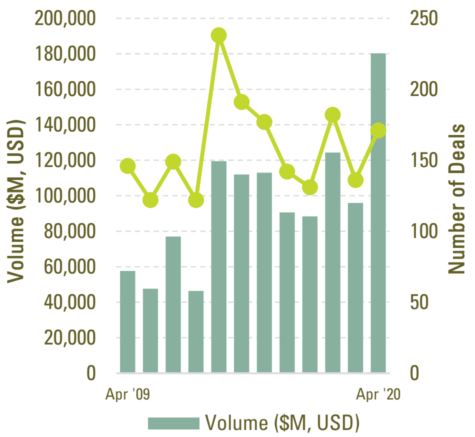
COVID-19 Research Update

Global Fixed Income Themes & Market Conditions

The week of March 23, U.S. investment grade new issuance hit a post-2008 crisis high on a year-over-year basis (see **Figure 1**) after the Federal Reserve (Fed) provided a backstop for high-quality corporate credit. Central bank support for U.S. investment grade credit piqued investor interest in this higher-quality, long-duration alternative to the 10-year U.S. Treasury, which has continued to trade at historically expensive levels, as shown in **Figure 2**.

Figure 1 Year-Over-Year U.S. Investment Grade New Issuance As of 4/21/2020



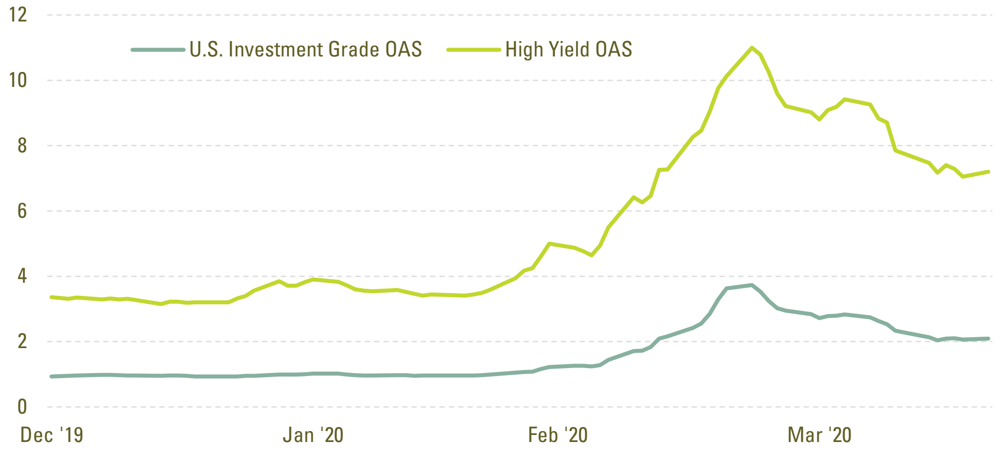
Source: Bloomberg (© 2020, Bloomberg Finance LP)

Figure 2 10-Year Treasury Bond Model
As of 4/21/2020

*Estimation interval: 1998M1 – 2020/03
Source: Brandywine Global

Investment grade option-adjusted spreads have notably contracted over a one-month period due to the combination of investor demand and anticipated Fed purchases, as shown in **Figure 3**.

Figure 3 U.S. Investment Grade and High Yield OAS
As of 4/20/2020



Source: Bloomberg (© 2020, Bloomberg Finance LP)

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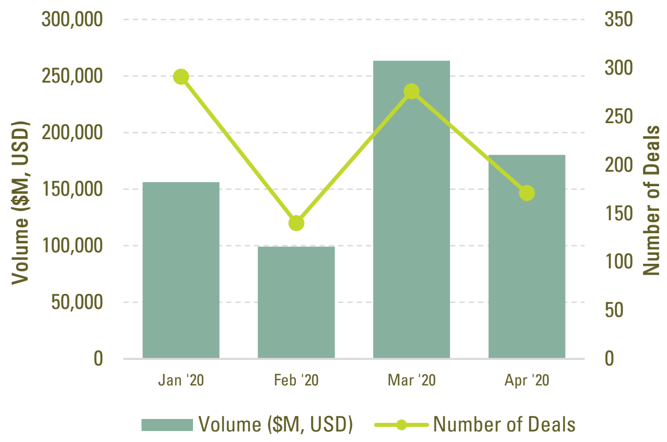
While April 2020 new issuance remained strong on a year-over-year basis, there was a $100B contraction in activity from the month prior (see **Figure 4**).

With investment grade new issuance activity potentially normalizing to pre-pandemic levels, investors may be signaling demand for spread-compression opportunities beyond high-quality corporate debt. While we believe opportunities in high yield and securitized credit will arise over the next 6-12 months, we think select opportunities will continue to present themselves within the investment grade corporate credit universe.

Figure 4 Monthly Rolling U.S. Investment Grade New Issuance
As of 4/21/2020



Source: Bloomberg (© 2020, Bloomberg Finance LP)

Figure 5 shows the top investment grade issuers in April. We believe this is the right mix of investment grade issuers coming to the market. The financials sector is largely comprised of multinational, U.S.-based banks that have been well capitalized since the Great Financial Crisis. Incidentally, the financials sector led March issuance activity, and we purchased several new issues given the value opportunity, strong fundamentals, and clean balance sheets. We will look for these traits on a case-by-case basis when evaluating purchases within investment grade credit. Aside from large financial institutions, we believe that multinationals within industrials exhibit these qualities. We are also interested in companies that stand to benefit from fiscal stimulus packages and the gradual economic recovery, such as names in telecom. Since earnings will be eroded across the board, we believe it is important to buy the bonds of companies that hold significant amounts of cash on their balance sheets so they can weather several months of flat or no revenue. A strong cash position is one of the reasons why we found an attractive select new issuance opportunity within the energy sector, although we are extremely cautious about the industry in general.

Most of the issuers in **Figure 5** fall in line with our investment thesis, although there are more economically sensitive businesses included, such as auto manufacturers. With companies like Ford coming to the new issuance market, some investors are trying to assess the fallen angel opportunities, as this particularly example is on the precipice of high-yield status with its split rating. Since credit ratings downgrades usually occur on a lag, company-specific bond yields have likely priced in this expected change in information.

We believe that companies that are most vulnerable to the shock in oil prices and the pandemic-related economic slowdown will be most susceptible to a credit ratings downgrade. Energy and any cyclically oriented sectors will likely be the most vulnerable. During the first half of 2020, fallen angels' outstanding debt should account for an estimated $300-$350B volume of activity relative to the investment grade index. For the year, the dollar amount could be $650-$700B in total volume or 7%-12% of the index. While this may seem extreme, the projected levels of downgrade activity remain lower when compared to other recent crises as shown in **Figure 6**.

Of note, the datapoints above account for all downgrades within the investment grade index, not just fallen angels. Energy companies are projected to account for 33% of the downgrade activity, either as fallen angels on a notch lower in their investment grade ratings. While fallen angels may offer relative value and additional spread compression opportunities, we plan to avoid picking "winners and losers" within the universe and instead will focus on liquidity and company fundamentals.

Figure 5 Top 10 U.S. Investment Grade Deals in April 2020
As of 4/21/2020

Issuer Name	Total Deal Size by Issuer ($, USD)
T-Mobile USA Inc	$19.0 billion
JPMorgan Chase & Co	$10.0 billion
Exxon Mobil Corp	$9.5 billion
Ford Motor Co	$8.0 billion
Anheuser-Busch InBev Worldwide Inc	$6.0 billion
General Electric Co	$6.0 billion
Petronas Capital Ltd	$6.0 billion
Equinor ASA	$5.0 billion
Broadcom Inc	$4.5 billion
BMW US Capital LLC	$4.0 billion

Source: Bloomberg (© 2020, Bloomberg Finance LP)

Figure 6

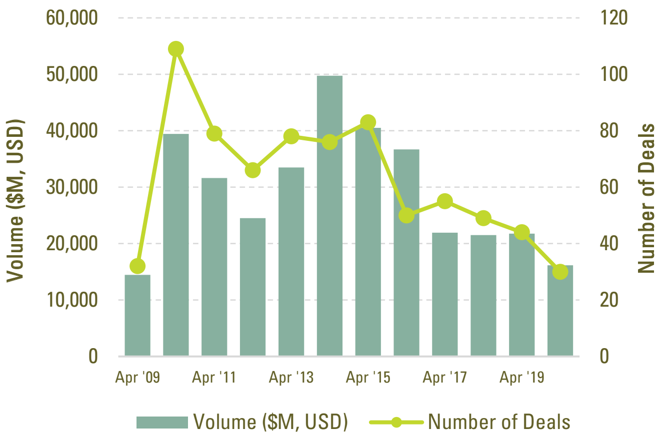
Event	Period	% of Index Downgraded
Great Financial Crisis	2008-2009	30%
European Sovereign Debt Crisis	2011-2012	15%
Energy Crisis	2016	10%

Source: Barclays, Brandywine Global

With liquidity top of mind, we will prudently assess whether we should add any high yield credit exposure to our eligible Global Fixed Income strategies. With borrowing costs expected to rise for lower-quality issuers, we expect traditional metrics like leverage ratios to broadly increase, particularly within the high yield universe. Therefore, it is unsurprising that new deals within the high yield segment have significantly lagged in this challenged environment. **Figure 7** illustrates that current high yield new issuance has remained anchored at the trough seen during the Great Financial Crisis.

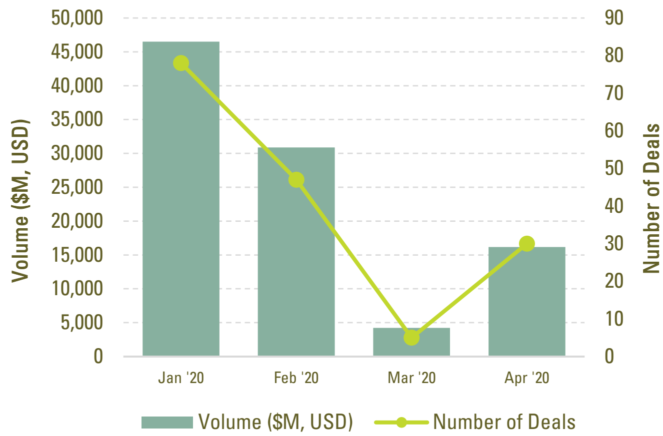
Although high yield issuance hasn't returned to levels seen in the year prior, April activity seems to have rebounded from the lull in March, as shown in **Figure 8**. This revival in activity may suggest that investors may be willing to move down in credit quality for higher-yielding opportunities.

Figure 7 Year-Over-Year U.S. High Yield New Issuance
As of 4/21/2020



Source: Bloomberg (© 2020, Bloomberg Finance LP)

Figure 8 Monthly Rolling U.S. High Yield New Issuance
As of 4/21/2020



Source: Bloomberg (© 2020, Bloomberg Finance LP)

A wide variety of high yield companies are tapping the new issuance market, including defense/aerospace, industrials, energy, consumer discretionary, and healthcare (see **Figure 9**).

While there may be opportunities on a case by case basis, most of these top issuers are economically sensitive and at the mercy of regional or country-specific recoveries. Additionally, the high yield universe is anticipated to grow as fallen angels enter the market, which may alter supply-demand technicals over the next three-12 months.

Figure 9 Top 10 U.S. High Yield Deals in April 2020
As of 4/21/2020

Issuer Name	Total Deal Size by Issuer ($, USD)
TransDigm Inc	$1,500 million
Spirit AeroSystems Inc	$1,200 million
Cedar Fair LP / Canada's Wonderland Co / Magnum Management Corp / Millennium Op	$1,000 million
Hilton Domestic Operating Co Inc	$1,000 million
Cleveland-Cliffs Inc	$955.2 million
Sabre GLBL Inc	$775.0 million
Six Flags Theme Parks Inc	$725.0 million
Ardagh Packaging Finance PLC / Ardagh Holdings USA Inc	$700.0 million
Ferrellgas LP / Ferrellgas Finance Corp	$700.0 million
Tenet Healthcare Corp	$700.0 million

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