

Material Sector Stock Presentation

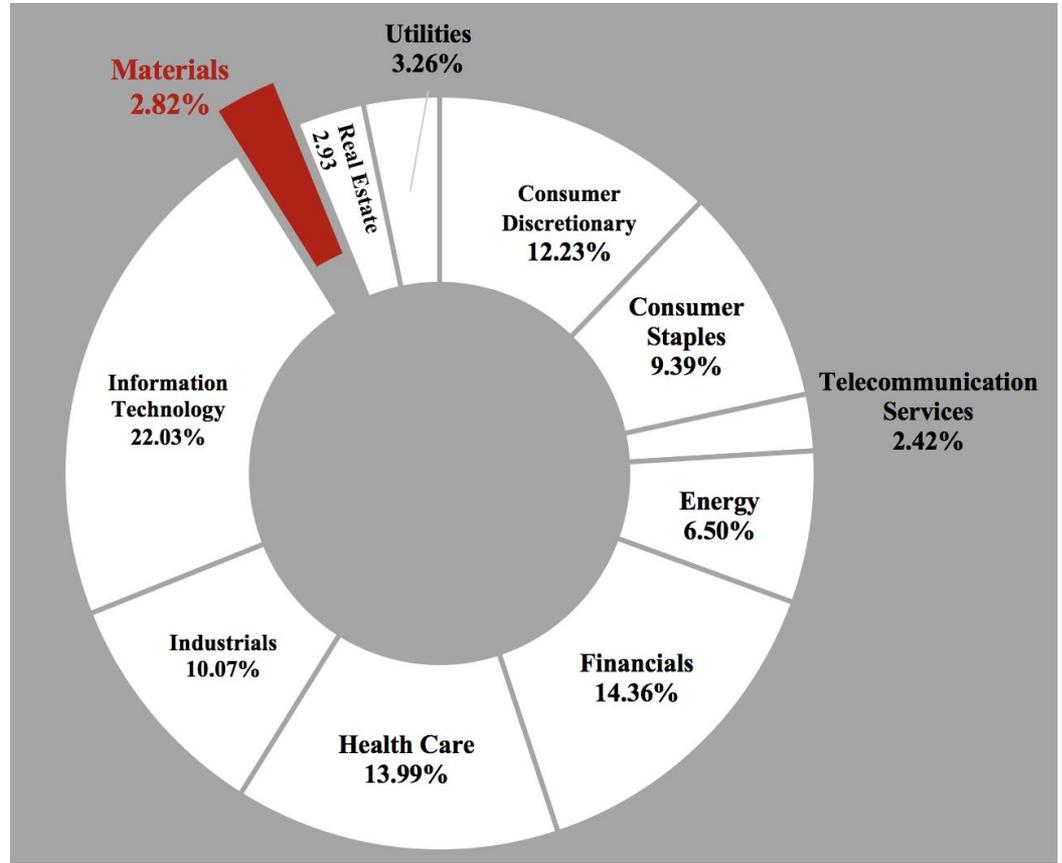
Kyle Hendrickson
Liyin Huang
Min Zhang

Agenda

- Sector Overview
- Stock Recommendations
 - PPG
 - Mosaic
 - Crown Holding

S&P 500 Sector Breakdown

Market Cap: 1.89 T
S&P 500: 2.82%
SIM: 2.71%
+/-: -0.11%



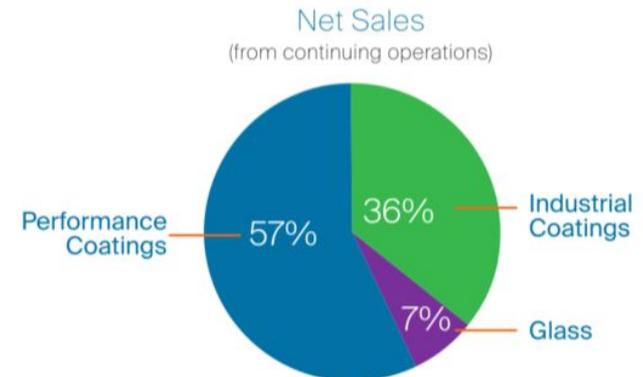
SIM Holding

| Quantity | Security | Ticker | Market Value | Unrealized Gain/(Loss) | Beta | %age Assets |
|----------|--------------------|--------|--------------|------------------------|------|-------------|
| 2000 | CROWN HOLDINGS INC | CCK | \$105,900.00 | \$5,953 | 1.05 | 0.96% |
| 6600 | MOSAIC CO/THE | MOS | \$192,588.00 | (\$364) | 1.20 | 1.75% |



PPG-Description

- Founded in 1883 in Pittsburgh, Pennsylvania, PPG is a \$15.4 billion global producer of coatings, specialty products, and glass. It operates in around 70 countries with 45% of sales in North America and 35% in Europe.
- PPG has three business segments
 - Performance coatings
 - Industrial coatings
 - Glass
- Its end products include coatings for automobiles, architectural, aerospace, etc



Business Analysis

Key Drivers: Performance Coating business' s margin, favorable North American housing trends, moderation in raw material costs

12-month stock price



Stock Information

| | |
|----------------------------|------------------|
| Ticker | PPG |
| Sector | Material |
| Industry | Paint & Coatings |
| Current Price (04/17/2017) | \$105.39 |
| Price Target | \$98.86 |

Market Information

| | |
|-----------------------|--------------|
| Market Capitalization | \$27.05B |
| Shares Outstanding | 257M |
| Dividend Yield | 1.52% |
| P/E Ratio | 17.48 |
| Beta | 1.39 |
| 52wk Range | 89.64-117.00 |

Financial Analysis

| | Revenue Growth | | | | EBITDA Growth | | | | Gross Margin | | | |
|----------------|----------------|------|------|-------------|---------------|------|------|------------|--------------|------|------|------------|
| | 2014 | 2015 | 2016 | 2017E | 2014 | 2015 | 2016 | 2017E | 2014 | 2015 | 2016 | 2017E |
| PPG | 2% | 0% | -4% | 1.3% | 6% | 13% | -1% | 3% | 43% | 44% | 45% | 46% |
| SHW | 9% | 2% | 5% | 7% | 14% | 19% | 12% | 10% | 46% | 49% | 50% | 50% |
| VAL | 10% | -3% | -5% | 3% | 14% | 2% | -7% | 9% | 35% | 36% | 37% | 37% |
| AKZA NA | -2% | 4% | -4% | 5% | 12% | 24% | 1% | 4% | 39% | 41% | 42% | 42% |

| | Diluted EPS | | | | ROE | | | |
|----------------|-------------|-------|-------|--------------|------|------|------|------------|
| | 2014 | 2015 | 2016 | 2017E | 2014 | 2015 | 2016 | 2017E |
| PPG | 7.52 | 5.14 | 3.28 | 6.35 | 42% | 28% | 18% | 33% |
| SHW | 8.78 | 11.16 | 11.99 | 13.71 | 63% | 113% | 82% | 59% |
| VAL | 4.01 | 4.85 | 4.36 | 4.91 | 32% | 43% | 36% | 29% |
| AKZA NA | 2.22 | 3.92 | 3.85 | 3.92 | 10% | 16% | 15% | 15% |

Multiple Analysis

SP 500

| Absolute Basis | High | Low | Average | Current |
|----------------|-------|-------|---------|---------|
| P/E | 21.83 | 14.06 | 17.61 | 21.52 |
| P/B | 2.87 | 2 | 2.48 | 2.85 |
| P/S | 1.96 | 1.24 | 1.64 | 1.94 |
| P/EBITDA | 11.27 | 7.19 | 9.32 | 11.16 |

Material Sector

| Absolute Basis | High | Low | Average | Current |
|----------------|-------|-------|---------|---------|
| P/E | 19.93 | 14.87 | 17.8 | 19.44 |
| P/B | 3.67 | 2.31 | 2.9 | 3.62 |
| P/S | 1.84 | 1.07 | 1.41 | 1.80 |
| P/EBITDA | 11.54 | 6.39 | 9.06 | 11.35 |

PPG

| Absolute Basis | High | Low | Average | Current | SHW | VAL | Median |
|----------------|-------|-------|---------|---------|-------|-------|--------|
| P/E | 27.35 | 14.03 | 21.08 | 17.49 | 24.74 | 24.04 | 26.01 |
| P/B | 6.18 | 1.53 | 4.01 | 5.21 | 11.03 | 6.61 | 5.4 |
| P/S | 1.97 | 0.95 | 1.67 | 1.79 | 2.30 | 2.07 | 1.66 |
| P/EBITDA | 18.58 | 8 | 12.35 | 16.61 | 14.73 | 14.60 | 14.12 |

| Absolute Valuation | Current Multiple | #Your Target | Target Price |
|--------------------|------------------|--------------|--------------|
| P/E | 17.49 | 20 | 119.4 |
| P/B | 5.21 | 5.04 | 99.6 |
| P/S | 1.79 | 1.65 | 96.0 |
| P/EBITDA | 16.61 | 18.8 | 118.4 |

Current: \$105.39

DCF Analysis

| | | | | | | Terminal Discount Rate = 11.0% | | | | | | |
|--|------------------|--------------|--------------|--------------|--------------|--------------------------------|--------------|--------------|--------------------|--------------|--------------|--|
| | | | | | | Terminal FCF Growth = 3.3% | | | | | | |
| Year | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | |
| Revenue | 14,945 | 15,393 | 15,865 | 16,405 | 16,962 | 17,539 | 18,118 | 18,716 | 19,333 | 19,971 | 20,630 | |
| % Growth | | 3.0% | 3.1% | 3.4% | 3.4% | 3.4% | 3.3% | 3.3% | 3.3% | 3.3% | 3.3% | |
| Income from continuing Operations | 1,684 | 2,007 | 2,085 | 2,001 | 2,103 | 2,210 | 2,301 | 2,377 | 2,455 | 2,536 | 2,620 | |
| Operating Margin 1 | 11.3% | 13.0% | 13.1% | 12.2% | 12.4% | 12.6% | 12.7% | 12.7% | 12.7% | 12.7% | 12.7% | |
| Income from discontinued Operations | 431 | 257 | 353 | 361 | 373 | 386 | 399 | 412 | 425 | 439 | 454 | |
| Operating Margin 2 | 2.9% | 1.7% | 2.2% | 2.2% | 2.2% | 2.2% | 2.2% | 2.2% | 2.2% | 2.2% | 2.2% | |
| Interest and Other | (37) | (36) | (43) | (33) | (34) | (35) | (36) | (37) | (39) | (40) | (41) | |
| Interest % of Sales | -0.2% | -0.2% | -0.3% | -0.2% | -0.2% | -0.2% | -0.2% | -0.2% | -0.2% | -0.2% | -0.2% | |
| Taxes | 421 | 502 | 521 | 492 | 517 | 544 | 566 | 585 | 604 | 624 | 645 | |
| Tax Rate | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | |
| Net Income | 1,657 | 1,726 | 1,875 | 1,837 | 1,925 | 2,017 | 2,097 | 2,166 | 2,238 | 2,312 | 2,388 | |
| % Growth | | 4.2% | 8.6% | -2.0% | 4.8% | 4.8% | 4.0% | 3.3% | 3.3% | 3.3% | 3.3% | |
| Add Depreciation/Amort | 471 | 486 | 500 | 525 | 543 | 561 | 580 | 599 | 619 | 639 | 660 | |
| % of Sales | 3.2% | 3.2% | 3.2% | 3.2% | 3.2% | 3.2% | 3.2% | 3.2% | 3.2% | 3.2% | 3.2% | |
| Plus/(minus) Changes WC | (215) | 153 | 2 | (82) | (85) | (88) | (91) | (94) | (97) | (100) | (103) | |
| % of Sales | -1.4% | 1.0% | 0.0% | -0.5% | -0.5% | -0.5% | -0.5% | -0.5% | -0.5% | -0.5% | -0.5% | |
| Subtract Cap Ex | (469) | (500) | (509) | (525) | (543) | (561) | (580) | (599) | (619) | (639) | (660) | |
| Capex % of sales | -3.1% | -3.2% | -3.2% | -3.2% | -3.2% | -3.2% | -3.2% | -3.2% | -3.2% | -3.2% | -3.2% | |
| Free Cash Flow | 1,444 | 1,865 | 1,869 | 1,755 | 1,840 | 1,929 | 2,007 | 2,073 | 2,141 | 2,212 | 2,285 | |
| % Growth | | 29.2% | 0.2% | -6.1% | 4.8% | 4.8% | 4.0% | 3.3% | 3.3% | 3.3% | 3.3% | |
| NPV of Cash Flows | 11,508 | 52% | | | | | | | | | | |
| NPV of terminal value | 10,795 | 48% | | | | | | | Terminal Value | 30,652 | | |
| Projected Equity Value | 22,303 | 100% | | | | | | | | | | |
| Free Cash Flow Yield | 0.053317 | | | | | | | | Free Cash Yield | 7.45% | | |
| Current P/E | 16.3 | 15.7 | 14.4 | | | | | | | | | |
| Projected P/E | 13.5 | 12.9 | 11.9 | | | | | | Terminal P/E | 12.8 | | |
| Current EV/EBITDA | 12.0 | 10.4 | 10.0 | | | | | | | | | |
| Projected EV/EBITDA | 9.8 | 8.5 | 8.2 | | | | | | Terminal EV/EBITDA | 8.98 | | |
| Shares Outstanding | 257 | | | | | | | | | | | |
| Current Price | \$ 105.39 | | | | | | | | | | | |
| Implied equity value/share | \$ 86.78 | | | | | | | | | | | |
| Upside/(Downside) to DCF | -17.7% | | | | | | | | | | | |
| Debt | 629 | | | | | | | | | | | |
| Cash | 1,820 | | | | | | | | | | | |
| Cash/share | 7.08 | | | | | | | | | | | |

| Method | Target Price | Weights out of 10 |
|---------------------------------|------------------|-------------------|
| DCF with r = 11% and g = 3.3% | 86.8 | 3 |
| DCF with r = 11.5% and g = 2.7% | 78.7 | 1 |
| DCF with r = 10.5% and g = 3.9% | 97.3 | 1 |
| P/E Multiple | 119.4 | 1.5 |
| P/B Multiple | 99.6 | 1 |
| P/S Multiple | 96.0 | 1 |
| P/EBITDA Multiple | 118.4 | 1.5 |
| Final Target Price | \$ 98.86 | |
| Current Price | \$ 105.39 | |
| Downside | -6.20% | |

Investment Outlook: Hold

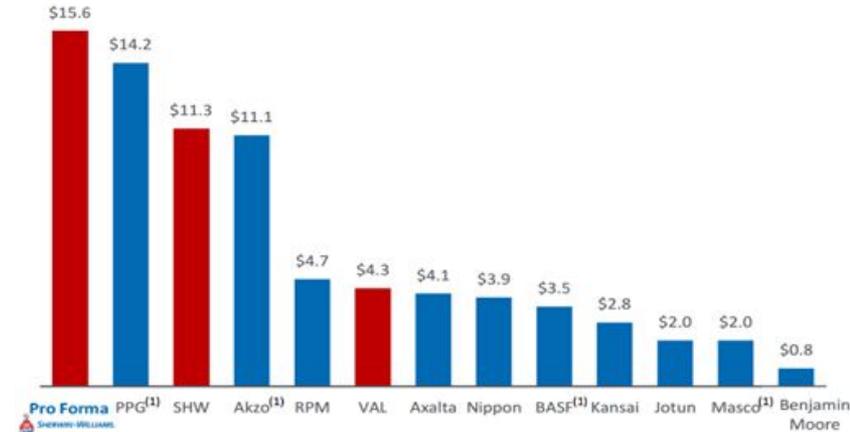
Opportunities:

- Favorable North American housing trends
- Outperform auto OEM volumes outside of North America
- Low P/E
- High free cash flow
- Stock buyback plan

Risks:

- Cyclical risk and high volatility
- Lose the lead position in the industry
- No PPG/Akzo transaction
- Sherwin-William's acquisition of Valspar
- Raw material inflation

Global Paints and Coatings Industry Landscape
(CY2015 Sales, \$ in billions)





Mosaic Company

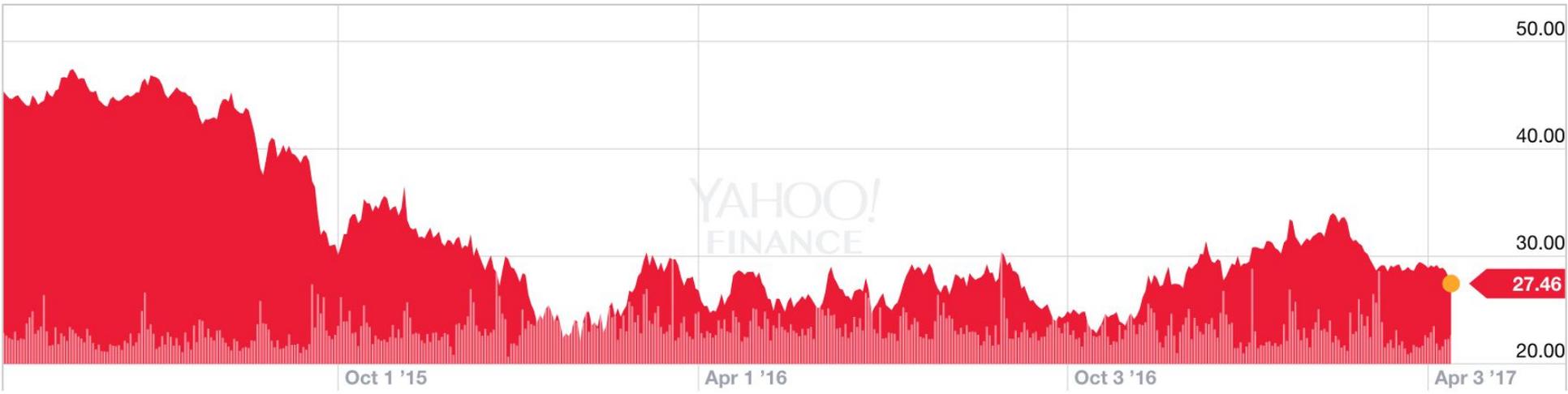
Material | Agricultural Chemicals Industry

Formed in 2004 by the combination of IMC Global and Cargill's fertilizer business

- A world's leading producer and marketer of phosphate and potash crop nutrients
- One of the five largest potash producers in the world
- 3 segments: Phosphate, Potash and International Distribution.

Business Analysis

Key drivers: rising demand of agricultural inputs, cost reduction and rising food price.



Financials

Mosaic Financial Ratios and Peers

| Company (Ticker) | Gross Margin | | | Net Margin | | | Revenue Growth | | | EPS Growth | | |
|---------------------------------|--------------|---------|---------|------------|---------|---------|----------------|---------|---------|------------|---------|---------|
| | 2016 | 2017(E) | 2018(E) | 2016 | 2017(E) | 2018(E) | 2016 | 2017(E) | 2018(E) | 2016 | 2017(E) | 2018(E) |
| The Mosaic Co (MOS) | 11.3% | 14.6% | 16.0% | 4.2% | 6.6% | 9.4% | -19.5% | 4.3% | 7.0% | -69.5% | 64.4% | 82.7% |
| Potash Corp of Saskatchewan Inc | 19.1% | 23.5% | 26.1% | 7.7% | 10.6% | 13.7% | -29.0% | 7.5% | 5.3% | -72.9% | 46.5% | 36.5% |
| Agrium Inc (AGU) | 25.3% | 26.9% | 26.6% | 4.8% | 6.4% | 6.8% | -8.9% | 4.6% | 3.1% | -32.7% | 42.9% | 23.1% |
| Average | 22.2% | 25.2% | 26.6% | 6.3% | 8.5% | 10.3% | -19.0% | 6.1% | 4.2% | -52.8% | 42.9% | 23.1% |

| Company (Ticker) | ROE | | | ROA | | | ROIC | | | EV/EVITDA | | |
|---------------------------------|-------|---------|---------|------|---------|---------|------|---------|---------|-----------|---------|---------|
| | 2016 | 2017(E) | 2018(E) | 2016 | 2017(E) | 2018(E) | 2016 | 2017(E) | 2018(E) | 2016 | 2017(E) | 2018(E) |
| The Mosaic Co (MOS) | 3.1% | 5.0% | 8.8% | 1.7% | 2.7% | 4.6% | 2.4% | 3.8% | 5.6% | 11.6% | 10.3% | 7.8% |
| Potash Corp of Saskatchewan Inc | 4.1% | 5.6% | 8.1% | 1.9% | 2.7% | 3.9% | 3.5% | 5.0% | 6.3% | 14.1% | 13.5% | 11.9% |
| Agrium Inc (AGU) | 10.6% | 14.1% | 14.5% | 4.0% | 5.5% | 5.8% | 7.3% | 9.3% | 9.9% | 12.3% | 11.7% | 10.6% |
| Average | 7.4% | 9.9% | 11.3% | 1.7% | 2.7% | 4.6% | 5.4% | 7.2% | 8.1% | 13.2% | 11.7% | 10.6% |

DCF Model

Terminal growth rate: 3.5%

Discount rate: 11%

Target price: \$33.31

Current price: \$27.04

Upside: 21%

| SALES GROWTH | FY | FY | FY |
|-----------------------------------|--------------|--------------|---------------|
| | 2019E | 2018E | 2017E |
| Phosphate | <i>7.00%</i> | <i>7.00%</i> | <i>-3.00%</i> |
| Potash | <i>3.00%</i> | <i>3.00%</i> | <i>-3.00%</i> |
| International Distribution | <i>7.00%</i> | <i>7.00%</i> | <i>-3.00%</i> |

| Millions | 2019E | 2018E | 2017E | 2016 | 2015 |
|-------------------|--------------------|--------------------|--------------------|-------------|-------------|
| Sales & Revenues: | \$ 8,419.45 | \$ 7,965.25 | \$ 7,492.20 | \$ 7,162.80 | \$ 8,895.00 |
| Gross Profit | \$ 1,103.32 | \$ 989.71 | \$ 947.11 | \$ 863.70 | \$ 1,718.20 |
| <i>Consensus</i> | <i>\$ 8,421.00</i> | <i>\$ 7,949.00</i> | <i>\$ 7,404.00</i> | | |

Multiples

| Multiples Valuations | | | | |
|-----------------------------|----------------|---------------------|-----------------------|-----------------|
| Absolute | Current | #Your Target | Target/Current | Target |
| P/E | 34.5 | 12.1 | 34.5 | \$ 30.75 |
| P/B | 1.11 | 1.6 | 1.11 | \$ 32.25 |
| P/S | 1.47 | 1.7 | 1.47 | \$ 34.79 |
| P/EBITDA | 3.67 | 3.2 | 3.67 | \$ 36.81 |
| | | | | \$ 33.65 |

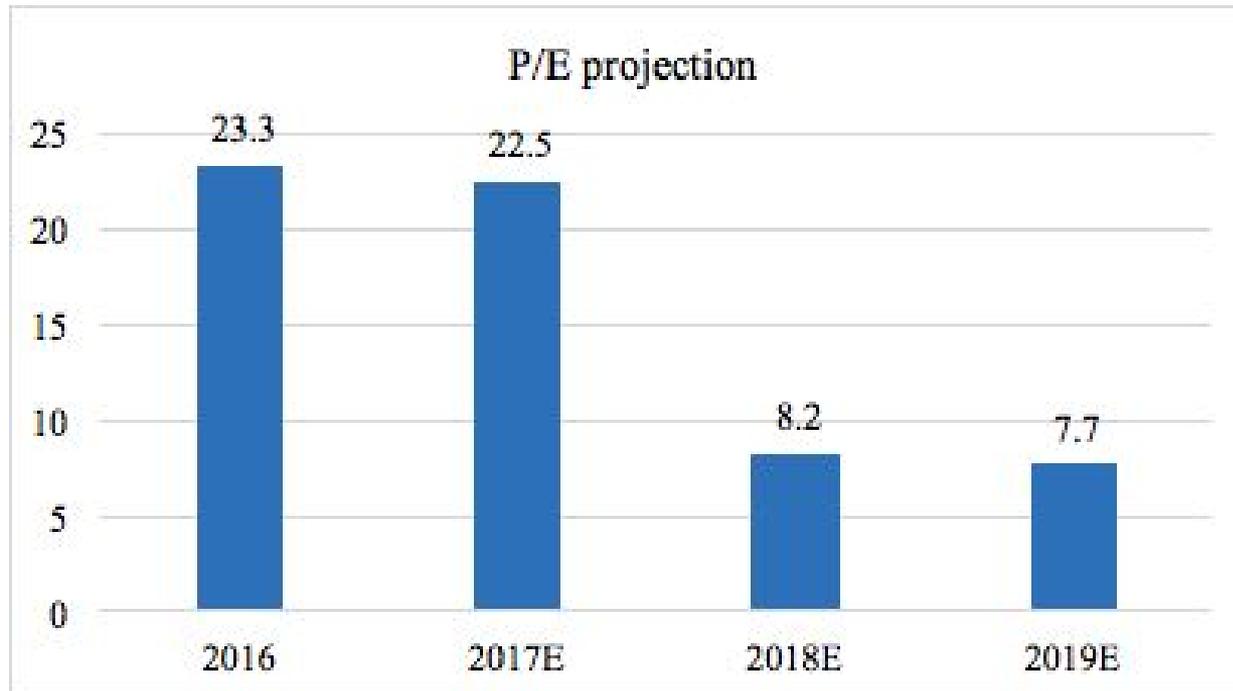
Valuation Ratio

| Sector Relative Performance to S&P 500 | | | | |
|--|------|------|--------|-------------|
| Relative to S&P500 | High | Low | Median | Current |
| P/E | 1.49 | 0.63 | 1.04 | 0.97 |
| P/B | 1.34 | 0.85 | 1.16 | 1.32 |
| P/S | 1.07 | 0.7 | 0.88 | 0.96 |
| P/EBITDA | 1.33 | 0.8 | 0.98 | 1.07 |

Relative cheaper than S&P 500

| MOS Relative Performance to Material Sector | | | | |
|---|------|------|--------|-------------|
| Relative to Sector | High | Low | Median | Current |
| P/E | 3.07 | 0.3 | 0.93 | 1.92 |
| P/B | 3.15 | 0.26 | 0.85 | 0.32 |
| P/S | 4.78 | 0.74 | 1.89 | 0.83 |
| P/EBITDA | 3.67 | 0.41 | 1.2 | 0.76 |

Relative cheaper than Sector



2017 Keep higher

Investment Outlook (Trim)

Opportunities:

- Expansion in developing countries
- Acquisition with Brazilian fertilizer and ammonia supply agreement with CF Industries
- Lower SG&A
- Potential steadily rising food price

Risks:

- Lower margin
- Global competition
- Balance between supply and demand



Crown Holdings

Crown Holdings, based in Philadelphia, PA, is a worldwide leader in the design, manufacture, and sale of packaging products for consumer goods.

- Core product is metal cans for beverages and food
- The company operates internationally with divisions in the Americas, Europe, Asia Pacific, and an increasing presence in emerging markets
 - 146 plants throughout 36 countries with 24,000 employees and net sales of nearly \$8.3 billion
- Crown maintains business partnerships with companies like Coca-Cola, Anheuser Busch, and Nestle





Sector: Materials
 Current Price: \$54.25
 Price Target: \$63.23
 Upside/Downside: 16.5%
 Dividend Yield: N/A

Market Capitalization: \$7.7B
 Shares Outstanding: 139.5M
 52 Week Price Range: \$47.39-\$57.09
 Beta: 1.06
P/E Ratio: 15.23



Click on the chart to view the underlying data.



2016 Sales by Business Lines and Location

- Americas Beverage: \$2.76B (33.24% of Revenue)
- North American Food: \$652M (7.86%)
- European Beverage: \$1.4B (17.12%)
- European Food: \$1.9B (22.49%)
- Asia Pacific: \$1.1B (13.46%)
- Other income (5.84%) comes from aerosol cans and specialty packaging products

Key Business Drivers: Demand for consumer goods and staples, demand for end products (key business partnerships), strength of the overall economy, consumer preferences

Key Risks: Raw material prices (aluminum), seasonality, foreign currency, risk in emerging markets



Business Partnerships



Nestlé



Anheuser-Busch



Competitive Advantages

1. Understanding markets
 - a. 125 years of operations
 - b. International operations
2. Strong and Enduring Customer Base
 - a. Customers are among the largest and most successful in the world
 - b. Consistent innovation, quality of product, responsiveness, and a strong product portfolio
3. Global Footprint
 - a. Manufacturing and operating in 37 countries and growing



Income Statement

| (millions) | FY19E | FY18E | FY17E | FY16 | FY15 | FY14 | FY13 | FY12 |
|---------------------|-------------|-------------|-------------|--------|--------|--------|---------|---------|
| Net Sales | 9318 | 8960 | 8615 | 8284 | 8,762 | 9,097 | 8,656 | 8,470 |
| COGS | 7129 | 6944 | 6763 | 6583 | 7,116 | 7,525 | 7,180 | 7,013 |
| Gross Profit | 2190 | 2016 | 1852 | 1701 | 1,646 | 1,572 | 1,476 | 1,457 |
| Net Earnings | 662 | 615 | 588 | 583 | 461 | 475 | 428 | 658 |
| EPS | 3.79 | 3.65 | 3.58 | 3.58 | 2.82 | 2.79 | 2.30 | 3.77 |
| EPS Growth | 3.75% | 2.09% | -0.11% | 26.97% | 1.08% | 21.30% | -38.99% | 102.69% |
| Cap Ex | 559 | 515 | 452 | 473 | 354 | 328 | 275 | 324 |
| Cap Ex % of Sales | 6.00% | 5.75% | 5.25% | 5.71% | 4.04% | 3.61% | 3.18% | 3.83% |
| Change In Sales | 4.00% | 4.00% | 4.00% | -5.46% | -3.68% | 5.09% | 2.20% | -2.01% |
| Gross Margin | 23.50% | 22.50% | 21.50% | 20.53% | 18.79% | 17.28% | 17.05% | 17.20% |
| Chg YoY | 1.00% | 1.00% | 0.97% | 1.75% | 1.51% | 0.23% | -0.15% | -0.43% |

- Net sales impacted by international
- Growing EPS
- Growing earnings
- Strong gross margins



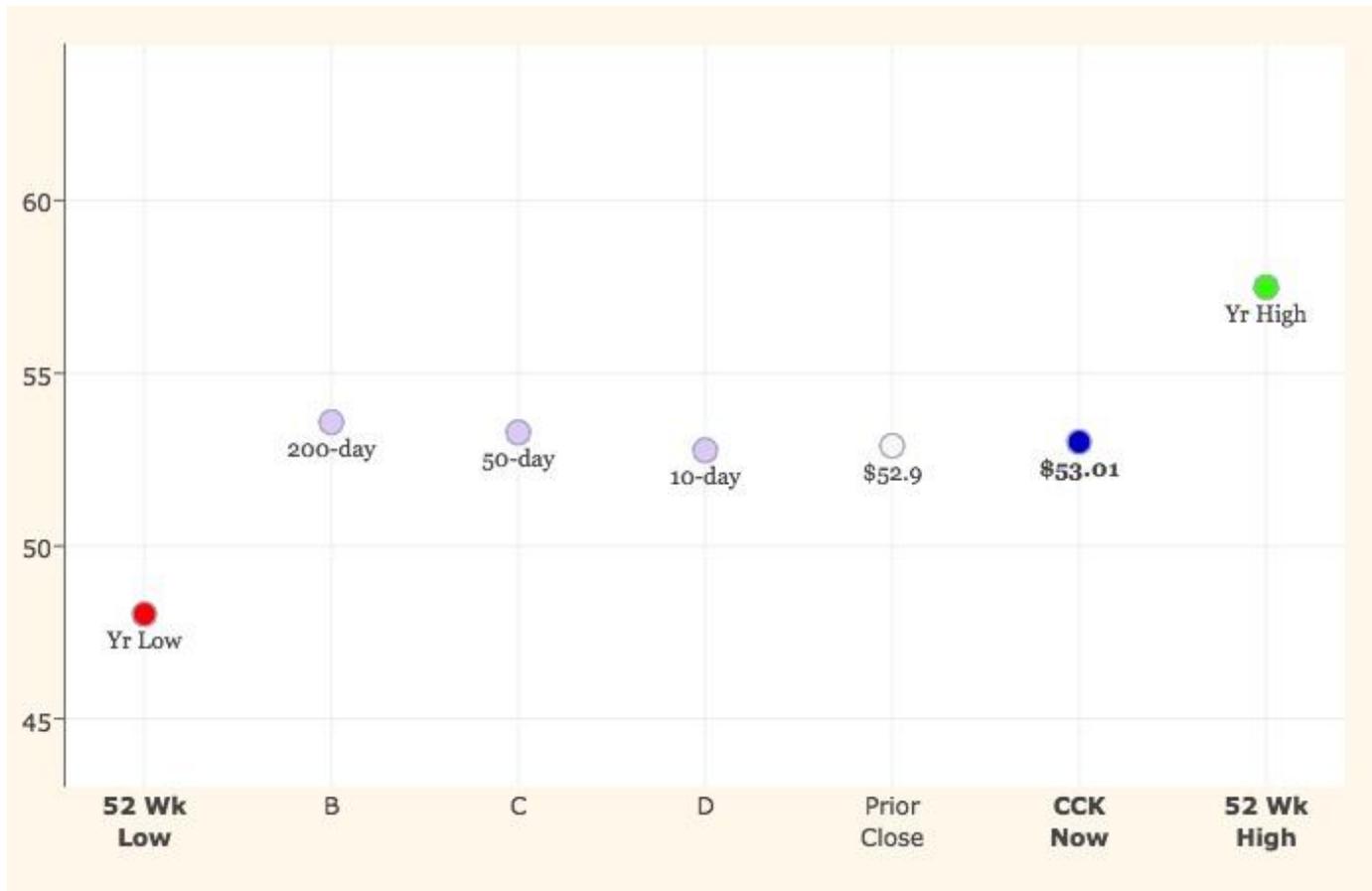
Valuation Ratios

| Absolute Basis | High | Low | Median | Current |
|----------------|-------|-------|--------|---------|
| P/E | 23.72 | 9.37 | 14.36 | 15.23 |
| P/B | 2.07k | 11.81 | 43.01 | 16.16 |
| P/S | 0.94 | 0.31 | 0.65 | 0.8962 |
| P/EBITDA | 13.4 | 5.95 | 9.44 | 9.8732 |

| Relative to Sector | High | Low | Median | Current |
|--------------------|-------|-------|--------|---------|
| P/E | 0.644 | 1.098 | 0.824 | 0.659 |
| P/B | 520 | 7.6 | 15.36 | 4.06 |
| P/S | 0.484 | 0.534 | 0.496 | 0.461 |
| P/EBITDA | 0.852 | 1.192 | 9.89 | 0.634 |

| Ticker | P/E TTM | P/S TTM | P/B | P/CF TTM | EV/EBITDA TTM |
|------------|---------|---------|-------|----------|---------------|
| Average | 19.71 | 1 | 3.75 | 16.84 | 9.02 |
| Crown | 14.69 | 0.9 | 16.18 | 12.55 | 9.82 |
| Peers | | | | | |
| Ball Corp | 33.44 | 1.37 | 3.6 | - | 18.83 |
| West Rock | 20.88 | 0.96 | 1.43 | 15.08 | 7.84 |
| Sealed Air | 18.11 | 1.41 | 17.2 | 19.3 | 11.84 |
| Int. Paper | 15.57 | 1.09 | 5.46 | 19.85 | 7.7 |
| CCL | 27.56 | 2.52 | 0.4 | 37.62 | 14.17 |

- Currently cheaper than its own historical median across the board
- Cheaper relative to its sector
- Cheaper than its peers despite being a market leader



| Crown Holdings (CCK) | | | | | | | | | | | | |
|--|-------|--------------------------------|-------|-------|--------|--------|--------|--------|-----------------|--------------|--------------------|-----|
| Analyst: Kyle Hendrickson | | Terminal Discount Rate = 11.0% | | | | | | | | | | |
| Date: 2/7/17 | | Terminal FCF Growth = 2.0% | | | | | | | | | | |
| Year | 2017E | 2018E | 2019E | 2020E | 2021E | 2022E | 2023E | 2024E | 2025E | 2026E | 2027E | |
| Revenue | 8,615 | 8,960 | 9,318 | 9,877 | 10,470 | 10,994 | 11,543 | 12,005 | 12,485 | 12,860 | 13,117 | |
| % Growth | 4.0% | 4.0% | 4.0% | 6.0% | 6.0% | 5.0% | 5.0% | 4.0% | 4.0% | 3.0% | 2.0% | |
| Operating Income | 1,067 | 1,153 | 1,274 | 1,432 | 1,571 | 1,649 | 1,789 | 1,861 | 2,060 | 2,186 | 2,295 | |
| Operating Margin | 12.4% | 12.9% | 13.7% | 14.5% | 15.0% | 15.0% | 15.5% | 15.5% | 16.5% | 17.0% | 17.5% | |
| Miscellaneous Expenses (Including interest) | 282 | 333 | 391 | 415 | 440 | 462 | 485 | 504 | 524 | 540 | 551 | |
| Misc Expenses % of Sales | 3.3% | 3.7% | 4.2% | 4.2% | 4.2% | 4.2% | 4.2% | 4.2% | 4.2% | 4.2% | 4.2% | |
| Taxes | 196 | 205 | 221 | 254 | 283 | 297 | 326 | 339 | 384 | 412 | 436 | |
| Tax Rate | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | |
| Net Income | 588 | 615 | 662 | 763 | 848 | 890 | 978 | 1,017 | 1,152 | 1,235 | 1,308 | |
| % Growth | 4.5% | 7.6% | 15.3% | 11.1% | 11.1% | 5.0% | 9.9% | 4.0% | 13.2% | 7.2% | 6.0% | |
| Net Income Attributable to Non Controlling Interest | 88 | 105 | 132 | 153 | 170 | 178 | 196 | 203 | 230 | 247 | 262 | |
| as % of net income | 15% | 17.0% | 20.0% | 20.0% | 20.0% | 20.0% | 20.0% | 20.0% | 20.0% | 20.0% | 20.0% | |
| Net Income to Crown Holdings | 500 | 510 | 530 | 610 | 678 | 712 | 783 | 814 | 921 | 988 | 1,047 | |
| % Growth | | 2.1% | 3.7% | 15.3% | 11.1% | 5.0% | 9.9% | 4.0% | 13.2% | 7.2% | 6.0% | |
| Add Depreciation/Amort | 302 | 358 | 373 | 415 | 471 | 517 | 577 | 624 | 674 | 720 | 761 | |
| % of Sales | 3.5% | 4.0% | 4.0% | 4.2% | 4.5% | 4.7% | 5.0% | 5.2% | 5.4% | 5.6% | 5.8% | |
| Plus/(minus) Changes WC | 32 | 67 | 72 | 76 | 81 | 85 | 89 | 92 | 96 | 99 | 101 | |
| % of Sales | 0.4% | 0.8% | 0.8% | 0.8% | 0.8% | 0.8% | 0.8% | 0.8% | 0.8% | 0.8% | 0.8% | |
| Subtract Cap Ex | 452 | 515 | 559 | 573 | 607 | 638 | 670 | 696 | 724 | 746 | 761 | |
| Capex % of sales | 5.3% | 5.8% | 6.0% | 5.8% | 5.8% | 5.8% | 5.8% | 5.8% | 5.8% | 5.8% | 5.8% | |
| Free Cash Flow | 405 | 391 | 404 | 529 | 631 | 685 | 797 | 853 | 1,006 | 1,110 | 1,208 | |
| % Growth | | -3.6% | 3.3% | 31.0% | 19.4% | 8.5% | 16.4% | 7.0% | 17.9% | 10.4% | 8.8% | |
| NPV of Cash Flows | 4,022 | 45% | | | | | | | | | | |
| NPV of terminal value | 4,820 | 55% | | | | | | | Terminal Value | 13,685 | | |
| Projected Equity Value | 8,842 | 100% | | | | | | | | | | |
| Free Cash Flow Yield | 5.52% | | | | | | | | Free Cash Yield | 8.82% | | |
| Current P/E | 12.5 | 11.9 | 11.1 | | | | | | | | | |
| Projected P/E | 15.0 | 14.4 | 13.4 | | | | | | | Terminal P/E | 10.5 | |
| Current EV/EBITDA | 8.7 | 7.9 | 7.3 | | | | | | | | Terminal EV/EBITDA | 6.0 |
| Projected EV/EBITDA | 9.8 | 8.9 | 8.2 | | | | | | | | | |
| Shares Outstanding | 139.8 | | | | | | | | | | | |
| Current Price | \$ | 52.48 | | | | | | | | | | |
| Implied equity value/share | \$ | 63.23 | | | | | | | | | | |
| Upside/(Downside) to DCF | | 20.5% | | | | | | | | | | |

Current Price \$54.25

Implied equity value/share \$63.23

Upside/(Downside) to DCF 16.5%

Terminal Discount Rate = 11.0%

Terminal FCF Growth = 2.0%

| | 8.50% | 9% | 9.50% | 10% | 10.50% | 11% | 11.50% | 12% |
|-------|----------|----------|----------|---------|---------|---------|---------|---------|
| 1.50% | \$88.20 | \$81.31 | \$75.31 | \$70.05 | \$65.40 | \$61.25 | \$57.55 | \$54.21 |
| 2.00% | \$92.75 | \$85.10 | \$78.49 | \$72.74 | \$67.69 | \$63.23 | \$59.25 | \$55.69 |
| 2.50% | \$98.06 | \$89.47 | \$82.13 | \$75.79 | \$70.28 | \$65.43 | \$61.15 | \$57.33 |
| 3% | \$104.34 | \$94.56 | \$86.32 | \$79.28 | \$73.21 | \$67.92 | \$63.27 | \$59.15 |
| 3.50% | \$111.88 | \$100.59 | \$91.21 | \$83.31 | \$76.56 | \$70.73 | \$65.65 | \$61.19 |
| 4.00% | \$121.09 | \$107.82 | \$96.99 | \$88.00 | \$80.42 | \$73.94 | \$68.35 | \$63.48 |
| 4.50% | \$130.29 | \$114.95 | \$104.99 | \$95.55 | \$86.99 | \$79.95 | \$74.11 | \$69.07 |

Recommendation: Buy

Rationale

- Proven business model with a strong market share
- Successful business partnerships with successful companies
- International expansion presents growth opportunities
- Right time to buy, cheap valuations
- Good value relative to its peers

Risks

- International turmoil
- Emerging Markets
- Upside?



Final Recommendation

| Company | Ticker | Price | Target Price | Current Weight | Action | Suggested Weight | Change |
|--------------------|------------|----------|--------------|----------------|-------------|------------------|----------------|
| PPG | PPG | \$104.42 | \$98.896 | 0 | HOLD | 0 | 0 |
| CROWN HOLDINGS INC | CCK | \$54.18 | \$63.23 | 0.96% | BUY | 1.41% | 45 bpts |
| MOSAIC CO/THE | MOS | \$27.36 | \$33.31 | 1.75% | Trim | 1.41% | —34 bpt |

Thank You

Any Questions?