



E-commerce Disrupts Retail-Related Bonds

Detailed analysis of CMBS and retail corporates is essential.

September 2019

KEY INSIGHTS

- Internet retailers are fundamentally disrupting the traditional retail industry, which is having a profound impact on some segments of the bond market.
- Commercial mortgage-backed securities (CMBS) and corporate debt from retail-related issuers are feeling the most meaningful effects of e-commerce.
- The disruption of the retail industry by e-commerce has created opportunities as well as areas to avoid in bonds.

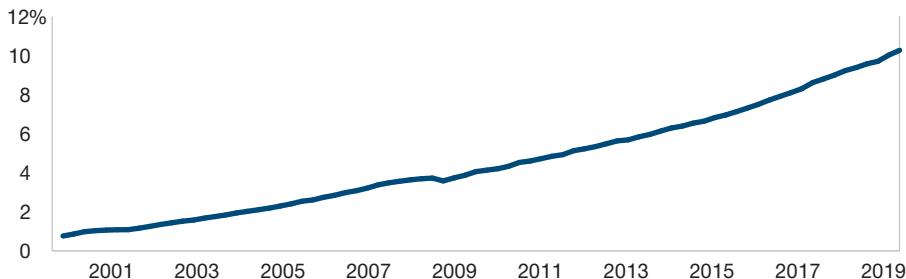
Internet retailers are fundamentally disrupting the traditional retail industry. E-commerce has decimated brick-and-mortar retailers by offering a combination of low prices and rapid home delivery. Illustrating the remarkable inroads of internet retail, approximately

60% of U.S. households now have an Amazon Prime subscription.¹ This trend toward e-commerce is having a profound impact on some segments of the fixed income markets in addition to its well-publicized effects on various stock market sectors.

(Fig. 1) Steady Growth of Internet Retail

E-commerce as a share of retail sales*

As of June 30, 2019



Source: U.S. Census Bureau/Haver Analytics.

*Excluding gas stations.

¹ Source: Evercore ISI.



Carson Dickson

Credit Analyst, High Yield Debt



Jane Rivers

Credit Analyst, Securitized Debt



Ted Robson

Credit Analyst, Investment-Grade Corporate Debt



Mitchell Unger

Credit Analyst, Investment-Grade Corporate Debt

9%

Preliminary data show that Amazon overtook Walmart as the top apparel retailer in 2018 with more than 9% of the market.

CMBS and corporate debt issued by retailers and real estate investment trusts (REITs) are feeling the most meaningful effects of e-commerce within the bond market. However, as in the stock market,² the disruption of the retail industry by e-commerce has created opportunities as well as areas to avoid in bonds.

These are among the key observations of four members of T. Rowe Price's global team of credit analysts. Carson Dickson covers high yield retail corporates, Mitchell Unger specializes in investment-grade retail sector credit, Jane Rivers analyzes CMBS, and Ted Robson covers investment-grade corporate debt in the financials sector, which includes REITs.

Retail-Related High Yield Corporates Struggle

The effects of e-commerce have been almost universally negative for corporate bonds issued by retailers with below investment-grade credit ratings that reflect their already weak financial condition. "Internet retailers increasingly dominate even apparel sales, which was once one of the brick-and-mortar segments that was seen as most resilient to e-commerce because some consumers like to try on clothes before purchasing," explains Dickson. In 2006, Amazon accounted for a negligible share of the

U.S. apparel market, but preliminary data show that Amazon overtook Walmart as the top apparel retailer in 2018 with more than 9% of the market.

"Running down a traditional retailer's income statement, revenue has decreased as a result of e-commerce price transparency, gross margin has fallen because of the need for free and fast shipping, and the fixed costs of maintaining stores and paying staff have stayed constant," says Dickson. "All of these factors lead directly to lower profitability."

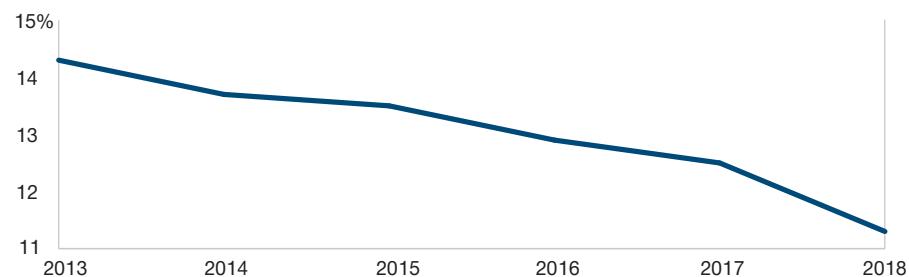
Retailers with a brick-and-mortar presence also need to invest capital to continually upgrade store appearance or risk losing customers, and they must devote additional capital to inventory in stores. T. Rowe Price analysts and portfolio managers do not see any of these trends reversing, so our fixed income strategies are either underweight retailer high yield bonds or have no exposure to the segment.

Although the same trends are impacting investment-grade retailers, T. Rowe Price analysts are somewhat more positive on corporates issued by select retailers with investment-grade credit ratings because of their stronger balance

(Fig. 2) E-commerce Weighs on Retailer Profits

EBITDA* margin of select retailers

As of December 31, 2018



Sources: Corporate filings for 7 publicly traded and 2 privately held retailers. Data analysis by T. Rowe Price.

*Earnings before interest, taxes, depreciation, and amortization.

² Discussed by T. Rowe Price's equity portfolio managers and analysts in an early 2018 Insights article.

CMBS structures provide varying degrees of credit enhancement, which can help offset elevated default risk.

sheets as well as their broader scale. "The financial resources and pure size of some retail companies in the investment-grade universe give them the ability to invest in upgrading logistics, better positioning them to compete with internet retailers," contends Unger. "We favor investment-grade corporates from 'e-tail natives' like QVC as well as home improvement and auto parts retailers that have a larger share of business-to-business sales, which insulates them to some degree from Amazon risk."

Internet Retail's Nuanced Effects on CMBS

While e-commerce has definitely affected the CMBS market, its impacts on CMBS are more nuanced than on corporate bonds issued by retailers. CMBS are bonds backed by the cash flows from mortgages on commercial properties, including malls. As T. Rowe Price's real estate equity analysts noted in 2018, the universe of enclosed malls is bifurcating into high-quality and low-quality segments as internet retail forces many mall tenants into bankruptcy. "We think that top-quality malls in healthy markets that have financially strong sponsors and unique stores will still thrive, while low-quality malls will continue to deteriorate," explains Rivers.

The CMBS universe tends to have more exposure to mid- and low-quality

malls than to their higher-quality peers. According to Rivers, "the outlook for these struggling malls is highly dependent on demographics, degree of competition, diversification of tenant type, amount of capital invested by the owner, and redevelopment potential." This makes detailed credit analysis essential for understanding which mall-backed mortgages are at greater risk of default and for quantifying the potential risk.

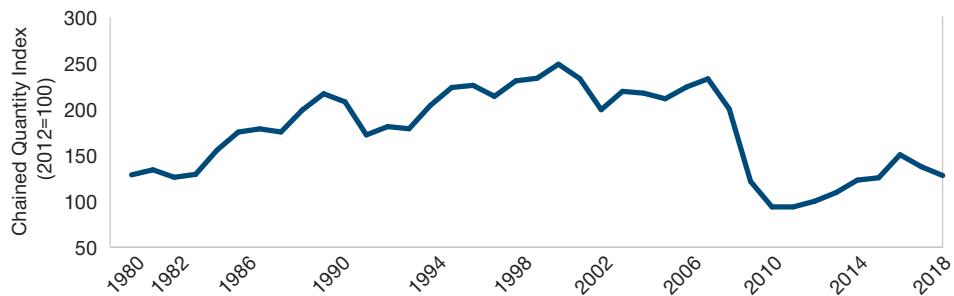
CMBS structures provide varying degrees of credit enhancement, which can help offset elevated default risk. AAA rated CMBS provide more credit enhancement than lower-rated bonds. "We are finding select opportunities in mall-backed CMBS that provide the right balance of default risk and credit enhancement, but detailed examination of both the deal structure and the underlying mall assets is essential for this risk/reward analysis," Rivers adds.

Opportunities in Select REIT Corporates

A REIT is a company that generates income by owning, operating, or financing real estate, which can include commercial properties. REITs issue corporate bonds to fund their operations. Like CMBS, the credit quality of corporate debt issued by REITs that own malls or other retail properties is subject to the ongoing bifurcation of the mall market into high- and low-quality categories. However, unlike CMBS, REIT corporates

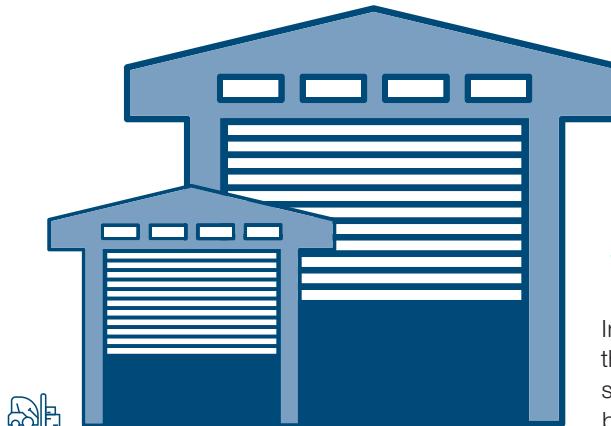
(Fig. 3) Boom in Retail Investment Turned to Bust

Retail industry investment in private structures
1980 Through 2018



Source: Bureau of Economic Analysis/Haver Analytics.

However, detailed analysis of the properties underlying a particular security, whether CMBS or a REIT corporate bond, and the structure of a CMBS deal are essential.



3X

Internet retailers require three times the warehouse space when compared with brick-and-mortar stores.

do not have the added protection of credit enhancement. "Within the retail REIT universe, we prefer REITs with relatively stable, grocery store-oriented community shopping centers and financially strong malls," says Robson.

Internet Retailers Need Three Times the Warehouse Space of Brick-and-Mortar Retailers

Robson thinks that another segment of the REIT universe—those focused on industrial properties—stands to benefit directly from the rapid rise of internet retail. "The boom in e-commerce sales and accompanying demand for same-day or two-day delivery are driving strong demand for warehouse space," Robson notes. "REITs that own or operate industrial warehouses are benefiting from

this trend as e-commerce operators need increasing amounts of space." In fact, internet retailers require three times the volume of warehouse space as traditional retailers, according to Prologis, a REIT specializing in logistics-related properties.

Detailed Credit Analysis Is Essential

Although e-commerce has unquestionably had a negative effect on many retail-related corporate bonds, analyzing CMBS and REIT debt can uncover areas where internet retail has created opportunities. Industrial REITs that can capitalize on the growing warehouse needs of e-commerce companies are a prime example. However, detailed analysis of the properties underlying a particular security, whether CMBS or a REIT corporate bond, and the structure of a CMBS deal are essential.

WHAT WE'RE WATCHING NEXT

The trade conflict between the U.S. and China has the potential to dampen retail sales—via both e-commerce and brick-and-mortar stores—if tariffs on imported Chinese goods push prices meaningfully higher. This could shift consumer spending preferences toward lower-priced goods, potentially favoring discount retailers and affecting our analysis of the quality of traditional retailers.

The specific securities identified and described are for informational purposes only and do not represent recommendations.

T. Rowe Price focuses on delivering investment management excellence that investors can rely on—now and over the long term.



Important Information

This material is being furnished for general informational purposes only. The material does not constitute or undertake to give advice of any nature, including fiduciary investment advice, and prospective investors are recommended to seek independent legal, financial and tax advice before making any investment decision. T. Rowe Price group of companies including T. Rowe Price Associates, Inc. and/or its affiliates receive revenue from T. Rowe Price investment products and services. **Past performance is not a reliable indicator of future performance.** The value of an investment and any income from it can go down as well as up. Investors may get back less than the amount invested.

The material does not constitute a distribution, an offer, an invitation, a personal or general recommendation or solicitation to sell or buy any securities in any jurisdiction or to conduct any particular investment activity. The material has not been reviewed by any regulatory authority in any jurisdiction.

Information and opinions presented have been obtained or derived from sources believed to be reliable and current; however, we cannot guarantee the sources' accuracy or completeness. There is no guarantee that any forecasts made will come to pass. The views contained herein are as of the date written and are subject to change without notice; these views may differ from those of other T. Rowe Price group companies and/or associates. Under no circumstances should the material, in whole or in part, be copied or redistributed without consent from T. Rowe Price.

The material is not intended for use by persons in jurisdictions which prohibit or restrict the distribution of the material and in certain countries the material is provided upon specific request. It is not intended for distribution to retail investors in any jurisdiction.

Australia—Issued in Australia by T. Rowe Price Australia Limited (ABN: 13 620 668 895 and AFSL: 503741), Level 50, Governor Phillip Tower, 1 Farrer Place, Suite 50B, Sydney, NSW 2000, Australia. For Wholesale Clients only.

Brunei—This material can only be delivered to certain specific institutional investors for informational purpose upon request only. The strategy and/or any products associated with the strategy has not been authorised for distribution in Brunei. No distribution of this material to any member of the public in Brunei is permitted.

Canada—Issued in Canada by T. Rowe Price (Canada), Inc. T. Rowe Price (Canada), Inc.'s investment management services are only available to Accredited Investors as defined under National Instrument 45-106. T. Rowe Price (Canada), Inc. enters into written delegation agreements with affiliates to provide investment management services.

China—This material is provided to specific qualified domestic institutional investor or sovereign wealth fund on a one-on-one basis. No invitation to offer, or offer for, or sale of, the shares will be made in the People's Republic of China ("PRC") (which, for such purpose, does not include the Hong Kong or Macau Special Administrative Regions or Taiwan) or by any means that would be deemed public under the laws of the PRC. The information relating to the strategy contained in this material has not been submitted to or approved by the China Securities Regulatory Commission or any other relevant governmental authority in the PRC. The strategy and/or any product associated with the strategy may only be offered or sold to investors in the PRC that are expressly authorized under the laws and regulations of the PRC to buy and sell securities denominated in a currency other than the Renminbi (or RMB), which is the official currency of the PRC. Potential investors who are resident in the PRC are responsible for obtaining the required approvals from all relevant government authorities in the PRC, including, but not limited to, the State Administration of Foreign Exchange, before purchasing the shares. This document further does not constitute any securities or investment advice to citizens of the PRC, or nationals with permanent residence in the PRC, or to any corporation, partnership, or other entity incorporated or established in the PRC.

DIFC—Issued in the Dubai International Financial Centre by T. Rowe Price International Ltd. This material is communicated on behalf of T. Rowe Price International Ltd. by its representative office which is regulated by the Dubai Financial Services Authority. For Professional Clients only.

EEA ex-UK—Unless indicated otherwise this material is issued and approved by T. Rowe Price (Luxembourg) Management S.à r.l. 35 Boulevard du Prince Henri L-1724 Luxembourg which is authorised and regulated by the Luxembourg Commission de Surveillance du Secteur Financier. For Professional Clients only.

Hong Kong—Issued in Hong Kong by T. Rowe Price Issued by T. Rowe Price Hong Kong Limited, 6/F, Chater House, 8 Connaught Road Central, Hong Kong. T. Rowe Price Hong Kong Limited is licensed and regulated by the Securities & Futures Commission. For Professional Investors only.

Indonesia—This material is intended to be used only by the designated recipient to whom T. Rowe Price delivered; it is for institutional use only. Under no circumstances should the material, in whole or in part, be copied, redistributed or shared, in any medium, without prior written consent from T. Rowe Price. No distribution of this material to members of the public in any jurisdiction is permitted.

Korea—This material is intended only to Qualified Professional Investors upon specific and unsolicited request and may not be reproduced in whole or in part nor can they be transmitted to any other person in the Republic of Korea.

Malaysia—This material can only be delivered to specific institutional investor upon specific and unsolicited request. The strategy and/or any products associated with the strategy has not been authorised for distribution in Malaysia. This material is solely for institutional use and for informational purposes only. This material does not provide investment advice or an offering to make, or an inducement or attempted inducement of any person to enter into or to offer to enter into, an agreement for or with a view to acquiring, disposing of, subscribing for or underwriting securities. Nothing in this material shall be considered a making available of, solicitation to buy, an offering for subscription or purchase or an invitation to subscribe for or purchase any securities, or any other product or service, to any person in any jurisdiction where such offer, solicitation, purchase or sale would be unlawful under the laws of Malaysia.

New Zealand—Issued in New Zealand by T. Rowe Price Australia Limited (ABN: 13 620 668 895 and AFSL: 503741), Level 50, Governor Phillip Tower, 1 Farrer Place, Suite 50B, Sydney, NSW 2000, Australia. No Interests are offered to the public. Accordingly, the Interests may not, directly or indirectly, be offered, sold or delivered in New Zealand, nor may any offering document or advertisement in relation to any offer of the Interests be distributed in New Zealand, other than in circumstances where there is no contravention of the Financial Markets Conduct Act 2013.

Philippines—THE STRATEGY AND/ OR ANY SECURITIES ASSOCIATED WITH THE STRATEGY BEING OFFERED OR SOLD HEREIN HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION UNDER THE SECURITIES REGULATION CODE. ANY FUTURE OFFER OR SALE OF THE STRATEGY AND/ OR ANY SECURITIES IS SUBJECT TO REGISTRATION REQUIREMENTS UNDER THE CODE, UNLESS SUCH OFFER OR SALE QUALIFIES AS AN EXEMPT TRANSACTION.

Singapore—Issued in Singapore by T. Rowe Price Singapore Private Ltd., No. 501 Orchard Rd, #10-02 Wheelock Place, Singapore 238880. T. Rowe Price Singapore Private Ltd. is licensed and regulated by the Monetary Authority of Singapore. For Institutional and Accredited Investors only.

South Africa—T. Rowe Price International Ltd ("TRPIL") is an authorised financial services provider under the Financial Advisory and Intermediary Services Act, 2002 (FSP Licence Number 31935), authorised to provide "intermediary services" to South African investors.

Switzerland—Issued in Switzerland by T. Rowe Price (Switzerland) GmbH, Talstrasse 65, 6th Floor, 8001 Zurich, Switzerland. For Qualified Investors only.

Taiwan—This does not provide investment advice or recommendations. Nothing in this material shall be considered a solicitation to buy, or an offer to sell, a security, or any other product or service, to any person in the Republic of China.

Thailand—This material has not been and will not be filed with or approved by the Securities Exchange Commission of Thailand or any other regulatory authority in Thailand. The material is provided solely to "institutional investors" as defined under relevant Thai laws and regulations. No distribution of this material to any member of the public in Thailand is permitted. Nothing in this material shall be considered a provision of service, or a solicitation to buy, or an offer to sell, a security, or any other product or service, to any person where such provision, offer, solicitation, purchase or sale would be unlawful under relevant Thai laws and regulations.

UK—This material is issued and approved by T. Rowe Price International Ltd, 60 Queen Victoria Street, London, EC4N 4TZ which is authorised and regulated by the UK Financial Conduct Authority. For Professional Clients only.

USA—Issued in the USA by T. Rowe Price Associates, Inc., 100 East Pratt Street, Baltimore, MD, 21202, which is regulated by the U.S. Securities and Exchange Commission. For Institutional Investors only.

© 2019 T. Rowe Price. All rights reserved. T. ROWE PRICE, INVEST WITH CONFIDENCE, and the Bighorn Sheep design are, collectively and/or apart, trademarks of T. Rowe Price Group, Inc.