

ANALYSIS
DECEMBER 2020

Prepared by

Michael Brisson
Michael.Brisson@moodys.com
Senior Economist

Contact Us

Email
help@economy.com

U.S./Canada
+1.866.275.3266

EMEA
+44.20.7772.5454 (London)
+420.224.222.929 (Prague)

Asia/Pacific
+852.3551.3077

All Others
+1.610.235.5299

Web
www.economy.com
www.moodysanalytics.com

Used-Vehicle Price Growth Hits the Brakes but Doesn't Come to a Complete Stop

Introduction

Australian used-vehicle prices reached yet another all-time high in November. According to the Datium Insights-Moody's Analytics Price Index, wholesale used-vehicle prices are 33% above where they were at this point last year. Price growth has slowed considerably since the historic jump in values began in May. From May through August, prices rose anywhere from 6% to 11% on a monthly basis. In November prices rose at below 1% month over month, less than half the rate of any month since May. In fact, prices fell slightly across the widely popular truck/ute/SUV segment in November.

Used-Vehicle Price Growth Hits the Brakes but Doesn't Come to a Complete Stop

BY MICHAEL BRISSON

Australian used-vehicle prices reached yet another all-time high in November. According to the Datium Insights-Moody's Analytics Price Index, wholesale used-vehicle prices are 33% above where they were at this point last year (see Chart 1). Price growth has slowed considerably since the historic jump in values began in May. From May through August, prices rose anywhere from 6% to 11% on a monthly basis. In November prices rose at below 1% month over month, less than half the rate of any month since May (see Chart 2). In fact, prices fell slightly across the widely popular truck/ute/SUV segment in November.

The November price divergence between passenger cars and larger vehicles has happened because trucks and SUVs have begun to approach a price ceiling. It could be said that this is no longer your father's used-car market where 20% of the vehicle's MSRP was lost when driven first off the lot. In November, and a bit more so in October, many low-kilometer utes were selling for more than 95% of their MSRP. Still, prices of these larger vehicles remain incredibly high compared with 2019 despite the slight pullback. Light trucks and SUVs are currently 45% above where they were last year (see Chart 3).

Passenger cars on the other hand were not as constrained by the upper limits of vehicle prices in November. This was reflected by the stable 2% growth experienced in this segment. Comparatively, astronomical price gains by utes over the previous six months have made some consumers reconsider a passenger car despite a secular change in preferences. Going into November, passenger car prices were 26% above where they were the previous year compared with 48% for larger vehicles. This price discrepancy led some consumers to choose a passenger car in November.

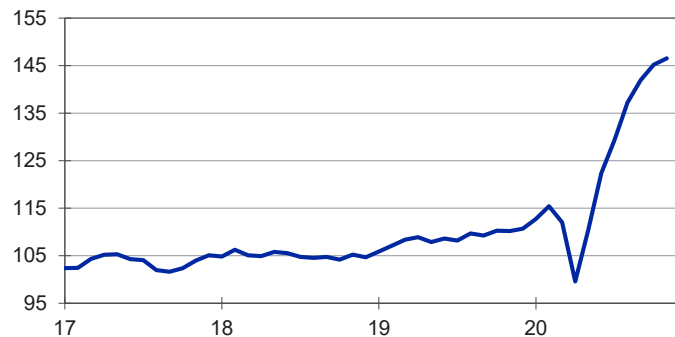
There are reasons on both the supply and demand sides of the equation that have led

to the historic rise in prices. On the supply side, vehicle availability remains an issue for both new and used vehicles. New-vehicle supplies remained limited because of world-wide production and supply chain slowdowns that have occurred due to the pandemic. Consumers have reported waiting weeks for some of the more popular models of new trucks and SUVs.

Since new and used vehicles both fulfill the need for transportation, new-vehicle sales were helped in October by record used-vehicle prices (see Chart 4). Still, decreased new-vehicle sales over the previous six months have in turn led to a decrease in

Chart 1: Prices Inch Higher in November

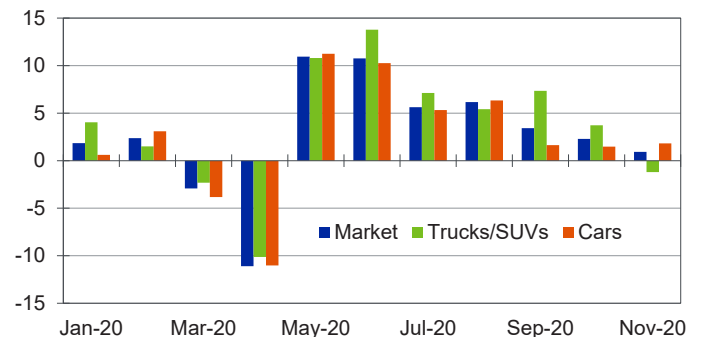
Datium Insights-Moody's Analytics Price Index, 2010=100, SA



Sources: Datium Insights, Moody's Analytics

Chart 2: Price Growth Slows

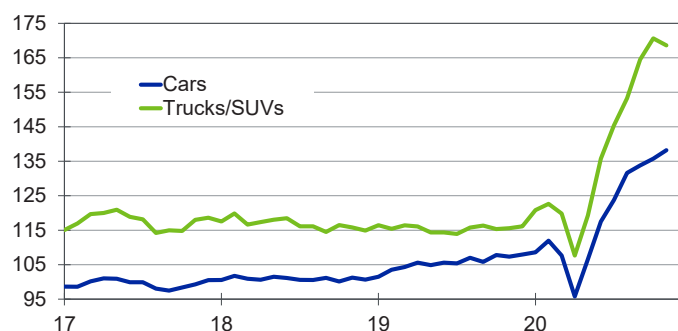
Used-Vehicle Price Index, % change mo ago, SA



Sources: Datium Insights, Moody's Analytics

Chart 3: Larger Vehicles Hit Growth Limits

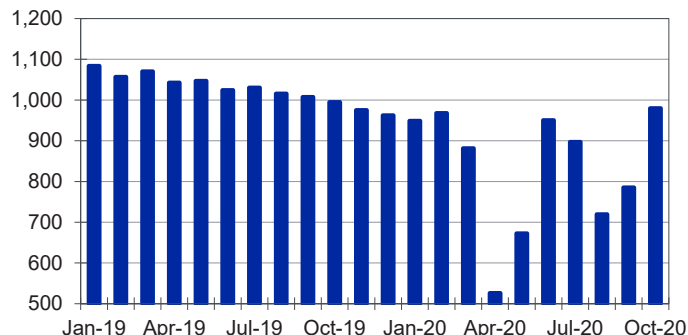
Datium Insights-Moody's Analytics Price Index, 2010=100, SA



Sources: Datium Insights, Moody's Analytics

Chart 4: New-Vehicle Sales Up in October

New light-vehicle sales, ths, SAAR



Sources: Wards Intelligence, Moody's Analytics

available used vehicles. Fewer new-vehicle sales mean fewer trade-ins. Additionally, lease extensions significantly restrained used-vehicle supply from May through September. Finally, most fleet vehicles have been driven significantly less than before the pandemic because of travel restrictions and increased digital work. Fewer kilometers traveled by fleets lead to a decline in vehicle turnover for one of the largest suppliers of used vehicles in the marketplace.

At the same time supply remains constrained, consumers are demanding private vehicles. Australia's stringent response to the virus helped it outperform Europe and the Americas in controlling the outbreak and returning the economy closer to a sense of normalcy. Still, public transit usage remains more than 25% below its pre-pandemic level, according to Apple mobility data (see chart 5). The mobility data are a bit skewed because of the seasonal nature of travel increasing as the weather begins to warm.

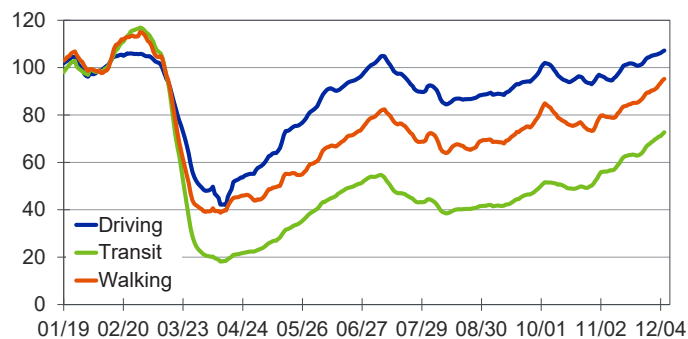
Recent mobility readings also show that trends of diminished public transit usage do

not appear to be long term. In fact, transit routes searched increased by almost 30% over the past month, faster than walking or driving. Public transit offers convenience and affordability to many people, and the reasons people chose to use public transit before COVID-19 will again take hold once the virus is no longer a deciding factor. This will lead to less overall demand for personal vehicles.

We expect seasonally adjusted used-vehicle prices to turn south as the calendar turns to 2021. The price drop is not expected to be steep or sudden, but rather a slow turn and flattening as the economy returns to normal patterns of driving and vehicle usage. Risks to this forecast are weighted to

Chart 5: Mobility Rates Rising

Australia routes searched, 2020, Jan 13=100, 7-day MA



Sources: Apple Inc., Moody's Analytics

the downside. If vehicle demand drops significantly as the virus is effectively managed and people are vaccinated, then many cars purchased for use during the pandemic may hit the market at once. In this case, prices will fall faster than currently expected. Still, this risk remains limited as people will likely hold on to their vehicles as things slowly return to normal.

About the Author

Michael Brisson is a senior economist and associate director at Moody's Analytics. He is the lead auto economist working as a member of the Economic Research group in West Chester PA. Mike works at developing new, empirically driven auto-related products and services. Prior to leading the Moody's Analytics auto research team, Mike built loan and vintage-level CECL, CCAR, and stress-testing models of consumer loan performance as a member of the Business Analytics group at Moody's Analytics. Additionally, Mike has spent time developing econometric models used by U.S. states and local governments for tax/revenue projections. Mike holds a PhD in applied economics from Northeastern University.

About Moody's Analytics

Moody's Analytics provides financial intelligence and analytical tools supporting our clients' growth, efficiency and risk management objectives. The combination of our unparalleled expertise in risk, expansive information resources, and innovative application of technology helps today's business leaders confidently navigate an evolving marketplace. We are recognized for our industry-leading solutions, comprising research, data, software and professional services, assembled to deliver a seamless customer experience. Thousands of organizations worldwide have made us their trusted partner because of our uncompromising commitment to quality, client service, and integrity.

Concise and timely economic research by Moody's Analytics supports firms and policymakers in strategic planning, product and sales forecasting, credit risk and sensitivity management, and investment research. Our economic research publications provide in-depth analysis of the global economy, including the U.S. and all of its state and metropolitan areas, all European countries and their subnational areas, Asia, and the Americas. We track and forecast economic growth and cover specialized topics such as labor markets, housing, consumer spending and credit, output and income, mortgage activity, demographics, central bank behavior, and prices. We also provide real-time monitoring of macroeconomic indicators and analysis on timely topics such as monetary policy and sovereign risk. Our clients include multinational corporations, governments at all levels, central banks, financial regulators, retailers, mutual funds, financial institutions, utilities, residential and commercial real estate firms, insurance companies, and professional investors.

Moody's Analytics added the economic forecasting firm Economy.com to its portfolio in 2005. This unit is based in West Chester PA, a suburb of Philadelphia, with offices in London, Prague and Sydney. More information is available at www.economy.com.

Moody's Analytics is a subsidiary of Moody's Corporation (NYSE: MCO). Further information is available at www.moodyanalytics.com.

DISCLAIMER: Moody's Analytics, a unit of Moody's Corporation, provides economic analysis, credit risk data and insight, as well as risk management solutions. Research authored by Moody's Analytics does not reflect the opinions of Moody's Investors Service, the credit rating agency. To avoid confusion, please use the full company name "Moody's Analytics", when citing views from Moody's Analytics.

About Moody's Corporation

Moody's Analytics is a subsidiary of Moody's Corporation (NYSE: MCO). MCO reported revenue of \$4.8 billion in 2019, employs more than 11,000 people worldwide and maintains a presence in more than 40 countries. Further information about Moody's Analytics is available at www.moodyanalytics.com.

© 2020 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,000 to approximately \$2,700,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody's.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.