

WEEKLY MARKET OUTLOOK

Moody's Analytics Research

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Foreign Investors Ease Burden of U.S.' Elevated Leverage

[Credit Markets Review and Outlook](#) *by John Lonski*

Foreign Investors Ease Burden of U.S.' Elevated Leverage

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[The Week Ahead](#)

We preview economic reports and forecasts from the US, UK/Europe, and Asia/Pacific regions.

[» FULL STORY PAGE 7](#)

[The Long View](#)

Full updated stories and key credit market metrics: A lively pace of recent and prospective bond offerings now widens investment-grade yield spreads.

| | |
|----------------|--|
| Credit Spreads | <u>Investment Grade:</u> We see year-end 2018's average investment grade bond spreads exceeding its recent 114 bp. <u>High Yield:</u> Compared to a recent 360 bp, the high-yield spread may approximate 425 bp by year-end 2018. |
| Defaults | <u>US HY default rate:</u> From February 2018's 3.6%, Moody's Default and Ratings Analytics team forecasts that the US' trailing 12-month high-yield default rate will sink to 2.0% by February 2019. |
| Issuance | <u>In 2017,</u> US\$-denominated IG bond issuance grew by 6.8% to a record \$1.508 trillion, while US\$-priced high-yield bond issuance advanced by 33.0% to a new record calendar-year high of \$453 billion. <u>For 2018,</u> US\$-denominated corporate bonds, IG bond issuance may drop by 2.9% to \$1.464 trillion, while high-yield bond issuance is likely to fall by 3.1% to \$439 billion.. |

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[Ratings Round-Up](#) *by Njundu Sanneh*

Chapter 11 Bankruptcy Filings Point to High Defaults in Energy/Retail Sectors

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Credit spreads, CDS movers, issuance.

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[Moody's Capital Markets Research](#) *recent publications*

Links to commentaries on: Internal funds, tariffs, borrowing restraint, default decline; corporate bonds, tax law changes, stocks and spreads, Greek drama, South Korea, Brazil sovereign credit, Greece and Spain, dangers in the outlook, high-yield borrowing, Saudi Arabia, credit/stocks.

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[Click here for Moody's Credit Outlook](#), our sister publication containing Moody's rating agency analysis of recent news events, summaries of recent rating changes, and summaries of recent research.

Credit Markets Review and Outlook

Credit Markets Review and Outlook

By John Lonski, Chief Economist, Moody's Capital Markets Research, Inc.

Foreign Investors Ease Burden of U.S.' Elevated Leverage

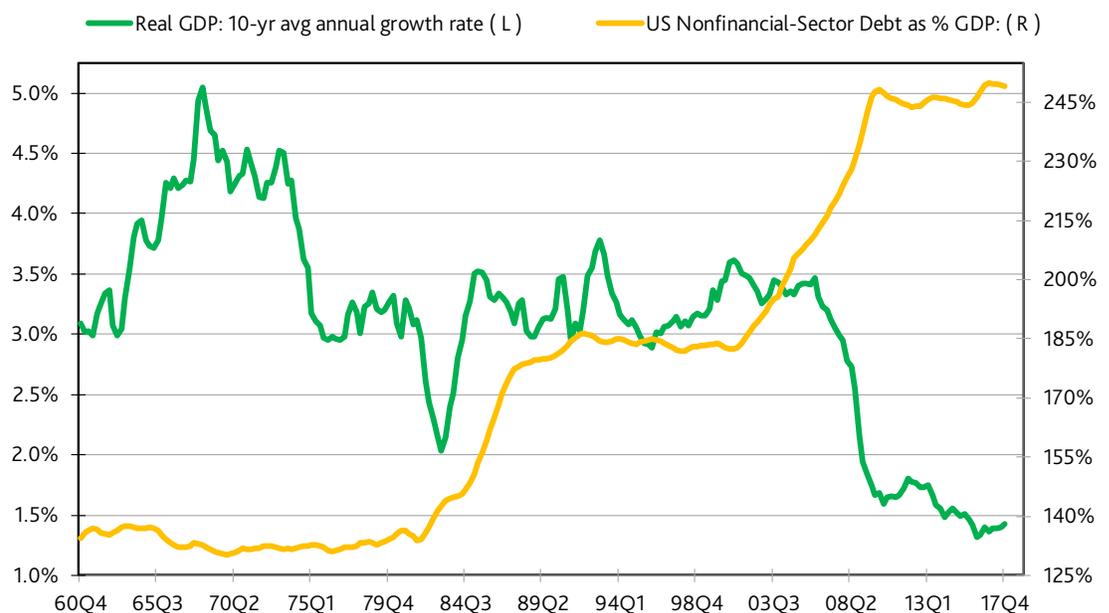
Perceived economic and political risks drove share prices sharply lower on March 22. Markets are beginning to ask whether companies will be capable of passing on higher costs to the U.S.' less than financially robust middle class. The U.S.' still relatively low personal savings rate questions how easily consumers will absorb recent and any forthcoming price hikes. Moreover, the recent slide by Moody's industrial metals price index amid dollar exchange rate weakness hints of a leveling off of global business activity.

Missing from last week's discussion of a record ratio of U.S. nonfinancial-corporate debt to GDP was any mention of 2017's near-record high ratio of total U.S. private and public nonfinancial-sector debt relative to GDP. The yearlong averages of 2017 showed \$49.05 trillion of total nonfinancial-sector debt and \$19.74 trillion of nominal GDP that put nonfinancial-sector debt at 249% of GDP—or just a tad under 2016's record 250%.

As shown in Figure 1, the leveraging up of the U.S. economy has coincided with a downshifting of U.S. economic growth. From 1961 through 1979, U.S. real GDP expanded by an astounding 3.9% annually, on average, while total nonfinancial-sector debt approximated 133% of nominal GDP. When real GDP's average annual rate of growth eased to the 3.2% of 1979-2000, the ratio of nonfinancial-sector debt to GDP rose to 176%. Since the end of 2000, U.S. economic growth has averaged only 1.8% annually and, in a possible response to subpar growth, nonfinancial-sector debt has soared to 232% of GDP.

US' Ratio of Private & Public Nonfinancial-Sector Debt to GDP Climbs Higher as Economic Growth Trends Lower

sources: Federal Reserve, Moody's Analytics



High Systemic Leverage Reins in Benchmark Yields

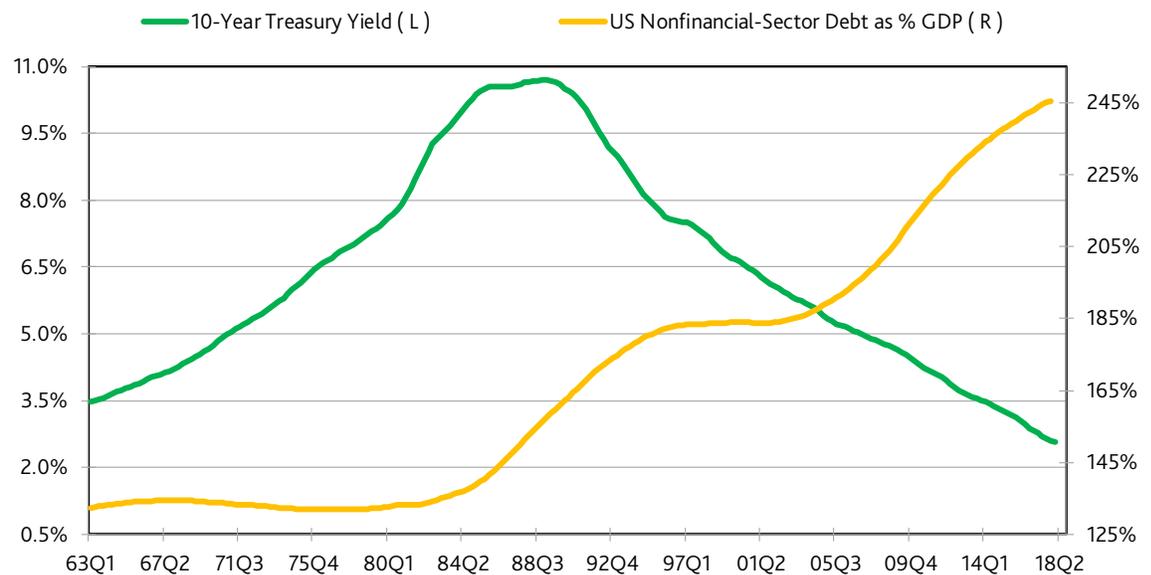
Over time, the record shows that the climb by the moving 10-year ratio of nonfinancial-sector debt to GDP has been accompanied by a declining 10-year moving average for the 10-year Treasury yield. For

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example, as the moving 10-year ratio of debt to GDP rose from 1997's 183% to 2017's 245%, the 10-year Treasury yield's moving 10-year average fell from 7.31% to 2.59%.

Two factors may be at work. First, lower interest rates encourage an increase in balance-sheet leverage. Second, to the degree an elevated ratio of debt to GDP heightens the economy's sensitivity to an increase in interest rates, lofty readings for leverage limit the upside for interest rates. Moreover, as shown by the historical record, if higher leverage tends to occur amid a slower underlying pace of economic growth, then the case favoring relatively low interest rates amid high leverage is strengthened.

Elevated Ratio of Private & Public Nonfinancial-Sector Debt to GDP Limits Upside for Treasury Bond Yields *moving 10-year averages; sources: Federal Reserve, Moody's Analytics*



None of this dismisses the possibility of an extended stay above 3% by the 10-year Treasury yield. Instead, today's record ratio of debt to GDP warns of greater downside risk for business activity whenever interest rates enter into a protracted climb.

Rest of the World Holds \$5.6 Trillion of U.S. Treasury Notes and Bonds

Notwithstanding widespread expectations of wider premiums for short-term dollar-denominated interest rates over the short-term interest rates of other major currencies, the dollar exchange rate continues to weaken against the world's other vehicle currencies. The persistent softness of the dollar is perplexing in view of how much higher U.S. interest rates are relative to those of other advanced economies. With reference to 2-year sovereign government bond yields, the recent U.S. Treasury yield of 2.32% differed radically from Germany's -0.59% and Japan's -0.16%.

In addition, the dollar's much anticipated appreciation in response to a massive repatriation of U.S. corporate cash held abroad has yet to occur. Perhaps, the foreign exchange market senses that the projected climb by the U.S.' short-term interest rates will not be realized, which is the same as saying that neither real U.S. economic growth nor inflation expectations will put much additional upward pressure on U.S. interest rates.

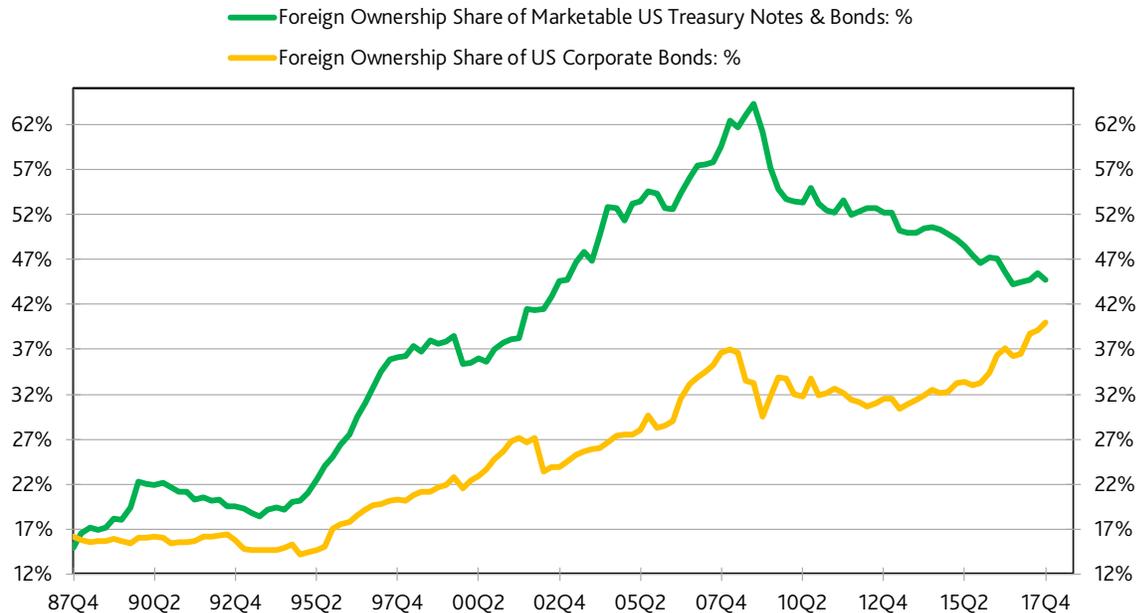
Exchange rate expectations are important to the U.S. credit market. As of year-end 2017, foreigners held \$6.307 trillion of outstanding U.S. Treasuries (\$724 billion of bills and \$5.583 trillion of notes and bonds), which equates to 43.7% of the \$14.435 trillion of outstanding marketable Treasury debt. Foreign ownership also approximated 44.8% of the \$12.471 trillion of outstanding marketable Treasury notes and bonds and an even greater 55.7% of the \$1.002 trillion of outstanding marketable Treasury notes and bonds not held by the Federal Reserve. Moreover, 2017's \$249 billion net purchase of U.S. Treasury notes and bonds by foreign investors approximated 59% of the accompanying \$419 billion increase in

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marketable Treasury notes and bonds and 58% of the \$428 billion increase in the outstandings of such Treasuries exclusive of Federal Reserve holdings.

Foreign Ownership Share of Outstanding US Bonds Rises for Corporates, but Falls for Treasuries

source: Moody's Analytics, Federal Reserve



Foreigners Hold Record \$3.5 Trillion of U.S. Corporate Bonds

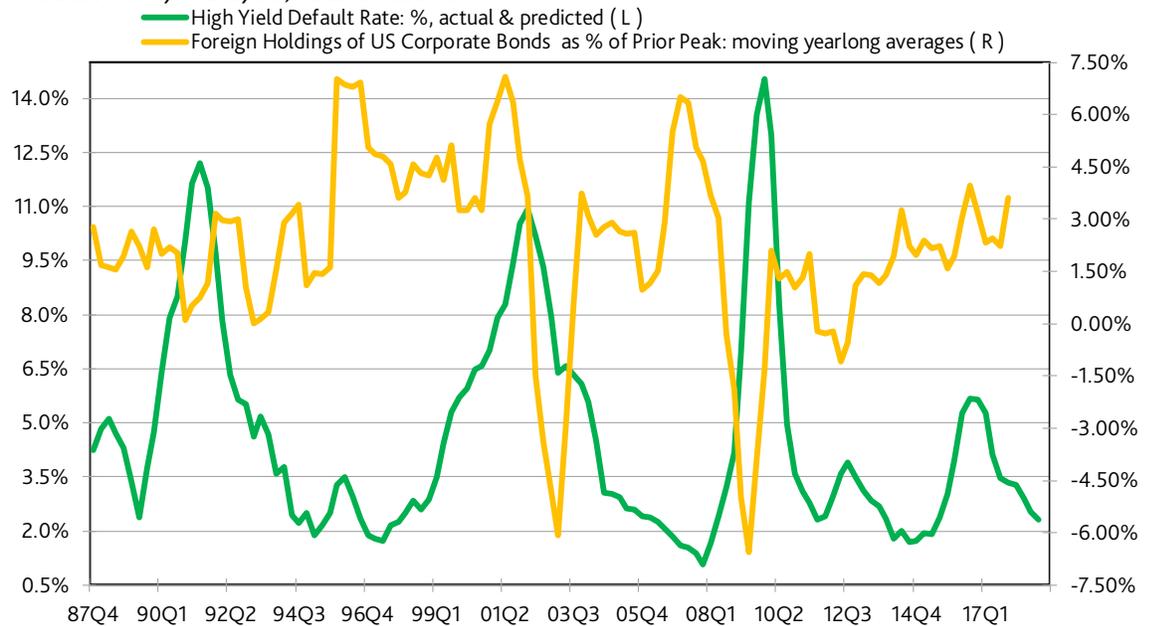
As of Q4-2017, foreigners held \$3.533 trillion, or a record 40.0%, of the \$8.826 trillion of outstanding U.S. corporate bonds, where both amounts exclude ABS and MBS obligations. (Going forward, ABS and MBS will be excluded when referring to corporate bonds.) During the year-ended Q4-2017, the \$468 billion increase in foreign ownership of U.S. corporate bonds topped the accompanying \$368 billion increase by the outstandings of such debt. Similarly, 2016's \$368 billion increase by foreign holdings of U.S. corporate bonds eclipsed the concurrent \$358 billion addition to outstanding corporates. Thus, in an unprecedented manner, the rest of the world's \$837 billion net purchase of bonds issued by U.S. companies during the two-years-ended 2017 exceeded the accompanying \$727 billion increase in the outstandings of U.S. corporates.

Foreigners have been net sellers of U.S. corporate bonds in only three years since 1989. In response to sharply higher default rates, foreign holdings of outstanding U.S. corporate bonds fell by 5.8% in 2002 and by 6.4% in 2008. Financial market volatility stemming from difficulties in the Eurozone helped to trim foreign ownership of U.S. corporates by 0.3% in 2011.

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Foreigners Become Net Sellers of US Corporate Bonds When the Default Rate Soars

source: Moody's Analytics, Federal Reserve

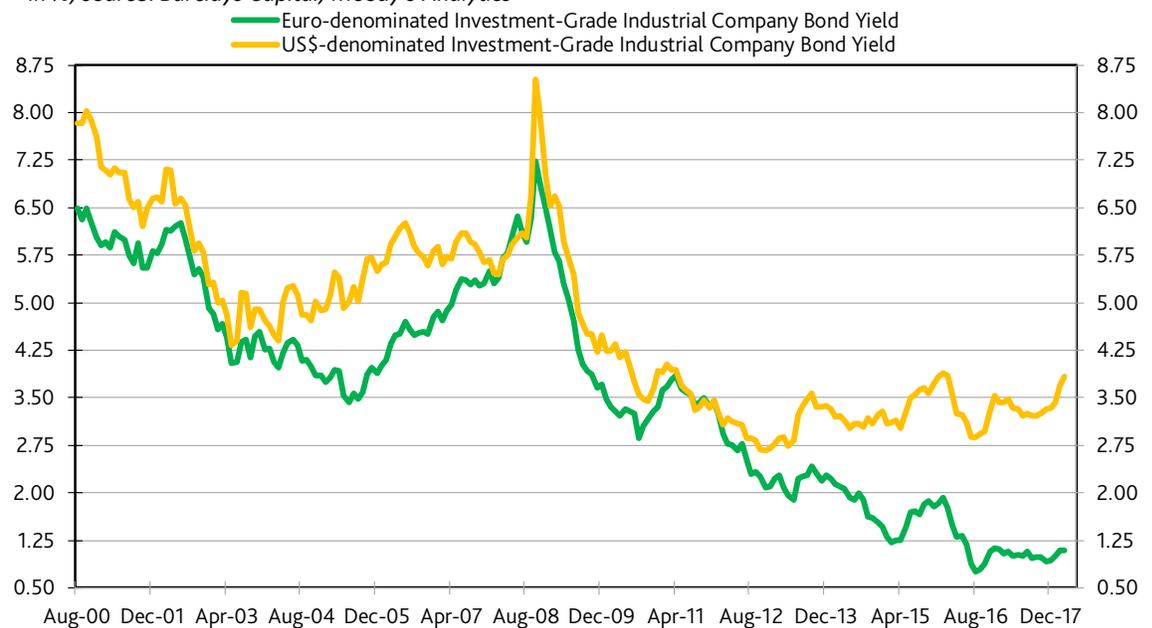


Relatively High Yields of U.S. Corporates Lure Foreign Investors

Interest rate differentials and a benign default outlook favor the continued net purchase of U.S. corporate bonds by foreigners. Thus far in March, Barclays Capital's investment-grade industrial-company bond yields averaged 1.10% for euro-denominated issues and 3.83% for dollar-denominated obligations. March-to-date's 274 basis points premium offered by dollar-denominated industrial company bonds is a record. As of December 2017, the yield spread between dollar and euro denominated industrial-company bonds set record highs of 231 bp for a moving 12-month average and 219 bp for a moving 24-month average.

Ultra-Wide Gap Between US\$- and Euro-Denominated Industrial Company Bond Yields

in %; source: Barclays Capital, Moody's Analytics

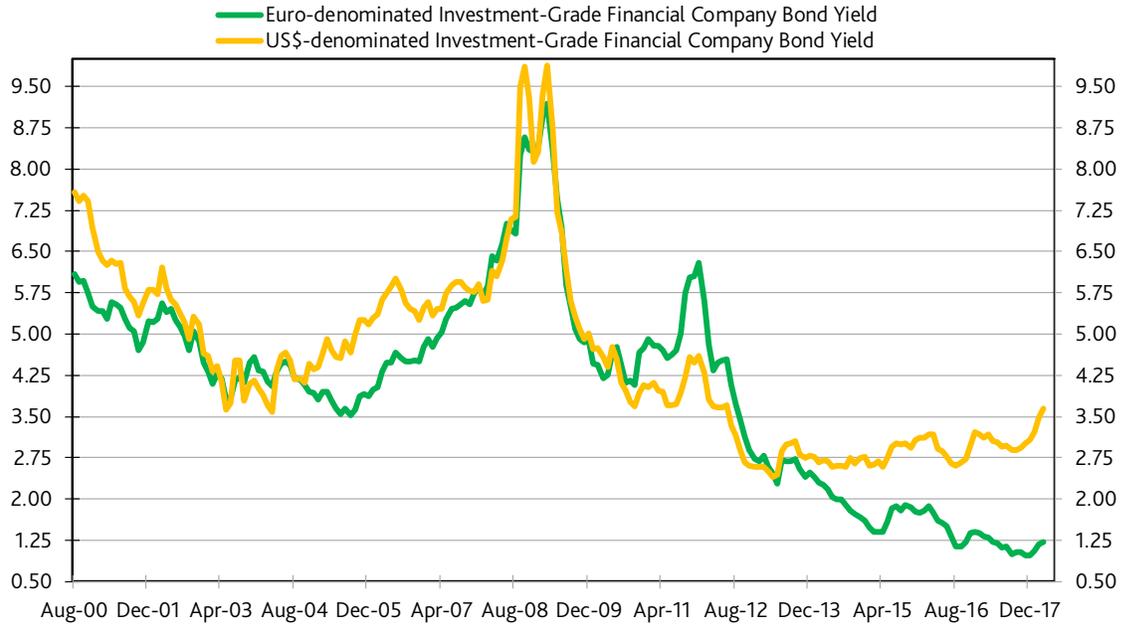


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In like manner, March shows the dollar-denominated investment-grade financial company bond yield's 3.65% average exceeding the 1.22% of its euro-denominated counterpart by an unprecedented 243 bp. In addition, this spread's moving 12- and 24-month moving averages set record highs of 188 bp and 165 bp, respectively at the end of 2017.

Very Wide Spread Between US\$- and Euro-Denominated Financial Institution Bond Yields

in %; source: Barclays Capital, Moody's Analytics



Stepped-up foreign ownership of corporates helps to explain why corporate bond yield spreads narrowed from Q4-2016's averages of 129 bp for Barclays Capital's investment-grade index, 185 bp for Moody's long-term Baa industrials, and 453 bp for Barclays Capital's high-yield index to Q4-2017's 97 bp for Barclays' investment-grade index, 153 bp for Moody's long-term Baa industrials, and 346 bp for Barclays' high-yield index.

It is of critical importance to both the U.S. Treasury and corporate debt markets that the outlook for the dollar exchange rate not deteriorate by enough to significantly diminish foreign net purchases of dollar-denominated bonds. In fact, if the outlook for the dollar exchange rate improves, the premiums for dollar bond yields over the yields of other major currencies are great enough to prompt an increase in foreign inflows to the U.S. credit market that might indefinitely delay the attainment of a 3% 10-year Treasury yield.

The Week Ahead – U.S., Europe, Asia-Pacific

THE U.S.

By Ryan Sweet and U.S. staff of Moody's Analytics

Pride and Protectionism

Many of the Trump administration's trade policies are aimed at addressing the perceived adverse impact of trade on U.S. manufacturing employment and to improve trade deals the president sees as not being in U.S. interests. These appear to be worthwhile goals, but crafting trade policy to address them is difficult. If not done correctly the policy could do more harm than good for manufacturing and the broader economy, particularly if more protectionist policies are implemented or U.S. trading partners retaliate.

Policies today shouldn't be aimed at returning the composition of the U.S. economy to that of several decades ago in terms of the types of manufacturing jobs. Technology and global markets make this unlikely. This doesn't imply that those workers and regional economies that have been hurt should be left behind. Instead, federal, state and local policies should help them adjust to—rather than prevent—change. Economies can reinvent themselves. Pittsburgh is a success story in this regard. Its economy, once heavily reliant on steel manufacturing, is now oriented toward education, healthcare and energy.

Free trade versus...

Support for free trade is grounded in the idea that each country should specialize in producing the goods and services in which it has a comparative advantage. A country enjoys a comparative advantage if that good or service can be produced at lower cost in terms of other goods or services. Take the example of steel, if it can be produced at a lower price in countries outside of the U.S., those countries have a comparative advantage. This would lower the global price of steel as U.S. production declines. This would appear to be unfair to the U.S., but the reduction in steel production frees up factors of production to be allocated elsewhere. The benefits of trade suggest that a good or service is not imported unless its net price to buyers is below the net price of its domestically produced alternative. Therefore, trading countries end up paying less for a good or service while consuming more. In other words, it's a win-win; "Made In America" doesn't always make economic sense.

...Protectionism

Support for protectionism is often rooted in the idea that it saves domestic jobs. There is no denying that when the U.S. imports goods, domestic production suffers and jobs are lost. However, the counterargument is that these laid off workers could be re-employed elsewhere in the economy. This still comes with a cost, since these workers may need to be retrained or need to relocate to another part of the country. These social costs shouldn't be ignored, but fiscal policy can help by investing in education and job retraining that can help individuals and economies reinvent themselves. Economies have successfully reinvented themselves, including those in Pittsburgh and New England, the latter of which shifted from textiles to finance and high tech.

There are a number of ways to assess trade's impact on U.S. manufacturing employment, but sticking with Occam's razor—the principle that simplest explanations are likely correct—the industry's share of total employment is telling. This share has been steadily declining since the 1950s, well before NAFTA in 1994, or the U.S. joining the World Trade Organization in 1995, or China joining the WTO in 2001.

Manufacturing's share of employment was falling, on average, by 38 basis points per annum in the 10 years before NAFTA and WTO. Since then, the average annual decline has slowed to 30 basis points per annum. Also, on average, the annual rate of decline didn't change appreciably leading up

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to China entering the WTO and has not since. The most encouraging news is that manufacturing's share of employment appears to have begun to stabilize over the past few years.

The loss of manufacturing jobs because of trade is an overdone notion. The bigger culprits are technology and automation, which have made many factory jobs obsolete. Over the past several decades, manufacturers have invested heavily in capital, allowing them to produce more with fewer workers. Also, the manufacturing workforce has shifted as the share of workers with a bachelor's degree or higher has risen while the share of those with some college or less has declined. Therefore, job retraining would be more beneficial in helping manufacturing and the broader economy than tariffs or ripping up trade agreements. Protectionist policies may help the few at the expense of the many.

Another support for protectionism is national security. This argument has been made frequently by the U.S. steel industry. The argument has validity but applies to a small number of industries. Protectionism also prevents dependency. In other words, a country could be too dependent on trading partners for too many goods and services. This applies to small economies but not the U.S. Other supports for protectionist policies are that they protect emerging domestic industries that are unable to compete globally. There are examples where this was successful and others where it backfired.

For example: Heavy subsidization of Australia's auto plants, Japan's rice farmers, and Malaysia's car manufacturers delayed the inevitable decline of those industries, because producers didn't have a comparative advantage, and because subsidies directed government funds away from potential longer-term growth drivers, where there was a comparative advantage.

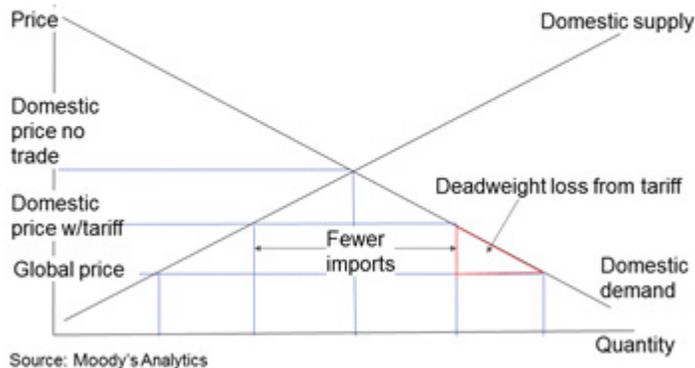
Why most economists are against tariffs

Tariffs usually make more political sense than economic sense. Trump is not the first president to use tariffs and won't be the last. Still, most economists view tariffs as a bad idea, because they prevent a country from reaping the benefits of specialization, disrupt the movement of goods and services, and lead to a misallocation of resources. Also, consumers and producers often pay higher prices when tariffs are implemented.

We take a simple approach to highlight why economists generally don't favor the use of tariffs. For this example, the supply and demand of a domestic good is used. Without trade, the market clearing price occurs where quantity supplied equals quantity demanded. If this good is produced globally and countries have a comparative advantage in the production, the price is lower. Domestic producers will have to charge the lower price, increasing domestic demand and reducing quantity supplied. The difference between quantity demanded and supplied is imported.

Tariffs Lead to Inefficiencies

Hypothetical scenario of tariff imposed on domestic good/service



Next, assume a tariff is imposed on this good. This would raise the global price, reducing the quantity demanded domestically while increasing quantity supplied. This reduces imports. The government imposing the tariff receives increased revenues, but there is a loss of efficiency, or deadweight loss. For one, consumers pay a higher price than they otherwise would have. Also, domestic marginal producers of this good are pulled into this market, pulling resources from other goods.

Other concerns: Imports matter

Imports are critical to the manufacturing supply chain and any disruption would have negative implications for factory production.

From 1974 to 2016, the correlation coefficient between growth in real goods imports and manufacturing industrial production is 0.91. This is larger than the 0.57 correlation between growth in real goods exports and industrial production. A Granger causality test reveals that both real imports and exports Granger-cause changes in industrial production.

Therefore, reducing imports would have unintended consequences. To test the importance of imports, we model manufacturing industrial production using an ordinary least squares regression. Independent variables include U.S. GDP, the unemployment rate, real trade-weighted dollar, real imports, real exports, and a lag of the dependent variable. The lag dependent was included because of the assumption that growth in manufacturing production demonstrates persistence.

Our a priori is that the sign on the coefficients on real GDP, real goods imports, real goods exports, and the lag dependent would be positive. The coefficients on the unemployment rate and trade-weighted dollar were expected to be negative.

The results were in line with our a priori; all the coefficients had the expected sign. All were statistically significant save for real exports, and the regression had an adjusted R-squared of 0.84. The regression was re-estimated, but the dependent variable was changed from manufacturing production to real manufacturing output. This didn't change the results significantly. The results suggest that an increase in real imports boosts manufacturing industrial production. Therefore, policies aimed at reducing imports could damage domestic manufacturing.

Currency implications

The use of tariffs should cause the U.S. dollar to appreciate, all else being equal. However, that's not always the case. Trade is a two-way street, and trading partners retaliate by putting tariffs on U.S. exports. Retaliation reduces U.S. exports, weighs on GDP growth, and implies less inflation and

The Week Ahead

lower interest rates, which puts downward pressure on the U.S. dollar. This occurred when George W. Bush imposed tariffs on U.S. steel in 2002 and 2003; the U.S. dollar depreciated. This could fan more protectionist policies by the Trump administration, which has discussed the benefits of a weak U.S. dollar, particularly if it helps narrow the trade deficit.

For example, in a break from tradition for Treasury secretaries, Steven Mnuchin recently highlighted the benefits of a weak U.S. dollar for the economy, particularly for trade. This is true in the short run, but there other potentially offsetting costs.

It could simply be cheap talk. Mnuchin's comments don't appear to be tied to a coherent policy approach to weaken the dollar, which would be more significant and troubling. A large number of factors influence the dollar's exchange rate, and aside from rhetoric the Treasury has little direct influence. For example, following the recession the dollar was weak despite strong-dollar rhetoric from the Treasury.

Still, talk also can be costly. Whether it is a strategy of the Treasury secretary to try to depreciate the dollar or simply a slip of tongue, there are risks. For example, the Treasury secretary runs the risk of not just talking down the dollar but talking people out of buying U.S. equities and U.S. bonds. The latter would drive interest rates higher. That would offset some of the positive effects that dollar depreciation has on trade and GDP growth. For context, the depreciation in the U.S. dollar over the past few months would add a few tenths of a percentage point to GDP growth over the course of a year.

The economy does benefit from a depreciation in the dollar. This is a short-term boost, since the underlying terms of trade don't change. The immediate implications of a depreciation in the dollar for inflation are modest, but they build. The dollar affects inflation with a lag and a significant depreciation in the dollar would be inflationary. The Federal Reserve would respond.

We will release our forecasts for the upcoming week on Monday.

| | Key indicators | Units | Moody's Analytics | Consensus | Last |
|-------------------|--|----------------|-------------------|-----------|-------|
| Mon @ 10:00 a.m. | Moody's Analytics Business Confidence | index, 4-wk MA | | | 39.1 |
| Tues @ 10:00 a.m. | Conference Board Consumer Confidence for March | index | | 131.0 | 130.8 |
| Wed @ 8:30 a.m. | Advanced goods deficit for February | \$ bil | | -74.0 | -74.4 |
| Wed @ 8:30 a.m. | GDP for 2017Q4-third estimate | % change, SAAR | | 2.6 | 2.5 |
| Wed @ 10:00 a.m. | Pending Home Sales for February | % change | | 2.0 | -4.7 |
| Thur @ 8:30 a.m. | Jobless Claims for 3/24/18 | ths | | | 229 |
| Thur @ 8:30 a.m. | Personal Income for February | % change | | 0.4 | 0.4 |
| | Personal Spending for February | % change | | 0.2 | 0.4 |
| | Core PCE deflator for February | % change | | 0.2 | 0.3 |
| Fri @ 10:00 a.m. | Michigan sentiment for March, final | index | | 102.0 | 102.0 |

EUROPE

By Barbara Teixeira Araujo and Europe staff of Moody's Analytics in London and Prague

Expect GDP estimates for the U.K. and France to stand

The spotlight in the week ahead will be on the Thursday publication of the final estimate of the U.K.'s fourth quarter GDP. We do not expect the headline to be revised from its current 0.4% q/q rate, which is the same as in the third stanza. Yearly growth is similarly expected to be confirmed at 1.4%, worsening from a 1.8% rise in the previous quarter and the slowest since the second stanza of 2012. We expect the focus to be that both net trade and business investment disappointed sharply, contrasting with the Bank of England's hopes that the sterling's plunge since 2016 would have brought a rebalancing from consumer spending towards net trade and investment. But while household consumption is expected to have indeed underperformed, retreating further from a downwardly revised increase in the third quarter, business investment likely failed to provide some offset, stalling at the end of the year. The final figures will confirm our theory that Brexit jitters are still weighing on companies' major decisions, while capacity constraints suggest that the best days of manufacturing revival are already over.

But that was not all, as net trade again should have subtracted from growth. Chances are that some of the 0.5 percentage point drag will be revised away given that most of the rise in imports was due to erratic components, but we don't expect that the revisions will be significant to push the fourth quarter GDP headline higher to 0.5%. In any case, it is now clear that the costs of the currency's depreciation have outweighed its supposed benefits. Exports are expected to have declined further, corroborating that the U.K.'s competitiveness in global markets failed to improve to the extent implied by the pound's slump. True, most of the rise in imports was accounted for by a jump in inventories—particularly non-monetary gold flows, which are always a main theme in the U.K. GDP release—but even taking this offset into consideration, net trade is still expected to have been a small drag on GDP.

Elsewhere, the expansion in France should be confirmed at 0.6% q/q, in line with initial estimates. Here, manufacturing investment is set to be the standout detail, soaring on the back of a revival in the country's industries last year, though net trade should also have contributed strongly to growth as well. In other words, an opposite picture from that of the U.K. economy. This is very impressive, notably as the 10% y/y appreciation of the euro was supposed to have dented the competitiveness of the area's export products. We don't expect this strength to be sustained throughout 2018, but leading indicators made available for the first quarter have remained relatively resilient until now.

Consumer spending in France is expected to have slowed over the fourth quarter and over the year as a whole. Last year's above-average temperatures dampened energy consumption, and consumption of engineered goods also slowed marginally, especially demand for new cars. But we expect some offset via a pickup in services spending, suggesting that the improving labour market is encouraging households to dig into their pockets

French spending on goods data for February will also be released next week and should show that consumption rebounded strongly at the middle of the first quarter, following a plunge in January. Spending is expected to have increased across the board, but a jump in energy production should have boosted the headline the most following a weather-related 7.6% m/m plunge at the start of the year. Temperatures fell back sharply in February—they were on average 2.2 °C below their long-term average for the month—so demand for heating is expected to have increased accordingly. This story is expected to have been the same all across the area's major countries. We will update our forecasts on Monday.

| | Key indicators | Units | Moody's Analytics | Last |
|-------------------|--|----------|-------------------|-------|
| Mon @ 7:45 a.m. | France: GDP for Q4 | % change | 0.6 | 0.5 |
| Tues @ 10:00 a.m. | Euro Zone: Business and Consumer Sentiment for March | index | 113.0 | 114.1 |
| Tues @ 5:00 p.m. | France: Job Seekers for February | ths, SA | 3.45 | 3.46 |
| Wed @ 8:05 a.m. | Spain: Retail Sales for February | % change | 0.1 | 0.3 |
| Wed @ 12:05 a.m. | U.K.: Consumer Confidence for March | | -10.0 | -10.0 |
| Thur @ 9:00 a.m. | Germany: Unemployment for March | % | 5.4 | 5.4 |
| Thur @ 9:30 a.m. | U.K.: GDP Expenditure Breakdown for Q4 | % change | 0.4 | 0.4 |
| Wed @ 7:45 a.m. | France: Household Consumption Survey for February | % change | 2.4 | -1.9 |

ASIA-PACIFIC

By Katrina Ell and the Asia-Pacific staff of Moody's Analytics in Sydney

Japan's February data looking a little shaky

Japan's February activity data dump is looking a little shaky, adding to evidence of a weak GDP print in the March quarter. Japan's production is suffering in the first quarter of 2018, after a sharp 6.6% m/m fall in January. A pickup in February remains unlikely due to disruptions across the supply chain on the back of Lunar New Year festivities. The sharp decrease suggests that the momentum from last year is unlikely to persist in early 2018. Some of the decline is payback from the sharp increases towards the end of 2017.

Japanese consumption has softened early in 2018. Overall, sales decelerated to 1.6% y/y in January, and we expect a further deceleration in February. Discretionary spending could cool further in 2018, with a broad-based slowdown across the major food and fuel categories. Japan's labour market tightened further in January on the back of a rise in the number of people employed and a drop in the number of unemployed. The trend is expected to continue in February, so the jobless rate will likely be unchanged at 2.4%, but the net gain in the number of employed is expected to cool. Japan is near full employment, with only 1.6 million workers out of 67.5 million unemployed. Wage growth remains the missing ingredient, and the spring wage negotiations in April will be key for Japan's consumption outlook in 2018.

The final estimate of South Korea's GDP growth likely remained unchanged at -0.2% q/q for the final stanza of 2017. The South Korean economy cooled more than expected at the end of last year, largely owing to weaker exports and construction investment, which both fell in quarter-ago terms. Still, South Korea's near-term growth prospects remain positive, as global growth is projected to remain solid in 2018, and the government's expansionary policies are likely to lift consumer spending. The Trump administration's protectionist trade stance is an ongoing downside risk, with South Korea's steel and washing machine exports to the U.S. an important causality so far.

| | Key indicators | Units | Moody's Analytics | Last |
|--------------------|--|-----------------|-------------------|-------|
| Mon @ 8:45 a.m. | New Zealand Foreign trade for February | NZ\$ mil | 124 | -566 |
| Tues @ 8:00 a.m. | South Korea Consumer sentiment for March | Index | 107.6 | 108.2 |
| Wed @ 10:00 a.m. | South Korea GDP for Q4 - second estimate | % change | -0.2 | -0.2 |
| Wed @ 6:05 p.m. | Thailand Monetary policy for March | % | 1.5 | 1.5 |
| Thurs @ 10:50 a.m. | Japan Retail sales for February | % change yr ago | 0.4 | 1.6 |
| Fri @ 10:00 a.m. | South Korea Retail sales for February | % change | 2.1 | 1.7 |
| Fri @ 10:30 a.m. | Japan Unemployment rate for February | % | 2.4 | 2.4 |
| Fri @ 10:50 a.m. | Japan Industrial production for February | % change | -0.4 | -6.6 |
| Fri @ 6:30 p.m. | Thailand Private consumption for February | % change yr ago | 4.9 | 6.1 |
| Fri @ 6:30 p.m. | Thailand Foreign trade for February | US\$ mil | 900 | 1,300 |
| Sat @ 12:00 p.m. | China Official manufacturing PMI for March | Index | 50.6 | 50.3 |

FRIDAY, MARCH 23

Japan: Consumer Price Index (February; 10:30 a.m. AEDT; Thursday, 11:30 p.m. GMT)

Japan's core consumer price inflation was likely lower in February, although core-core inflation ticked up slightly in January. Overall, February's core CPI inflation is expected to rise 0.8% y/y, after 0.9% in December. The slowdown is largely driven by lower fuel inflation; after adding firmly to prices in 2017, slightly lower commodity prices at the start of 2018, along with base effects from the previous year, imply that fuel inflation will add less to core-inflation in coming months. Price pressures in other sectors remain relatively mild, although the ageing population is putting upward pressure on medical care costs. Our views are unchanged that Japan's inflation is unlikely to reach 2% over the medium term.

The Week Ahead

MONDAY, MARCH 26

New Zealand: Foreign Trade (February; 8:45 a.m. AEDT; Sunday, 9:45 p.m. GMT)

We expect New Zealand's trade balance returned to surplus in February, notching NZ\$124 million. The merchandise trade balance has endured wild swings of late, and January was no different. The trade balance fell into a NZ\$566 million deficit, the largest deficit for a January since 2007. This follows December's NZ\$596 million surplus, the largest surplus ever for a December. While import and export growth was robust in January, imports surged by more with increases across a range of commodities including turbojets, diesel and ships. Dairy-powered exports cooled a little from December as shipments to China fell for the first time since November 2016.

TUESDAY, MARCH 27

South Korea: Consumer Sentiment Index (March; 8:00 a.m. AEDT; Monday, 9:00 p.m. GMT)

South Korea's consumer sentiment index likely slipped to 107.6 in March, after falling 1.7 points to 108.2 in February. Although consumer sentiment remains relatively upbeat, the euphoria over President Moon Jae-in's policies is over, suggesting consumer sentiment is likely to soften further in March. Still, the recent de-escalation of North Korea tensions could provide some lift.

WEDNESDAY, MARCH 28

South Korea: GDP (2017Q4; 10:00 a.m. AEDT; Tuesday, 11:00 p.m. GMT)

The final estimate of GDP growth likely remained unchanged at -0.2% q/q for the final stanza of 2017. The South Korean economy cooled more than expected at the end of last year, largely owing to weaker exports and construction investment, which both fell in quarter-ago terms. Still, South Korea's near-term growth prospects remain positive, as global growth is projected to remain solid in 2018, and the government's expansionary policies are likely to lift consumer spending.

Thailand: Monetary Policy (March; 6:05 p.m. AEDT; 7:05 a.m. GMT)

The Bank of Thailand is expected to keep its key policy interest rate unchanged at 1.5% at its March meeting. Although the economy is benefiting from an export-led rebound, domestic demand remains relatively subdued, which is keeping a lid on inflation. A firm baht is also keeping imported price pressures down. Given the soft inflation environment, the Bank of Thailand is unlikely to be in any rush to change its policy stance in the near term.

THURSDAY, MARCH 29

Japan: Retail Sales (February; 10:50 a.m. AEDT; Wednesday, 11:50 p.m. GMT)

Consumption could soften in the first quarter of 2018, despite January's third consecutive increase in year-ago retail sales. Overall, sales decelerated to 1.6% y/y in January, and we expect a further deceleration, to 0.4%, in February. The slowdown was broad-based, with general merchandise and autos declining. This suggests that discretionary spending could cool further in 2018, with a broad-based slowdown across the major food and fuel categories. Wage growth remains a missing puzzle in Abenomics—Prime Minister Shinzo Abe's economic policies—and absence of meaningful wage gains in 2018 could cause consumption to slip this year. For Japan to repeat 2017's increases in consumption and investment, it needs wages to rise more meaningfully.

FRIDAY, MARCH 30

South Korea: Retail Sales (February; 10:00 a.m. AEDT; Thursday, 11:00 p.m. GMT)

South Korean retail sales likely grew 2.1% m/m in February, after ticking up 1.7% in the prior month. Retail sales likely got a boost from the Winter Olympics, as well as the 16.4% increase in the minimum wage at the start of the year. However, consumer sentiment has softened and household debt remains elevated, which will likely restrain spending.

The Week Ahead

Japan: Employment Situation (February; 10:30 a.m. AEDT; Thursday, 11:30 p.m. GMT)

Japan's labour market tightened further in January on the back of a rise in the number of people employed and a drop in the number of unemployed. The trend is expected to continue in February, so the jobless rate will likely be unchanged at 2.4%. The jobs-to-application ratio was unchanged at 1.59 in January while the economy added 420,000 jobs and the labour force rose by 160,000. These are impressive figures. However, in February, the economy is unlikely to add as many jobs, but overall labour market conditions remain healthy. Japan is near full employment, with only 1.6 million workers out of 67.5 million unemployed. Wage growth remains the missing ingredient, and the spring wage negotiations in April will be key for Japan's consumption outlook in 2018.

Japan: Industrial Production (February; 10:50 a.m. AEDT; Thursday, 11:50 p.m. GMT)

Japan's production is set to suffer in the first quarter of 2018, after a sharp 6.6% m/m fall in January and a likely 0.4% fall in February. A pickup in February remains unlikely due to disruptions across the supply chain on the back of Lunar New Year festivities. The sharp decrease suggests that the momentum from last year is unlikely to persist in early 2018. Some of the decline is payback from the sharp increases towards the end of 2017. That said, overall production remains buttressed by the global tech cycle. Stronger regional demand thanks to China, along with a rise in U.S. consumption, will likely keep production sanguine. Japanese producers remain at the forefront of manufacturing and technology changes. Auto production firmed in 2017 on the back of improved external demand and a more competitive currency.

Thailand: Private Consumption (February; 6:30 p.m. AEDT; 7:30 a.m. GMT)

Private consumption likely grew 4.9% y/y in February, after a 6.1% increase in the prior month. Private consumption has surged recently, thanks to strong demand for durables and strength in services demand. Tourist spending has also firmed noticeably, largely thanks to an increase in Chinese tourists. Although consumer spending is likely to benefit from the government's social welfare card scheme and an improvement in agricultural and export-related income, elevated household debt and a soft labour market are likely to restrain spending.

Thailand: Foreign Trade (February; 6:30 p.m. AEDT; 7:30 a.m. GMT)

Thailand's trade surplus likely narrowed to US\$900 million in February, after falling to US\$1.3 billion in the prior month. Exports kicked off 2018 on a strong note, up by a 62-month high of 16.7% y/y. Imports also surged, thanks to strong increases in raw materials, consumer and capital goods imports. However, we expect foreign trade to have slowed in February, as Lunar New Year celebrations likely slowed activity.

SATURDAY, MARCH 31

China: Manufacturing PMI (March; 12:00 p.m. AEDT; 1:00 a.m. GMT)

Manufacturer sentiment fell sharply in February but this seems partly related to the Lunar New Year that month, which would have lowered production activity. Sentiment on new orders remains positive, and manufacturers also report increased optimism on future business conditions. Global tech demand remains healthy and consumer spending at home is similarly strong. We expect the official PMI recovered 0.3 point to 50.6 in March.

The Long View

A lively pace of recent and prospective bond offerings now widens investment-grade yield spreads.

By John Lonski, Chief Economist, Moody's Capital Markets Research Group,
March 15, 2018

CREDIT SPREADS

As measured by Moody's long-term average corporate bond yield, the recent investment grade corporate bond yield spread of 114 bp is far under its 122-point mean of the two previous economic recoveries. This spread is more likely to be wider, as opposed to narrower, a year from now.

The recent high-yield bond spread of 360 bp is less than what is inferred from the spread's macroeconomic drivers, the high-yield EDF metric, and the VIX index. The adverse implications for liquidity of possibly significantly higher interest rates merit consideration.

DEFAULTS

After setting its current cycle high at January 2017's 5.8%, the U.S. high-yield default rate has since eased to the 3.6% of February 2018. Moody's Default and Ratings Analytics team expects the default rate will average 2.1% during the three months ended February 2019. A deeper slide to its 1.85% average of the 18-months-ended June 2015 is unlikely for now.

US CORPORATE BOND ISSUANCE

Yearlong 2017's US\$-denominated bond issuance rose by 6.8% annually for IG, to \$1.508 trillion and soared by 33.0% to \$453 billion for high yield. Across broad rating categories, 2017's newly rated bank loan programs from high-yield issuers sank by 26.2% to \$72 billion for Baa, advanced by 50.6% to \$319 billion for Ba, soared by 56.0% to \$293 billion for programs graded single B, and increased by 28.1% to \$25.5 billion for new loans rated Caa.

Fourth-quarter 2016's worldwide offerings of corporate bonds showed annual percent changes of -10.2% for IG and +24.9% for high-yield, wherein US\$-denominated offerings fell by 8.5% for IG and advanced by 24.9% for high yield.

First-quarter 2017's worldwide offerings of corporate bonds showed annual percent increases of 7.7% for IG and 110.6% for high-yield, wherein US\$-denominated offerings advanced by 17.1% for IG and by 98.3% for high yield.

Second-quarter 2017's worldwide offerings of corporate bonds showed an annual percent decline of 6.3% for IG and an increase of 8.3% for high-yield, wherein US\$-denominated offerings fell by 6.4% for IG and grew by 5.8% for high yield.

Third-quarter 2017's worldwide offerings of corporate bonds showed an annual percent decline of 1.6% for IG and an increase of 6.6% for high-yield, wherein US\$-denominated offerings dipped by 0.7% for IG and grew by 4.3% for high yield.

Fourth-quarter 2017 revealed year-over-year advances for worldwide offerings of corporate bonds of 17.6% for IG and 77.5% for high-yield, wherein US\$-denominated offerings posted increases of 21.0% for IG and 56.7% for high yield.

For yearlong 2016, worldwide corporate bond offerings rose by 2.3% annually for IG (to \$2.402 trillion) and sank by 7.8% for high yield (to \$426 billion). For yearlong 2017 worldwide corporate bond offerings increasing by 4.0% annually (to \$2.499 trillion) for IG and advanced by 41.2% for high yield (to \$602 billion). The projected annual percent changes for 2018's worldwide corporate bond offerings are +5.7% for IG and -2.1% for high yield.

The financing of acquisitions and shareholder compensation will stand out among 2016's uses of funds obtained via bond issues and newly-rated bank loan programs. Companies will resort to acquisitions and divestitures in order to better cope with the US's subpar recovery. To the degree companies fear significantly

The Long View

higher bond yields, pre-fundings will rise.

US ECONOMIC OUTLOOK

The consensus expects that the mid-point for the federal funds rate should finish 2018 at 2.125%. In view of the considerable underutilization of the world's productive resources, low inflation should help to rein in Treasury bond yields. As long as the global economy operates below trend, the 10-year Treasury yield may not remain above 2.8% for long. A fundamentally excessive climb by Treasury bond yields and a pronounced slowing by expenditures in dynamic emerging market countries are among the biggest threats to the adequacy of economic growth and credit spreads going forward.

EUROPE

By Barbara Teixeira Araujo and Reka Sulyok • of Moody's Analytics
March 22, 2018

U.K.

March's Bank of England monetary policy committee meeting didn't bring any policy changes, but markets were spooked after two of the committee members, Ian McCafferty and Michael Saunders, voted for a rate hike. Although investors were largely penciling in a May move, they were still expecting a unanimous vote for the status quo Thursday. As a consequence, the pound jumped to a seven-week high against the dollar following the minutes' release.

That the committee didn't change its forward guidance on rates speaks more than the vote split. Before it raised rates in November, it clearly announced at its September meeting that rates would be hiked "over the coming months." By contrast, March's meeting only reiterated that an ongoing tightening of monetary policy over the forecast period would be appropriate to return inflation sustainably to target. While the split has pushed us to bring forward our call for the next rate hike to May, from August, we still think that chances that the committee will stand pat in two months are higher than the 20% currently implied by markets.

Accordingly, the minutes were filled with acknowledgments of the disappointments in the recent data. Not only did fourth quarter growth surprise on the downside, but leading activity indicators for the first quarter all came in below consensus too. This pushed the BoE's staff to revise down its expectations for GDP growth to just 0.3% q/q in the three months to March—in line with our own forecasts—from an already-weak 0.4% gain in the fourth quarter of 2017. The heavy snowfall at the end of February likely caused major disruptions and weighed on retail sales, construction and services spending.

At the same time, inflation surprised heavily on the downside in February, corroborating our view that the MPC's estimates of the inflation path are too optimistic. Our view is that the core rate is set to surprise strongly on the downside throughout this year, just as it did in February. Most of the pass-through of higher import prices to consumers is already finished, which means that core goods inflation should moderate, while at the same time services inflation doesn't seem to be going anywhere. Even as wages accelerated in January—clearly the only good economic news released recently—pay growth this year will rise but won't soar, with the widespread uncertainty keeping job-to-job flows too depressed to drive overall wage growth up.

In all, we think that over the past few months the outlook hasn't brightened enough to warrant a rate hike as soon as May, even if we do not rule out such a move anymore.

Russia

Experience tells us that Vladimir Putin's fourth presidential term, which he won Sunday, will likely not bring a sea change in economic policy even though Russia faces stalling economic growth. Putin's previous term was beset by economic troubles. A commodity crisis led to a recession in 2014. Sanctions imposed by the West then exacerbated the crisis, leading to severe underinvestment: Fixed investment fell for three consecutive years and did not start to rebound until the first half of 2017.

The Long View

The economy barely got back on its feet by the end of 2017 amid stabilizing oil prices and a global economic upturn. The Bank of Russia estimates that the economy expanded at its potential rate of 0.5% on a quarter-ago basis in the third stanza, but leading indicators suggest that growth cooled further in the final quarter. The weaker second half was in sharp contrast with the stronger readings in the first half of the year, when temporary tailwinds and rising business optimism propelled the economy.

Economic policy did little to address the weak spots. A few public infrastructure projects boosted fixed investment and GDP growth, but that impulse is fading. Growth-fostering investments were lacking because falling oil revenues dealt the government a fiscal blow. Fiscal deprivation then prompted some countercyclical budget reforms. But beyond that, structural economic reforms were practically nonexistent in Putin's last term.

In his speech just before the election, Putin indicated that the Russian economy could be better embedded into the global economy by sharing know-how and strengthening trade ties, and that it should diversify away from oil and gas exports. But these proclamations are at odds with the pillars of his policy agenda, which are to steadily tighten state control in all sectors of the economy and to maintain a foreign policy at the expense of sanctions hurting economic potential.

Assuming that tight budget policies will last for some time, the Bank of Russia projects that public spending should shave a cumulative 0.3 percentage point off GDP growth over the next three years. With the sovereign fund exhausted and the government wary of taking out more debt, Russia is painfully short of fiscal options.

We do not expect a state spending spree to come in the near term. But the Russian government might feel more confident opening the money taps later on, given the stable outlook for commodities. Pouring money into infrastructure is the most straightforward way to boost GDP.

ASIA PACIFIC

By Faraz Syed, Alastair Chan, Katrina Ell, Veasna Kong of Moody's Analytics
March 22, 2018

Australia

Australia's property market garners much attention locally and abroad, as it is one of the few in the developed world to have not experienced a sizeable correction. Our baseline maintains that this will persist in coming years, even though certain pockets have had unprecedented growth.

The latest February CoreLogic Hedonic Home Value Index results show a slowing national market. Housing values fell for a fifth consecutive month in February, driven by declines in Sydney but also increasing softness in Melbourne and Brisbane and declines in Perth, Canberra and Darwin. Home values in Hobart and Adelaide are defying the trend and continue rising.

Moody's Analytics has developed an econometric model to forecast the direction of Australia's residential property market down to the Statistical Area 4 level, using historical data from CoreLogic's Hedonic Home Value Index. SA4s are geographic areas defined by the Australian Bureau of Statistics such that each area has a high percentage of people who live and work in the same SA4. There are 106 SA4s covering Australia, and CoreLogic has created hedonic home value indexes² for 85 of them.

Australia's most populated state, New South Wales, has had the sharpest rise in house prices in recent years among states and territories. Since the start of 2013—coinciding with RBA's latest easing cycle—home values across Greater Sydney have risen around 80%, according to the CoreLogic Hedonic Home Value Index. Values across the rest of New South Wales have also risen, albeit not as sharply as in Sydney; since 2013 home values have increased 35%. Strong dwelling price growth was borne out of the upbeat state economy. State final demand in New South Wales has outperformed the national average for the past two years. The unemployment rate in NSW has been improving since 2015, and averaged 5.2% from 2015 to 2017, well below the national average of 5.8% over the same period. This reflects several factors, including the state's high sensitivity to the sustained low interest rate environment given the prevalence of interest-sensitive industries including hospitality and construction. These industries performed well in 2016 and through 2017 and forward indicators suggest ongoing buoyancy.

The Long View

Infrastructure investment

An added lift to state final demand is record levels of public infrastructure investment, which is picking up some of the slack from cooling dwelling investment. A significant infrastructure push is happening in New South Wales, particularly centered around the CBD and Greater Sydney to improve bottlenecks, especially public transport and roads. Incomes in NSW have increased faster than the national average and underpin some of the recent gains in home values. However, housing values have risen even faster and are overvalued relative to equilibrium value. Therefore, Moody's Analytics expects a correction across NSW.

This has already begun with dwelling values across Sydney falling 0.9% in January, the fifth consecutive monthly decline. We expect house prices across Greater Sydney to fall by 4.2% y/y in 2018, after a 12.8% gain in 2017. Apartments are expected to also slow but not as sharply, with a 0.3% y/y expansion expected in 2018, from the 9.8% growth in 2017. By 2019, the correction is expected to have largely passed, with house and apartment values forecast to increase by 0.9% and 1.6%, respectively.

House values across the city of Brisbane are forecast to gain a mild 1.8% in 2018, with strength in West Brisbane and Inner Brisbane offsetting declines in South Brisbane and Logan-Beaudesert areas. Brisbane's apartment values are tipped to rise this year, driven by recovery in North Brisbane apartment values. Apartments in East Brisbane and West Brisbane are still expected to post mild declines.

House values in Western Australia's capital city, Perth will have another year of decline, with a 1.9% decline forecast for this year before a 1.2% recovery in 2019, driven by the steadily recovering local economy. Meanwhile South Australia's capital, Adelaide's housing market will extend its remarkable run, albeit at a moderating pace. House values in Adelaide are forecast to rise 2.6% in 2018, following a 4.9% gain in 2017. Canberra's housing market will similarly slow down, with values forecast to rise 4.8% in 2018 after an 8.7% gain in 2017.

Ratings Round-Up

Ratings Round-Up

By Njundu Sanneh

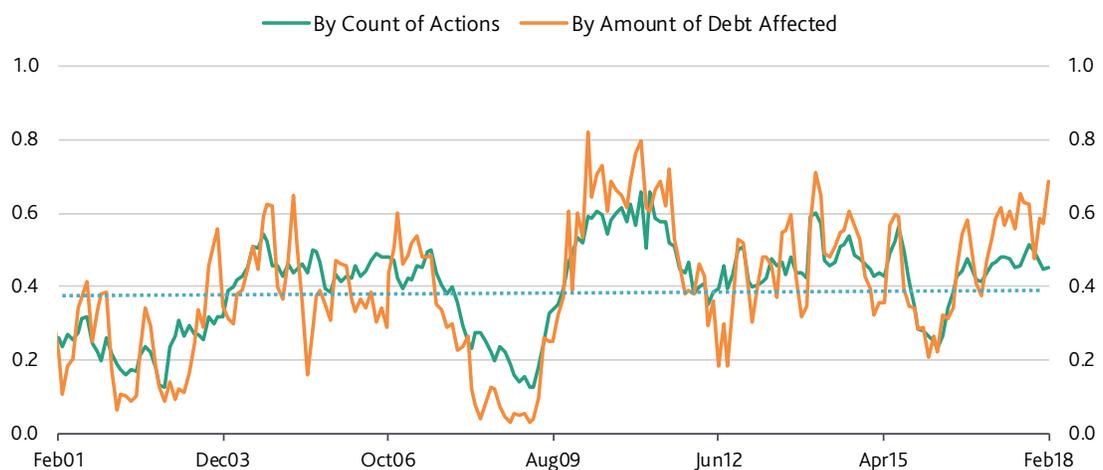
Chapter 11 Bankruptcy Filings Point to High Defaults in Energy/Retail Sectors

The contribution of positive rating changes to total rating changes improved slightly from the prior week for both the U.S. and Europe. The contribution of positive rating changes rose to 42% from 40% for the U.S. and 25% from 13% for Europe. Notwithstanding these improvements in the ratio of positive rating changes, the speculative grade default rate rose to 3.1% in February from 2.9% in January. The retail sector accounted for four of the 10 defaults last month. The Chapter 11 Bankruptcy filing of several U.S. energy and retail sector outfits last week is not going to help March's global speculative grade default rate either. Among the companies filing for bankruptcy protection or just restricting debt were retail companies FullBeauty, Inc., Claire's Stores, Inc., and Bi-Lo Holding Finance, LLC. Energy company EV Energy partners, LP also entered in a restructuring agreement with its creditors. Not all is bad news as several companies were also upgraded in the challenging retail and energy sectors which continue to see defaults. Abercrombie & Fitch Management Co. and Tailored Brands, Inc.'s Men Wearhouse, Inc. were both upgraded within the retail space. The speculative grade default rate which has been on a downward trend reflective of a benign credit cycle is still expected to fall to 1.8% by December 2018 even while the U.S. central bank embarks on a tightening cycle as economic growth gains steam behind tax cuts and government spending.

Rating revisions were sparse in Europe with four companies affected across diverse sectors and geography. The sole upgrade was a Romanian REIT, Globalworth Real Estate Investments Limited, on account of its expansion in Poland through M&A and solid operating performance as it expands its domestic portfolio as well.

FIGURE 1

Rating Changes - US Corporate & Financial Institutions: Favorable as % of Total Actions



* Trailing 3-month average

Source: Moody's

Ratings Round-Up

FIGURE 2

Rating Key

| | | | |
|--------------|-------------------------------------|----------------|-------------------------------------|
| BCF | Bank Credit Facility Rating | MM | Money-Market |
| CFR | Corporate Family Rating | MTN | MTN Program Rating |
| CP | Commercial Paper Rating | Notes | Notes |
| FSR | Bank Financial Strength Rating | PDR | Probability of Default Rating |
| IFS | Insurance Financial Strength Rating | PS | Preferred Stock Rating |
| IR | Issuer Rating | SGLR | Speculative-Grade Liquidity Rating |
| JrSub | Junior Subordinated Rating | SLTD | Short- and Long-Term Deposit Rating |
| LGD | Loss Given Default Rating | SrSec | Senior Secured Rating |
| LTCF | Long-Term Corporate Family Rating | SrUnsec | Senior Unsecured Rating |
| LTD | Long-Term Deposit Rating | SrSub | Senior Subordinated |
| LTIR | Long-Term Issuer Rating | STD | Short-Term Deposit Rating |

FIGURE 3

Rating Changes: Corporate & Financial Institutions – US

| Date | Company | Sector | Rating | Amount (\$ Million) | Up/ Down | Old LTD Rating | New LTD Rating | Old STD Rating | New STD Rating | IG/ SG |
|---------|--|------------|------------------------|------------------------|-------------|----------------------|----------------------|----------------------|----------------------|-----------|
| 3/14/18 | GUISTAR CENTER HOLDINGS, INC -GUISTAR CENTER INC. | Industrial | PDR | | D | Caa1 | Ca | | | SG |
| 3/14/18 | HGIM CORP. | Industrial | SrSec/BCF/LTCFR/PDR | | D | Caa3 | Ca | | | SG |
| 3/15/18 | PETROLEOS DE VENEZUELA, S.A. -CITGO HOLDING, INC. | Industrial | SrSec/BCF/LTCFR/PDR | 2,800 | U | Caa2 | Caa1 | | | SG |
| 3/15/18 | MUELLER WATER PRODUCTS, INC. | Industrial | SrSec/BCF/LTCFR/PDR | | U | Ba3 | Ba2 | | | SG |
| 3/15/18 | ABERCROMBIE & FITCH MANAGEMENT CO. | Industrial | SrSec/BCF/LTCFR/PDR | | U | B1 | Ba2 | | | SG |
| 3/15/18 | IHEARTCOMMUNICATIONS, INC. | Industrial | PDR | | D | C | D | | | SG |
| 3/15/18 | EV ENERGY PARTNERS, L.P. | Industrial | SrUnsec/LTCFR/PDR | 343 | D | Caa3 | Ca | | | SG |
| 3/15/18 | FPC HOLDINGS, INC. | Industrial | LTCFR/PDR | | U | Caa1 | B3 | | | SG |
| 3/15/18 | LANAI HOLDINGS III, INC. | Industrial | SrSec/BCF/LTCFR/PDR | | D | B2 | B3 | | | SG |
| 3/16/18 | MATTEL, INC. | Industrial | SrUnsec/LTCFR/PDR | 1,900 | D | Ba3 | B2 | | | SG |
| 3/16/18 | PRESTIGE BRANDS HOLDINGS, INC. -PRESTIGE BRANDS, INC. | Industrial | SrSec/BCF | | U | B1 | Ba3 | | | SG |
| 3/16/18 | WPX ENERGY, INC. | Industrial | SrUnsec/LTCFR/PDR | 2,450 | U | B3 | B1 | | | SG |
| 3/16/18 | BI-LO HOLDING FINANCE, LLC | Industrial | SrUnsec/LTCFR/PDR | 475 | D | Ca | C | | | SG |
| 3/19/18 | PG&E CORPORATION | Utility | SrUnsec/BCF/LTIR/PS/CP | 17,888 | D | A3 | Baa1 | P-1 | P-2 | IG |
| 3/19/18 | LKQ CORPORATION | Industrial | SrUnsec/LTCFR/PDR | 1,214 | D | Ba2 | Ba3 | | | SG |
| 3/19/18 | BOWLERO CORP. | Industrial | LTCFR/PDR | | U | B3 | B2 | | | SG |
| 3/19/18 | PLASKOLITE, LLC | Industrial | SrSec/BCF | | D | B1 | B2 | | | SG |
| 3/19/18 | TAILORED BRANDS, INC. -MEN'S WEARHOUSE, INC. (THE) | Industrial | SrUnsec/LTCFR/PDR | 575 | U | B3 | B2 | | | SG |
| 3/20/18 | LEUCADIA NATIONAL CORPORATION | Financial | SrUnsec/LTCFR | 1,000 | U | Ba2 | Ba1 | | | SG |
| 3/20/18 | BLACKBOARD, INC. | Industrial | SrSec/BCF/LTCFR/PDR | 378 | D | Caa1 | Caa3 | | | SG |
| 3/20/18 | CLAIRE'S STORES, INC. | Industrial | PDR | | D | Ca | D | | | SG |
| 3/20/18 | MATADOR RESOURCES COMPANY | Industrial | SrUnsec/LTCFR/PDR | 575 | U | B3 | B2 | | | SG |
| 3/20/18 | GALLERIA CO. | Industrial | SrSec/BCF/LTCFR/PDR | NULL | D | Ba1 | Ba2 | | | SG |
| 3/20/18 | FULLBEAUTY BRANDS HOLDINGS CORP. | Industrial | SrSec/BCF/LTCFR/PDR | NULL | D | B3 | Caa1 | | | SG |

Source: Moody's

Ratings Round-Up

FIGURE 4

Rating Changes: Corporate & Financial Institutions – Europe

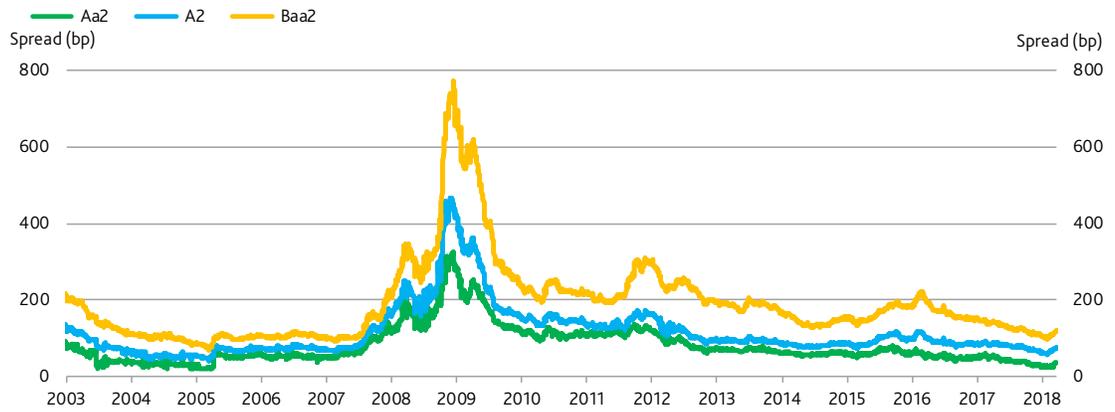
| Date | Company | Sector | Rating | Amount (\$ Million) | Up/ Down | Old LTD Rating | New LTD Rating | IG/ SG | Country |
|---------|--|------------|-------------------|------------------------|-------------|----------------------|----------------------|-----------|----------------|
| 3/14/18 | INMARSAT PLC | Industrial | SrUnsec/LTCFR/PDR | 1,400 | D | Ba2 | Ba3 | SG | UNITED KINGDOM |
| 3/14/18 | GLOBALWORTH REAL ESTATE INVESTMENTS LIMITED | Industrial | SrUnsec/LTCFR | 675 | U | Ba2 | Ba1 | SG | ROMANIA |
| 3/20/18 | ASTALDI S.P.A. | Industrial | SrUnsec/LTCFR/PDR | 921 | D | B3 | Caa1 | SG | ITALY |
| 3/20/18 | STARS GROUP INC. (THE) -STARS GROUP HOLDINGS B.V. (THE) | Industrial | SrSec/BCF | | D | B1 | B2 | SG | NETHERLANDS |

Source: Moody's

Market Data

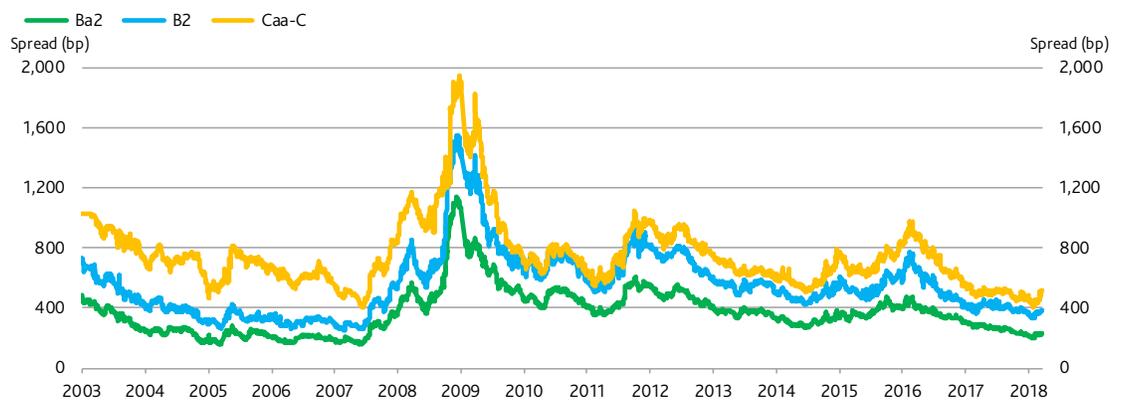
Spreads

Figure 1: 5-Year Median Spreads-Global Data (High Grade)



Source: Moody's

Figure 2: 5-Year Median Spreads-Global Data (High Yield)



Source: Moody's

Market Data

CDS Movers

Figure 3. CDS Movers - US (March 14, 2018 – March 21, 2018)

| CDS Implied Rating Rises | CDS Implied Ratings | | Senior Ratings |
|-------------------------------------|---------------------|---------|----------------|
| | Mar. 21 | Mar. 14 | |
| Issuer | | | |
| Nordstrom, Inc. | Ba3 | B2 | Baa1 |
| Consolidated Edison, Inc. | A2 | Baa1 | A3 |
| American Express Credit Corporation | Aa2 | Aa3 | A2 |
| Oracle Corporation | A2 | A3 | A1 |
| Coca-Cola Company (The) | Aa1 | Aa2 | Aa3 |
| Chevron Corporation | Aa1 | Aa2 | Aa2 |
| Exxon Mobil Corporation | Aa3 | A1 | Aaa |
| Amazon.com, Inc. | Baa2 | Baa3 | Baa1 |
| Anthem, Inc. | A2 | A3 | Baa2 |
| 3M Company | Aa1 | Aa2 | A1 |

| CDS Implied Rating Declines | CDS Implied Ratings | | Senior Ratings |
|---------------------------------|---------------------|---------|----------------|
| | Mar. 21 | Mar. 14 | |
| Issuer | | | |
| Lexmark International, Inc. | C | B3 | B3 |
| Ally Financial Inc. | Ba2 | Ba1 | Ba3 |
| Comcast Corporation | A3 | A2 | A3 |
| Walt Disney Company (The) | Aa3 | Aa2 | A2 |
| Amgen Inc. | A3 | A2 | Baa1 |
| Johnson & Johnson | Aa1 | Aaa | Aaa |
| UnitedHealth Group Incorporated | Aa3 | Aa2 | A3 |
| General Electric Company | Ba1 | Baa3 | A2 |
| Dominion Energy, Inc. | Baa2 | Baa1 | Baa2 |
| Berkshire Hathaway Inc. | Baa2 | Baa1 | Aa2 |

| CDS Spread Increases | Senior Ratings | CDS Spreads | | |
|---|----------------|-------------|---------|-------------|
| | | Mar. 21 | Mar. 14 | Spread Diff |
| Issuer | | | | |
| Lexmark International, Inc. | B3 | 1,541 | 302 | 1,239 |
| K. Hovnanian Enterprises, Inc. | Caa3 | 2,290 | 1,868 | 422 |
| Sears Roebuck Acceptance Corp. | C | 4,288 | 4,131 | 157 |
| Windstream Services, LLC | Caa1 | 2,397 | 2,255 | 142 |
| Rite Aid Corporation | B3 | 748 | 646 | 101 |
| Weatherford International, LLC (Delaware) | Caa1 | 683 | 594 | 89 |
| Penney (J.C.) Corporation, Inc. | B3 | 947 | 868 | 79 |
| Dish DBS Corporation | Ba3 | 516 | 447 | 68 |
| SUPERVALU Inc. | B3 | 717 | 655 | 62 |
| Dean Foods Company | B2 | 427 | 368 | 59 |

| CDS Spread Decreases | Senior Ratings | CDS Spreads | | |
|---------------------------|----------------|-------------|---------|-------------|
| | | Mar. 21 | Mar. 14 | Spread Diff |
| Issuer | | | | |
| Nine West Holdings, Inc. | C | 24,312 | 30,737 | -6,425 |
| Sears Holdings Corp. | C | 3,738 | 4,004 | -266 |
| Nordstrom, Inc. | Baa1 | 183 | 270 | -87 |
| PolyOne Corporation | Ba3 | 99 | 114 | -15 |
| Newell Brands | Baa3 | 121 | 133 | -12 |
| MBIA Inc. | Ba3 | 927 | 937 | -10 |
| Pride International, Inc. | B3 | 499 | 504 | -5 |
| Ball Corporation | Ba1 | 66 | 68 | -3 |
| Chevron Corporation | Aa2 | 24 | 25 | -2 |
| Consolidated Edison, Inc. | A3 | 43 | 45 | -2 |

Source: Moody's, CMA

Market Data

Figure 4. CDS Movers - Europe (March 14, 2018 – March 21, 2018)

| CDS Implied Rating Rises | | | |
|----------------------------------|---------------------|---------|----------------|
| Issuer | CDS Implied Ratings | | Senior Ratings |
| | Mar. 21 | Mar. 14 | |
| France, Government of | Aaa | Aa1 | Aa2 |
| Spain, Government of | A1 | A2 | Baa2 |
| Portugal, Government of | Baa2 | Baa3 | Ba1 |
| Landesbank Baden-Wuerttemberg | Aa2 | Aa3 | A1 |
| Royal Bank of Scotland N.V. | A2 | A3 | A3 |
| SEB | Aa2 | Aa3 | Aa3 |
| Raiffeisen Bank International AG | Baa1 | Baa2 | A3 |
| Banco Popular Espanol, S.A. | A2 | A3 | Baa3 |
| DZ BANK AG | Baa2 | Baa3 | Aa3 |
| Unione di Banche Italiane S.p.A. | Baa3 | Ba1 | Baa3 |

| CDS Implied Rating Declines | | | |
|---------------------------------------|---------------------|---------|----------------|
| Issuer | CDS Implied Ratings | | Senior Ratings |
| | Mar. 21 | Mar. 14 | |
| Barclays Bank PLC | Baa1 | A3 | A1 |
| Lloyds Bank Plc | A2 | A1 | Aa3 |
| The Royal Bank of Scotland Group plc | Ba1 | Baa3 | Baa3 |
| Santander UK plc | A3 | A2 | Aa3 |
| Banco Bilbao Vizcaya Argentaria, S.A. | Baa1 | A3 | Baa1 |
| HSBC Holdings plc | Baa1 | A3 | A2 |
| Banco Santander S.A. (Spain) | A2 | A1 | Baa1 |
| Bayerische Landesbank | Aa3 | Aa2 | A1 |
| Landesbank Hessen-Thuringen GZ | A2 | A1 | A1 |
| Standard Chartered Bank | A2 | A1 | A1 |

| CDS Spread Increases | | CDS Spreads | | |
|--------------------------------------|----------------|-------------|---------|-------------|
| Issuer | Senior Ratings | Mar. 21 | Mar. 14 | Spread Diff |
| CMA CGM S.A. | B3 | 442 | 394 | 48 |
| Altice Finco S.A. | B3 | 456 | 416 | 40 |
| Selecta Group B.V. | Caa2 | 410 | 370 | 40 |
| Boparan Finance plc | B3 | 488 | 450 | 38 |
| Sunrise Communications Holdings S.A. | B1 | 117 | 80 | 37 |
| Stonegate Pub Company Financing plc | Caa1 | 316 | 280 | 36 |
| Matalan Finance plc | Caa1 | 652 | 617 | 34 |
| Iceland Bondco plc | Caa1 | 356 | 324 | 32 |
| PizzaExpress Financing 1 plc | Caa1 | 932 | 900 | 32 |
| Stena AB | B3 | 520 | 490 | 30 |

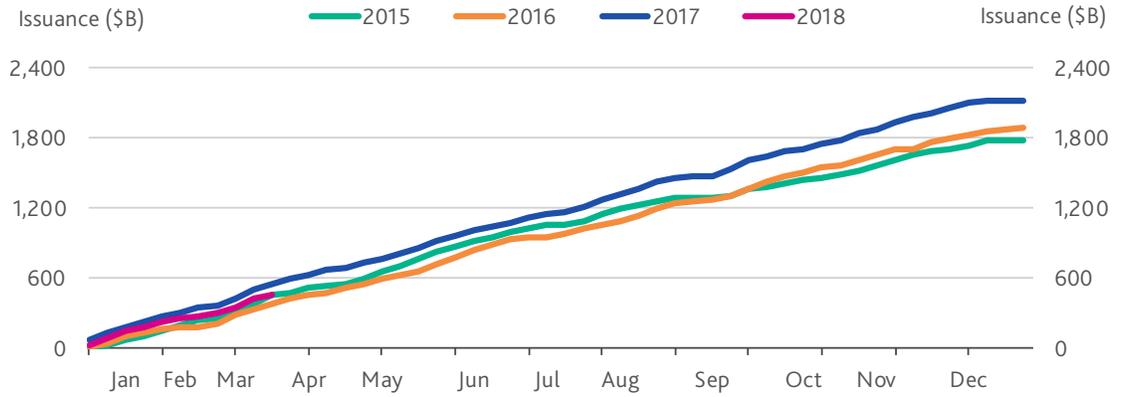
| CDS Spread Decreases | | CDS Spreads | | |
|-----------------------------------|----------------|-------------|---------|-------------|
| Issuer | Senior Ratings | Mar. 21 | Mar. 14 | Spread Diff |
| Astaldi S.p.A. | Caa1 | 1,813 | 1,927 | -114 |
| Banca Nazionale Del Lavoro S.p.A. | Baa3 | 64 | 78 | -15 |
| Ensco plc | B3 | 458 | 462 | -4 |
| Spain, Government of | Baa2 | 37 | 39 | -2 |
| Greece, Government of | B3 | 304 | 306 | -2 |
| Portugal, Government of | Ba1 | 66 | 67 | -1 |
| Switzerland, Government of | Aaa | 11 | 12 | -1 |
| National Bank of Greece S.A. | Caa2 | 662 | 663 | -1 |
| Belgium, Government of | Aa3 | 15 | 15 | 0 |
| Austria, Government of | Aa1 | 12 | 12 | 0 |

Source: Moody's, CMA

Market Data

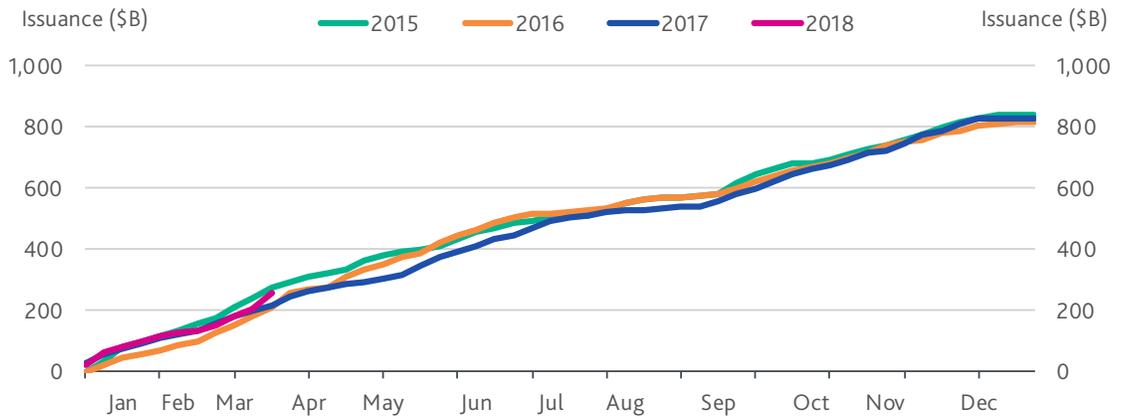
Issuance

Figure 5. Market Cumulative Issuance - Corporate & Financial Institutions: USD Denominated



Source: Moody's / Dealogic

Figure 6. Market Cumulative Issuance - Corporate & Financial Institutions: Euro Denominated



Source: Moody's / Dealogic

Market Data

Figure 7. Issuance: Corporate & Financial Institutions

| | USD Denominated | | |
|--------------|------------------|---------------|---------------|
| | Investment-Grade | High-Yield | Total* |
| | Amount \$B | Amount \$B | Amount \$B |
| Weekly | 23.926 | 9.197 | 34.933 |
| Year-to-Date | 355.960 | 89.739 | 455.270 |

| | Euro Denominated | | |
|--------------|------------------|---------------|---------------|
| | Investment-Grade | High-Yield | Total* |
| | Amount \$B | Amount \$B | Amount \$B |
| Weekly | 49.458 | 4.606 | 55.128 |
| Year-to-Date | 226.936 | 21.091 | 256.329 |

* Difference represents issuance with pending ratings.

Source: Moody's/ Dealogic

Moody's Capital Markets Research *recent publications*

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Topics CreditEdge - Bank Default Risk Improves in 2017

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