AUGUST 01, 2019

KEY THEMES

- We evaluated 10 data points that we believe drive consumers' spending on their homes.
- These range from housing-specific measures, such as existing home sales and home prices, to broader consumer metrics, such as employment.
- Of the 10 key metrics, we view three as indicating a positive picture for the housing market, three as mixed, and four as negative.
- Incremental changes were housing formation (turned mixed from positive) and consumer confidence (turned mixed from negative).
- Our index value stood at 45, similar to April 2019 and down from 55 in December 2018 and 70 in September 2018.
- **Home Depot:** We rate HD Market Perform, with a 12-month price target of $192, based on applying a P/E multiple of 19x to our 2019 EPS estimate of $10.12
- **Lowe's:** We rate LOW Outperform with a 12-month price target of $116, based on applying a P/E multiple of 18x to our 2020 EPS estimate of $6.44.
- **Floor & Decor:** We rate FND Market Perform with a 12-month price target of $42, based on applying a P/E multiple of 38x to our 2019 EPS estimate of $1.12.
- **The Tile Shop:** We rate TTS Underperform with a 12-month price target of $2.50, based on applying an EV/EBITDA multiple of 4.5x to our 2020 EBITDA estimate of $42.6MM.

Home Improvement Update

TAG HOUSING SCORECARD - JULY 2019

Our latest Housing Scorecard points to a housing market that continues to decelerate, with our index value remaining at 45, consistent with our prior analysis in April 2019, and down from 70 a year ago. Lowe's remains our only Outperform-rated home improvement stock, as we believe the company is in a unique position to benefit from improved execution, optimized productivity, and refined merchandising under a new leadership team.

To assess the health of the housing market, we evaluate ten data points that we believe drive home spending. These range from housing-specific measures, such as existing home sales and home prices, to broader consumer metrics, such as employment. Of the ten key metrics, we view three as positive for the housing market, three as mixed, and four as negative. Since our last analysis in April 2019, the direction of two indicators changed: 1) household formation decelerated in 2Q19 and moved to mixed from positive; and 2) consumer confidence improved from lower levels earlier in the year during the government shutdown and moved from negative to mixed. Indicators that remained positive (stable or accelerating) included remodeling activity, mortgage rates, and employment. Meanwhile, private fixed residential investment, value of construction work, existing home sales, and new construction stayed negative. Home prices continue to rise, but at a decelerating pace.

TAG HOUSING SCORECARD

		<---------------- July 2019 ---------------->		
#	Housing Indicator - Directional Trend	Positive (Accelerating)	Mixed (Decelerating)	Negative (Declining)
1	Private Fixed Residential Investment (PFRI)			X
2	Value of Construction Put in Place			X
3	Remodeling Market Index (RMI)	X		
4	S&P/Case Shiller Home Price Index		X	
5	30-Year Fixed Mortgage Rate (1)	X		
6	Existing Home Sales			X
7	New Construction - Housing Starts & Permits			X
8	Housing Formation		X	
9	Employment	X		
10	Consumer Confidence		X	
	Total	3	3	4

Source: TAG Research

Looking ahead, we expect the home improvement sector to be impacted by slower GDP growth and more muted home price appreciation. In addition, the Harvard Joint Center for Housing Studies anticipates a significant slowdown in remodeling spending in 1H20. Providing some relief are mortgage rates, which are likely to decline further and support better existing home sales in 2H19.

Both Lowe's and Home Depot should capture incremental market share from weaker players in the fragmented $900B home improvement industry. We see greater upside potential at Lowe's once the company gets past its inventory pricing issues, given the new team's initiatives to improve merchandising, operations, and the Pro. We continue to view Home Depot as the best-in-class retailer, with a large Pro customer base, strong execution, and superior real estate. However, we see risk to its 2019 comp guidance of 5.0%, which could be revised downward when it reports 2Q19 results.

In the flooring segment, we continue to view Floor & Decor as a disruptor with store growth potential, innovative product, and low prices, but view the stock as fairly priced. Meanwhile, we recently downgraded The Tile Shop following a disappointing 1H19 and believe the company needs to evolve its strategy and improve execution.

Joseph Feldman
212.584.4605 / jfeldman@telseygroup.com

Cristina Fernández, CPA
212.584.4612 / cfernandez@telseygroup.com

Sarang Vora, CFA
212.660.5436 / svora@telseygroup.com

KEY HOUSING INDICATORS

TAG HOUSING MARKET SCORECARD

To frame our view of the state of the housing market—in particular the factors that drive spending for home improvement products—we look at 10 distinct data points. These range from housing-specific indicators, like existing home sales, mortgage rates, and home prices, to broader consumer metrics, such as confidence and employment.

The housing market is supported by the health of the US economy, which remains solid but is expected to moderate in 2019, with average GDP growth now forecast at 2.5% vs. 2.9% in 2018. Home price appreciation also continues, but at a slower rate after seven years of increases. Looking ahead, a recent report from Harvard University's Joint Center for Housing Studies forecast a meaningful deceleration in remodeling spending in 1H20, after multiple years of strong growth. We expect this and other factors, such as weakness in existing home sales and uncertainty around trade, to weigh on housing demand, despite low unemployment, growing wages, healthy household balance sheets, and lower mortgage rates.

US GDP GROWTH PROJECTIONS

Source	As of	2017	2018	2019E	2020E
US GDP (Reported by the Bureau of Economic Analysis)	Mar. 2019	2.2%	2.9%		
US Federal Reserve	Jun. 2019	2.5%	3.1%	2.1%	2.0%
Organization for Economic Co-operation and Development (OECD)	Apr. 2019	2.2%	2.9%	2.8%	2.3%
International Monetary Fund (IMF)	July 2019	2.2%	2.9%	2.6%	1.9%
The Conference Board	July 2019	2.2%	2.9%	2.5%	2.0%
Average		2.3%	2.9%	2.5%	2.0%

Source: Respective organizations' websites and TAG estimates.

Overall, the 10 data points we discuss in this report depict a housing market that is slowing. As a reminder, our scorecard gauges the direction of each indicator relative to the recent past. We include in the positive column those indicators where the pace of growth has remained stable or accelerated in recent months, in the mixed column those that are growing, but at a decelerating rate, and in the negative column those that have declined. In the case of the 30-year fixed mortgage rate, an increase is negative.

We view three of the 10 data points as positive for the housing market, three as mixed, and four as negative. The direction of eight indicators remained constant since our last analysis in April 2019, while one has weakened (household formation) and one has improved (consumer confidence).

HOUSING SCORECARD

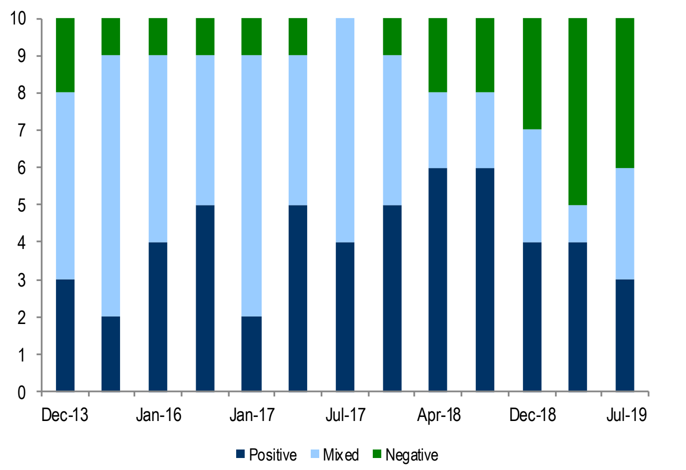
		< ---------------- July 2019 ---------------->			< ---------------- April 2019 ---------------->		
#	Housing Indicator - Directional Trend	Positive (Accelerating)	Mixed (Decelerating)	Negative (Declining)	Positive (Accelerating)	Mixed (Decelerating)	Negative (Declining)
1	Private Fixed Residential Investment (PFRI)			X			X
2	Value of Construction Put in Place			X			X
3	Remodeling Market Index (RMI)	X			X		
4	S&P/Case Shiller Home Price Index		X			X	
5	30-Year Fixed Mortgage Rate (1)	X			X		
6	Existing Home Sales			X			X
7	New Construction - Housing Starts & Permits			X			X
8	Housing Formation		X		X		
9	Employment	X			X		
10	Consumer Confidence		X				X
	Total	3	3	4	4	1	5

(1) Decrease in the 30-year fixed mortgage rate is positive for housing demand. Source: TAG estimates.

Since developing our housing scorecard in December 2013, we have seen the housing market steadily improve through 2016, then slow around the US Presidential election in November 2016, before re-accelerating in early 2017. After remaining solid for much of 2018, the housing market has been softer since 2H18.

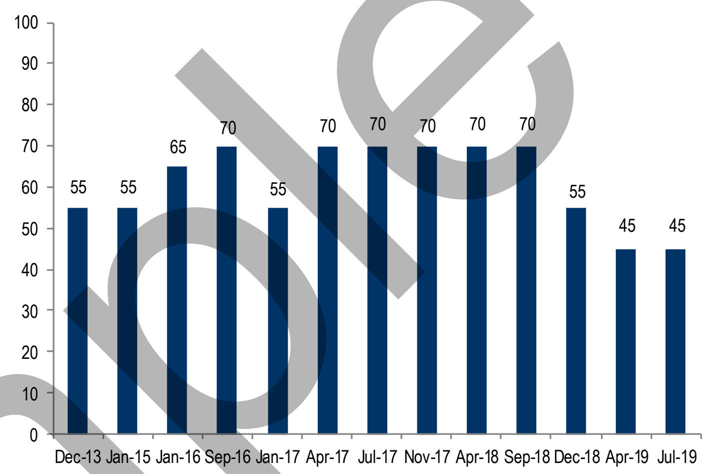
To quantify these trends, we developed an index for the housing market based on the direction of the 10 indicators we track. We value positive indicators (stable or accelerating) at 10, mixed (positive, but decelerating) at 5, and negative (declining) at 0. In July 2019, our index value remained flat at 45 vs. 55 in December 2018 and 70 in September 2018.

TAG HOUSING SCORECARD – INDICATORS



Source: TAG Research.

TAG HOUSING SCORECARD - SCORES



Source: TAG Research.

The impact of tax reform on the housing market is expected to negatively impact states with high property values and high personal income taxes, like California and New York. So far, the impact has been felt in homes taking longer to sell, while consumer spending remains strong.

> **The Impact of New Tax Law:** The new tax reform bill, the *Tax Cuts & Jobs Act*, allows new homeowners to deduct the interest paid on up to $750,000 on new mortgages (including refinancing), down from $1MM previously. This is expected to affect homeowners where property costs and taxes tend to be highest—the Northeast, California, Hawaii, and Washington, DC—which amounts to ~5% of the total market.

> **State and Local (SALT) Deduction:** The deduction for state and local tax (SALT), property, and income taxes will be limited to $10,000 for both single and married filers, affecting people in states with high income taxes. Under the 2017 tax plan, ~30% of filers itemized, while just 10% are expected to do so under the 2018 plan as the standard deduction is doubling to $12,000 from $6,350 for singles and to $24,000 from $12,700 for married couples filing jointly. It is estimated that over 90% of households making over $200,000 itemize and claim SALT deductions.

REVIEW OF ECONOMIC AND CONSUMER INDICATORS

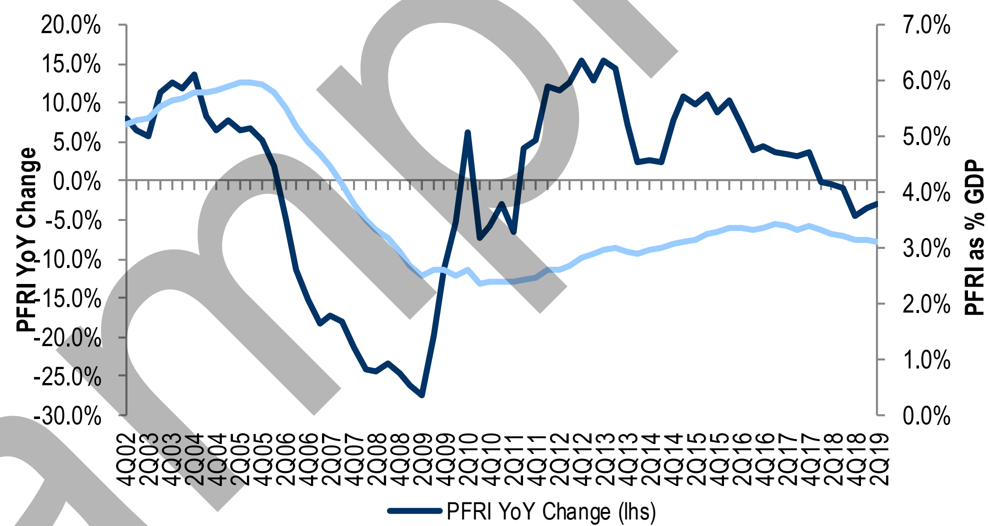
Based on Home Depot's commentary that 65% of its sales are derived from renovation and remodel projects, 30% from discretionary projects, and 5% from housing turnover, we assume an increase in home prices, the health of the consumer, and the pace of remodeling activity are the most important sales drivers. Meanwhile, maintenance and repair projects of existing homes represent two-thirds of sales at Lowe's, with potentially a lower percentage from capital improvement projects, given less exposure to the professional contractor.

TAG Scorecard:

↓ Negative (Declining)

1) **Private Fixed Residential Investment (PFRI):** The Bureau of Economic Analysis (BEA) reports PFRI along with GDP growth on a quarterly basis. Before the recent recession, PFRI spending was a reliable leading indicator for home improvement spending. However, this correlation weakened during the recession and early stages of the recovery, as consumers continued to spend on smaller maintenance and repair jobs, while big ticket discretionary remodeling projects were delayed and new construction activity stopped. From 1Q15 to 1Q16, PFRI increased at a high single-digit to double-digit rate, before slowing to the single-digit area in 2017. Since 2Q18, PFRI has declined every quarter. In 2Q19, the rate of growth was (2.8%) vs. (3.4%) in 1Q19, (4.4%) in 4Q18, (1.5%) in 2018, and 3.5% in 2017. As a percentage of GDP, during 2Q19, PFRI remained in line with last quarter at 3.1%. Compared to the historical average, this is higher than the 2.5% level seen in 2010-2011, but still below the long-term average of 4.5%.

PFRI YOY CHANGE VS. % GDP



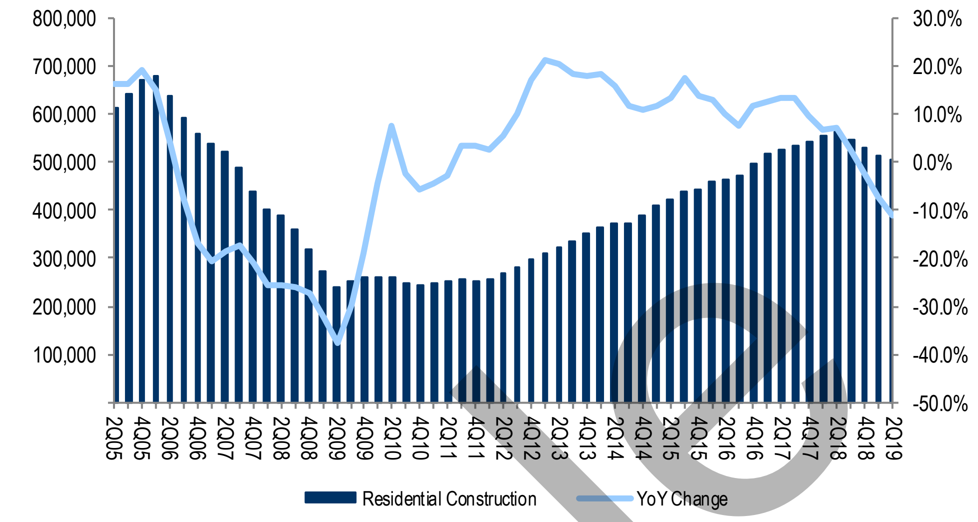
Source: Bureau of Economic Analysis and TAG estimates.

TAG Scorecard:

↓ Negative (Declining)

2) **Value of Construction Put in Place**: On a monthly basis, the US Census Bureau publishes the dollar value of construction work on US residential projects. The figure reflects labor and materials costs, architectural and engineering expenses, overhead costs, interest and taxes paid, and contractors' profits. The monthly data represents work done in the prior month (e.g., August data reflects work in July). In 2Q19-to-date (April and May), the value of construction put in place decreased 11.0% vs. a decrease of 7.5% in 1Q19, a decrease of 2.3% in 4Q18, and increases of 2.7% in 3Q18, 7.1% in 2Q18, and 7.0% in 1Q18. The decline in 2Q19-to-date represents the third consecutive decline since 2Q11.

VALUE OF CONSTRUCTION PUT IN PLACE VS. YOY CHANGE



Source: US Census Bureau and TAG estimates.

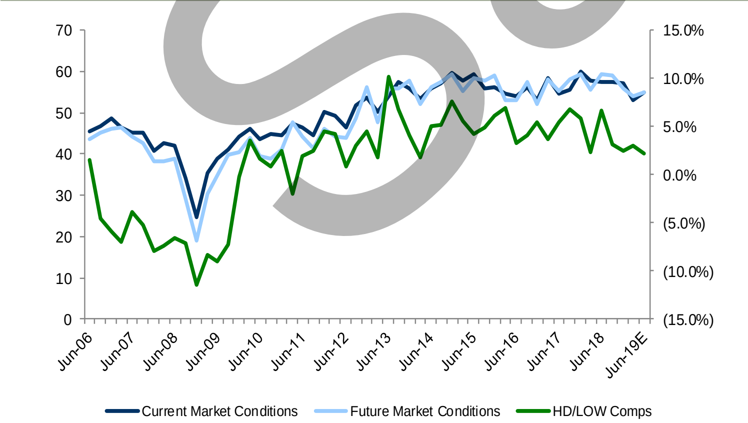
TAG Scorecard:

↑ Positive (Stable to Accelerating)

3) **Remodeling Activity:** The National Association of Home Builders (NAHB) on a quarterly basis publishes the RMI, which measures the rate of change or remodel activity from the prior period, with a reading of about 50 indicating incremental market activity. The index is based on a survey of professional remodelers above their current and future business expectations. The index has come in above 50 every quarter except one since 3Q12, indicating professional remodeling activity continues to rise. Historically, Home Depot and Lowe's same-store sales have directionally tracked the index.

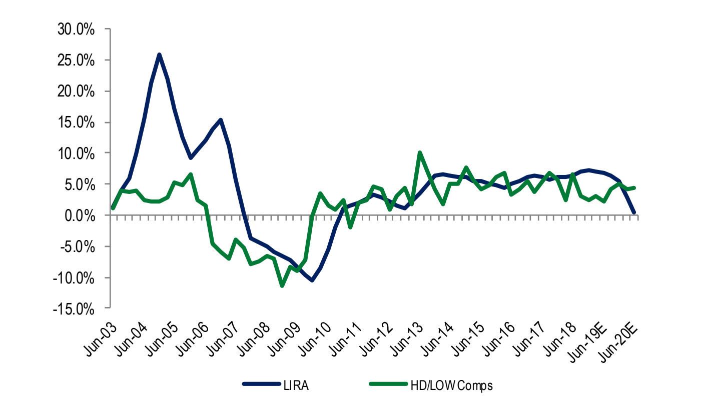
This is consistent with Harvard University's Joint Center for Housing Studies' (JCHS) Leading Indicator for Remodeling Activity (LIRA), which measures repair and remodeling spending on a four-quarter moving totals basis. For 2Q19, the index growth remained relatively stable at 6.8% vs. 7.0% in 1Q19 and 7.2% in 4Q18. However, in the latest July 2019 update, Harvard's JCHS projected annual home remodeling spending growth to sharply slow to 3.0% in 1Q20 and 0.4% in 2Q20.

RMI VS. HD/LOW COMPS



Source: National Association of Home Builders and TAG estimates.

LIRA VS. HD/LOW COMPS



Source: Harvard University JCHS and TAG estimates.

TAG Scorecard:

↔ Mixed (Decelerating)

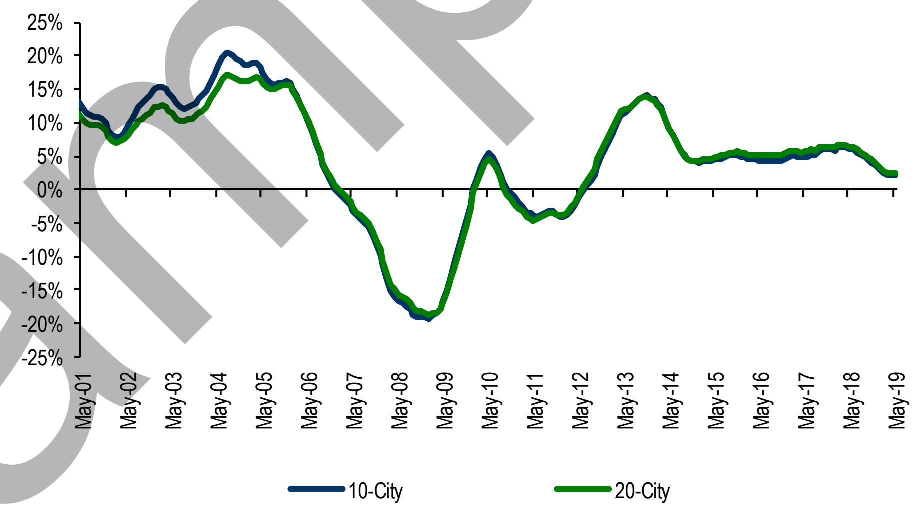
4) **Home Prices:** The S&P Core Logic Case-Shiller Home Price Index measures the average change in the value of single-family housing in the US. The national index is a composite of single-family home price indices for the nine US census divisions and is calculated monthly. The index measures changes in housing market prices given a constant level of quality.

In the three months ended May (latest available), the S&P Core Logic Case-Shiller national index for home prices rose 3.5% YoY vs. 4.2% in the prior three months. As a reminder, the index rose 5.8% in 2018, 5.8% in 2017, and 5.1% in 2016.

For 2019, the National Association of Realtors forecasts home price appreciation of 3.3% (as of July 2019) vs. 4.9% in 2018 and 5.7% in 2017. The 20-City Home Price Index rose at an average pace of 2.6% YoY for the three months ended April, compared to 4.0% in the prior three months. The index rose 5.8% in 2018, 5.9% in 2017, and 5.2% in 2016.

While the current strong level of home prices is expected to further moderate, tight inventories are leading to fewer homes available for sale, supporting price appreciation. In the near-to-medium-term, home price appreciation should remain a positive driver of investment in homes since people tend to invest in assets that increase in value. Home Depot and Lowe's have indicated that rising home prices have the greatest influence on consumers' willingness to conduct capital improvement projects, such as kitchen remodels.

S&P CORE LOGIC CASE-SHILLER HOME PRICE INDEX



Source: S&P and TAG estimates.

The S&P/Case-Shiller *10-City* Composite Index has reached a new peak of 229.35, which is 1.1% above its prior peak of 226.90 in April 2006. The *20-City* Composite Index also has reached a new peak of 215.97, which is 4.5% above its prior peak of 206.66 in April 2006. Lastly, the S&P/Case-Shiller National Index is 13.2% above its prior peak.

S&P/CASE-SHILLER INDICES – CURRENT PRICES VS. PEAK AND TROUGH

Index	May 2019	Current vs. Peak	Current vs. Trough	Peak to Trough	Peak Price	Peak Date	Trough Price
10-City Composite	229.35	1.1%	53.1%	(34.0%)	226.90	Apr-06	149.85
20-City Composite	215.97	4.5%	57.6%	(33.7%)	206.66	Apr-06	137.05
National	208.89	13.2%	52.7%	(25.9%)	184.60	Feb-07	136.78

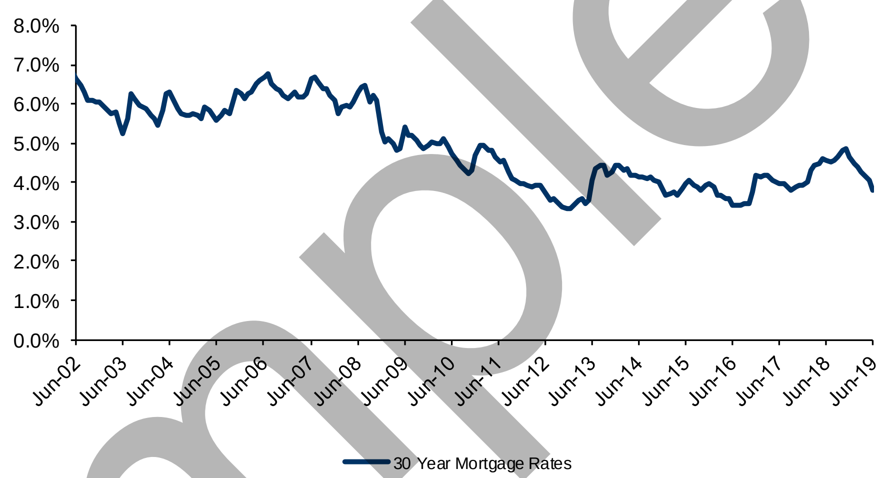
Source: S&P/Case-Shiller Indices and TAG estimates.

TAG Scorecard:

↑ Positive (Declining)

5) **30-Year Fixed Mortgage Rate:** After the purchase price of a home, the interest rate on the mortgage has the greatest impact on housing affordability, with every 100-bp change on a \$200,000 mortgage impacting monthly payments by roughly \$120 per month, or ~\$1,500 per year. Currently, the 30-year fixed mortgage rate stands at 3.8%, ~80 bps below June 2018. Importantly, it has declined ~110 bps lower from its 2018 peak of 4.9%, a positive for housing demand and affordability. This also is well below the long-term average of ~6%. Current expectations are that the 30-year mortgage rate could further decline, driven by the Fed cutting the Fed Funds rate by 0.25% in its July 2019 meeting, as US economic growth has moderated. This is the first interest rate cut since the last recession in 2008.

30-YEAR CONVENTIONAL MORTGAGE RATE



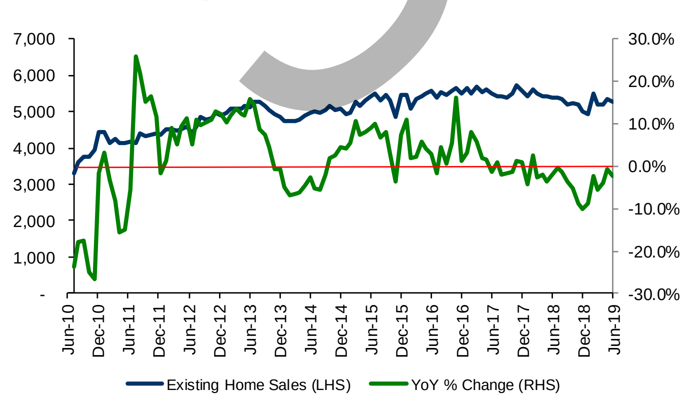
Source: Freddie Mac, FactSet.

TAG Scorecard:

↓ Negative (Declining)

6) **Existing Home Sales:** The National Association of Realtors publishes existing home sales on a monthly basis. In the three months ending June 2019, existing home sales declined 2.3% YoY vs. a decrease of 5.5% YoY in the prior three months. Inventory of homes for sale increased to 4.4 months of supply in June 2019 from 3.6 in February 2019. This is below the historical average of ~6 months, which is considered the threshold for the market to be in equilibrium. As of July 2019, the National Association of Realtors forecasts existing home sales to increase 0.2% to 5.35MM in 2019 vs. a decline of 3.1% in 2018.

EXISTING HOME SALES



EXISTING HOME INVENTORY

Source: National Association of Realtors and TAG estimates.

Source: National Association of Realtors and TAG estimates.

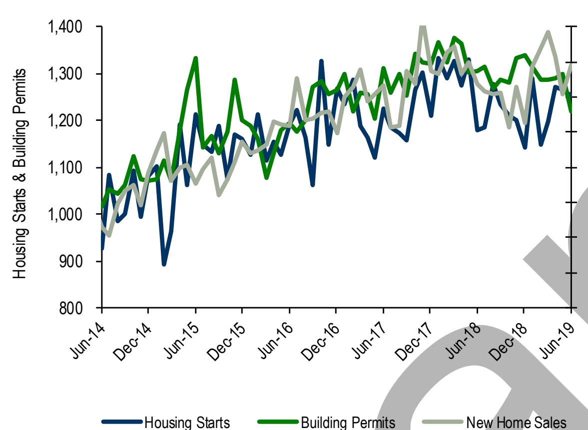
TAG Scorecard:

↓ Negative (Declining)

7) **New Construction:** Housing starts and building permits are the key indicators of new construction, eventually resulting in new home sales. The home improvement retailers derive a small percentage of their sales from new construction (~5%), as builders typically buy building materials and supplies from distributors and wholesalers. Constrained new home inventory should support further growth, while tariffs on building materials and rising labor costs have been pressuring new construction.

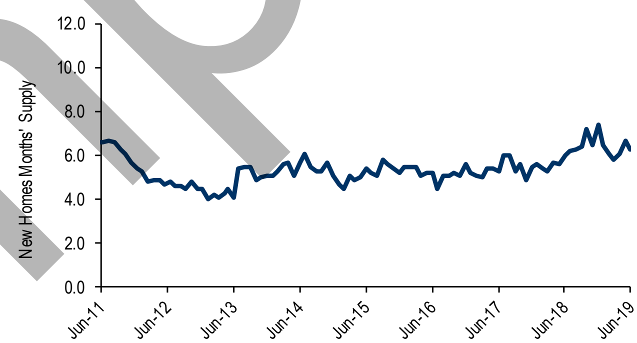
Housing starts increased 0.3% in the last three months (ending June 2019) vs. down 7.9% in the prior three months, +3.5% in 2018, and +3.0% in 2017, due to a 6.2% increase in the most recent reading (June 2019), which represents the first increase since September 2018. Meanwhile, building permits were down 4.1% in the last three months (ending June 2019) vs. down 4.3% in the prior three months, +3.5% in 2018, and +6.9% in 2017. Lastly, new home sales were up 0.5% in the last three months (ending June 2019) vs. up 1.9% in the prior three months. When we average the three metrics, new construction activity declined 1.1% in the last three months (ending June 2019) vs. down 3.4% in the prior three months. Meanwhile, new home inventory was at 6.3 months of supply in June 2019, slightly lower than 6.4 in May.

NEW CONSTRUCTION INDICATORS



Source: US Census Bureau and TAG estimates.

NEW HOME INVENTORY



Source: US Census Bureau and TAG estimates.

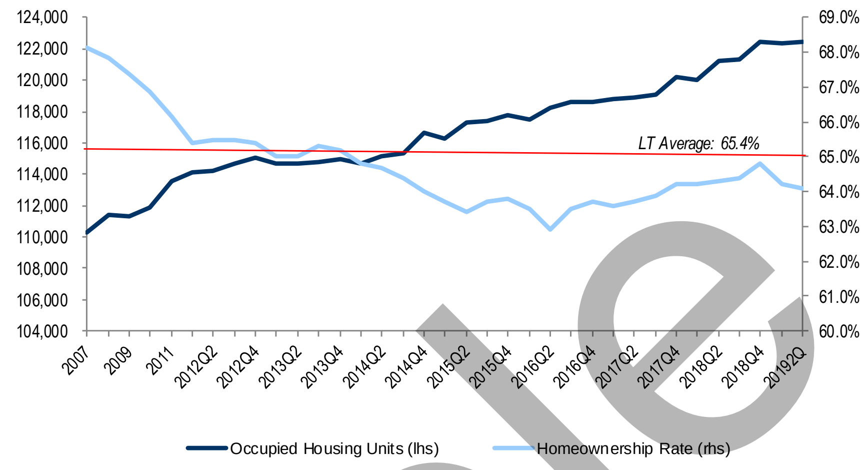
TAG Scorecard:

↔ Mixed (Decelerating)

8) **Home Occupancy and Ownership:** According to the US Census Bureau, the number of occupied housing units has continued to rise, with 1.2MM new households added YoY in 2Q19. While this still shows solid YoY growth, the figure declined from the ~2.3MM units added in each of the previous four quarters. We have also seen the home ownership rate moderate a bit in the past two quarters to 64.1% in 2Q19 vs. 64.2% in 1Q19 and 64.8% in 4Q18. In 2Q19, the increase in households was roughly evenly split between owners and renters. This is a deviation from the past two years, when owners accounted for the majority of new households. In our view, the change in trend can be explained by high home prices, which are pricing many individuals out of the market, and softer demand in high tax states and high property value areas as a result of new tax laws. In 2Q19, we again saw rental unit growth picked up, with 599,000 units added. Recall, rental units were the key driver of household formation after the recession.

While all household formation is positive for the housing markets, spending on owned units is more than 2x that on rental units on a per unit basis. A moderating homeownership rate is negative for the housing market, although lower mortgages rates make homeownership more affordable.

HOME OCCUPANCY AND OWNERSHIP



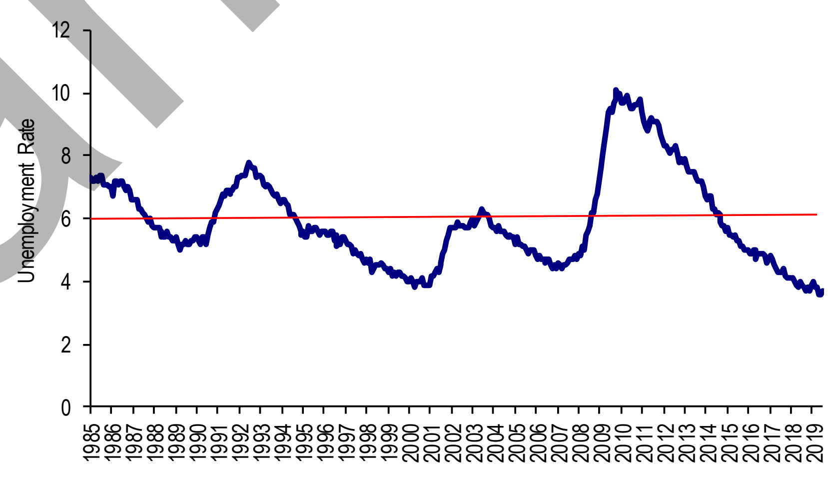
Source: US Census Bureau and TAG estimates.

TAG Scorecard:

↑ Positive (Stable to Accelerating)

9) **Employment:** The level of unemployment, a key measure of the health of the economy, remains strong. The unemployment rate stands at 3.7% (96.3% of people who want a job have one) as of June 2019 vs. 3.9% in 2018, 4.4% in 2017, 4.9% in 2016, and the long-term average of 6.0% since 1985. Unemployment has improved for those in the homeowner demographic, which is largely educated and over 25, with older millennials entering the home buying years.

UNEMPLOYMENT RATE



Source: Bureau of Labor Statistics and TAG estimates.

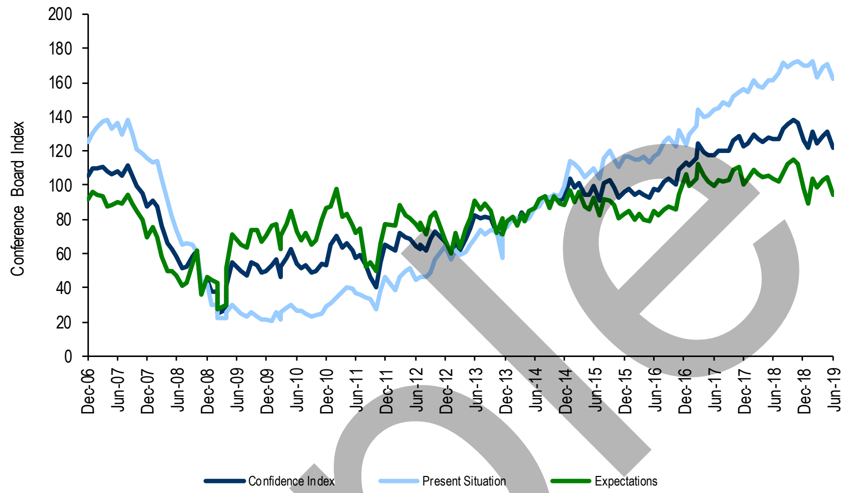
TAG Scorecard:

↔ Mixed (Decelerating)

10) **Consumer Confidence:** Since peaking in late 2018, consumer confidence has been volatile, likely impacted by the government shutdown, stock market volatility, slowing US economic growth, and global trade tensions. In June 2019, the index declined to 121.5, the lowest reading since September 2017. In the past three months, the metric has averaged 127.3, which is only 1.2% above the previous three months and 0.2% higher YoY.

Looking at the drivers of the index, the present situation component decelerated to 162.6 in June from 170.7 in May and the future expectations component decreased to 94.1 in June from 105.0 in May, indicating a more moderate outlook for the economy.

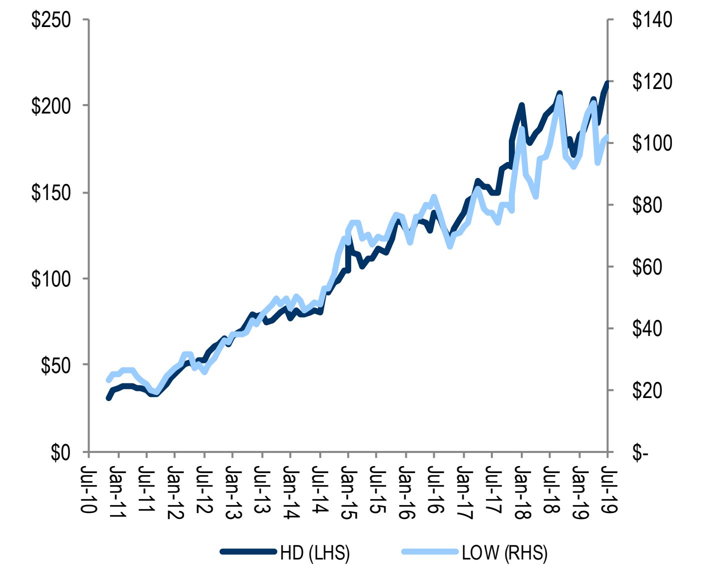
CONSUMER CONFIDENCE INDEX



Source: Conference Board and TAG estimates.

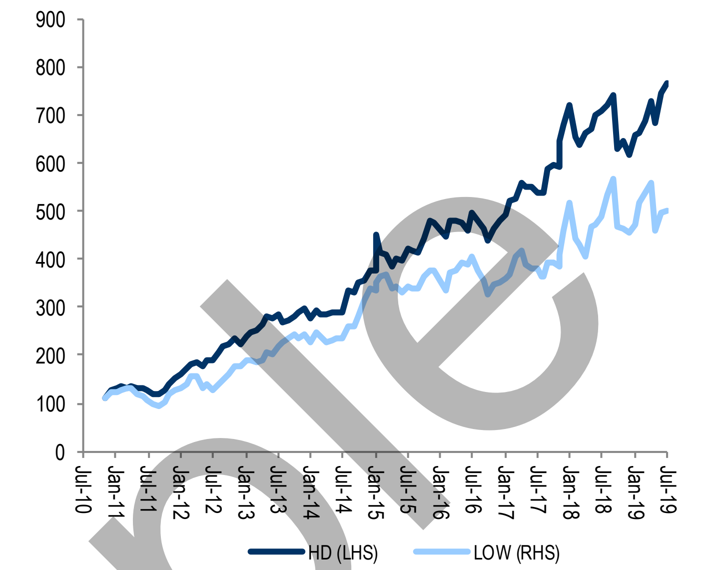
THOUGHTS ON HOME DEPOT AND LOWE'S

HD VS. LOW STOCK PRICE



Source: FactSet and TAG estimates.

HD VS. LOW INDEXED PERFORMANCE



Source: FactSet and TAG estimates.

HD and LOW are up ~24% and ~10%, respectively YTD, following a ~25% decline in September-December 2018, which was due to the market-wide sell-off related to the US-China trade dispute and a slowdown in the housing market. Although concerns around a housing slowdown remain, we attribute the bounce back in these two stocks to solid company-specific initiatives and macro indicators, such as low unemployment, rising home equity levels, and growing wages. In addition, mortgage rates have declined in recent months—3.8% in June 2019 vs. 4.9% in November 2018—a trend that is likely to persist in the near term as the Fed signaled another rate cut in the Fed Funds rate in the July 2019 meeting. As it relates to trade tensions, although President Trump increased the tariff rate on Chinese imports to 25% on $200B in Chinese imports (effective June 2019), the two sides have continued to negotiate which can be seen a positive sign for a possible resolution.

By retailer, Home Depot expects a comp of 5.0%, with the 2H19 comp anticipated to be more than ~2x the 1H19 comp, as the hurricane-related comparisons get easier (lapping $500MM in 1H19 vs. $300MM in 2H19) and strategic initiatives should help fuel performance. That said, the guidance does not include two key factors: 1) the ongoing lumber deflation, which could serve as an $800MM headwind to total sales in 2019, assuming prices remain at current levels; and 2) the recent increase in tariffs to 25% on Chinese imports, which translates into an incremental ~$1B exposure on top of the ~$1B at the 10% tariff rate. Given these two factors, coupled with a tough comp comparison of 11% in May 2018, we would not be surprised if the company cuts its comp guidance on its 2Q19 earnings call. As a reminder, in 1Q19, Home Depot's comp of 2.5% fell short of our forecast of 4.5% and the FactSet consensus of 4.2%, due to bad weather in February (125-bp headwind to the comp) and lumber price deflation (75-bp headwind to the comp or $200MM in total sales).

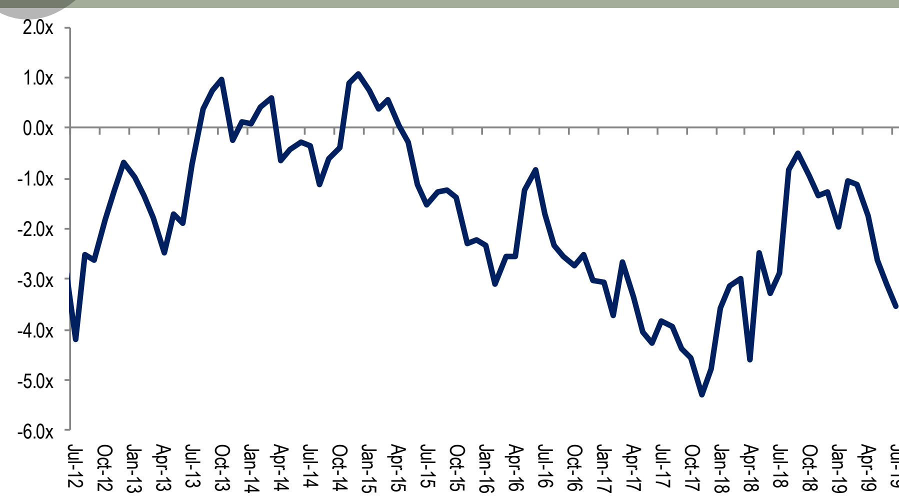
Meanwhile, Lowe's expects a 3.0% comp in 2019, helped by macro tailwinds offsetting softness in housing, as well as its new initiatives in merchandising, stores, labor, Pro, supply chain, digital, technology, and marketing. Unlike Home Depot, Lowe's 1Q19 comp of 3.5% beat our inline forecast of 3.0%, despite a 220-bp combined headwind from unfavorable weather in February and commodity deflation. However, the company's solid comp performance was overshadowed by a 165 bps of gross margin pressure, with a 90-bp headwind from pricing issues, as Lowe's, surprisingly, had little visibility into the cost of its goods and failed to make price adjustments on time to offset cost increases.

Home Depot Thesis: We continue to view Home Depot as a best-in-class operator and believe its 2019 EPS guidance of $10.03 (~1.5% YoY growth) is achievable, given the company's good execution track record (beat on EPS over the past 18 quarters), flexibility in the model, and potential to drive productivity improvements. Furthermore, we see opportunity for Home Depot to gain share in key categories, such as tools (given its exclusive agreement with Stanley), home decor, furnishings, and flooring. However, the company's comp guidance does not factor in commodity deflation, which Home Depot estimated could serve as a potential sales headwind of $800MM in 2019, or 75 bps. Second, Home Depot would have to generate an average comp of 5.8% in 2Q19-4Q19 to achieve its full year target of 5.0%, which seems optimistic. Lastly, SG&A expense leverage likely will prove harder to come by, as 2Q19 is negatively impacted by the calendar week shift and it laps the 53rd week in 4Q19. All in, we remain concerned about the company's ability to meet its 5% comp guidance, given aforementioned issues and softness in housing trends. As such, we maintain our Market Perform rating and 12-month price target of $192, which is based on applying a P/E multiple of 19x to our new 2019 EPS estimate of $10.12.

Lowe's Thesis: Along with its 1Q19 report in May, Lowe's surprisingly cut its 2019 EPS guidance by ~8% to $5.45-$5.65 from $6.00-$6.10, largely due to incremental gross margin pressure as it failed to pass through price increases that the prior merchant team had accepted from vendors. The guidance revision was disappointing and called into question the new team's ability to execute the transformation and its handle of the problems that need to be addressed. However, we maintained our Outperform rating as we understand that transformations are difficult, and the teams might need more time to gel and upgrade processes and systems. In addition, despite a slowing housing market, we continue to believe Lowe's has the opportunity to see solid sales growth, achieve market share gains, and expand its operating margin over the next three years, due to its company-specific initiatives, such as 1) reinvigorating merchandising; 2) simplifying operations; 3) increasing Pro penetration; 4) expanding omnichannel capabilities; and 5) transforming the supply chain. Our 12-month price target of $116 is based on applying a P/E multiple of 18x to our 2020 EPS estimate of $6.44.

From a valuation perspective, as of July 31, LOW trades at a wide 3.6x discount to HD, wider than the 1.7x discount the stock traded at over the LTM and the 1.6x discount since 2010. Back in late 2014, LOW has traded as high as a 1.1x premium to HD.

NTM P/E MULTIPLE – LOW PREMIUM (DISCOUNT) VS. HD



Source: FactSet and TAG estimates.

Comparison Analysis of Home Depot and Lowe's

Besides valuation, there are a few operating differences worth pointing out between the two companies that may weigh on each company's near-term success. Please see our comparison on page 14.

> **E-commerce:** *Home Depot's* online sales increased 23% in 1Q19 vs. 23% in 4Q18, 26% in 2018 and 22% in 2017, with e-commerce representing over 8% of total sales, up from ~6.5% in 2017, ~6% in 2016, and 5% in 2015. Buy online, pick up in store (BOPIS) continues to represent a meaningful portion of online sales at ~54% in 1Q19. The company's "buy online, deliver from store" offering is available across the chain. Currently, *Home Depot* has the capability to deliver products to 90% of the US population within two days and to 36% of the population next-day (expanding to 50% of the population by the end of 2Q19), with plans to cover more areas by opening two new direct fulfillment centers in Dallas and near Seattle. *Home Depot* also provides crowd-sourced same-day delivery from stores to 40% of the US population via cars (expanding to 50% by the end of 2Q19) and 70% of the population via vans. The company aims to fulfill orders same-day or next-day to the entire US population within five years by building a more robust delivery network. Today, most of *Home Depot's* online orders are delivered to customers for free, given they are generally above the $45 minimum purchase requirement. In fact, online orders are about 3x the in-store average ticket.

At *Lowe's*, online sales grew 16% in 1Q19 vs. 11% in 4Q18, 12% in 3Q18, 18% in 2Q18, 20% in 1Q18, and 34% for 2017. We estimate e-commerce represents over 5% of total sales. The company typically sees 60% of online orders picked up in a store (40% of BOPIS customers buy incremental products when they pick up an order), while parcel shipments represent ~30% of online transactions, and other delivery ~10%. Over the past several years, *Lowe's* invested in digital operations, including expansion of SKUs, BOPIS, ship-from-store, last-mile delivery, and MyLowes.com. Going forward, *Lowe's* is targeting an annual spend of $500MM-$550MM, with 2019 investments focusing on modernization, 2020 investments targeting functionality improvements and capability rollouts, and 2021 centering on strategic investments. Key areas of effort include supporting assortment expansion (on-track to increase its online assortment from 450K SKU's today to ~1.5MM SKUs), moving slow-turning SKUs from stores into online, customizing content, improving inventory accuracy, speeding up checkout in-store and online, and enhancing search.

> **Pro Consumer:** Pro sales generate about 45% of *Home Depot's* total sales, growing faster than the company average. While still a very low penetration of online sales, the Pro is starting to adjust to placing orders from home at night and picking up the items in the morning before heading back to the job site. *Home Depot* is building better tools aimed at supporting Pros. *Home Depot* added 35,000 additional customers to its new B2B platform (now total of 135,000 customers), with plans to have 1MM on the platform by the end of 2019. New features are helping to attract Pros, such as linking purchases to QuickBooks and adding new purchasers to the account. *Home Depot* has seen sales increase after assigning dedicated associates to Pro accounts, given that the associates are able to build stronger relationships and better serve Pros' needs. Pro customers interact with the company 66x a year and spend ~$6,500 annually. *Home Depot* estimates that this segment has a $120B addressable market for products, $200B for services, and $80B for maintenance, repair, and overall (MRO).

Pros account for ~20%-25% of sales at *Lowe's*, with an average Pro spending 5x more than a DIY customer. *Lowe's* is already starting to see improvement in the Pro business, helped by its Pro-focused initiatives. In 1Q19, Pro sales substantially outpaced DIY and *Lowe's* acquired 40,000 new Pro customers in 1Q19. The results were boosted by several initiatives: 1) higher in-stocks and job-lot quantities; 2) better volume-pricing offers and product presentation in the Pro department and on end-caps; 3) exclusive Profriendly brand introductions, such as Little Giant Ladders, and innovative products from Bosch and MetaboHPT; 4) more dedicated Pro associates and loaders; 5) 15 new regional Pro leader managers; and 6) a Pro-focused advertising campaign. In addition, lower prices/lack of price adjustments likely helped fuel the addition of so many new Pros in the quarter.

> **Merchandising:** In 2019, *Home Depot* plans to leverage its deal with Stanley Black & Decker to be its only supplier of Stanley hand tools and storage products, as well as the Stanley Fatmax tape measure product line in the US. The company also added Troy-Bilt power equipment to its portfolio of brands. For Pro customers, the company's efforts to improve tool rental (now live in 1,100 locations) is making progress, with 25% of its Pro customers renting tools up from 10% several years ago. For DIY customers, *Home Depot* continues to focus on expanding its online selection in areas such as seasonal and décor. *Home Depot* is optimistic about the product innovation pipeline slated for 2019, especially in roofing, such as long-lasting and easy-to-install laminate architectural shingles and water and dirt-resistant elastomeric coatings, and in grills, such as a phone-controlled Traeger Pellet grill which can grill, smoke, bake, roast, barbecue, and braise all on the same grill. Furthermore, the company is expanding multiple online categories, such as auto, pool, and workwear, and brands, like Weather Guard, Carhartt, and Hayward.

Meanwhile, *Lowe's* has an exclusive agreement with Sherwin-Williams in paint and Craftsman in tools and storage. The company is seeing success in outdoor power equipment, with key brands like John Deere, Husqvarna, and Craftsman, in grills, with strength in Weber and Char-Broil, and lawn and garden, with solid gains in Scotts and Live Goods. After it completes the Craftsman brand rollout to all stores in 2Q19, *Lowe's* also plans to introduce new Craftsman categories in 2H19. In addition, the company is enhancing its merchandising strategy through new merchandising service teams (MSTs), which adds eight employees per store funded by vendors and responsible for enhancing merchandise displays. Recall, at its Analyst Day, *Lowe's* mentioned plans to undertake a rigorous category management analysis to improve assortment optimization, enhance localization, increase the omni-channel assortment, and result in more informed decision-making, with benefits expected to be more visible in 2H19.

> **Delivery Capability:** *Home Depot* has five direct fulfillment centers that provide one or two-day delivery for 90% of the population, while offering next-day delivery to Pros nationwide by leveraging Interline Brands' over 70 distribution centers and 700 trucks. In 2019, the company plans to open new delivery centers (including one in Dallas and one near Seattle), market delivery operations (three already live) to ship bulky items, and flatbed delivery centers (including one in Dallas, and retrofit some delivery centers to increase shipping capacity (Hagerstown, Maryland distribution center). In addition, *Home Depot* views its store base as a key competitive advantage and a central part of its growth strategy. Currently, 90% of the US population resides within 10 miles of a store, 10% of online orders are placed in a store, 47% of online orders are picked up in a store, and 85% of products are returned in a store. Interestingly, half of online orders picked up in store are for items not sold in stores (online only).

Meanwhile, *Lowe's* opened its first direct fulfillment center in Tennessee in 3Q18 to deliver products to 75% of the US within two days, with plans to open another direct fulfillment center on the West Coast for the remaining 25% of the US. For next-day and same-day delivery, the company will continue to leverage its store base. For bulk products, *Lowe's* plans to open 9 new bulk DCs to total 20 by 2021 and add 85 new cross-dock delivery terminals to total 90, which are expected to directly deliver bulk items to customers and free backroom space in stores. For Pros, the company intends to directly ship items from flatbed distribution centers and stores and is testing same-day job site delivery via FedEx.

2019 GUIDANCE ASSUMPTIONS AND TAG VIEW – HOME DEPOT VS. LOWE'S

	Home Depot	Lowe's
Company Guidance	5.0%	3.0%
Street Expectations	FactSet 4.2%; TAG at 4.2%	FactSet 2.9%; TAG at 2.9%
TAG Commentary	The company expects a comp of 5.0%, with the 2H19 comp anticipated to be more than ~2x the 1H19 comp, as the hurricane-related comparisons get easier (lapping $500MM in 1H19 vs. $300MM in 2H19) and strategic initiatives should help fuel performance. That said, the guidance does not include two key factors: 1) the ongoing lumber deflation, which could serve as an $800MM headwind to total sales in 2019, assuming prices remain at current levels; and 2) the recent increase in tariffs to 25% on Chinese imports, which translates into an incremental ~$1B exposure on top of the ~$1B at the 10% tariff rate.	Lowe's expects its comp to be driven by several initiatives including 1) the completion of the Craftsman brand rollout; 2) better in-stocks and job-lot quantities, helped by hiring merchandising service teams; 3) new exclusive brand partnerships, like Little Giant Ladder Systems, and innovative products from partners, such as Bosch and MetaboHPT; 4) smart in-store mobile devices; and 5) improved pricing systems.
Operating Margin		
Company Guidance	20 bps of YoY contraction to ~14.4%	20-50 bps of expansion (on adj. basis) to ~8.8%-9.1%
Street Expectations	FactSet 14.4%; TAG 14.5%	FactSet 8.9%; TAG 8.9%
TAG Commentary	The decline in the operating margin is driven by a gross margin contraction of 30 bps to 34.0%, due to higher supply chain costs and a shift in sales mix, partly offset by SG&A expense ratio leverage, helped by productivity initiatives.	In 1Q19, the company lowered its operating margin outlook, largely due to a softer gross margin, which was down 165 bps in 1Q19 and should continue to be a drag in 2Q19, largely due to pricing challenges. Overall, we expect gross margin to be down ~55 bps in 2019, more than offset by SG&A expense ratio leverage of ~ 90 bps.
Tax Rate	25.5%	~24%
EPS		
Company Guidance	$10.03	$5.45-$5.65
Street Expectations	FactSet $10.12; TAG $10.12	FactSet $5.58; TAG $5.60
TAG Commentary	Home Depot's EPS guidance reflects YoY growth of ~1.5%.	Lowe's EPS guidance reflects ~9% YoY growth at the midpoint.
Capital Deployment		
Company Guidance	$5.0B in share repurchases vs. $10.0B in 2018	$4.0B in share repurchases vs. $3.0B in 2018
TAG Commentary	Similar to 2018, we expect the company to exceed its share buyback guidance, given our projection of $6.0B in 2019.	In 1Q19, Lowe's lowered its share repurchase outlook to $4.0B, down from $6.0B-$7.5B previously.
CAPEX	$2.7B vs. $2.4B in 2018	$1.6B vs. $1.2B in 2018
New Stores	Five new net store openings are expected in 2019	Lowe's completed its store assessment plan in late 2018, exiting Orchard Supply Hardware (99 stores) and closing underperforming Lowe's locations in the US (20 stores) and Canada (27 stores)

Source: Company reports and TAG estimates.

THOUGHTS ON FLOOR & DECOR AND TILE SHOP

In the specialty flooring retail sector, we view Floor & Decor as a disruptive player in the space, with a competitive advantage from a wide product mix, everyday low prices, and strong execution. We rate Floor & Decor Market Perform. Meanwhile, we recently downgraded The Tile Shop to Underperform from Market Perform, as the company's 1H19 performance showed it needs to improve its strategy and execution.

Floor & Decor Thesis: Floor & Decor should continue to gain market share in the flooring space as it benefits from: 1) growing units by 20% per year for the next few years; 2) delivering a core comp of MSD; and, 3) Pro-focused strategies. However, in the near-term, a slowing housing market could put pressure on comp growth. We also expect Floor & Decor to adjust its 2019 guidance to reflect the increase in Chinese import tariffs to 25% in June. Recall that the company's initial 2019 guidance provided in February reflected a 25% tariff effective March, but the current guidance reflects a 10% tariff, since that seemed the likely scenario at the time of the last update in early May. The impact of the tariff to EPS is neutral, with the tradeoff being between sales and gross margin as Floor & Decor plans to pass through a portion of the cost increase via higher prices. The stock also is trading at a premium P/E multiple of ~36x on our 2019 estimates, which could limit share price appreciation. Our 12-month price target of $42 is based on applying a P/E multiple of ~38x to our 2019 EPS estimate of $1.12.

The Tile Shop Thesis: The Tile Shop's 2Q19 disappointment showed the lower customer traffic was not just related to disruption from transitory factors like the new ERP system, reduced marketing, and unfavorable weather, as seemed to be the case in 1Q19. We believe The Tile Shop's shift to a more premium price positioning, a flooring product assortment concentrated in only tile and stone, and inconsistent execution are the bigger culprits. These factors, together with a softer housing market and more difficult YoY sales comparisons, make returning to positive same-store sales in 2H19 more challenging, and unlikely, in our view. We now model a comp decline of MSD in 2H19 vs. up LSD previously. Without better sales, we now see essentially breakeven EPS in 2019, due to SG&A deleverage from investments in labor and advertising. With limited visibility to a recovery, we struggle to recommend investors hold TTS. As such, we maintain our Underperform rating and 12-month price target of $2.50, which is based on applying an EV/EBITDA multiple of 4.5x to our 2020 EBITDA estimate of $42.6MM. Our price target equates to a P/E multiple of 25.0x our 2020 EPS estimate of $0.10.

ADDENDUM
Important Disclosures:

Valuation Method for Target Price: Price-to-Earnings, enterprise-value-to-EBITDA, P/E to growth, price to free cash flow, and discounted cash flow analysis.

Investment Risks: Telsey Advisory Group's (TAG's) equity research department covers consumer-focused sectors including apparel manufacturers, cannabis, children's and teen retailers, consumer electronics retailers, cosmetics, department stores, discounters, footwear, gaming and lodging, home furnishings retailers, home improvement retailers, internet, luxury goods, office supply retailers, off-price retailers, online travel agencies, restaurants, specialty apparel retailers, sporting goods retailers, and supermarkets. Risks across or specific to one or more of these sectors include volatility of commodity costs, consumer spending, currency, rising interest rates, weaker consumer confidence and unemployment rates. Additionally, access to capital, supply chain disruptions, commodity costs, private label distribution, currency, geopolitical uncertainty, unfavorable government regulations, lack of appropriate real estate sites, and the use of the World Wide Web to sell merchandise represent unique industry risks.

Analyst Certification

The Research Analysts, Joseph Feldman, Cristina Fernández, CPA and Sarang Vora, CFA, who prepared the research report hereby certify that the views expressed in this report accurately reflect the Analyst(s) personal views about the subject companies and their securities. The Research Analyst(s) also certify that the Analyst(s) have not been, are not, and will not be receiving direct or indirect compensation for expressing the specific recommendation(s) or view(s) in this report.

Company Specific Disclosures

Floor & Decor Holdings, Inc. Rating History as of 07/31/2019

* Telsey with ratings are effective as of 09/11/14

The Home Depot, Inc. Rating History as of 07/31/2019

On September 16, 2012 TAG completed a transition from price target ranges to specific price targets. All price target changes prior to September 16, 2012, are displayed as price target averages. Exception listed for 08/15/2012

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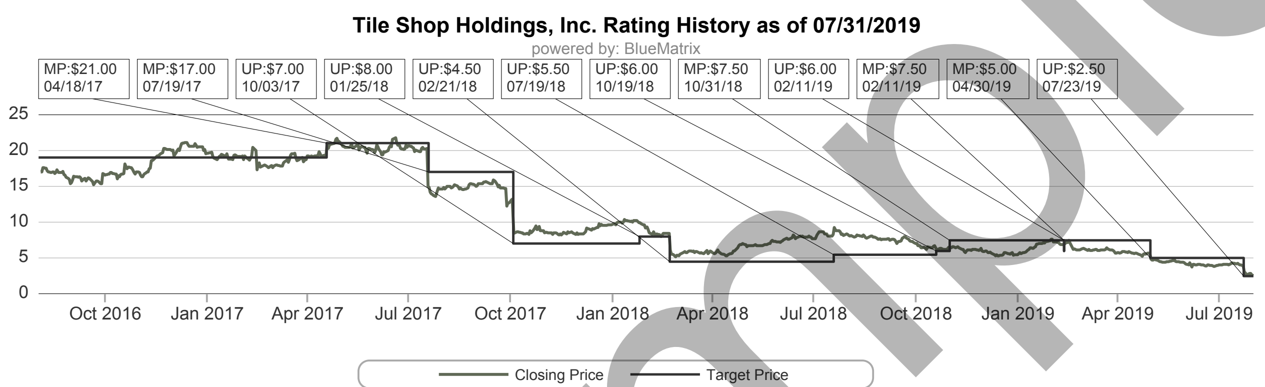

On September 16, 2012 TAG completed a transition from price target ranges to specific price targets. All price target changes prior to September 16, 2012, are displayed as price target averages.

* Telsey with ratings are effective as of 09/11/14

Ratings Distribution & Investment Banking Disclosure

Rating	Count	Ratings Distribution	Count	*Investment Banking
OUTPERFORM	**42**	**44.21%**	**2**	**4.76%**
MARKET PERFORM	**51**	**53.68%**	**0**	**0.00%**
UNDERPERFORM	**2**	**2.11%**	**0**	**0.00%**

On 09-11-2014 TAG launched a three-tiered rating system of Outperform, Market Perform, and Underperform to evaluate its stocks under coverage. Price targets continue to be used in conjunction with the new rating system.

Ratings Definition and Distribution

Our recommendation system is based on a stock's expected total return relative to the industry universe over the next 12 months.

We divide stocks under coverage into three categories, each defined by a prospective rate of return:

Outperform – the stock is expected to outperform the average total return of the industry universe over the next 12 months.

Market Perform – the stock is expected to perform in line with the average total return of the industry universe over the next 12 months.

Underperform – the stock is expected to underperform the average total return of the industry universe over the next 12 months.

Disclosures required by United States laws and regulations

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