Thank you for joining, we will begin shortly!

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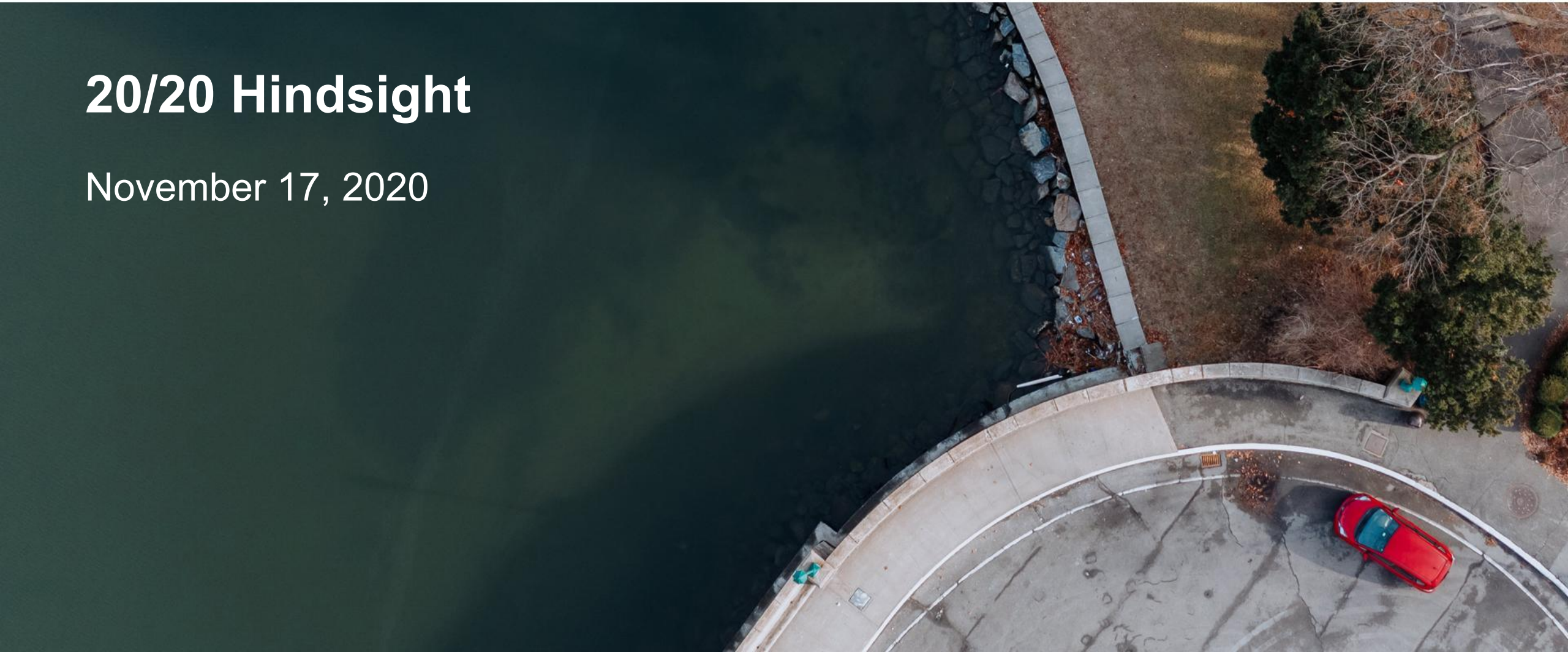
20/20 Hindsight

November 17, 2020



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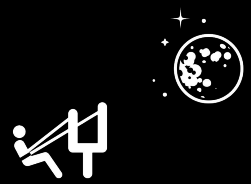
Summary of what we will cover…..

20/20 Hindsight

- Initial COVID-19 outlook versus where we ended up
- What actually drove 2020's performance
- What can we learn from 2020 to better predict the recovery?

Next

- What is in store for 2021?
- What does a K recovery look like in auto?
- Residual value outlook moving forward
- Upsides and downsides



Moonshot Predictions

- Possible, but unlikely, developments for 2021

20/20 Hindsight

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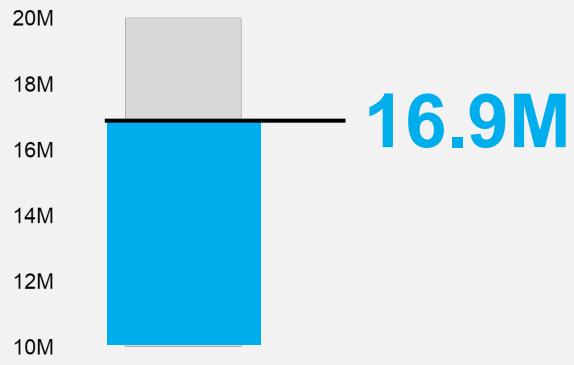
Initial Outlook **From January 2020**

Total Sales

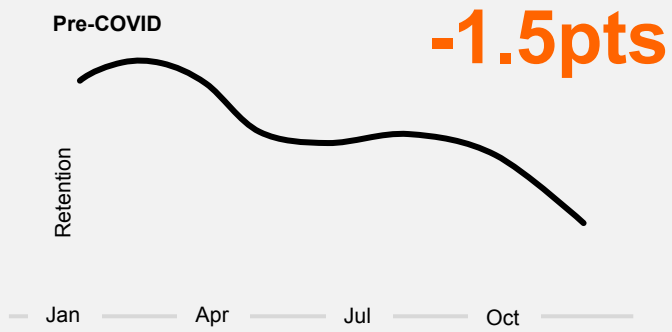


- Recession risk at 30% in January
- Market correction overdue, uncertainty of source of recession
- Auto industry tends to over-predict sales and downturns

Incentive Spend

- Production exceeds natural demand
- Supply fully shifted to align with segment level demand
- Up $125 vs. 2019
- Sustained elevated spending near $4k/unit

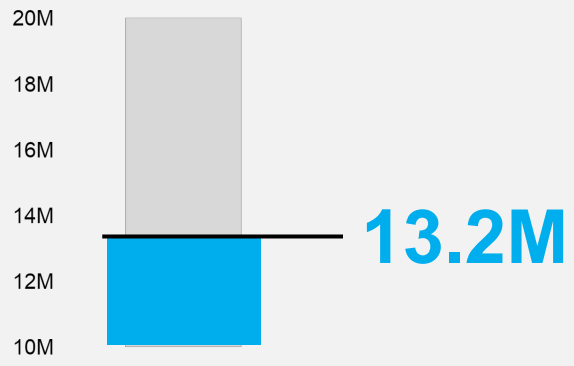
Wholesale Market



- Elevated rental fleet as demand wanes
- Pricing actions as more technology included in vehicles
- Incentive impact

Initial Outlook **At Start of the Shutdowns**

Total Sales

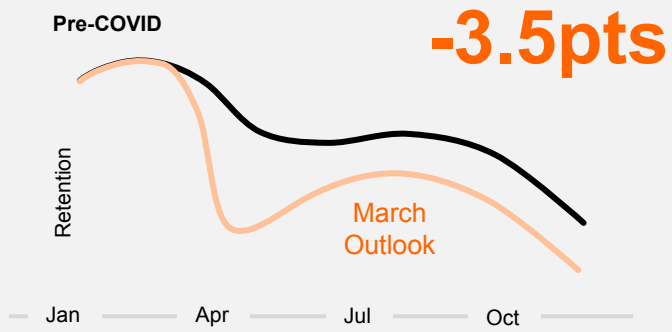


- Poor economic outlook (especially unemployment)
- Tanking stock market
- Production shutdowns

Incentive Spend

- Incentive support required to offset massive demand decline despite production slowdown/stoppage
- Shopping behaviors shifts (household austerity measures

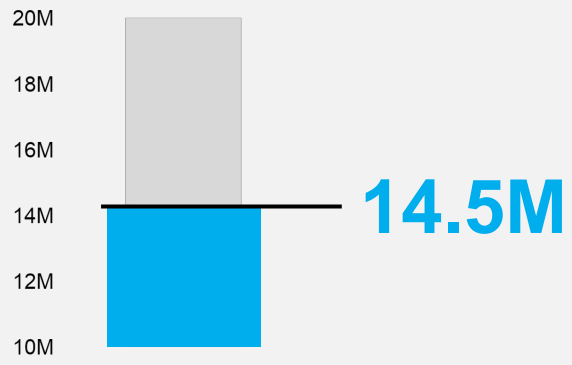
Wholesale Market



- Low customer demand
- Off-loaded fleets

Final Projections

Total Sales

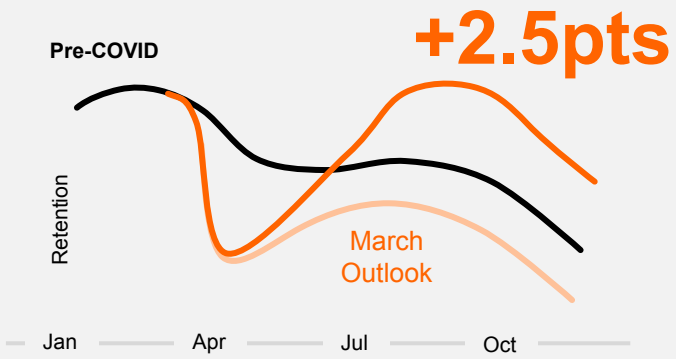


- Innovative purchase options
- Recovered financial markets
- Traditional buyers less impacted

Incentive Spend

- Limited inventory of high demand product
- Mix of models sold
- Finance subvention supported by low interest rates
- ATPs actually increased

Wholesale Market



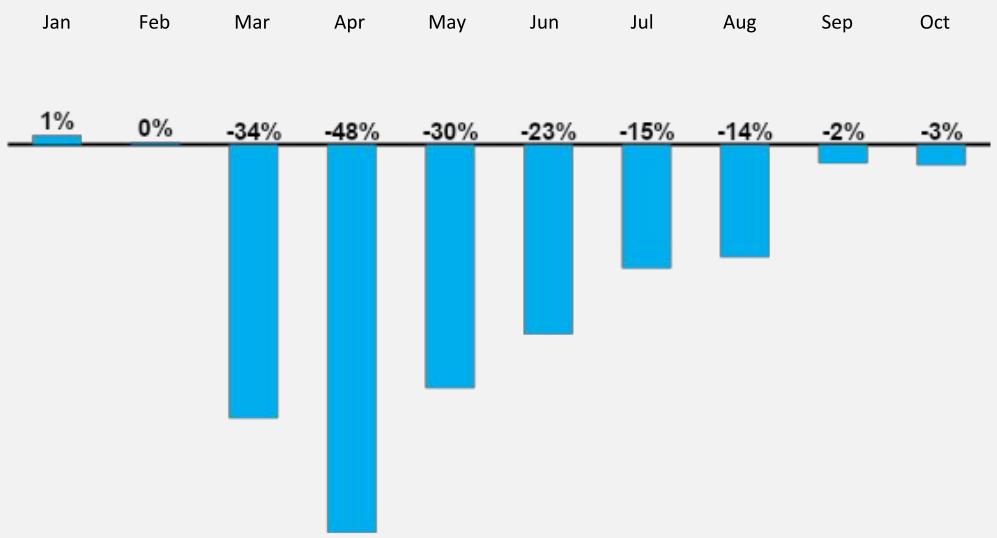
- Low new inventory drives late model used purchases
- Low incentive levels
- Tempered de-fleeting

The Incredible 2020 Sales Recovery

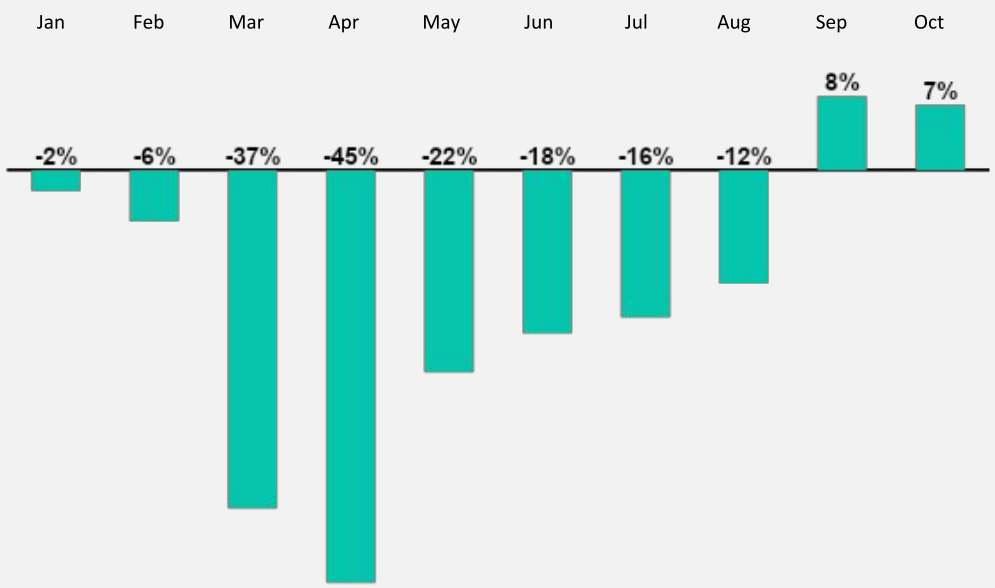
Sales Change (DSR)

% Difference Year-Over-Year 2020 vs 2019

Total Sales



Retail Sales

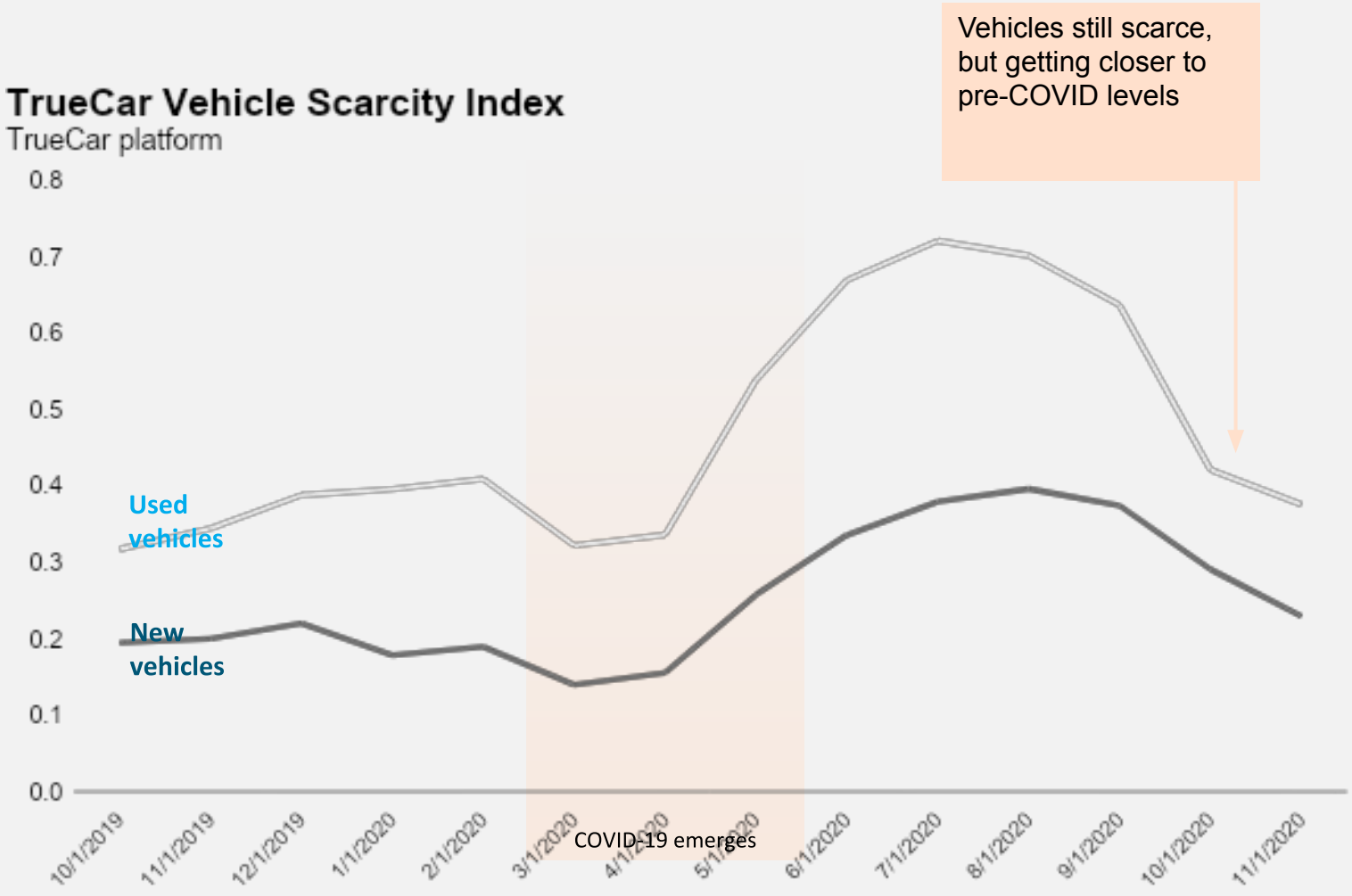


Vehicle scarcity has returned from peak

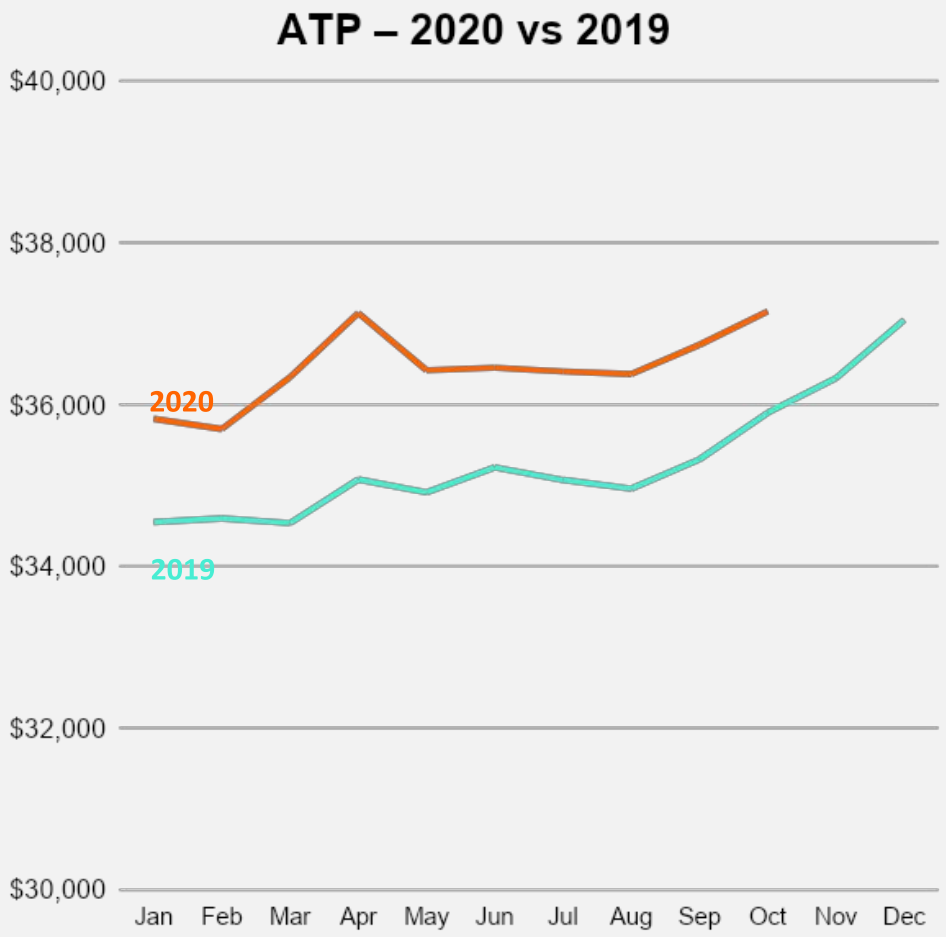
Defining Scarcity

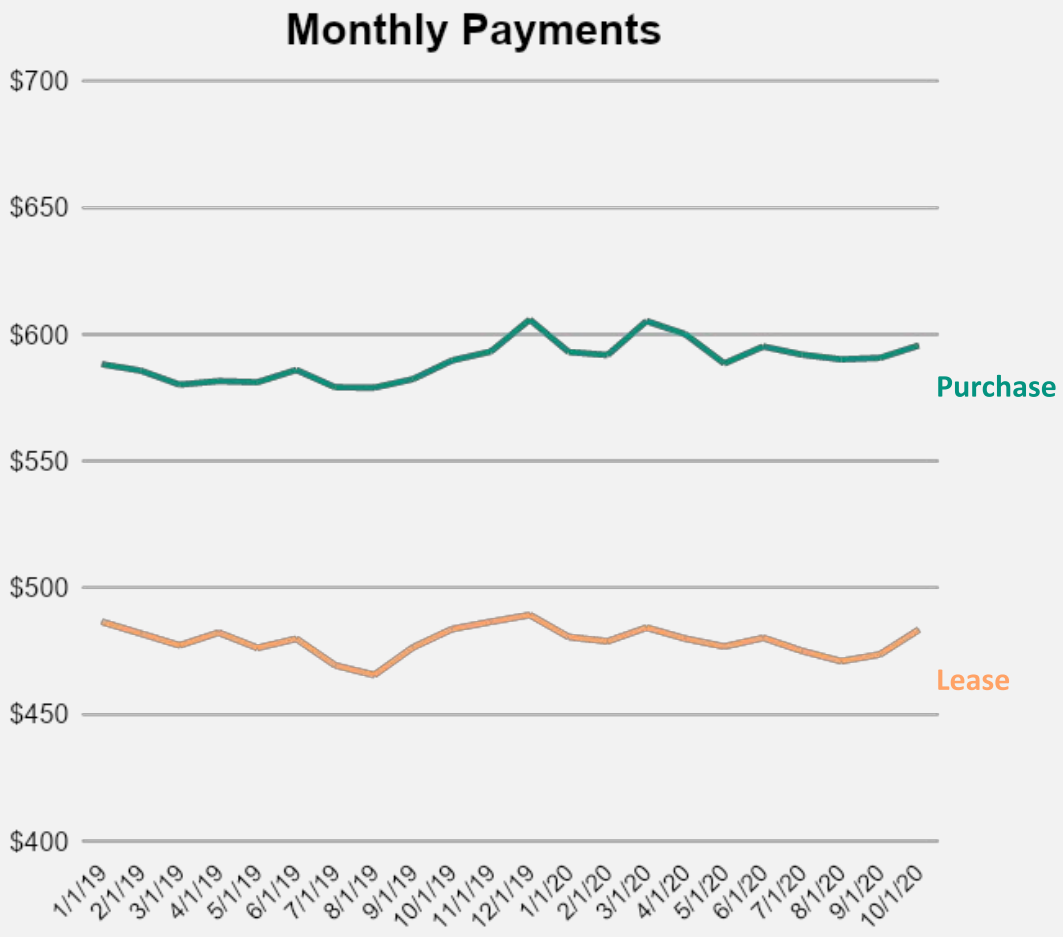
The TrueCar Vehicle Scarcity Index is a measure of the relationship between both vehicle supply and vehicle demand.

A higher scarcity implies that consumers are having a more difficult time finding a vehicle/brand/segment.

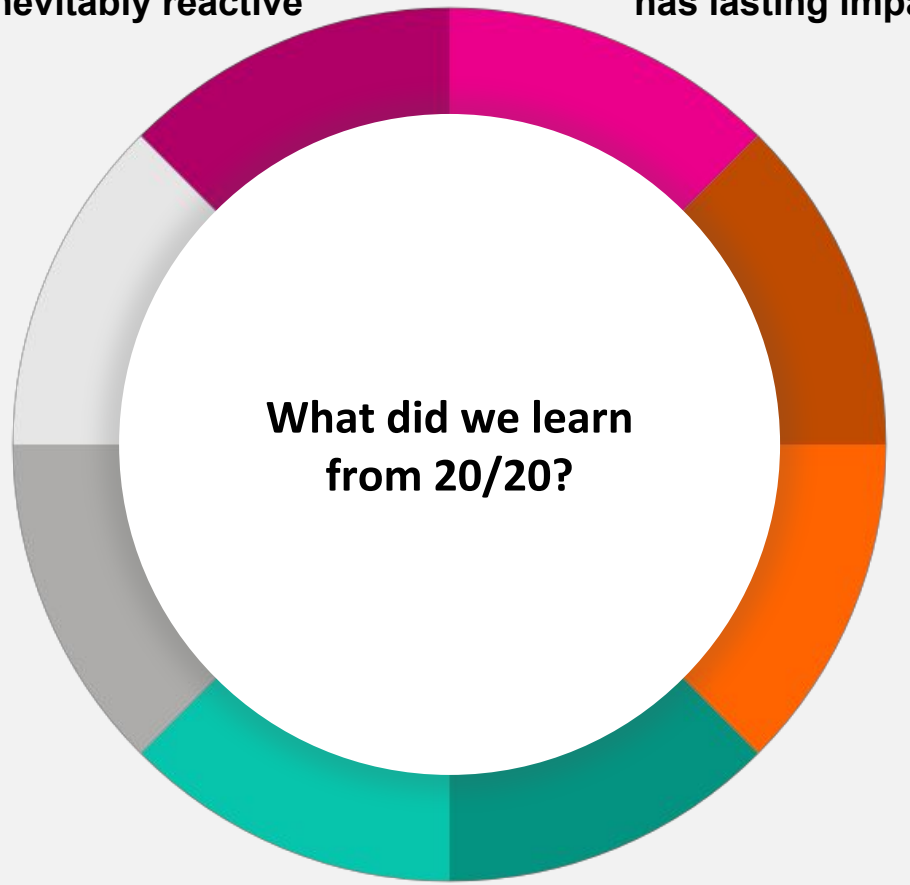


ATP & Monthly Payment Trends





So….



Auto industry is resilient. But inevitably reactive

Supply vs. demand disruption has lasting impact

Reaction in 2020 was based on previous downturns, more nuanced approach would've had longer lasting positive impact

Opportunity to improve strategic approach of incentives. Will it continue?

Economic impact delineates new/late model used vs. early model used buyer

Disruptions impact short term forecast more than long term

People need cars (natural demand)

ALG phased in methodology to diverging outlooks was the right approach

Next in 2021

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What are consumers saying? Underlying Support For Continued Recovery

Factors Deterring Purchase

Concern about **catching COVID-19**

Concerns about **diminished income**

Dealerships not having inventory I want

Decreased “need” **for new vehicle**

Factors Encouraging Purchase

Lower interest rates / less expensive financing

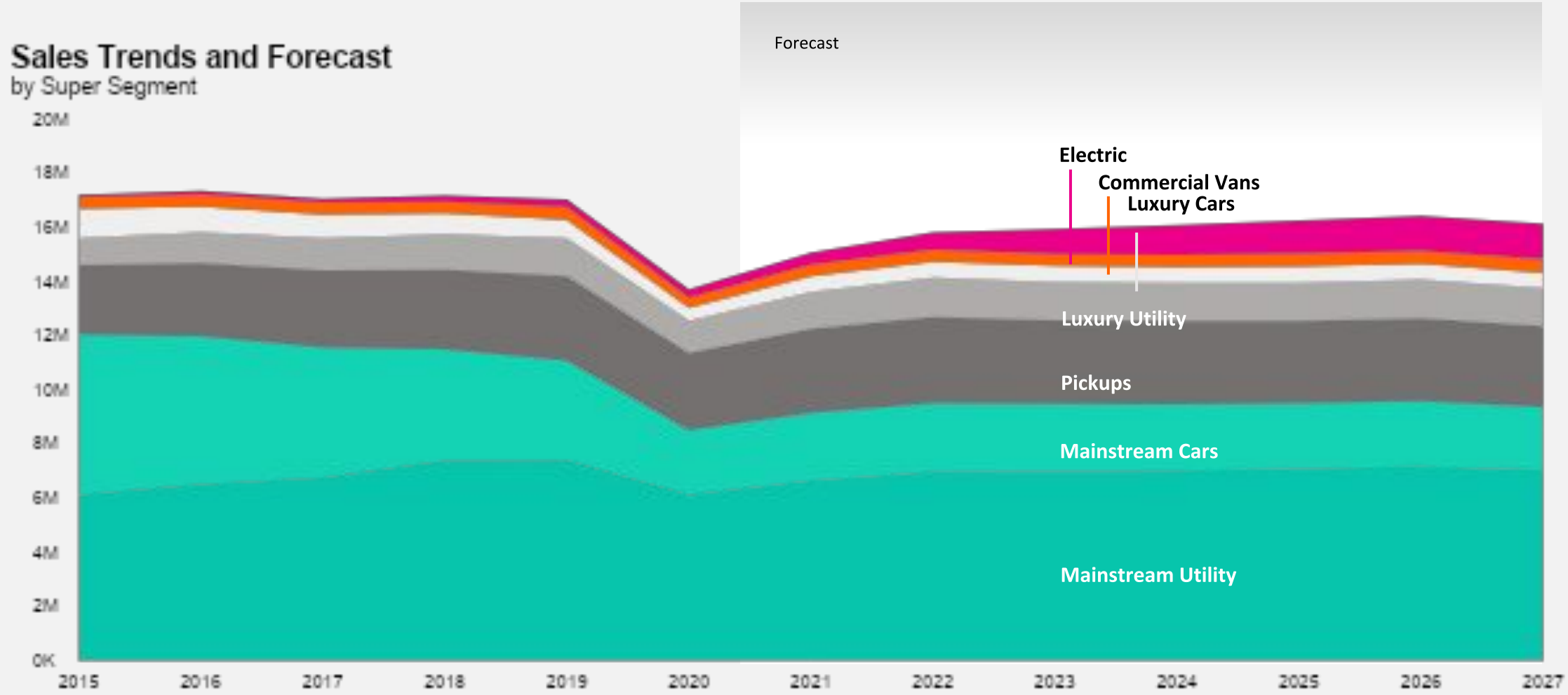
Increase in **vehicle discounts**

Reduced **monthly payments**

Increased “need” **for new vehicle**

The “need” for vehicle is polarizing

Sales History & Forecast



Utility share of total: **41%** Main + Lux → **53%** → **53%**

Forecasting Natural Demand

Total Registered
Vehicles in the US

New Sales Forecast
Short term sales will impact supply relative mid/long term outlook

Population Growth
Growth population aged 16+ and licensed drivers
Includes growth from immigration

Scrappage Rate
Number of vehicles removed from operation/registration due to obsolescence or damage

Stress Test Variables

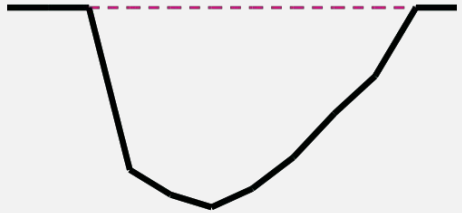
- ✔ Scrappage Rate
  5.0% to 6.0%
  Short term severe drop to
  4.0% to 4.5%
- ✔ Sales
  14.5 in 2020 trending up to
  16.5 in 2023
- ✔ Licensed drivers as percent of total eligible population
  84.5% to 87.5%
- ✔ Number of registered vehicles per licensed driver
  1.15 to 1.20

Shapes of economic recovery: *K-shaped sees market bifurcation*

V-Shaped

Sharp decline,
Quick recovery

U-Shaped

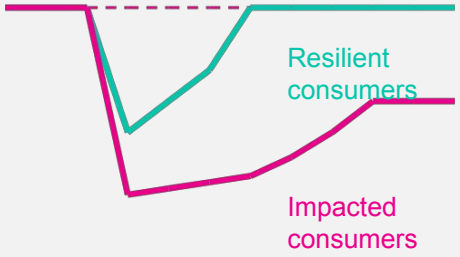


Sharp decline,
Gradual recovery

W-Shaped

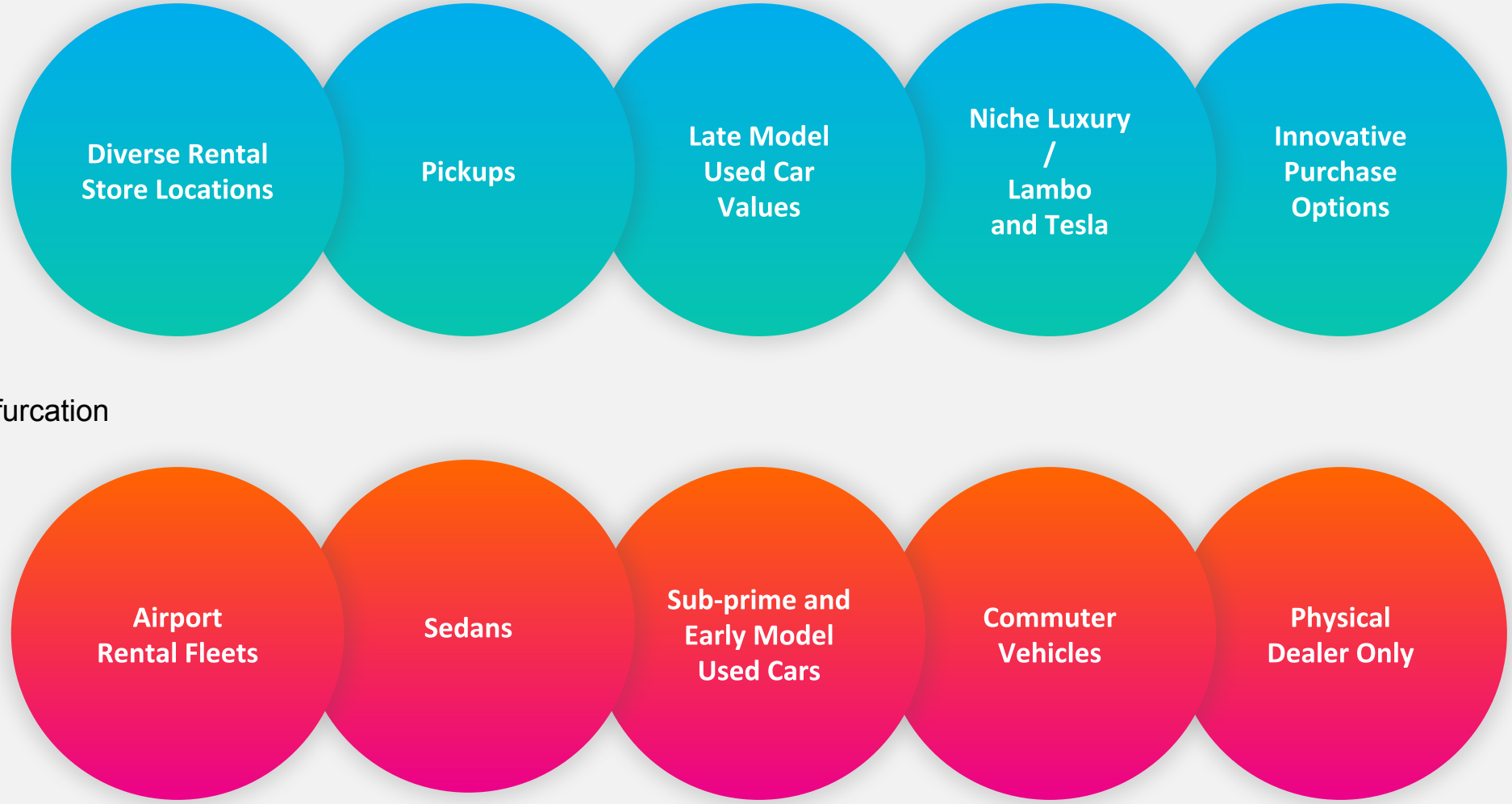
Sharp decline,
Bumpy and or false recovery

K-Shaped



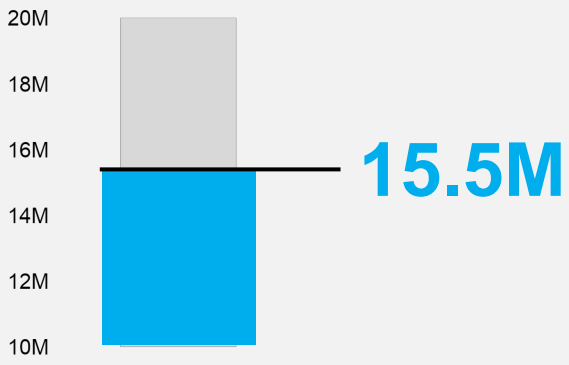
Sharp but split decline,
Uneven/incomplete recovery

Auto K Recoveries from 2020 Recession



Initial 2021 Outlook

Total Sales

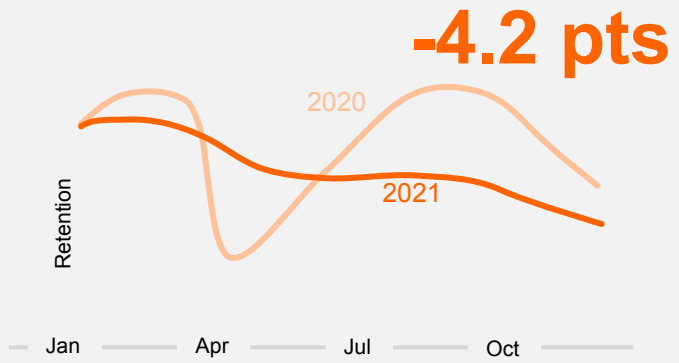


- Economic recovery speeds up
- Employment metrics improve
- Production back to pre-COVID capacity

Incentive Spend

- Higher customer demand
- Market share competition

Wholesale Market



- Low customer demand
- Off-loaded fleets

Next Residual Value Outlook

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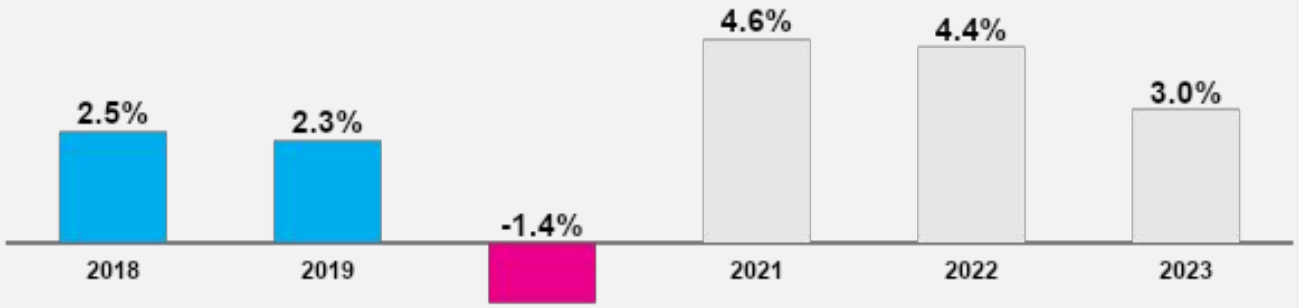
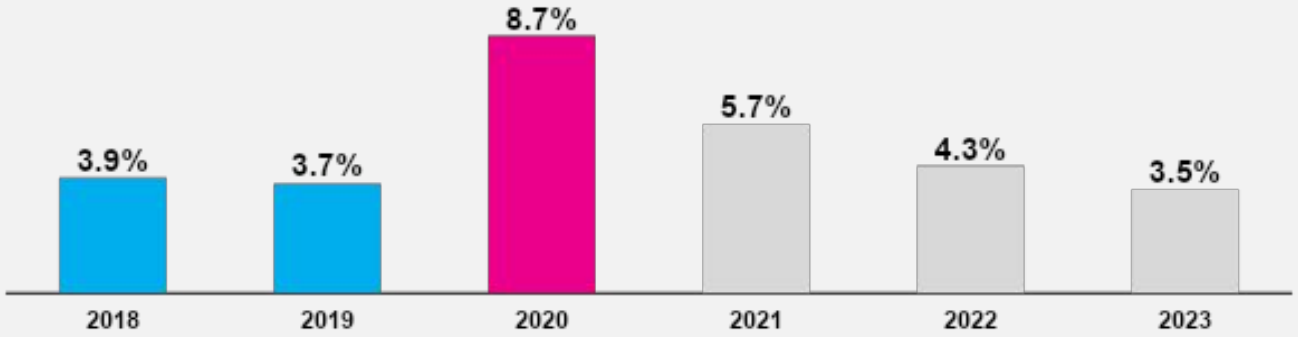
Economic Outlook

Annual US GDP



US Unemployment Outlook

annual rates



COVID-19 has **slowed the US economy** down by historic levels.

GDP growth will stay **flat until the virus in under control** and consumer sentiment is recovered

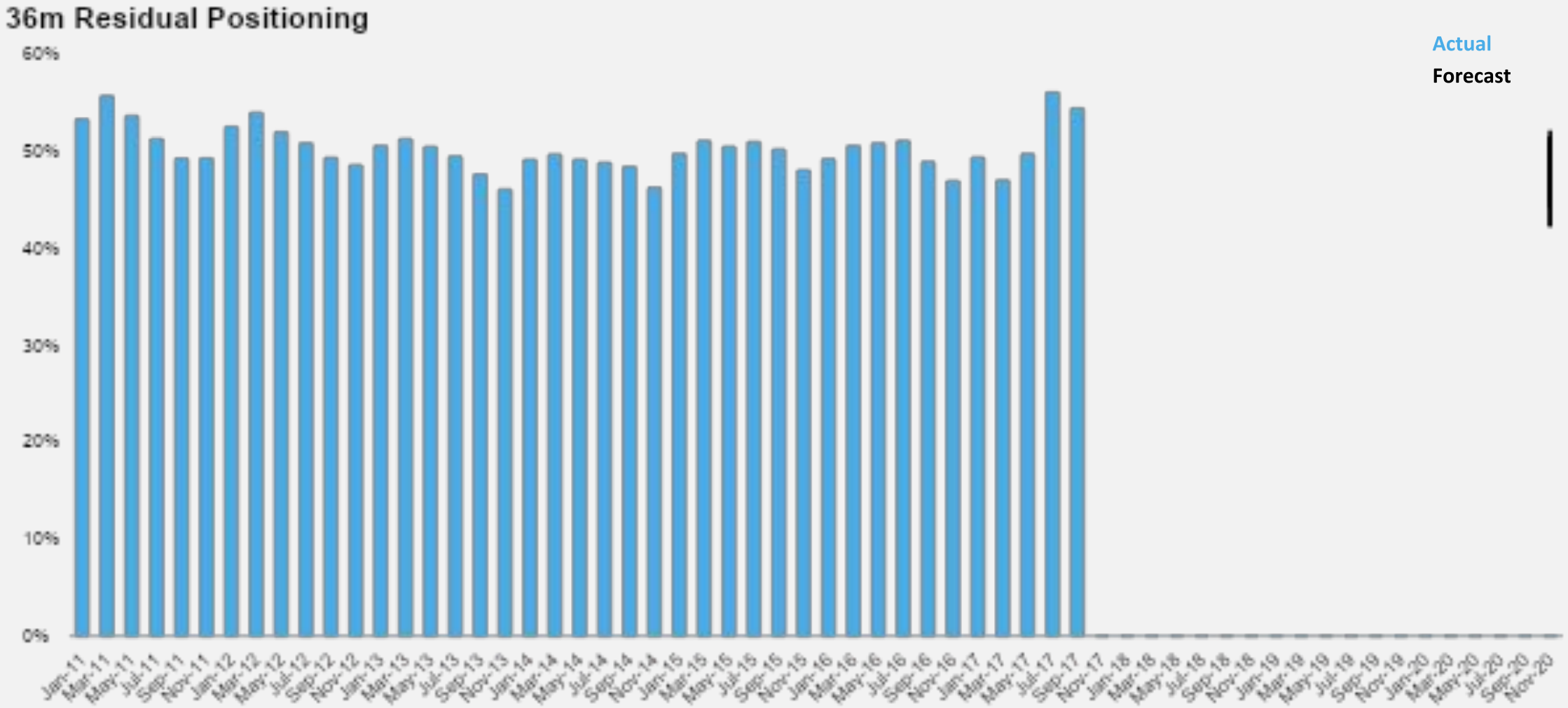
Forecast predict **Pre COVID-19 GDP levels return late 2021**

US unemployment recorded values **not seen since the Great Depression** in Q2 2020

Employment growth will lag behind GDP growth trends with slow recovery until the virus is fully under control

Unemployment rate is **not expected to reach pre-COVID levels** over the next three years

2020 Residual Value Forecast vs Actual Retention

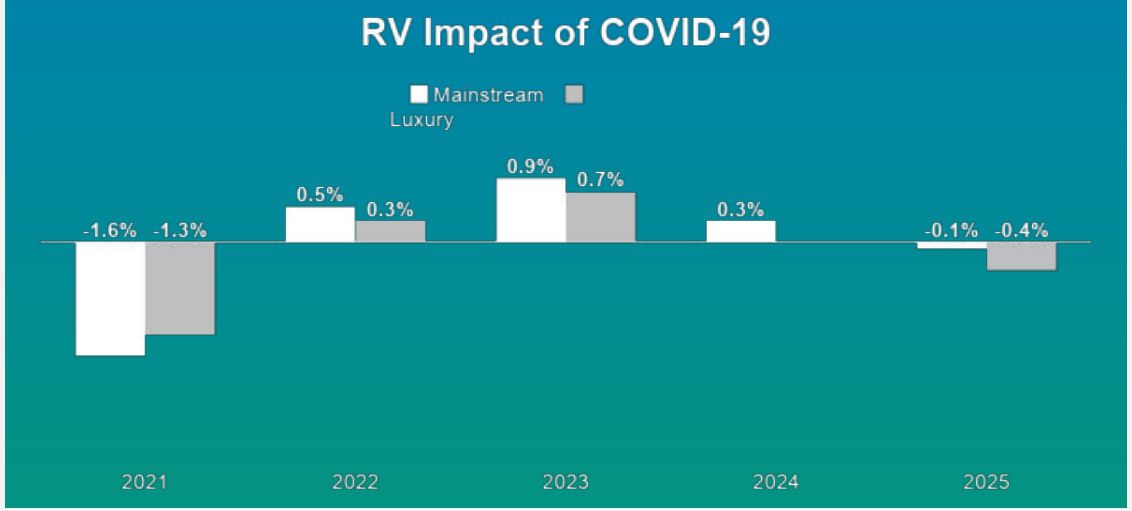


COVID-19 2020 Recession Used Value Impact

Notes

2020 and beyond returns were forecasted to be near steady state. New sales were strong and the shift of CUVs had matured in the used market.

The 2020 recession has created 3 key and intertwined imbalances that are detrimental to used values moving forward: **high unemployment, pent up demand for new models, and incentive increases as new inventories recover.**



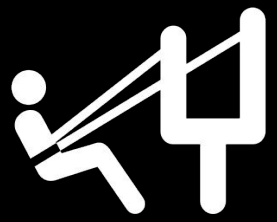
Upside Potential

- Faster recovery than expected
- New car supply shortages continue to buoy late model sales
- Traditional gently used buyers are less impacted by unemployment than previous down turns

Downside Risks

- Slow economic recovery
- Record unemployment levels
- Subsequent COVID-19 outbreaks
- Financial markets react negatively to election

Moonshots



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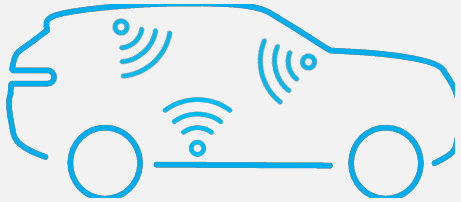
It probably won't happen but maybe…

FAANG Invasion

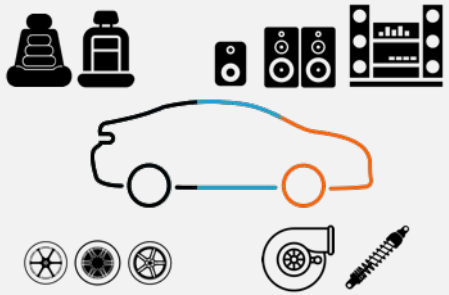
EV Cash for Clunkers

Chinese BEV in the US

An IoT Kind of Smart Car



More Build to Order



"On Demand" Subscription Services Take Off

Q&A

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For more information, contact webinar@alg.com

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