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OUTLOOK
15 June 2018

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Building Materials — US

Positive outlook supported by strength in construction spending, producer optimism

Our outlook for the Building Materials sector in the US is positive. This outlook reflects our expectations for the fundamental business conditions in the industry over the next 12 to 18 months.

» **Solid construction market fundamentals underpin positive outlook.** We forecast operating income will grow about 15% over the next 12-18 months. All construction end markets, public and private, are solid with strong underlying demand.

» **Credit metrics are largely sound.** We expect revenue to grow about 10% in 2018 and 6% in 2019. Operating margin will improve modestly on momentum of industry fundamentals, but those will be offset in part by cost pressures. Adjusted debt-to-EBITDA has risen for a number of building materials companies, mostly because of large, leveraged acquisitions in 2017. Earnings growth should bring leverage back in line with ratings by year-end 2018.

» **Tax overhaul will enhance cash flow during construction expansion.** All the rated building material companies will benefit from increased free cash flow from a combination of lower tax rates and deductions for capital spending that come from the Tax Cuts and Jobs Act (TCJA) signed into law in December. However, speculative grade companies are exposed to the risk of losing their interest expense deductions during a downturn, which will accelerate liquidity deterioration and heighten default risk. We do not see this as a near term risk because end market fundamentals are solid.

» **Despite positive backdrop, there is some risk to ratings following 2017 leveraged acquisitions.** Debt-financed M&A activity leaves some companies with leverage metrics that expose them to ratings risk. Operating margin has also stabilized. Martin Marietta is on negative outlook. Summit Materials and U.S. Concrete have not yet transitioned to the capital structures contemplated when their ratings were upgraded.

- **Private residential construction continues steady growth.** Residential construction will continue to produce solid growth metrics, though at a slower rate than in recent years. Private residential construction spending grew 9.5% year-over-year as of April 2018. Rising material costs and labor constraints are limiting growth, despite demand fueled by a strong economy, positive employment trends, household real-income growth, and increasing household formation by coming-of-age millennials.
- **Indicators point to moderate growth in private nonresidential construction.** Private nonresidential construction spending will continue to grow moderately, at about 4% in both 2018 and 2019, according to the American Institute of Architects' Consensus Construction Forecast. Most nonresidential construction activity will be in commercial construction in 2018 and in industrial and institutional construction in 2019. Nonresidential spending increased 5.3% year-over-year as of April 2018.
- **Funding mechanisms support public construction spending.** Infrastructure demand will improve through the construction season. Funding provided by the Fixing America's Surface Transportation (FAST) Act, and numerous state and local transportation initiatives, will translate into increased product demand in 2018 and 2019. If passed, the Trump administration's infrastructure plan released in February, would produce upside to our public spending outlook. Public construction spending increased 7.7% as of April, and has been growing since late 2017.
- **What could change our outlook?** We could revise the positive outlook to stable if our expectation for the industry's operating income growth declines below 7%, from our current view of 15%. The largest risks to the outlook include inflation, rising interest rates, and effects from tariffs. Input cost inflation, including materials, labor freight, and energy, could limit operating income growth if average selling prices rise at a slower rate. Rising interest rates could temper private construction growth. Unintended consequences from tariffs on imported steel and aluminum could also undermine construction spending. Higher costs for projects that require steel could impede project starts and consume a higher percentage of available funding. Further tariffs, countertariffs, and trade disputes could undermine the economy.

Since outlooks represent our forward-looking view on business conditions that factor into our ratings, a negative (positive) outlook suggests that negative (positive) rating actions are more likely on average. However, the industry outlook does not represent a sum of upgrades, downgrades or ratings under review, or an average of rating outlooks of issuers in the industry, but rather our assessment of the main direction of business fundamentals within the overall industry.

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Construction end markets fundamentals underpin our positive outlook

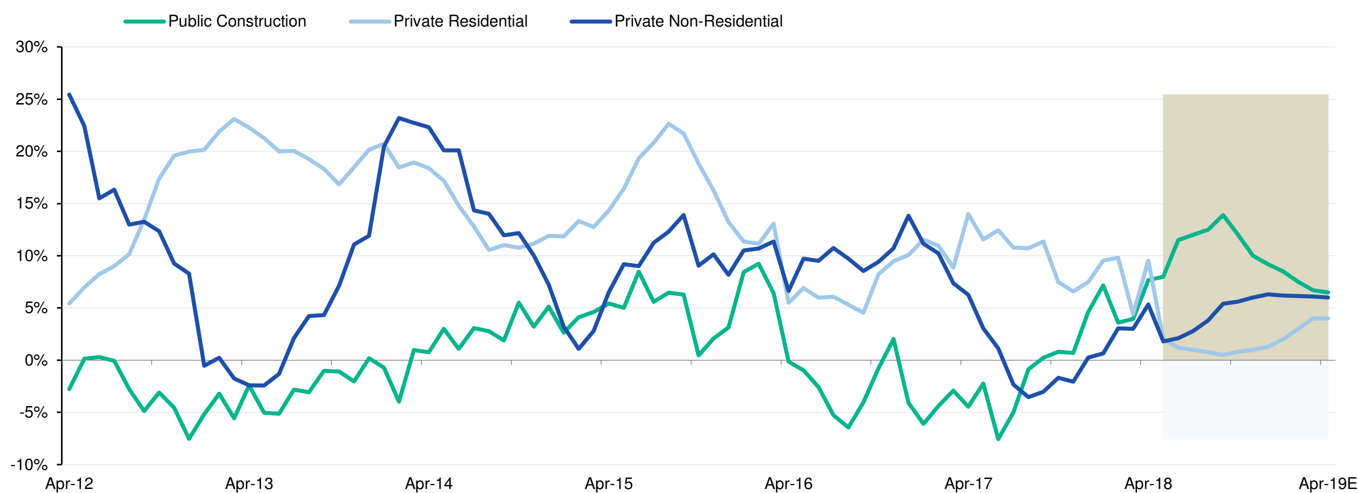
Our outlook for the US Building Materials Industry remains positive. We forecast operating income will grow about 15% over the next 12-18 months. Average selling prices will continue to rise, supported by strong demand and a lagging benefit from inflation. Volume should grow as we move fully into the construction season following a long period of severe weather patterns and project delays that muted shipment volume growth in recent quarters. Rated building material companies ubiquitously cite strong customer demand, growing backlogs, and increased bidding activity as the foundation for their own optimism.

Private construction spending will remain solid. Strength in employment data, housing starts, and wage growth, along with measured increases in interest rates, reinforce our outlook for private construction spending. Public construction spending returned to growth in late 2017. We expect public spending momentum to continue through 2019, as state funding initiatives, along with funds from the FAST Act, finally result in construction of highways, streets and bridges. Bottlenecks in planning and approval are easing, but construction end markets will continue to struggle with labor constraints. Rising input and freights costs are headwinds that will negatively pressure margins over the short-term due to the time-lag in passing costs onto customers, but will later support increases in average selling prices. The combination of volume and price growth across products should offset inflationary headwinds over the next 12-18 months.

Year-over-year increases in public spending are consistent with ongoing economic and industry fundamentals. Public construction spending is accelerating, jumping 7.7% year-over-year as of April 2018. We expect this to continue over the next 12-18 months, becoming a more significant driver of overall construction spending. Private construction remains sound as private residential spending increased 9.5% year-over-year and private non-residential grew 5.3%.

Exhibit 1

Public construction spending momentum to continue on infrastructure projects
Total construction put in place($ millions)



Sources: FactSet and Moody's Investors Service

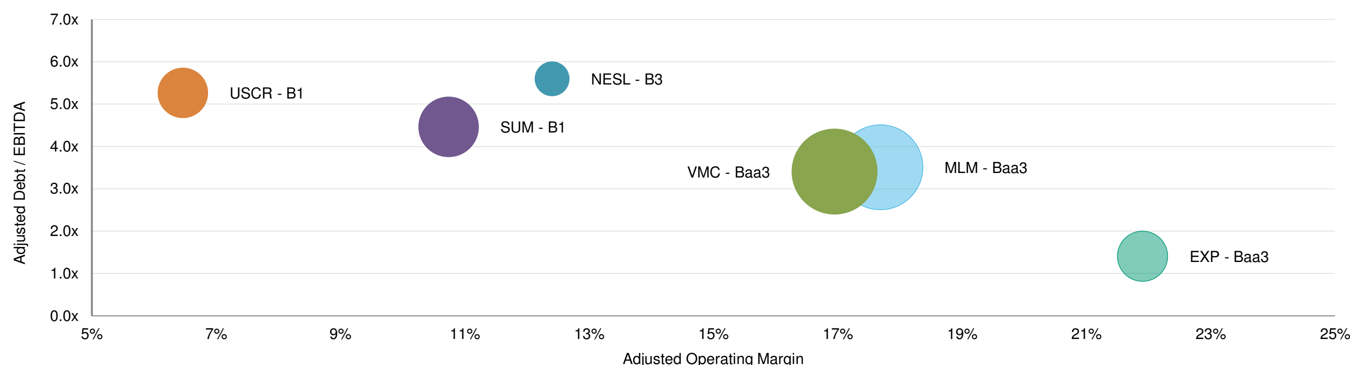
Credit metrics largely sound, despite leveraging acquisitions

We expect revenue to grow about 10% in 2018 and 6% in 2019 for the firms we rate. Increases in shipment volumes and average selling price, as well as acquisitions, continue to drive revenue growth. Operating margin was largely flat in 2017 due to loss of operating leverage stemming from temporary shipment volume declines tied to severe weather and project delays. We expect operating margin to improve modestly over the next 12-18 months on the strength of industry fundamentals, offset by input cost pressures.

Adjusted debt-to-EBITDA has crept up, or remained elevated, for a number of building materials companies — mostly due to large, leveraged acquisitions in 2017. This followed rating upgrades in late 2016 and early 2017, which were driven by strengthened

balance sheets and longer-term commitments to more conservative financial policies. Most active acquirers will achieve our leverage expectations by year-end 2018 through a combination of volume and price increase, as well as cost cutting.

Exhibit 2
Companies' elevated leverage following acquisitions, should be reduced by year-end
Adjusted debt/EBITDA and operating margin



Source: Moody's investors Service

US tax overhaul enhances cash flow during construction expansion

All of the rated building material companies will benefit from increased free cash flow from a combination of lower tax rates and deductions for capital expenditures in the Tax Cuts and Jobs Act that was signed into law in December. However, investment grade companies will benefit more from the TCJA than speculative grade companies through economic cycles. Spec grade companies face the risk of losing a greater percentage of their interest expense deductions during a downturn, which will accelerate liquidity deterioration and heighten default risk.

Under tax law revisions, interest deductibility will be limited to 30% of EBITDA in 2018 through 2021, and further limited to 30% of EBIT thereafter. Companies will be able to deduct capital expenditures, which should offset any limit to interest deductions. Lower tax rates will also mitigate the effect of interest limitation. Our early analysis indicates that New Enterprise Stone & Lime Co. (B3 positive) would run up against this limitation. Summit Materials LLC (B1 stable) and U.S. Concrete Inc. (B1 stable) would likely be able to benefit fully from their interest expense deductions through our outlook period (assuming industry fundamentals remain favorable), but will be limited once the threshold changes to 30% of EBIT.

The Building Materials Industry is cyclical. The tax positions of speculative-grade building materials companies will become more burdensome on cash flow when end market conditions eventually turn negative. As EBITDA (or EBIT in later years) deteriorates, less interest will be allowed and building materials companies would likely reduce capital expenditures, which would decrease any offset. For now, end market conditions are favorable, so this is not a risk over the next 12-18 months.

We expect the TCJA to result in additional free cash flow to be used to fund bolt-on acquisitions and capital expenditures. Shareholders will also benefit from growing dividends and share repurchases. For Martin Marietta Materials Inc. (Baa3 negative), we expect the company to prioritize debt reduction in order to bring its leverage back to levels consistent with its rating. Increased free cash flow should enable the company to drive adjusted debt-to-EBITDA lower at a faster pace than originally anticipated.

Despite positive backdrop, there is some risk to ratings following 2017 leveraged acquisitions

While we expect stable ratings during the outlook period, there is some downside risk stemming mainly from large, debt-funded acquisitions and the time it takes to absorb and integrate those operations. We changed Martin Marietta's outlook to negative after it announced the planned purchase of aggregates producer Bluegrass in June 2017. Adjusted debt-to-EBITDA increased to approximately 3.5x during the 12 months ended March 31.

Adjusted debt-to-EBITDA for Summit Materials is also high for its rating, at 4.5x for the 12 months through March 31. Our stable outlook assumes the company will be able to drive adjusted debt-to-EBITDA below 4.0x.

At 5.3x, U.S. Concrete's adjusted debt-to-EBITDA is high too. For its B1 rating our view is that adjusted debt-to-EBITDA should be below 3.5x, due to the company's geographic and product concentration. U.S. Concrete also has the largest exposure to private non-residential construction, making it vulnerable to any setback in that market.

Ultimately, positive end market fundamentals will buoy credit metrics, allowing building materials companies to grow back into their target metrics. Our outlook for all construction end markets are positive through 2019.

Private residential construction continues steady growth

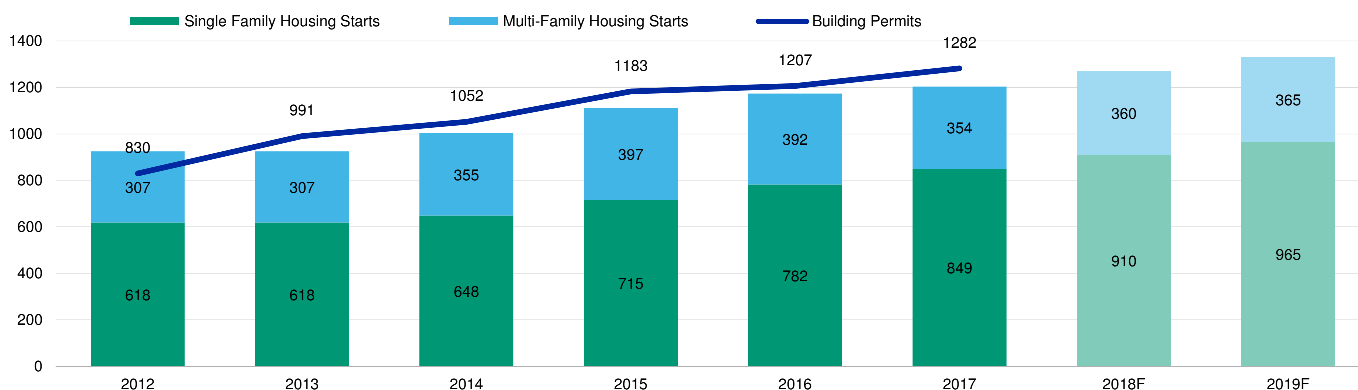
Residential construction will continue to produce solid growth metrics, although at a slower rate than in recent years. Rising material costs and labor constraints are limiting growth, despite solid demand fueled by a strong economy, positive employment trends, household real-income growth and increasing household formation by coming-of-age millennials. Private residential construction has grown year-over-year since 2012. Since late 2016, single-family home starts climbing at a faster pace than multi-family housing construction. This is positive for aggregates producers, since single-family housing activity is more aggregates-intensive than multi-family. Our Homebuilding Industry Outlook remains positive, indicative of the prolonged and steady housing recovery. We project total housing starts to reach 1.27 million in 2018, and single-family home starts to reach 910,000 - solid increases over 2017. In 2019, we project 1.33 million and 965,000, respectively.

Private residential construction spending grew 9.5% year-over-year as of April. The long-term growth trend remains positive for housing starts and housing permits despite choppy monthly indicators. US housing starts were approximately 1.29 million (annual seasonally adjusted rate) in April 2018, well below the historical average of 1.5 million per year. US housing permits were 1.35 million in April. Continued strength in residential construction should support future non-residential and infrastructure activity.

Exhibit 3

US housing starts trending upward, remain below long-term average

Moody's Macro Housing Forecast (figures in thousands)



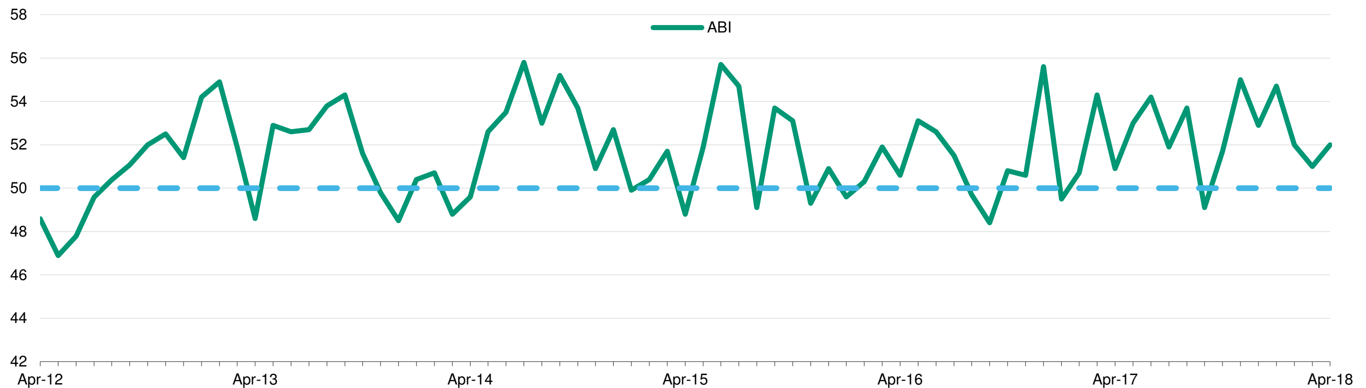
Building permits are based on new privately owned housing units authorized by building permits in permit-issuing places.
Source: Moody's Investors Service

Indicators point to moderate growth in private non-residential construction spending

Private non-residential construction spending will continue to grow moderately. Construction for non-residential buildings is projected to grow by 4% in 2018 and 4% in 2019, according to the AIA Consensus Construction Forecast, with the predominance of activity being generated by commercial construction in 2018 and industrial and institutional construction in 2019.

The overall forecast is supported by the Architectural Billings Index (ABI), an indicator of non-residential construction spending that leads by 9-12 months, and which rose 52 in April from 51 in March. The index has been over 50, which indicates expansion, for 11 of the last 12 months. The Dodge Momentum Index also continues to ascend. Rebuilding activity from 2017 natural disasters, implications from tax reform that should boost cash flow, and strong consumer and business confidence, also support the outlook. Building materials companies cite renewed development of industrial and energy-related projects as well, with bidding expected in 2018 and the benefits of actual construction spending in 2019 and beyond.

Exhibit 4
Architecture Billings Index in expansion territory 11 of last 12 months



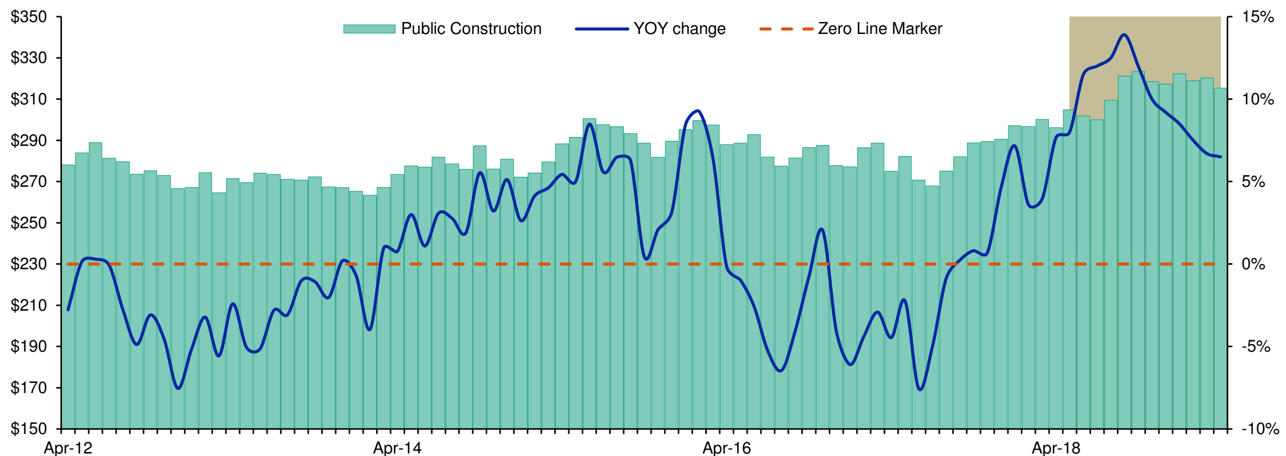
Source: The American Institute of Architects

Non-residential spending increased 5.3% year-over-year as of April 2018, only returning to growth in early 2018 after declines in the second half of 2017. Commercial spending, which represented 19% of total non-residential spending, has been the primary driver behind growth. In April, this segment grew 5.2% year-over-year on top of a year of strong double-digit increases. The infrastructure and office spending segments, representing 29.8% and 14.2% of total non-residential spending, increased 6.1% and 6.3% but have only been posting positive growth in recent months. The manufacturing segment, representing 14.5% of total, continues to decline.

Funding mechanisms support positive growth for public construction spending

Infrastructure demand will improve through the construction season. The funding provided by the FAST Act and numerous state and local transportation initiatives translates into increased product demand in 2018 and 2019. Twenty-four states increased their gas taxes in recent years to fund state level infrastructure projects. In addition, the federal budget agreement passed in February will support increased public construction spending in 2018. Despite demand and funding supports, labor constraints will limit the rate of growth. Public construction spending increased 7.7%, as of April, and grown since late 2017.

Exhibit 5
Public construction spending continues to rise on state, federal funding
Total Public Construction($ millions)



Source: FactSet and Moody's Investors Service

The Trump administration's infrastructure plan released in February, if passed, would offer upside to our public spending outlook. However, the plan has not gotten much traction with lawmakers and it is our view that the legislation is unlikely to pass in Congress in 2018.

The infrastructure plan aims to produce $1.5 trillion in new public and private infrastructure investments from $200 billion in federal government investment over 10 years, but it requires $1.3 trillion in investment by state and local governments and private investors. This will be difficult to achieve, given growing mandatory spending pressures on states from Medicaid and pensions, and the complexity and limitations around private investment.

Largest risks to outlook include inflation, rising interest rates, tariffs

We could revise the positive outlook to stable if our expectation for the industry's operating income growth declines below 7%, from our current view of 15%. Inflationary pressures are building — including in labor, energy and freight — which could pressure operating income growth if companies are unable to pass along increased costs through price increases at the same rate.

Lower operating-income growth would most likely result from moderating private construction spending. The private residential markets could be affected by a rapid rise in mortgage rates and/or a reversal in employment trends, but we view these risks as small over the next 12-18 months.

The private nonresidential construction end market is more likely to moderate than residential. Risks include rising interest rates, lower GDP expectations and weakening in industrial production. In addition, trade policy could undermine the general economy and shake confidence of business and consumers. In particular, steel tariffs could undermine spending because costs will increase for projects that require steel. Higher costs could impede project starts and would also consume a higher percentage of available funding, which would diminish funds available for future projects. Further tariffs, countertariffs, and trade disputes could undermine the economy.

Exhibit 6

US Building Materials Portfolio Metrics

Company Name	Senior Unsecured / CFR	Outlook	Net Sales ($millions)	Cash ($thousands)	Adj. EBIT/ Interest Expense	Adj. Total Debt ($millions)	Adj. Debt / EBITDA	Adj. Debt/ Book Capitalization
Eagle Materials Inc.	Baa3	Stable	$ 1,387	$ 9,315	12.2x	$ 663	1.4x	36%
Vulcan Materials Company	Baa3	Stable	$ 3,957	$ 38,141	2.1x	$ 3,722	3.4x	59%
Martin Marietta Materials, Inc.	Baa3	Negative	$ 3,924	$ 1,422,373	5.2x	$ 3,836	3.5x	53%
Summit Materials, LLC	B1	Stable	$ 1,963	$ 178,293	1.8x	$ 1,892	4.5x	94%
U.S. Concrete, Inc.	B1	Stable	$ 1,365	$ 36,616	1.7x	$ 954	5.3x	101%
New Enterprise Stone & Lime Co., Inc.	B3	Positive	*Private*					

Source: Moody's Investors Service

Moody's related publications

» Outlook Update: Building Materials - US: Positive outlook at risk from threat of US steel tariff, March 2018

» Homebuilding, Building Materials - North America: 2018 outlook - housing expansion continues, overall construction spending grows (slides), December 2017

» Non-Financial Corporates - US: Debt and Taxes: What investors should know as issuers report tax law changes, March 2018

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

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REPORT NUMBER 1129552

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