

Corporate & Financial Credit Trends in Bank-Sourced Data 2016-2018

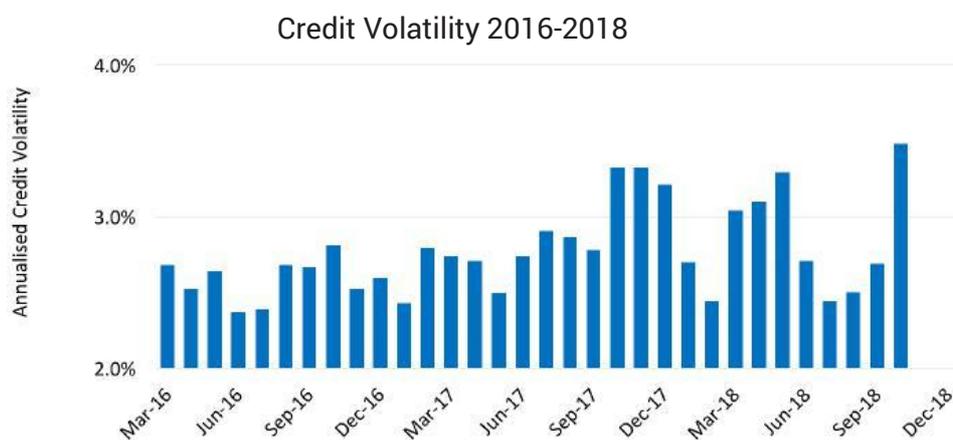
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Introduction

2018 has been a year of growing concerns about trade wars and supply chain disruption. Major technology stocks dropped into bear market territory just weeks after making record highs, while the sharp Q4 decline in oil prices surprised many investors. Interest rates trended higher across the maturity curve for most of the year but US 10-year Government yields have recently dropped sharply. Credit spreads have expanded while rising equity market volatility has been reflected in frequent spikes in the VIX.

This report uses bank-sourced credit data and shows that, in some industries, the fundamental credit view has been changing for a year or more; some of those movements have only recently been reflected in markets. The overall conclusion is one of increasing credit volatility. As the chart below shows, successive waves have taken credit volatility to progressively higher levels.

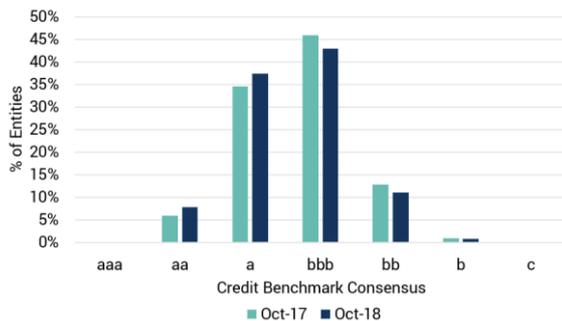


Executive Summary:

1. **USA, Inc.:** The Republican administration has been credit-positive for most US financials and corporates, but Silicon Valley companies have been downgraded.
2. **Brexit:** Uncertainty appears to have been negative for most UK industries, although UK Banks have seen less impact. During this period of uncertainty, EU ex UK industries show some very divergent trends.
3. **Globals:** The Oil credit recovery may have run its course, but Airlines continue to improve.
4. **Sovereigns:** Trade wars and geopolitical tensions has been negative for Emerging and Frontier Sovereigns; Developed Sovereigns have seen little impact.
5. **Credit Volatility:** This has trended higher with a series of increasing peaks.

Types of chart used in this report:

Credit Distribution Chart

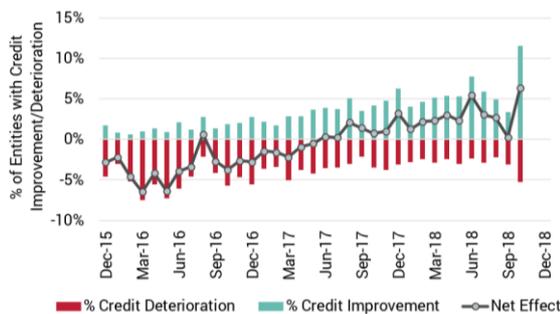


These show the distribution of credit estimates for a chosen group of borrowers shown as percentages across seven credit categories (**aaa**, **aa**, **a**, **bbb**, **bb**, **b**, and **c**).

Blue bars show the position now and green bars show one year ago. If blue bars on the left are above the green bars, and those on the right below, credit has generally improved.

These distributions usually show an approximate bell shape, with the largest credit exposures typically in the **bbb** or **bb** categories.

Upgrade/Downgrade Chart



These show the pattern of monthly upgrades and downgrades. Green bars show the percentage of borrowers where credit has improved by at least 0.25 of one of the 21-category credit notches in that month. Red bars show the percentage that have declined.

The black line shows the net effect. If the black line is above the midline it can provide an advance indication that average credit is improving; if it is below then average credit is likely to deteriorate. Months where there are large numbers of both upgrades and downgrades may reflect major credit model recalibrations.

Credit Risk Indicator Trends Chart



The Credit Risk Indicator (“CRI”) shows the cumulative change in average credit risk since the date shown at the far left of the x-axis. A rising line indicates that credit is improving; if it is above the zero bar then there has been a cumulative improvement since the start date.

The CRI is based on average default risk for a series of quarterly baskets of borrowers. These are chain linked to provide a single, rebased series. This allows easy comparisons of credit risk trends for multiple sectors even if those sectors have very different initial average credit risk levels.

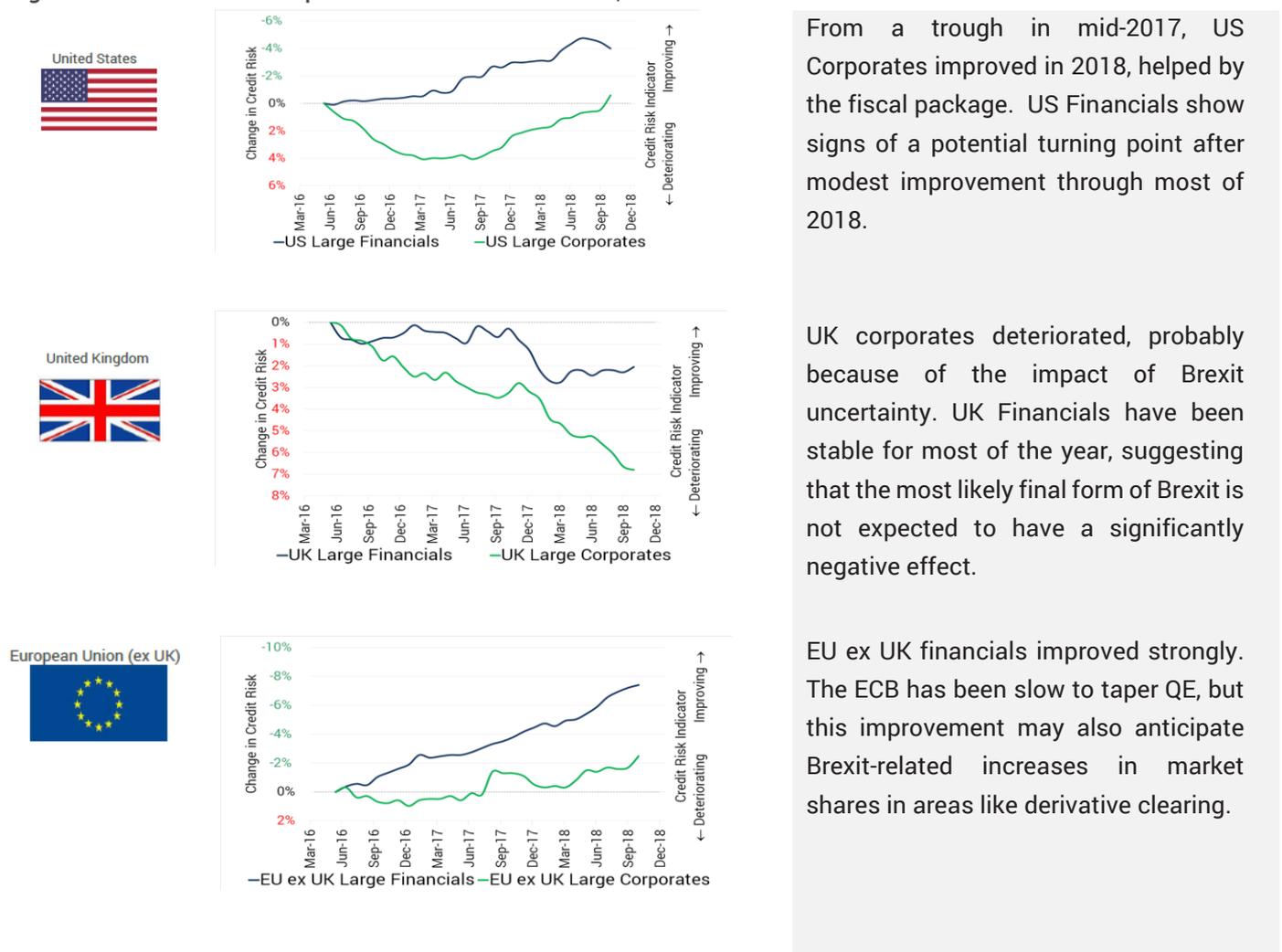
Financials vs. Corporates

US Investment Grade credit spreads have moved from a low of 0.9% in early 2018 to 1.30% currently.* With interest rates rising and scope for expansion in credit spreads, there have been a number of media stories about the US Corporate bond **BBB** debt “time bomb”. Compared with the credit distribution of bank loans, there does appear to be an unusually high proportion of **BBB** bonds compared with other US categories; but the unusually high proportion of companies in the **B** category that do not appear to issue bonds or use bank finance[†] suggests that any looming credit problem could be most acute in the non-investment grade categories.

Trade issues in 2018 highlighted the risk of supply chain disruptions. With the prospect of US tariffs and a hard departure by the UK from the EU, a number of multinational companies have already relocated production. Analysis by Credit Benchmark[‡] suggests that the UK is critical in a number of sector supply chains. The same paper showed significant differences in the credit profiles of major corporate supply chains.

Figure 1 shows credit trends for the US, UK and EU ex UK.

Figure 1: Financials vs. Corporates: credit trends for US, UK and EU ex UK.



From a trough in mid-2017, US Corporates improved in 2018, helped by the fiscal package. US Financials show signs of a potential turning point after modest improvement through most of 2018.

UK corporates deteriorated, probably because of the impact of Brexit uncertainty. UK Financials have been stable for most of the year, suggesting that the most likely final form of Brexit is not expected to have a significantly negative effect.

EU ex UK financials improved strongly. The ECB has been slow to taper QE, but this improvement may also anticipate Brexit-related increases in market shares in areas like derivative clearing.

*Bloomberg Barclays Indices

[†]Contact Credit Benchmark for details – research note on this will be published in January 2019.

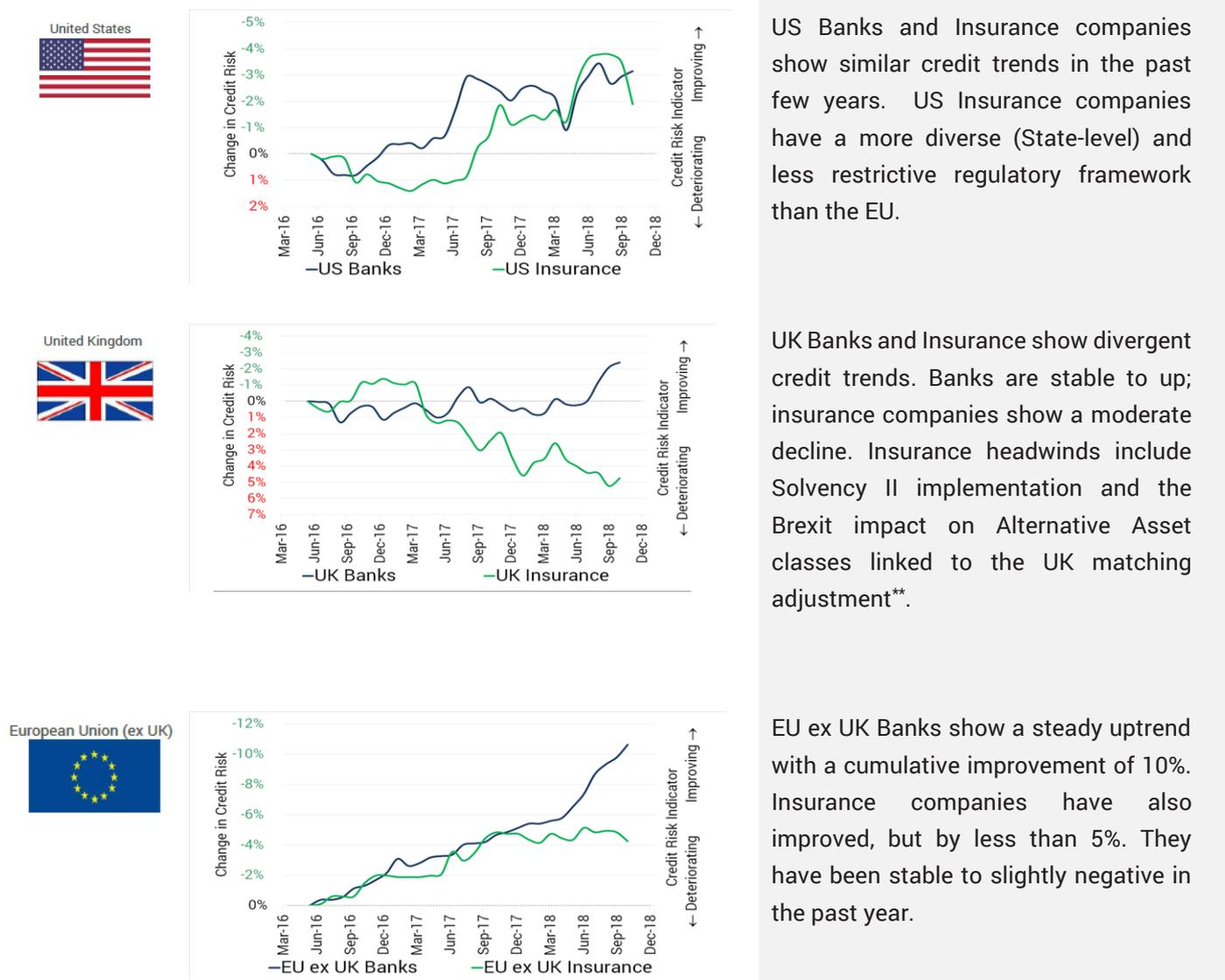
[‡]<https://www.creditbenchmark.com/supply-chain-credit-risk/>

Financials

Financials have had a mixed year. Banks have been preparing to implement the Basel 2017 rules[§] and European banks have rolled out IFRS9 reporting. US banks are now gearing up for the equivalent CECL rules. The Dodd-Frank repeal was positive for US banks.

Insurance companies face mixed fortunes. Moody's have a neutral outlook for the global life sector, while Fitch are negative on UK general insurers mainly because of competition, while climate driven losses will be negative for the global general insurance industry. Business insurance (including litigation) is more positive.

Figure 2: Financials (Banks vs. Insurance): credit trends for US, UK and EU ex UK.



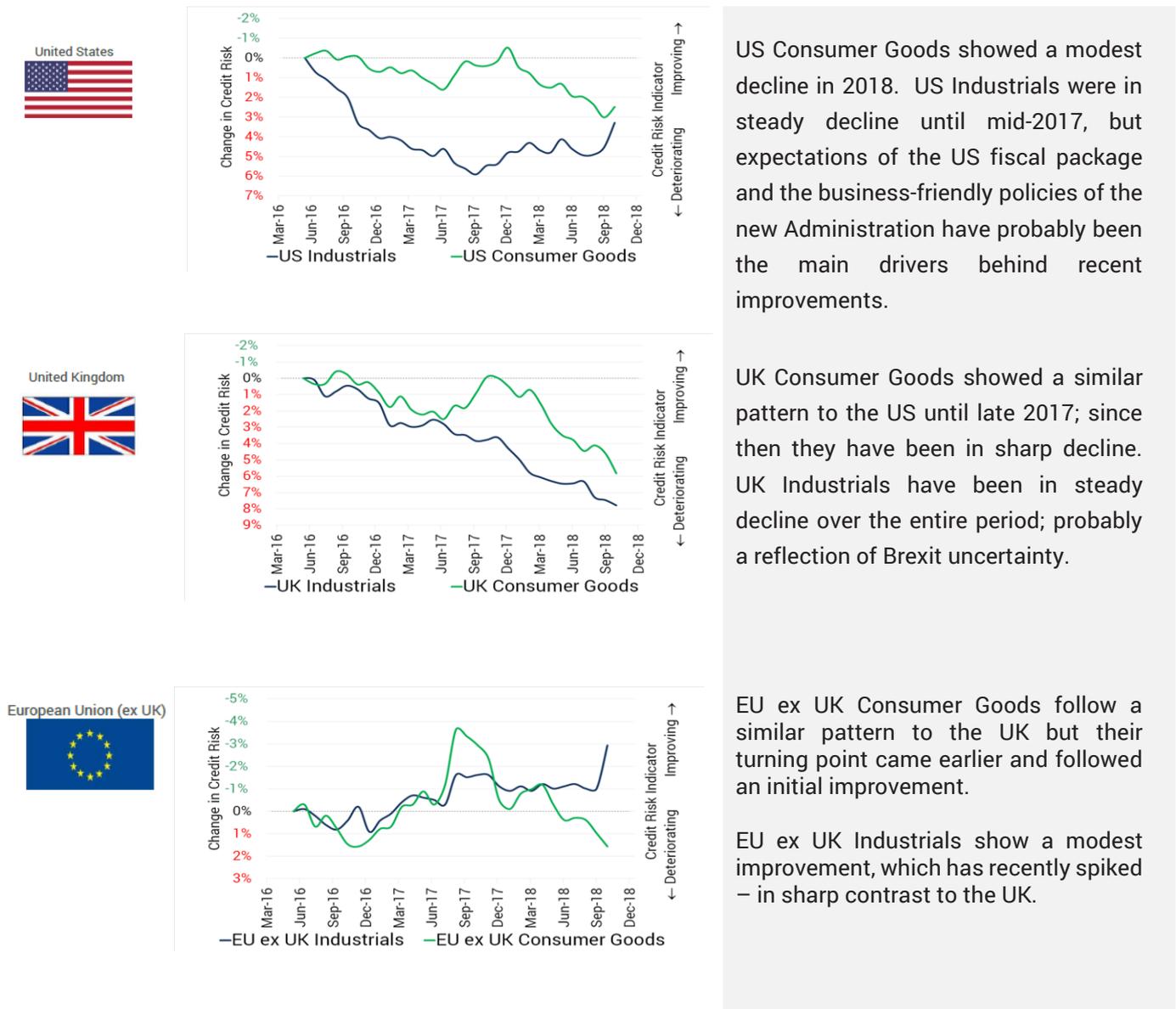
[§] https://www.creditbenchmark.com/wholesale_credit_regulations_an_uneven_playing_field_for_all/

** Contact Credit Benchmark for a copy of research paper "Housing Associations".

Corporates: Industrials vs. Consumer Goods

Consumer Goods face sustained challenges, and these are particularly acute in the Retail sector.^{††} Major consumer-related bankruptcies and Chapter 11 filings include Sears, Toys R Us, Remington, Claire’s, Bertucci’s, Kiko, Brookstone and SouthEastern Grocers. Industrials have seen some major agency downgrades include GE, PG&E and Tata Motors.

Figure 3: Corporates: Industrial vs. Consumer: credit trends for US, UK and EU ex UK.



US Consumer Goods showed a modest decline in 2018. US Industrials were in steady decline until mid-2017, but expectations of the US fiscal package and the business-friendly policies of the new Administration have probably been the main drivers behind recent improvements.

UK Consumer Goods showed a similar pattern to the US until late 2017; since then they have been in sharp decline. UK Industrials have been in steady decline over the entire period; probably a reflection of Brexit uncertainty.

EU ex UK Consumer Goods follow a similar pattern to the UK but their turning point came earlier and followed an initial improvement.

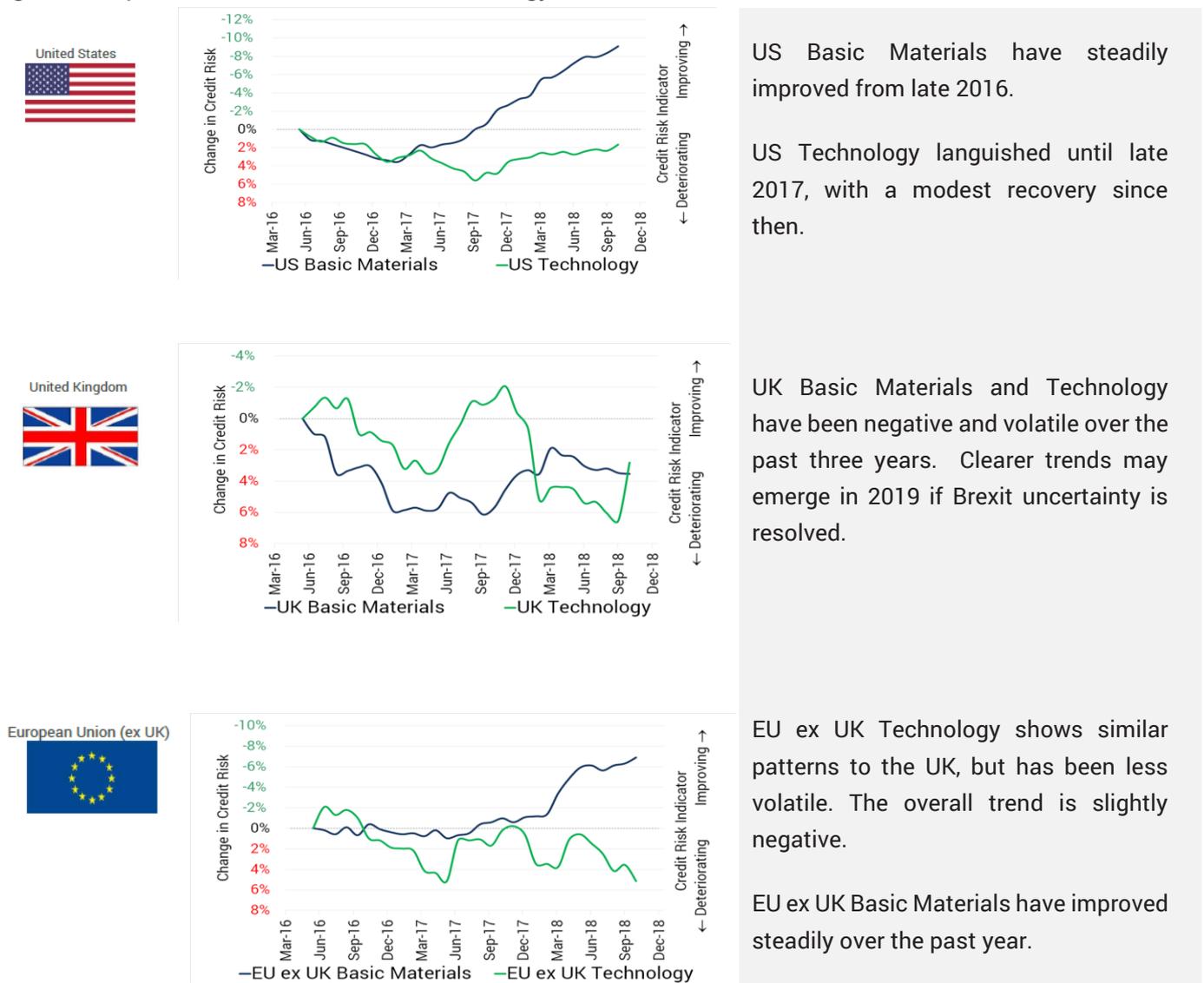
EU ex UK Industrials show a modest improvement, which has recently spiked – in sharp contrast to the UK.

^{††}<https://www.creditbenchmark.com/us-retail-sector-credit-trends/>

Corporates: Basic Materials and Technology

Representing the first stage of the supply chain, Basic Materials can be seen as a barometer for general economic activity and capital investment in particular. Public and market perception of “Technology” tends to focus on the consumer-led FAANG^{##} giants, but technology is involved in various forms across the supply chain. For this reason, technology is more sensitive to trade-related supply chain disruption (as OEMs switch sources) whereas basic materials are usually difficult to substitute. Any tariffs on basic materials are likely to be passed on as higher prices.

Figure 4: Corporates - Basic Materials vs. Technology: credit trends for US, UK and EU ex UK.



US Basic Materials have steadily improved from late 2016.

US Technology languished until late 2017, with a modest recovery since then.

UK Basic Materials and Technology have been negative and volatile over the past three years. Clearer trends may emerge in 2019 if Brexit uncertainty is resolved.

EU ex UK Technology shows similar patterns to the UK, but has been less volatile. The overall trend is slightly negative.

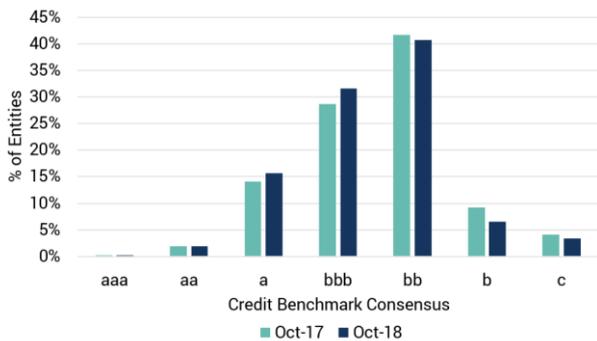
EU ex UK Basic Materials have improved steadily over the past year.

^{##} Facebook, Apple, Amazon, Netflix and Google

Corporates: Global Oil & Gas

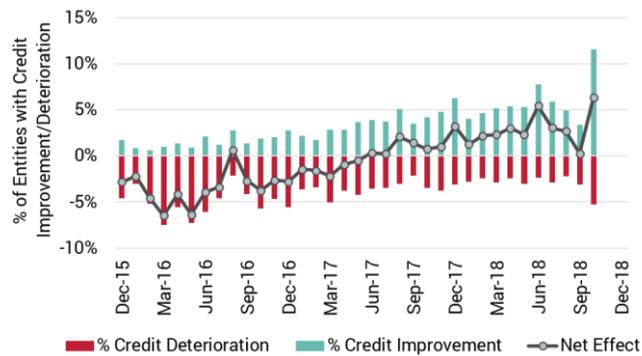
Figure 5: Global Corporates – Oil & Gas

Credit Distribution



The credit distribution of Global Oil & Gas companies shows a modest improvement – the proportion of companies in **a** and **bbb** categories has increased and the proportion in each of the non-investment grade categories – **bb**, **b** and **c** – has dropped.

Upgrades vs. Downgrades



The balance of upgrades and downgrades shows a sustained improvement over the past two years, although it has become more volatile in recent months.

The net effect of changes in credit views was negative in early 2016, but moved closer to zero in early 2017 and has been positive ever since. This increase occurred well in advance of the improvement in average credit risk shown below.

Credit Trends



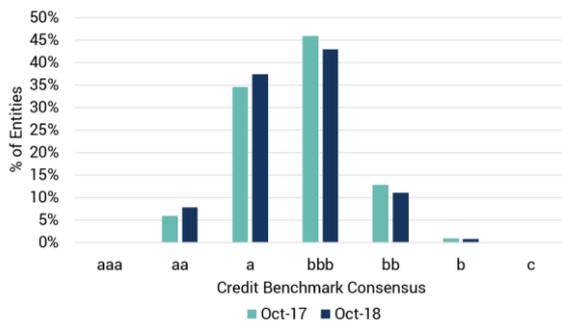
Credit deteriorated sharply in 2016, with a decline of more than 20% during the year. It began to recover in 2017 and has recovered about 15% of the cumulative decline.

The outlook for 2019 depends on the oil price, but the increasing volatility in the upgrade/downgrade chart may indicate that the recent improving trend is coming to an end.

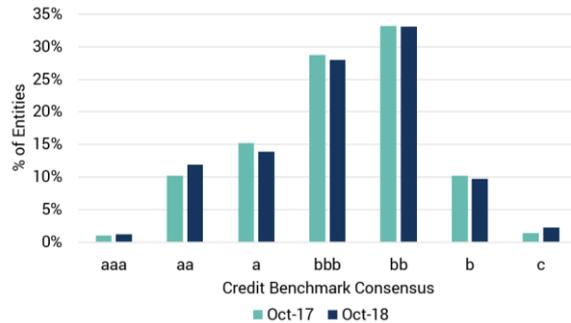
Main St. vs. Silicon Valley

Figure 6: Corporates – Main Street vs. Silicon Valley

Credit Distributions: Main St

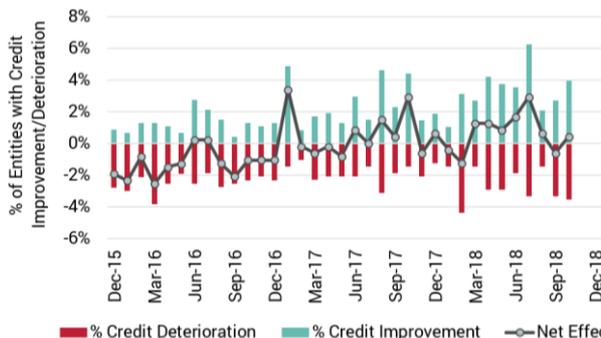


Credit Distributions: Silicon Valley

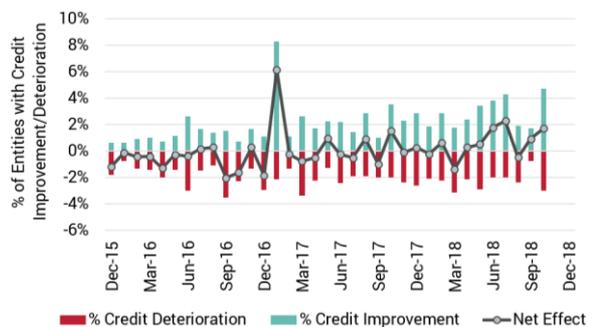


“Main Street” (largest 500) borrowers are mainly rated **bbb** or **a**, and proportions in categories **aa** and **a** have recently increased. “Silicon Valley” (1000 NASDAQ-listed companies) is dominated by **bbb** and **bb** categories. Tail category proportions – **aaa** and **c** – have recently increased, suggesting some divergent credit trends.

Upgrades vs. Downgrades: Main St



Upgrades vs. Downgrades: Silicon Valley



The balance of upgrades vs. downgrades has been neutral to positive for both sets of companies over the past few years, with the Main Street companies showing a slightly higher proportion of upgrades.

Credit Trends: Main St



Credit Trends: Silicon Valley



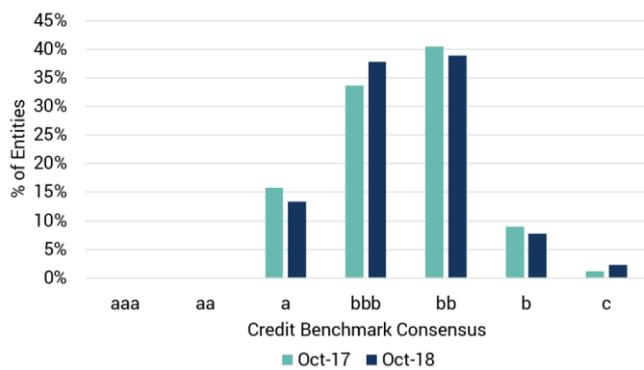
Main Street deteriorated in 2016 but have now recovered nearly all of their losses. Silicon Valley also declined in 2016 recovery has been limited by commercial and regulatory issues.

Corporates: Global Airlines

Global airlines are expected to post a 10th consecutive year of profits in 2019^{SS}, which would be an all-time record for the sector. This is despite a steady toll of bankruptcies (Primera Air, Cobalt Air), strikes (Ryanair) and restructurings / takeovers (FlyBe). Sector consolidation is likely to be positive for margins.

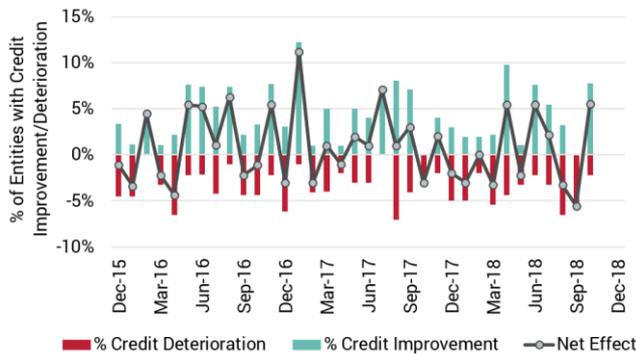
Figure 7: Global Corporates – Airlines

Credit Distribution



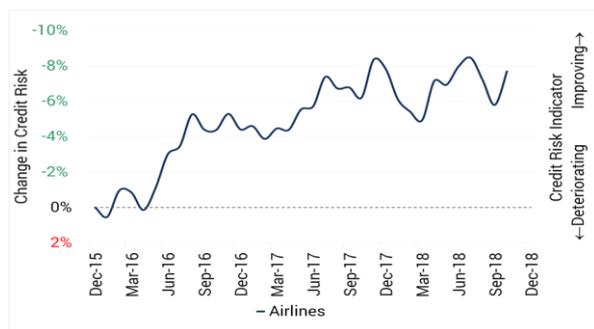
The distribution of credit ratings for global airlines shows an increase in the proportion of **bbb** ratings with slight drops in most of the other categories. The exception is the **c** category, which also shows a slight increase.

Upgrades vs. Downgrades



Global airlines have typically had more upgrades than downgrades but there have been some very volatile phases with sudden spikes in downgrades. This may reflect the changes underway in the airline industry where struggling smaller companies cause bouts of credit nerves before being snapped up by the majors.

Credit Trends



Since the beginning of 2016, global airlines have seen a fairly steady credit improvement. The cumulative change currently shows a 7% reduction in credit risk. If oil prices remain soft and sector consolidation persists, this trend could continue.

^{SS} <https://www.rmahq.org/credit-risk-in-the-airlines-sector/>

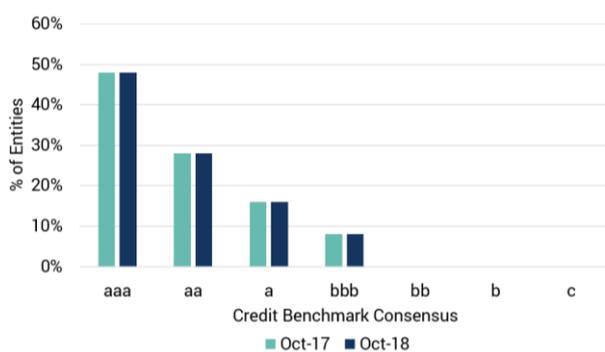
Sovereigns

Despite some major economic and political events in 2018, the credit status of the G8 Sovereigns is largely unchanged. Italy was downgraded by Moody’s due in part to the budget stand-off with the EU, and major agencies warn of risk to the UK rating in the event of a no-deal Brexit. But political dramas in Germany and France show no significant impact, and the US has confounded the pessimists and kept its rating largely intact. The exception is Dagong, the Chinese agency, who downgraded the US from **A-** to **BBB+** at the beginning of the year. Trade issues – sanctions on Russia and tariffs on China – have affected company stock prices, but the Sovereign ratings for these two countries have been stable. Canada has NAFTA-related tensions with the US, but the Government rating is still solid. Japan’s debt remains staggeringly high but rating agencies (and investors) seem to be unconcerned.

However, trade disputes and geopolitical tensions have taken their toll on a number of Emerging and Frontier Sovereign ratings. Turkey, South Africa, Argentina, Zambia, Chile, and Brazil were all downgraded by at least one agency during the year.

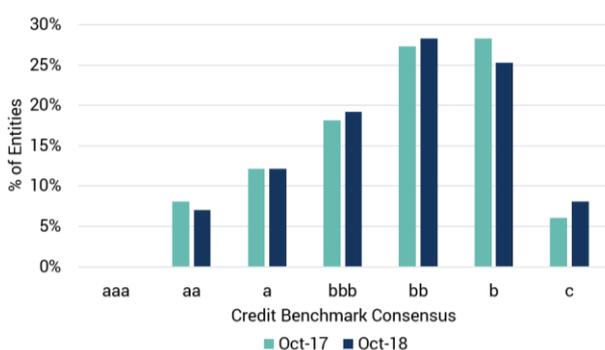
Figure 8: Sovereigns

Sovereigns: Developed Economies



The chart is based on 25 Developed Economy Sovereign ratings and shows no change in the bank-sourced credit distribution over the past year. All countries in the sample are classed as investment grade, and the majority are **aaa**.

Sovereigns: Emerging / Frontier Economies

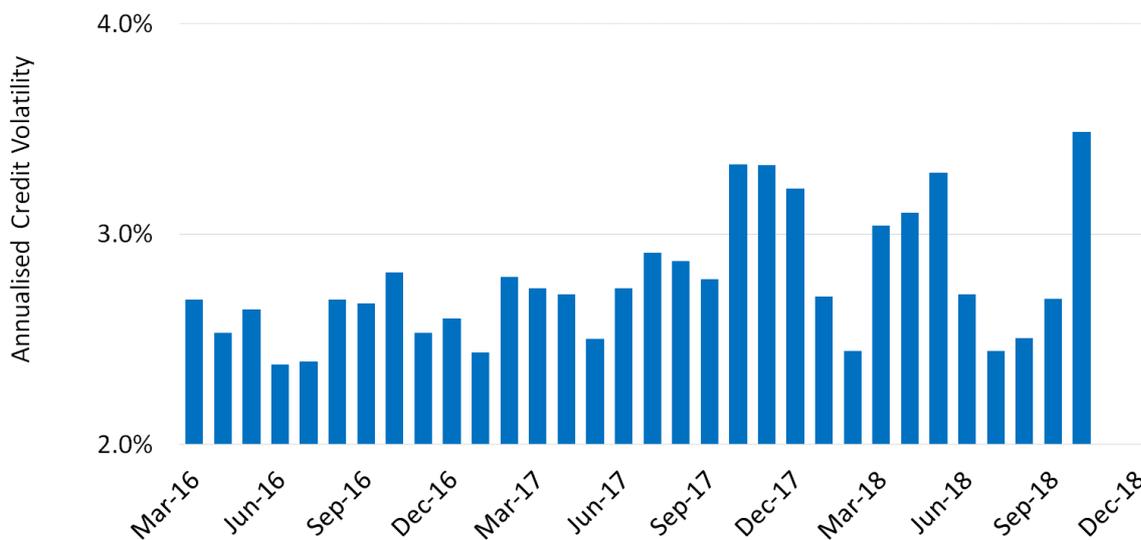


The chart is based on 98 Emerging and Frontier Economy Sovereign ratings and shows that there have been cross-currents. The proportions in category **aa** and **bbb** have dropped, but so has the proportion in **b**. The proportions in **bb** and **c** have increased.

Credit Volatility

Volatility in credit risk *estimates* is one component of the volatility in credit *spreads*. Spread volatility tends to be higher because it also includes a set of risk premiums^{***}. While the equity VIX is directly based on forward looking option volatilities, credit volatilities are derived from forward looking default risk estimates; but the two metrics are very similar and are useful indicators of possible turning points.

Figure 9: Credit Volatility 2016-2018



This chart shows the average annualized 3-month rolling volatility of CRI changes for about 100 aggregates covering various industries and geographies.

It shows that average credit volatility has ranged from 2.4% to the current high of 3.5%. Credit volatility seems to occur in waves; over the past 2 1/2 years each wave has reached a higher volatility level.

Increasing credit volatility is usually a signal of a turning point for credit risk or an indication that a previously flat trend is about to move sharply in one direction.

^{***}Including liquidity risk and hedging risk.

Conclusion

Credit Benchmark publish a large set of aggregates every month, and the set of aggregates continues to grow. The data presented here shows some selected highlights for the period 2016-2018. The key conclusions are:

- **Financial** credit risk outperformed **Corporate** credit over the three year period. US financials have recently stalled while corporates have been steadily recovering in the past few months.
- US **Banks** and **Insurance** companies have been volatile with no clear trend. UK Insurance has deteriorated vs. UK Banks. EU ex UK Banks have been very positive and Insurance has been stable.
- **Consumer Goods** deteriorated across the board this year. **Industrials** in the UK also show sustained weakness, but the US and EU ex UK show a modest recovery.
- **Technology** has been negative and volatile in all three regions over the past few years; but the US is now showing modest recovery. **Basic Materials** have shown a steady improvement in the US and EU ex UK; they have been stable in UK.
- **Oil & Gas** has improved in line with the oil price; recent credit improvement may have run their course if oil prices soften.
- **Main St. and Silicon Valley** declined in 2016, but “Main St.” (i.e. the S&P 500, including the FAANGs) has steadily improved since then. “Silicon Valley” (1000 of the NASDAQ companies) deteriorated into 2018 but has recently improved.
- **Airlines:** Despite a steady stream of bankruptcies, the sector shows modest improvements over the past few years.
- **Sovereigns:** Major Sovereigns have been stable, but trade tensions have been negative for Emerging and Frontier Sovereigns.
- **Volatility:** Credit volatility has risen over the period.

Credit Benchmark publish consensus credit ratings for more than 25,000 individual borrowers. There are 21 separate rating categories (aaa,aa+...cc,c), and 7 summary categories (aaa,aa...c). The 25,000 published consensus ratings are based on a broader database of 500,000 monthly credit updates contributed by more than 30 major banks. This broader database supports the calculation of aggregates such as credit risk time series, as well as the credit transition matrices. The current history spans more than 40 months.

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