

ANALYSIS JULY 2021

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Used-Vehicle Demand Has Decelerated

INTRODUCTION

U.S. wholesale used-vehicle demand has begun to cool off after rising rapidly in the first few months of the year. Price growth rose every month from January to April, increasing from 2.8% in January to an eye-watering 11.6% in April. In contrast, used-vehicle prices have gone up by a monthly average of 0.3% during the 25-year history of the index. However, economic gravity has caught up to the used-vehicle market. Price appreciation declined 7.8 percentage points to 3.8% in May. Furthermore, the change in prices fell an additional 4.3 percentage points to -0.5% in the most recent month. June marked the first decline since December. In the first few months of the year, the federal government sent stimulus payments that bolstered consumer demand, including that for used vehicles. However, that economic shot in the arm has largely worn off. With government support waning, consumers' appetites for vehicles have lessened.

Used-Vehicle Demand Has Decelerated

BY LOC QUACH

U.S. wholesale used-vehicle demand has begun to cool off after rising rapidly in the first few months of the year (see Chart 1). Price growth rose every month from January to April, increasing from 2.8% in January to an eye-watering 11.6% in April. In contrast, used-vehicle prices have gone up by a monthly average of 0.3% during the 25-year history of the index. However, economic gravity has caught up to the used-vehicle market. Price appreciation declined 7.8 percentage points to 3.8% in May. Furthermore, the change in prices fell an additional 4.3 percentage points to -0.5% in the most recent month. June marked the first decline since December. In the first few months of the year, the federal government sent stimulus payments that bolstered consumer demand, including that for used vehicles. However, that economic shot in the arm has largely worn off. With government support waning, consumers' appetites for vehicles have lessened.

Rising household income bolsters consumer demand, a concept known as the income effect. In the last two months, the income effect has made a U-turn. Public health shutdowns and occupancy limits enacted to combat the spread of COVID-19 caused financial hardships for millions of Americans. To soften the economic blow, the federal government sent transfer payments to U.S. households. In March 2021 alone, the IRS issued more than \$300 billion in payments (see Chart 2). With an infusion of funds into their checking accounts, many households purchased a vehicle the next month. Whole-

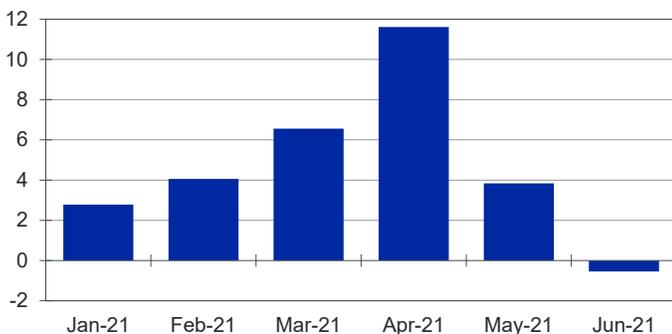
sale used-vehicle prices surged 11.6% in April, one of the highest rates of appreciation for the index. After the initial wave of transfers, payments have slowed to a trickle, as most households have received their allotment. IRS transfers totaled \$7.9 billion in May and \$6.6 billion in June, small potatoes compared with March. With less government support for consumers, demand for used vehicles eased off the gas pedal. Price growth decelerated in May and reversed in June.

The rising cost at the pump has weighed on used-truck/SUV demand in the last two months. From May through June, used-car

prices appreciated 5% while used-truck/SUV prices rose 3% (see Chart 3). Within the same two-month span, the per-barrel price of West Texas Intermediate spiked 16% as an expanding economy boosted energy demand. A barrel of black gold broke the \$70 marker in June for the first time since 2018. The higher cost of refueling incentivized purchases of cars instead of trucks or SUVs because they are more fuel efficient. As a result, price growth for used passenger cars was 2 percentage points, or two-thirds higher than used-truck/SUV price growth in the last two months.

Chart 1: Vehicle Price Appreciation Slows

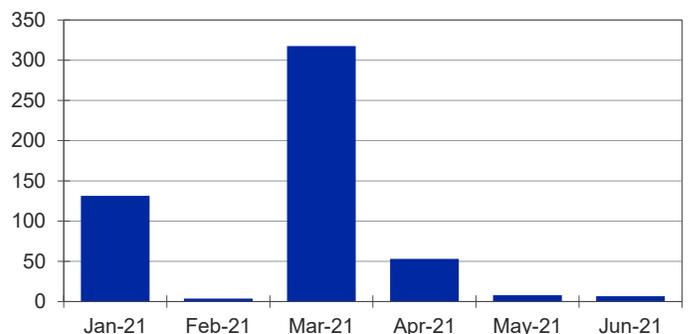
Moody's Analytics used-vehicle price index, monthly growth, SA



Sources: NADA, Moody's Analytics

Chart 2: Transfer Payments Slow Down

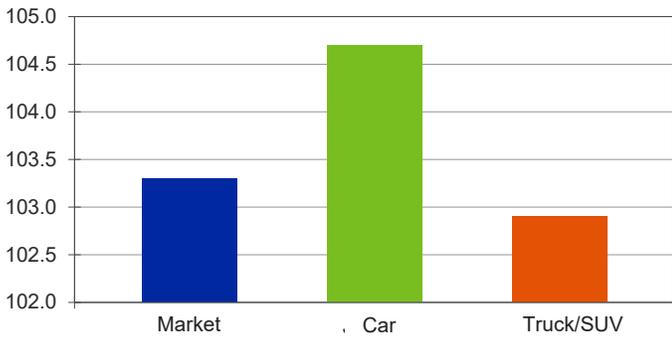
Economic impact payments, \$ bil, NSA



Sources: Census Bureau, Moody's Analytics

Chart 3: Cars Outperformed Since April

Used-vehicle prices, Jun 2021, Apr 2021=100



Sources: NADA, Moody's Analytics

Used-vehicle valuations will decline in the near term before turning the corner post-2023 (see Chart 4). The government has directly transferred more than \$797 billion to U.S. households to shore up the economy. Some of these transfer payments funded used-vehicle purchases. However, the fiscal and monetary stimulus measures enacted in the last year have led to a robust economic rebound, so it is unlikely that new transfer payments will be authorized. Furthermore, more than 99% of the stimulus payments authorized by Congress have been distributed. While unspent stimulus payments will keep used-vehicle prices from falling back to pre-pandemic levels, there will be few additional stimulus payments to support the current high prices. As a result, the price decline in June will continue in the near term. Post-2023, higher employment levels will benefit the used-vehicle market and push prices upward.

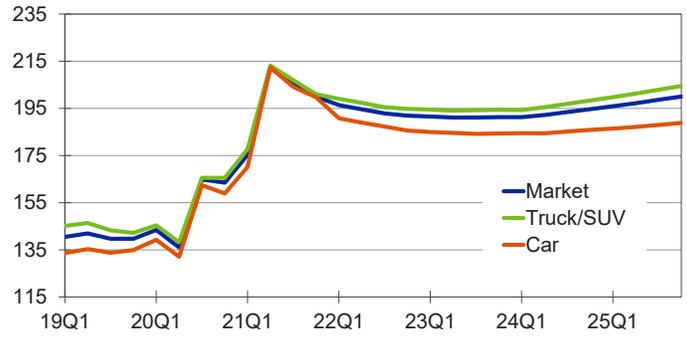
In addition to less government support for consumers, rising availability of new vehicles will allow aspiring vehicle purchasers to buy new vehicles instead of used. This will further dampen used-vehicle demand. The modern vehicle requires semiconductor chips for its numerous electronic parts. Surging demand for electronics and vehicles within the last year has left chip manufacturers unable to meet auto manufacturers' chip needs. With

chips in short supply, many factory managers had no choice but to reduce vehicle output. Reduced production in turn has caused auto inventory to plummet. Many vehicle shoppers purchased used vehicles instead of new amid low new-vehicle inventory, a factor that further elevated used-vehicle prices. However, the chip shortage will start to abate within the next few months. Taiwan Semiconductor Manufacturing Co. Ltd., the largest chipmaker in the world, has stated that it is on track to increase the output of semiconductors used in vehicles by 60% compared with 2020. An increase in chip supply will enable manufacturers to ramp up vehicle production. Higher new-vehicle supply will reduce new-vehicle prices through the return of incentives and ding used-vehicle prices via the substitution effect, where lower prices for a substitute lowers the price for a good.

The Moody's Analytics forecast calls for used-vehicle valuations to decline in the near

Chart 4: Vehicle Price Forecast

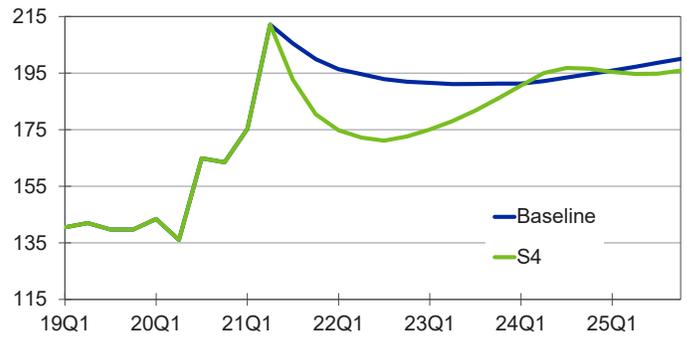
Used-vehicle prices, Jan 2010=100, SA



Sources: NADA, Moody's Analytics

Chart 5: Delta Variant Is Downside Risk

Used-vehicle prices, Jan 2010=100, SA



Sources: NADA, Moody's Analytics

term, but the Delta variant of COVID-19 could cause prices to decline further. The more-contagious variant of the disease is now the dominant strain in the U.S. If the Delta variant spreads unchecked and leads to a return to highly elevated hospitalization and death rates, some businesses will choose to roll back reopenings. This is a key assumption of the severely adverse S4 alternative macroeconomic scenario in which unemployment rises and household income falls. Unlike the first year of the pandemic, there will be no new fiscal support. As a result, declining income hurts used-vehicle demand and dents prices (see Chart 5).

About the Author

[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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