MOODY'S

OUTLOOK

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Homebuilding – US

Outlook stays positive on employment, low inventory, aging millennials

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

- » Positive trends persist. We remain positive on the US homebuilding market as momentum in key underlying drivers of housing demand offsets signs of nascent headwinds. The homebuilding expansion, now in year seven, and the overall economic expansion, now in year nine, show few signs of slowing. This despite rising interest rates and trade war anxieties that are beginning to raise recession fears. We project industry revenue growth to exceed 10% and average gross margins to hover around 20%.
- » Demographics is destiny. The clock cannot be stopped on the aging of the millennials, the biggest population cohort in the US. They are entering the housing market both purchase and rental in powerful and increasing numbers.
- » Profitability cutting into leverage. Credit metrics continue to improve for much of the industry on improving profitability. Debt leverage is gradually being reduced, interest coverage is strengthening, and gross margins have slowed and even stopped their recent declines.
- » Consolidation within the industry continues briskly. Homebuilders find it cheaper and quicker to enter new markets, and easier to go much deeper in existing markets, by buying competitors rather than "green fielding."
- » What could change our outlook? We could change our homebuilding industry outlook to stable from positive if industry revenue growth dips below 10% or gross margins dip sustainably below 20%. These, in our opinion, are more likely to result from an eventdriven shock rather than from industry fundamentals.

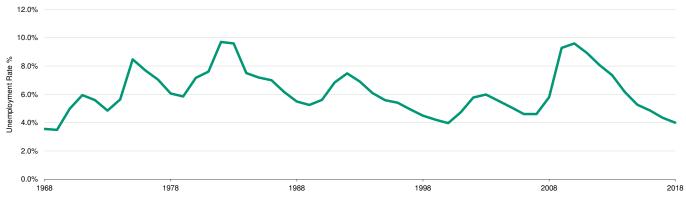
Since outlooks represent our forward-looking view on business conditions that factor into our ratings, a negative (positive) outlook suggests that negative (positive) rating actions are more likely on average. However, the industry outlook does not represent a sum of upgrades, downgrades or ratings under 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.

Positive employment, wage and consumer confidence trends persist

The environment remains largely supportive of continued sustainable growth in the US homebuilding industry over the next 12 to 18 months. This is reflected in multiple economic and consumer indicators that have been steadily improving since the last recession and are currently strong.

Unemployment rates are at their lowest levels since 1999. Wages, as well as household real income, continue to rise, increasing homebuyers' disposable income and buying power. Consumer confidence, which is another integral part of homeownership planning, continues to steadily inch up and remains in strongly positive territory, and demand continues to grow. We see few signs of slowing.

Exhibit 1
Unemployment at lowest levels seen in last 20 years



Source: U.S. Bureau of Labor Statistics, Moody's Analytics

Exhibit 2
Consumer confidence in strongly positive territory

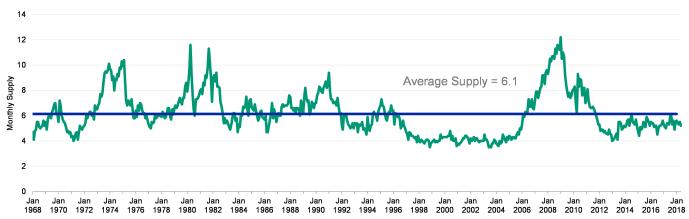


Source: The Conference Board, Moody's Analytics

Existing and new home inventories remain low, with US homebuilding companies unable to keep up with growing demand because of insufficient capacity. Constraints include the extensive land permitting process, pervasive shortages of skilled labor, and an insufficient supply of developed land, especially in locations close-in to major cities. Unsold new homes in the US currently equal approximately five months of supply, and have ranged from four to six months of supply since 2012. A six-month supply of new homes is considered the norm for a stable housing market, and is a 50-year average — ranging from as little as three-and-a-half months to as long as 12 months — over this time.

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Exhibit 3
Home inventory remains tight



Source: U.S. Census Bureau, Moody's Analytics

There is a lack of finished lots to help address this shortage. Additionally, land prices continue to rise, making it more difficult and expensive for builders to compete for land. Homebuilders have a more-conservative approach to land buying and land development since the downturn that helped spark the last recession, to avoid the risk of being caught with significant inventory and forced to take major impairment charges when the market cools. Builders are managing their land more prudently, planning to complete new communities in two to four years, as opposed to nearly double that in the past. The land supply currently carried by US homebuilders now ranges from three to five years, compared with five to seven years before the last downturn. As a result, this shortage of inventory drives home prices higher, helping builders offset increasing input costs, which in turn supports their margins.

Not everything is rosy, however

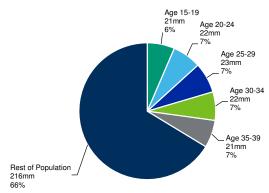
Recently implemented trade tariffs raise concerns about rising input costs and potential material supply disruption across a variety of US manufacturing industries. And while certain material costs other than lumber and plywood (which were separately subjected to tariffs early in 2018) are likely to rise for homebuilders, particularly steel, we do not see this as a major obstacle to operating performance. Homebuilders use far less steel in building a home than lumber and plywood and are likely to pass through any material cost increases to buyers through higher home prices.

In addition, mortgage interest rates are rising and widely expected to continue to rise as the Federal Reserve continues to raise its benchmark fed funds rate in a modest, stair-step fashion. Over the long term, mortgage rates are not closely correlated to housing starts and new home sales, but a sudden spike, as with the "taper tantrum" during the first half of 2013 when the Fed ended quantitative easing, could put the brakes on housing demand.

Demographics is destiny

Demographic fundamentals in the US remain favorable for the housing market. In addition to overall population growth supporting housing demand, the generation known as Millennials, a larger cohort than the post-war Baby Boomer generation, provide a significant opportunity for the homebuilding industry. Millennials are entering the housing market in increasing numbers, and their demand for homes will be a source of growth for the homebuilding industry over at least the next two decades. Thus far, Millennials have tended to enter the housing market at a later age than their predecessors. This factor, among others, is attributable to Millennials' focus on career success; significant educational debt burdens; preference for experiences such as travel to owning tangible property; and their waiting longer to form households and have children. Homebuilders have been making efforts to address this segment's needs. This includes building smart homes that incorporate technology with features such as smart door locks, video doorbells and surveillance, temperature and lighting controls, garage door openers; as well as providing a home-shopping experience that better fits their lifestyles. The average age of Millennials is currently around 29. The average age of a first-time homebuyer is 32, so the math is quite favorable.

Exhibit 4
Millennial population (born 1980s to early 2000s)
As of 2017, ages 18 to 37



Source: U.S. Census Bureau, Moody's Analytics

Profitability helping to reduce debt leverage

Homebuilders' credit metrics continue to grow stronger through improving profitability. This includes growing interest coverage, declining debt-to-capitalization, and gross margins that appear to have narrowed or stopped their declines, with some builders demonstrating modest improvements through various factors. We expect these trends to continue over the next 12 to 18 months.

We note that accounting considerations related to recent US tax law changes have resulted in a one-time reduction of some builders' net income and an increase in leverage metrics, however, long-term benefits will ensue. Builders with net deferred tax asset positions had to revalue those assets at the new lower 21% tax rate versus the old 35% rate, which caused them to record income tax expense charges. These charges reduced some of rated homebuilders' net income and in some cases equity balances, thus impacting homebuilding debt-to-capitalization ratios. The benefits of the reduced corporate tax rate overall in the long term, however, will far outweigh the one-time impact on credit metrics by increasing net income, equity balances, and cash flow generation, the latter of which can be reinvested back in the business or used to reduce debt.

Many homebuilders have faced diminishing gross margins over several years due to rising costs for land, building materials, and labor, that followed a run-up in margins during the early years of recovery after the housing downturn. In more recent quarters, builders narrowed or eliminated margin declines, and in some cases, produced modest improvements. This is attributable to a variety of reasons, in some cases unique to each builder.

Some consolidated acquisitions and improved negotiating power due to expanding scale and reach. Some quickly became accustomed to taking advantage of rising prices in booming markets, such as California, Arizona, Florida, and Nevada. And some started offering a reduced amount of product designs. Overall, we expect gross margins for the US homebuilders to continue stabilizing or modestly improve, hovering around or even exceeding the 20% mark, which we would expect for our positive industry outlook.

35% 30% 23.7% 22.7% 25% 22.0% 21.4% 20.9% 20.0% 19.8% Gross Margin 17.6% 16.5% 10% 0% 2012 2013 2014 2015 2016 2017 IТМ 2010 2011

Exhibit 5

Average gross margin of rated homebuilders and land developers

All figures are calculated using Moody's estimates and standard adjustments Source: Moody's Financial Metrics

Buy and grow, or be bought

Rated homebuilders have actively consolidated in recent years. This includes large national public builders buying their peers and creating the largest companies in the industry (such as Lennar's purchase of CalAtlantic along with its previous purchase of WCI Communities), mid-scale but transformational purchases (such as Taylor Morrison's acquiring AV Homes), and a variety of tuck-in acquisitions executed in place of land buying (such as Beazer Homes USA's acquiring smaller regional builders Venture Homes and Bill Clark Home).

We view the industry as having significant further room for consolidation. Among the 23 currently rated homebuilders, the top five currently generate over 55% of aggregate revenues. Moreover, we believe acquisitions will be selective and well-spaced out. We expect public-to-public large transformational purchases to continue as builders compete for market share, while public-to-private purchases will extend reach into new and existing markets. We do not expect any builder to complete two or more large acquisitions in the same year, due to the time investment required for smooth integration and consolidation of support offices, realignment of sales structures, implementation of strategy, and culture change.

What could change our outlook?

Our outlook would be changed to stable from positive if we expected a meaningful slowdown in our key indicators, namely if homebuilding revenues were to grow less than 10% and companies' gross margins were to weaken sustainably below 20%.

Other homebuilding indicators that would cause concerns if they were to weaken include a slowdown in homebuyer traffic and rapidly rising cancellations. The current economic recovery is the second-longest recovery in the post-war period. We are currently in month 109 of a steady recovery, compared to an average post-war expansion of 58 months. Mark Zandi, chief economist at our sister company, Moody's Analytics, believes the potential inversion of the yield curve suggests a mid-2020 economic recession.

While we do not expect a slow-down in the housing sector in the next 12 to 18 months, we believe, if one were to occur it would come from an external shock -- given that fundamentals for homebuilding remain solid. Following is our projection for total housing starts, new and existing home sales, and median home selling prices for 2018 and 2019.

Exhibit 6
Moody's Macro Housing Forecast

2013A	2014A	2015A	2016A	2017A	2018P	2019P
925	1,003	1,112	1,174	1,203	1,270	1,330
	8.4%	10.9%	5.6%	2.5%	5.6%	4.7%
618	648	715	782	849	910	965
	4.9%	10.3%	9.4%	8.6%	7.2%	6.0%
307	355	397	392	354	360	365
	15.6%	11.8%	-1.3%	-10.7%	1.7%	1.4%
429	437	501	561	614	650	685
	1.9%	14.6%	12.0%	9.4%	5.8%	5.4%
9.5%	6.9%	5.0%	4.6%	5.3%	4% - 5%	3% - 4%
5,090	4,940	5,250	5,450	5,510	5,750	5,950
	-2.9%	6.3%	3.8%	1.1%	4.4%	3.5%
11.5%	5.7%	6.8%	5.1%	5.7%	4% - 5%	3% - 4%
	925 618 307 429 9.5%	925 1,003 8.4% 618 648 4.9% 307 355 15.6% 429 437 1.9% 9.5% 6.9% 5,090 4,940 -2.9%	925 1,003 1,112 8.4% 10.9% 618 648 715 4.9% 10.3% 307 355 397 15.6% 11.8% 429 437 501 1.9% 14.6% 9.5% 6.9% 5.0% 5,090 4,940 5,250 -2.9% 6.3%	925 1,003 1,112 1,174 8.4% 10.9% 5.6% 618 648 715 782 4.9% 10.3% 9.4% 307 355 397 392 15.6% 11.8% -1.3% 429 437 501 561 1.9% 14.6% 12.0% 9.5% 6.9% 5.0% 4.6% 5,090 4,940 5,250 5,450 -2.9% 6.3% 3.8%	925 1,003 1,112 1,174 1,203 8.4% 10.9% 5.6% 2.5% 618 648 715 782 849 4.9% 10.3% 9.4% 8.6% 307 355 397 392 354 15.6% 11.8% -1.3% -10.7% 429 437 501 561 614 1.9% 14.6% 12.0% 9.4% 9.5% 6.9% 5.0% 4.6% 5.3% 5,090 4,940 5,250 5,450 5,510 -2.9% 6.3% 3.8% 1.1%	925 1,003 1,112 1,174 1,203 1,270 8.4% 10.9% 5.6% 2.5% 5.6% 618 648 715 782 849 910 4.9% 10.3% 9.4% 8.6% 7.2% 307 355 397 392 354 360 15.6% 11.8% -1.3% -10.7% 1.7% 429 437 501 561 614 650 1.9% 14.6% 12.0% 9.4% 5.8% 9.5% 6.9% 5.0% 4.6% 5.3% 4% - 5% 5,090 4,940 5,250 5,450 5,510 5,750 -2.9% 6.3% 3.8% 1.1% 4.4%

Source: U.S. Census Bureau, National Association of Realtors, Moody's Projections

Moody's related publications

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- » Homebuilding -US and Canada: Few investment-grade companies, potential crossovers among homebuilders, July 2018
- » Cross-Sector US: Housing-related industries lay foundation for 21st century technology, April 2018
- » Homebuilding US: FAQ: Optimal Land Supply, Risks of High Rise Business, Hurricane Impact, and Rialto, October 2017

Outlook

- » Outlook Update: Homebuilding North America: Positive outlook remains, despite blow from tax law changes, January 2018
- » Homebuilding, Building Materials-N America: 2018 outlook housing expansion continues, overall construction spend grows (slides), December 2017

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