

Market Briefing

Content

US Economy	2
Housing & Construction	4
Power Tool Industry	5
Retail	6
Canada Snapshot	10
Market Trends	12

US ECONOMY

Consumer Confidence Falls to 135.1
Consumer Spending Jumps 0.6%
Consumer Prices Rise 0.3%
Unemployment Remains at 3.7%
Durable Goods Orders Rise 2.1%
Chicago PMI Rises to 50.4
Wholesale Prices Rise 0.2%
Q2 GDP Growth Revised to 2.0%
The Impact of Tariffs
NABE Recession Forecast

HOUSING & CONSTRUCTION

Housing Starts Drop 4.0%
▶ Single-family starts rise 1.3%
Building Permits Rise 8.4%
▶ Single-family permits rise 1.8%
New-Home Sales Fall 2.8%
Existing Home Sales Rise 2.5%
Builder Confidence Rises to 66
Mortgage Rates Drop to 3.58%

POWER TOOL INDUSTRY

Robert Bosch

- ▶ Market leader in IoT development
- ▶ Petitions FCC to update UWB rules

Stanley Black & Decker

- ▶ Acquires stake in IguanaFix

TTI/Techtronic Industries

- ▶ First-half Conference Call
- ▶ Milwaukee Tool expansion

RETAIL

Retail Sales Increase 0.7%

The Home Depot

- ▶ Q2 sale rise 1.2%
- ▶ Comp sales rise 3.0%
- ▶ Q2 conference call with analysts

Lowe's

- ▶ Q2 sales rise 0.5%
- ▶ Comp sales rise 2.3%
- ▶ Q2 conference call with analysts
- ▶ Lays off thousands of employees

Walmart

- ▶ Q2 revenue rises 1.8%
- ▶ US comp sales rise 2.8%
- ▶ CMO Barbara Messing steps down

Ace Hardware

- ▶ Q2 revenue rises 2.3%
- ▶ US comp sales rise 1.7%
- ▶ Institutes vendor fee
- ▶ CEO talks about Ace advantages

W. W. Grainger

- ▶ Warns on 2020 sales and profits

Amazon

- ▶ Expands robot deliveries
- ▶ Partners with Reaology
- ▶ Pressures brands on packaging

CANADA SNAPSHOT

Economy

Housing & Construction

Retail

MARKET TRENDS

Labor and Subcontractor Shortages

The Aging Construction Workforce

Girls Encouraged to Consider Careers in Construction

Home Design Trends

Delivery Wars Wage On

Bosch | Dremel

RotoZip | Vermont American

CST/berger | freud | Sia

Robert Bosch Tool Corporation

1800 W Central Rd
Mount Prospect, IL 60056 USA
www.boschtools.com
PTNA.Marketing@us.bosch.com

© Robert Bosch Tool Corporation. All rights reserved.
No copying or reproducing is permitted without prior written approval.

US ECONOMY

Exchange Rates August 30, 2019

Euro	1 Euro = \$1.099	\$1.00 = 0.910 Euros
Canadian Dollar	1 CAD = \$0.752	\$1.00 = 1.329 CAD
Japanese Yen	1 Yen = \$0.009	\$1.00 = 106.298 Yen
Chinese Yuan	1 Yuan = \$0.140	\$1.00 = 7.156 Yuan
Mexican Peso	1 Peso = \$0.050	\$1.00 = 20.065 Pesos

Market Watch August 30, 2019

DOW	26,403	-1.7%
NASDAQ	8,182	-1.8%
S&P 500	2,983	-2.6%

The markets all finished in the red for August, turning in their worst monthly results since May. Conflicting economic news, an escalating and volatile trade situation and worries about the future direction of the economy all contributed to the decline.

Consumer Confidence Falls to 135.1

The New York-based Conference Board's Consumer Confidence Index fell marginally to 135.1 in August after rising to 135.7 in July, according to the Conference Board's latest survey. The decline was less than economists expected after a month of economic and market turbulence. The Present Situation Index, which is based on consumers' assessment of current business and labor market conditions, rose to 177.2 after rising to 170.9 in July and is now at its highest level in nearly 19 years. The Expectations Index, which is based on consumers' short-term outlook for income, dropped to 107.0 after rising to 112.2 in July. Wells Fargo noted that the survey is taken mid-month and that the drop in the Expectations Index is a sign people are growing more nervous about the future. Economists note that a level of 90 indicates that the economy is on solid footing and a level of 100 or more indicates growth. Analysts caution that the real driver behind consumer spending is income growth and that labor market trends are a more accurate predictor of consumer behavior.

Consumer Spending Jumps 0.6%

Consumer spending jumped 0.6% in July after rising 0.3% in June. Core consumer spending rose 0.4% in July after rising 0.2% in each of the previous three months. Personal income rose 0.1% after increasing an upwardly revised 0.5% in June. Savings fell to \$1.27 trillion, the lowest level since November 2018. Inflation pressures remained low, with the personal consumption expenditures (PCE) price index excluding the volatile food and energy components rising 0.2% for the fourth consecutive month. In the 12 months through June, the core PCE price index increased 0.6%, well below the Fed's preferred inflation reading of 2.0%.

Consumer Prices Rise 0.3%

The Consumer Price Index (CPI) rose a seasonally adjusted 0.3% in July after rising 0.1% in June. The year-over-year CPI was up 1.8% in July after being up 1.6% in June. Excluding the volatile food and energy categories, core prices were up 0.3% in July and 2.2% from a year ago, the biggest increase in six months. Gains were modest, but widespread.

Unemployment Remains at 3.7%

The unemployment rate remained at 3.7% in August and the economy added 134,000 new jobs, well below expectations of 160,000 jobs. Unemployment is at the lowest level since 1969. Job growth for June and July was revised down by a total of 20,000 jobs. The pace of job creation this year has slowed, with the economy adding an average of 158,000 jobs each month, down from 223,000 last year. Employment in construction, manufacturing, warehousing and transportation was steady. The private sector added 96,000 jobs. Wage growth rose 0.4% (11 cents per hour) and was up 3.2% year over year. Unemployment remained at 3.7% because the labor participation rate edged up again. The economy needs to create about 120,000 new jobs each month to keep up with growth in the working-age population.

Durable Goods Orders Rise 2.1%

Durable goods orders rose 2.1% in July after rising 2.0% in June. However, excluding a 47.8% surge in aircraft and parts due primarily to Boeing orders, durable goods orders fell 0.4%. Core durable goods orders for non-defense capital goods excluding aircraft, widely regarded as a key indicator of business spending, rose 0.4% in July but orders for June were revised

down, leaving the overall level for core goods down. Nondefense capital goods shipments, which factor into GDP, fell 3.0% in July and June shipments were revised down to a 0.9% gain. The durable goods report is very volatile and often subject to sharp revisions.

Chicago PMI Rises to 50.4

The Chicago Purchasing Managers' Index (PMI) rose to 50.4 in August after falling to 44.4 in July, reversing two consecutive months of below-50 readings. Supplier Deliveries fell sharply to 50.3 from 55.6 in July. Production picked up 6.7 points but remains muted and New Orders saw the largest single component monthly gain and shifted back into expansion. Prices Paid rose 3.7 points, reaching a five-month high of 59.8. August's special question concerned business investment plans for the remainder of the year. The majority of respondents, 63%, envision no change in their plans, 27% plan to increase their investments and 10% intend to reduce them. Economists use the Chicago PMI and other regional indicators to gauge the health of the ISM manufacturing index.

Wholesale Prices Rise 0.2%

The Producer Price Index (PPI) rose 0.2% in July after inching up 0.1% in June and was up 1.7% year over year. Core producer prices, which exclude food, energy and trade services, fell 0.1% after being flat in June and were up just 1.7% year over year. The increase was primarily driven by an increase in gasoline prices in July during the height of the summer driving season; prices for services declined 0.1% after five months of increases.

Q2 GDP Growth Revised Down to 2.0%

GDP growth was revised down to 2.0% for the second quarter from the first quarter's surprisingly strong growth of 3.1% but was still ahead of expectations for 1.8% growth, according to the second reading from the Commerce Department. Consumer spending was revised sharply upwards to 4.7%. The increase in consumer spending almost offset small downward revisions in other areas. Business fixed investments and net exports were both revised lower, partially reflecting the ongoing trade war with China. Corporate profits rose a solid 2.7% year over year after dipping in the first quarter, but business investment declined at an unrevised 0.6% rate, the first contraction since the beginning of 2016. The second release shows how the income

side of the economy is doing. Real domestic income (GDI) was up 2.1%.

Job Openings Flat

The number of job openings was largely unchanged at 7.35 million in June after dropping to 7.30 million in May, according to the most recent Job Openings and Labor Turnover Survey (JOLTS). Total hiring fell 1.0% to 5.7 million, below the record of nearly 6 million set in April. There are currently nearly 1.3 available jobs for every unemployed person, and figures indicate that businesses remain in a hiring mode, a sign they are confident that the economy will keep growing. The quits rate was also little changed in June, with roughly 2.3% of workers quitting their jobs, a figure that has been relatively stable for the past year. The quits rate is viewed by policymakers and economists as a measure of job market confidence.

The Impact of Tariffs

Some tariffs due to be imposed September 1 will be delayed until December 15, reportedly so that they will not impact the holiday shopping season. Most of the tariffs being delayed are on consumer goods like laptops, cellphones and toys. However, additional 15% tariffs were imposed on a long list of about \$112 billion in Chinese imports. The previous round of tariffs primarily impacted industrial goods, but under the new tariff schedule 69% of the consumer goods will face higher tariffs compared to 29% previously. If the tariffs delayed until December 15 are applied, the average tariff on Chinese imports will have risen from 3.1% in 2017 to 24.3%. US companies say they will be forced to pass at least some of the costs on to consumers, who will be forced to choose between paying higher prices, trading down or putting off any discretionary purchases.

Financial analysts were quick to point out that the imposition of the tariffs could have a wide-ranging impact on the economy. Goldman Sachs lowered their forecast for US economic growth, and also predicted that the trade war between China and the US will not be resolved before the 2020 election.

Moody's Analytics said that if the tariff issue can be resolved, the economic expansion could continue through the end of 2020 or beyond; if it is not resolved, it could send the economy into recession. Businesses are growing wary and losing confidence that the issues can be resolved before they have a big negative impact on the economy.

NABE Recession Forecast

A strong majority, 74%, of NABE economists expect a recession in the US by the end of 2021. Just 2% expect a recession to begin this year while 38% predict that a recession will occur sometime next year. The latest survey was taken during the last two weeks of July before the yield curve on the 10-year Treasury Bond briefly fell below the yield on short term Treasuries, an inversion that has correctly signaled many of the past recessions because it's an indicator that people are less confident about the future than they are about the present. However, it is a long indicator; typically the recession, if it occurs, will be at least a year away. The lack of resolution to the trade war with China and a faltering global economy has added additional pressure.

HOUSING & CONSTRUCTION

Housing Starts Fall 4.0%

Housing starts fell 4.0% in July to a seasonally adjusted annual rate of 1.19 million units from a downwardly revised reading in June. **Single-family starts rose 1.3%** to 876,000 units after rising to 847,000 units in June and multifamily starts fell 16.2% to 315,000 units. **Regional starts were mixed.** Combined single-family and multifamily starts rose 3.7% in the South. Starts declined 5.7% in the Northeast, 7.9% in the Midwest and 12.3% in the West.

Building Permits Rise 8.4%

Building permits rose 8.4% in July to 1.34 million annual units after falling to 1.22 million units in June. **Single-family permits rose 1.8%** to a 838,000 units and multifamily permits jumped 21.8% to 498,000 units. **Regional permits were mixed.** Year to date, permits were up 2.4% in the Northeast. Permits were down 7.1% in the Midwest, 0.1% in the South and 6.8% in the West.

New-Home Sales Fall 2.8%

New-home sales fell 2.8% in July to a seasonally adjusted annual rate of 635,000 units after June sales were revised strongly upwards to 728,000 units. New home sales were up 4.1% from July 2018. The inventory of new homes for sale fell slightly to 337,000 homes, a 6.4-month supply at the current

sales pace, up from a 6.3-month supply in June. The median sales price rose to \$312,800 in July after rising to \$310,400 in June. The median sales price in June 2018 was \$327,500. Regional new home sales year to date were mixed. Sales were up 7.2% in the South and 9.5% in the West. Sales were down 15.4% in the Northeast and 12.4% in the Midwest. Wells Fargo noted that sliding mortgage rates and builder discounts have led to an overall improving sales trend, but prices remain below last year's level as there is more focus on the entry level market. Sales of new homes are tabulated when contracts are signed and are considered a more timely barometer of the housing market than purchases of previously-owned homes, which are calculated when a contract closes.

Existing Home Sales Rise 2.5%

Existing home sales rose 2.5% in July to a seasonally adjusted annual rate of 5.42 million homes after falling to 5.27 million in June. Sales were up 0.6% from July 2018. **Regional sales were mixed.** Sales were up 1.6% in the Midwest, 1.8% in the South and 8.3% in the West. Sales dropped 2.9% in the Northeast. Total housing inventory at the end of July fell to 1.8 million after rising to 1.92 million in June. Unsold inventory is at a 4.2-month supply at the current sales pace, down from a 4.4-month supply in June and a 4.3-month supply in June 2018. The median existing home price for all housing types in July was \$280,800, up 4.3% from July 2018. July was the 89th consecutive month that home prices increased.

Builder Confidence Rises to 66

Builder confidence rose one point to 66 in August after rising one point to 65 in July, according to the National Association of Home Builders/Wells Fargo Housing Market Index (HMI). Builder confidence has been in the low- to mid-sixties for the past six months. Builders report demand has been solid, but development and construction costs continue to rise, labor remains in short supply and home prices continue to outpace consumer incomes, particularly at lower price points. The HMI indices were mixed in August. The index measuring current sales conditions rose two points to 73, the component gauging expectations in the next six months fell one point to 70 and the index measuring buyer traffic rose two points to 50. Looking at the three-month moving averages for regional HMI scores, the South rose one point to 69, the West rose one point to 73 and the Midwest rose one point to 57. The Northeast fell three points to 57.

Mortgage Rates Slip to 3.58%

A 30-year fixed-rate mortgage (FRM) was 3.58% at the end of August, down from 3.75% at the end of July. Rates were 4.52% at the end of August 2018. Freddie Mac expects rates to average 4.5% this year and 4.8% next year. The drop in mortgage rates has caused a corresponding increase in applications for mortgages and refinancing.

POWER TOOL INDUSTRY

Robert Bosch

Robert Bosch has become a real market leader in developing technology and capitalizing on the growth of the Internet of Things (IoT), according to Paul Thomas, executive vice president of sales for Bosch in North America. He says research shows that society wants more interconnected services and systems.

Robert Bosch has petitioned the FCC to update their Ultra-wideband (UWB) rules to keep pace with technological developments. Bosch also proposed the FCC modify rules for UWB operation for devices and systems. Bosch stated that the FCC has not further reviewed the existing rules as promised, and that there are no documented cases of interference from a UWB device to either narrowband or wideband allocated radio services. The proposal has created opposition from GPS manufacturers, who believe that the reliability of GPS could be threatened by broadening the use of UWB.

Stanley Black & Decker

SB&D acquired a stake in Argentinian online company IguanaFix. IguanaFix is a tech startup that connects homeowners with service providers. Argentina is South America's second-largest economy. Larry Harper, vice president of Stanley Ventures, said there could be opportunities for the two companies beyond Latin America. Financial terms were not disclosed.

TTI/Techtronic Industries

TTI/Techtronic Industries First-Half Conference Call:

First-half organic growth increased 8.7% to more than \$3.7 billion US. Excluding the impact of currency, revenue increased 10.7% in local currency.

Milwaukee sales rose 22.2% globally, 20% in the US and 28% in Canada.

Sales for the Power Equipment division grew 12.1% or 14.3% in local currency to US \$3.3 billion. The Power Equipment division now accounts for 89.1% of the group's total revenue. Excluding the effect of currency, the Power division grew 20.2% in Europe and 15.3% in Australia.

North America accounted for 76.3% of the Group's revenue, followed by Europe (16%).

Milwaukee's FUEL business was up 22%. FUEL is Milwaukee's highest priced, highest margin and most sophisticated range of cordless, brushless motor products.

End user conversion globally in the Milwaukee business is a major area of investment. Their sales coverage program continues to expand geographically in a very targeted way.

Their Leadership Development Program is a campus recruiting effort. This year they will hire globally about 1,000 graduates from college campuses around the world.

They focus on very specific end user groups they call verticals. CEO Joe Galli discussed six verticals on the conference call, including Carpentry and Remodeling, Mechanical, Electrical and Plumbing (MEP), Power Utility, Transportation and Mechanics Hand Tools.

Some of the areas of future growth they see include lithium-powered cordless lighting and mobile tool storage. Galli stated that people used to have six or eight tools; now people have 25 to 35 tools. That means they need a good system to keep them organized, store them and move them from storage to job sites. Their PACKOUT system is essentially wheeled organization and storage for these tools.

The RYOBI ONE+ system is expanding; this year they are introducing a line of hobby tools as well as a line of plumbing tools. They plan to keep expanding this line into other areas.

Their outdoor business is up more than 15%, which Galli attributed to their transition from gas and AC-based products to lithium battery-powered products. Users are welcoming all the benefits of cordless outdoor and adopting this new technology at a very rapid rate.

Other News:

An affiliate of Milwaukee Tool bought an office building in Menomonee Falls, Wisconsin for future expansion. The 52,744-square-foot, two-story building sold for \$4.7 million to Schwer, Pflight & Werkzeug Properties, which roughly translates into Heavy Duty Tool. The Woodland Prime office park where the building is located is about a 10-minute drive from Milwaukee Tool's headquarters. The building was purchased from Kohl's Department Stores. Milwaukee CFO Ty Staviski said that they are looking into additional space to consolidate operations as they continue to grow their presence in Wisconsin.

RETAIL

Retail Sales Increase 0.7%

Retail sales rose 0.7% in July after rising a downwardly revised 0.3% in June and were up 1.0% from July 2018, according to the latest figures from the Commerce Department. It was the fifth consecutive month retail sales increased. Core retail sales, which exclude food services, car dealers, building-materials stores and gasoline, rose 0.7% after a downwardly revised gain of 0.4% in June. Core retail sales correspond most closely with the consumer spending component of GDP. Online and other non-store sales were up 2.8% from June, a gain that might be attributed to the impact of Amazon's Prime Day sales. Building materials and garden supply stores were up 0.2% from June but down 0.5% year over year.

Retail Store Traffic Up

Retail traffic rose in the second quarter, according to Placer.ai, a foot traffic analytics platform. Traffic was up 38% at Lowe's, 35% at Home Depot and 27% at Ace Hardware. Home Depot and Lowe's together accounted for more than two-thirds

of store visits in the DIY category, with Home Depot in the lead at 39%.

The Home Depot

Q2 sales rose 1.2% to \$30.84 billion, slightly below analysts estimates. Comp store sales were up 3.0%, also below estimates. Profits came in ahead of estimates, but THD lowered their sales forecast for fiscal 2019, and now expects sales growth of 2.3% rather than the 3.3% growth forecast earlier. The comp stores sales forecast was lowered from 5% growth to 4%. THD noted that lower lumber prices and rising lumber sales were cutting into revenue.

Home Depot Q2 Conference Call with Analysts:

All US divisions posted positive comps, as did 17 of 19 US regions. The exceptions were the Gulf and Florida regions, which delivered very high storm-related comps last year. Canada comps grew in the low single digits in local currency.

With the exception of lumber, all merchandising departments posted positive comps. Tools and building materials were among the categories that posted above-average comps.

Comp average ticket rose 2% and comp transactions rose 1%. Lumber negatively impacted average ticket growth by approximately 110 basis points, with prices for popular products like OSB sheets continuing to drop.

Big ticket comp transactions over \$1,000, approximately 20% of US sales, rose 3.7%, partially reflecting the impact of hurricane-related sales last year and lumber price deflation. Excluding hurricane-related markets, big ticket comps were up nearly 5%.

Pro sales once again outpaced DIY sales in the US. THD is on track to have one million Pros on their B2B website by the end of the year.

They have been working on appliance resets and tool sales for some time, and those two businesses continue to post incredibly strong results.

They have implemented their way-finding signage and store refresh package in more than 1,400 stores. Customer service scores in the category of neat and clean have increased

140 basis points. Customer service scores for checkout time satisfaction have increased more than 450 basis points thanks to the frontend store investments they're making, which are now in place at more than 400 stores. 87% of customers give them the highest score when asked if they are likely to shop at Home Depot again.

Online sales grew 20% from Q2 2018 and they are seeing incremental growth from new categories like pool and work-wear. During the quarter approximately 50% of all online US orders were picked up in stores.

They are on track with their plans to create the fastest and most efficient delivery network in home improvement.

They are working on accelerated merchandise and resets focused on upgrading showrooms, improving visual merchandising and refining assortments to drive a better in-store shopping experience.

They opened two new stores during the quarter, one in the US and one in Mexico, for an ending store count of 2,291. Selling square footage was 238 million square feet and total sales per square foot were \$510, up 1.1% from 2018.

The impact of transportation on gross margins has moderated from last year and they are excited about the productivity they are seeing in their upstream supply chain.

They are constantly working on the impact of the tariffs; at 10% it has a potential impact of about 2% of US sales. Suppliers are generally moving at least some manufacturing out of China to Taiwan, Thailand, Indonesia and even back to the US. All these efforts reduce the net impact to about 1%; then it's up to the merchant team to work it through and see how much, if any, of the impact they can pass along to customers.

Most price increases are mix-driven in the sense that customers are trading up to more innovative, higher priced goods. The growth in average ticket has been largely driven by new product introductions which are higher price points because of innovation; for example, a cordless lawnmower is considerably more expensive than a push gas mower.

Right now they are making a lot of investments in their physical locations to make shopping easier and more rewarding for both consumers and Pros.

Other News:

Home Depot has reportedly set up what employees called a "tariff war room" to analyze products and costs and devise pricing strategies. Home Depot's CFO Carol Tome told CNBC that they were working with suppliers to offset tariff costs, but acknowledged that some of the costs will have to be passed along to consumers.

THD is reportedly shopping for sites for new fulfillment centers, part of a \$1.2 billion overhaul of their US supply chain. The new centers could range from between 750,000 square feet to more than one million square feet. THD plans to add at least 170 distribution centers across the US over the next five years in hopes of speeding up delivery of products to homes and job sites. Ultimately they want to be able to reach 90% of the population with same-day or next-day delivery. CEO Craig Menear told the *Atlanta Business Chronicle* that the supply chain overhaul is part of a \$11.1 billion investment they are making to better handle the rise of online shopping.

Lowe's

Q2 sales rose 0.5% to \$21 billion from \$20.9 billion in Q2 last year, slightly exceeding estimates. **Comp sales were up 2.3%**, led by a 3.2% increase in comp sales in the US. They maintained their guidance for the year, and expect sales to grow 2% and comp sales to grow 3%.

Lowe's Q2 Conference Call with Analysts:

All 15 geographic regions saw positive comps. Three of their top four performing regions were in the Western division. Atlanta, Boston, Charlotte and Tampa also delivered outstanding results. They posted negative comps for the quarter in Canada, largely due to their ongoing RONA integration.

Comp transactions rose 0.3% and average ticket grew 3%. Pro comps significantly outperformed DIY comps during the quarter.

Tools delivered strong mid-single digit comps and they continue to see market share gains from the Craftsman resets.

Weather was particularly challenging early in the quarter. Commodity deflation exerted 110 basis points of pressure on comp sales.

Pro performance was driven by investments in job lot quantities coupled with their improved service model. Service scores with Pros increased 900 basis points. Pros are now getting more job lot quantities, dedicated loaders, preferred parking under the canopy, dedicated department supervisors and a new customer-friendly field structure. They are pleased so far but are pursuing many additional opportunities to deepen their relationships with Pros.

They are leveraging key brands to grow their Pro business, including Bosch, Metabo HTP and DeWalt. They will be launching DeWalt's 12-volt cordless Xtreme brushless platform during the third quarter.

Lowe's.com posted positive comps of 4% and accounts for about 5% of sales, so is an area with tremendous growth potential. Several actions made key contributions to growth, including slowing down the number of new SKUs added during the quarter while addressing systems and process issues that negatively affected stores' productivity.

They also took steps to improve the quality of their online business by eliminating certain programs that were unprofitable. The move cut into short-term growth but better positions them for long-term success.

They are taking aggressive steps to improve the technology foundation of lowes.com and replatforming the entire site to Google Cloud.

Construction of their new global technology center began in August with plans to open in 2021.

All the initiatives they've put in place are helping them make steady progress to better serve customers, position the business for long-term success and improve results in categories that have consistently underperformed for them.

Over the next 12 months they'll be focusing on two major initiatives to modernize systems and pricing tools. First, the deployment of their new price management system will allow them to do a better job of systematically analyzing, prioritizing and implementing retail pricing programs. The new system will be in place by the end of the year.

Their second initiative is focused on fully integrating their

acquisition of the Boomerang retail analytics platform. The integration will let them incorporate Boomerang's technology into their core retail business, which will facilitate data-driven pricing and let them make better merchandising decisions as far as assortments go. The integration should be completed during the first half of 2020.

This year they invested in inventory in order to improve sales performance in Q1 and Q2. Part of the transformation of their supply chain includes rolling out predictable delivery and product flow to the stores. During the second half they'll be strategically managing down inventory while protecting their in-stock position and margins.

Focusing on retail fundamentals drove strong performance in areas of historical strength and improved performance in categories which have historically underperformed.

The strength in Craftsman came from power tools, tool storage and mechanics tools.

They introduced new and innovative products from Bosch, Spyder and Metabo HPT and leveraged key programs from DeWalt.

In Q3 they will remain focused on retail fundamentals and driving profitable sales. They will continue to use Craftsman to drive traffic.

They are working with their vendors and making sure they are managing costs and getting the right support for all the efforts they are doing in the stores.

They'll be leveraging the partnership with the NFL they announced in January, which allows them to advertise with the NFL during and off-season, including special events like the Super Bowl and the NFL draft. Lowe's will be the presenting sponsor of the Superbowl Experience, an interactive park for NFL fans that debuts at Super Bowl LIV in 2020 in Miami.

Their investments in stores are paying off. They armed associates with SMART phones that provide real-time data and added more than 600 assistant store managers and 5,500 department supervisors. That allowed them to add 120 customer-facing hours per store per week without negatively impacting payroll.

Their research shows that certain DIY customers traditionally shop the store about four times a year, so it's very important to execute the retail events that pull in traffic. In the past they've had out of stock problems and service issues for big events like Spring Black Friday and Holiday. This year they are putting enormous emphasis on great execution and not disappointing customers.

Other News:

Lowe's will lay off thousands of store employees that are part of the merchandise assembly and maintenance staff and outsource their duties, such as assembly of barbecue grills, wheel barrows and other products along with janitorial duties in stores and at other locations. Lowe's currently has 190,000 full-time and 110,000 part-time workers in stores and other facilities in the US and Canada. Affected associates will reportedly be given transition pay and the opportunity to apply for open positions at Lowe's.

Walmart

Q2 revenue rose 1.8% to \$130.38 billion, beating expectations. US net sales rose 2.9% to \$85.20 billion. Comp sales in the US were up 2.8% excluding fuel, handily beating expectations. Online sales jumped 37%. Transactions were up 0.6% and average ticket rose 2.2%.

WM said their online business has gotten a boost from their gradual rollout of next-day delivery, which now reaches about 75% of the US population.

Walmart's CMO Barbara Messing stepped down the end of August in order to return to the San Francisco Bay area with her family. Michael Francis, the former CMO of Target, will lead a newly formed retail marketing team on an interim basis. He's been consulting with Walmart since 2015. Messing was Walmart's third chief marketer in four years.

Ace Hardware

Q2 revenue rose 6.3% to \$1.69 billion. US comp sales rose 1.7% and online sales jumped 58%. Total wholesale revenues rose 4% to \$1.53 billion. Ace added 33 new domestic stores in the second quarter and cancelled 23.

Ace will begin charging vendors a 1% fee for all distribu-

tion center and drop-ship purchases beginning January 1. They are terming the fee the Ace Hardware Transformational Growth Allowance. Ace says the fee will support growth in two primary areas, advancing the brand and enhancing the supply chain. Ace VP of Merchandising Brian Wiborg told vendors that the co-op's board of directors approved \$2 billion in wholesale and retail investments in order to pave the way for another 800 stores and more than \$20 billion in sales over the next five years. He said the allowance is 100% focused on growth. Ace will reportedly spend 50% more marketing dollars over the next five years to boost in-store and online traffic. Ace will make significant investments in their website, digital marketing and the customer experience and expand their retail support network to handle more products and faster shipments. Ace's wholesale sales have grown from \$4.2 billion in 2013 to \$6 billion today.

CEO John Venhuizen told the *Wall Street Journal* that the fact that they have more than 5,000 stores gives them a distinct advantage over Home Depot and Lowe's. More than 75% of US households are within 15 minutes of an Ace store, and they have more physical stores than Home Depot and Lowe's combined. Right now about 2,100 or 2,200 of those stores have bought into the buy online deliver from store program available on their website. And almost every Ace store does local delivery on their own. Delivery expenses are born by the individual store, so buying into the program requires commitment. Venhuizen said big, bulky "obnoxious" products are the vast majority of what they sell online. People don't want to pay to ship big bulky products and they don't want to have to figure out how to assemble them. The average Ace store is about 10,000 square feet; the average Home Depot or Lowe's is ten times bigger, which means the stores are harder to navigate and can be intimidating, especially to people who just want to find out how to fix something and buy whatever is needed.

W. W. Grainger

CEO D.G. Macpherson warned that margin pressure was really going to impact next year's sales and profits, because so far rising sales volumes have blunted the impact of price cuts on profitability. Macpherson said they know they are in a slowing, choppy market and sales growth will not be as great as they hoped. Economic indicators point to an industrial slowdown, according to Macpherson, and they are also dealing with rising costs for the products they sell. They are also facing a "growing threat" from online rivals. Amazon launched their business distribution unit in 2012.

Amazon

Amazon started using robots to deliver some items in California in August after several months of tests in a neighborhood near Amazon's headquarters in Seattle. According to Amazon, Scout devices have made thousands of successful deliveries, and navigated successfully around a wide variety of residential obstacles, including trash cans and skateboards. Scout is described as being the size of a small cooler, and travelling on sidewalks at a "walking pace." The test in Irvine, California launched with a small number of Scouts making daylight deliveries on weekdays. There are dedicated software and hardware labs working on Scout in Seattle. Amazon says the Irvine test is just another in the many steps forward Scout will need to take before it can be deployed nationwide.

Treasury Secretary Steve Mnuchin said that Amazon has "destroyed" the US retail industry as the Trump administration announced a broad antitrust review into whether technology companies are using their power to limit competition. Amazon countered by pointing out that small and medium-sized businesses thrive on Amazon's marketplace and rang up \$160 billion in sales last year. Amazon also pointed out that approximately 90% of US retail sales still take place in physical stores, according to the Commerce Department. Amazon accounts for less than 4% of the US retail market, according to the company.

Amazon is partnering with Realogy, the largest residential real estate company in the US, in order to get Amazon's home products and services in front of more customers. Realogy is the New Jersey-based parent company of brands that include Better Homes and Gardens Real Estate, Century 21, Coldwell Banker, Sotheby's International and ERA. Potential homebuyers in 15 cities can go to Amazon's website and be matched with a real estate agent from one of the companies. If they eventually close on a house, Realogy will pay for up to \$5,000 worth of Amazon Home Services and Alexa-enabled smart home products. They are calling the partnership TurnKey. It's designed to help Realogy compete with tech-focused brokerages including Seattle-based Redfin, and drive adoption of Amazon products and services. Amazon offers services including home improvement, plumbing, electrical, and odd jobs through Amazon Home Services and has a range of smart home products, including the Ring smart door bell and Echo smart speakers and smart home hubs. Last year Amazon partnered with homebuilder Lennar to host showrooms with smart tech and offer Amazon services to people who buy Lennar

smart homes. The value of the benefit varies based on the price of the home; a homebuyer would have to buy a house for \$700,000 or more to receive the full \$5,000 benefit.

Amazon is pressuring brands to make their packaging more efficient, more compact and easier to open. Eventually Amazon wants every product it ships to meet similar standards. Amazon has also been pressuring companies to sell products in quantities and at prices that that best fit Amazon's storage and delivery systems; brands that don't comply are being cut from the site. Amazon is also asking makers of consumer products to develop brands for Amazon to sell exclusively rather than develop their own private label products from scratch.

CANADA SNAPSHOT

BoC Changes Rates Posting

The overnight lending rate finished the month of August at 1.75%, after having briefly ticked up to 1.8% earlier in the month. Effective October 1, 2019, the Bank of Canada will no longer publish the monthly Chartered Bank Interest Rates, but will instead post weekly rates. These interest rates represent the typical posted rates offered by the six major chartered banks in Canada for the prime rate, conventional mortgages, guaranteed investment certificates and daily interest savings, among other things.

Unemployment Remains at 5.7%

Following three consecutive months of little change, employment increased by 81,000 in August, largely in part-time work. The unemployment rate remained at 5.7% as more people participated in the labor market. Compared with August 2018, employment rose by 2.5%, or 471,000 new jobs, as the number of full-time jobs increased 2%, or 306,000 jobs and the number of part-time jobs grew 4.8%, or 165,000. The bulk of the employment increase in August was in Ontario and Quebec. There were also smaller gains in Manitoba, Saskatchewan and New Brunswick. Employment held steady in the other provinces. Employment declined in business, building and other support services.

Consumer Confidence Rises to 55.60

Consumer Confidence in Canada increased to 55.60 Index Points in August from 54.51 Index Points in July of 2019. Consumer Confidence in Canada averaged 53.49 Index Points from 2010 until 2019, reaching an all time high of 57.05 Index Points in November of 2018 and a record low of 46.80 Index Points in February of 2016. The monthly Index of Consumer Confidence is constructed from responses to four attitudinal questions posed to a random sample of Canadian households.

Consumer Prices Steady

The Consumer Price Index (CPI) remained at 2.0% year over year in July after rising 2.0%, according to Statistics Canada. On a seasonally adjusted monthly basis, the CPI was up 0.5% in July after falling 0.1% in June. Core inflation rose slightly to 2.03% in July from 2% in June. The BoC targets an inflation rate of 2%. All eight components of the CPI rose in July.

Q2 GDP Grows 3.7%

The Canadian economy grew 3.7% in the second quarter to \$2.085 trillion CAD, rebounding with its best performance in two years. Strong export sales helped to offset a decline in business investment and softness in household spending, which slowed to just 0.1% growth after advancing 0.7% in the first quarter. Results were well ahead of both expectations and the Bank of Canada's forecast. The economy grew just 0.5% in the first quarter. Monthly GDP rose 0.2% in June, with growth recorded in 17 of 20 sectors tracked.

Housing and Construction News

Housing starts fell 9.6% in July to an adjusted annual rate of 22,013 units, according to Canada Mortgage and Housing Corp. Multiple unit starts fell 1%; the construction of single-detached houses was down 1.6%. CMHC said that residential construction is still strong and the real estate market is stabilizing after steep declines in 2018.

Home sales rose 3.5% compared with June and were up 12.6% year over year, according to the Canadian Real Estate Association (CREA). The increase in sales came as the number of newly listed homes rose 0.4% in July. The national average price of a home sold in July was just under \$499,000, up 3.9% from July 2018.

Retail Sales Steady

Retail sales were essentially steady in June after dropping 0.1% to \$51.5 billion in May. Sales were down in 4 out of 11 subsectors, representing 48% of retail trade. Excluding sales at motor vehicle dealers and gas stations sales were up 1.7%. Sales decreased in four provinces but were higher in Quebec and Ontario. Sales at building material and garden equipment and supplies dealers rose 6.0% as they recovered from the effects of inclement weather in parts of the country in May. Compared with June 2018, retail ecommerce accounted for 3.4% of total retail trade. On a year-over-year basis, retail ecommerce increased 30.7%, while total unadjusted retail sales were down 0.3%.

Retail Notes

Canadian company Shopify wants to challenge Amazon's dominance in the storing and shipping business, and has created technology that routes packages and orders based on what a customer orders and what inventory is available at each site. Shopify was founded in 2006 with a simple promise: for \$29 a month they will deliver all the tools a retailer needs to start an online business. Shopify has grown exponentially and become one of Canada's most successful startups. Revenue is growing as much as 74% annually, but they are struggling to turn a profit. Shopify says that this latest adventure will help them better serve their 820,000 customers and also be more profitable.

Canadian Tire's Q2 revenues of C\$3.69 billion missed analysts' estimates of C\$3.71 billion. Canadian Tire has been spending to broaden their retail offerings by including private labels and rolling out options like home delivery

Canadian Tire is acquiring Party City Holdings brand, store network, employee base, leaseholds and fixed assets in Canada for C\$174.4 million, which included C\$40 million in inventory.

Amazon will buy a stake in Canadian cargo carrier Cargojet. Cargojet is a key air cargo carrier for Amazon's "middle mile" transportation in Canada. Amazon already has a commercial partnership with them for overnight air cargo services and charters. The first agreement allows Amazon to acquire up to 9.9% of the company; they can acquire an additional 5% if they deliver an addition C\$200 million in business volume.

MARKET TRENDS

Labor and Subcontractor Shortages

NAHB reported that labor and subcontractor shortages remain widespread. They asked builders specifically about shortages in 15 different occupations. Builders reported that shortages ranged from a low of 47% for building maintenance managers to a high of 83% for framing crews. Many of the shortages were virtually unchanged from last year, indicating that the problem is chronic. Seventy-nine percent of builders said that the shortage of labor was making it hard for them to find subcontractors with well-trained employees.

The Aging Workforce in Construction

NAHB analysis of the most recent 2017 American Community Survey (ACS) data reveals that the median age of construction workers is 42, a year older than a typical worker in the national labor force. The median age of construction workers varies across the states. States with the oldest median age of construction workers (45 years old) are Connecticut, Maine and New Hampshire, followed by Illinois, Kentucky, New Jersey, Pennsylvania and Wyoming. Construction workers are younger on average in the central part of the nation. Half of all construction workers in Utah are under 38, while in Nebraska and Texas half are under 39. In Kentucky the median age of construction workers is four years higher than the overall median, followed by Illinois, Wyoming, Arizona and New Mexico (+3). Workers in Delaware are two years younger than the overall median. In some areas the Great Recession drove workers into other occupations and they have not returned; more than 80% of construction firms in Texas reported having a hard time filling their open positions. Construction occupations with younger workers include helpers, roofers and fence erectors. Older workers are concentrated in managerial positions such as inspectors, construction supervisors and construction managers.

Girls Encouraged to Consider Careers in Construction

The National Association of Women in Construction has organized its first camp in Texas in an effort to encourage girls in middle school to consider careers in the industry.

Thirteen girls in the program will spend one week gaining hands-on experience and acquiring marketable skills. This is the first camp of its kind the organization has put on in Texas, and it comes at a time when contractors say they can't find enough workers. The group will pour concrete, build and wire their own lamps and build a library stand over the course of the week. A recent Associated General Contractors of America report showed construction firms expanded their workforces across much of the country between April 2018 and April 2019, with Dallas-area companies creating the second-most jobs in the nation at 9,200. AGC noted that many firms would have hired even more employees if they could have found qualified workers. Meanwhile, women represent just 10% of the construction industry workforce, according to data from the U.S. Bureau of Labor Statistics. That's lower than any other industry the agency tracks. NAWIC hopes to convince the next generation of girls that working in the construction sector is a good way to build a career.

Home Design and Building Trends

Home design trends for 2020 are reflecting some new trends as well as the continuation of some popular ones, according to The Plan Collection, which produces home plans for builders.

Technology is growing more important, and people want designs that are technology friendly. The kitchen Command Center includes multiple charging stations, convenient ways to hide charging cords, dedicated space for digital assistants and easy access to iPads or tablets. Some kitchens are being designed to include a dedicated space for package deliveries so items can be dropped off without delivery personnel needing to come into the main house or garage.

Prep Pantries in kitchens are being designed to accommodate countertop appliances like microwaves, coffee makers and blenders, prep areas, warming ovens and prep sinks. Designers say this trend is reminiscent of the butler's pantry of old, and allows the kitchen to shine in its relatively new role of entertainment center while all the mess is hidden away.

Environmental considerations are factoring into new home building trends, with people looking for maximum wall, roof and foundation insulation, energy and water-efficient appliances and energy-efficient heating and cooling.

Flex spaces remain popular, with people looking for rooms that can be transformed into different spaces from office to playroom to guest suite as wants and needs change.

Open floor plans continue to rule, and generally include a blended family room, kitchen and dining space that enables togetherness and creates a greater sense of space.

“Zen Dens” are growing in popularity. They are seen as a place to get away from it all and practice yoga, meditate or exercise.

High ceilings are still desired, despite being typically less energy efficient. But people also want more energy efficient windows with a window to wall ratio below 30%.

Business in the Cloud

The public cloud market is growing rapidly, with spending in the US expected to increase by 36% this year. Approximately 19% of IT workloads are now running on the public cloud, with 55% of the survey group using cloud-based email systems, 53% relying on the public cloud for web hosting, 52% for sales and marketing applications and 52% for ecommerce. Amazon is currently the second-largest company in the world by market capitalization at just over \$900,000 billion, slightly behind Microsoft, according to *Barron's*. However, Amazon Web Services, their cloud-computing operation, is worth half a trillion dollars, considerably more than Microsoft's value in this arena.

Convenience Vs. Privacy

The onset of in-home delivery options is raising privacy concerns. Recent announcements from Amazon and Walmart that they will be launching in-home delivery raised the question of what companies will do with all the footage of the inside of homes that will be gathered by employees wearing proprietary body-cams so that consumers can watch the delivery in real time. The bodycams are positioned as security measures for consumers, but companies could use the footage to analyze homes and use the information to improve ad targeting or training materials for people creating vision algorithms. Another risk is the safety of all the access information needed, including entry codes. When Amazon rolled out Key delivery in 2017, security researchers found a way to hack the camera and freeze the image. Amazon quickly patched the hole, but the discovery illustrated that almost any networked hardware can

be vulnerable to an attack. Amazon also has a standing policy of giving at least some of the data requested to law enforcement in more than 75% of cases. Amazon says the company is not using customer video footage to improve product recommendations or ad targeting, but last year Google filed for a patent that would use footage to train AI to recognize specific products in customers' homes so they can better target product recommendations. An example cited by Google was the camera sees a 15-year old boy walking into the living room and turning on the TV. The camera then estimates his age, gender and notes that there is a basketball. Then the TV shows ad for a local basketball camp and announces when the next basketball game is on TV.

Delivery Wars Wage On

UPS is introducing several new delivery services, including pick-up and delivery seven days per week, expanded Saturday schedules for both residential and business accounts and new Sunday pick-up and delivery options. UPS is also making investments to optimize transportation assets, shipping modes and technology resources to help reduce the amount of time packages spend in transit. At the end of July UPS launched My Choice for Business, which is targeted at small and medium sized business. The service enables customer to monitor, plan and control deliveries and outgoing shipments. They also launched UPS Worldwide Economy, a new deferred service designed to make more low-priced services available for cross-border ecommerce transactions that will debut in the US, Canada, China, Hong Kong and the UK. FedEx already announced that beginning in January they will offer ground delivery seven days per week.

FedEx ended its contract with Amazon for ground deliveries at the end of August; FedEx indicated they made the move in order to focus on the broader ecommerce market. FedEx noted that Amazon is developing and implementing in-house delivery capabilities and utilizing independent contractors for deliveries, and thus has become a competitor to FedEx rather than a customer. Some analysts believe that the move by FedEx was primarily designed to let Walmart know that FedEx is willing to join Microsoft and Google in a strategic alliance with Walmart to challenge Amazon. Amazon has been building a fleet of airplanes, trucks and vans that allow the company to control every leg of a package's journey from warehouse to doorstep.