OUTCOMES BEYOND PERFORMANCE

SPECTRUM

The path of least disruption: responding to technological change in high-yield credit

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Disruption is changing the face of many industries: electric and autonomous vehicles are threatening traditional car manufacturers, while the penetration of ecommerce is transforming consumer services.

In this issue of *Spectrum*, we explore how a wave of disruptive change has impacted the composition of global equity markets more severely than the high-yield bond market. We also explain the importance of active high-yield allocation to a risk-balanced portfolio in an investment landscape that is increasingly being upended by technological progress and business-model disruptions.

KEY POINTS

1 Disruptive technologies have overhauled the composition of global equity indices in the last decade, but they have had a less pronounced effect on high-yield bonds.

2 The global high-yield index has little exposure to the technology sector: as at September 2018, the weighting to technology was 3.99% compared to 4.18% a decade earlier.

3 As equity and high-yield bond returns de-correlate (reflecting the large proportion of technology companies in equity indices), allocating to an active global high-yield manager, rather than investing passively, will become increasingly important to navigate the threats and opportunities of disruption.

"Disruptive innovation describes a process by which a product or service takes root initially in simple applications at the bottom of a market and then relentlessly moves up market, eventually displacing established competitors."[1]

So said Professor Clayton M Christensen, of Harvard Business School, who coined the phrase disruptive technology in his 1995 paper *Disruptive Technologies: Catching the Wave*[2].

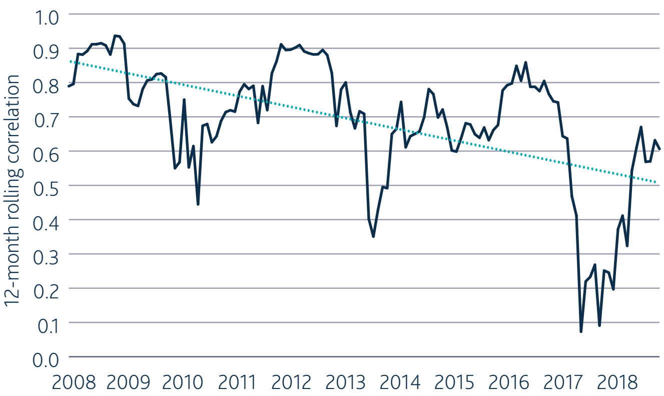
Of course, disruption has been with us long before then. In the 1920s, for example, cars displaced the horse and carriage with the invention of the combustion engine. Today, the pace of technological progress and business-model disruptions is accelerating, displacing market leaders and legacy industries in its wake. The transition from fossil fuels to renewable energy, the emergence of cloud computing, breakthroughs in drug discoveries and the surge of digital advertising and streaming services have transformed traditional industries and supply chains. Indeed, waves of innovative technologies have also overhauled the composition of global equity indices in the last decade, but they have had a less pronounced effect on high-yield bond indices. This underscores the importance of active allocation to high-yield credit, as we will discover during this issue of *Spectrum*.

DE-CORRELATED: STOCKS VS HIGH-YIELD BONDS

The correlation between movements in stock-market returns and high-yield bond returns is an important input for portfolio asset allocation decisions.

Historically, there has been a dependable correlation between equities and high-yield bond markets, but this has changed in the last decade: since 2008, the relationship between the two asset classes has become less correlated (see figure 1). Indeed, the downward trending correlation between the S&P 500 and the global high-yield index has been particularly pronounced in the last two years, reflecting the narrow leadership of the US stock market, which has been dominated by technology disrupters, most notably the FAANGs – Facebook, Amazon, Apple, Netflix, and Google, now Alphabet.

Figure 1. De-correlated: stock-bond market correlation has trended downward since 2008
The 12-month rolling correlation between the global high-yield market and the S&P500 index



Source: Bloomberg as at November 2018.

It's not just the S&P500 index, however. Disruptive forces – caused by a powerful combination of technology innovation, changing consumer preferences and evolving business models – have transformed the composition of equity markets globally. For example, in the past decade, industry heavyweights have been jettisoned on the MSCI World Index: Procter & Gamble, the 181-year old US consumer goods bellwether, has made way for Facebook, which was only founded in 2004, in the top 10 index constituent listings (see Figure 2). However, Microsoft has surfed the wave of innovation in the past decade: it still clings to its position as a top-10 index constituent, while energy giant Exxon Mobil has slipped from the top spot to eighth-largest company in the index.

[1] "Disruptive Innovation," published by Clayton Christensen http://www.claytonchristensen.com/key-concepts/
[2] "Disruptive Technologies: Catching the Wave," by Joseph L Bower and Clayton M Christensen, published by the Harvard Business Review in January 1995.

Figure 2: The composition of global equities and the high-yield bond market (2008 vs 2018)

TOP 10 CONSTITUENTS (BY WEIGHTING)

Select an index and year to see how things have changed over the past decade;

THE MSCI WORLD INDEX	THE GLOBAL HIGH-YIELD INDEX
2008	2018

2nd
Sprint Corporation
Telecommunications

1st
Ford Motor
Automotive

3rd
GMAC
Automotive

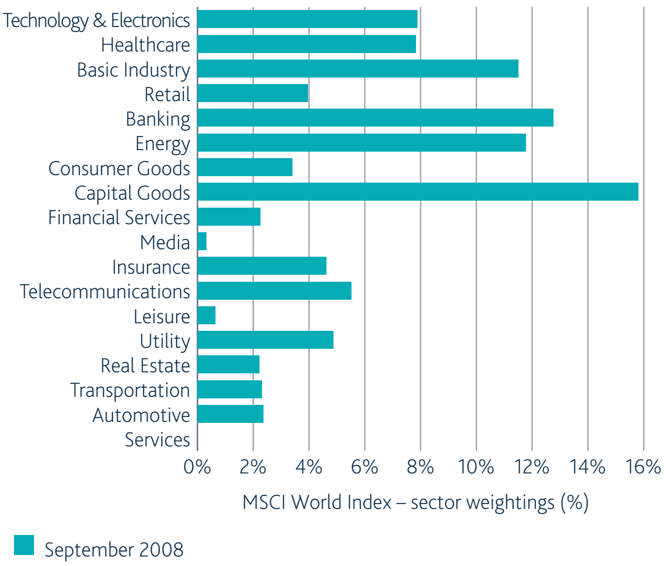
	Company	Sector
4.	TXU Energy	Utility
5.	HCA	Healthcare
6.	El Paso Natural Gas	Energy
7.	CCO Holdings	Media
8.	Chesapeake Energy	Energy
9.	General Motors	Automotive
10.	Intelsat	Telecommunications

Select a year to see how things have changed over the past decade;

2008 2018

At industry level, the changing composition of the MSCI World Index is also evident. Today, the technology and electronics sector represents more than 14% of the index (see Figure 3) – that's almost double the sector's weighting in 2008. What's more, the healthcare sector accounts for almost 13% of the index – up from just under 8% 10 years ago. Meanwhile, two sectors – namely energy and capital goods – now constitute less of the index than they did in 2008.

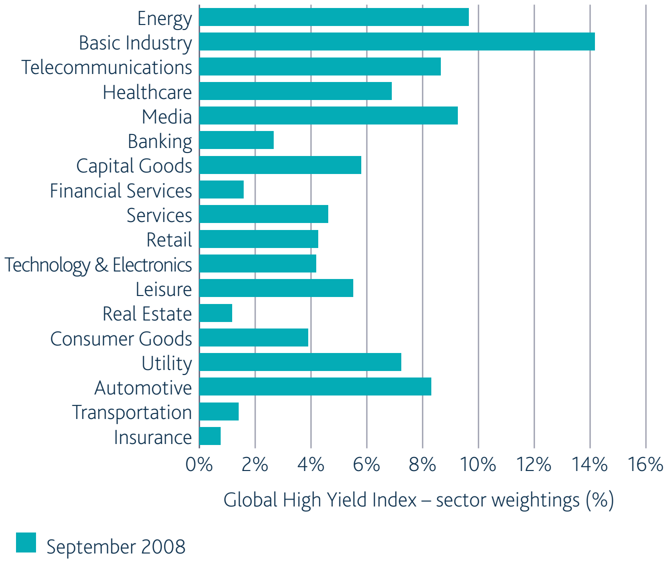
Figure 3. Disrupted: the composition of the MSCI World Index has changed dramatically since 2008



Source: Bloomberg as at September 2018.

Conversely, some of the biggest credit issuers on the global high-yield index in 2008 still occupy their place among the top 10 index constituents today (see Figure 2). Interestingly, other credit issuers that currently feature among the top 10 index constituents have been downgraded from investment grade status, including Petrobras and Teva Pharmaceuticals. And although these companies lost their investment-grade ratings for their own idiosyncratic reasons, they operate in industries that are less exposed to disruption.

Figure 4. Technology accounts for less than 4% of the Global High Yield Index



Source: Bloomberg as at September 2018.

In addition, the composition of the global high-yield index has experienced little change over the same period (see Figure 4). There has been a small rotation from basic industry to energy in the high-yield index, but with a weighting of just under 4% today, the size of the technology and electronics sector is broadly unchanged compared to 2008 (when it represented 4.18% of the index).

It is therefore evident that the global high-yield Index has little exposure to the technology sector. But that's not to say the global high-yield index has been immune to disruption, some sectors have been exposed to technological innovation and business-model disruptions.

DISRUPT OR BE DISRUPTED: THE AUTO SECTOR

One such example is the autos sector. There are the two main technological threats to traditional automotive manufacturers: electric vehicles (EVs) and autonomous cars. And today, nearly every major car manufacturer is committing to EV investments. However, some companies, such as Ford, have lagged behind their peers for some time despite the emergence of disruptive technologies.

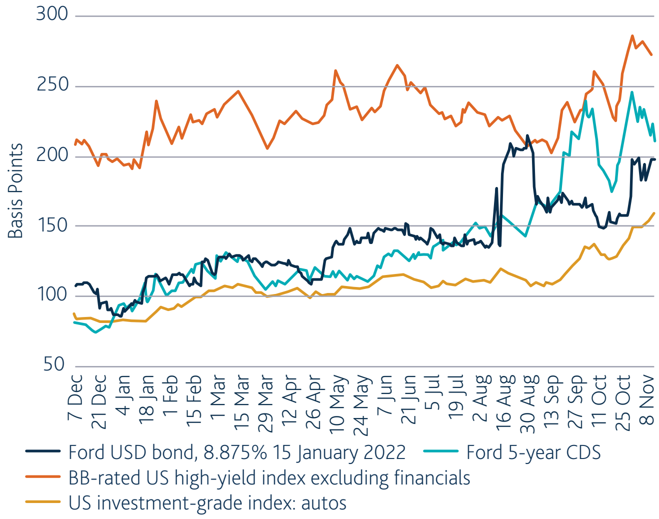
Ford had a limited focus on mega trends impacting the automotive industry until Jim Hackett took the helm as new chief executive in 2017. Since then, there have been some EV-related investment announcements. In January 2018, the group announced plans to accelerate its planned investments in electric vehicles from $4.5bn to $11bn by 2022 and have 40 hybrid and fully electric vehicles in its model line-up at the Detroit auto show.[3] That compares to rival General Motors – a company that has invested heavily in EVs since 2007. General Motors boasts an advanced EV strategy, launching the Chevrolet Volt plug-in hybrid in 2010 and one of the first mass-market EVs, the all-electric Chevrolet Bolt, in 2016 (compared to product offerings by Tesla, which target the premium EV segment).

But to catch-up – and compete – with disrupters, Ford will need to explore partnerships with other car manufacturers. In June 2018, Ford and Volkswagen signed a memorandum of understanding to explore a strategic alliance that improves their competitiveness. According to recent media reports, the two companies have been exploring a partnership on autonomous vehicles as part of the talks that began earlier this year. And last month, Bryan Salesky, the chief executive of Argo AI, Ford's self-driving car unit, said that the company is talking to other potential customers and OEMs (original equipment manufacturers which make cars).[4] Meanwhile, at an event in Miami last month, Sherif Marakby, chief executive of Ford Autonomous Vehicles told a media outlet that collaborating with rivals and sharing technology "makes total sense",[5] suggesting it needs support to compete in the EV and autonomous car space.

In addition to disruptive forces, the adverse impact from the introduction of new car-emissions rules in the eurozone is weighing on the group's performance alongside a lacklustre performance in its European operations. What's more, Ford has a low market share in China, the largest autos market in the world. Ford also announced that it is embarking on a costly restructuring earlier this year, but so far the company's plans lack detail.[6]

Today, Ford CDS, which has previously underperformed the US investment-grade auto index, is trading above 200 basis points (see Figure 5) – that's more in-line with BB credit issuers. This shows that by allocating to an active global high-yield manager rather than investing passively, investors can navigate the threats and opportunities that disruption poses, such as those faced by Ford and General Motors, and identify outperforming securities.

Figure 5. Ford is now trading in-line with BB credit issuers



Source: Bloomberg as at November 2018.

TECHNOLOGY SECTOR DISRUPTION: WINNERS AND LOSERS IN CREDIT

DELL: SURFING THE WAVE OF TECHNOLOGY DISRUPTION

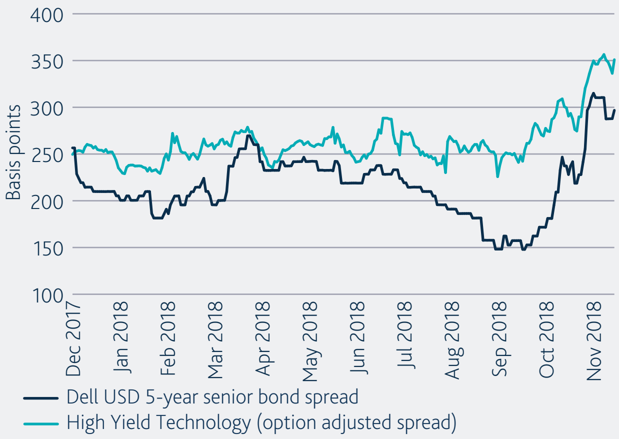
Although the weighting of the technology sector is little changed compared to 2008, some technology-focused credit issuers have fared better than others during this period of technological innovation. Active global high-yield managers can exploit the so-called winners of disruption, by actively allocating to these credit issuers, whereas passive investors will be exposed to both the winners and losers.

For example, tech giant Dell has been impacted by stalling PC sales and longer replacement cycles due to the emergence of smartphones and tablets. But thanks to its scale and ability to compete on costs, Dell has gobbled market share from smaller competitors, helping it grow and generate robust cash flow in a challenging market.

To further mitigate the impact of disruption, Dell diversified its business into servers, memory and software through its acquisition of EMC in September 2016. While the EMC acquisition led to increased leverage, the company has been paying down debt and attempted to return to public equity markets early this year. In turn, this has helped Dell's senior debt outperform the high-yield technology sector this year.

[3] "Ford plans $11bn investment, 40 electrified vehicles by 2022," published by Reuters on 14 January 2018.
[4] "Ford in talks with multiple rivals to secure 'billions of dollars' to develop driverless cars," published by The Telegraph on 15 November 2018.
[5] "Ford in talks with multiple rivals to secure 'billions of dollars' to develop driverless cars," published by The Telegraph on 15 November 2018.
[6] "Ford CEO says restructuring is a 'massive undertaking' that must be 'very thoughtfully orchestrated'" published by CNBC on 24 October 2018.

Figure 6. Dell has outperformed the high-yield technology sector in 2018

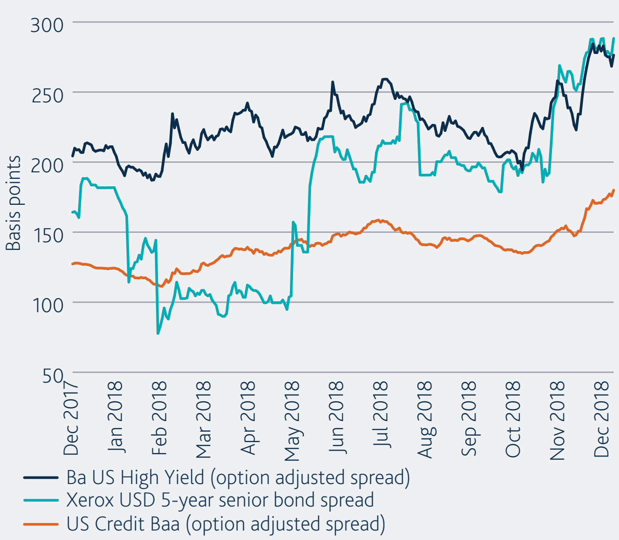


Source: Barclays as at December 2018.

XEROX: TEETERING ON JUNK

Conversely, US printer and photocopier maker Xerox has managed disruption less effectively than Dell as intense competition and secular pressures industry-wide weighed on the business. And despite holding a series of major product launches in 2017, Xerox has reported seven consecutive quarters of year-on-year revenue declines on a constant currency basis. In May 2018, Jeff Jacobson, the main architect of a proposed $6.1bn sale to Fujifilm (which was later scrapped), was ousted as chief executive and the company struck a deal with two of its largest shareholders who fought to block the sale. The new management team must now focus their efforts on reversing the slide in revenues by gaining market share or adding growth businesses to the company's offerings. If it fails to do so, Xerox's relatively healthy credit metrics (~10% free cash flow-to-debt and ~2.3x net leverage) may come under pressure. Already, credit-rating agency Moody's has placed the company's investment-grade credit rating under review for possible downgrade to high-yield status. It will announce its credit rating decision in the coming weeks. What's more, the credit issuer is trading in-line with the high-yield bond market.

Figure 7. Xerox is trading like a high-yield credit issuer



Source: Barclays as at December 2018.

WITHSTANDING DISRUPTION: HOMEBUILDERS REMAIN ON SOLID FOUNDATIONS

Other sectors, however, are less vulnerable to industry disruption and active global high-yield managers can choose to allocate to these sectors. Homebuilders – and the construction sector at large – have stubbornly resisted disruption, employing techniques and materials that are rooted in decades of tradition. Importantly, there are a number of fundamental hurdles that the industry would need to overcome to transform itself, which makes wide-sweeping disruption unlikely in the homebuilding sector.

First, building codes and regulations, which specify the minimum standards for the construction of buildings and are generally country-specific, must be adhered to by companies operating in the sector. They would also apply to any industry innovations, which poses a challenge to technological disruption.

Moreover, to innovate, companies would incur large upfront costs to invest in meaningful automation. In a low margin industry, there have been limited incentives to invest heavily in new technologies sector-wide, so far. In addition, new custom-built homes add a further challenge.

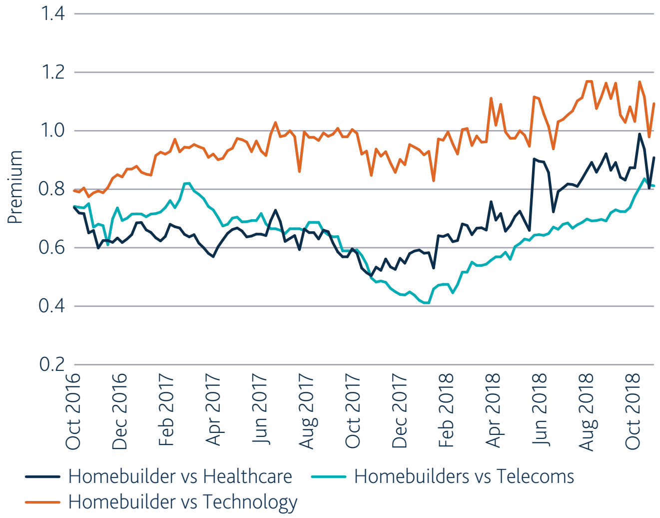
Health and safety is also a concern, as construction necessitates the use of heavy machinery. The homebuilding market, particularly in the US, is extremely fragmented, and in the past, changes have been slow to be adapted at scale.

We believe that any technological advances in the industry will be small, such as remote site monitoring, limited robotics automation to help builders dealing with a tight labour supply and smart homes or materials, which could be used by existing players in the sector. Technology could also be used to manage project workflows. But for the most part, we believe that unlike traditional industries, where technological progress and business-model disruption threatens their future, homebuilders are less vulnerable to disruption. We therefore believe that there should be a premium attached to sectors, such as homebuilders, that are less exposed to such structural change.

CAPTURING VALUE FROM DISRUPTION

Interestingly, a trend is emerging in the high-yield bond market: in recent years, sectors that are less susceptible to disruption have been trading at a premium to disrupted sectors. This has become particularly pronounced in the past 24 months as demonstrated by Figure 8 – the period during which the correlation between stock market returns and high-yield bond returns fell sharply. For example, in October, homebuilders were trading at a premium of 1.09x compared to the technology sector and 0.91x to the healthcare sector. Indeed, this reflects the significance of allocating to an active global high-yield manager rather than passively investing, as they can navigate an investment landscape upended by rapid technology innovation – and importantly, select credit issuers that are benefiting from disruption or immune to it.

Figure 8. Disrupted vs non-disrupted sectors: high-yield bond returns (premium)



Source: Bloomberg as at November 2018.

A DISRUPTED FUTURE?

The rate of technological change is faster now than it's been in the past – and as innovative technologies continue to emerge, the rate of disruptive transformation will be much faster in the future than it is today.

As technology-backed companies continue to disrupt market leaders and legacy industries, the technology sector will continue to represent a large proportion of equity indices. In turn, we expect that the correlation between equity returns and high-yield bond returns will continue to decrease, providing value from an allocator's perspective: with some sectors less susceptible to disruption than others, it is becoming increasingly important to actively allocate high-yield bonds to a diversified portfolio. Moreover, rather than investing passively, allocating to an active global high-yield manager is also essential to navigate the risks and opportunities posed by disruption. That way, investors can control their exposure to both disruptors and the disrupted.

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