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VALUE FOCUS

Construction & Building Materials

Fourth Quarter 2018 | Segment Focus: Nonresidential Construction

Executive Industry Trends

- The labor market continues to tighten, and construction labor costs continue to rise especially in expensive coastal cities.
- GDP growth and corporate profitability bolstered nonresidential construction growth throughout 2018; residential construction was choppier over the year. Housing market activity continued to soften in Q4 as housing starts fell.
- Key themes in construction industry mergers and acquisitions have been consolidation as retiring baby boomers look for exit opportunities and the rise of construction technology and software companies.
- After two years of Fed rate hikes, the Fed has adopted a wait-and-see approach to raising rates as treasury yield spreads continue to flatten.

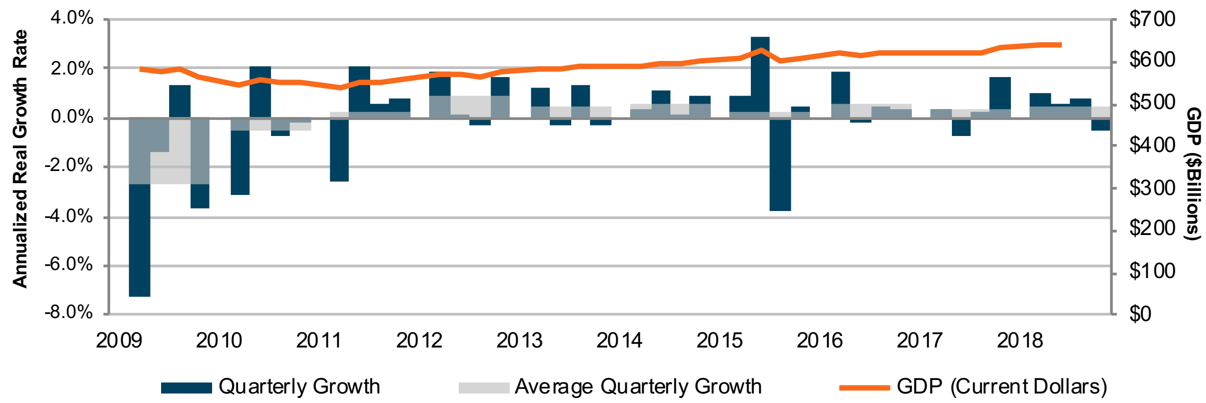
In This Issue

Construction Overview

Construction & National GDP

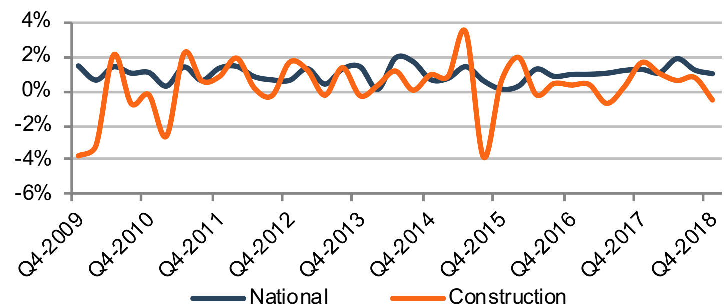
GDP rose 5.2% over the past the past year through the fourth quarter of 2018, decelerating slightly last quarter. Since 2008, construction has averaged 3.5% of national GDP, and it accounted for 3.1% of GDP over 4Q 2018. Construction has steadily recovered since the decline precipitated by the 2008 financial crisis, experiencing growth consistent with that of the national GDP. Fluctuations in construction GDP have now stabilized, with most quarterly growth rates lying in the plus or minus 0-2 percent range since 2012. Year-over-year construction GDP has increased 1.9%. The deceleration in construction GDP growth was primarily due to slowing residential construction activity. Despite improved corporate profitability, political and trade tensions are weighing on the outlook for industry growth as well as concerns over the length of the current credit cycle.

Construction Gross Domestic Product



Source: Bureau of Economic Analysis

% Change in GDP



Source: tradingeconomics.com | U.S.Bureau of Economic Analysis

Construction GDP	
Period	**% Change**
Q-o-Q	-0.5%
Y-o-Y	1.9%

National GDP	
Period	**% Change**
Q-o-Q	1.0%
Y-o-Y	5.2%

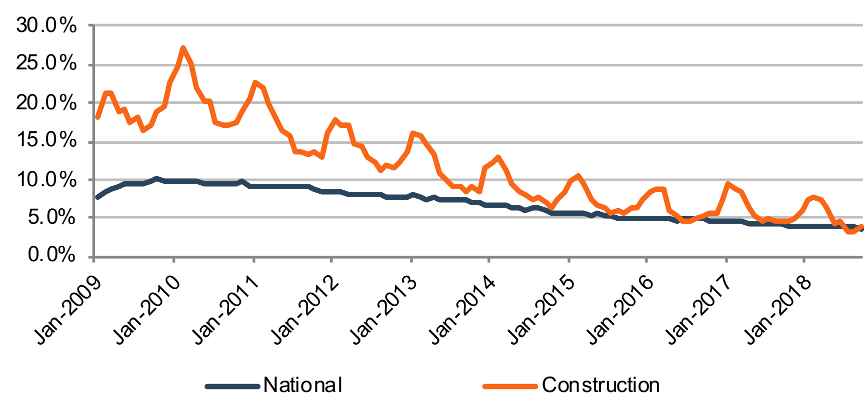
Construction Overview

Construction & National Unemployment

The Federal Reserve believes a healthy economy typically has an unemployment rate between 4.5% and 6.0%. The current level of 3.9% falls below this range, indicative of a tight labor market. The unemployment rate in September and November fell to the lowest rate of the ten-year period.

The unemployment rate in the construction industry is typically more volatile because it is a cyclical and seasonal industry. The major contributing factor to the seasonal nature of the industry is the weather. Production of materials and projects generally decrease during the colder, winter months. Construction unemployment is currently at 5.1%, below the level of 5.9% at the same time last year. The construction unemployment rate fell to a period low of 3.4% in July and August 2018. A lack of skilled laborers has become an industry-wide issue and has contributed to wage growth and increased costs for builders.

Unemployment Rate



Source: U.S. Bureau of Labor Statistics

Note: In the above graph, the national unemployment rate is seasonally adjusted, but the construction unemployment rate is not in order to show seasonality and recent trends.

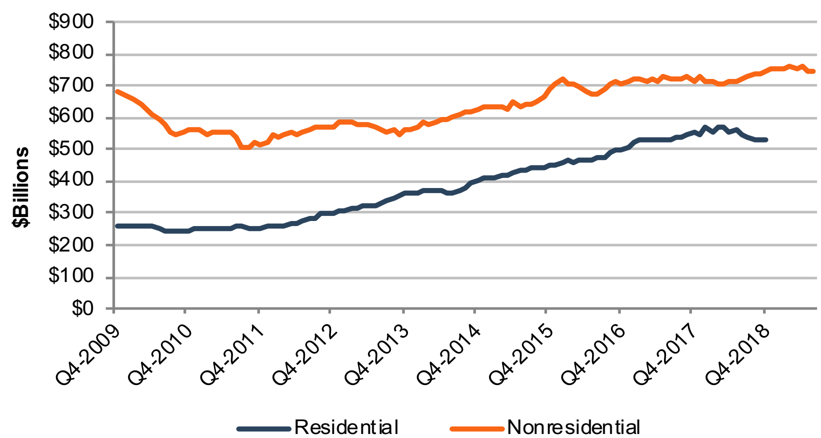
Construction Overview

Value of Construction Put-in-Place

The value of construction put-in-place is the total value of construction work done in the U.S. for a particular period. The U.S. Census Bureau tracks this data and reports the total monthly. This value includes, but is not limited to, building materials costs, labor costs, profit, engineering costs, interest, and taxes.

Year-over-year put-in-place construction has decreased by 3.2% for residential and increased by 2.9% for nonresidential. Nonresidential construction declined by 1.2% quarter-over-quarter through December 2018. The decrease in non-residential construction comes in the midst of delays for the President's $1 trillion infrastructure plan due to financing issues and other political priorities. Progress in these plans would create significant public work projects and could revivify nonresidential growth. Residential construction was disappointing as higher prices and financing rates contributed to a decline in housing starts in the second half of 2018.

Value of Construction Put-in-Place



Source: U.S. Census Bureau

Residential	
Period	**% Change**
Q-o-Q	-0.6%
Y-o-Y	-3.2%

Nonresidential	
Period	**% Change**
Q-o-Q	-1.2%
Y-o-Y	2.9%

Sector Focus

Nonresidential Construction

According to the ***2019 FMI Overview***, the top performing nonresidential construction sectors in 2018 included transportation (spending up 16%), lodging (up 14%), and office (up 11%). Transportation spending has been driven by airport construction and renovations as many airports look to overhaul their terminals and amenities to offer improved experiences. Lodging construction spending was boosted by improved corporate earnings as well as higher business and leisure travel. Office construction spending has benefited from a strong demand in key urban markets as vacancy rates have remained at cycle lows. Construction spending on commercial space, such as shopping centers and malls, has continued to be adversely affected by the shift in spending habits towards e-commerce. Despite the long-term demographic trends in favor of increased health care construction spending, it was relatively flat year-over-year in 2018. Manufacturing construction spending was only up 2% in 2018 despite improved corporate profitability owing to 2017 tax reform. A strong dollar as well as heightened trade tensions with China weigh on the outlook for manufacturing spending.

Increased cost pressures continue to be pervasive throughout the construction industry. While higher materials and energy costs do not vary significantly by region, labor costs can vary markedly by region and city. A tight labor market has also increased the competition for employees in the construction industry and driven up wage costs. Labor shortages are affecting contractors' capacity for work and may be limiting potential levels of activity. According to data from BuildZoom, the most expensive cities for construction are predominantly located in expensive coastal cities (New York, San Francisco, Boston, Philadelphia, and Los Angeles) where labor costs have outpaced the rise in materials costs. The least expensive cities for construction are located in the south including Austin, Jacksonville, Little Rock, and Knoxville.

The **Associated Builders and Contractors Construction Backlog Indicator (CBI)** declined 7.5% year-over-year to 8.9 months which still remains high by historical standards. The CBI reached a record high of 9.9 months in Q2 2018. The largest backlog increases were in the heavy industrial sector and the South and West regions. With the additional margin pressure of rising costs, companies should be wary of taking on too much work and burning through working capital solely to secure revenues. While a large backlog may appear to be a safe line, we are late in the current credit cycle and a current backlog can be delayed or even disappear in the next recession.

Mergers and acquisitions activity (M&A) in 2018 was predominantly fueled by smaller strategic deals rather than $1 billion or larger blockbuster deals from previous years. The demographic need for owner succession of retiring baby boomers has driven a lot of the smaller deals. In addition to company sales, employee stock ownership plans have become an increasingly appealing option for an owner exit strategy. Another key theme in M&A activity has been strategic acquisitions of construction technology companies. Over $10 billion has flown into construction technology investments in the past decade in order to begin to harvest the sheer amount of data that is constantly produced.

Nonresidential Construction

Trade-Weighted Index and Yield on 10-Year Treasury

The Trade-Weighted Index ("TWI") measures the relative strength of the U.S. dollar in comparison to foreign currencies, putting an emphasized weight on the most common trade partners and largest economies. When the dollar is strong, imports become cheaper and exports become more expensive. The dollar is near its strongest level in the last 10 years, which increases the cost for other countries to purchase U.S. building materials and decreases sales volume. The TWI has increased throughout 2018 after a decline in 2017. Divergence in monetary policy between the U.S. and the international community has boosted the dollar's appreciation as the Fed has increased rates and begun its process of shrinking its balance sheet.

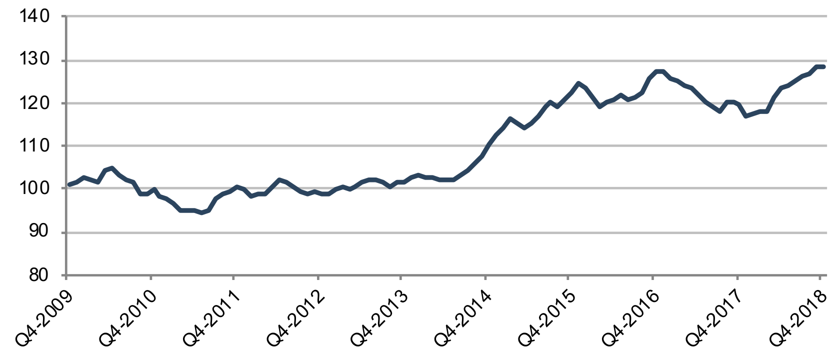
The yield on 10-Year Treasury Bonds can indirectly affect the road contracting industry. Higher interest rates make construction projects more expensive to undertake, but they may also signify increased optimism about economic growth. As seen **in the chart on page 6**, the 10-year yield has experienced a downward trend for much of the past ten years as the Fed attempted to aid the economic recovery by encouraging an increase in investment. The 10-year yield has increased by 43 basis points over the past year due to a shift in the Fed's stance on interest rates and expectations of stronger economic growth and higher inflation.

One interest rate measure to watch is the spread between 10-year and 2-year treasury yields. A spread approaching zero or even crossing into negative territory has historically preceded a recession and potentially signals that the Fed has tightened rates too much. The spread declined to 0.16% in December 2018 which is the lowest monthly spread in the past 10 years as the growth in 2-year yields, which the Fed has more influence over, has outpaced the growth in 10-year yields.

Nonresidential Construction

Trade-Weighted Index and Yield on 10-Year Treasury

Trade-Weighted Index



Source: St. Louis Fed | Board of Governors of the Federal Reserve (US)

Trade-Weighted Index	
Period	**% Change**
Q-o-Q	2.0%
Y-o-Y	7.2%

Yield on 10-Year Treasury

Source: St. Louis Fed

Yield on 10-Year Treasury	
Period	**% Change**
Q-o-Q	-17 BPS
Y-o-Y	43 BPS

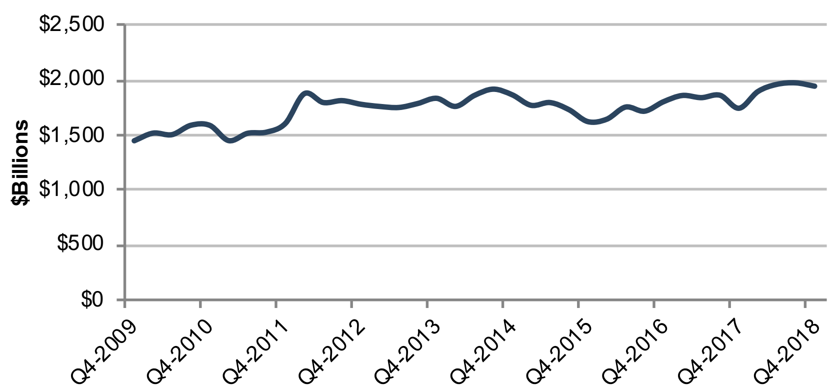
Nonresidential Construction

Corporate Profit and Office Rental Vacancy

Corporate profit is essential for companies not only to survive, but to grow and expand. When corporate profit increases, companies are more willing and able to open new branches and divisions. These additions lead to more commercial construction. As seen in the chart below, corporate profit has increased over the past year to the highest level of the past 10 years. In addition to favorable macroeconomic trends discussed in other sections, the U.S. Tax Cuts and Jobs Act of 2017 lowered the corporate tax rate from 35% to 21%. The dip in the fourth quarter of 2017 is partially due to one-time deferred tax asset write-downs incurred by companies owing to the new tax rate. A lower tax burden going forward should encourage increased investment.

Office rental vacancy can also be a signal for new commercial construction demand. Low vacancy rates indicate a need for more space for companies to conduct business, which is a boon for the nonresidential construction industry. Both suburban and downtown vacancy rates have remained stable at cycle lows for the previous couple of years as strong demand has absorbed supply as it has become available. New construction has been predominantly concentrated in a small number of strong markets such as Manhattan, Washington D.C., and San Francisco. Growth in office employment, another driver of construction demand, is projected to be highest in Sunbelt and tech markets.

Corporate Profit



Corporate Profit	
Period	**% Change**
Q-o-Q	-1.5%
Y-o-Y	11.1%

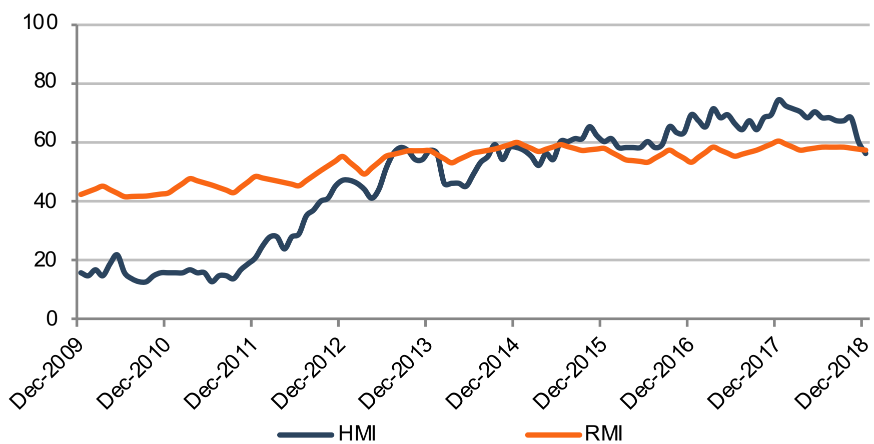
Source: St. Louis Fed

Sector Round-up

Residential Construction

The National Association of Home Builders conducts two separate surveys, the Housing Market Index ("HMI") and the Remodeling Market Index ("RMI"), to measure confidence in the home building industry. Respondents rate their activity on a scale from 1-100 with 50 being average. The HMI is produced monthly and asks respondents to rate market conditions both at present and looking forward six months. The monthly index has remained above 50 since July 2014 and reached a 10 year high of 74 in December 2017. The HMI declined in the fourth quarter of 2018 as housing market activity softened. The RMI is produced quarterly and asks respondents to rate their work volume as either higher or lower than the previous quarter. The quarterly index has fluctuated between 50 and 60 since the second quarter of 2013.

National Association of Home Builders HMI and RMI



NAHB HMI	
Period	**% Change**
Q-o-Q	-16.4%
Y-o-Y	-24.3%

NAHB RMI	
Period	**% Change**
Q-o-Q	-1.7%
Y-o-Y	-5.0%

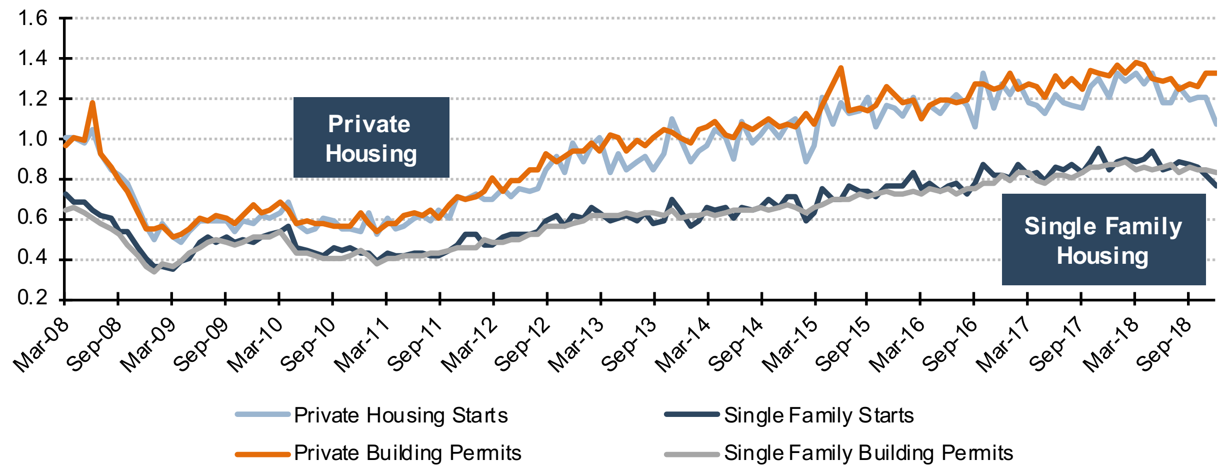
Source: National Association of Home Builders
Note: RMI is measured quarterly and approximated for a monthly basis using a straight-line approach

Sector Round-up

Residential Construction (continued)

Building permits and housing starts are two important indicators for the home building industry. Both reflect demand, consumer confidence, and the feasibility of financing construction projects. Building permits can be issued and then shelved by builders; therefore, housing starts are a better focused measure of current activity within the industry. After declining nearly 75% during from Q1 2006 to Q1 2009 as the housing bubble unwound, housing permits and starts have steadily recovered but are unlikely to reach pre-recession highs. After mixed performance throughout most of the year, housing starts declined in the fourth quarter.

Seasonally Adjusted Annualized Rates of New Housing Starts and Building Permits (Millions of Units)



Source: U.S. Census Bureau
Note: Permits at a given date are generally a leading indicator of future starts.
Beginning with January 2004, building permit data reflects the change to the 20,000 place series.

Private Housing Starts		Single Family Starts		Private Building Permits		Single Family Building Permits	
Period	**% Change**	**Period**	**% Change**	**Period**	**% Change**	**Period**	**% Change**
Q-o-Q	-10.2%	Q-o-Q	-13.0%	Q-o-Q	4.4%	Q-o-Q	-2.9%
Y-o-Y	-10.9%	Y-o-Y	-10.5%	Y-o-Y	0.5%	Y-o-Y	-5.5%

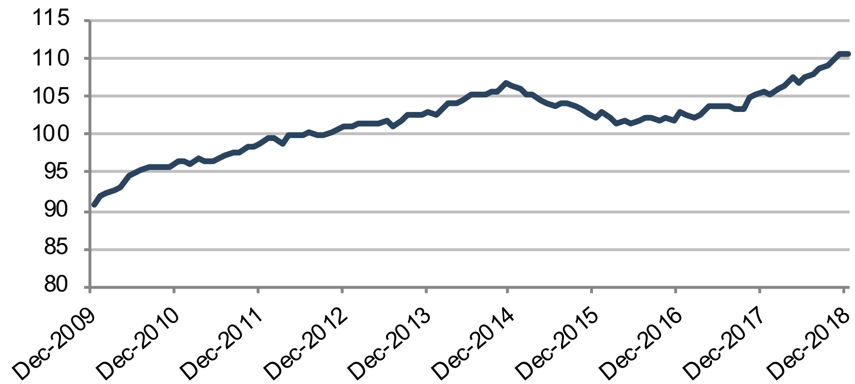
Sector Round-up

Building Materials

The Industrial Production Index ("IPI") is an indicator of economic activity that measures real production output of the manufacturing, mining, and utilities industries. It acts as a barometer for the level of demand for industrial products and manufacturing activity. Building materials such as sand and gravel are important inputs of industrial production. After oscillating for a couple of years, IPI steadily increased for most of 2017 and 2018. In December 2018, IPI reached its highest level of the examined period.

Cement and ready-mix concrete are used in most construction projects involving the utilities subsector such as transportation, energy, gas, water, and sewage. There will always be a need for such infrastructure, so building materials companies can rely on this revenue stream even though the growth rate of new projects fluctuates. The value of utilities construction has increased 7.0% over the past year. Increased renovation and safety requirements have driven an increase in power construction spending as well as a focus on natural gas and renewable energy sources. Spending on water supply construction is expected to increase as most of the country's pipeline system was installed in the mid-20th century and will need to be replaced or renovated.

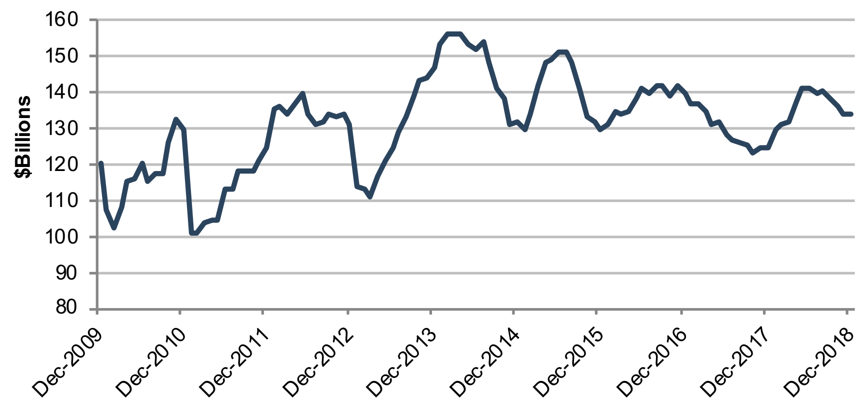
Industrial Production Index



Source: St. Louis Fed

Industrial Production Index	
Period	**% Change**
Q-o-Q	1.5%
Y-o-Y	4.5%

Value of Utilities Construction



Source: U.S. Census Bureau

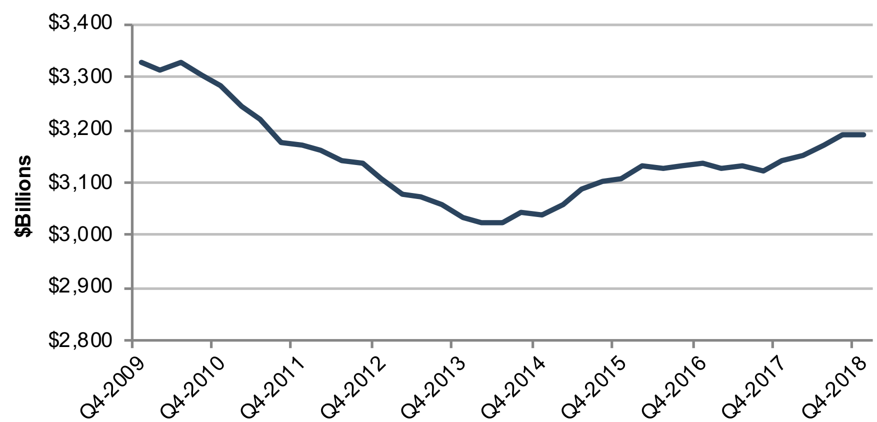
Value of Utilities Construction	
Period	**% Change**
Q-o-Q	-3.1%
Y-o-Y	7.0%

Sector Round-up

Roads, Bridges, and Highways

Building materials are a crucial input to construction projects. Without funding, however, construction projects cannot be completed. Much of this funding comes from public resources, so the industry is typically concerned with the level of government spending on construction activity. Government consumption expenditures and gross investments reached high levels during the recession to boost the economy and declined significantly in the years following. After stagnating for much of 2016 and 2017, GCI grew throughout most of 2018 and reached the highest levels since 2011. The growth in GCI comes despite the absence of the touted infrastructure investment bill under the new administration. State budgets have generally grown the past couple of years. 31 states have passed legislation to increase funding since 2012.

Government Consumption and Investment



Government Consumption and Investment	
Period	**% Change**
Q-o-Q	-0.1%
Y-o-Y	1.6%

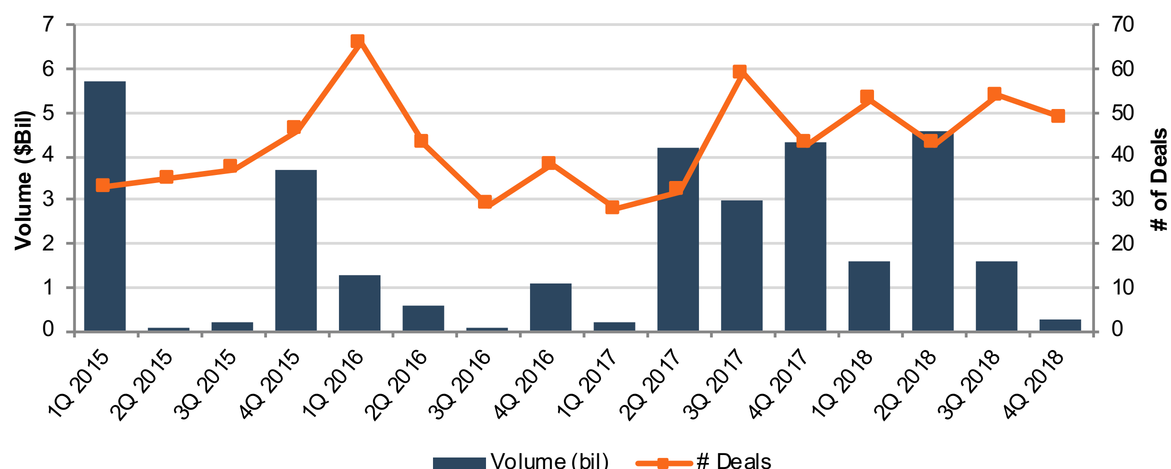
Source: St. Louis Fed

Mergers and Acquisitions

One key M&A trend has been the strategic acquisition of technology solution companies as construction companies attempt to catch up to the information technology wave and differentiate themselves. Funding has begun to flow into construction technology and software companies aimed at streamlining disparate processes and systems or prefab construction. According to **Mary Ann Azevedo at *Tech Crunch***, funding increased 324% to $3.1 billion in 2018. Not including two large series, Katerra raised $865 million and View raised $1.1 billion, total construction tech funding increased 55% over 2017's total to $1.135 billion. In July 2018, software developer Trimble (NASDAQ: TRMB) acquired Viewpoint for $1.2 billion. Viewpoint is a construction management software company that provides value by integrating contractors' financial and resource management with project operations.

Jacobs Engineering Group (NYSE: JEC) has embraced a strategy of making use of digital and technical integration to increase productivity and client satisfaction. Part of the strategic transformation has been the acquisition of two companies, Blue Canopy and CH2M, as well as the planned divestiture of its energy, chemicals, & resources department for $3.3 billion. Blue Canopy is a data analytics cybersecurity and application development firm. Cybersecurity expertise has risen as a priority for infrastructure construction companies. The $3.27 billion deal for CH2M closed in late 2017 and is aimed at improving Jacobs' position in the infrastructure and government services sectors. Jacobs management has indicated that the company began to benefit from revenue synergies ahead of schedule in 2018.

Construction M&A Activity



Source: Bloomberg

Bellwether Stocks & Industry Participants

	Ticker	Price at 12/31/18	52-Week Perf.	LTM Revenue	Enterprise Value	Debt / MVTC	EBITDA Margin	EV / EBITDA (x)	TEV / Next Yr EBITDA (x)	Price / LTM Earnings
Residential										
Beazer Homes USA, Inc.	NYSE: BZH	9.48	-50.7%	2,137	1,399	80.3%	4.7%	14.00	6.55	3.28
D.R. Horton, Inc.	NYSE: DHI	34.66	-32.1%	16,254	14,886	20.5%	12.9%	7.13	6.36	8.37
KB Home	NYSE: KBH	19.10	-40.2%	4,547	3,397	55.0%	8.7%	8.62	6.54	9.90
Lennar Corporation	NYSE: LEN	39.15	-38.1%	20,572	22,450	44.5%	12.2%	8.91	7.09	7.17
LGI Homes, Inc.	NasdaqGS: LGIH	45.22	-39.7%	1,504	1,617	38.9%	13.5%	7.96	7.03	6.57
M.D.C. Holdings, Inc.	NYSE: MDC	26.03	-11.8%	3,065	2,324	41.3%	9.9%	7.63	6.18	7.52
NVR, Inc.	NYSE: NVR	2,436.99	-30.5%	7,187	8,808	6.4%	14.1%	8.71	8.81	11.10
PulteGroup, Inc.	NYSE: PHM	25.99	-21.8%	10,188	9,818	32.0%	14.6%	6.60	6.25	7.29
Taylor Morrison Home Corporation	NYSE: TMHC	15.90	-35.0%	4,227	2,985	53.9%	8.3%	8.48	6.13	8.61
Meritage Homes Corporation	NYSE: MTH	36.72	-28.3%	3,529	2,574	47.2%	8.7%	8.40	7.59	6.48
TRI Pointe Group, Inc.	NYSE: TPH	10.93	-39.0%	3,263	2,991	47.6%	12.7%	7.21	7.62	6.00
Median			**-35%**	**4,227**	**2,991**	**44.5%**	**12.2%**	**8.40**	**6.55**	**7.29**

All figures reported in millions, except per share data

Source: Capital IQ

Bellwether Stocks & Industry Participants

	Ticker	Price at 12/31/18	52-Week Perf.	LTM Revenue	Enterprise Value	Debt / MVTC	EBITDA Margin	EV / EBITDA (x)	TEV / Next Yr EBITDA (x)	Price / LTM Earnings
Building Materials										
Eagle Materials Inc.	NYSE: EXP	61.03	-46.1%	1,393	3,478	18.0%	29.4%	8.48	7.20	12.36
Martin Marietta Materials, Inc.	NYSE: MLM	171.87	-22.2%	3,980	13,937	22.5%	26.4%	13.28	11.45	23.04
Summit Materials, Inc.	NYSE: SUM	12.40	-60.6%	2,101	3,162	57.4%	17.9%	8.42	7.23	40.73
U.S. Concrete, Inc.	NasdaqCM: USCR	35.28	-57.8%	1,506	1,320	54.6%	11.4%	7.71	5.73	19.40
Vulcan Materials Company	NYSE: VMC	98.80	-23.0%	4,383	15,986	18.2%	25.6%	14.23	12.69	25.26
CEMEX, S.A.B. de C.V.	BMV: CEMEX CPO	0.48	-35.5%	14,089	18,020	59.2%	17.4%	7.34	6.68	14.19
CRH plc	ISE: CRG	26.45	-26.5%	30,673	31,437	33.2%	12.5%	8.21	7.47	13.43
HeidelbergCement AG	DB: HEI	60.84	-44.0%	20,768	24,521	51.0%	14.9%	7.90	6.68	9.11
LafargeHolcim Ltd	SWX: LHN	41.16	-27.0%	27,914	44,175	40.0%	19.9%	7.94	6.65	16.08
Median			**-36%**	**4,383**	**15,986**	**40.0%**	**17.9%**	**8.21**	**7.20**	**16.08**
Roads, Bridges, and Highways										
Granite Construction Incorporated	NYSE: GVA	40.28	-36%	3,318	1,827	16.8%	6.9%	8.01	4.82	41.38
Sterling Construction Company, Inc.	NasdaqGS: STRL	10.89	-33.1%	1,038	294	21.8%	4.4%	6.40	4.67	11.63
Tutor Perini Corporation	NYSE: TPC	15.97	-37.0%	4,455	1,454	48.8%	5.4%	6.08	4.53	9.56
Median			**-36%**	**3,318**	**1,454**	**21.8%**	**5.4%**	**6.40**	**4.67**	**11.63**

All figures reported in millions, except per share data

Source: Capital IQ

Note: CX, CRG, HEI, and LHN report in foreign currency. Margin and multiples unaffected and shown for analysis.

Bellwether Stocks & Industry Participants

	Ticker	Price at 12/31/18	52-Week Perf.	LTM Revenue	Enterprise Value	Debt / MVTC	EBITDA Margin	EV / EBITDA (x)	TEV / Next Yr EBITDA (x)	Price / LTM Earnings
Nonresidential										
AECOM	NYSE: ACM	26.50	-29%	20,282	7,069	48.6%	3.8%	9.13	7.56	54.86
Dycom Industries, Inc.	NYSE: DY	54.04	-52%	2,879	2,523	33.9%	8.2%	10.68	6.38	16.58
EMCOR Group, Inc.	NYSE: EME	59.69	-27.0%	8,131	3,382	7.9%	6.0%	6.90	6.63	12.13
Fluor Corporation	NYSE: FLR	32.20	-38%	19,167	4,488	27.2%	3.9%	5.99	5.73	20.11
Jacobs Engineering Group Inc.	NYSE: JEC	58.46	-11.4%	16,284	9,769	24.3%	5.9%	10.18	7.81	31.75
MasTec, Inc.	NYSE: MTZ	40.56	-17%	6,909	4,837	31.0%	9.9%	7.08	6.23	12.29
Quanta Services, Inc.	NYSE: PWR	30.10	-23.0%	11,171	5,274	20.1%	7.5%	6.30	5.38	15.70
Median			**-27%**	**11,171**	**4,837**	**27.2%**	**6.0%**	**7.08**	**6.38**	**16.58**

All figures reported in millions, except per share data

Source: Capital IQ

Mercer Capital

Construction & Building Materials Industry Services

Mercer Capital provides valuation and transaction advisory services to the construction and building materials industries.

Industry Segments

Mercer Capital serves construction industry segments from to commercial and civil to residential. We also serve the building materials sector from aluminum and steel to brick, glass, and lumber.

Mercer Capital Experience

- Family and management succession planning
- Buy-side and sell-side transaction advisory assistance
- Conflict resolution and litigation support
- Trust and estate planning
- Buy-sell agreement valuation, design, and funding advisory

Contact a Mercer Capital professional to discuss your needs in confidence.

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