

Fortune Brands Home & Security, Inc: FBHS

Analyst: Joseph Nastasi

Sector: Industrials

Industry: Building Products

Company Description:

Fortune Brands Home & Security is a leading home and security products company. The company operates in the four business segments of cabinets, plumbing, doors, and security. The company manufactures and sells kitchen and bathroom cabinets, faucets, entry doors, trim, and padlocks. Fortune Brands industry leading brands include Moen faucets, MasterBrand Cabinets, Sentry Safe, and Therma-Tru entry. The company is highly dependent on the home improvement market of new construction and repair & remodel activities. This is a global manufacturing company with 31 US facilities and 13 international facilities with approximately 22,700 employees. FBHS was formed in 1988 as a Fortune Brands subsidiary and the company was spun off in 2011.

BUY

Current Price:	\$68.24
Target Price:	\$83.35
Market Cap:	\$10.51
Avg Volume:	880,815
S&P Debt Rating:	BBB+
ROE:	18.04%
K _e :	11.3%
EBIT Margin:	12.73%
WACC:	8.2%
Total Asset Multiplier:	1.0
Equity Multiplier:	2.08
Cash/Total Assets:	4.9%

Catalysts:

- **Short Term (within the year):** Q4 earning results on February 2, 2018
- **Mid Term (1-2 years):** Favorable industry trends of increased consumer confidence, millennials increase in house ownership, the median age of homes increasing leading to increased demand for repair & remodel activities
- **Long Term (3+):** Increasing sales volume in the company's highest operating margin segment of Plumbing and increasing the operating margins in the segments of Doors and Security closer to competitors' average

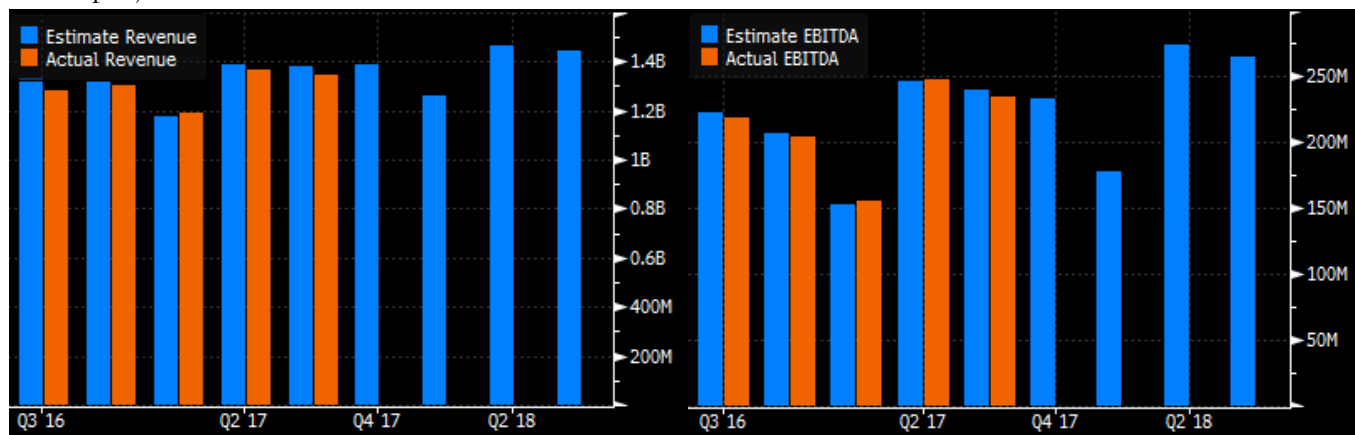


Thesis:

Fortune Brands Home and Security is the industry leader because of its well-known and high performing brands in the segments of cabinets, plumbing, doors, and security. The company's third quarter earnings resulted in operating margin gains in three of the four segments from the previous year while navigating the disruption in Florida and Texas due to hurricanes. FBHS will benefit from the promising housing improvement trends of greater consumer confidence, greater millennial homeowners, and an increase in the median age of homes in the U.S. to 40 years. FBHS has industry leading and increasing operating margins in the segments of cabinets and plumbing. The Global Plumbing Group strategy of increasing sales volume in the Plumbing segment with the largest operating margin. There is opportunity for margin growth in the segments of doors and security due to lagging behind competitors' margins in those segments. FBHS has an underleveraged balance sheet compared to its competitors that will allow them to continue growing with strategic acquisitions and international expansion. The Monte Carlo simulations shows that the company has a greater upside than downside due to the ability to continue decreasing operating costs as a percent of revenue. FBHS is well positioned for its stock price to continue increasing past its 52-week high.

3rd Quarter Earnings Performance:

Fortune Brands CEO, Christopher Klein, stated during the earnings call, "In the third quarter sales growth was solid despite the negative hurricane impact. Based on the current pace of market growth and our solid execution, we continue to expect to deliver strong full-year results." Below, the chart to the left shows the analyst estimates and actual revenue results for the past 5 quarters along with future projections for revenue. The chart to the right shows analyst estimates and actual EBITDA results for the past 5 quarters along with future projections for EBITDA.

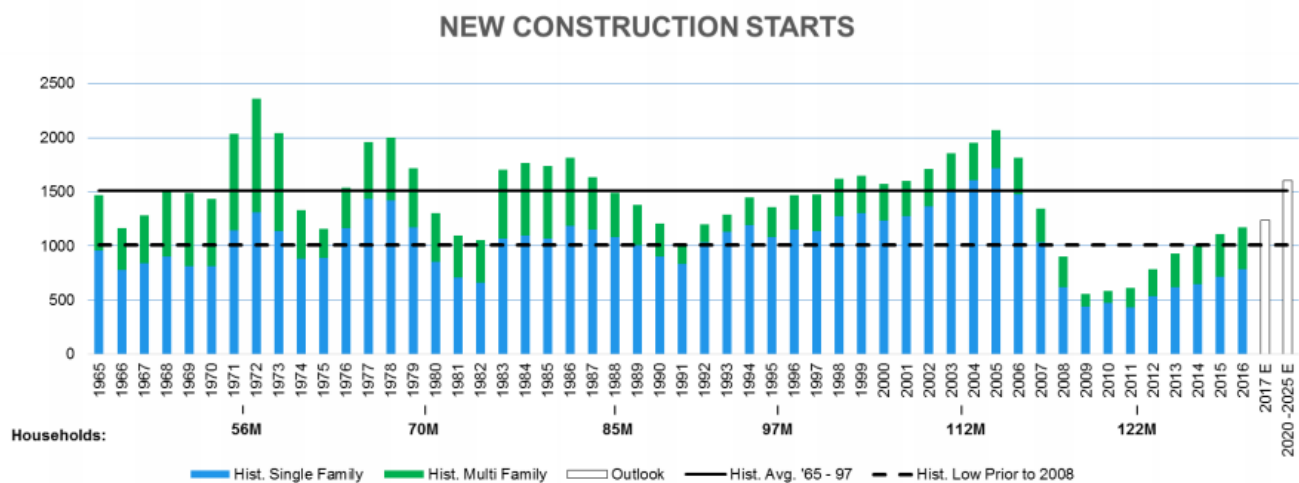


Fortune Brands was below analyst estimates for revenue for four of the last five quarters. The company was also below analyst estimates for EBITDA for three of the last five estimates. This has led to the share price generally decreasing after the past three earnings calls. Total sales increased 5% year-over-year to a Q3 result of \$1.35 billion. Operating income increased 7% year-over-year to a Q3 result of \$201.8 million. This is a Q3 operating margin of 14.95%. Plumbing sales increased 12%, cabinet sales increased 2%, door sales increased 7%, and security sales increased 5%. Plumbing sales were annually \$1.53 billion in 2016. In the Q3 earnings call, management set the goal plumbing sales reaching \$2.5 billion in sales by 2020 due to the Global Plumbing Group (GPG) strategy. This strategy involves accelerating product development, upgrading digital marketing efforts, and realizing potential from well-integrated acquisitions. This would be a revenue CAGR in the plumbing segment of 13.06% from 2017 to 2020. Fortune Brands cited the impact of storms for their

revenue and EBITDA results falling below expectations in Q3. Flooding results in consumers, in the immediate quarter, not undergoing home improvements, but will lead to home improvements in the future. Florida was severely impacted, which is the fifth largest construction market, leading to Fortune Brands being shut down there for essentially three weeks. Despite the disruption, Fortune Brands annual revenue guidance was 5% to 6% and was updated to expectations of 6% to 7%. After earnings on volume of 2 million, the stock price increased from around \$67 to \$68.5 and then in the following days fell to around \$64 on lower volume. Recently, Fortune Brands' stock price increased from a low of \$64 to \$68 due to tax reform passing the Senate, the company conducts approximately 85.5% of its revenue in the U.S. The price chart above shows how throughout the past year, Fortune Bank has outperformed the home improvement industry index. The company is at its 52-week high and has had a 52-week return of 20.9%.

Industry Outlook:

The price chart above shows how Fortune Brands' stock performance is highly correlated to the S&P 500 Home Improvement Retail Sub Industry Index (S5HOMI). Fortune Brands CEO stated "New construction activity grew in the high single-digits, while repair and remodel activity grew around 5%, both were in line with our expectations." The U.S. home market impacts over 70% of Fortune Brand's sales, which management expects to grow at a 6% to 7% rate for the full year. The hurricane disrupted Fortune Brands because Florida and Texas account for about 12% of its total revenue. However, after the hurricane recovery, construction building and repair & remodel activities will increase in demand in Florida and Texas. The chart below shows historical new construction starts in the U.S. and the outlook for the future.



The U.S. new home construction market is improving and demand for new homes is still recovering after the 2007-2009 economic recession. The chart shows from 2007 to 2009 that new construction starts were at an all time low around 500 thousand. Fortune Brand expects new housing starts to stabilize around 1.5 million from 2020 to 2025. This increase is due to favorable demographics with baby boomers retaining and even increasing home ownership. There is also a delay in marriage and child bearing, which is placing upward pressure on future (single family) household formations. Also, the median age of homes in the U.S. has increased to around 40 years, which creates a greater market for repair and remodeling demand. Consumers' willingness to invest in their homes should be high. The unemployment rate is at a low of 4.1%, access to credit is cheap with continued low interest rates, continued rising house prices, and greater stock market returns. Fortune Brand is well positioned to capture these industry trends with high correlation to the housing market and due to having leading market shares of the cabinet dealer channel and plumbing end market.

Business Model:

Fortune Brands Home & Security has broad channel and distribution strength. The geographic breakdown based on 2016 revenue is 85.43% in the U.S, 8.15% in Canada, and 6.42% in China and other international. Other international includes Europe, Southeast Asia, South America, and Mexico. The three-year CAGR for each geographic segment is 13.37% for the U.S, 0.07% for Canada, and 4.2% for China and other international. Fortune Brands distribution channel breakdown based on revenue is 27% home centers, 24% wholesale, 24% dealers, 15% international, 6% other retail, and 4% builder direct. The company's two largest customers are Home Depot and Lowe's Companies, which account for together about 30% of annual sales. Fortune's industry leading brands have consistently outperformed competitors in sales and performance. One portfolio is Master Brand Cabinets, which includes brand names such as Mid-Continent, Kitchen Classics, and Omega. This is the largest kitchen and bath residential cabinet manufacturer in North America. Fortune Brands' cabinets are in more than 70% of dealer and in-stock channels. The second portfolio is Fortune Brands Global Plumbing Group, which includes brands such as Moen, Riobel, and ROHL. The Moen faucet brand is number one in terms of sales in North America. These brands have obtained exclusive builder contracts. The third brand is Therma-Tru Doors, which is the number one entry door brand in U.S. buildings among building professionals. This brand has had a growing retail presence. The fourth brands are Master Lock and Sentry Safe, which are the number one padlock and personal safe brands in North America. The diversity of Fortune Brands can be shown with its customers. The main customer revenue breakdown is 14% Lowe's, 13% Home Depot, 3.08% Amazon, 2.93% Amazon, 1.04% Beacon Roofing, 0.46% Target, 0.45% Kroger, 0.32% Sears, and 0.28% CVS Health. These customers are varied across numerous industries. Fortune Brands strategic plan is to continue developing innovative products, expand in international markets, and leverage their global supply chains, and enhance returns of shareholders. There has been an increasing strategic focus on their Global Plumbing Group strategy. This plan was to grow its plumbing segments market growth from high single-digits to low double-digits for the next several years while maintaining the operating margin around 20% to 21%. This focus of putting resources where Fortune Brands' management sees areas of potential segment gains is why the continued operating margin gains in each segment have grown each year historically and will continue to grow in the future.

Segment Analysis:

Fortune Brands Home & Security operates in the segments of cabinets (48.1% of total revenue), plumbing (30.78% of total revenue), doors (9.49% of total revenue), and security (11.63% of total revenue). The CAGR based on revenue from 2011 to 2016 for each segment is 13.8% for cabinets, 9.77% for plumbing, -3.07% for doors, and 0.82% for security. The cabinets segment consists of manufacturing and selling custom, semi-custom, and stock cabinetry. The plumbing segment consists of manufacturing and selling faucets, accessories, kitchen sinks and waste disposals. The doors segment consists of manufacturing and selling fiberglass and steel entry door systems under the Therma-Tru brand. The security segment consists of locks, safety and security devices, and electronic security products manufactured and distributed. The time-series annual operating margin for each segment is shown below.

Annual EBIT Margin						
Segments	2011	2012	2013	2014	2015	2016
Cabinets	0.45%	1.55%	5.91%	7.71%	8.85%	10.75%
Plumbing	14.33%	15.37%	17.74%	19.45%	20.18%	21.27%
Doors	-18.30%	-0.40%	4.12%	7.05%	10.02%	13.09%
Security	11.25%	14.07%	13.75%	10.27%	10.12%	11.49%
Total	-0.47%	4.57%	8.86%	10.39%	11.22%	12.73%

Each segment's operating margin has increased over the past three-years. The efficiency gains in costs are shown in doors and security segment. Over the past five years, the revenue for the doors segment has decreased 3.07% annually, while the operating profit has reached its highest point of 13.09% in 2016. Also, the revenue for security has only increased 0.82% annually for the past five years, while the operating profit has reached its highest point of 11.49%. One area of margin concern is that the fastest growing and highest proportion of revenue segment of cabinets has the lowest 2016 margin of 10.75% of all the segments.

However, compared to its competitors, Fortune Brands' cabinet's margin is an industry leader. The increase in this operating margin is largely due to the benefit of the Norcraft acquisition. Norcraft was acquired in May 2015 for \$648.6 million and they were a leading manufacturer of kitchen and bathroom cabinetry.

Management is predicting in three-years an operating margin in the cabinets segment of around 14%. The increase in the plumbing segment's operating margin is due to higher sales volume and improving U.S. market conditions and new product innovations. This is also due to management's Global Plumbing Group strategy.

Where recent acquisitions in this segment, like the Victoria + Albert brand, has led to the opportunity of premium pricing. Management is predicting in three-years an operating margin in the plumbing segment to stay at 20% to 21%, but sales volume to continue increasing. The focus that management is putting on increasing the volume for the highest margin segment shows the cash flow focus of management, which is crucial for shareholders. The increase in the segment of doors is due the Therma-Tru brand benefiting from the shift toward fiberglass doors and away from steel. Management is predicting in three-year an operating margin in the doors segment of 15%. The security segment's operating margin has increased due to the acquisition of Sentry Safe in July 2014 for \$116.7 million in cash, which is a leading manufacturer of home safes. Management is predicting in three-year an operating margin of 15% in the security segment. The time-series quarterly operating margin for each segment is shown below.

Quarterly EBIT Margin								
Segments	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017	Q3 2017
Cabinets	9.92%	6.49%	12.94%	12.42%	10.62%	8.19%	13.58%	11.35%
Plumbing	19.75%	21.12%	23.02%	21.48%	19.63%	18.55%	23.76%	22.20%
Doors	11.62%	4.45%	15.34%	17.26%	12.98%	8.02%	16.85%	18.12%
Security	8.91%	4.53%	11.05%	14.62%	14.32%	7.62%	12.94%	17.58%
Total	11.43%	8.71%	14.46%	14.39%	12.78%	9.68%	15.56%	14.87%

The quarterly operating margins shows the impact of seasonality. The segments experience lower sales in the first quarter of the year when new home construction and repair & remodel activities are at their low.

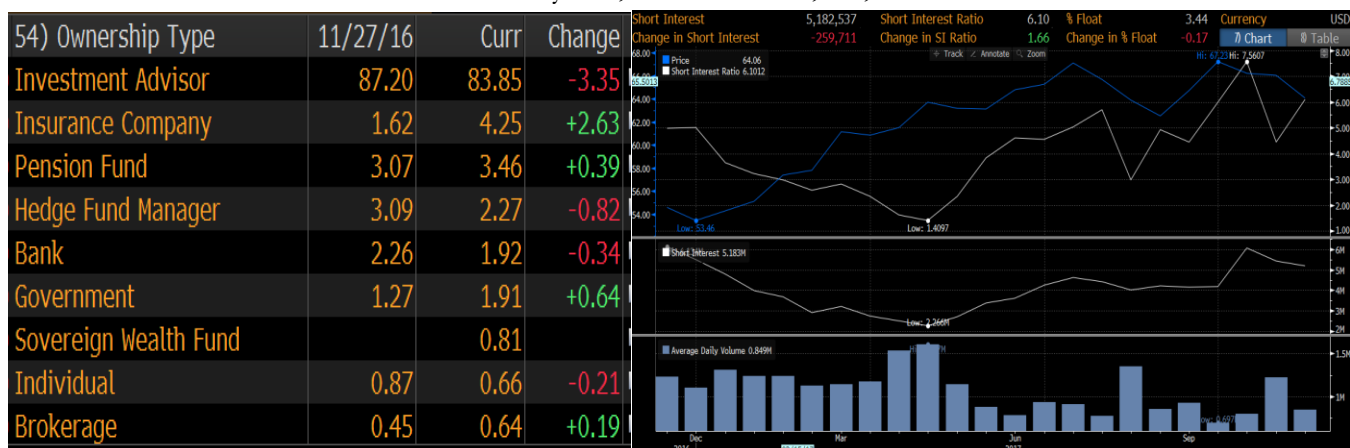
Revenue is typically higher during the second half of the year. Q3 2017 faced the disruption of the hurricanes in Texas and Florida, which account for 12% of total revenue. However, on the year-to-year basis, the segments of plumbing, doors, and security increased in their operating margin. Q4 has resulted in lower operating margins than Q3, which again may be the case because of feeling the full impact of the hurricane related disruptions of sales orders. Looking at comparable companies operating margins can add justification for the operating margins that Fortune Brand's managers projected in three years time. The comparative analysis with average operating margin, per segment, of Fortune Brands main competitors in each segment is shown below.

Annual EBIT Margin Competitors		
Segments	2016	N
Cabinets	9.71%	2
Plumbing	18.21%	2
Doors	15.71%	3
Security	22.84%	3
Total	16.62%	10

The competitors in the cabinet segment used were Masco and American Woodmark. The competitors used in the plumbing segment were Masco and Pfister. The competitors used in the doors segment were Spectrum Brands, Masonite, and JELD-WEN. The competitors used in the security segment were Kwikset, Schlage, and Assa Abloy. Fortune Brands cabinets and plumbing segments are best-in-industry at 10.75% and 21.27%. The greatest areas for potential improvement are in the segments of doors and security, which is shown by being below competitors operating margin. The largest difference is in security where Fortune is at 11.49% and competitors are at 22.84%. Management's three-year projection of 15% in the security segment seems reasonable based on competitors' higher margins.

Management/Ownership:

The ownership chart for Fortune Brands with their one-year change is shown below to the left. The majority of the company's shares are held by investment advisors at 83.85%, insurance companies at 4.25%, and pension funds at 3.46%. The high ownership by insurance companies and pension funds, which has been increasing on a one-year period, show how this stock is considered a "safe" investment with it being closely correlated to the improving housing market. Fortune Brands are apart of the indices of T. Rowe Price Growth Stock (owns 2.93% total shares), Vanguard Mid Cap (owns 2.5% total shares), and JP Morgan Mid Cap Value (owns 1.85% total shares). Being placed in these popular indices are beneficial due to it results in greater share volume. Fortune Brands has 99.5% of its shares outstanding as freely floated. The short interest chart is shown below to the right. The short interest days to cover is at 6.1 days. It has recently come down from a high of 7.6 days in September, where the stock price fell the following month. There has been a decline in the volume of the short interest by 259,711 shares to 5,182,537.








Christopher Klein has served as CEO of Fortune Brands since January 2010. Klein joined the parent company in April 2003 and prepared Fortune Brands Home & Security to become a stand-alone company. Before becoming CEO, he managed all mergers and acquisitions activities for the parent company. This background in mergers and acquisition is important due to Fortune's strategy of acquisitions to drive segment growth. Before working at Fortune Brands, Klein worked at Bank One Corporation. His finance background is important, so the focus will be put on the company's cash flow. The key executive compensation table from 2012 to 2016 is shown below. Key executive compensation has increased from 2012 to 2016 at a CAGR of 13.68%. While, the CAGR from 2012 to 2016 in terms of stock return was 23.84%. This is a good sign that the stock return is growing at a faster CAGR than executive pay. Klein owns 24,783,152 shares in the company or 0.24% of total shares outstanding. His position has been increasing in the last year.

Name/Title ⓘ	2012	2013	2014	2015	2016
Key Executive Compensation	12,353,587	13,742,909	13,897,792	20,098,062	20,630,222
Christopher J. Klein/Chief Executive Officer	7,372,250	7,889,415	7,747,028	7,624,739	8,897,621
E. Lee Wyatt/Senior Vice President and Chief Financial Officer	3,406,567	3,655,560	3,023,869	3,384,183	5,684,126
David M. Randich/President, MasterBrand Cabinets	1,574,770	2,197,934	1,580,498	4,446,687	2,230,327
Nicholas I. Fink/President, Global Plumbing Group	-	-	-	2,961,836	1,996,425









Capital Allocation Comparison:

Fortune Brands Home & Security capital structure is composed only of 14% debt. This is much lower than its competitors, which have on average 40% debt in their capital structure. This low amount of debt is rare for a manufacturing company of this scale. Fortune Brands has cash of \$277.1 million, which is 4.9% of total assets. Total debt has rapidly increased in the past three years from \$670 million in 2015 to \$1.46 billion currently. Even with an industry low of debt, Fortune Brands has a lower WACC at 8.2% than its competitors WACC at 9.2%. This is largely due to the lower cost of debt for the company at 3.2% compared to competitors' average cost of debt at 5%. The lower cost of debt is because of Fortune Brands high credit rating of BBB+. The company has a return on capital to WACC of 1.12, while its competitors have a return on capital to WACC of 0.98 for the LTM. This is due to Fortune Brands lower WACC and the company's greater net income compared to dividends paid out. Fortune Brands is financially well positioned for future acquisitions that may require taking on additional debt.

In Millions of USD	FY 2013	FY 2014	FY 2015	FY 2016	Current/LTM
12 Months Ending	12/31/2013	12/31/2014	12/31/2015	12/31/2016	09/30/2017
 Market Capitalization	7,616.7	7,159.0	8,874.8	8,201.4	10,342.2
 - Cash & Equivalents	241.4	191.9	238.5	251.5	277.1
 + Preferred & Other	3.7	3.6	2.9	1.5	1.6
 + Total Debt	356.0	670.0	1,169.5	1,431.1	1,462.2
 Enterprise Value	7,735.0	7,640.7	9,808.7	9,382.5	11,528.9

Profitability Comparison:

Fortune Brands for the past 5 years has seen increasing revenue growth, gross profit, EBITDA, and net income. Recently, even with a slower revenue growth rate of 6%, the company has had its highest net income margin of 8.9%. This is due to the company's operational efficiency of cutting operational costs by becoming more productive and technologically advanced. Fortune Brands has a cost of revenue to revenue of 63.1% compared to its competitors at 68.6%. This shows the company is also efficient in its use of non-operational expenses. Fortune Brands is still in the growth stage of its life-cycle.

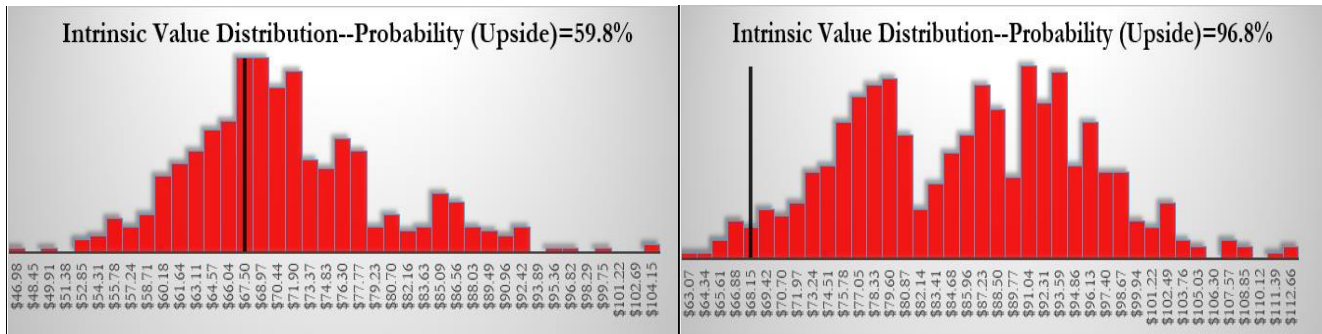
In Millions of USD	FY 2013	FY 2014	FY 2015	FY 2016	Current/LTM
12 Months Ending	12/31/2013	12/31/2014	12/31/2015	12/31/2016	09/30/2017
 Revenue, Adj	3,703.6	4,013.6	4,579.4	4,984.9	5,202.4
 Growth %, YoY	18.1	8.4	14.1	8.9	6.0
 Gross Profit, Adj	1,298.4	1,375.8	1,589.6	1,814.2	1,918.3
 Margin %	35.1	34.3	34.7	36.4	36.9
 EBITDA, Adj	444.2	529.5	653.5	780.5	840.8
 Margin %	12.0	13.2	14.3	15.7	16.2
 Net Income, Adj	235.2	288.9	337.5	434.1	465.3
 Margin %	6.3	7.2	7.4	8.7	8.9

Fortune Brands Home & Security comparison to its competitors are shown in the relative equity chart below. The competitors are representatives of the home improvement industry. The company's 1 year revenue growth rate of 8.85% and net income growth rate of 31.17%, which is much larger than the median of its competitors. Fortune Brands has the opportunity to grow its ROE of 18.04% to the median of its competitors at 20.72%. The company has a larger EBITA margin at 13.26% than the median of its competitors at 10.94%. Fortune Brands has the opportunity to decrease its cash conversion cycle of 58.40 days. Its main competitors of Masco has a lower cash conversion cycle of 38.72 days and Amercian Woorwork has a conversion cycle of 22.47. The higher cash conversion cycle is primary due to the low accounts payable turnover of 8.55 and low asset turnover of 1.0. Management should focus on extending its accounts payable turnover in order to have a lower cash conversion cycle. This will result in greater free cash flow for the company, thus a higher valuation.

Name (BICS Best Fit)	Mkt Cap (USD)	Rev - 1 Yr Gr:Y	NI / Profit - 1 Yr Gr:Y	ROE:Y	EBITA Mrgn:Y	Asst T0:Y	Inv Turnover:Y	A/P Turnover:Y	Cash Conversion Cycle:Y
Median	5.82B	5.42%	13.78%	20.72%	10.94%	1.20	5.85	8.55	58.40
FORTUNE BRANDS HOME ...	10.34B	8.85%	31.17%	18.04%	13.26%	1.00	5.85	8.55	58.40
AMERICAN WOODMARK CO...	1.87B	8.79%	21.25%	23.03%	10.94%	2.13	19.61	21.20	22.47
FLOOR & DECOR HOLDING...	4.20B	34.02%	60.55%	26.98%	8.00%	1.33	2.20	4.20	89.32
INTERFACE INC	1.48B	-4.32%	-25.21%	19.69%	8.92%	1.20	3.72	11.91	115.97
IROBOT CORP	1.86B	7.11%	-4.96%	11.07%	9.26%	1.28	6.08	5.12	37.72
MASCO CORP	13.39B	3.01%	38.31%	--	14.45%	1.36	7.01	6.36	38.72
MASONITE INTERNATIONAL...	2.04B	5.45%	--	15.15%	9.00%	1.33	7.20	16.42	71.44
SCOTTS MIRACLE-GRO CO	5.82B	5.42%	-30.76%	34.74%	17.35%	0.96	4.16	11.83	98.05
SNAP-ON INC	9.82B	3.30%	14.14%	21.75%	23.67%	0.82	3.51	11.51	174.17
STANLEY BLACK & DECKE...	25.72B	2.10%	9.23%	16.49%	13.52%	0.74	4.75	4.47	36.19

Sensitivity Forecast

Fortune Brands Home & Security's stock price value is very sensitive to revenue, operating expenses, and capital expenditure assumptions. The company currently had a revenue growth rate of 6% and had 83.8% ratio of operating expenses to revenue. The bear case and bull case valuation are evaluated using a Monte Carlo simulation with different assumptions. Under the bear case, there is 59.8% intrinsic value probability upside. This leads to a target price of \$69.05 or a one-year expected return of 1.19%. This is due to assuming for the continuing period that operating costs to revenue will stay at 83.8%. Also, that revenue growth expectations will be lower in the short-term and decline to a long-term revenue growth rate of 1.96%. This could be due to millennials continuing to hold off on buying houses and consumer willingness dropping. This downside still results in a return of 1.19%, so your money would be better off invested in another stock. However, based on industry trends and potential for margin growths, the bull case is far more likely. Under the bull case, there is a 96.8% intrinsic value probability upside. This leads to a target price of \$83.89 or one-year return of 23.99%. The assumptions here are the forecasted revenue predictions by Bloomberg remain the same and then trend downward towards the long-term growth rate of 1.96%. The big change is the operating expenses to revenue percent will continue to decline from 83.8% to a continuing period ratio of 81.5%. This is reasonable due to the historical drop in operating expenses to revenue. From 2011 to 2016, the operating cost to revenue have been 91.2%, 88.9%, 87.3%, 86.2%, 84.8%, and 83.8% in 2016. This is a CAGR decline in operating costs to revenue of 1.68%. There is potential for a lower operating costs to revenue, which will create an even greater per share value in one-year. This sensitivity analysis shows the upside is much greater than the downside for Fortune Brands Home & Security.



Summary:

In conclusion, Fortune Brands Home & Security is a buy at its current price. This is due to the promising industry trends in the home improvement industry and opportunity to increase segment margins to managents' expectations in the segments of Doors and Seurity. Also, the Global Plumbing Group strategy has the potential to increase sales volume in the highest margin segment of Plumbing. The upside is greater than the downside as shown in the Monte Carlo sensitivity analysis. The company's one-year target price of \$83.35, a 23.2% return is reasonable based on the analysis. FBHS is well positioned to break the resistance of its 52-week high and continue to reward shareholders in 2018.

Fortune Brands Home & Security, Inc. (FBHS)

CENTER FOR GLOBAL FINANCIAL STUDIES

BULLISH

Analysis by Joseph Nastasi

Current Price:

\$68.24

Intrinsic Value

\$75.63

Target 1 year Return: 23.2%

Probability of Price Increase: 97.4%

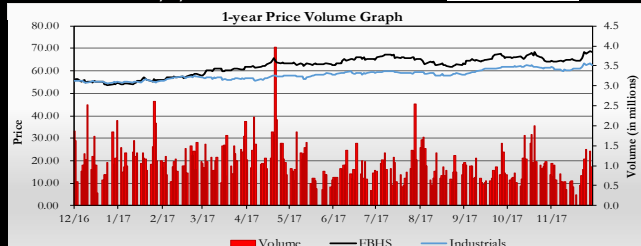
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Divident Yield:

1.1%

Target Price

\$83.35

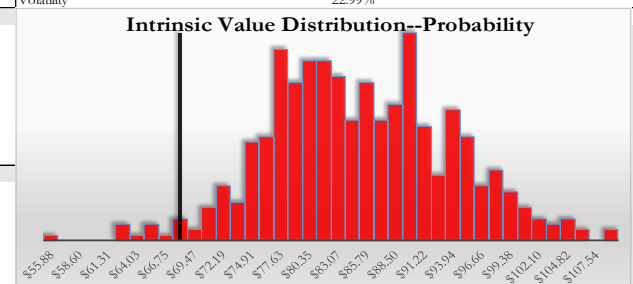


Description	General Information
Fortune Brands Home & Security, Inc. provides home and security products for use in residential home repair, remodeling, new construction, and security applications.	Sector: Industrials
	Industry: Building Products
	Last Guidance: November 3, 2015
	Next earnings date: February 2, 2018
	Estimated Country Risk Premium: 5.21%
	Effective Tax rate: 24%
	Effective Operating Tax rate: 24%

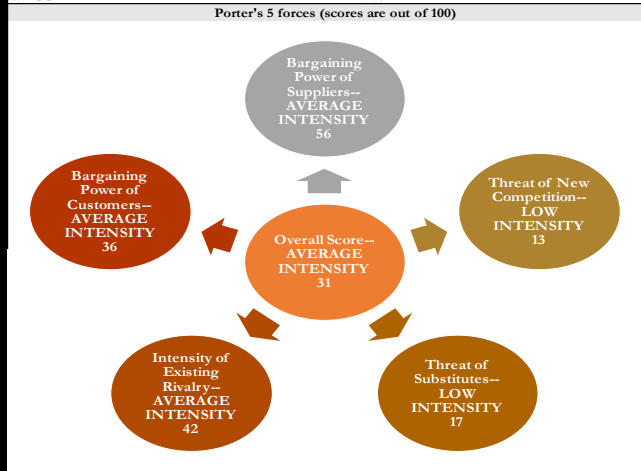
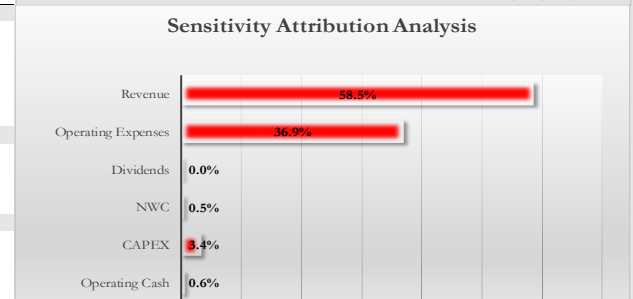
Market Data
Market Capitalization: \$10,358.88
Daily volume (mil): 0.51
Shares outstanding (mil): 151.80
Diluted shares outstanding (mil): 156.38
% shares held by institutions: 116%
% shares held by investments Managers: 77%
% shares held by hedge funds: 2%
% shares held by insiders: 0.52%
Short interest: 3.41%
Days to cover short interest: 5.83
52 week high: \$69.61
52-week low: \$53.15
Volatility: 22.99%

Past Earning Surprises	
Quarter ending	Revenue
9/30/2016	-3.84%
12/31/2016	-1.27%
3/31/2017	1.15%
6/30/2017	-1.90%
9/30/2017	-2.12%
Mean	-1.60%
Standard error	0.8%

Peers
Masco Corporation
Owens Corning
JELD-WEN Holding, inc.
USG Corporation
Builders FirstSource, Inc.
Masonite International Corporation
Ply Gem Holdings, Inc.



Management	Position	Total compensations growth	Total return to shareholders
Klein, Christopher	CEO & Director	15.84% per annum over 5y	N/M
Biggart, Robert	Senior Vice President, Gener	8.68% per annum over 1y	24.01% per annum over 1y
Wyatt, E.	Executive Vice President	-13.8% per annum over 4y	19.98% per annum over 4y
Randich, David	President of MasterBrand Cab	41.34% per annum over 3y	20.79% per annum over 3y
Fink, Nicholas	President of Fortune Brands	N/M	0% per annum over 0y
Hallinan, Patrick	CFO & Senior VP	N/M	N/M
Profitability	FBHS (LTM)	FBHS (5 years historical average)	Peers' Median (LTM)
Return on Capital (GAAP)	9.8%	7.32%	11.47%
Operating Margin	8%	4.91%	6.52%
Revenue/Capital (GAAP)	1.25	1.49	1.76
ROE (GAAP)	17.2%	9.0%	-30.4%
Net margin	9.1%	5.6%	6.9%
Revenue/Book Value (GAAP)	1.89	1.61	-4.44
Invested Funds	FBHS (LTM)	FBHS (5 years historical average)	Peers' Median (LTM)
Cash/Capital	6.0%	6.3%	12.5%
NWC/Capital	10.2%	8.0%	12.6%
Operating Assets/Capital	42.6%	37.4%	59.0%
Goodwill/Capital	41.1%	48.3%	16.0%
Capital Structure	FBHS (LTM)	FBHS (5 years historical average)	Peers' Median (LTM)
Total Debt/Market Capitalization	0.36	0.42	0.61
Cost of Existing Debt	3.2%	2.6%	5.0%
CGFS Rating (F-score, Z-score, and default Probability)	A	A	A
WACC	7.7%	7.7%	9.2%



		Valuation	
Period	Revenue Growth Forecast	NOPAT Margin Forecast	Revenue to Capital Forecast
Base Year	6%	11.8%	1.23
9/30/2018	6%	7.1%	1.14
9/30/2019	7%	7.6%	1.14
9/30/2020	5%	8.1%	1.13
9/30/2021	5%	8.4%	1.11
9/30/2022	5%	8.8%	1.09
9/30/2023	4%	9.1%	1.05
9/30/2024	4%	9.3%	1.02
9/30/2025	3%	9.5%	0.98
9/30/2026	3%	13.2%	0.94
9/30/2027	2%	13.3%	0.87
Continuing Period	2%	13.4%	0.81
Period	Return on Capital Forecast	WACC Forecast	Price per share Forecast
Base Year	14.5%	7.7%	\$74.98
9/30/2018	8.1%	8.0%	\$82.12
9/30/2019	8.7%	8.2%	\$88.57
9/30/2020	9.2%	8.2%	\$95.18
9/30/2021	9.4%	8.2%	\$101.95
9/30/2022	9.6%	8.2%	\$108.88
9/30/2023	9.5%	8.2%	\$115.93
9/30/2024	9.4%	8.2%	\$123.10
9/30/2025	9.3%	8.2%	\$130.37
9/30/2026	12.4%	8.2%	\$137.73
9/30/2027	11.6%	8.2%	\$145.21
Continuing Period	10.8%	8.2%	