Q2 MANHEIM USED VEHICLE VALUE INDEX CALL

July 10, 2023
THE POWER OF COX AUTOMOTIVE

The World’s Largest Automotive Services and Technology Provider
PRESENTERS

Mark Schirmer, Director, Corporate Communications
Jonathan Smoke, Chief Economist
Joe Kichler, Vice President, Logistics
Chris Frey, Senior Manager, Economic and Industry Insights
Jeremy Robb, Senior Director, Economic and Industry Insights
CONSUMER SPENDING GROWTH SLOWING BUT STILL STRONG IN TRAVEL

Total spending in mid-June was up 11% y/y with strength in travel, health care, and services

Y/Y Spending % Change for Week Ending June 17, 2023

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CONSUMER SENTIMENT IMPROVED IN JUNE

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

Source: Morning Consult; AAA

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

Source: Morning Consult; AAA
JOB MARKET STARTING TO WEAKEN

June saw 209,000 new jobs but the unemployment rate declined to 3.6%

Baseline vs. Recession
Quarterly Unemployment Forecast (U3 %)

Source: BLS, Moody's Analytics, Cox Automotive
Compared to 2022, new sales the first week of July were up 20% but down 2.9% w/w: used were up 2.8% and +0.6% w/w
SUPPLY BETTER THAN LAST YEAR FOR NEW BUT TIGHTER FOR USED

New supply is up 18 days y/y and up 2 days from June; used supply is down 6 days y/y and up 1 day from June

New Days’ Supply

Used Days’ Supply

Source: vAuto, Cox Automotive
JOE KICHLER
Vice President, Logistics
COX AUTOMOTIVE AND MANHEIM OFFER COMPREHENSIVE LOGISTICS SOLUTIONS FOR CLIENTS AND THE INDUSTRY

We touch 3 out of 4 wholesale vehicles in the U.S.

Full-service Logistics Provider

• “Do it for me” model
• White glove service primarily serving OEM Captives, Financial Institutions, Dealers
• 6,500+ transport partners
• ~1.1M cars will be transported in 2023 (2.5M pre-pandemic)

Self-service Marketplace

• “Do it myself” model
• Industry leading website load board connecting shippers and transporters
• ~13 million cars to be posted in 2023
• 32,500+ subscribers
SUPPLY CHAIN TRENDS

More Offsite Volume vs. Vehicles Flowing into an Auction

Greater % of Repo & Harder-to-Move Vehicles than Before

Transition to Digital Retailing Requires Changes
VIEW ON FUTURE PRICING

SUPPLY

Fewer Drivers and Carriers Available

Driver Wages Increasing Across Industries

Insurance Costs Have Increased

Fuel Prices are Flat ...For Now

DEMAND

Vehicle Transport Volume & Distance Traveled Continuing to Increase

More Onesy-Twosey Moves Means Less Full Loads
WHAT’S NEXT FOR LOGISTICS

- Load Building / Optimization / Dedicated Fleet
- AI Pricing Tools
- EV Transportation
MANHEIM USED VEHICLE VALUE INDEX

Concept
A single measure of used vehicle price change that is independent of underlying segment shifts in the characteristics of vehicles being sold

Steps
1. All Manheim U.S. sales
2. Classify by market segment
3. Account for differences in mileage
4. Weight to provide smoother segment mix
5. Seasonally adjust
WHOLESALE VEHICLE VALUES DECLINE IN JUNE

Prices in June decreased 4.2% from May and were down 10.3% from June 2022
YEAR-OVER-YEAR PERFORMANCE SLIPPING AFTER SPRING

Price differences were expanding since March, approaching fall and winter values
Price movements still large compared to history, but more normal recently.
WHOLESALE PRICE VERSUS KELLEY BLUE BOOK NEW AVERAGE TRANSACTION PRICE

Wholesale quickly losing advantage to new price, though not expecting major losses
WORK-RELATED UNITS SHOWING MORE RESILIENCY THAN OTHER SEGMENTS

Pickups and Vans losing less than more affordable and consumer-related vehicles

Percent Change in Manheim Index Year Over Year June 2023

- Industry: -10.3%
- Compact cars: -12.6%
- Midsize cars: -12.2%
- Luxury: -11.8%
- Pickups: -6.6%
- SUV / CUV: -10.5%
- Vans: -8.5%
WHOLESALE PERFORMANCE, U.S. VERSUS CANADA

Canada showing stronger price resiliency in second quarter
JEREMY ROBB
Senior Director, Economic and Industry Insights
OVERALL WHOLESALE MMR VALUE TRENDS

Volatility: Values rose faster to start the year, then declined much faster as well

MMR Index Trends
Overall

Weekly Change in Resale Value
All Model Years

Q1 Weekly: Increased More than Normal
Q2 Weekly: Decreased More than Normal

Source: Cox Automotive
KPIS: MMR RETENTION & SALES CONVERSION

Sales conversion rebounded in early June then continued to fall, relatively flat to 2022

Source: Manheim
WHOLESALE SUPPLY

Inventory down 5% Y/Y with sales running down 11% versus '22, supply tight but in range

Wholesale Days of Supply

25.5 Days

Source: vAuto, Cox Automotive
This year, the 1YO has been the weakest – prices now down 4% versus 2022

**MMR Index Trends**

1YO

**MMR Resale Value Trends**

1YO

Source: Cox Automotive
The 3YO was the strongest segment for most of the year but back to average levels now.
Auction Retention Values declined in Q2 and accelerated in June
CALE: LEASE EQUITY DECLINING BUT HIGH

2023 began declining in May and dipped under 2021 levels two weeks ago

CALE Historical View (36-month term)

Source: Cox Automotive
AUCTION CHECK-INS FOR COMMERCIAL SEGMENTS

Repo & Lease Check-In Rates rise versus last year, but lag against normal

Repo Check-In Index
2019=100

- 2019: 100%
- 2020: 80%
- 2021: 72%
- 2022: 71%
- 2023: 90%

Rental Check-In Index
2019=100

- 2019: 100%
- 2020: 93%
- 2021: 30%
- 2022: 54%
- 2023: 44%

Lease Check-In Index
2019=100

- 2019: 100%
- 2020: 84%
- 2021: 49%
- 2022: 13%
- 2023: 22%

- Repo +27% vs ’22 but down (10%) vs ’19
- Lease +65% vs ’22 yet down (78%) vs ’19
- Rental down (19%) vs ’22 and down (56%) vs ’19

Source: Manheim
RENTAL RISK AVERAGE AUCTION PRICES

Prices for units sold in June were down 2.5% year-over-year and down 4.5% from May

-2.5%
## RENTAL RISK VEHICLE VARIETY INCREASING

Shares of top configurations declining

<table>
<thead>
<tr>
<th></th>
<th>2021 Q2</th>
<th>2022 Q2</th>
<th>2023 Q2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of unique year, make, model, body configurations sold</td>
<td>2,800</td>
<td>3,472</td>
<td>3,422</td>
</tr>
<tr>
<td>Share accounted for top 10 YMMB</td>
<td>10.0%</td>
<td>13.9%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Share accounted for top 25 YMMB</td>
<td>18.7%</td>
<td>24.5%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Number of YMMB to reach 50% share</td>
<td>204</td>
<td>94</td>
<td>468</td>
</tr>
</tbody>
</table>
RENTAL RISK AVERAGE MILEAGE

Average mileage was down 3.1% from May and down 3.5% from June 2022.
RENTAL RISK SALES CONDITION

Minimal changes since last quarter and Q4 2022 indicating some stability in de-fleeting sales.
RENTAL RISK SALES BY MAKE

“All other” had largest gain from Q1 2023; Top four makes remain the same
RENTAL RISK SALES BY VEHICLE SEGMENT

Trend reversal in some large segments from Q1 – SUVs up, while Pickups, Midsize, and Compacts down
Price trends on top selling vehicles in June at Manheim showed declining values for the month.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Source(Rank)</th>
<th>Category</th>
<th>Subcategory</th>
<th>Vehicle</th>
<th>5-Jul</th>
<th>Past 30 Days</th>
<th>Last Year</th>
<th>Current Dep</th>
<th>L12M Dep/Mo</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>All</td>
<td>SUV</td>
<td>SUV Midsize</td>
<td>2020 FORD EXPLORER 4WD 4C 4D SUV XLT</td>
<td>$28,400</td>
<td>$28,900</td>
<td>$36,500</td>
<td>-1.7%</td>
<td>-1.8%</td>
</tr>
<tr>
<td>2</td>
<td>All</td>
<td>Pickup</td>
<td>Pickup Lite Duty Full</td>
<td>2020 FORD F150 4WD V6 CREW CAB 2.7L XLT</td>
<td>$35,300</td>
<td>$35,900</td>
<td>$40,700</td>
<td>-1.7%</td>
<td>-1.1%</td>
</tr>
<tr>
<td>3</td>
<td>All</td>
<td>SUV</td>
<td>SUV Midsize</td>
<td>2020 CHEVROLET EQUINOX AWD 4D SUV 1.5 LT</td>
<td>$18,150</td>
<td>$18,700</td>
<td>$21,300</td>
<td>-2.9%</td>
<td>-1.2%</td>
</tr>
<tr>
<td>4</td>
<td>All</td>
<td>SUV</td>
<td>SUV Midsize</td>
<td>2021 CHEVROLET EQUINOX AWD 4D SUV LT</td>
<td>$20,100</td>
<td>$20,700</td>
<td>$23,800</td>
<td>-2.9%</td>
<td>-1.3%</td>
</tr>
<tr>
<td>5</td>
<td>All</td>
<td>Compact Car</td>
<td>Compact Car Premium</td>
<td>2021 TOYOTA COROLLA 4D SEDAN LE</td>
<td>$17,450</td>
<td>$18,000</td>
<td>$21,900</td>
<td>-3.1%</td>
<td>-1.7%</td>
</tr>
<tr>
<td>1 Dealer</td>
<td>Dealer</td>
<td>Pickup</td>
<td>Pickup Lite Duty Full</td>
<td>2020 FORD F150 4WD V6 CREW CAB 2.7L XLT</td>
<td>$35,300</td>
<td>$35,900</td>
<td>$40,700</td>
<td>-1.7%</td>
<td>-1.1%</td>
</tr>
<tr>
<td>1 Lease</td>
<td>Lease</td>
<td>SUV</td>
<td>SUV Midsize</td>
<td>2020 FORD EXPLORER 4WD 4C 4D SUV XLT</td>
<td>$28,400</td>
<td>$28,900</td>
<td>$36,500</td>
<td>-1.7%</td>
<td>-1.8%</td>
</tr>
<tr>
<td>1 Rental</td>
<td>Rental</td>
<td>Van</td>
<td>Van Compact</td>
<td>2022 TOYOTA SIENNA FWD HYBRID MINIVAN XLE</td>
<td>$40,100</td>
<td>$40,800</td>
<td>$55,400</td>
<td>-1.7%</td>
<td>-2.3%</td>
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Source: Manheim, Cox Automotive
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)

Source: Manheim, Cox Automotive
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

-20.0%  -14.9%  -1.1%  2.4%
Dec-19  Dec-20  Dec-21  Dec-22  Dec-23  Dec-24
2023 FORECASTS
First Half Update

15.0M
NEW SALES
(Original 2023: 14.1M)

12.4M
NEW RETAIL SALES
(Original 2023: 11.9M)

2.6M
FLEET SALES
(Original 2023: 2.2M)

2.3M
NEW LEASE VOLUME
(Original 2023: 2.5M)

19%
LEASE PENETRATION
(Original 2023: 21%)

2.6M
CPO SALES
(Original 2023: 2.2M)

35.7M
USED SALES
(Original 2023: 35.6M)

18.9M
USED RETAIL SALES
(Original 2023: 18.9M)

-1.1%
DEC 2023 Y/Y MANHEIM USED VEHICLE VALUE INDEX
(Original 2023: -4.3%)
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/marketssnapshot
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 an expert:

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Director  
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