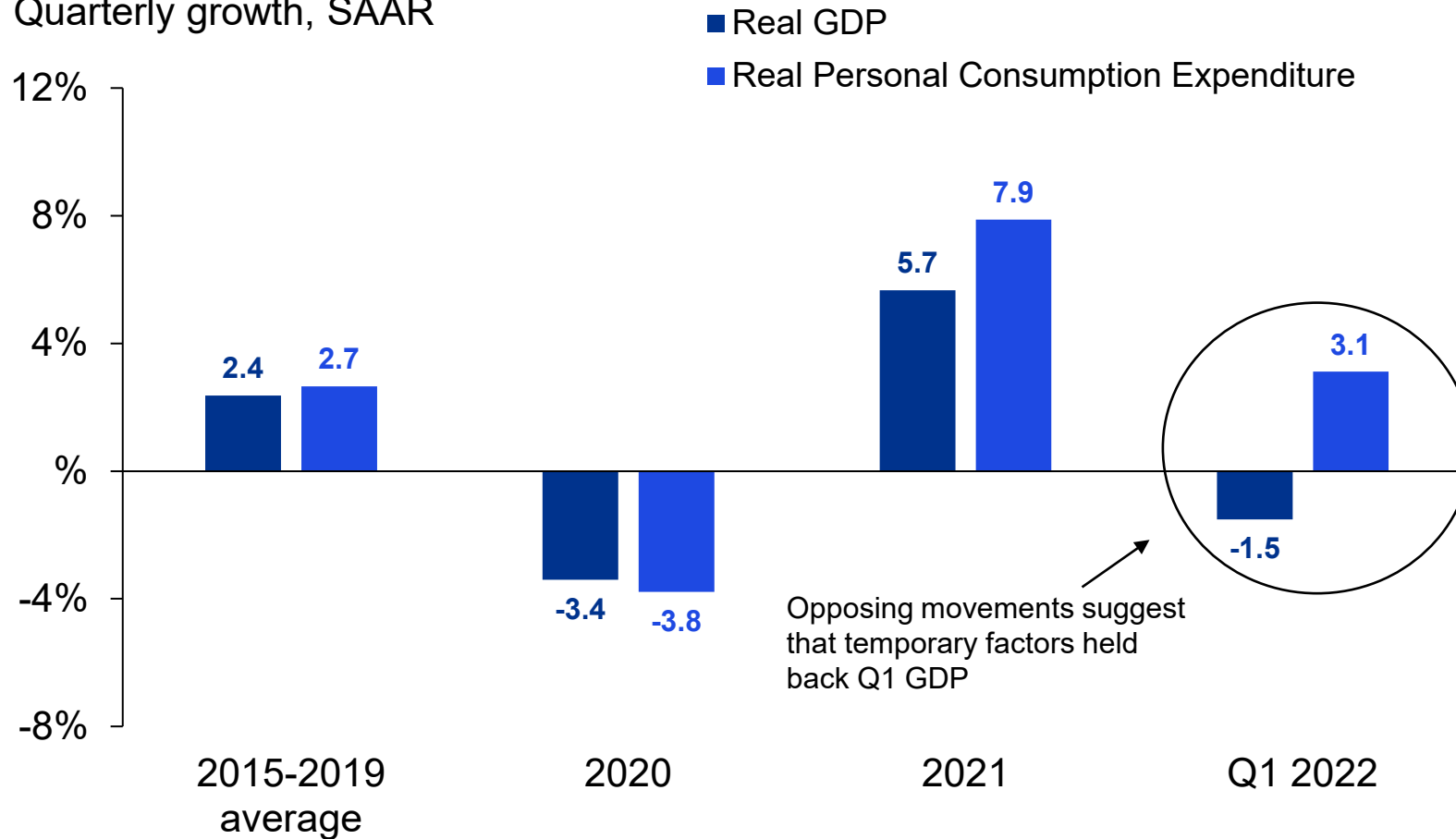
Employment income drives consumption and a strong labor market bodes well for continued spending through 2022.



# Underlying fundamentals suggest an economic rebound in Q2

## Real GDP and Consumption Growth

Quarterly growth, SAAR



### The contraction in first quarter GDP hid strength in consumer spending

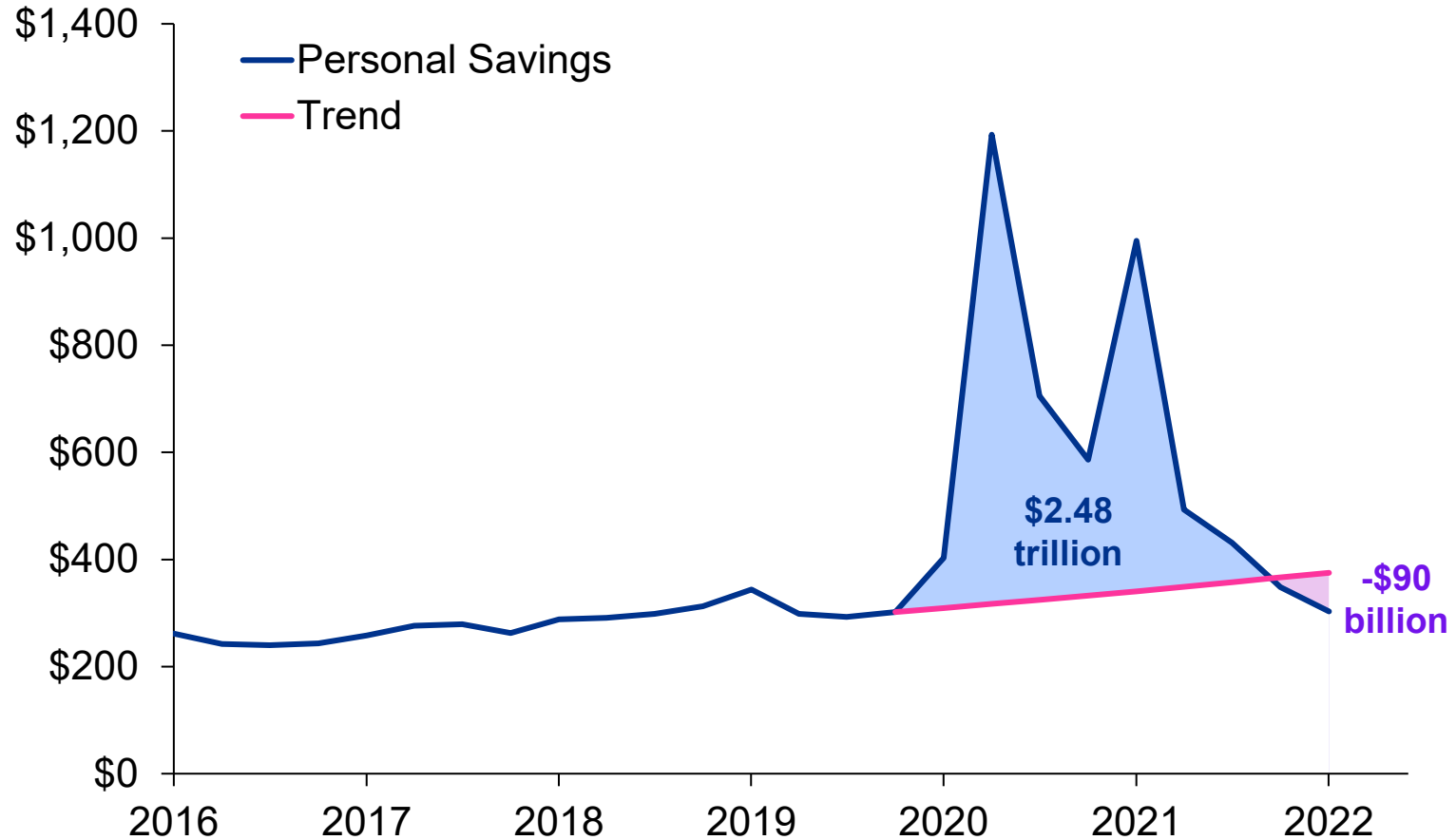
- First quarter growth was pulled down by a slowing in the pace of inventory investment and a rise in imports. The latter was driven by dollar appreciation and strong demand for foreign goods.
- However, consumer spending accounts for roughly two thirds of the U.S. economy and the solid pace of consumption growth in Q1 suggests a rebound in economic activity.
- Rising rates and above-target inflation will likely erode consumer spending over the course of the year. However, we still anticipate that an easing of inflationary pressures and a slower pace of interest rate increases over the second half of the year will translate into solid consumer spending in 2022.

Source: KPMG Economics, Bureau of Economic Analysis

# Savings backlog should provide some relief from surging inflation

## Excess Savings

Billions of Dollars



**Excess savings accumulated during the pandemic should provide some buffer to consumers as inflation remains elevated**

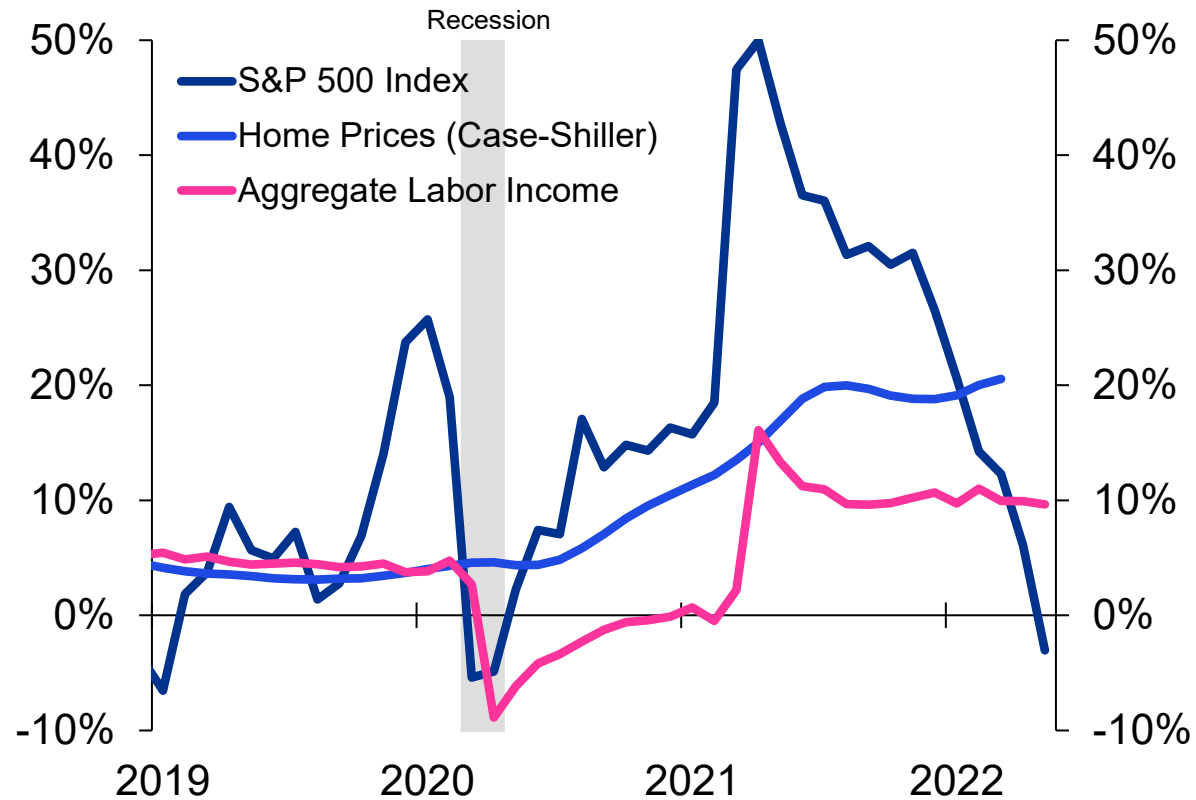
- Using the average growth rate of personal savings over the end of the last cycle, we estimate that cumulative excess savings grew by almost \$2.5 trillion over 2020 and most of 2021.
- Some of that excess likely flowed into equities and the housing market, but not in its entirety.
- Since the third quarter of 2021 excess savings have started to decline, signaling that high inflation has caused consumers to dip into reserves to supplement their spending.

Source: KPMG Economics, Bureau of Economic Analysis, Haver Analytics (January 2022)

# Other drivers of consumer spending will mitigate equity declines

## Equity prices have plummeted, but other spending drivers remain strong

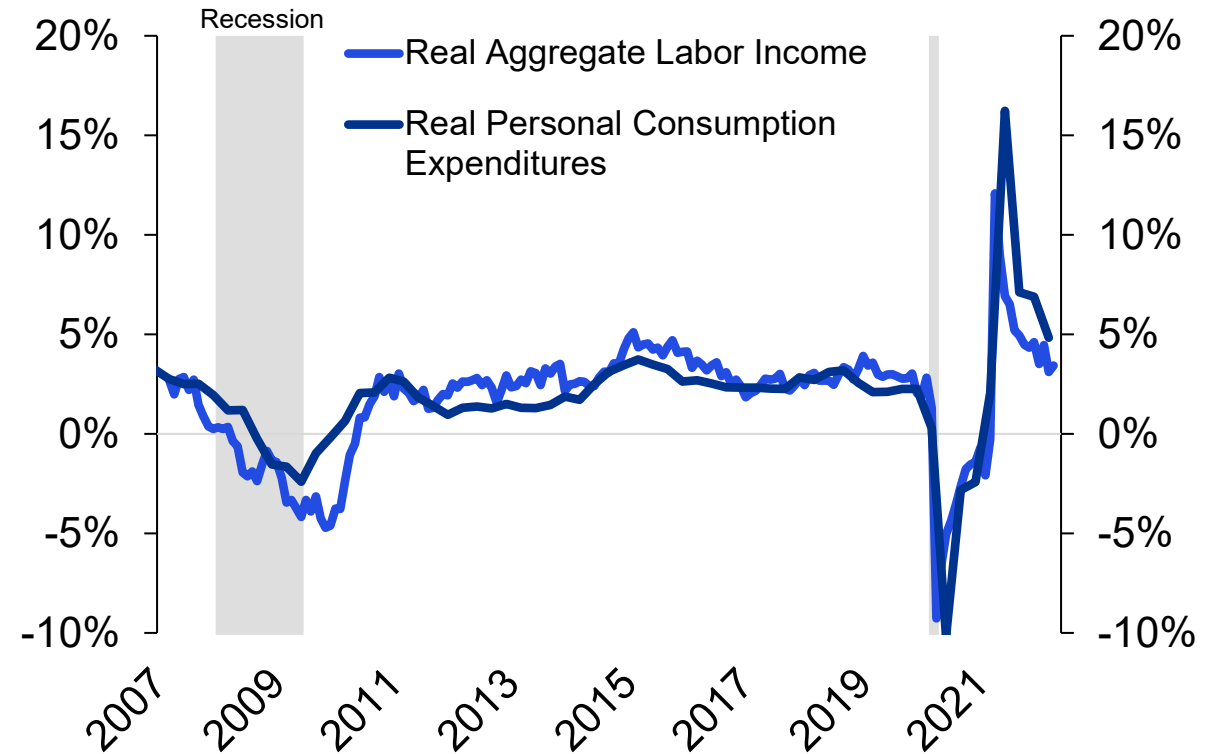
% Change – year over year



Source: KPMG Economics, Standards & Poor's, CoreLogic, Bureau of Labor Statistics, Haver Analytics

## Labor income drives consumer spending

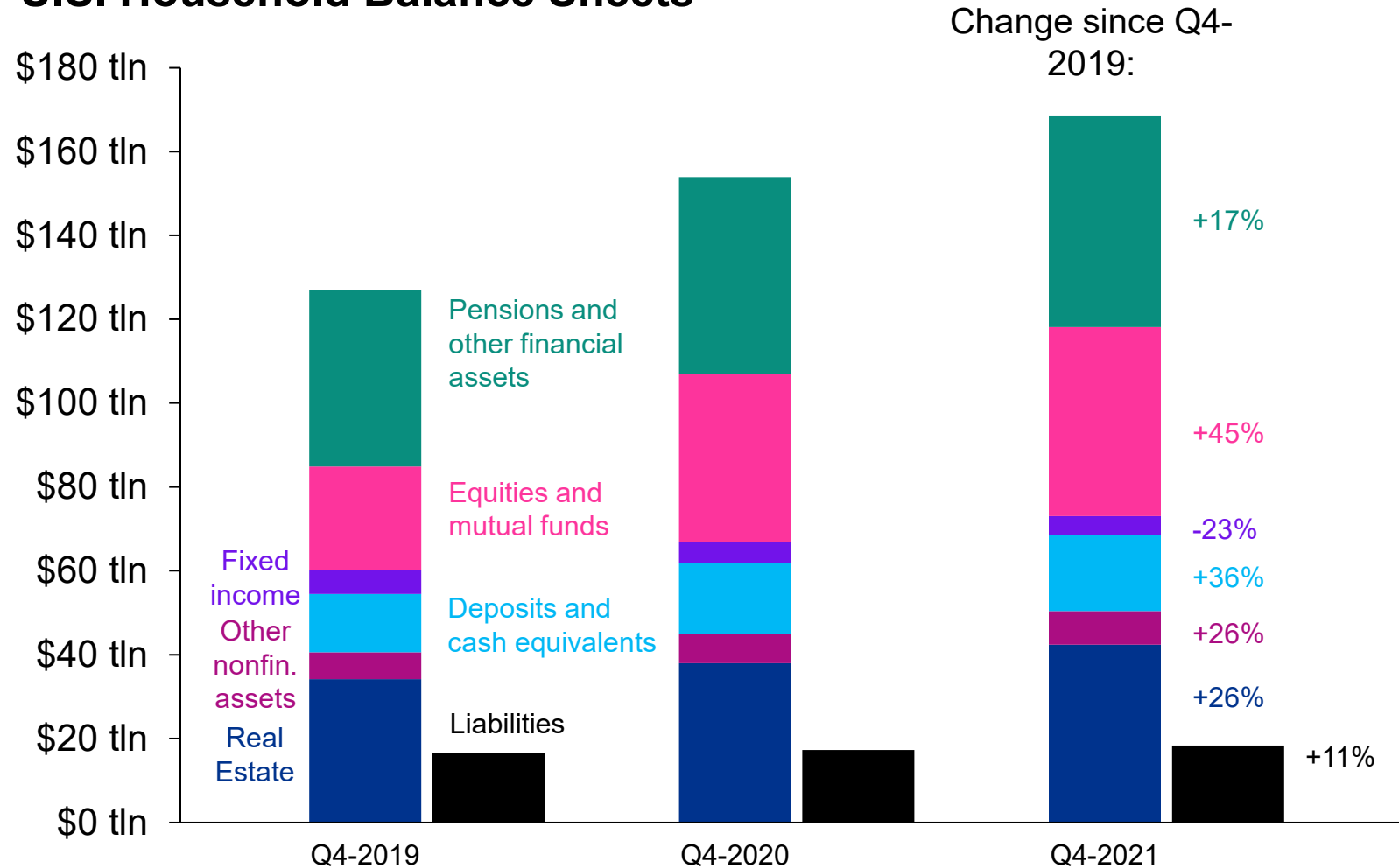
% Change – year over year, CPI-adjusted



Source: KPMG Economics, Bureau of Economic Analysis, Bureau of Labor Statistics, Haver Analytics

# Strength in household balance sheets supports consumer spending

## U.S. Household Balance Sheets



Source: KPMG Economics, Federal Reserve Board, Haver Analytics

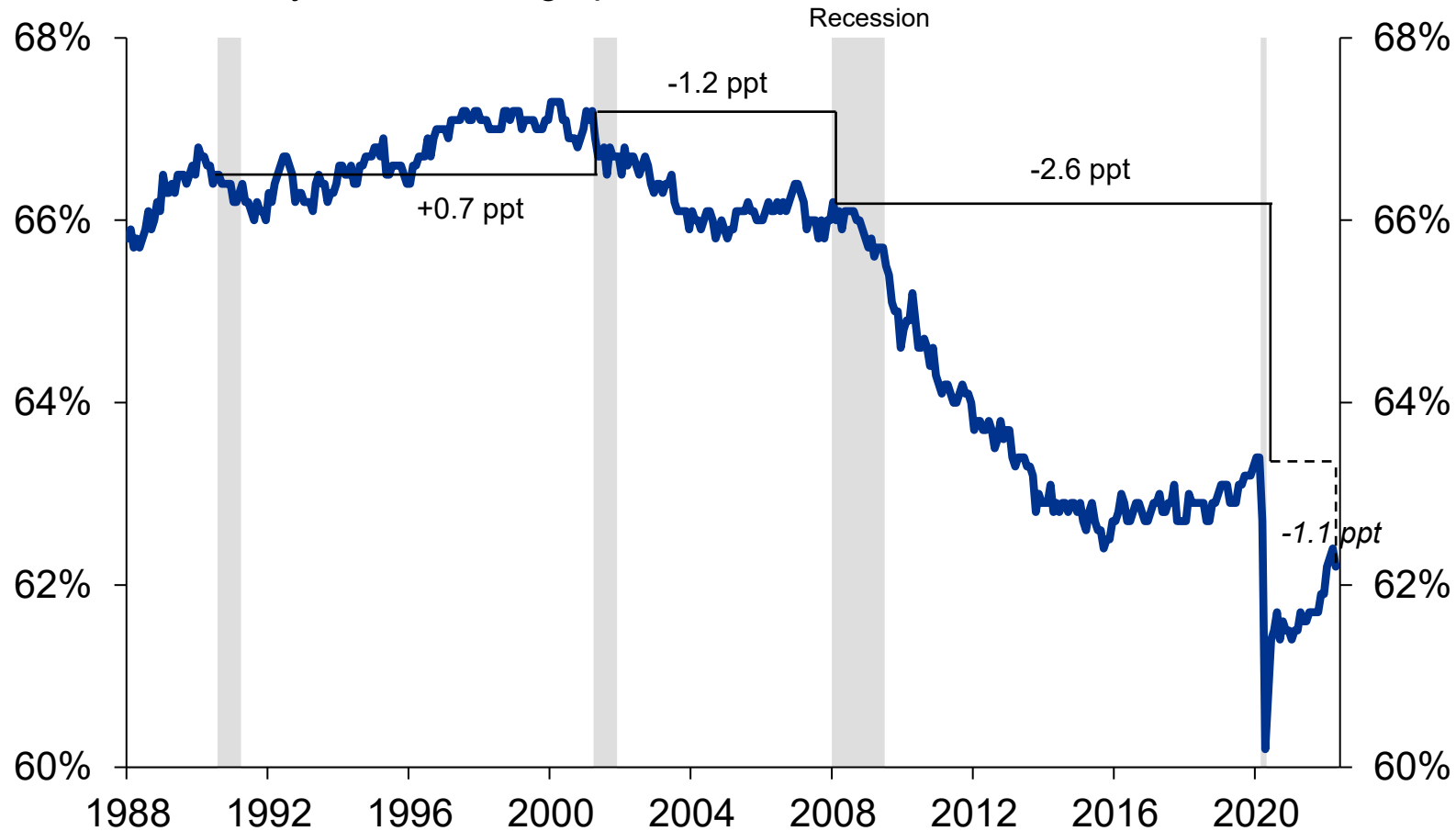
### The strength in household balance sheets will help consumers weather high inflation and rising rates

- Household balance sheets are still on strong footing, despite the 2022 slide in equity markets.
- Deposits and cash equivalents have increased by 36% from their pre-pandemic levels, indicating that consumers have liquid assets they can deploy even as inflationary pressures remain intense.
- However, inflation needs to begin easing over the summer or this cushion could evaporate quickly, which could materially slow consumption over the final quarter of the year.

# Labor supply will likely remain sidelined...

## Labor Force Participation Rates

Peak to End Cycle, Percentage points



Source: KPMG Economics, Bureau of Labor Statistics (May 2022)

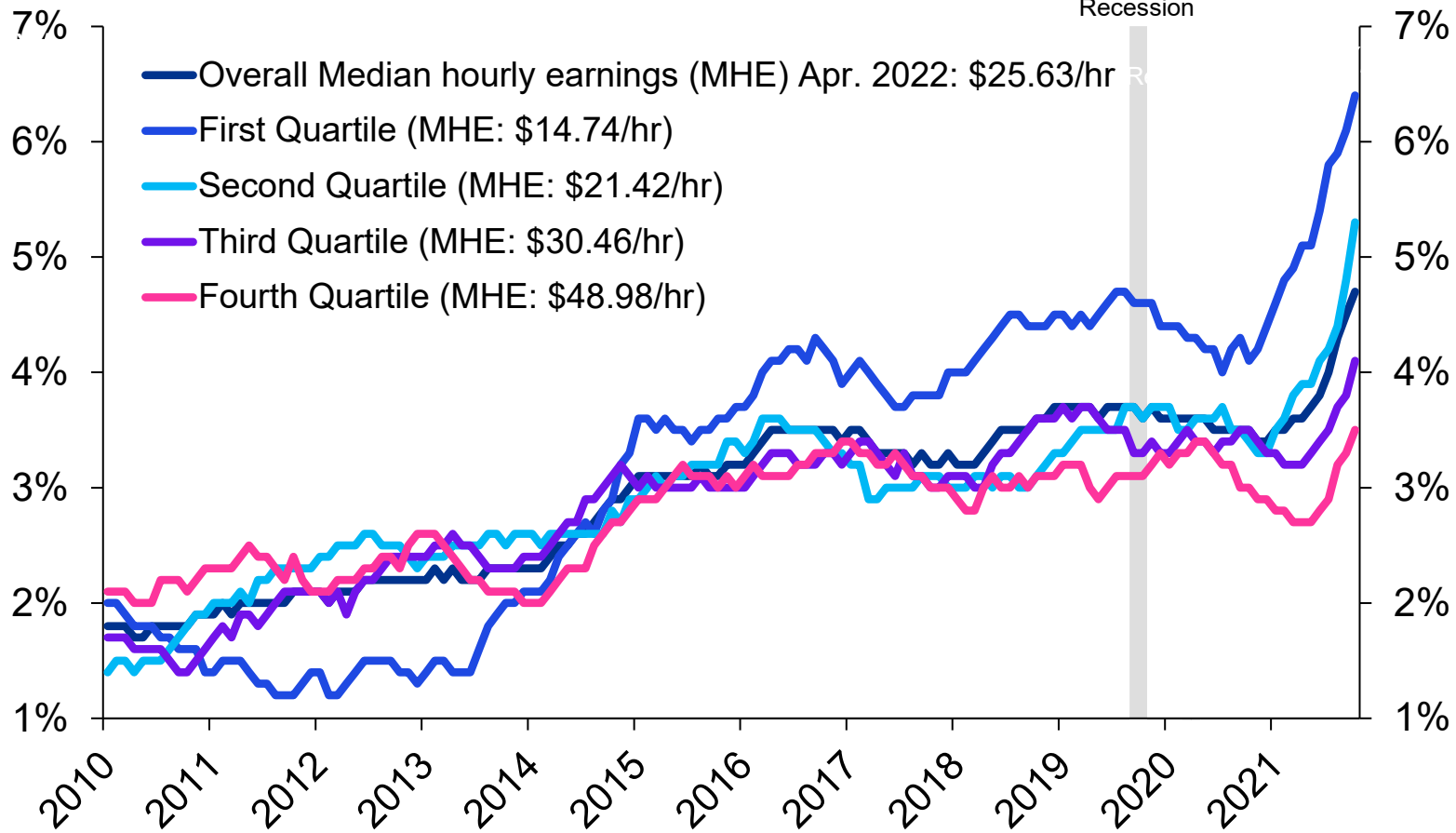
**The aging of the population will continue to restrict labor supply over the coming years.**

- Some retirees who left during the height of the pandemic have returned to work, but others remain sidelined.
- The recent decline in equity markets and a slowing housing market may further boost participation. However, the U.S. population growth rate remains weak, which will hamper labor force growth going forward.

# ...supporting continued above-trend wage gains

## Wage Growth by Income Quartiles

12m moving average, percent



Source: KPMG Economics, Federal Reserve Bank of Atlanta, Current Population Survey (April 2022), Haver Analytics

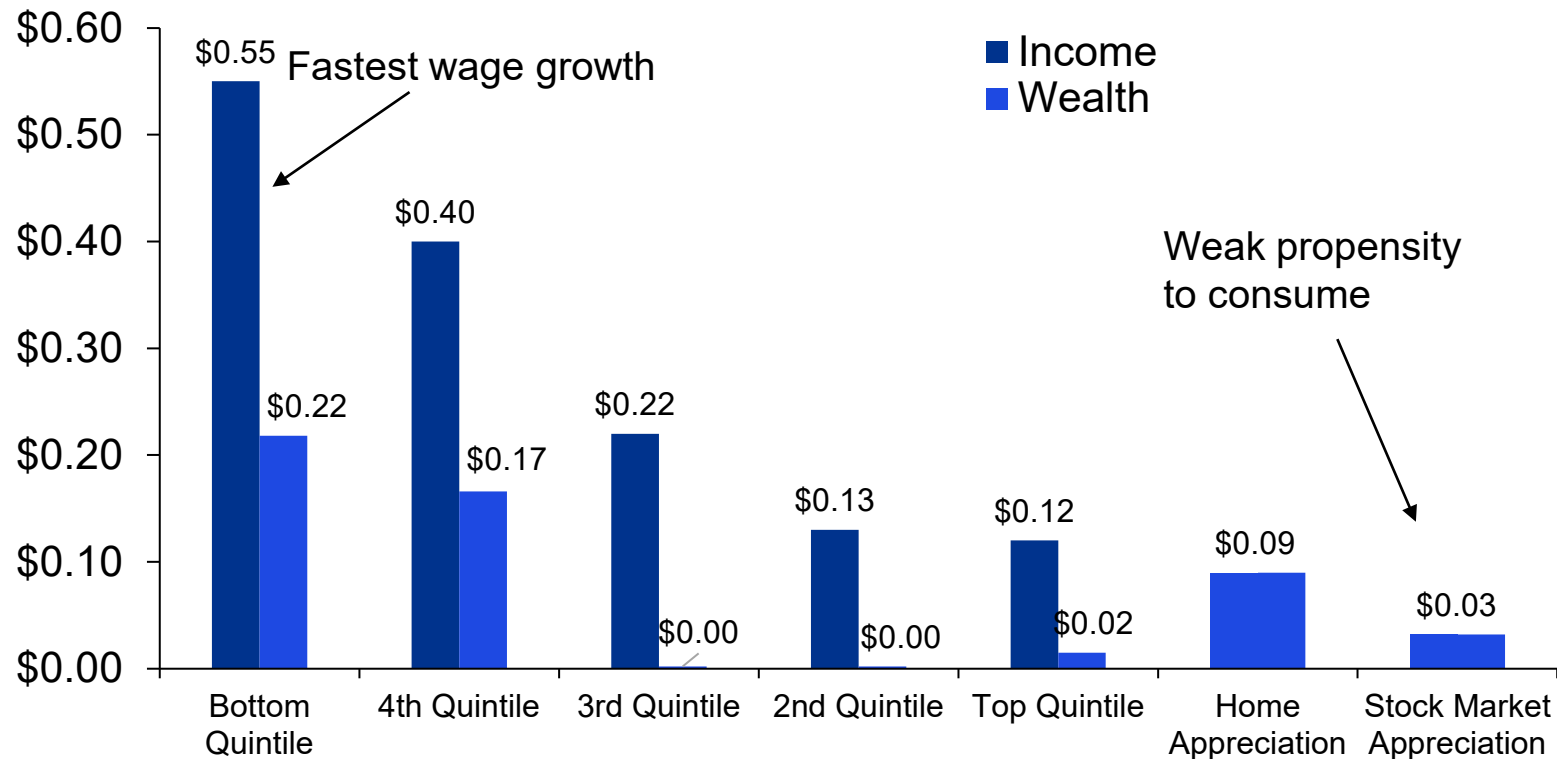
**Wage pressures may ease over the course of 2022, but will likely remain a tailwind to consumer wallets**

- Wage gains continue to pick up across the income distribution. We expect the pace of gains to ease as interest rates rise and labor demand cools over the remainder of 2022.
- However, absent additional shocks or an overtightening by monetary policymakers, the pace of gains is unlikely to drop below levels experienced at the end of the last expansion for most income quartiles.
- Persistent wage gains is one reason we don't expect core PCE inflation to drop to the Fed's 2% target in 2022. It's also why we anticipate consumption will remain solid.

# Wages are growing fastest for those most likely to spend

## Willingness to Spend by Income Group and Asset Class

Consumption impact of \$1 increase in income or wealth



Source: KPMG Economics, Penn-Wharton Budget Model (Income MPC), Boston Fed (Wealth MPC), Carroll et al (2006), Chodorow-Reich et al (2019)

### Labor market strength will mitigate the effects to consumption from declining house prices and equity markets

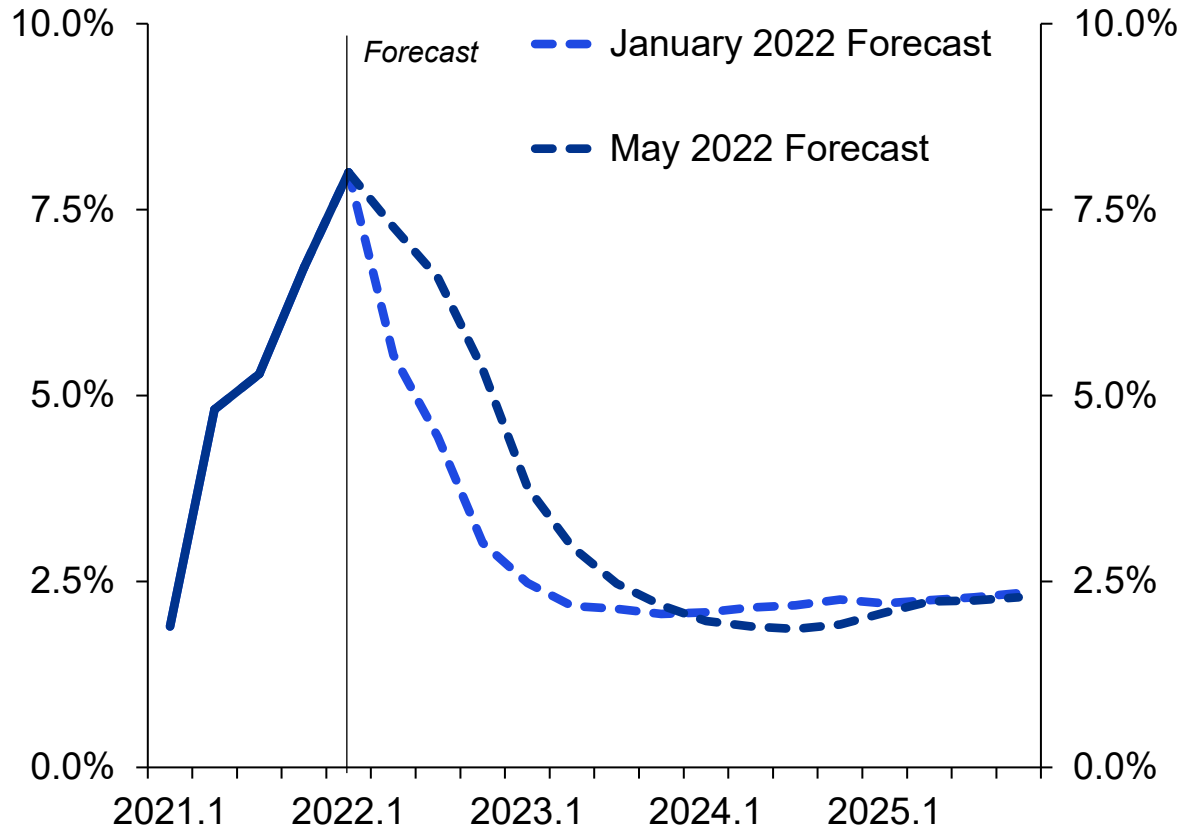
- On average, just over half of every dollar gained by those in the lowest quintile of the income distribution will be spent.
- Even though the effect loses steam at higher income quintiles, wage gains remain a bigger driver of consumer spending than both changes in home prices and equity markets.
- As of May 20, consumer spending would have been between \$150 billion to \$240 billion, or 0.8% to 1.4%, higher had equity markets not fallen since the end of December.



# We lowered our spending forecast, but it remains positive

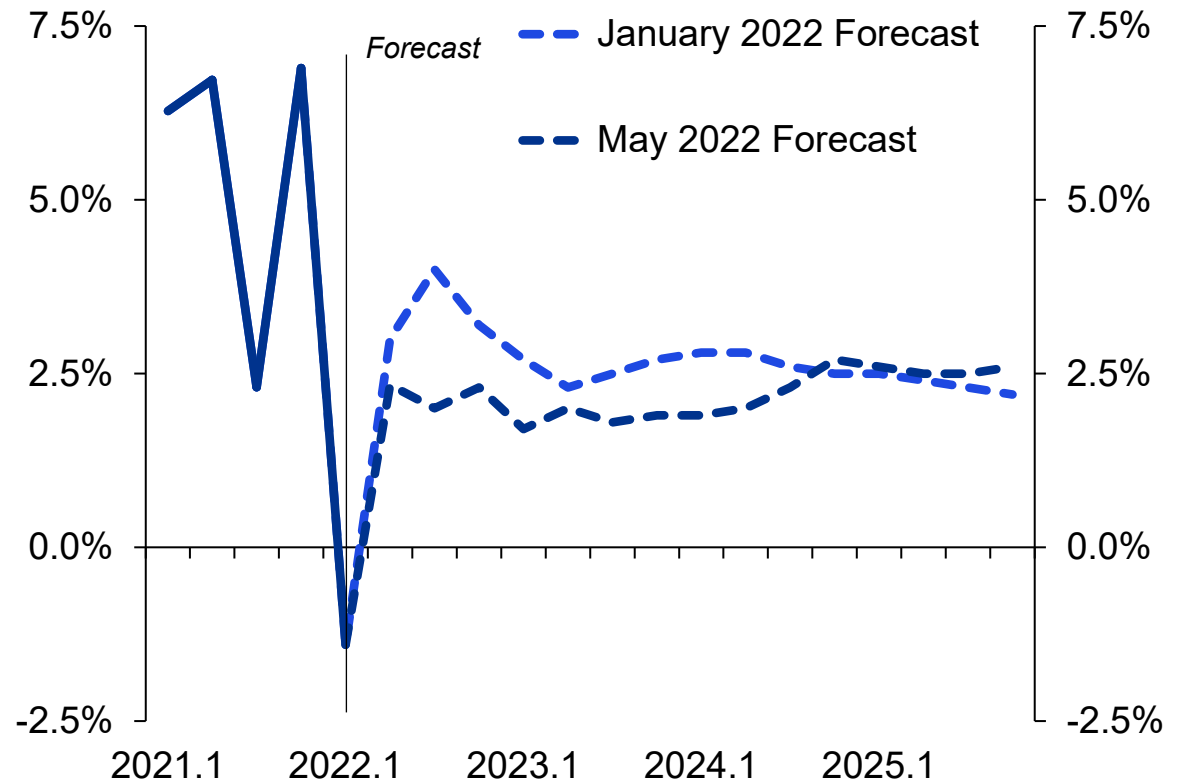
## Baseline: Consumer Price Index (CPI)

Year-over-Year % Change



## Baseline: Real Gross Domestic Product (GDP)

Seasonally-adjusted Annualized % Change



Note: Forecasts are inherently time sensitive and projections are dated as of May 24, 2022.

Source: KPMG Economics, Bureau of Economic Analysis

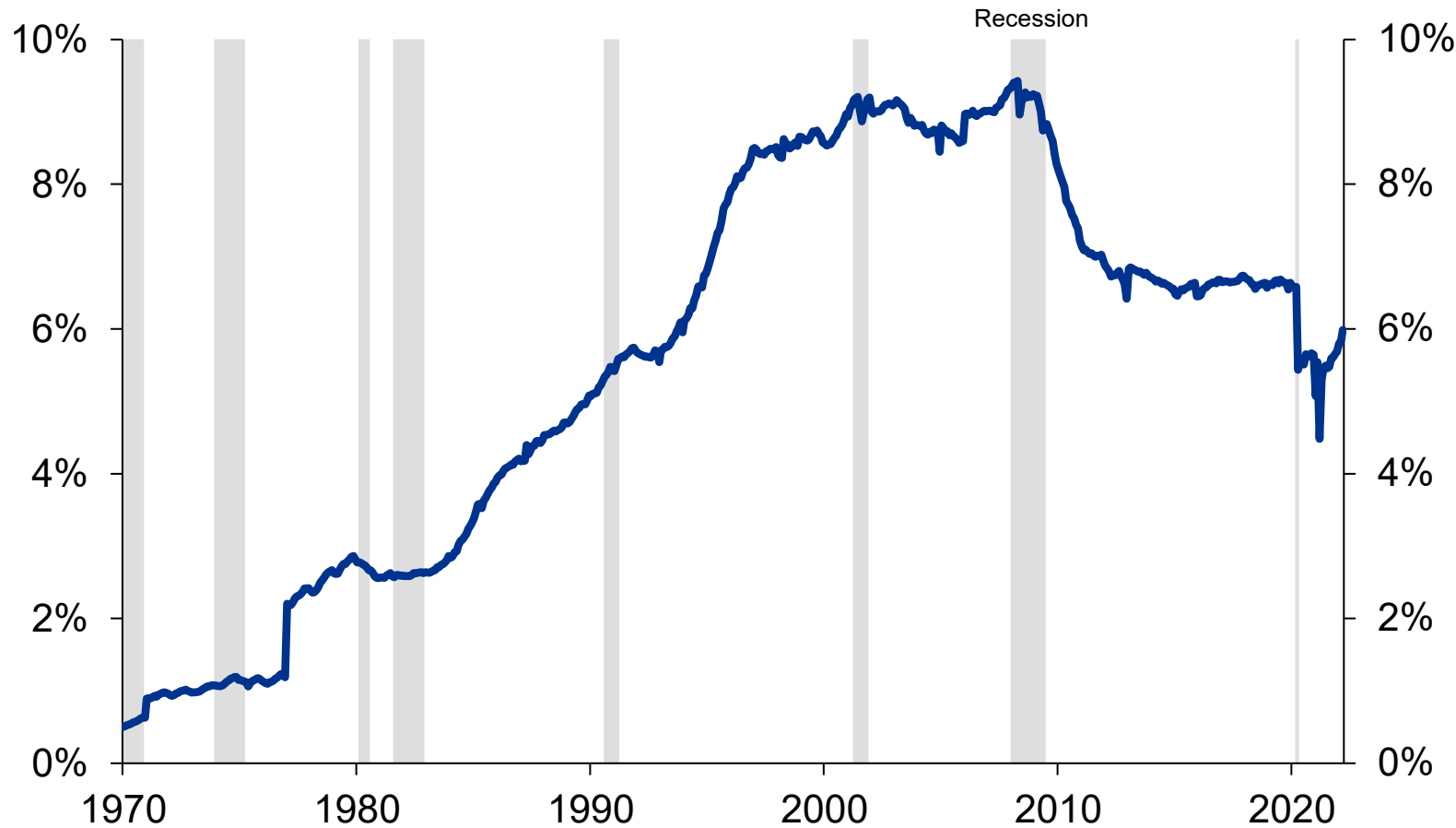


Risks to consumer spending are rising and could cause a recession next year.

# Consumers are taking on more leverage, but levels remain low

## Revolving Consumer Credit Outstanding

Percent of Disposable Personal Income



Source: KPMG Economics, Federal Reserve Board, Bureau of Economic Analysis (March 2022)

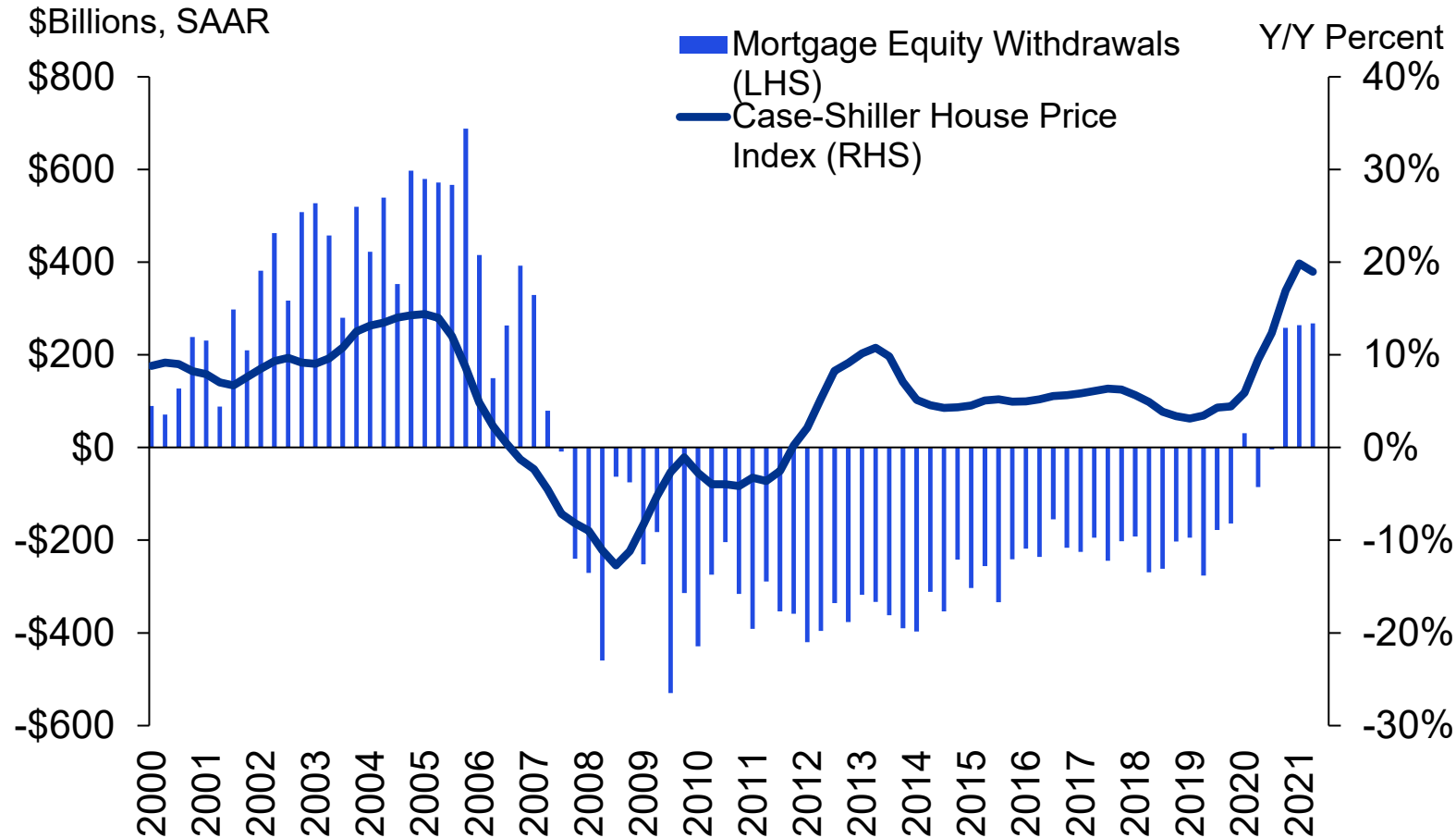
**Consumer spending is likely to be increasingly financed by debt as inflation erodes real incomes.**

- Revolving consumer credit includes things like credit card balances which can be a worrying sign if levels start to approach double digits.
- Credit scores improved over the course of the pandemic, giving consumers more leeway to use revolving credit, and providing a backstop to consumer spending as inflation remains elevated.
- Rising credit levels could be a sign of financial vulnerabilities and would amplify the negative effects of an economic downturn by putting additional strain on the financial system, depressing consumption for longer during the recovery.

Source: Urban Institute (March 2022), Federal Reserve Bank of Boston (October 2021), California Policy Lab (March 2022).

# Rising mortgage equity withdrawals raise financial risks

## House Prices and Mortgage Equity Withdrawals



Source: KPMG Economics, Standards & Poor's, CoreLogic, Haver Analytics

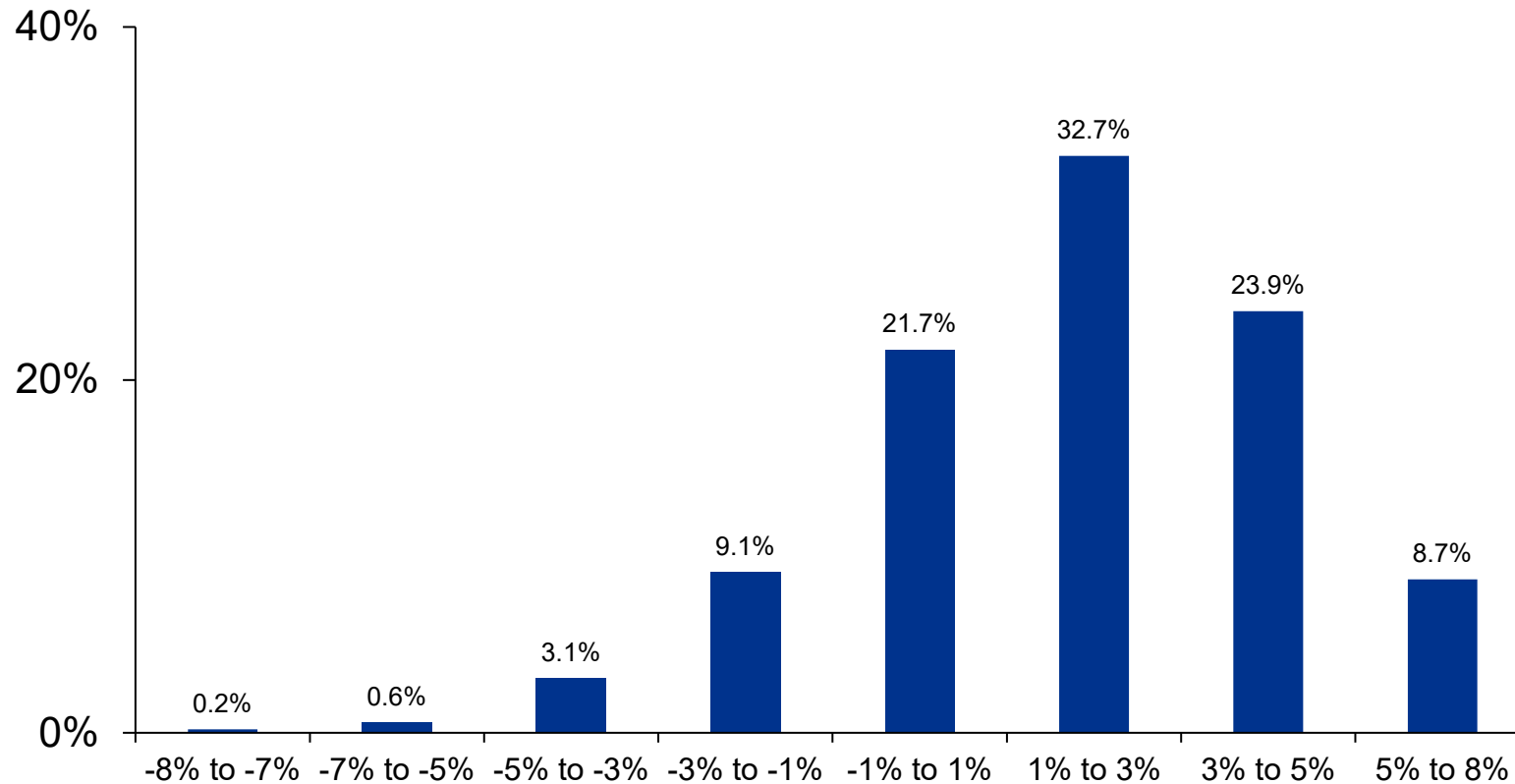
**The rapid pace of housing price growth is fueling household leverage in ways not seen since before the Global Financial Crisis**

- The Global Financial Crisis was spurred by financial instabilities in the housing market, as evidenced by the surge in mortgage equity withdrawals.
- Consumers stayed away from using home equity as a financial vehicle during the last expansion, but the recent surge in house prices has led to a return to this type of financing.
- While levels remain low relative to the early 2000s, this kind of borrowing can cause financial imbalances, especially if house prices decline.

# Consumer spending expected to hold up, even with high inflation

## Distribution of Consumption Growth from using a Monte Carlo Simulation

Y/Y% Personal Consumption Expenditure (PCE) Growth for 2022



Note: Forecasts are inherently time sensitive and projections are dated as of June 3, 2022.

Source: KPMG Economics, Bureau of Economic Analysis

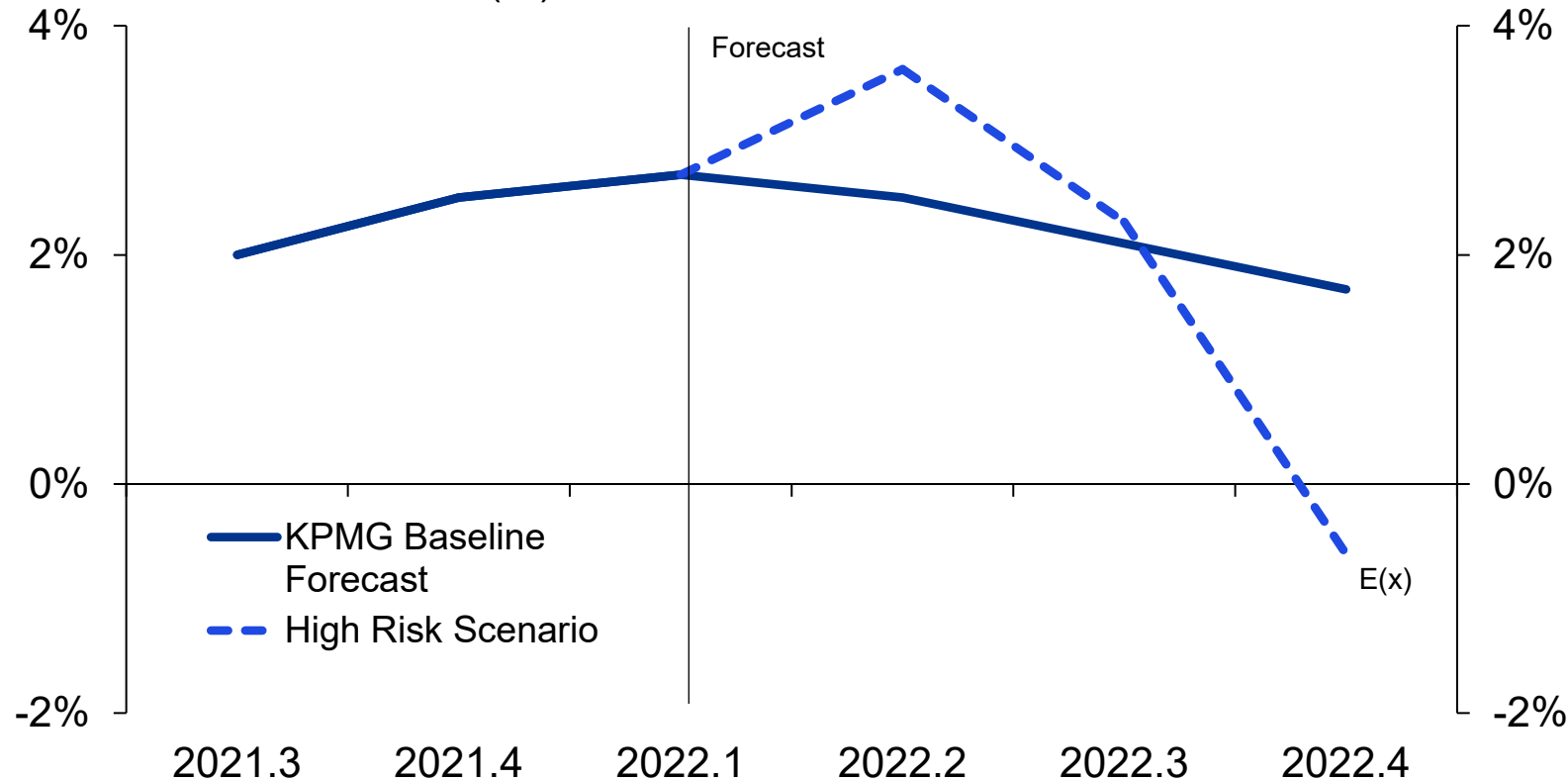
**Growth in real consumer spending is likely to average between 1% and 3% in 2022**

- We ran a series of simulations based on a “high risk scenario” where inflation hovers around 8.5% through the late summer and the Fed pushes the federal funds rates to 2.75% by the September FOMC meeting.
- Our model suggests that under these conditions, there is only a 13% chance that real consumption will decline by 1% or more this year.
- As the chart indicates, 32.7% of our simulations forecasted that consumer spending in 2022 would grow between 1% and 3%.

# High Risk Scenario shows consumption could contract in Q4

## Simulation Results: Average Consumption Growth in Baseline and High Risk Scenario

PCE Growth Y/Y Percent (%)



Note: Forecasts are inherently time sensitive and projections are dated as of June 3, 2022.

Source: KPMG Economics, Bureau of Economic Analysis

**Our simulation suggests that the most likely outcome from the high risk scenario is that consumer spending declines at the end of 2022.**

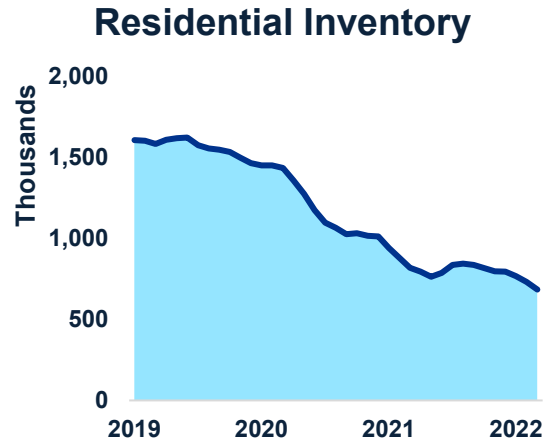
- Higher interest rates and inflation cause consumers to push more consumption into Q2 and Q3 of 2022, causing a sharp drop in Q4 and later into 2023.
- These conditions would greatly increase the risk of a recession in 2023. The probability of a contraction in consumption in Q1 of next year rises to 63%.



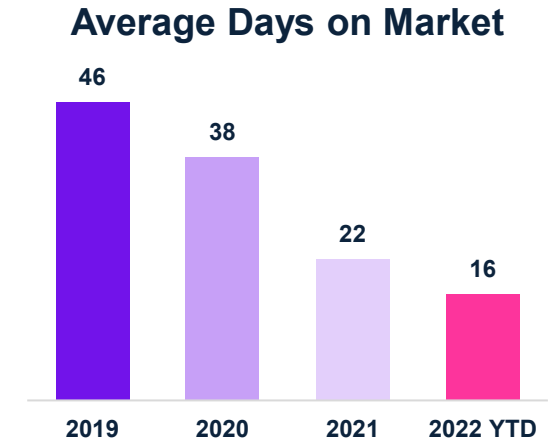
Housing market could contract by the end of 2022. However, financial stability is not yet a concern.

# Supply and demand pressures will ease but persist

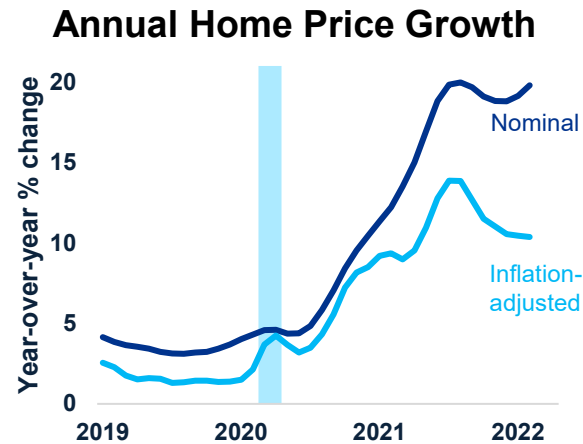
**Supply:** The supply of homes remains low and will take time to return to pre-pandemic levels as supply chain disruptions continue to impact building material supplies.



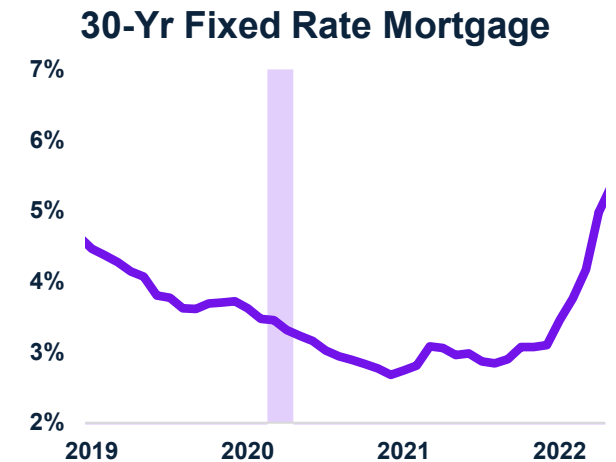
**Demand:** Average days on market remains at its historic low, suggesting demand will need to cool significantly for house prices to decline.



**Prices:** House price growth is already cooling in some markets, but supply shortages will likely translate into continued low single-digit price growth.



**Interest rates:** The Fed's indication that rates could rise at the fastest pace since the mid-1990s has already pushed mortgage rates up 2.1 ppt. this year.



Source: KPMG Economics, Redfin, Robert Schiller, Federal Home Loan Mortgage Corporation, Haver Analytics

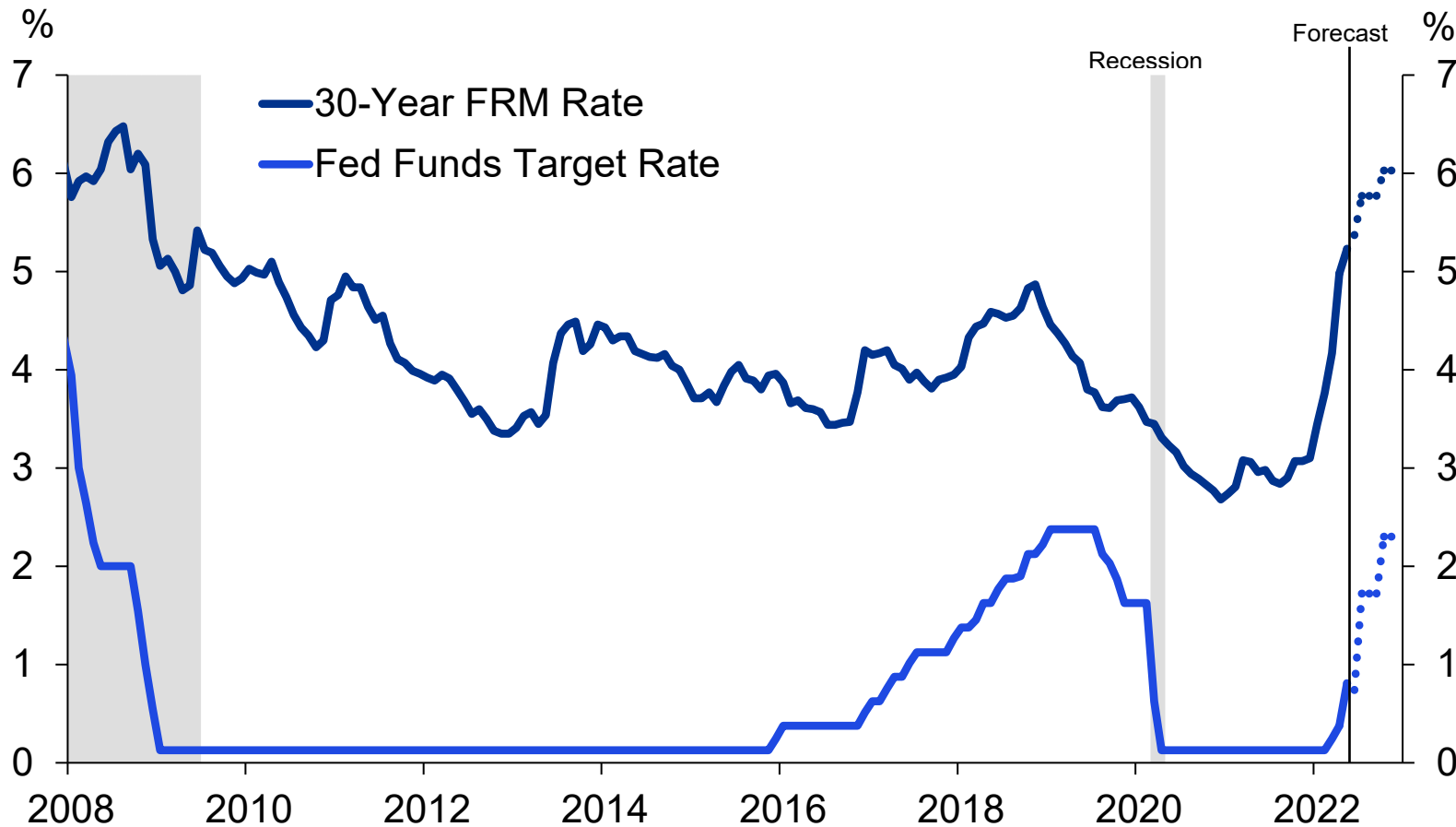


© 2022 KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.



# Mortgage rates likely to hit mid-2000s levels by year end

## Fed Action Pushes Up Mortgage Rates



Source: KPMG Economics, FHLMC (May 2022)

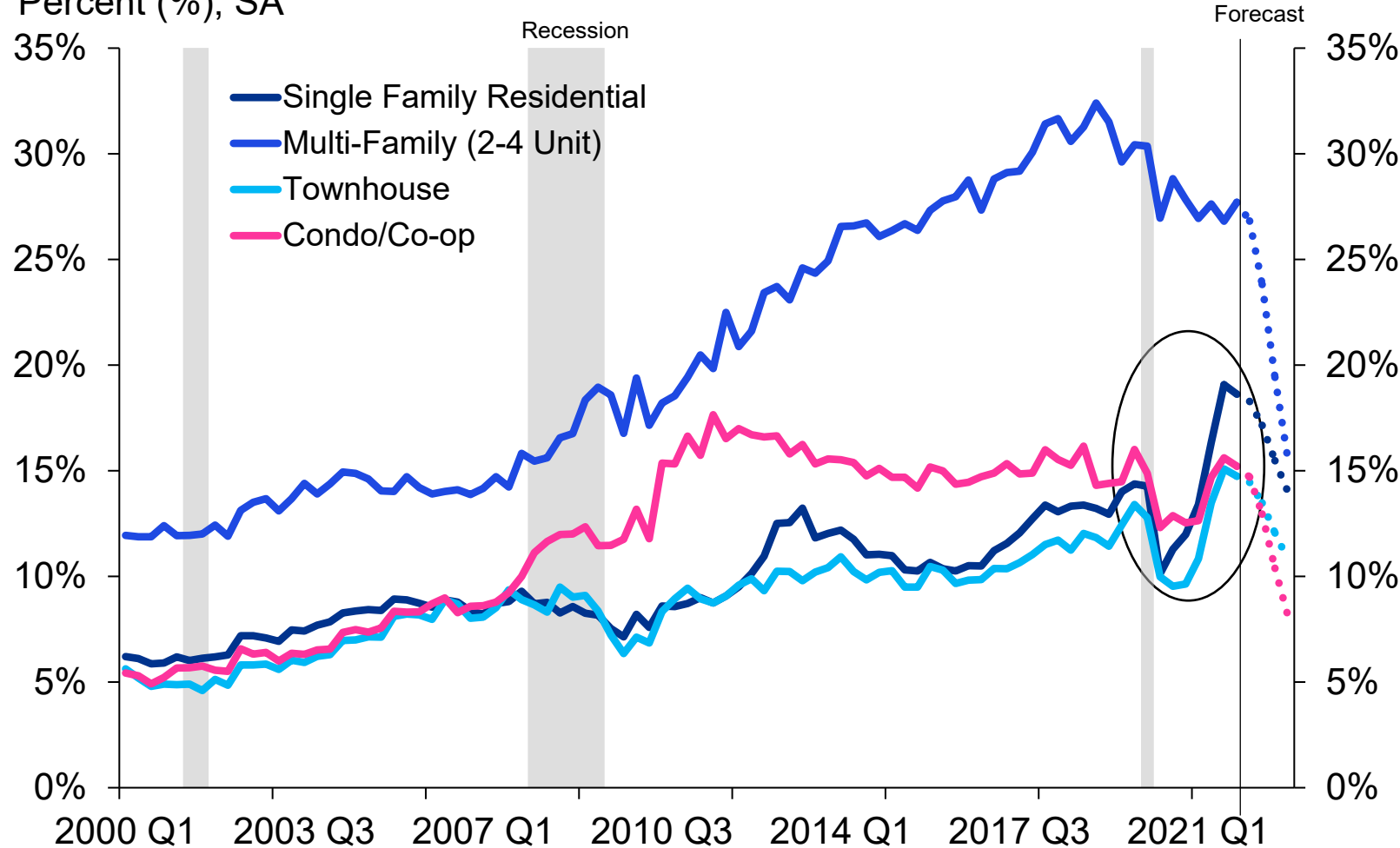
### We expect the 30-year fixed mortgage rate to hit 6.0% by the end of 2022

- Mortgage rates are very responsive to changes in monetary policy. The Fed's explicit announcement that a steep rise in interest rates is likely in 2022 front-loaded the rise in the 30-year fixed mortgage rate.
- Policymakers have been less clear as to where monetary policy will end the year, but we expect the federal funds rate to reach 2.50%. This would push the 30-year fixed mortgage rate up to 6.0%, the highest rate level since 2008.

# Investor demand could deteriorate quickly as rates rise

## Investor Share of Purchases

Percent (%), SA



**High house price growth pulled in financial institutions and investors. They will likely be the first to exit as rates rise**

- Investors have increased their purchases in single family homes much more than other types of homes during the pandemic.
- We expect investors to quickly exit the market in the second and third quarters of 2022 as rates rise, with the investor share of single-family home purchases dropping by 4.2 percentage points by year end.

Source: KPMG Economics, Redfin

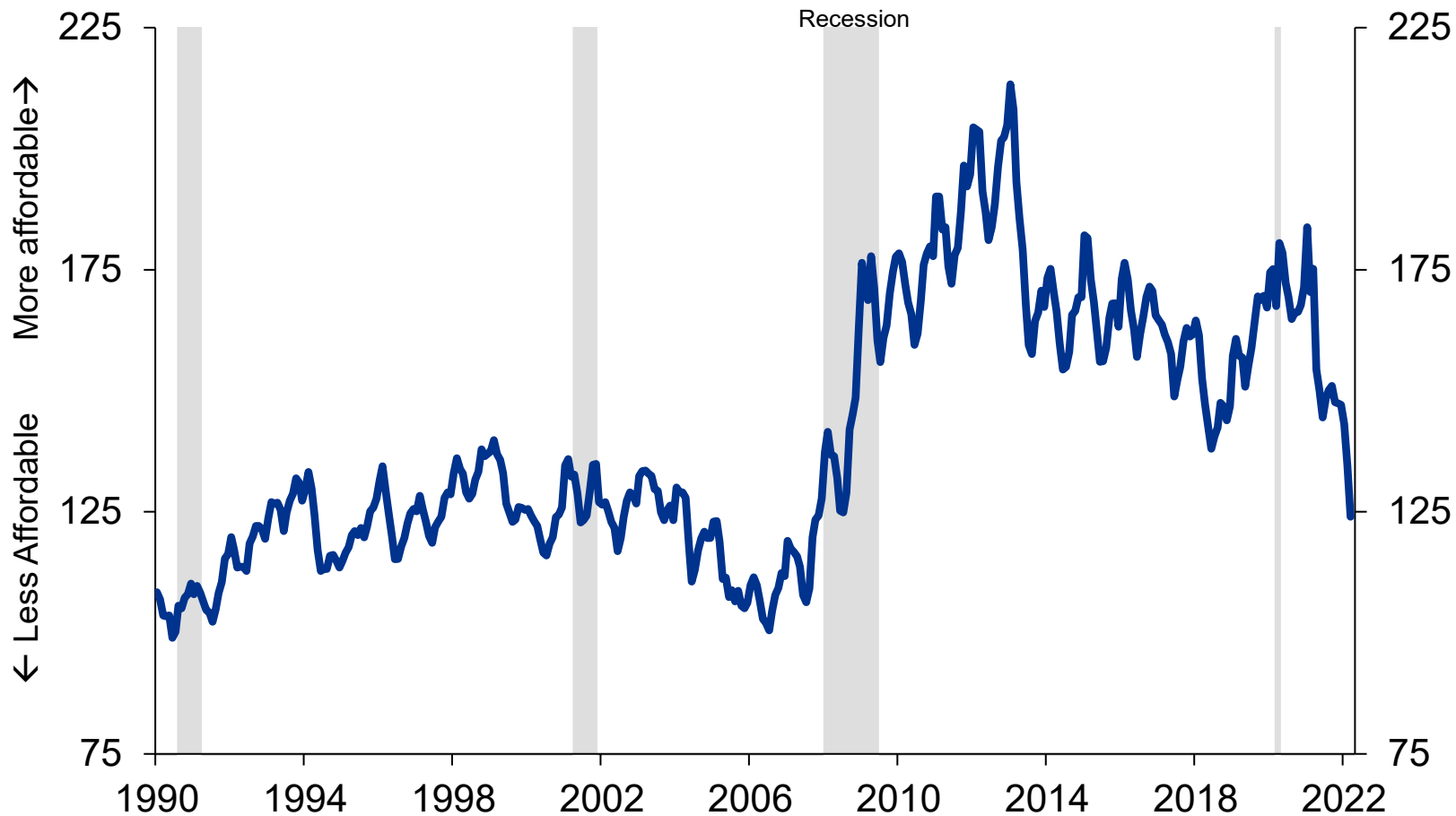


© 2022 KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

# High prices and rising rates will exacerbate affordability concerns

## Home Affordability

Index, Fixed-Rate Mortgages, 100+ = more affordable



**Rising rates will add to affordability concerns, further easing demand for new homes, especially as home prices are likely to stay near current levels**

- Home affordability has dropped to its lowest level since 2007.
- Recent research estimates that over half of the 23.8 percent rise in house prices since the start of the pandemic is attributable to a shift towards remote work, raising aggregate home prices 15.1 percent.
- While that is likely a one-time upward shock to price growth, it also led to a significant reduction in affordability that is unlikely to reverse in 2022.

Source: KPMG Economics, National Association of Realtors (March 2022)

Source: John Mondragon and Johannes Wieland, "Housing Demand and Remote Work," NBER WP 30041 (May 2022).

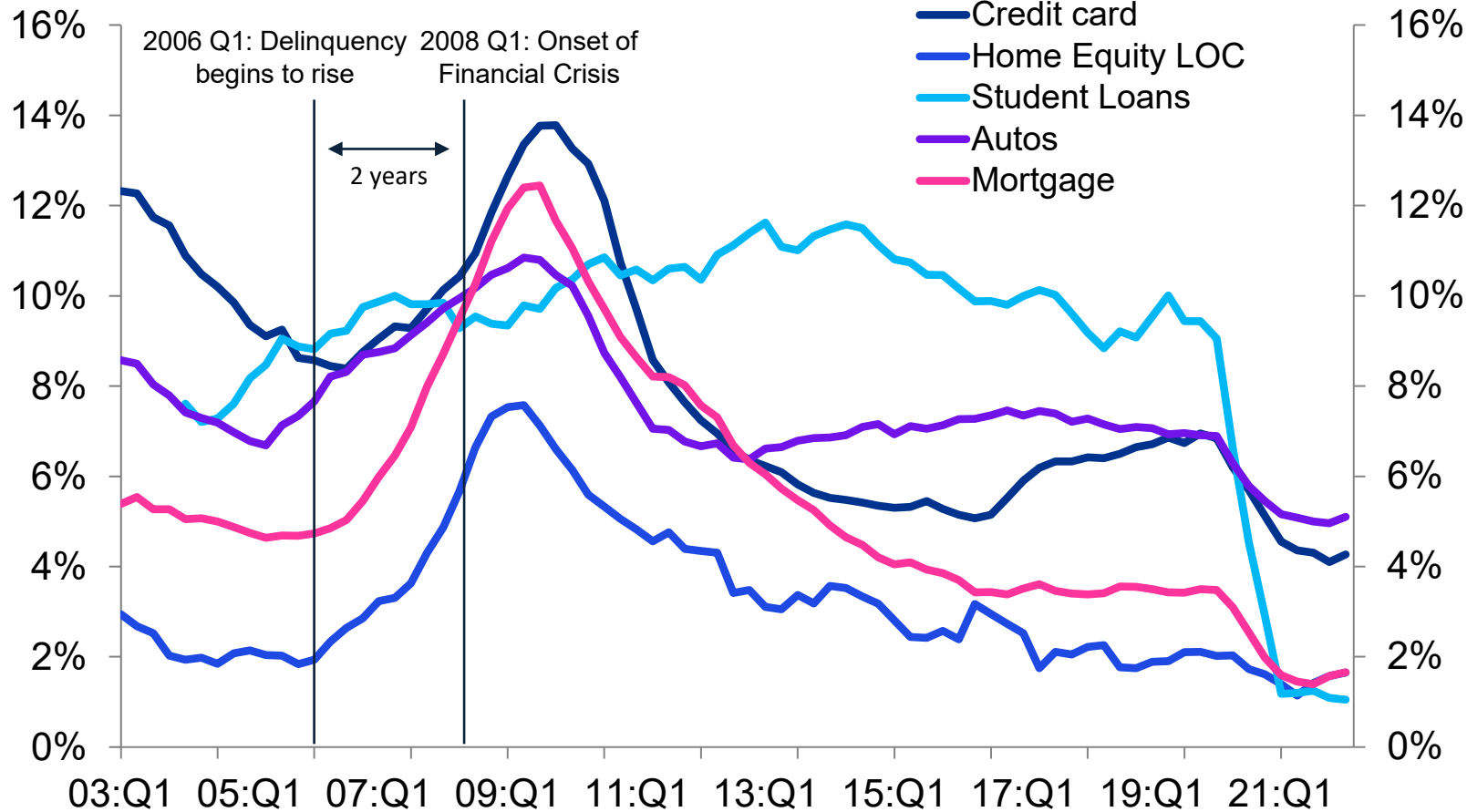


© 2022 KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

# Mortgage delinquencies are near historic lows

## Transition into Delinquency (30+) by Loan Type

Percent of Balance



**Despite headwinds and an expected slowdown or small contraction in house prices in 2022, the housing market is not showing signs of financial distress**

- Delinquencies on mortgages and home equity lines of credit started to rise two years prior to the Global Financial Crisis, signaling that financial imbalances were growing.
- This time around, both measures are near historic lows, a sign that the house price surge has not yet fueled a rise in unsustainable household debt.
- Even if delinquencies over 30 days begin to rise, a crisis in the housing market is unlikely in the next couple of years.

Source: KPMG Economics, NY Fed Consumer Credit Panel/Equifax Household Debt and Credit Report

# KPMG Office of the Chief Economist annual forecast

Major Economic Indicators				
	2021A	2022F	2023F	2024F
<b>GDP and related (annual pct. chg from preceding period)</b>				
Real GDP	5.7	2.4	2.0	2.0
Personal consumption expenditures	7.9	3.0	1.8	1.6
Business Investment	7.4	6.1	2.5	1.3
Residential Investment	9.2	-2.6	-6.7	1.8
Exports	4.5	4.8	6.1	5.3
Imports	14.0	9.5	0.6	0.7
Government	0.5	-0.8	1.5	1.0
Real disposable personal income	2.2	-3.9	2.7	4.0
Final sales to domestic purchasers	6.5	2.5	1.5	1.5
<b>Labor market (annual avg., percent)</b>				
Unemployment rate	5.4	3.5	3.8	4.4
<b>Prices (annual pct. chg from preceding period)</b>				
CPI	4.7	6.8	2.8	1.9
CPI excluding food & energy	3.6	5.3	3.2	2.3
PCE	3.9	5.6	2.7	1.7
PCE excluding food & energy	3.3	4.7	3.1	2.0
<b>Interest Rates (annual avg., percent)</b>				
Federal funds rate	0.08	1.22	2.82	2.79
3-month T-bill yield	0.04	1.24	2.60	2.56
5-year T-note yield	0.86	2.69	3.18	3.03
10-year T-note yield	1.44	2.69	3.19	3.15
Baa corporate bond yield	3.45	4.83	5.25	5.24
30-year mortgage rate	2.96	5.24	6.16	5.30

A = Actual, F = Forecast

Note: Forecasts are inherently time sensitive and projections are dated as of May 24, 2022.

Source: KPMG Economics, BEA, BLS, Federal Reserve, Haver Analytics, Moody's

Coming soon.....



## CFO Inflation Survey

**A short quarterly survey to gauge CFO views on prices**



# Thank you

For more information, please see KPMG's Office of the Chief Economist Website:  
[Office of the Chief Economist \(kpmg.us\)](https://www.kpmg.us/office-of-the-chief-economist)





[kpmg.com/socialmedia](https://kpmg.com/socialmedia)

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act upon such information without appropriate professional advice after a thorough examination of the particular situation.

© 2022 KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization.