



Q1 2023 Industry Insights and Sales Forecast Call

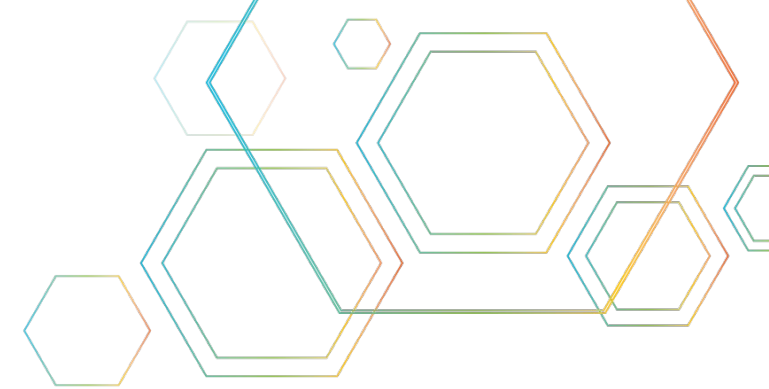
March 27, 2023

COX AUTOMOTIVE



The Power of Cox Automotive

The World's Largest Provider of Automotive Services and Solutions



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Agenda

Time Check: 90 Minutes

Intro & Cox Automotive

Mark Schirmer, Director, Corporate Communications

The Economy

Jonathan Smoke, Chief Economist

Market Performance: Used Vehicles

Chris Frey, Senior Manager, Economic and Industry Insights

Market Performance: New Vehicles

Charlie Chesbrough, Senior Economist

Outlook & Playlist

Jonathan Smoke, Chief Economist and Resident DJ

Q&A

w/ Michelle Krebs, Executive Analyst

Jeremy Robb, Senior Director, Economic and Industry Insights

Rebecca Rydzewski, Research Manager, Economic and Industry Insights



The Economy

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Jonathan Smoke

Chief Economist

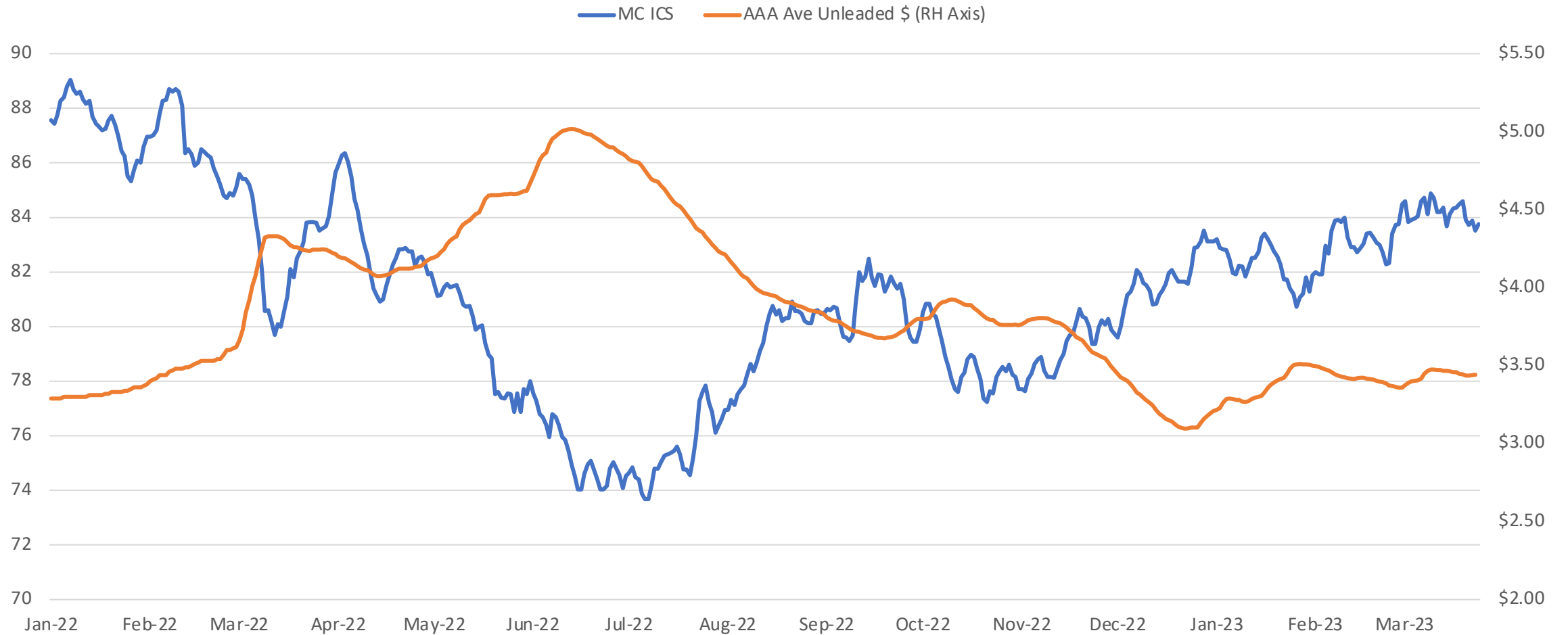
 @smokeoncars

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Consumer Sentiment Declining in March

The Index of Consumer Sentiment increased 3.2% in February but is down 0.9% so far in March

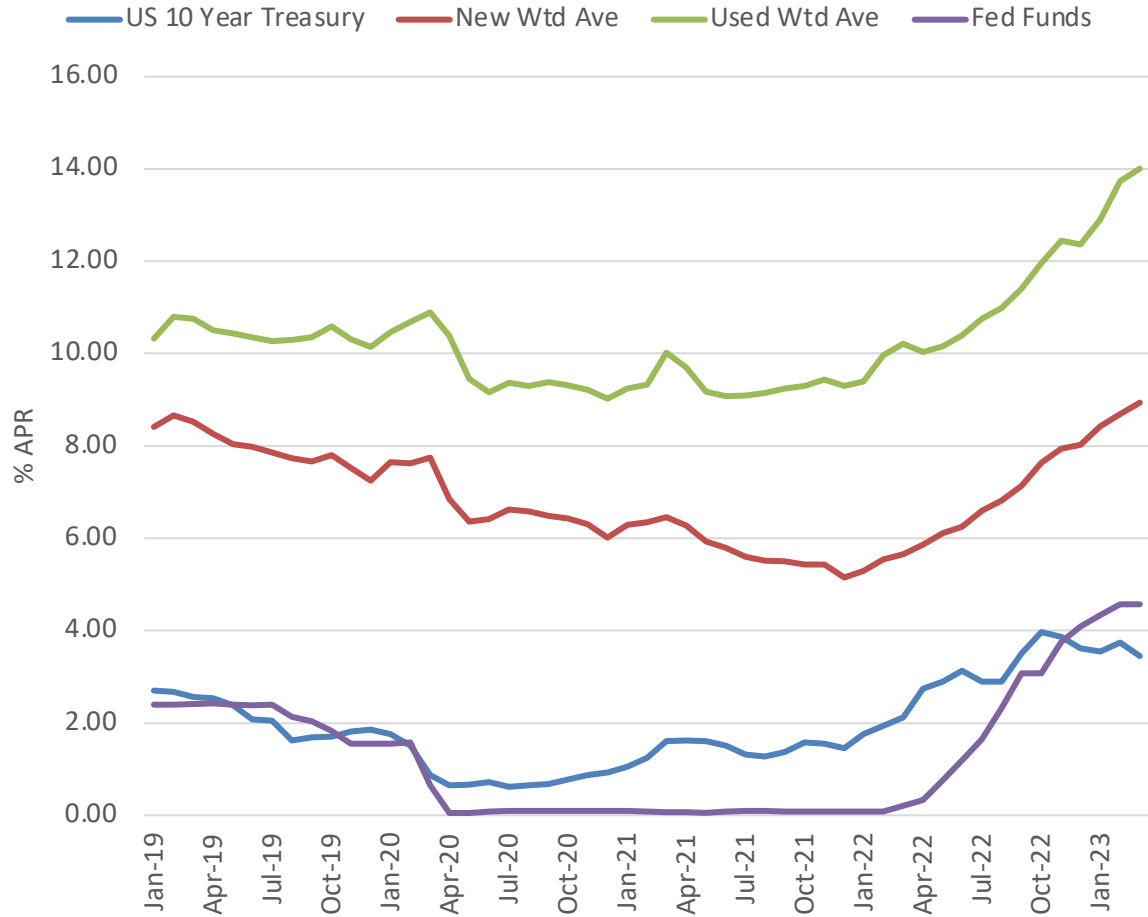
Morning Consult Index of Consumer Sentiment vs. Average Price of Unleaded



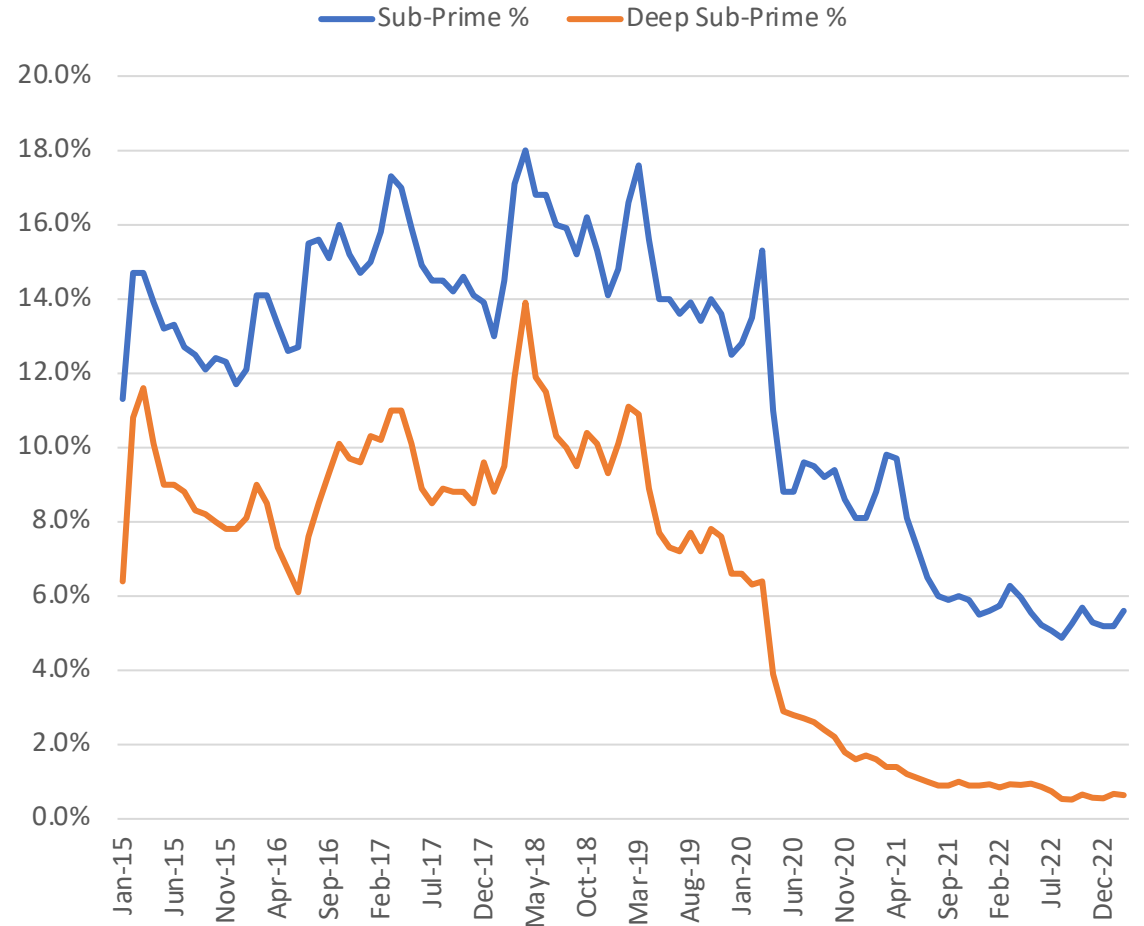
State of the Industry

Fastest and largest increases in interest rates resulting in affordability crisis

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



Subprime and Deep Subprime Share in New

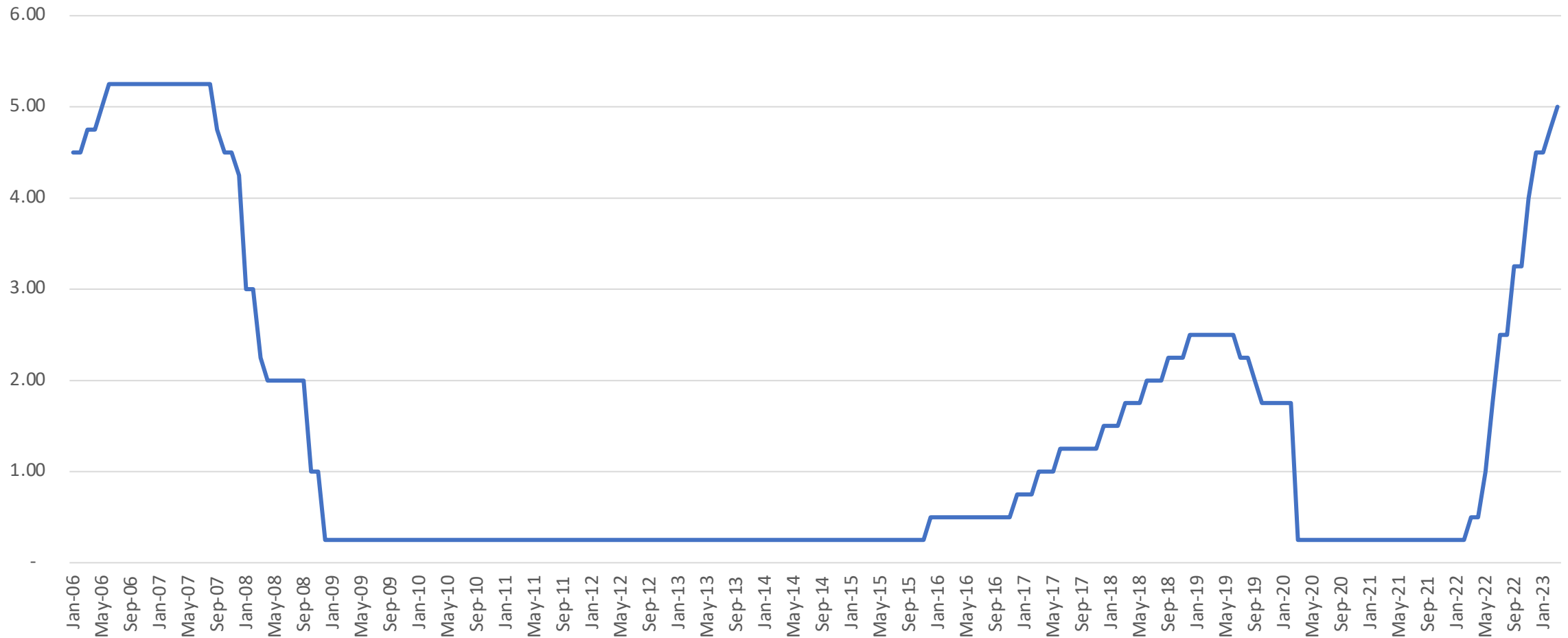


State of the Industry

In one year, the Fed Funds Rate has gone from zero to just 25 BPs below prior peak in 2006



Fed Funds Target Rate % Upper Bound

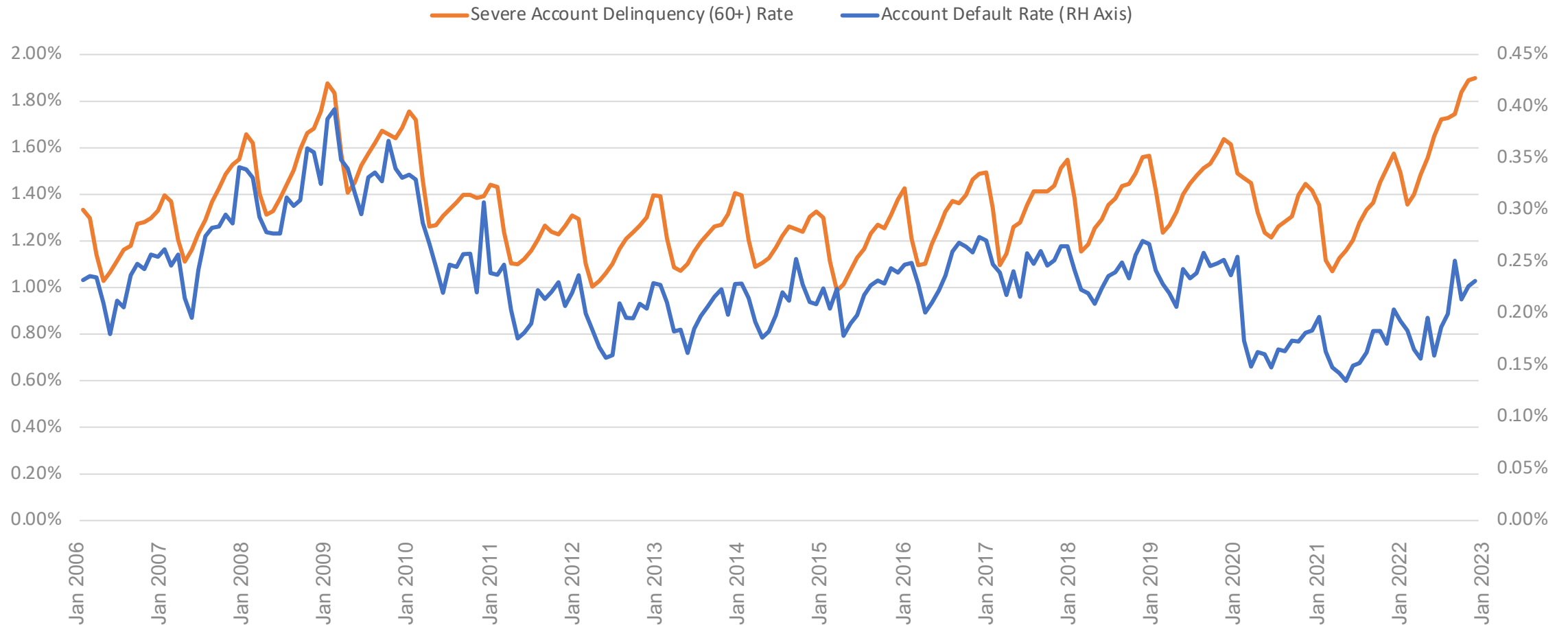


State of the Industry

Default rate moving higher but not to extent of delinquencies



Auto Loan Delinquency vs. Defaults







The Economy



Overall Economy	Real GDP Growth	-1.6% (Q1 '22)	2.7% (Q4 '22)	+2.5% (Q1 '23 F)	
Employment Conditions	U3 Unemployment Rate	3.8% (Feb '22)	3.4% (Jan '23)	3.6% (Feb '23)	
Buyer Confidence	UofM Consumer Sentiment	59.4 (Mar '22)	67.0 (Feb '23)	63.4 (Mar '23 P)	
Wages	Earnings Growth	5.3% (Feb '22)	4.4% (Jan '23)	4.6% (Feb '23)	
Buyer Ability	Disposable Income Y/Y	-6.1% (Jan '22)	8.4% (Jan '23)		

The Economy



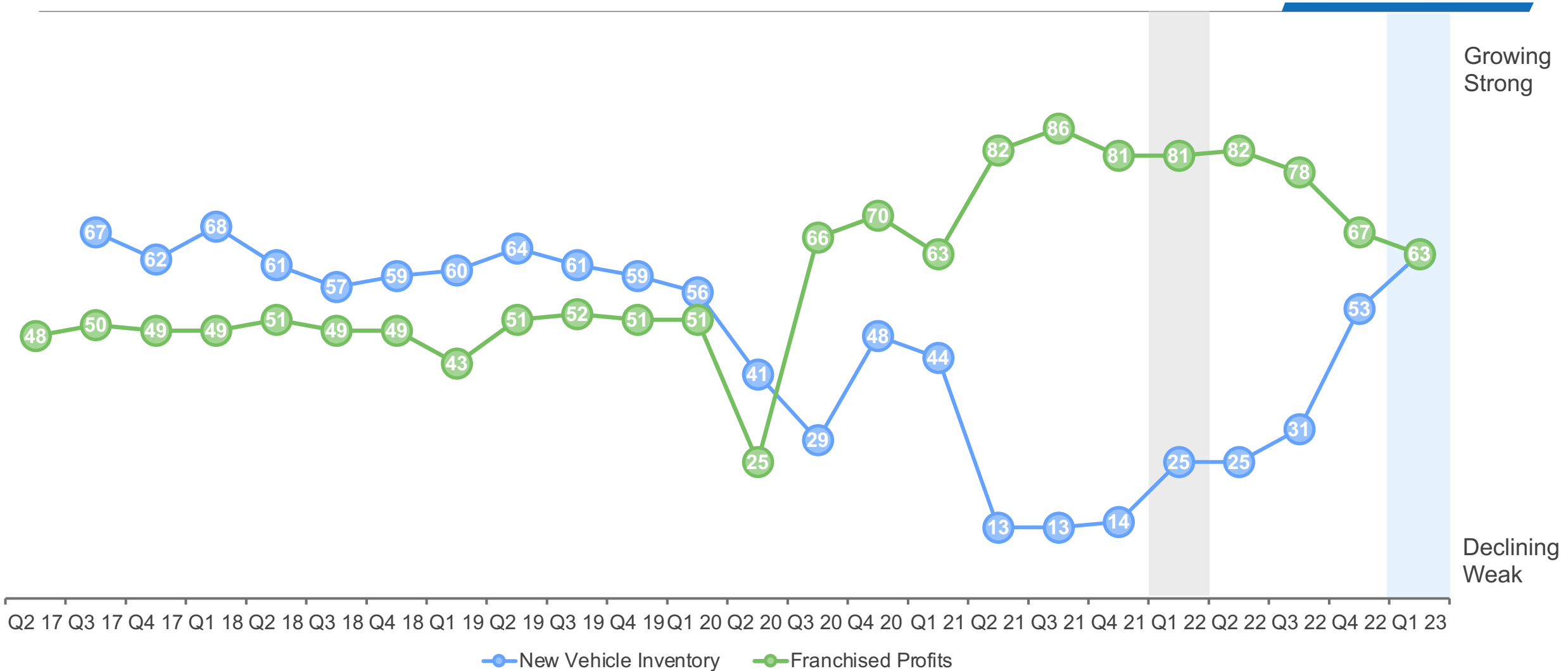
Auto Finance	FRBNY	\$181 billion (Q4 '21)	\$186 billion (Q4 '22)		
Interest Rates	Effective Fed Funds Rate	0.20% (Mar '22)	4.83% (Mar '23)		
Borrowing Costs	Average New Auto Loan Rate	5.66% (Mar '22)	8.95% (Mar '23)		
Mobility Costs	AAA Average Retail Unleaded Gasoline Price	\$4.21 (Mar '22)	\$3.36 (Feb '23)	\$3.44 (Mar '23)	

Inventory/Profits

How would you describe your profits over the past 3 months?
 How would you describe the current new-vehicle inventory levels?

Dealer Sentiment Index

FIRST QUARTER 2023



Note: Scale 1 - 100

Factors Holding Back Your Business?

OVERALL RANK

		Q1 '23	Q4 '22	Q1 '22	Q1 '21
1	Interest Rates	55% ↑	49%	5%	3%
2	Economy	54% ↓	62%	37%	42%
3	Limited Inventory	43%	47%	62%	43%
4	Market Conditions	42%	46%	40%	38%
5	Expenses	29%	29%	23%	21%
6	Consumer Confidence	28% ↓	33%	15%	25%
7	Credit Availability for Consumers	26%	24%	13%	18%
8	Political Climate	25% ↓	33%	20%	36%
9	Weather	13% ↑	4%	15%	17%
10	Competition	12%	12%	13%	20%

Significant decrease vs previous quarter ↓

Significant increase vs previous quarter ↑



Market Performance: Used Vehicles

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Chris Frey

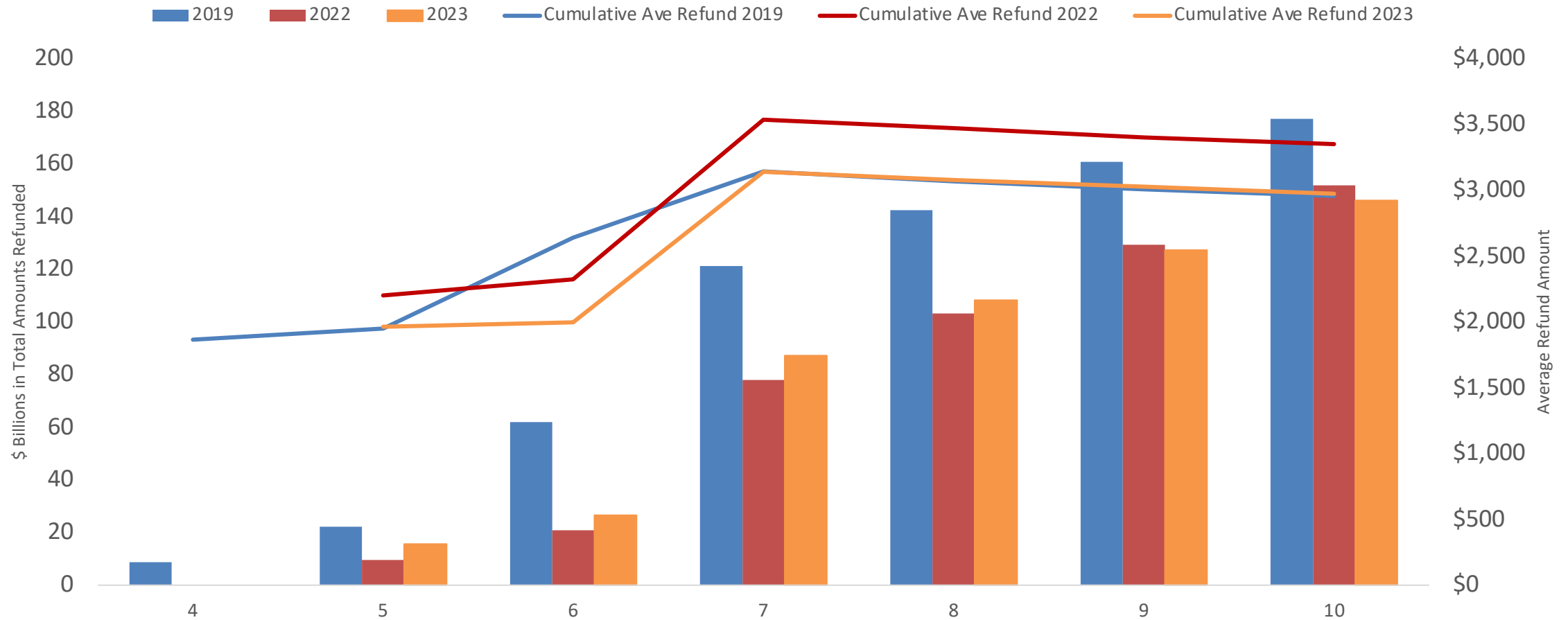
Senior Manager, Economic and Industry Insights

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Tax Refunds | Less Money Flowing Into Economy

The number of refunds is 9% ahead of last year, but the average refund is down 11%

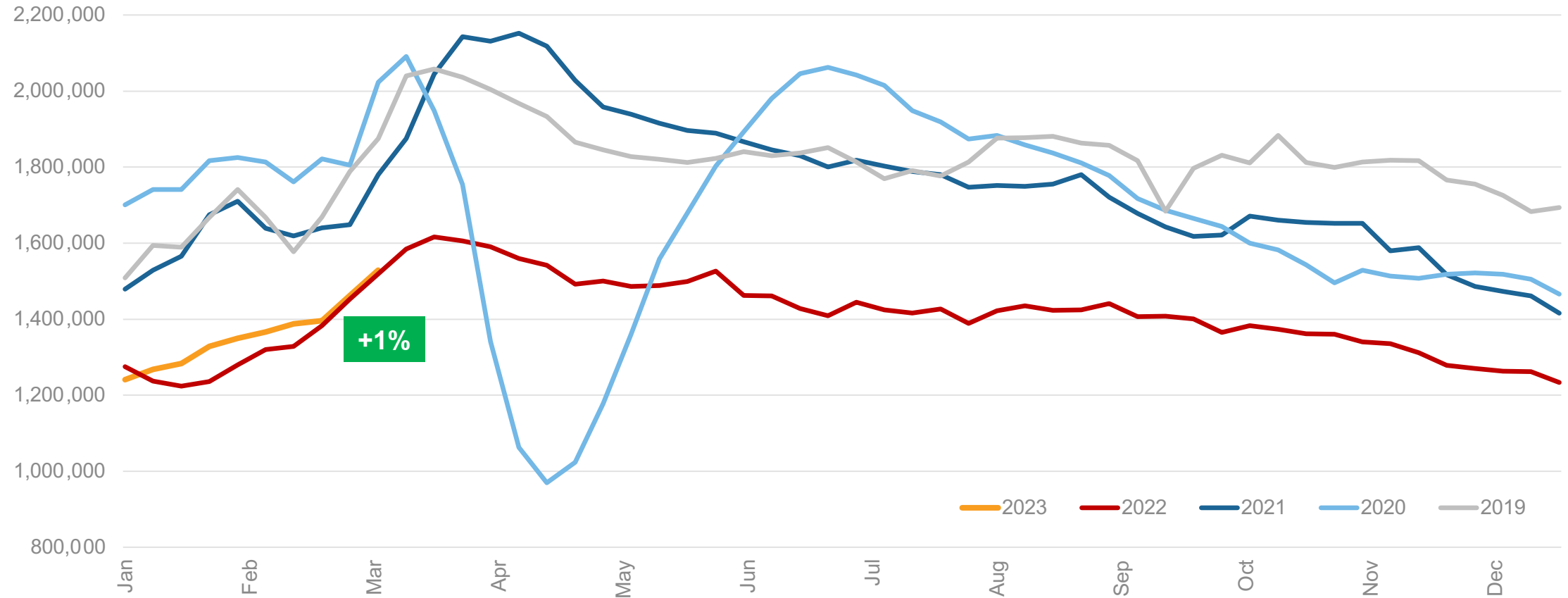
Cumulative Refunds Issued and Ave Refund Amount by Week
(week 10 was week ending March 10, 2023)



Used-Vehicle Sales | Pace Now Up Slightly Over Last Year

Early sales gains now appear to be slowing

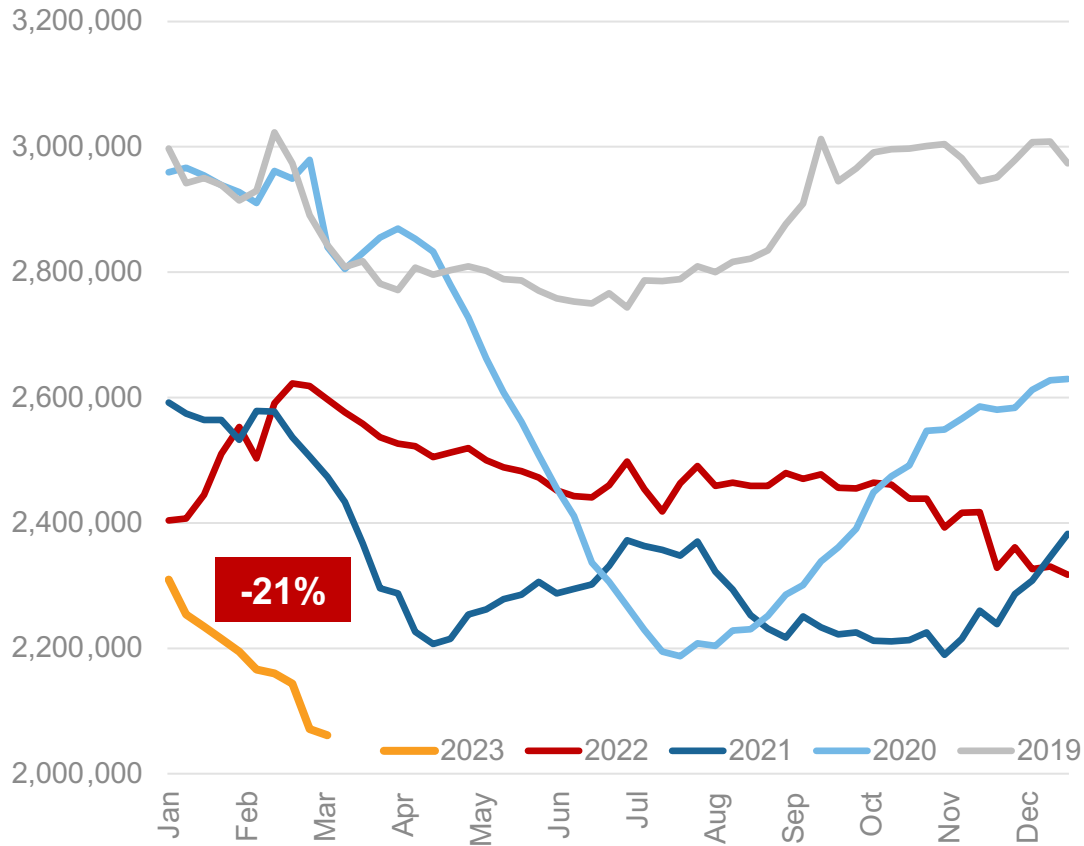
Rolling 30 Day Retail Sales weekly



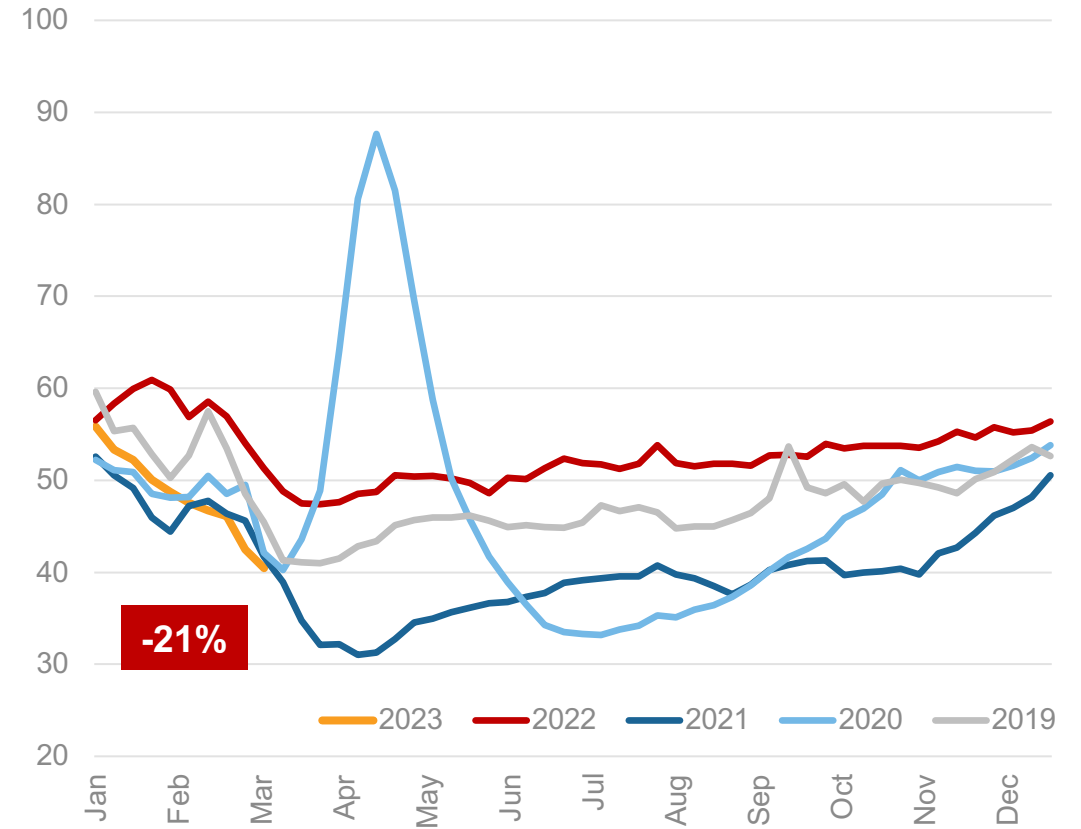
Used-Vehicle Inventory | Down 21% or 536K From Last Year

Days of supply down 21% from last year – entering spring selling season much leaner

Available Supply weekly

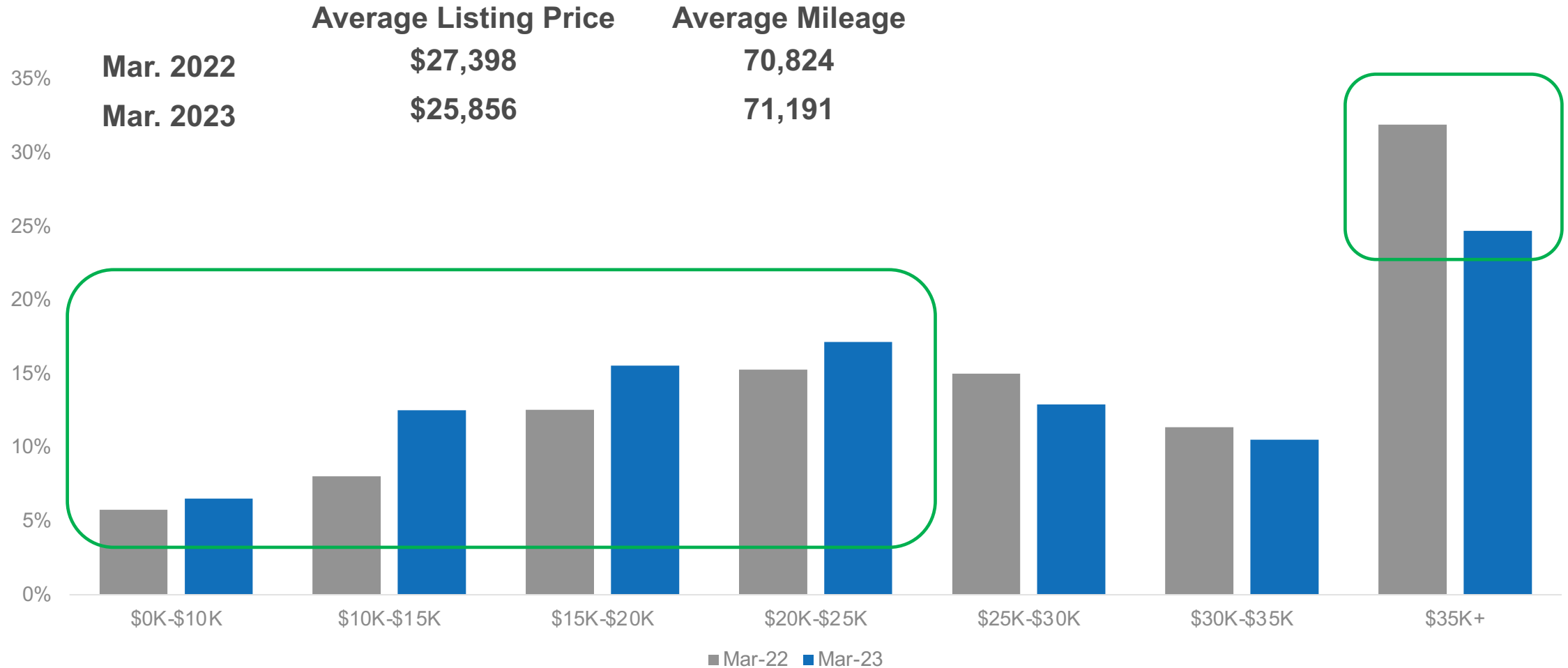


Days of Supply weekly



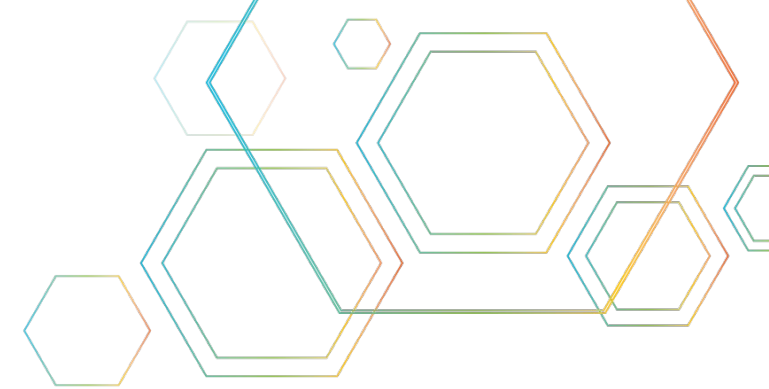
Retail Inventory | A Reversal In Price Mix From Higher To Lower In Q1 2023

Price buckets showing more favorability to lower end; YoY price down \$1,542 in March with similar mileage.

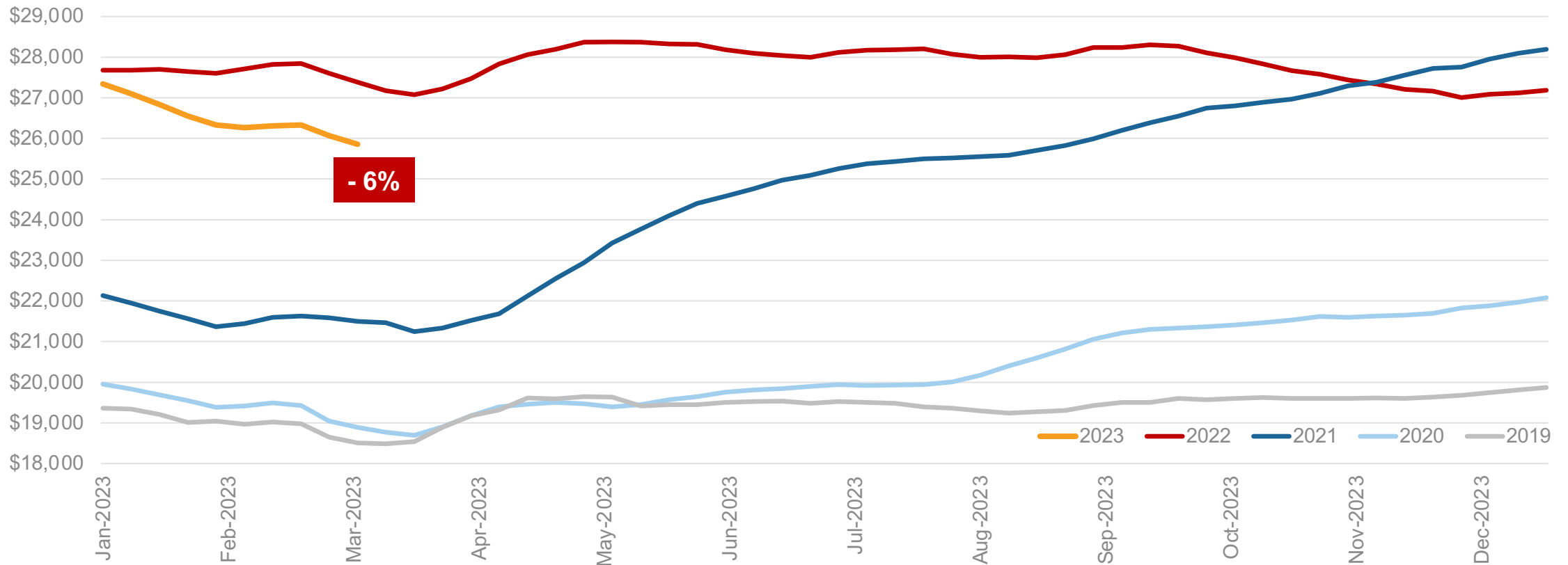


Used-Vehicle Listing Price | Down 6% From Last Year

Historically, winter weakness is normal – spring buyers usually reverse the trend



Average Listing Price weekly

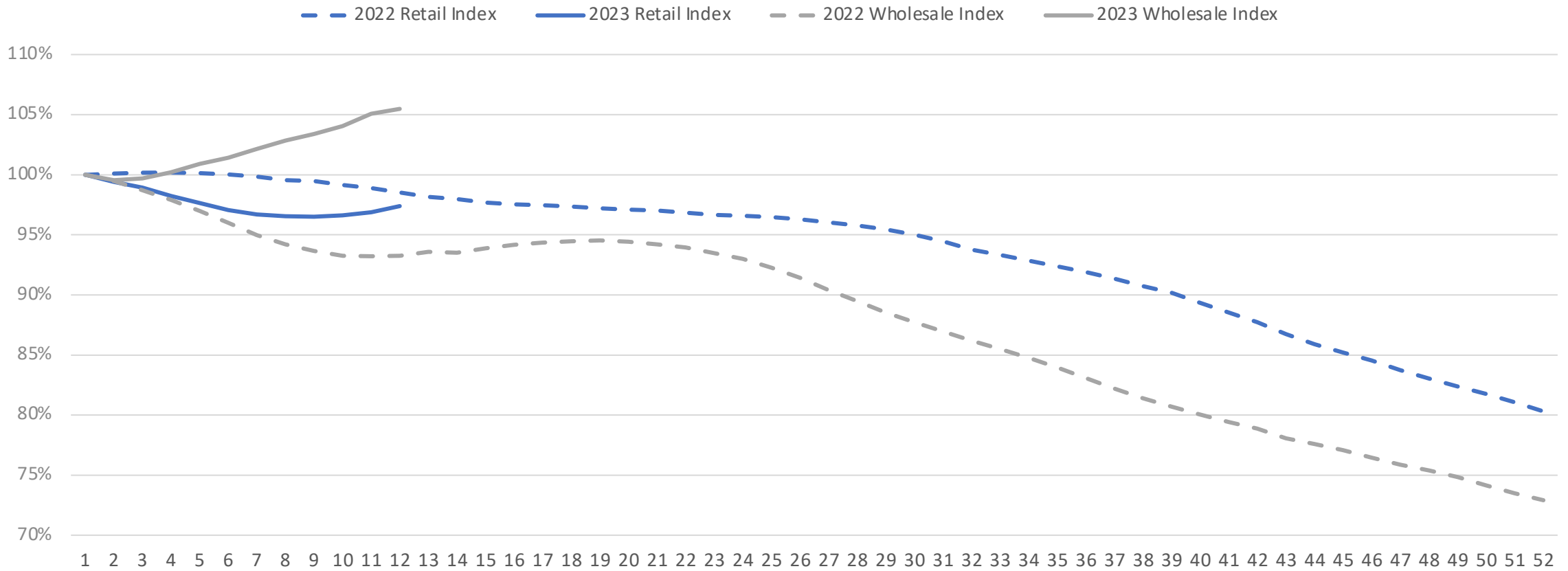


Price Movement | Retail Used Now Exceeding Wholesale

Retail index price increased 0.5% last week while Wholesale index price increased 0.4%



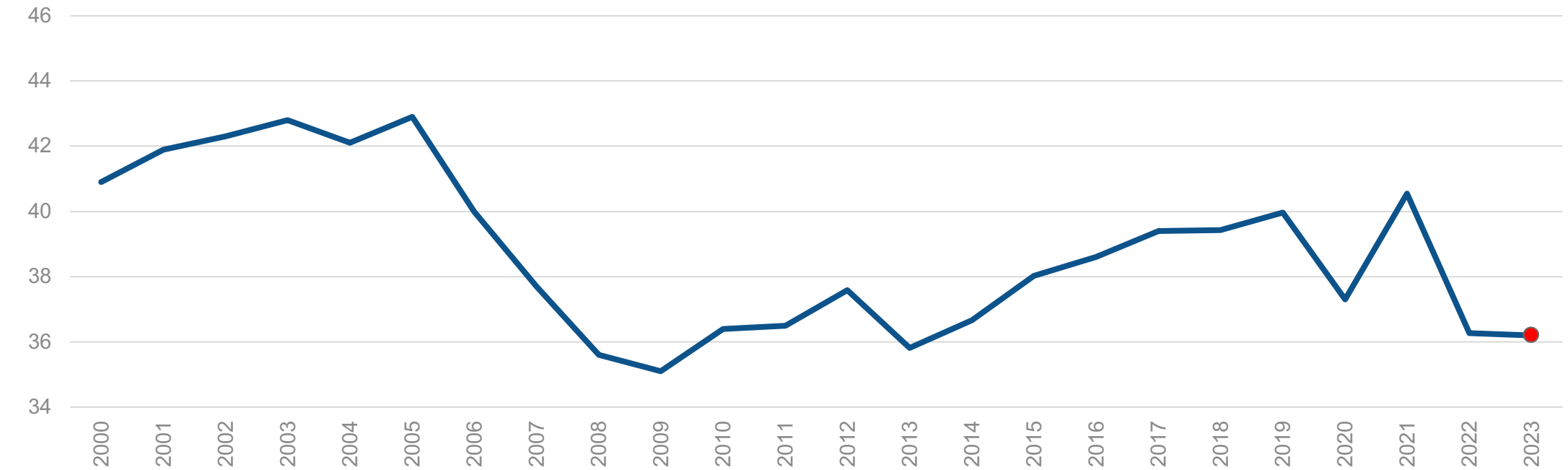
MY 2020 Retail and Wholesale Price Index



Used-Vehicle Outlook | Nearly flat sales expected for 2023 vs. 2022

Strong start to the year, lower prices since last fall, and more tax refunds out earlier help support sales.

USED-VEHICLE SALES OUTLOOK (MILLIONS)



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FULL-YEAR FORECASTS

2019	2020	2021	2022	2023
40.0	37.3	40.6	36.3	36.2

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RETAIL FORECASTS

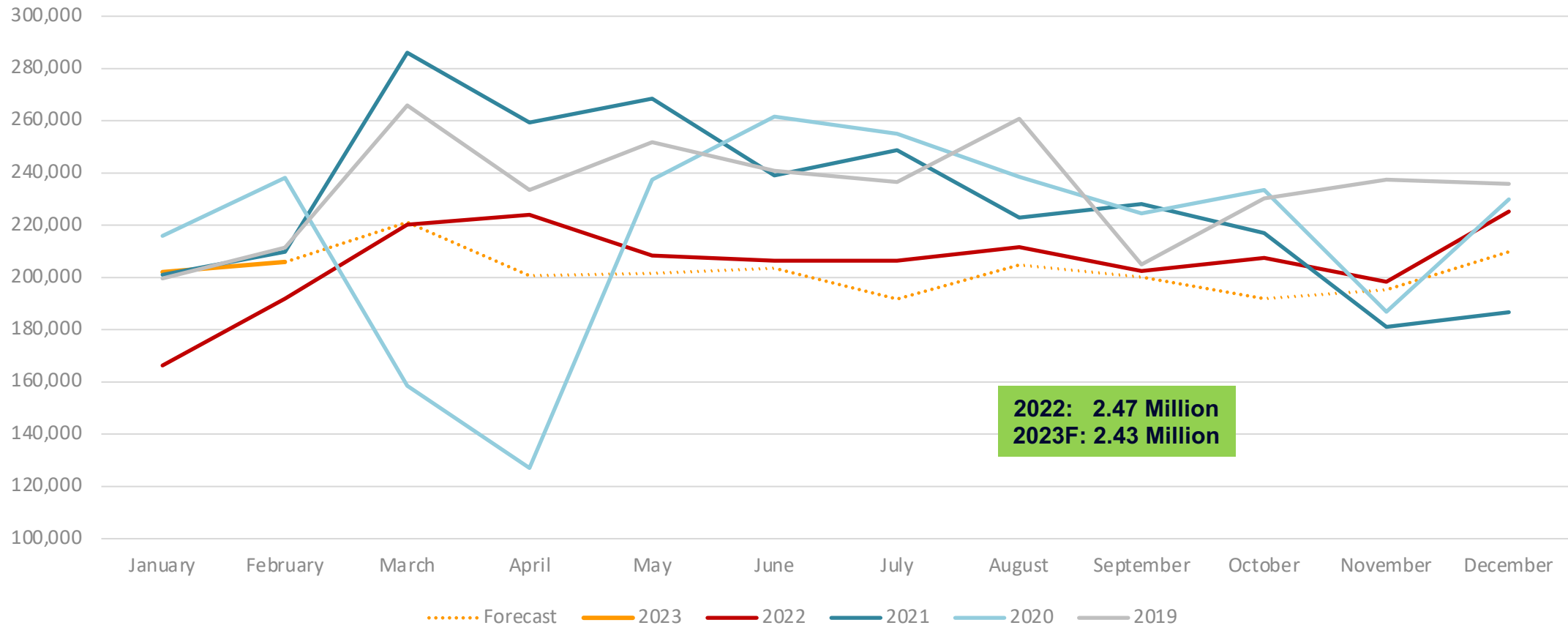
2019	2020	2021	2022	2023
21.0	19.8	21.2	19.1	19.2

Monthly CPO Sales | Strong Start In 2023 – Up 14%

Outlook facing major headwinds – limited supply of off-lease vehicles in coming years



CPO Monthly Sales





Market Performance: New Vehicles

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Charlie Chesbrough

Senior Economist

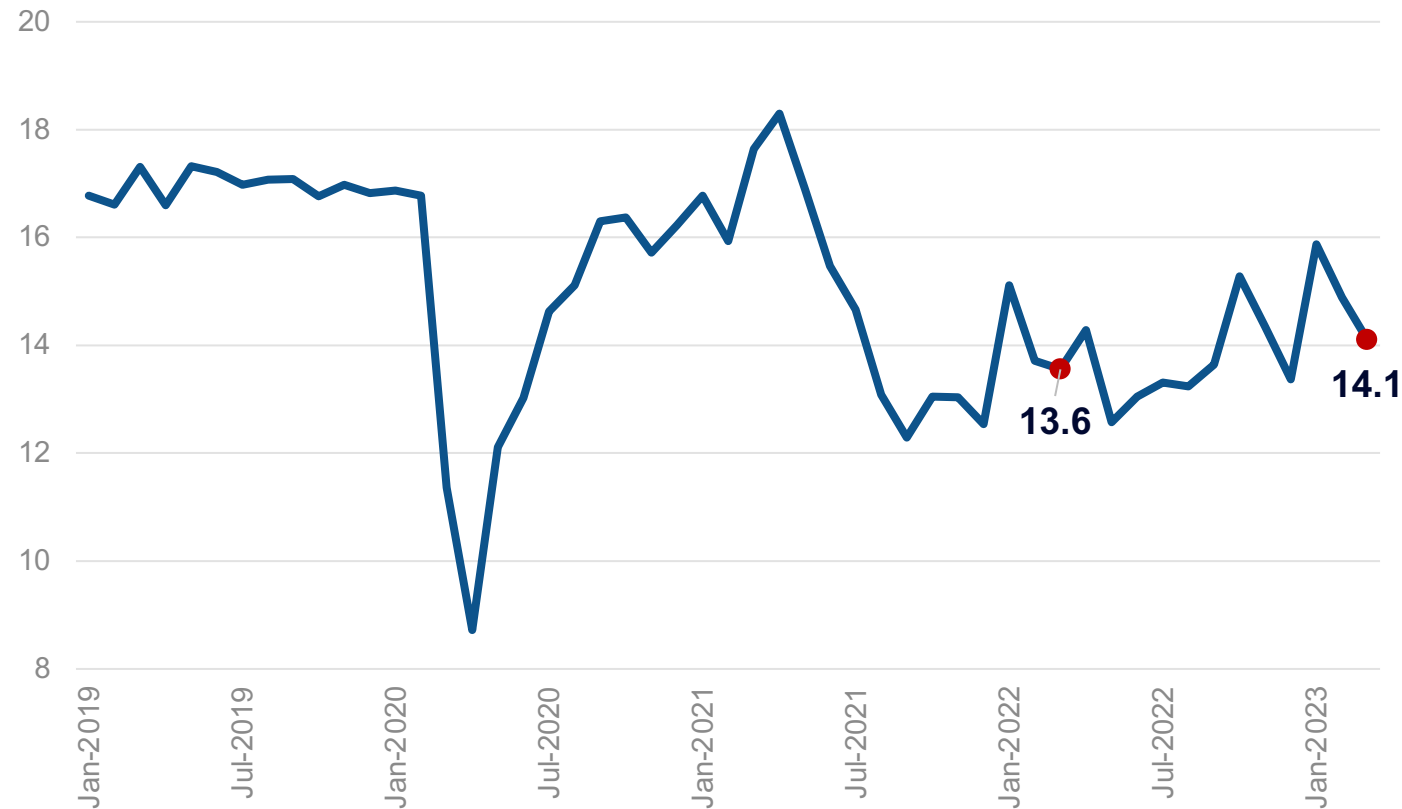
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New-Vehicle SAAR | Q1 Improves Over Last Year

March to finish near 14.1 million pace – Q1 pace up nearly 1.0 million units over Q1 2022



Monthly Light Vehicle Sales SAAR (millions)



Period	Sales Millions	SAAR Millions
Mar-22	1.26	13.6
Mar-23	1.30	14.1
<i>Change</i>	3.2%	3.7%
Q1 2022	3.30	14.1
Q4 2022	3.59	14.3
Q1 2023	3.48	15.0
<i>Y/Y change</i>	5.6%	5.8%
<i>Q/Q change</i>	-3.0%	4.3%
CY 2022	13.8	
CY 2023	14.2	Updated Forecast
<i>Change</i>	3.30%	

OEM Performance | Most Show Gains Over Last Year

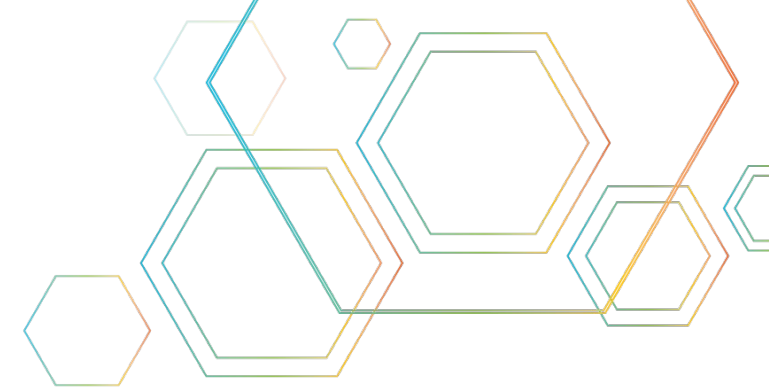
GM takes Q1 sales lead, but Tesla gains the most market share



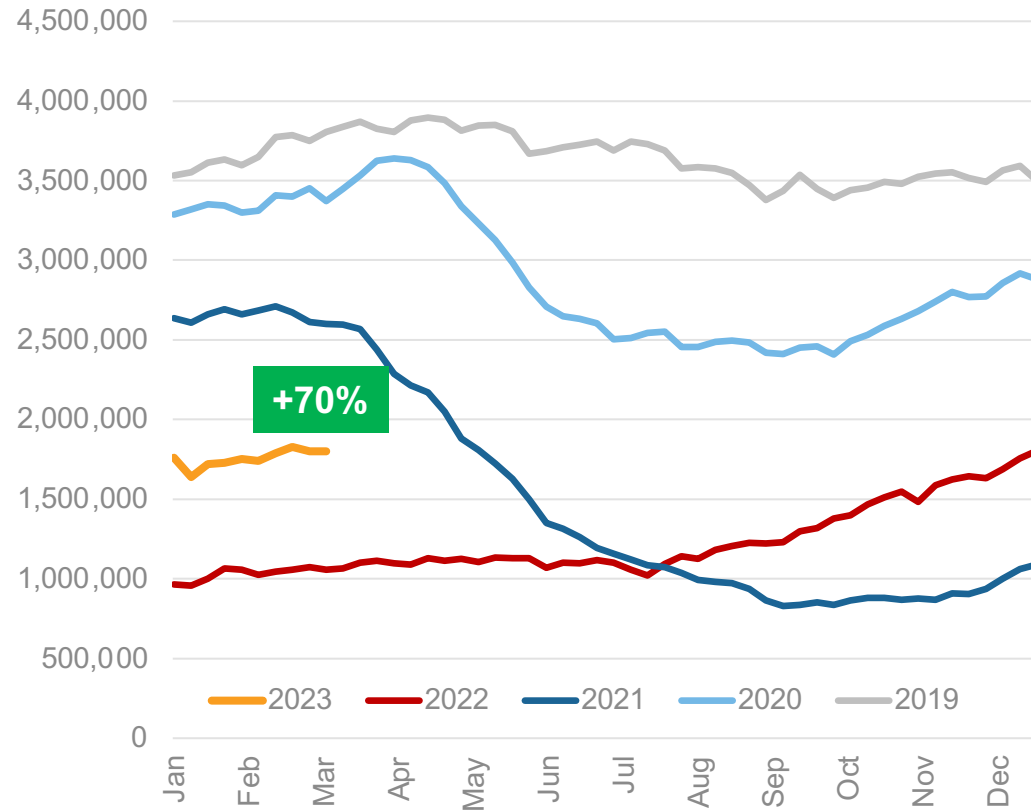
OEM	Q1 2022	Q4 2022	Q1 2023	Change v Q1'22	Change v Q4'22	Share CY2022	Share Q1 2023	Difference
General Motors	509,122	618,692	587,020	15.3%	-5.1%	16.3%	16.7%	0.4%
Ford	429,174	479,769	477,755	11.3%	-0.4%	13.3%	13.6%	0.2%
Toyota	514,592	536,740	464,530	-9.7%	-13.5%	15.2%	13.2%	-2.0%
Hyundai	322,593	386,898	364,521	13.0%	-5.8%	10.6%	10.3%	-0.3%
Stellantis	405,221	347,669	359,830	-11.2%	3.5%	11.1%	10.2%	-0.9%
Honda	266,418	255,250	265,880	-0.2%	4.2%	7.1%	7.5%	0.5%
Nissan-Mitsubishi	227,481	211,768	230,190	1.2%	8.7%	5.9%	6.5%	0.7%
Tesla	129,743	131,574	180,993	39.5%	37.6%	3.8%	5.1%	1.4%
Volkswagen	113,540	143,979	143,185	26.1%	-0.6%	4.0%	4.1%	0.0%
Subaru	132,346	155,466	142,897	8.0%	-8.1%	4.0%	4.1%	0.0%
Mazda	82,268	79,517	84,927	3.2%	6.8%	2.1%	2.4%	0.3%
BMW	80,590	112,057	82,651	2.6%	-26.2%	2.6%	2.3%	-0.3%
Daimler	75,939	88,493	79,535	4.7%	-10.1%	2.5%	2.3%	-0.3%
Geely	24,267	32,655	28,179	16.1%	-13.7%	0.8%	0.8%	0.0%
Tata	18,193	21,806	21,122	16.1%	-3.1%	0.5%	0.6%	0.1%
Rivian	1,227	8,054	8,145	563.8%	1.1%	0.1%	0.2%	0.1%
Lucid	460	1,060	1,344	192.2%	26.8%	0.0%	0.0%	0.0%
NATION	3,333,174	3,611,447	3,522,703	5.7%	-2.5%	100.0%	100.0%	0.0%

New-Vehicle Inventory | Now Up 70% From Last Year

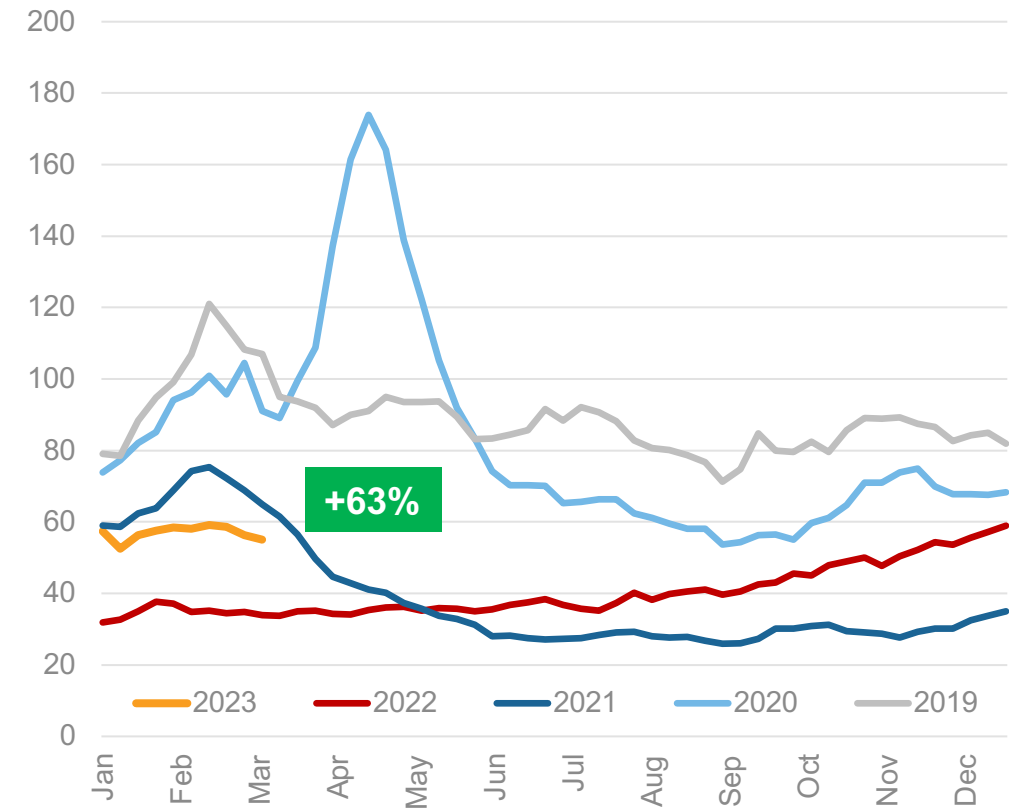
Supply noticeable higher – nearly 740K more vehicles than year ago



Available Supply weekly



Days of Supply weekly

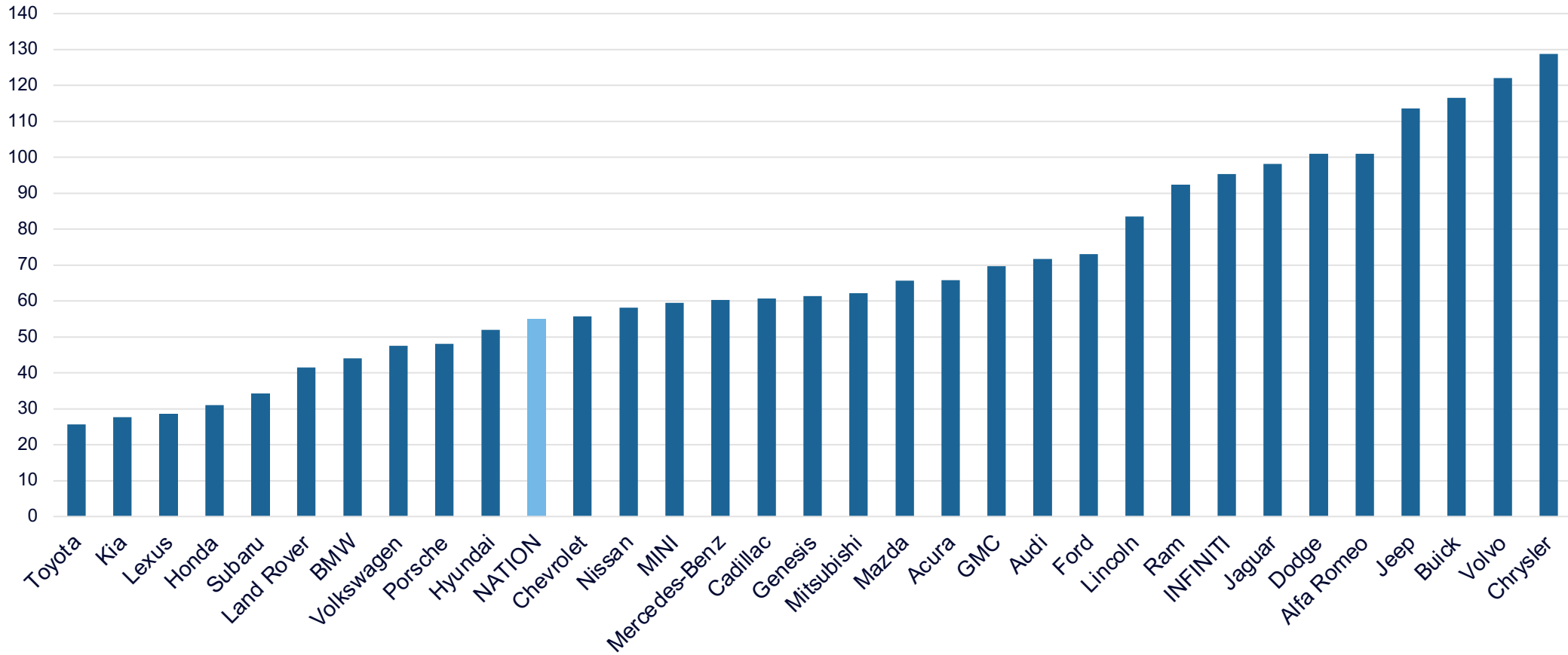


Brand Inventory | Supply Situation Varies

Detroit 3 brands returning to pre-covid levels while many Asian brands remain tight



Days Of Supply



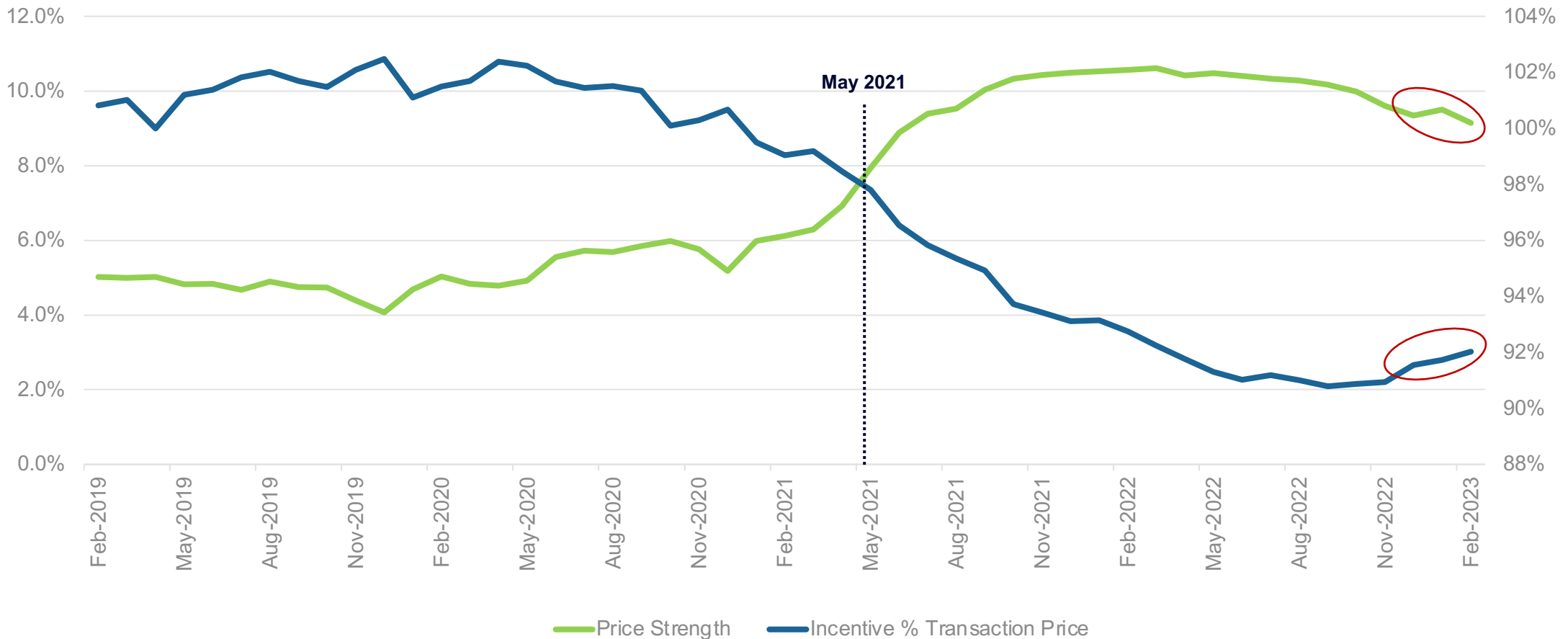
Seller's Market | Strong Margins Now Weakening

Discounting and negotiating still way down – but changing



Incentive % of Transaction Price

Price Share of MSRP

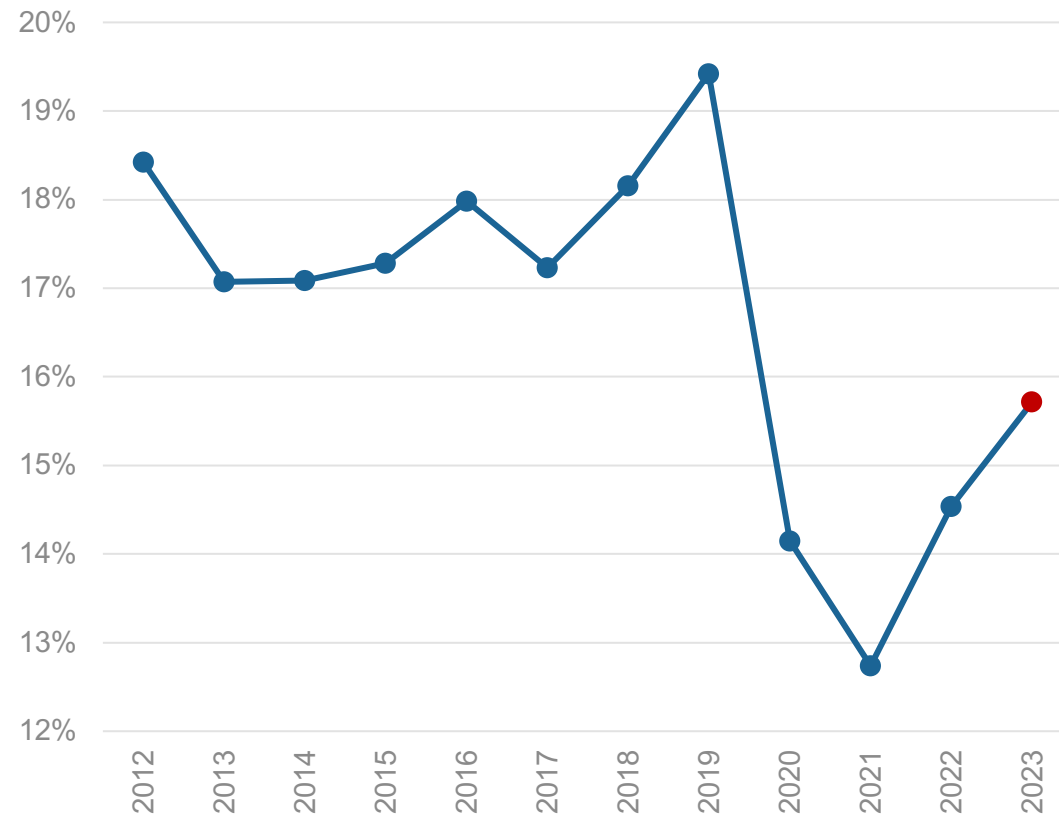


Sales Channels | More Fleet and Lease Expected

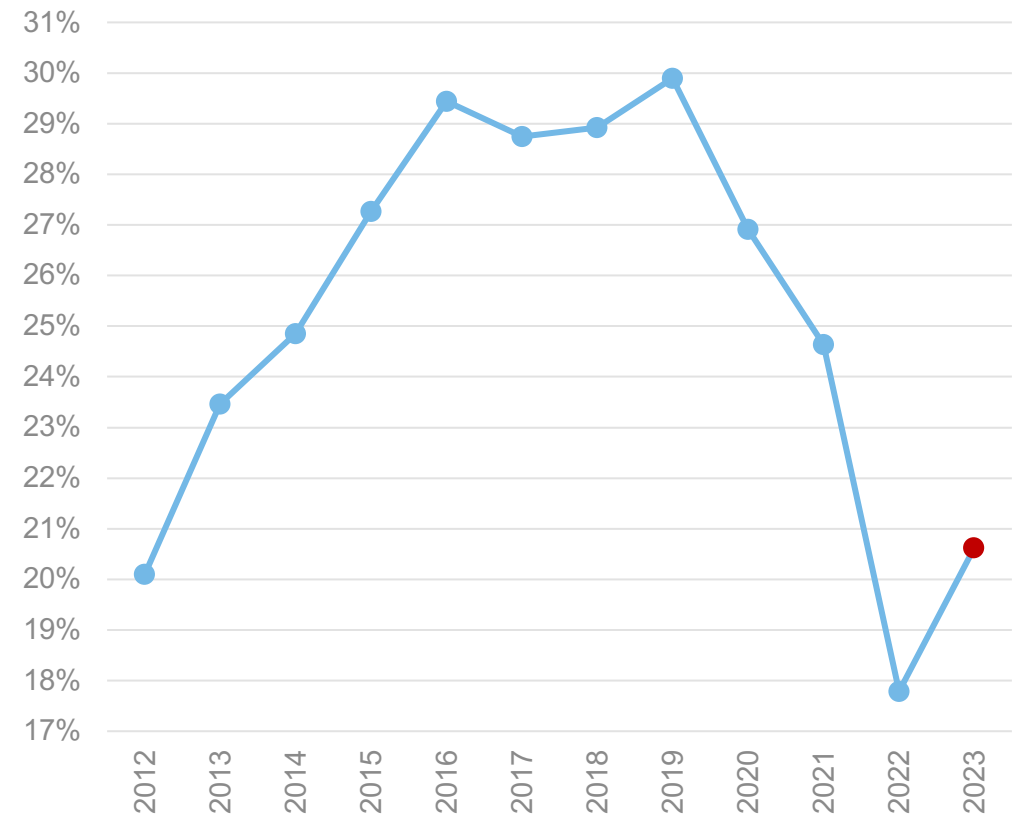
Constrained supply kept sales low - offers future opportunities for OEMs



Fleet Share of Total Sales



Retail Lease Share of Retail Sales

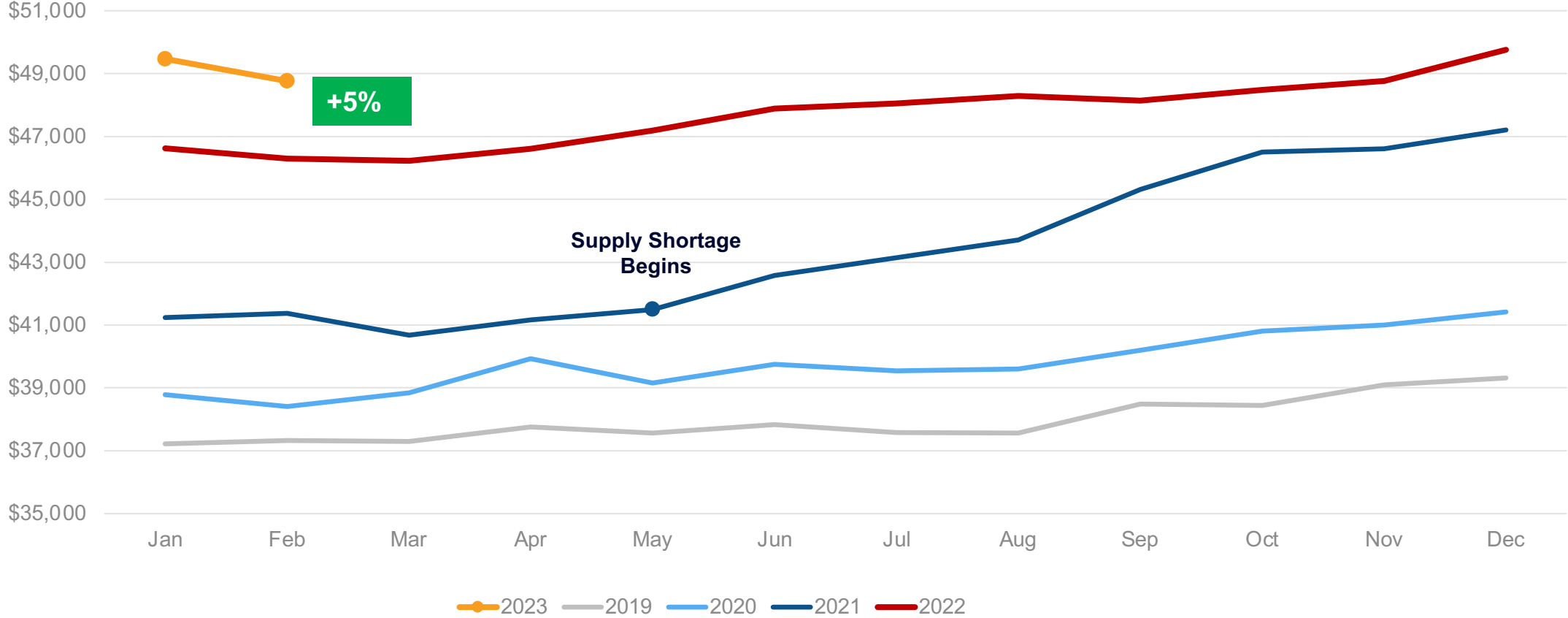


Transaction Prices | Average Up 5% vs 2022, Near \$49,000

Inflation slowing since 2021 but no retreat - more expensive mix likely to continue



Estimated Monthly Transaction Prices

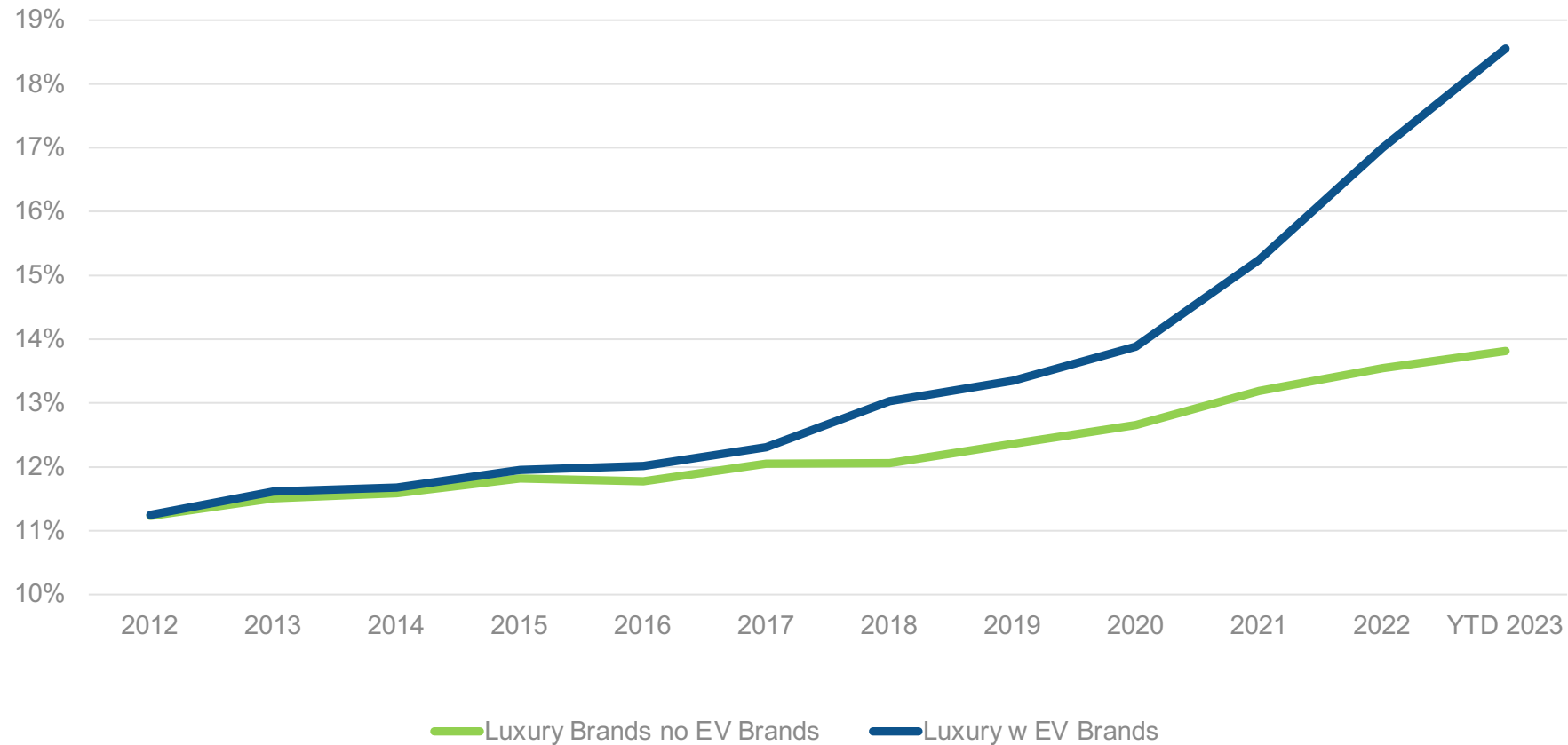


Luxury Brand Share | Rising Post Covid

Higher-end brands gaining, but Tesla is clearly a significant force



Luxury Brands' Share of US Sales



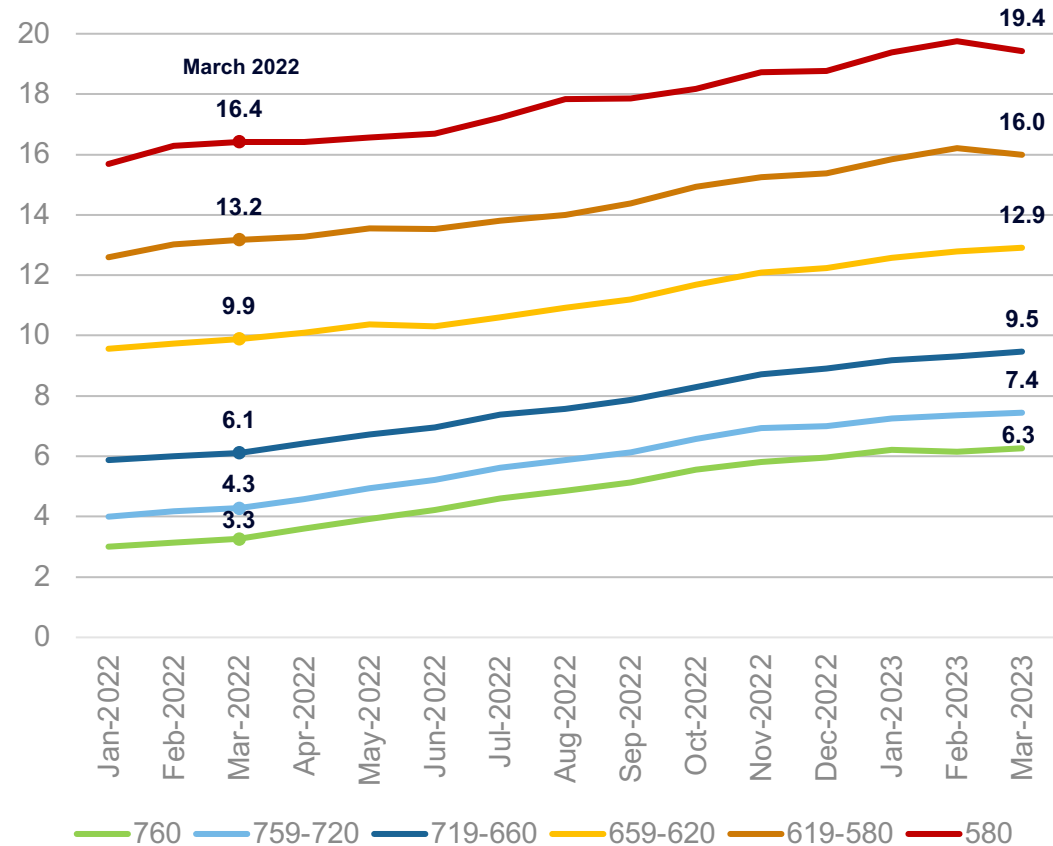
MSRP <\$30,000
2012: 54%
2019: 31%
2022: 14%
MSRP >\$50,000
2012: 6%
2019: 26%
2022: 39%

New-Vehicle APR | Rising Rates Impacting Payments

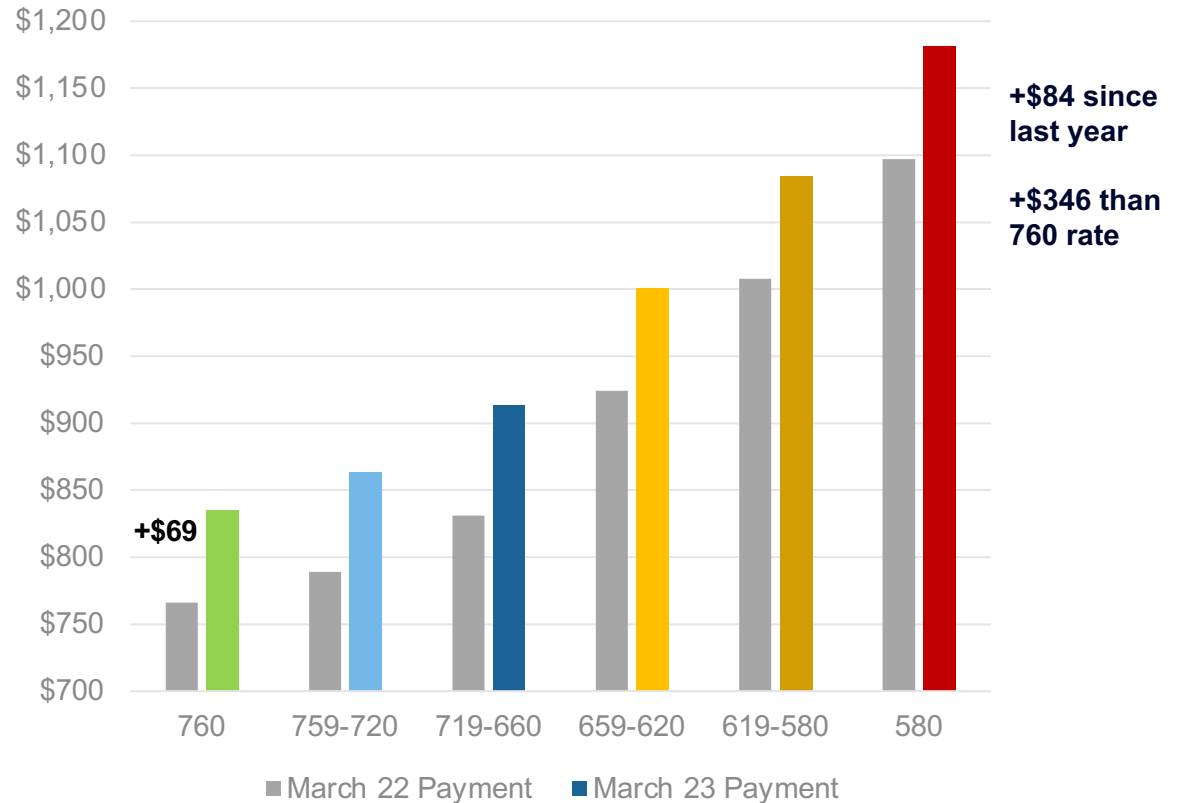
All monthly payments higher but lowest credit buyers hit hardest



Average Purchase APR% by FICO Score

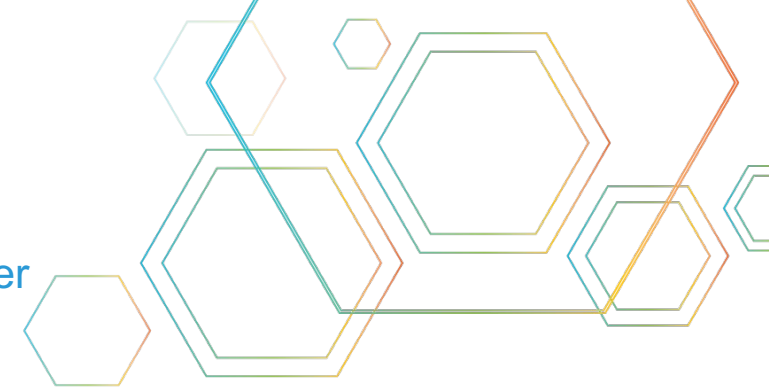


Monthly Payment by FICO Score (Loan \$50K, 6YR)

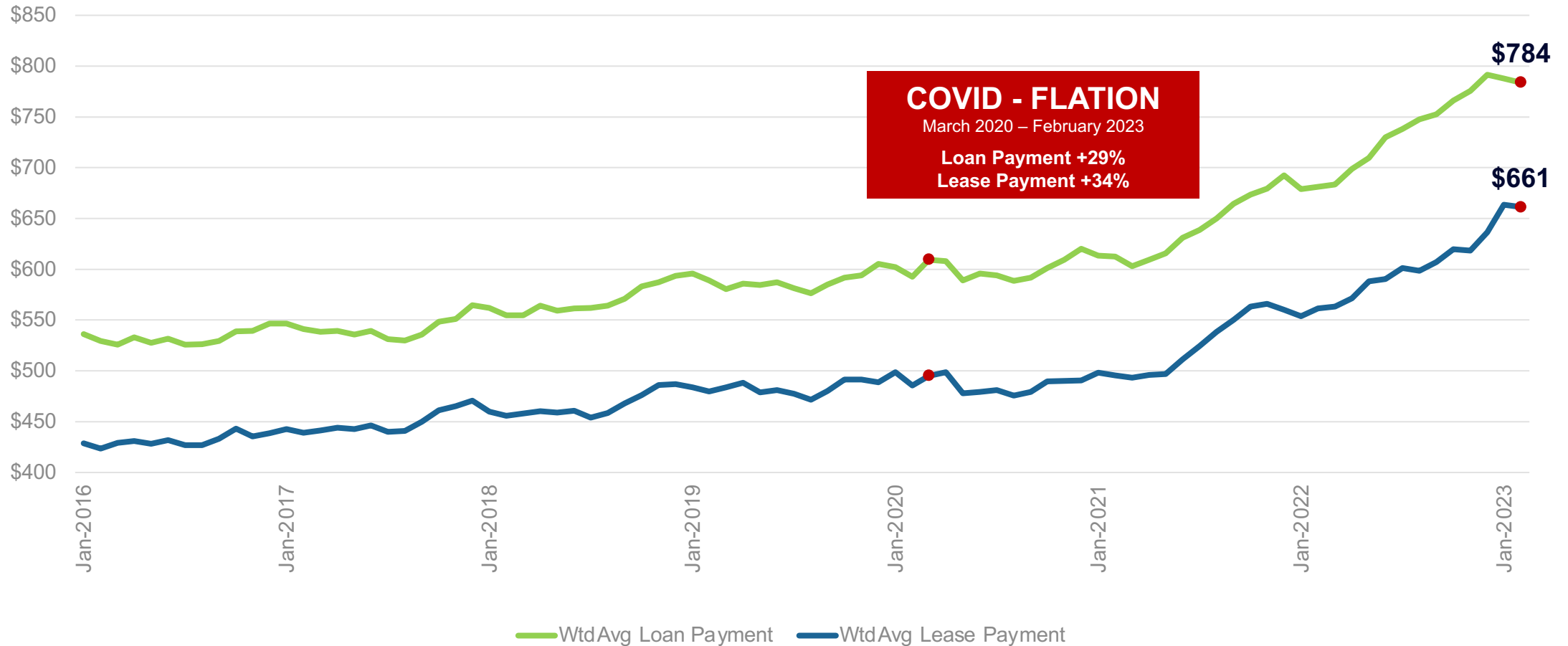


Monthly Payments | Average Loan = \$784, Lease=\$661

Lease payment rising more post Covid - rising interest rates will push both even higher



Average Monthly Loan and Lease Payment

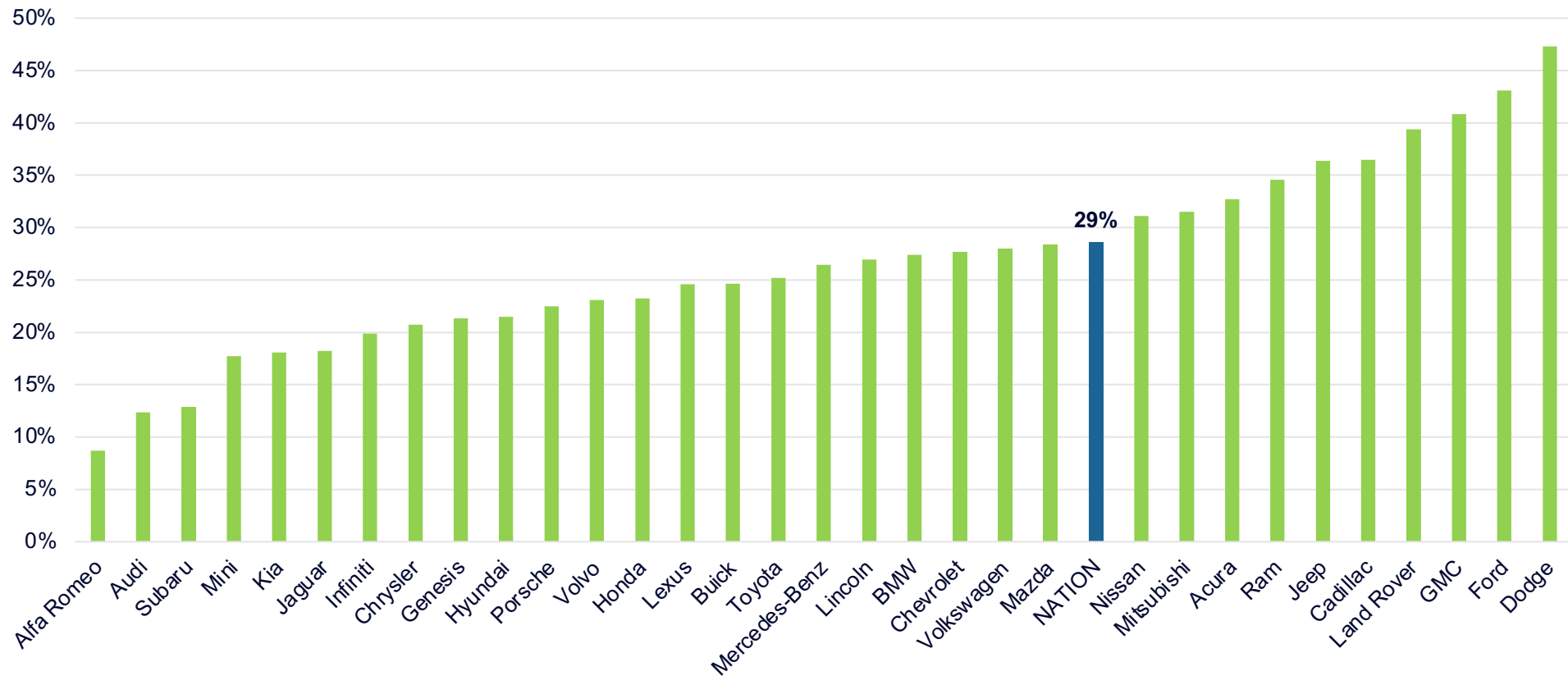


Change In Payments | Detroit Brands Have Largest Increases

Many brands show more mild inflation – may be less vulnerable to worsening conditions



Change In Average Monthly Loan Payment (March 2020 – February 2023)





Outlook and Playlist

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Jonathan Smoke

Chief Economist

 @smokeoncars

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10 PREDICTIONS FOR 2023



1

A Slow-Growing Economy Will Place Pressure on the Automotive Market.



2

New-Vehicle Inventory Levels Will Continue to Increase.



3

Total Retail Vehicle Sales Will Increase Slightly in 2023



4

Sales of Electric Vehicles in the U.S. Will Surpass 1 Million Units for the First Time.



5

2023 Will Be The Last Year Used-Vehicle Prices See Above-Normal Depreciation



6

Vehicle Affordability Will Be the Greatest Challenge Facing Vehicle Buyers.



7

All-Cash Deals Will Increase to Levels Not Seen in Decades.



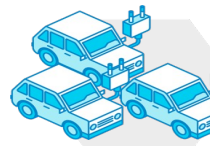
8

Dealership Service Operations Volume and Revenue Climb.



9

Half of Vehicle Buyers Will Engage With Digital Retailing Tools.



10

Federal Incentives Will Encourage More Fleet Buyers to Consider Electrified Solutions.

2023 FORECASTS *Q2 Update*

New

14.2M
NEW SALES

(original 2023: 14.1M)

New

12.0M
NEW RETAIL SALES

(original 2023: 11.9M)

2.2M
FLEET SALES

(2022: 1.8M)

New

2.5M
NEW LEASE
VOLUME

(2022: 2.3M)

21%
LEASE
PENETRATION

(2022: 19%)

2.4M
CPO SALES

(original 2023: 2.2M)

New

36.2M
USED SALES

(original 2023: 35.6M)

New

19.2M
USED RETAIL SALES

(original 2023: 18.9M)

New

+1.6%
DEC 2023 Y/Y MANHEIM
USED VEHICLE
VALUE INDEX

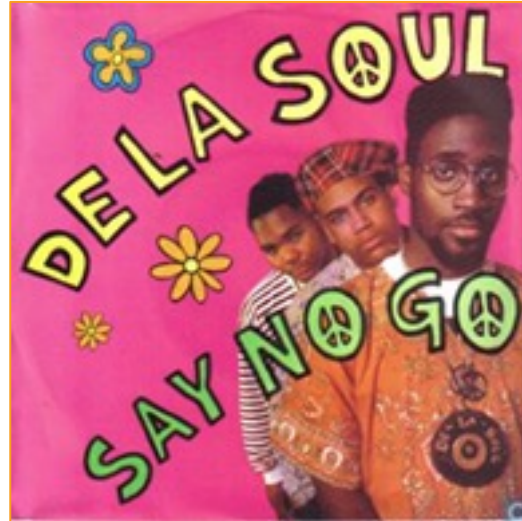
(original 2023: -4.3%)

Spring 2023 Playlist



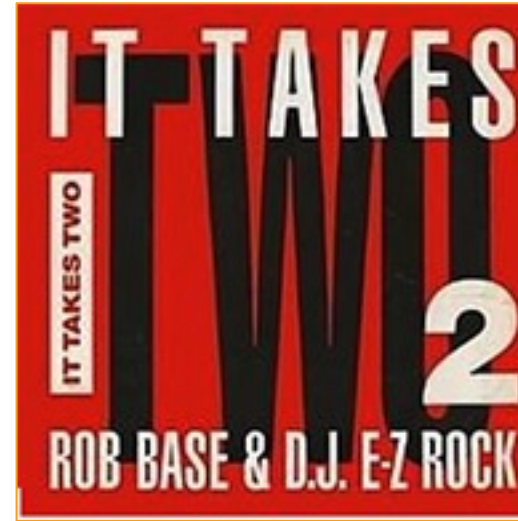
Regulate
By Warren G and Nate Dogg

For the banking crisis



Say No Go
By De La Soul

For credit tightening



It Takes Two
By Rob Base and DJ EZ Rock

For replacing a supply problem with a demand problem



It's Tricky
By Run DMC

For forecasting the rest of the year



Q&A

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More Auto Industry Data and Insights from Cox Automotive

The go-to source for insights based on the largest breadth of first-party data in the automotive ecosystem

Cox Automotive Newsroom: www.coxautoinc.com/newsroom/

Fresh content from Chief Economist Jonathan Smoke and the Industry Insights team is published regularly.

Auto Market Snapshot: www.coxautoinc.com/marketsnapshot

This dashboard is a one-stop dashboard for the most recent data points our team is tracking.

From the Newsroom: www.coxautoinc.com/signup

The Cox Automotive biweekly newsletter, published every other Tuesday, is a round-up of news from Cox Automotive and perspectives from its analysts and experts on topics dominating the automotive industry.





Thank you for attending!

Contact us with questions or to speak with one of our experts:

Dara Hailes

Senior Manager

Cox Automotive Corporate Communications

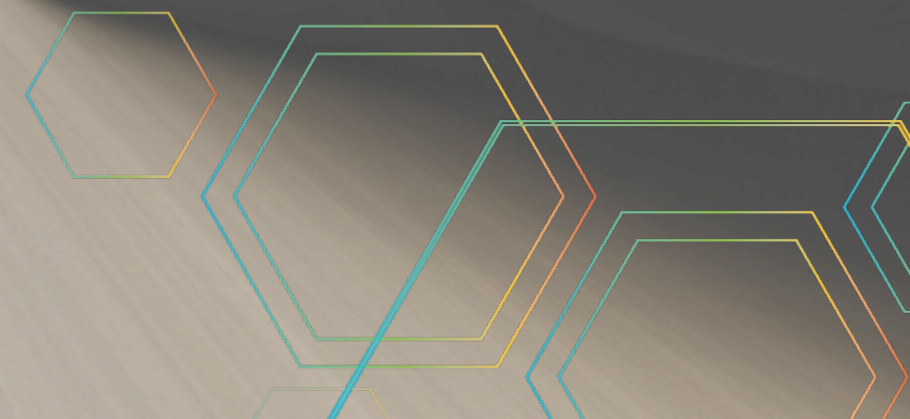
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