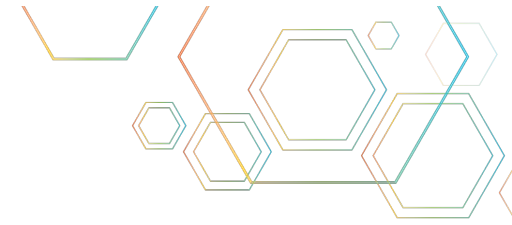




Auto Market Update

JONATHAN SMOKE
CHIEF ECONOMIST

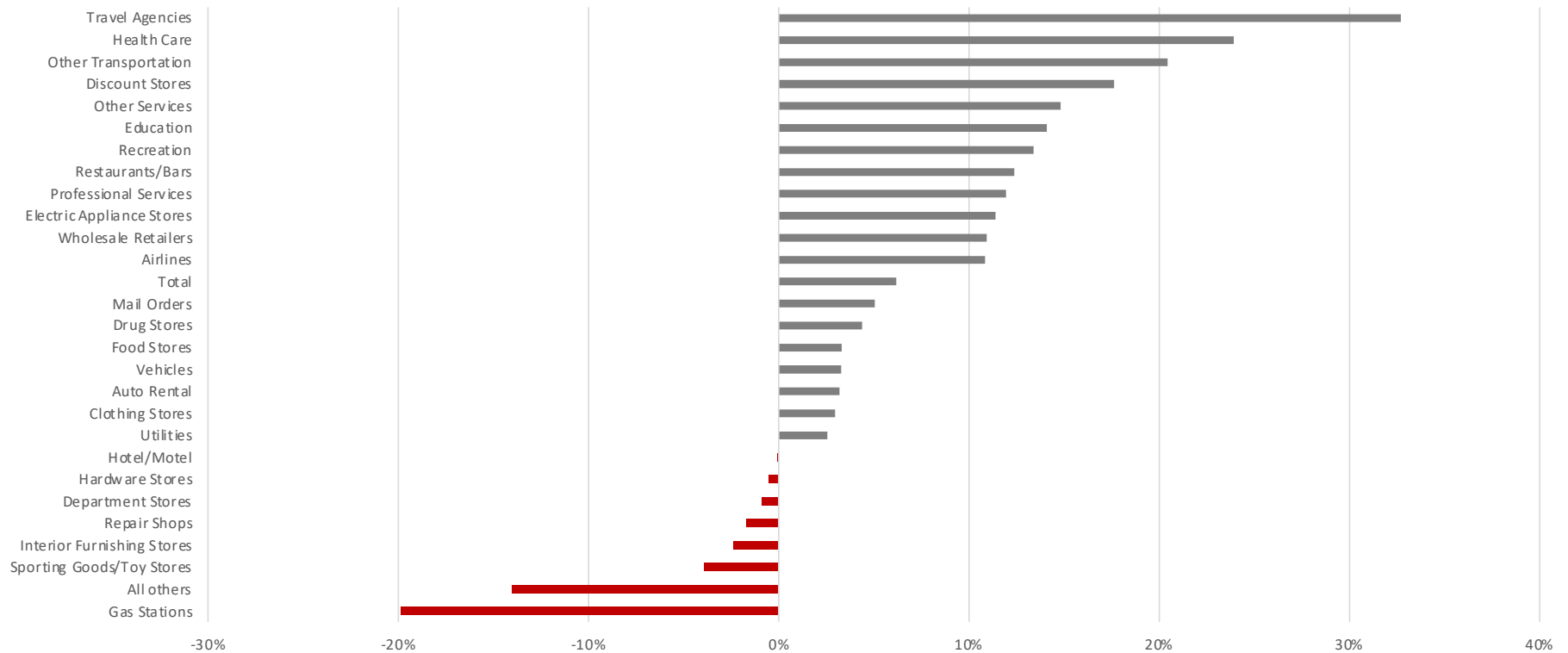
COX AUTOMOTIVE

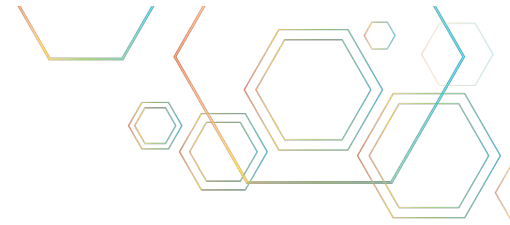


Consumer Spending Growth Slowing But Still Strong in Travel

Total spending in late June was up 6% y/y with strength in travel, health care, and services

Y/Y Spending % Change for Week Ending June 24, 2023

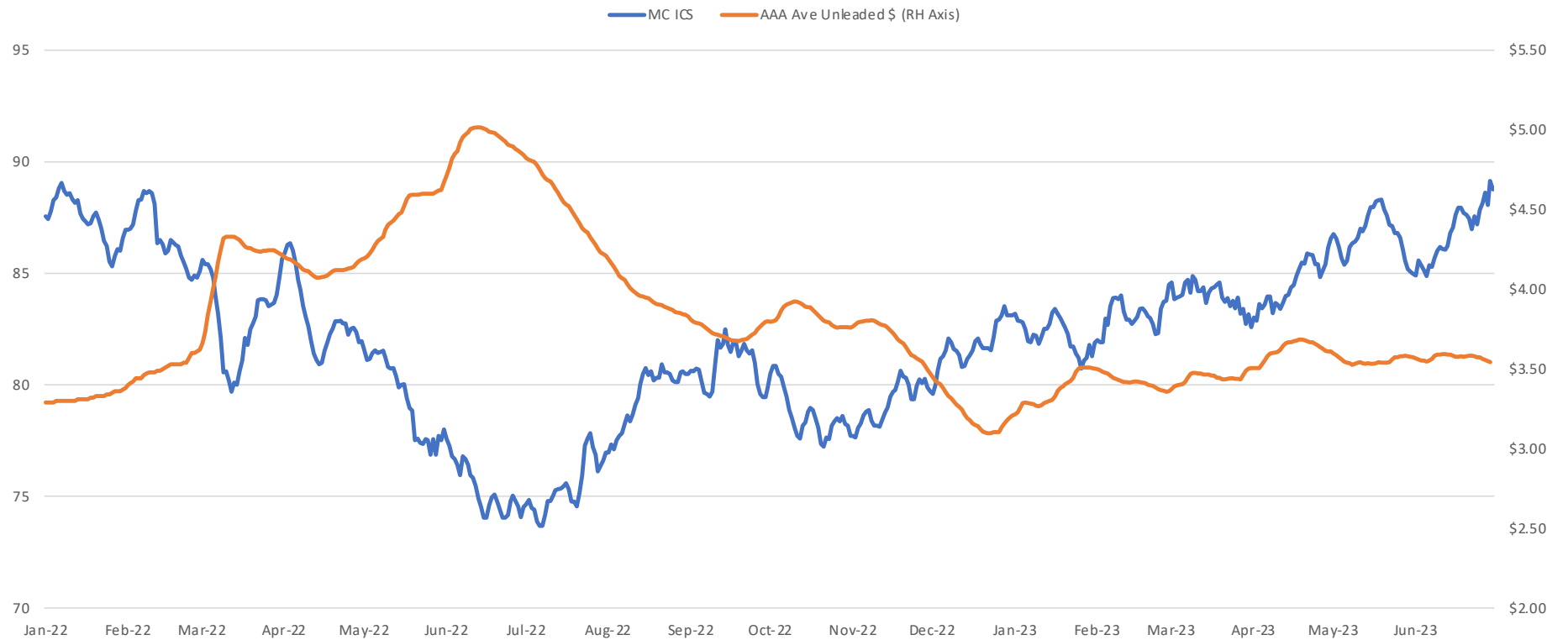


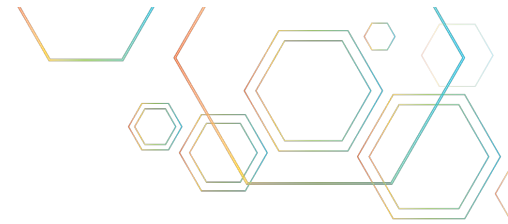


Consumer Sentiment Improved Strongly in June

The Index of Consumer Sentiment declined 1.8% in May but increased 4.4% in June

Morning Consult Index of Consumer Sentiment vs. Average Price of Unleaded

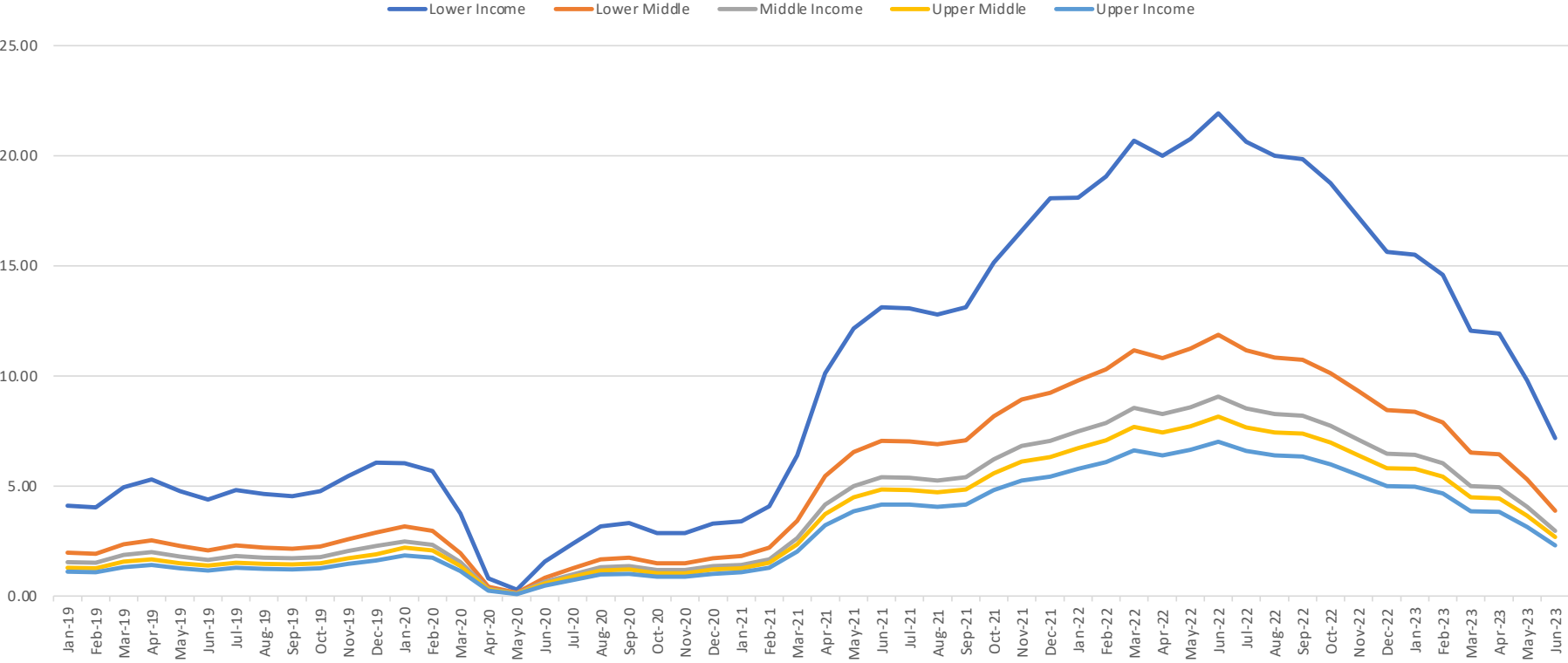


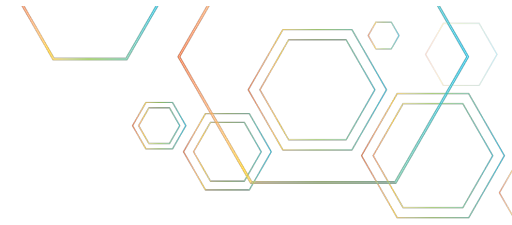


Inflation Is Declining But Impact Varies

Lower income quintiles now seeing fastest declines in inflation

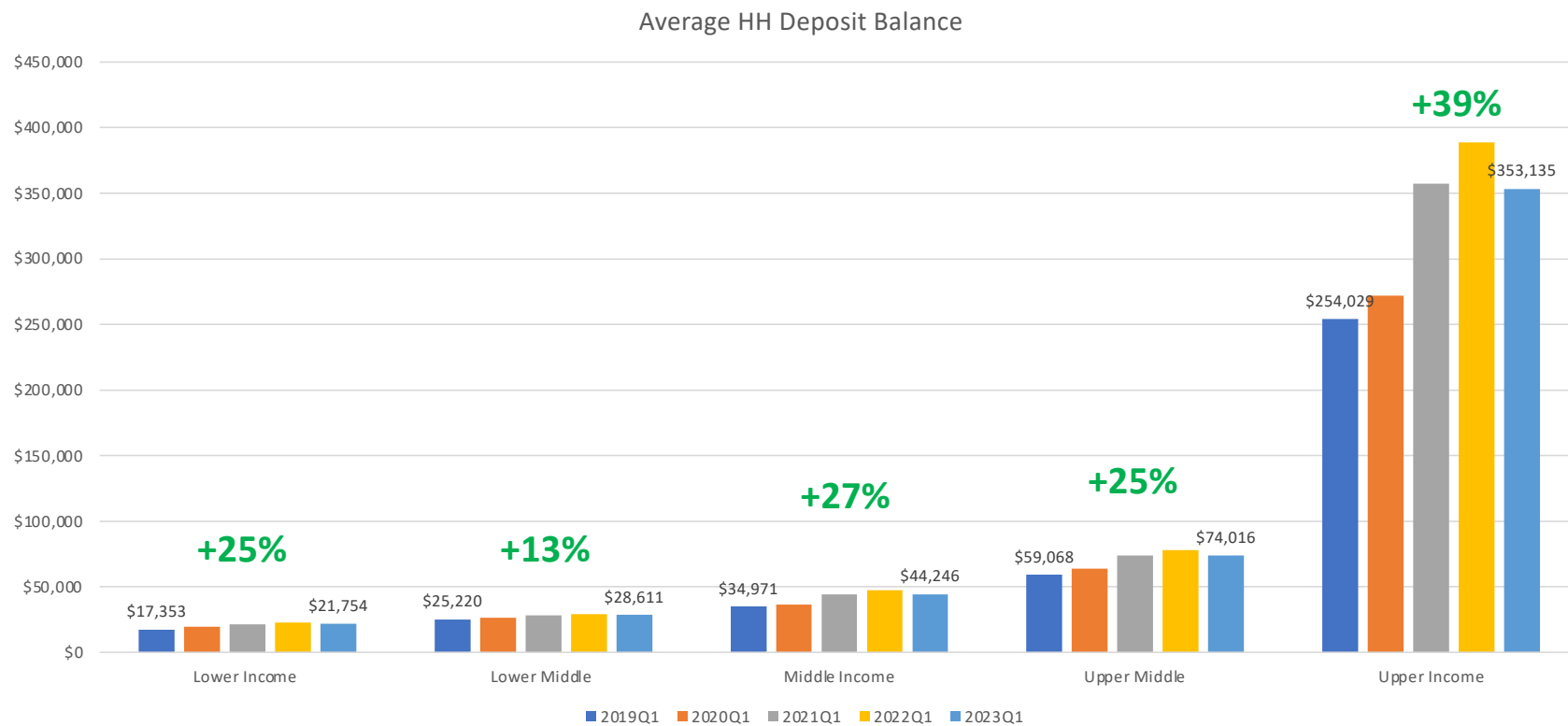
Consumer Price Inflation % Experienced by Income Quintiles

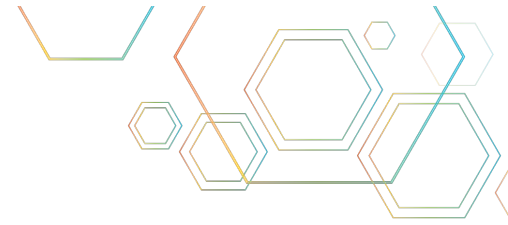




Pandemic Savings Were Partially Spent in 2022

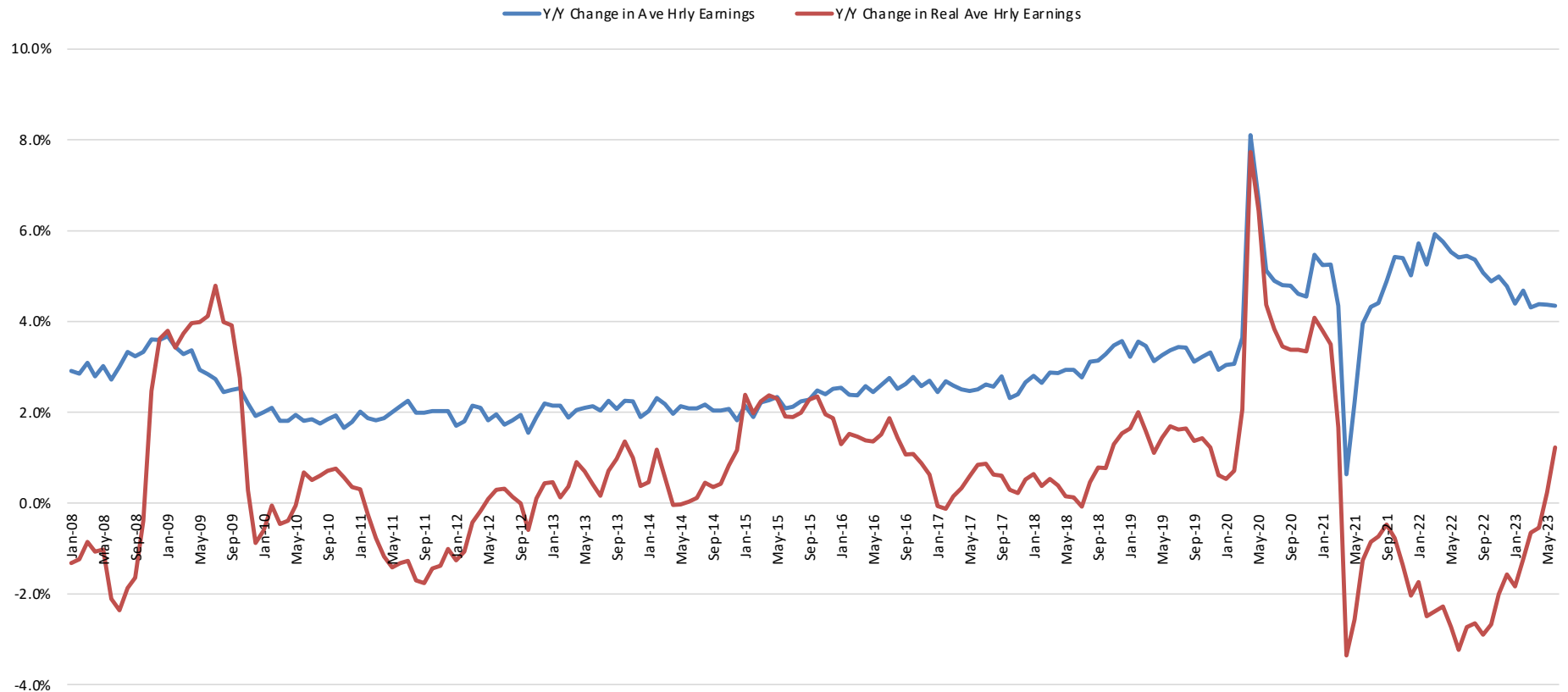
An excess savings buffer still exists and is substantial for upper income households

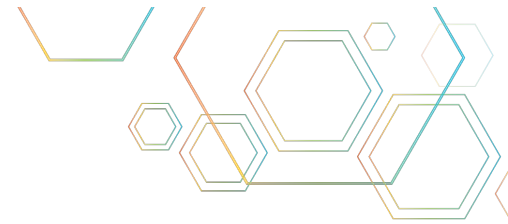




Real Earnings Growth Back to Positive

With strong nominal wage growth, lower inflation is leading to positive real earnings growth

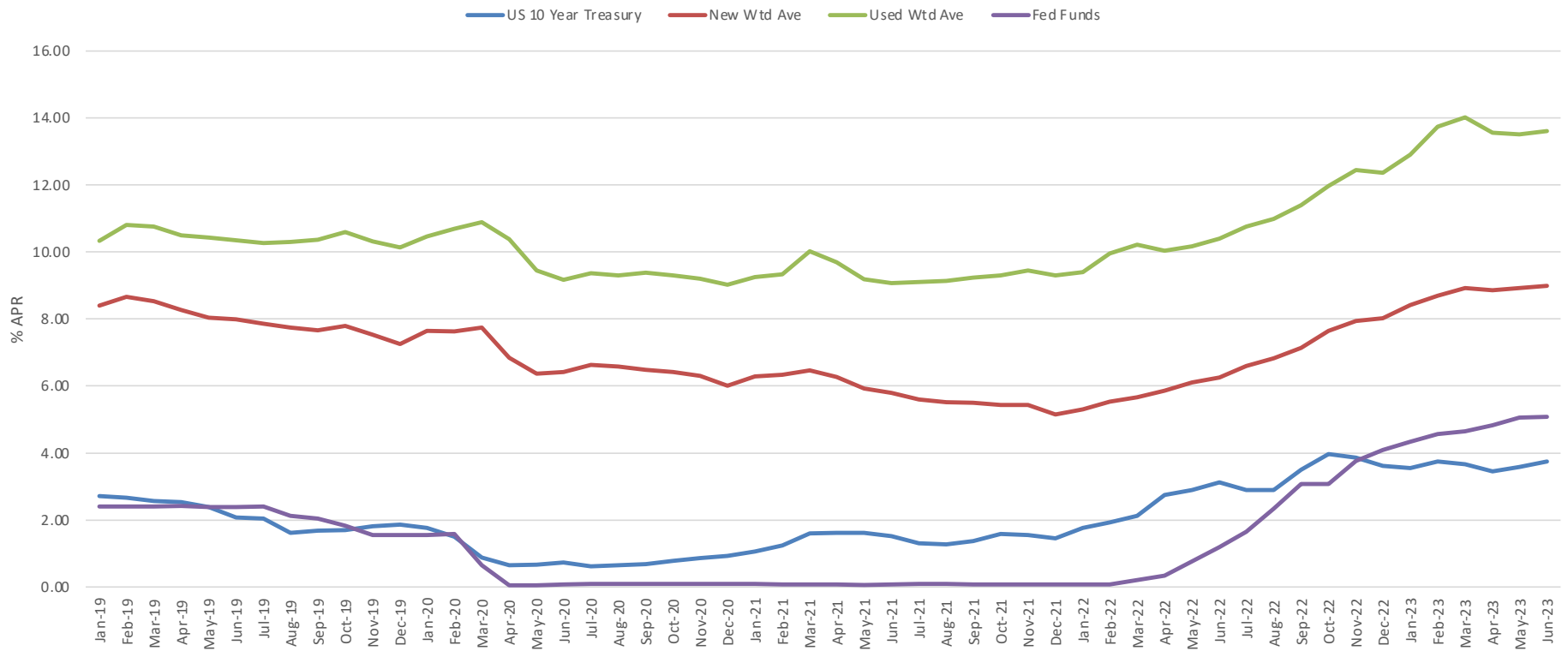


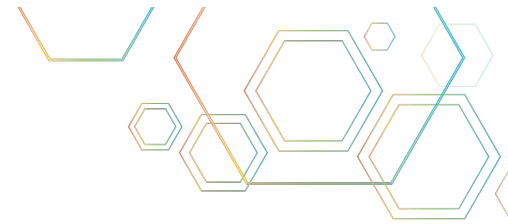


Auto Loan Rates Up Slightly in June

Auto loan rates are up slightly in June with average new up to 8.99% and used up to 13.61%

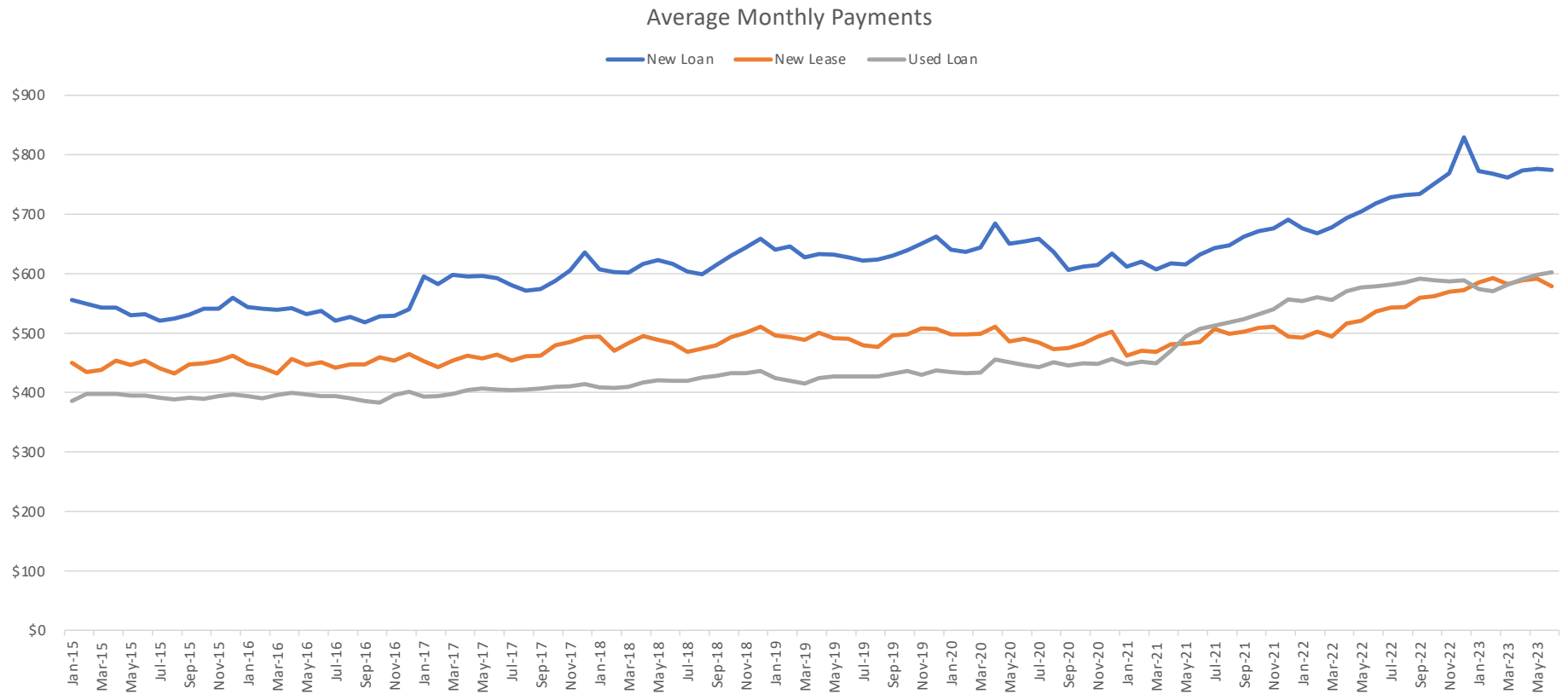
Fed Funds Rate, 10 Year, and Average Auto Loan Rates





Affordability Severely Challenged by Rates and Prices

Average payments up 18-41% since 2019 and now out of reach for many households

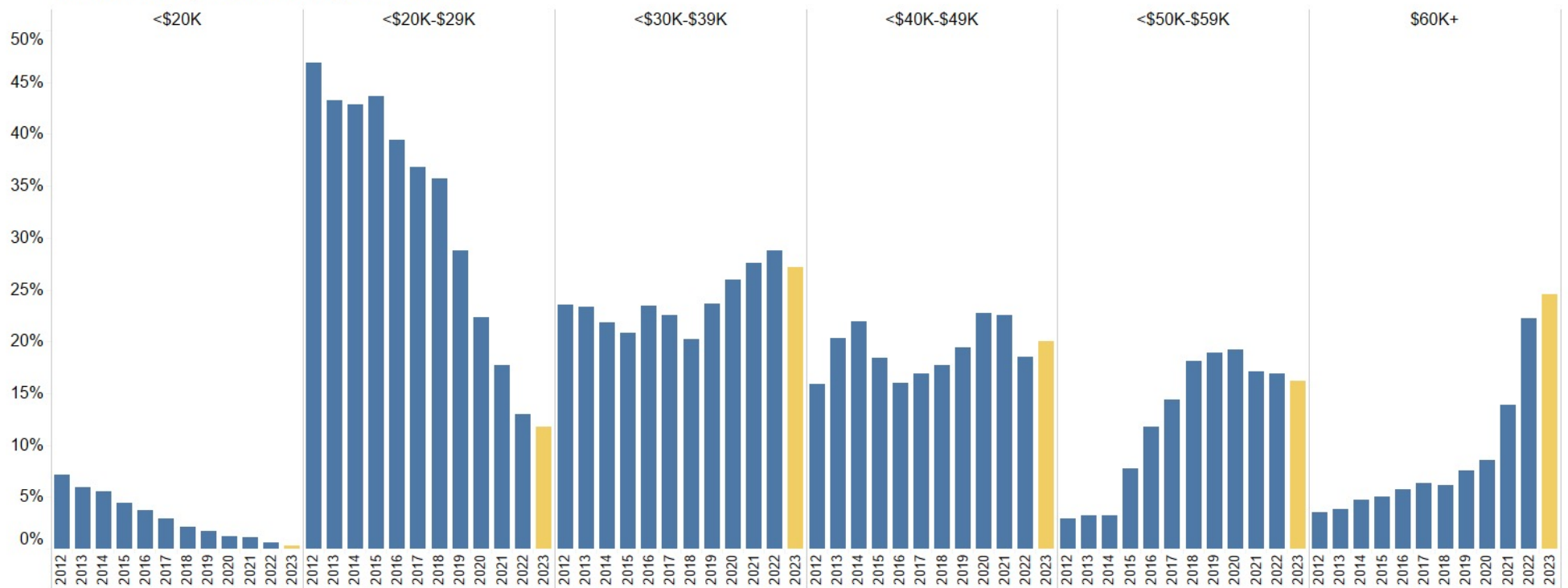


Higher Price Trend Movement in 2023

YTD, 12% of nameplates were priced below \$30,000, down from 54% in 2012 and down from 14% last year



Share of Market by MSRP Price Range 2012-2023 YTD

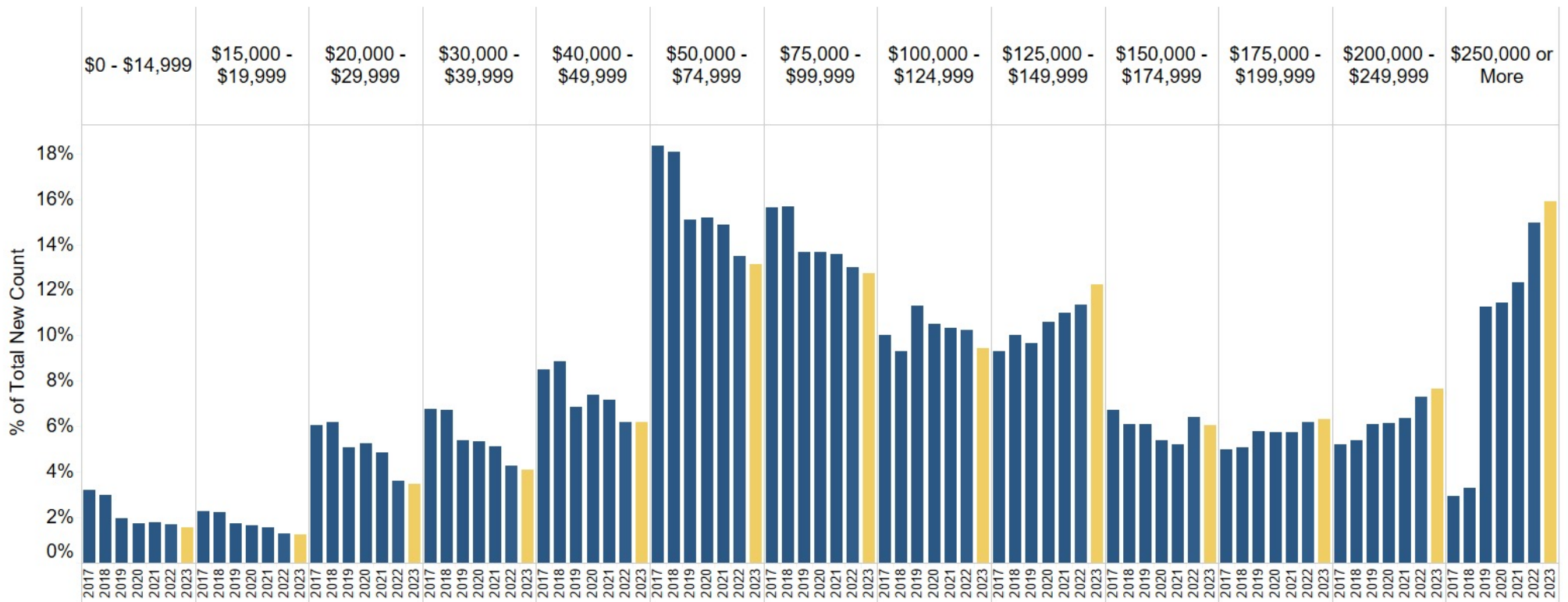


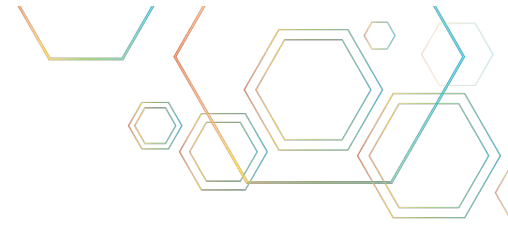
New Car Buyers Are Increasingly Higher Income

Share of sales to <\$75k incomes have dropped by 16 pts since 2017; >\$150k has gained 16 pts



Share of Market by INCOME of Head of Household 2017-2023 YTD

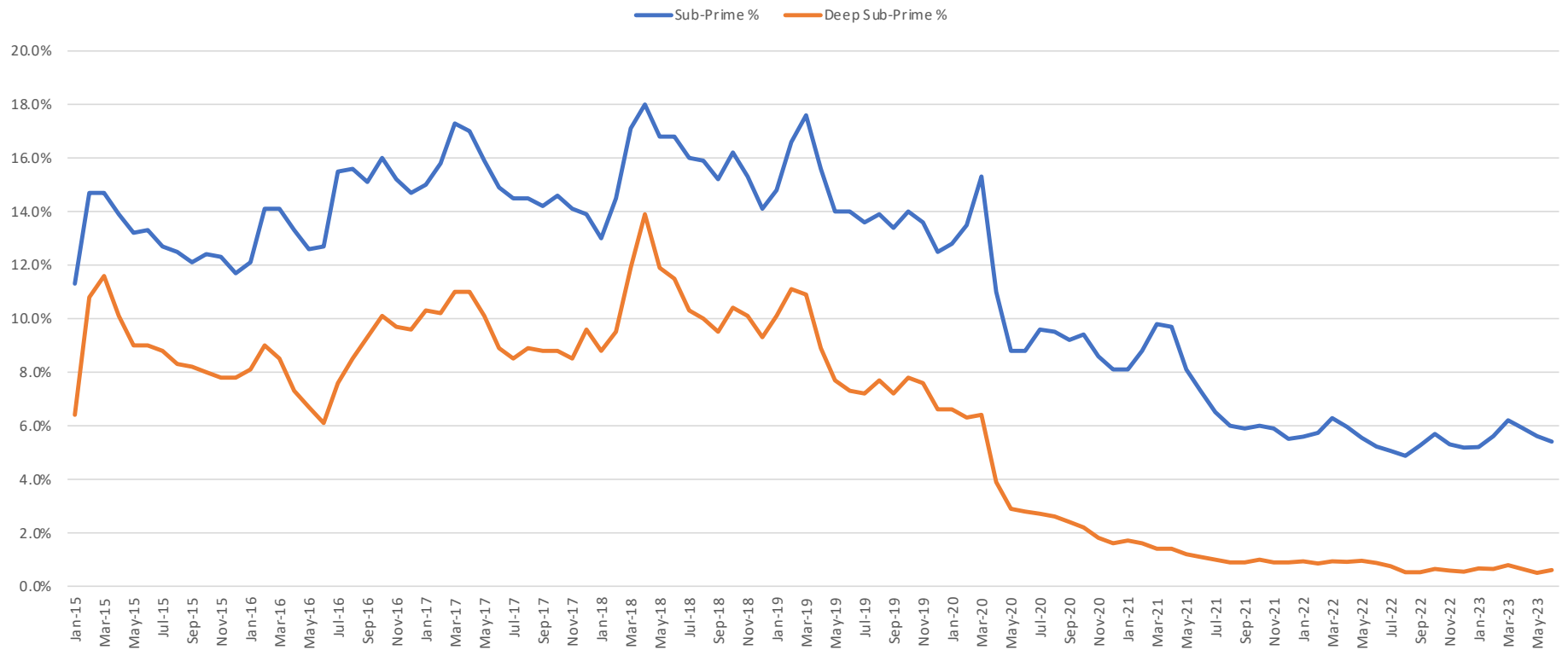


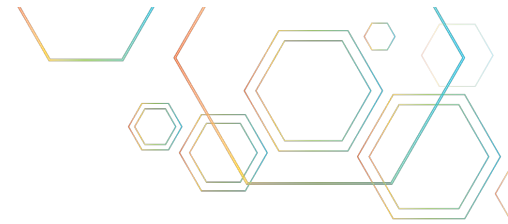


Rates + Pricing Reduce Almost 10% of Buying Pool

Deep subprime has all but disappeared from new loans and subprime below 6%

Subprime and Deep Subprime Share in New

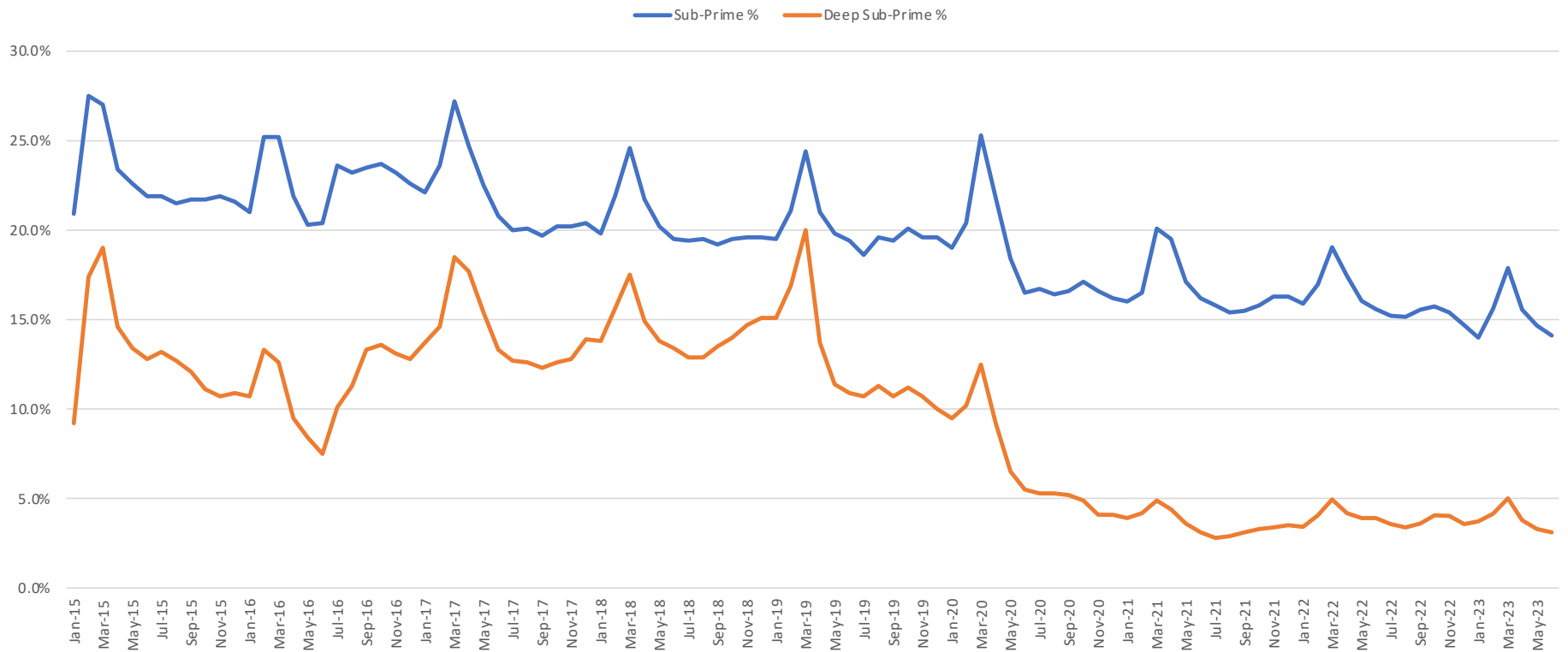


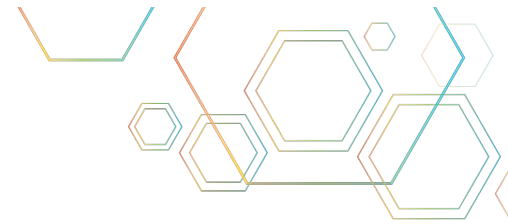


Affordability Also Creating Challenges in Used

Subprime now underrepresented in used loans

Subprime and Deep Subprime Share of Used

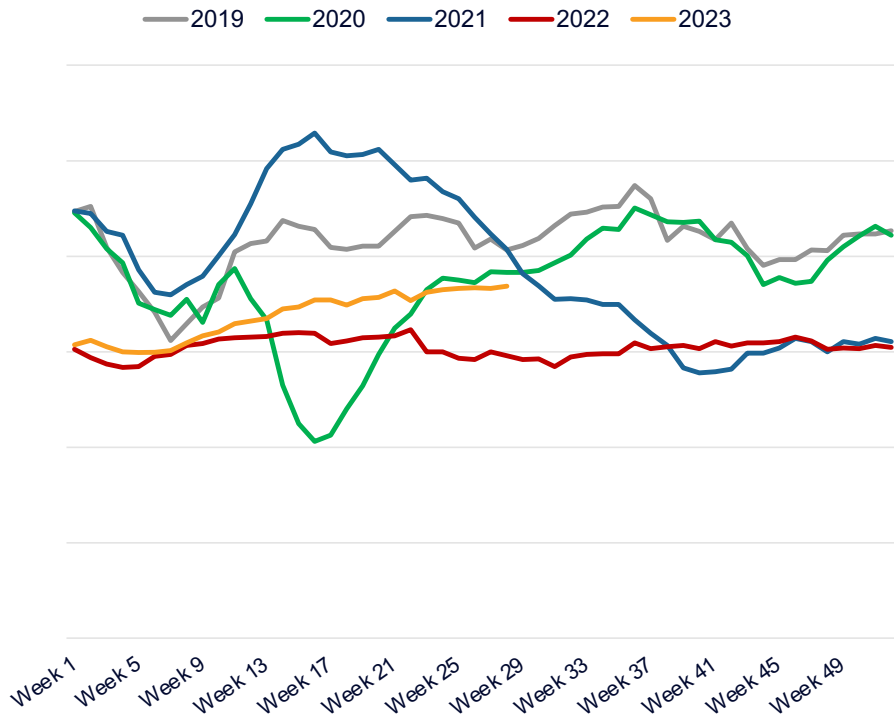




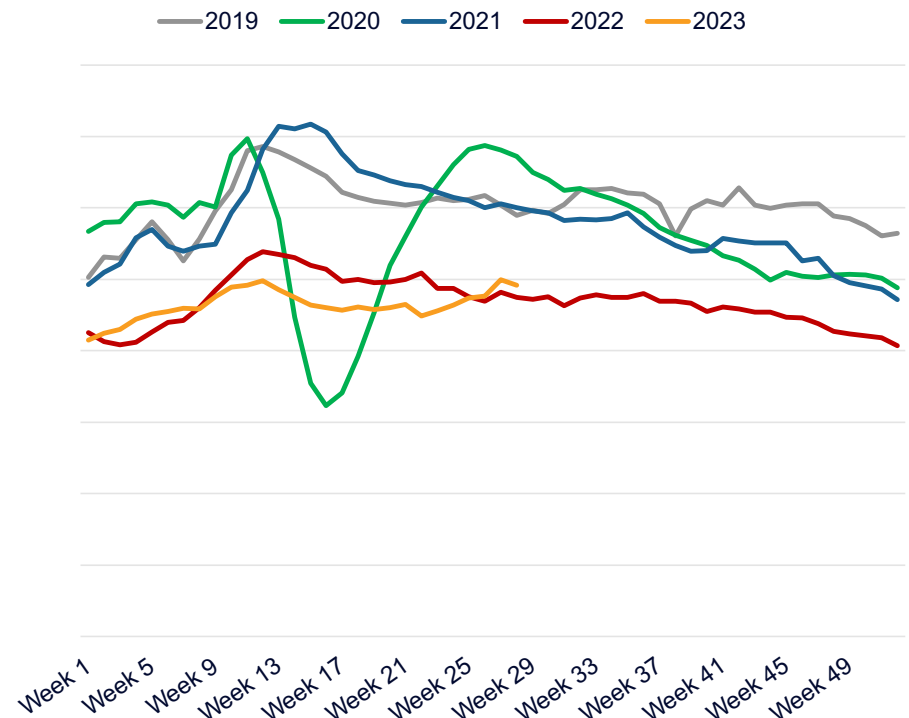
Retail Vehicle Sales Estimates

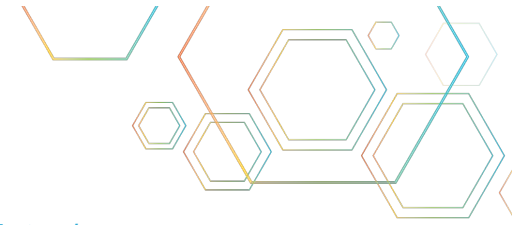
Compared to 2022, new sales last week were up 25% & up 0.7% w/w: used were up 3.7% but down 1.5% w/w

New Retail Sales



Used Retail Sales

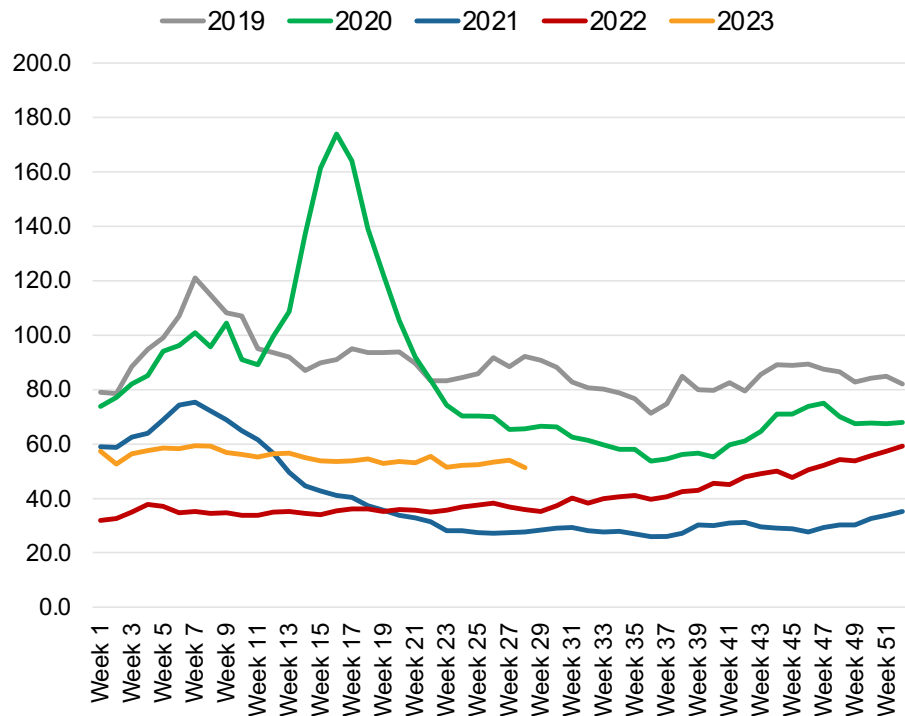




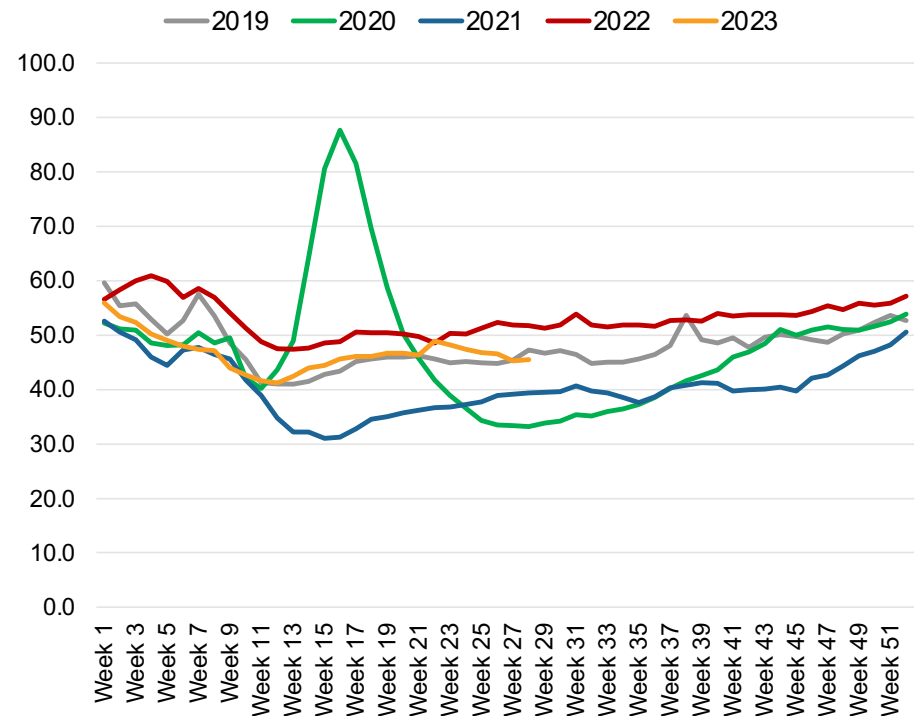
Supply Better Than Last Year for New But Tighter for Used

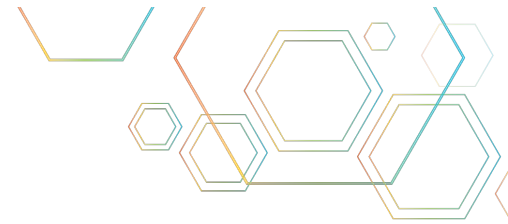
New supply is up 15 days y/y and down 5% w/w; used supply is down 6 days y/y and up ½ point w/w

New Days' Supply



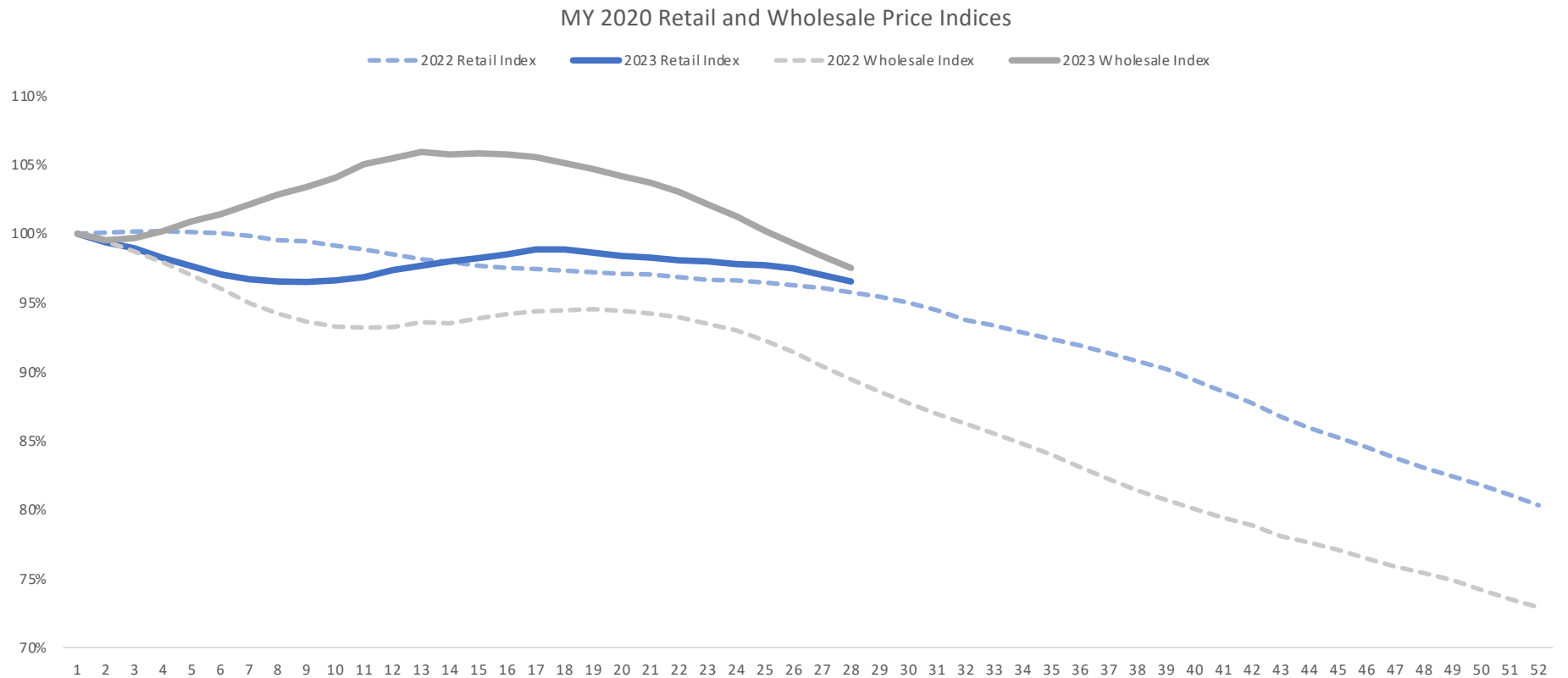
Used Days' Supply

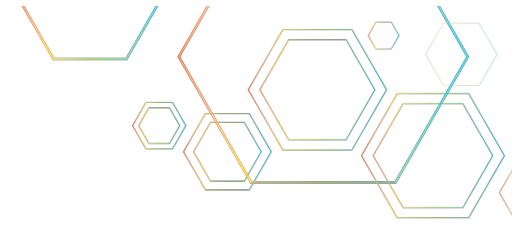




Used Prices Declining Again

The average MY 2020 wholesale price declined 0.9% last week while the average retail price declined 0.5%

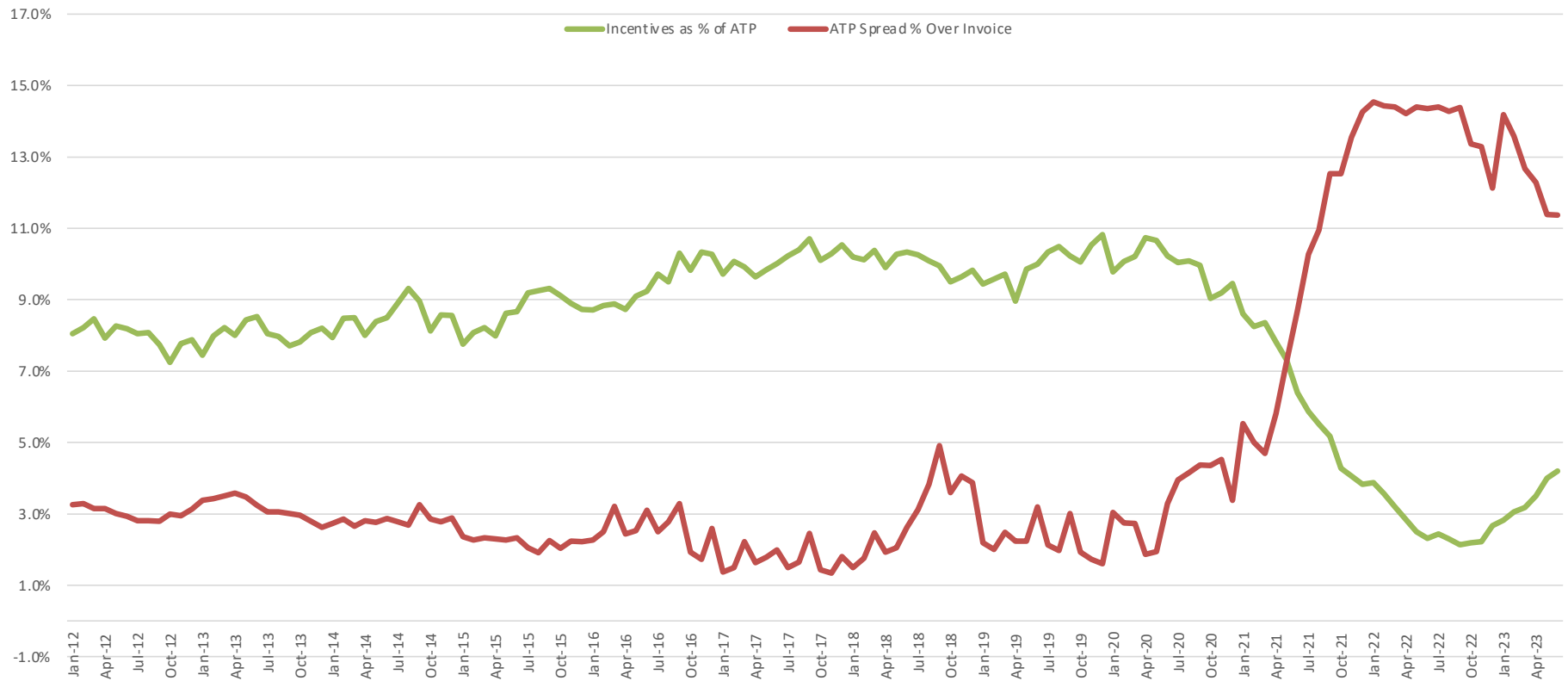


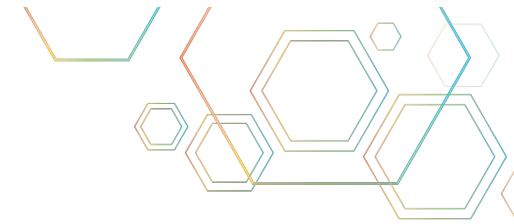


Prices Edging Lower, Past Peak in Pricing Power

Incentives up 85% y/y; ATP losing ground on MSRP, and spread at lowest level in 22 months

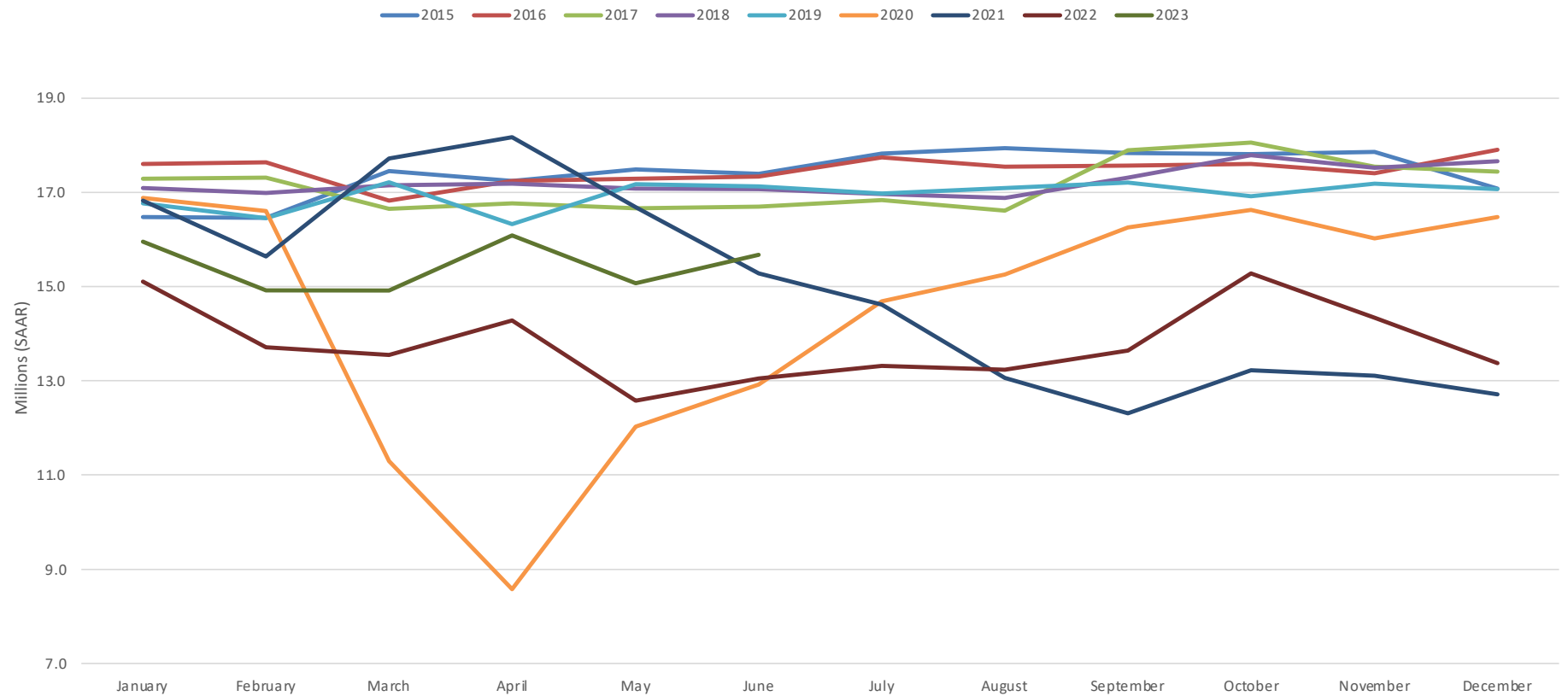
Incentives as a % of Average Transaction Price vs. ATP Invoice Spread %





New Vehicle Sales Seeing Gains from Production Recovery

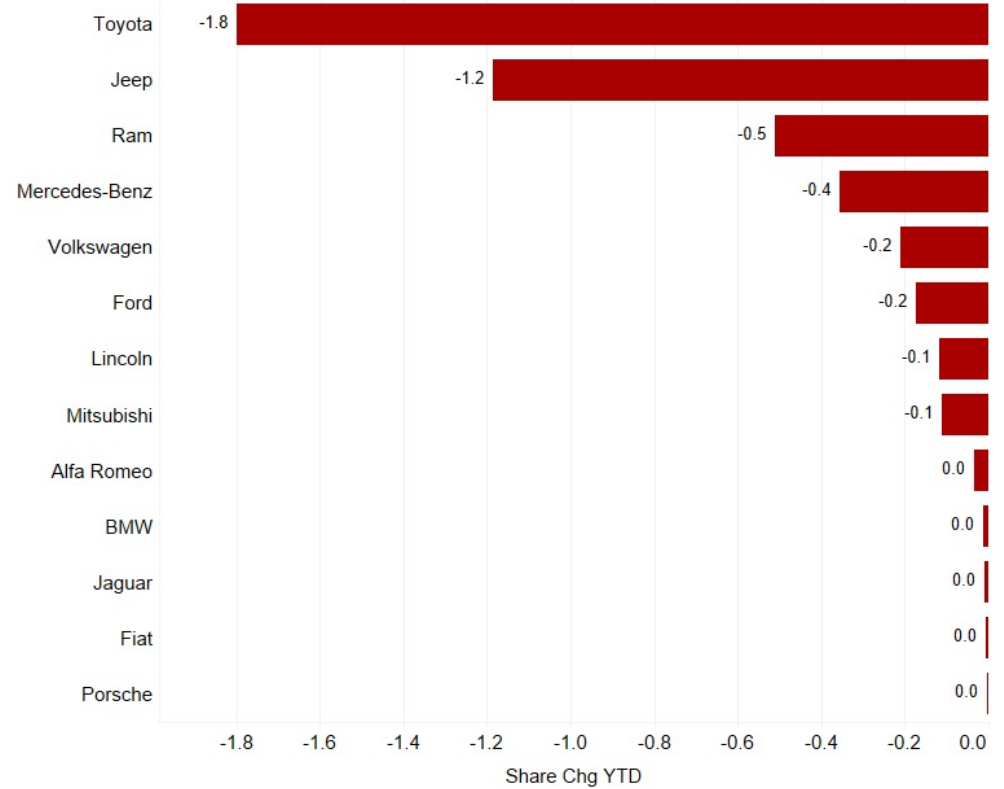
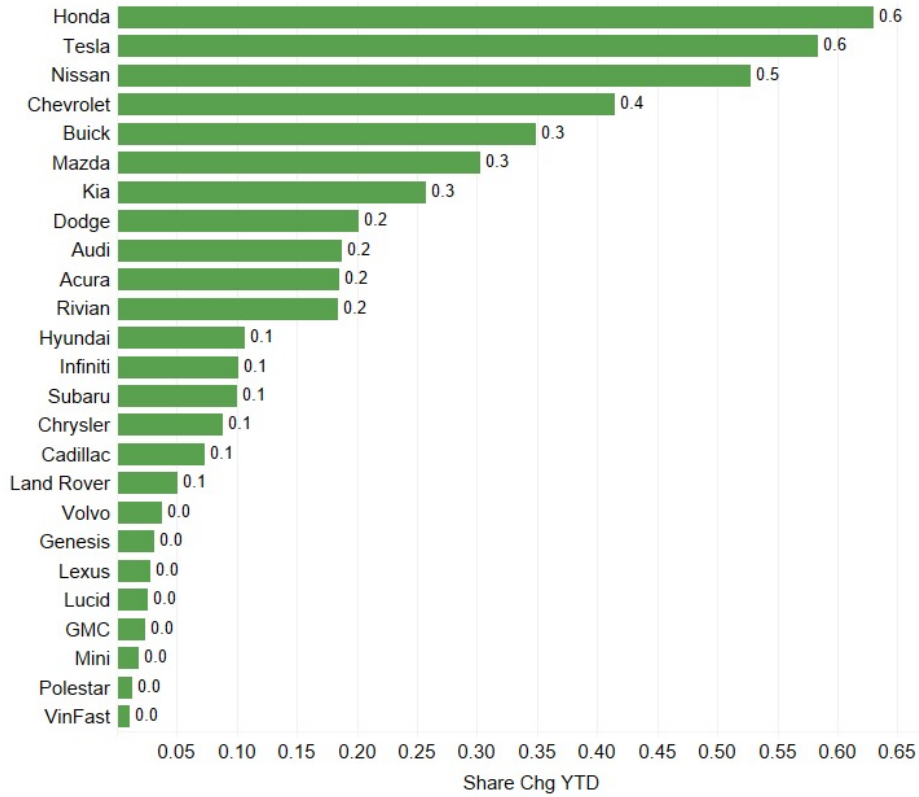
YTD SAAR of 15.4 million well ahead of last year's 13.8 million



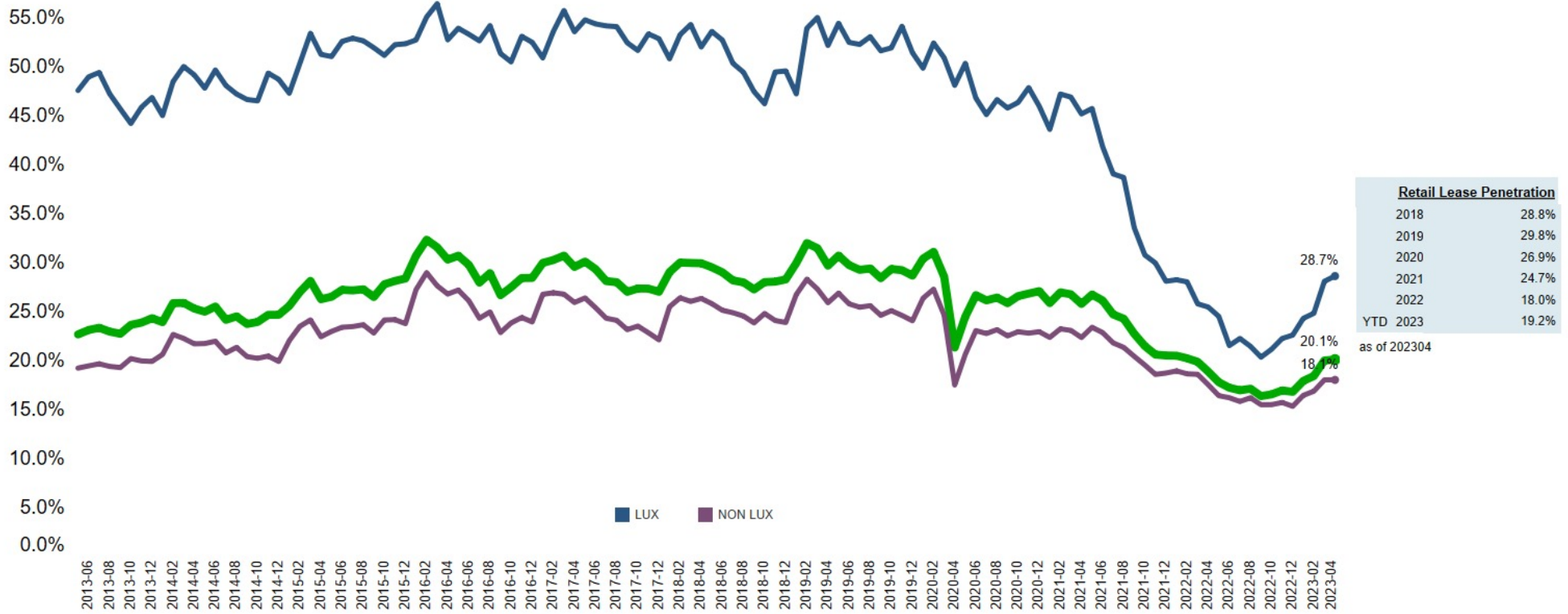
New Vehicle Market Share -Top Brands by Share Gain/Loss



YTD as of June 2023

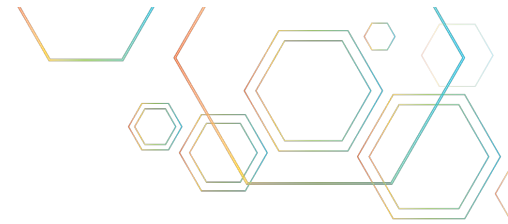


Retail Lease Penetration Slowly Recovering



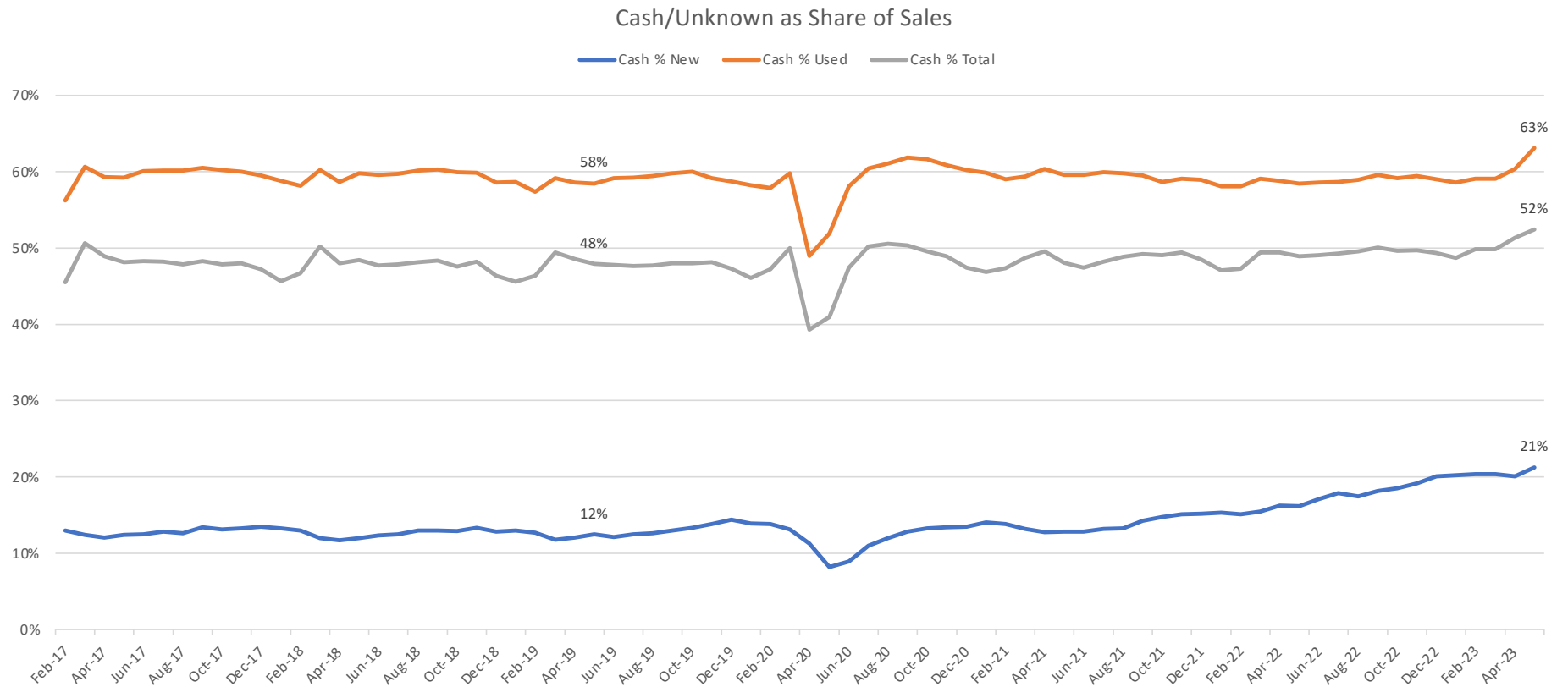
Retail Lease Penetration	
2018	28.8%
2019	29.8%
2020	26.9%
2021	24.7%
2022	18.0%
YTD 2023	19.2%

as of 202304



Credit Has Lost Share to Cash

Financing down more than sales as cash usage has accelerated with high levels of rates

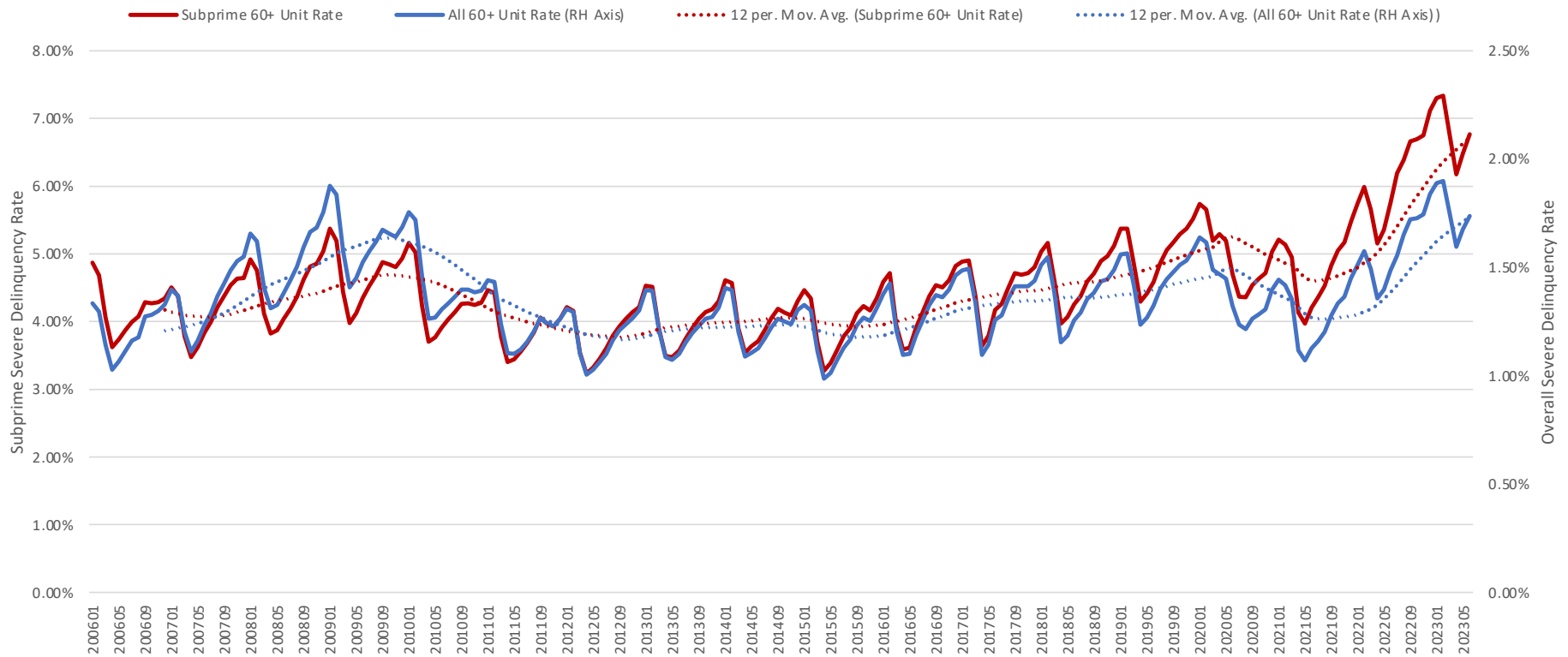




Delinquency Rates Up Again in June

After 2-month decline, severe delinquency rates increased in May and June and were higher y/y

60+ Severe Delinquency Unit Rates on Auto Loans

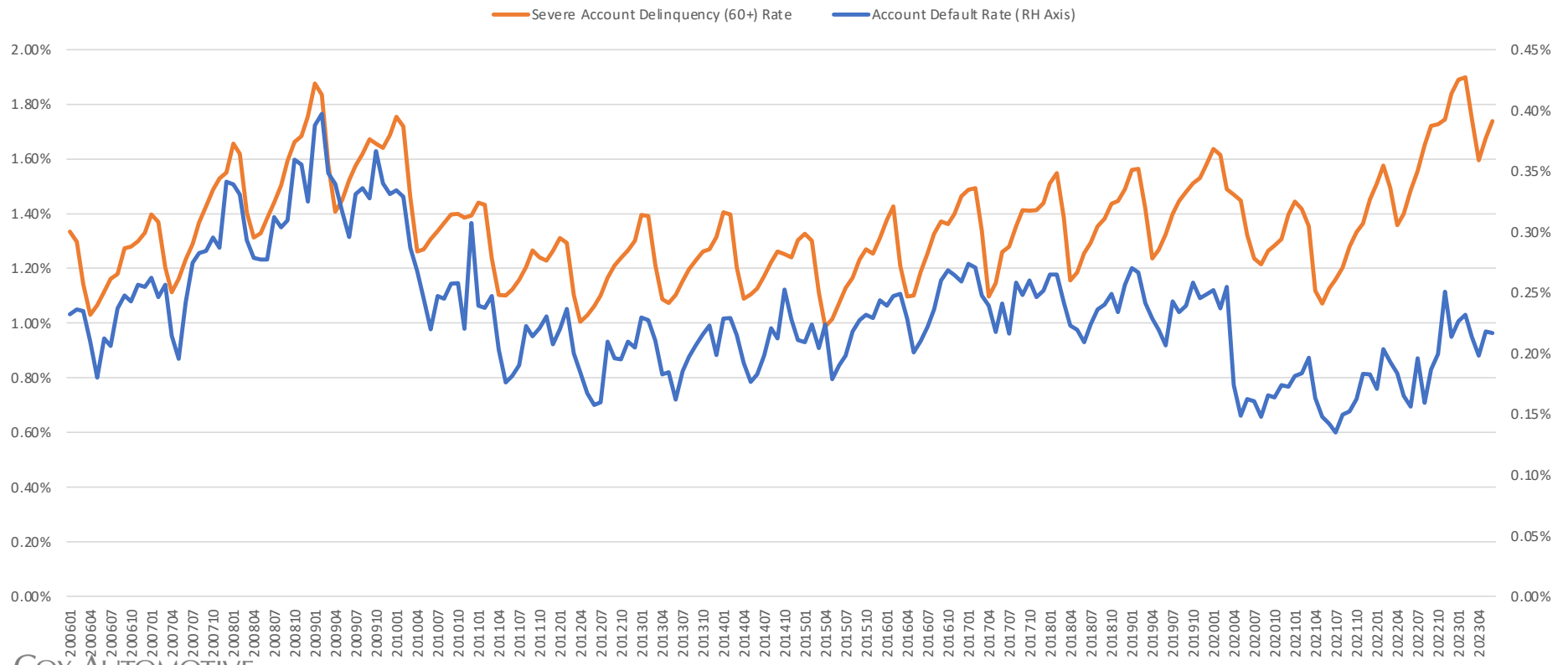




High Delinquency Rates Not Converting to Equivalent Defaults

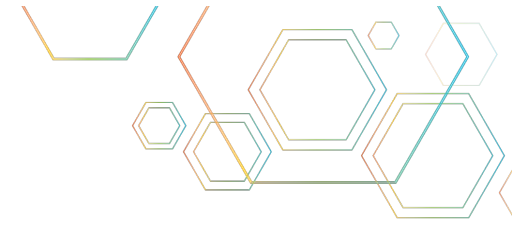
Default rate not matching rise in delinquencies; the delinquency rate increased in June, but the default rate declined

Auto Loan Delinquency vs. Defaults

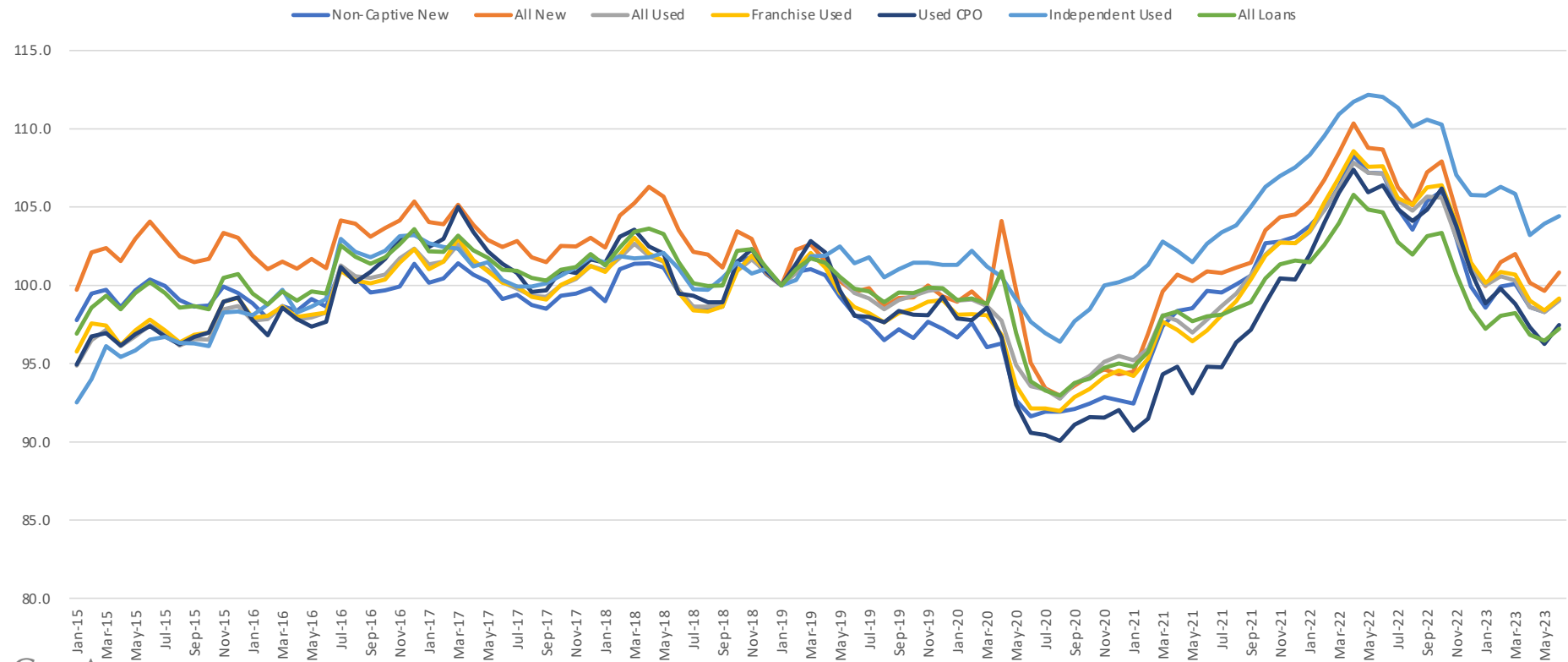


Auto Credit Availability Improved in June

Credit access loosened across all auto loan channels in June



Auto Credit Availability By Lending Type (Jan2019=100)

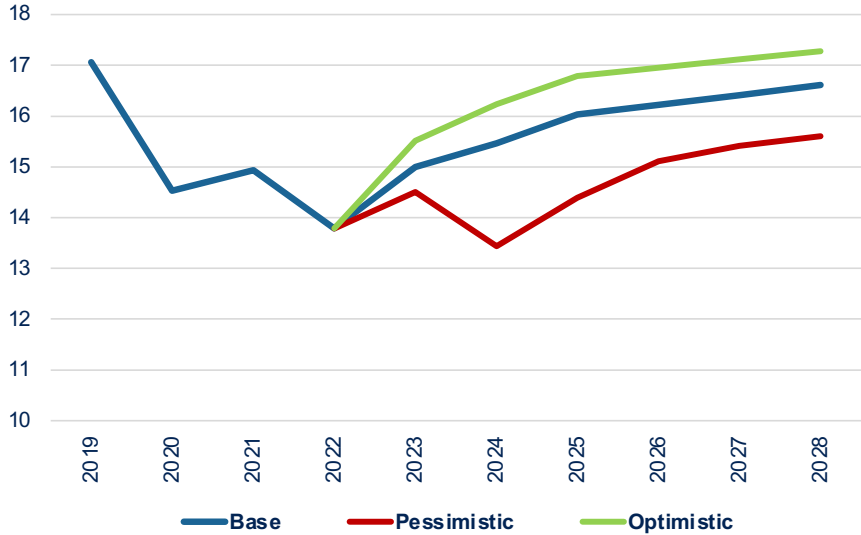


Sales Scenarios | Range Needed With Recession Possible

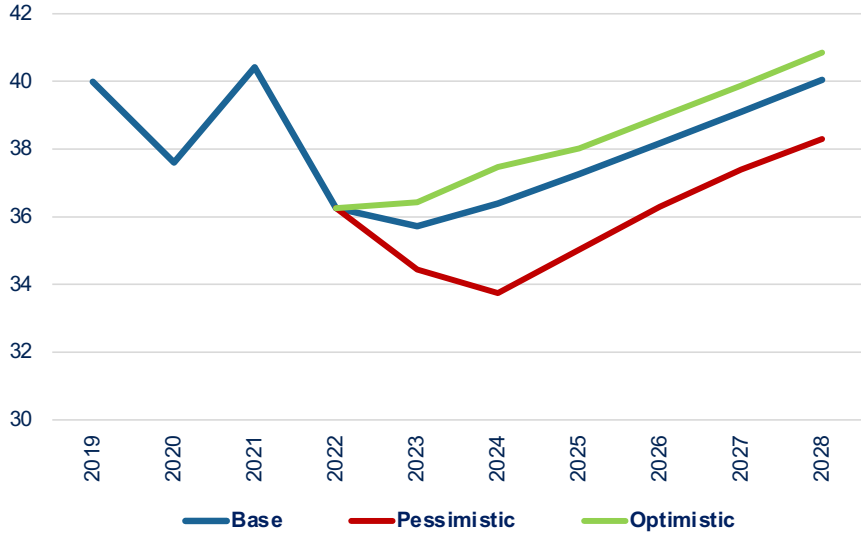
Slower 2023 second half likelihood growing – how severe is unknown



NEW VEHICLE SALES OUTLOOK (MILLIONS)



USED VEHICLE SALES OUTLOOK (MILLIONS)



Pessimistic: Persistent inflation forces higher rates, deeper recession results, Urate rises, market slows H2 2023 and H1 2024

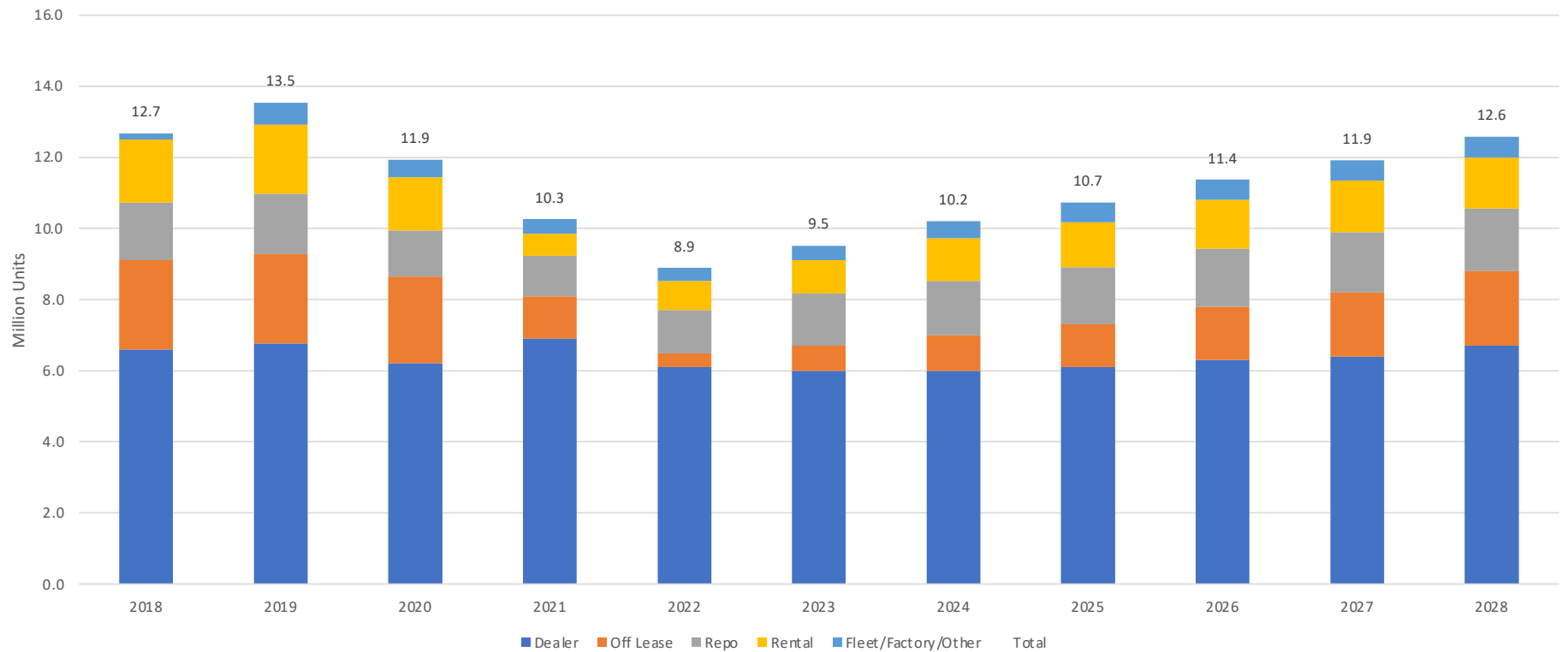
Optimistic: Soft landing achieved, recession avoided, supply rebuilds, rate policy reversals lifts sales



Wholesale Flows Bottomed in 2022

After 13% decline in 2022, the wholesale market should see a slow and gradual recovery to 2018 levels by 2028

Estimated Wholesale Volumes by Inflow Channel (Annual Volume)

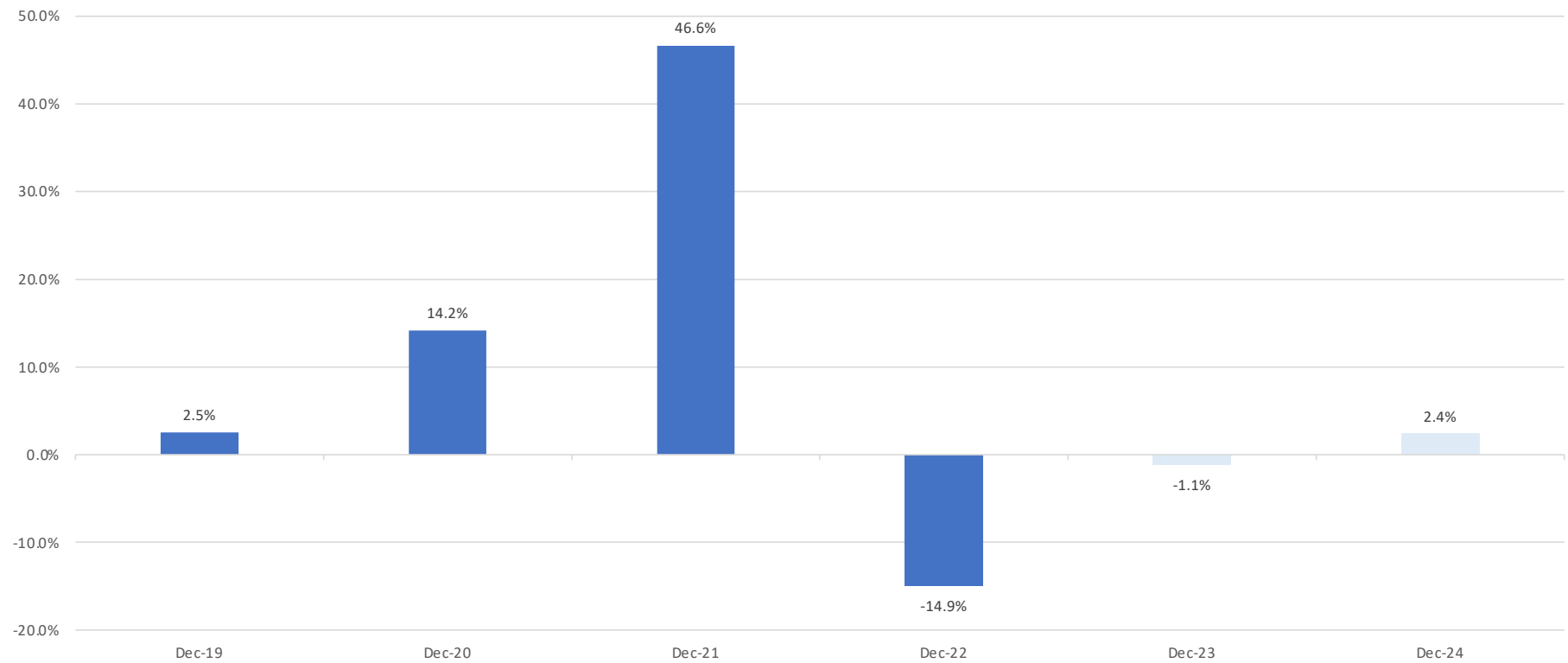




Used Vehicle Value Outlook Sees Slightly Higher Depreciation

Strong start followed by weaker spring and summer leads to a slightly below average year on Manheim Index

Y/Y % Change Manheim Index, As Of December



Cox AUTOMOTIVE

2023 FORECASTS

Change from 2022

15.0M
+9.2%
NEW SALES

12.4M
+5.6%
NEW RETAIL SALES

2.6M
+30.3%
FLEET SALES

2.3M
+9.7%
NEW LEASE
VOLUME

19%
+1%
LEASE
PENETRATION

2.6M
+3.4%
CPO SALES

35.7M
-1.6%
USED SALES

18.9M
-1.1%
USED RETAIL SALES

-1.1%
DEC 2023 Y/Y
MANHEIM USED
VEHICLE VALUE
INDEX

Source: Cox Automotive, Q2 2023