

ANALYSIS
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Used-Vehicle Valuations Reverse

INTRODUCTION

U.S. used-vehicle prices declined in the final quarter of 2020 after an unprecedented runup that began in May. Seasonally adjusted wholesale used-vehicle prices fell 2% over the three months of the fourth quarter, a sharp contrast to the 38% rise from April, when prices troughed, to September. The labor market recovery stalled in the final quarter of the year. Demand for used vehicles slowed as job creation provided less support.

Used-Vehicle Valuations Reverse

BY LOC QUACH AND MICHAEL BRISSON

U.S. used-vehicle prices declined in the final quarter of 2020 after an unprecedented runup that began in May (see Chart 1). Seasonally adjusted wholesale used-vehicle prices fell 2% over the three months of the fourth quarter, a sharp contrast to the 38% rise from April, when prices troughed, to September. The labor market recovery stalled in the final quarter of the year. Demand for used vehicles slowed as job creation provided less support.

A stalled-out jobs recovery has provided less support for used-vehicle demand, causing lower prices in the final quarter of 2020. Job creation slowed every month last quarter, culminating in net job losses in December (see Chart 2). December marked the first time payrolls contracted since the labor market recovery began in May.

Job creation benefits vehicle demand through two channels. It lifts household income and therefore expands households' budget for consumption. Many consumers have redirected their dollars to durable goods purchases such as used vehicles, rather than toward consumption of services such as travel or eating out. These activities, once some of the fastest-growing segments of the U.S. economy, have been severely curtailed because of the pandemic. A higher percentage of earnings going toward goods has strengthened

the income effect, where increased earnings increased used-vehicle demand.

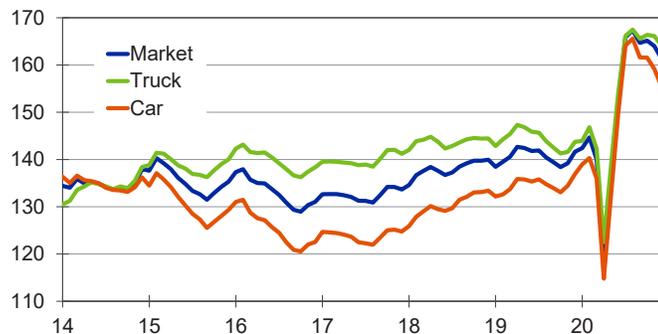
While many are working from home, most jobs still require employees to report to their place of employment. A poll by Gallup indicated that one-third of U.S. workers are working solely from home. The remaining two-thirds of workers still commute to their workplace. Transportation by personal vehicle is less risky in terms of exposure to COVID-19. As a result, the purchase of a vehicle for a commute, whether it be to an old position or a new job, becomes a top priority if the employee does not already own one. A jobs recovery running on fumes has weighed on used-vehicle prices by dinging the income effect and the need for a vehicle for a commute.

Light truck/SUV and passenger car prices have both fallen over the last quarter, with

car prices falling more. Over the course of the fourth quarter, light truck/SUV prices ticked down 0.9%. Passenger car prices fell 3.8% over the same period. Table 1 summarizes the price movements in the fourth quarter of 2020 for different subsegments of vehicles that were 5 years or younger. The three subsegments that best held their prices are all in the light truck/SUV category. In contrast, the three subsegments that did the worst in terms of price depreciation are in the car category. In fact, the worst-performing subsegments have some of the lowest average sale prices. The average price of the three car subsegments that saw the biggest price decline was about \$11,000. The average sale price of the three light truck/SUV subsegments that saw the smallest decline, or increase, was approximately \$28,000. The poor performance for less ex-

Chart 1: Vehicle Prices Decline

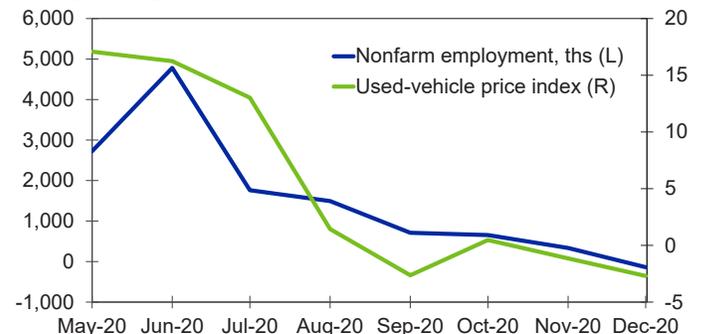
Moody's Analytics sale price indexes, Jan 2010=100, SA



Sources: NADA, Moody's Analytics

Chart 2: Job Gains Stalled

Change mo ago, SA



Sources: BLS, NADA, Moody's Analytics

Table 1: Wholesale Used-Vehicle Auction Summary

Subsegment	Vehicle category	Avg sale price, % change qtr ago	Avg sale price, \$	Vehicles sold
Large van	Truck/SUV	3.7	20,508	2,826
Midsize premium crossover/SUV	Truck/SUV	-1.0	30,807	28,977
Compact premium crossover/SUV	Truck/SUV	-2.6	25,910	21,177
Luxury car	Car	-2.6	29,946	72,792
Pickup	Truck/SUV	-4.9	29,522	103,691
Midsize crossover/SUV	Truck/SUV	-6.6	20,842	99,475
Compact crossover/SUV	Truck/SUV	-7.2	14,844	168,349
Sports car	Car	-9.3	21,406	16,180
Minivan	Truck/SUV	-9.4	15,712	19,622
Large crossover/SUV	Truck/SUV	-9.4	32,948	15,037
Large car	Car	-9.7	16,954	20,022
Midsize car	Car	-9.8	11,632	105,611
Compact car	Car	-10.3	9,562	124,038

Sources: NADA, Moody's Analytics

pensive vehicles suggests that demand from consumers with fewer financial resources has waned.

The less expensive passenger car subsegments may be more sensitive to job creation slowdowns such as the one that occurred last quarter. Job losses have hit lower-income positions disproportionately hard during the current economic malaise. Additionally, the customer base that purchases higher-end vehicles, which are often light trucks or SUVs, are more affluent and likelier to have benefited from the appreciation of the stock market and house prices that has occurred during the last six months. Less support through the income effect hurt passenger car demand more. In contrast, more support from the wealth effect, where people spend more as asset values rise, helped truck and SUV demand. As a result, there has been a divergence in

price performance between the two vehicle categories over the past quarter.

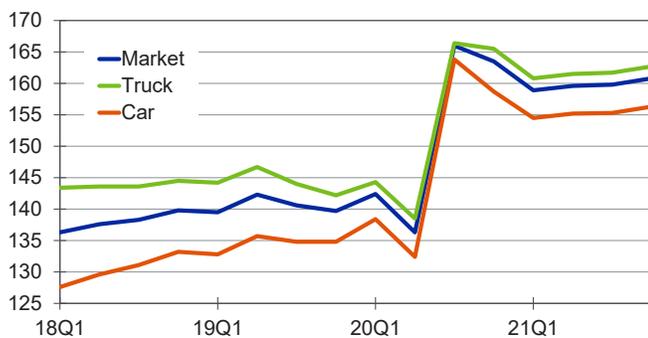
Used-vehicle valuations will decline in the first few months of 2021 before rising modestly for the rest of the year (see Chart 3). Job creation will slow in the first quarter, further reducing labor market support for used-vehicle demand. COVID-19 cases exploded late last year, causing many government officials to reimpose restrictions. These restrictions will limit job gains in the first quarter and dent vehicle demand via the income effect. Despite the dim outlook to start 2021, our assumption is that the effects of the pandemic will begin to fade midyear, once a majority of Americans are vaccinated. Having the pandemic behind them will give consumers the confidence to venture out of their homes and spend more freely. Additionally, Congress recently passed a \$900 billion stimulus bill. The bill included another round of stimulus

payments to most American households and more money for the Paycheck Protection Program. The stimulus payments will expand household budgets and more Paycheck Protection Program funding will lift job creation, both benefiting consumption. More consumer spending and fiscal stimulus will benefit the used-vehicle market and nudge prices toward slower, steadier growth patterns going forward.

Risks to this forecast are numerous given the limited parallels to the variability in prices. To the upside, prices may still have room to run given the underlying economic fundamentals. For months, people have stayed in their homes, avoiding unnecessary COVID-19 exposure. As a result, households reduced spending on services such as tourism and eating out. Additionally, some households have pocketed the first round of fiscal stimulus. As a result, personal

Chart 3: Vehicle Price Forecast

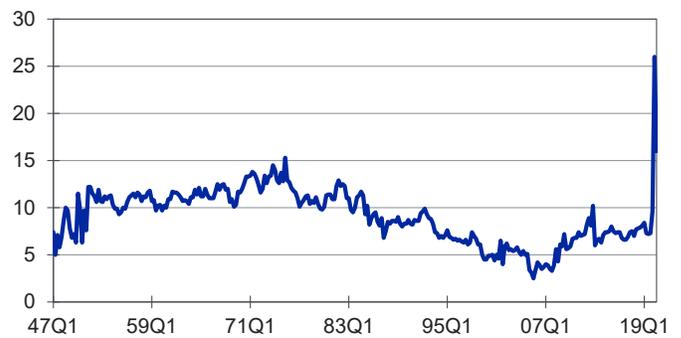
Moody's Analytics sale price indexes, Jan 2010=100, SA



Sources: NADA, Moody's Analytics

Chart 4: Elevated Personal Savings

Personal saving rate, %, SA



Sources: BEA, Moody's Analytics

savings have spiked (see Chart 4). Prior to the pandemic, the record high savings rate was 15.4%, achieved in 1975. The savings rate jumped from 9.6% in the first quarter of 2020 to 26% in the second quarter and 16% in the third quarter, the two most recent quarters of data available. With a large amount of savings on hand, Americans may simply let loose on their spending on the other side of this pandemic. Such a rising economic tide would lift aggregate demand, including that of used vehicles.

Nevertheless, risks remain weighted toward the downside. Used-vehicle prices were up 14% year over year in December. Outside of the pandemic, this growth rate was last matched in 2011 following the crash in prices from the great financial crisis. However, many of these gains can be attributed to the shift from public transportation to driving. Over the course of the pandemic, many have transitioned from taking public transportation to driving

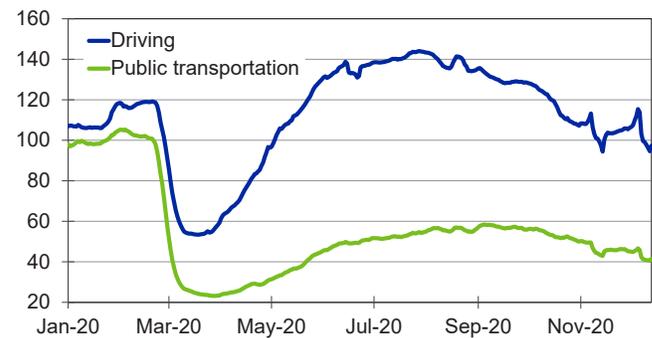
personal vehicles to limit exposure to the coronavirus. Apple mobility data show that driving search routes have been comparable to the beginning of 2020 or higher since May (see Chart 5). In contrast, public transportation search routes remain 60% below pre-pandemic levels.

The shift from public transportation to driving launched used-vehicle demand throughout the summer. However, this trend could reverse quicker than expected. The incoming Biden administration set a target of vaccinating 100 million Americans during the president's first 100 days in office and has

pledged \$20 billion to accomplish this task. Such a mass vaccination could convince people to hop on a train or bus again and sell their recently purchased used vehicle. If used-vehicle supply jumps and demand has been sufficiently wrung out, prices would drop faster than currently forecast.

Chart 5: Driving Is Currently Preferable

U.S. routes searched, Jan 13, 2020=100, 7-day MA



Sources: Apple Inc., Moody's Analytics

About the Authors

[Loc Quach](#) is an economist with the research group at Moody's Analytics. Loc forecasts used vehicle prices and contributes to automotive economics research. Loc previously covered the economies of Sweden, Israel, Hawaii, South Dakota, and more than a dozen U.S. metropolitan economies. He holds an MS in quantitative economics from California Lutheran University and a BA in economics from California State University, Long Beach.

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