



# Basic Materials

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November 8, 2016

- “The sector consists of companies engaged in the discovery, development, and processing of raw materials”

# Agenda

Sector Overview

Business Analysis

Economic Analysis

Financial Analysis

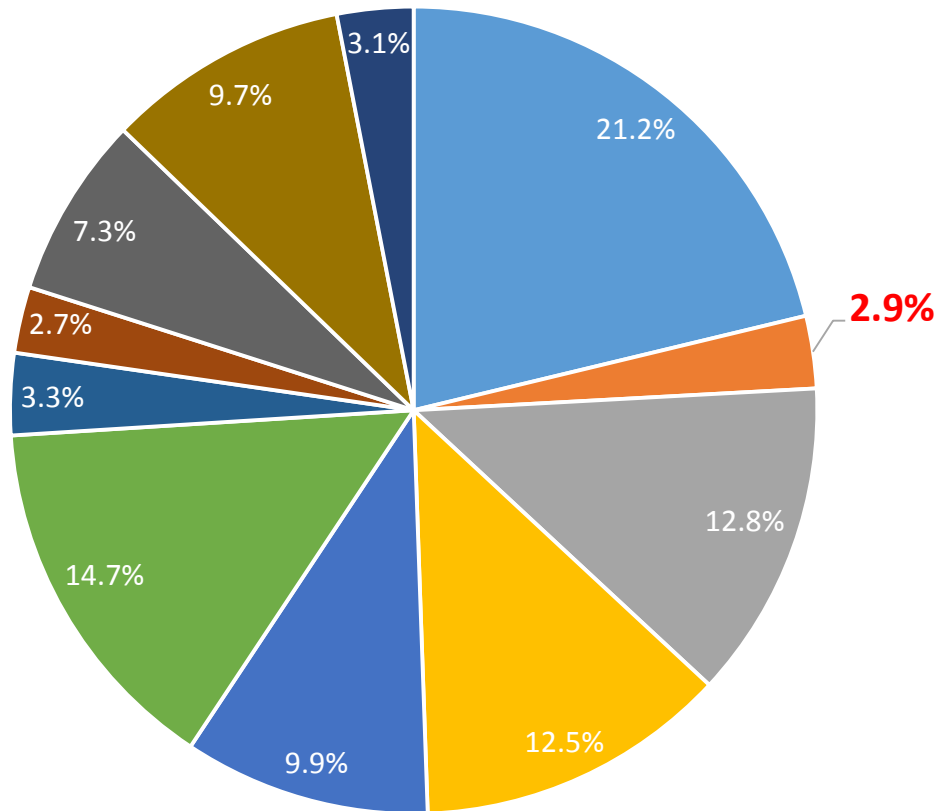
Valuation

Recommendations

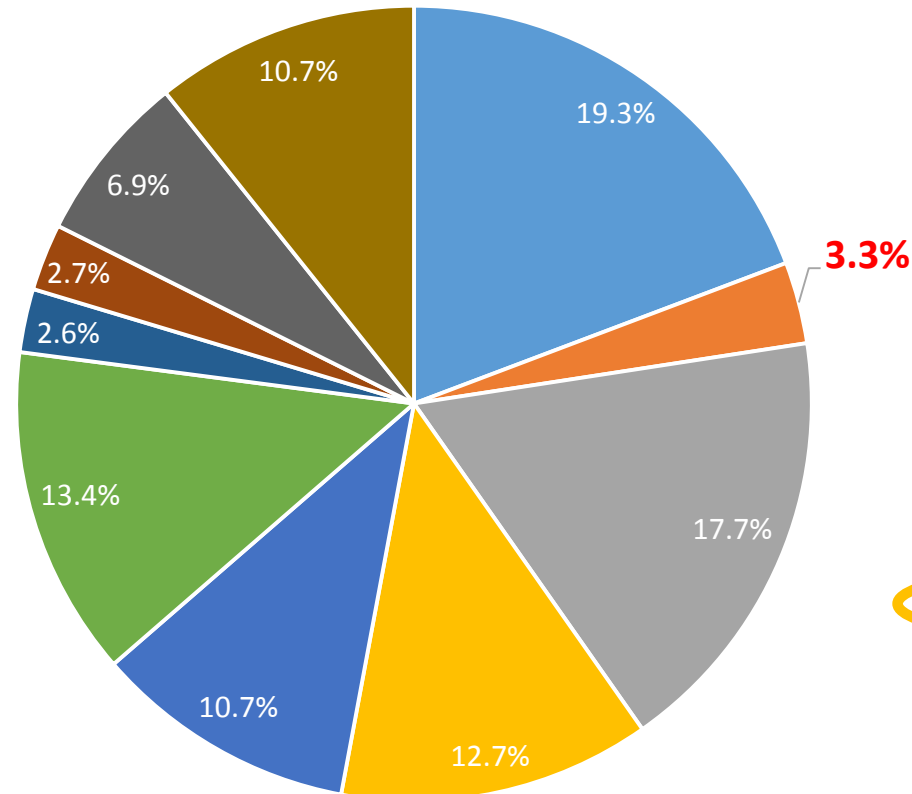


# S&P 500 vs SIM Fund Capital Allocations

## S&P 500 Sector Allocation



## SIM Fund Sector Allocation



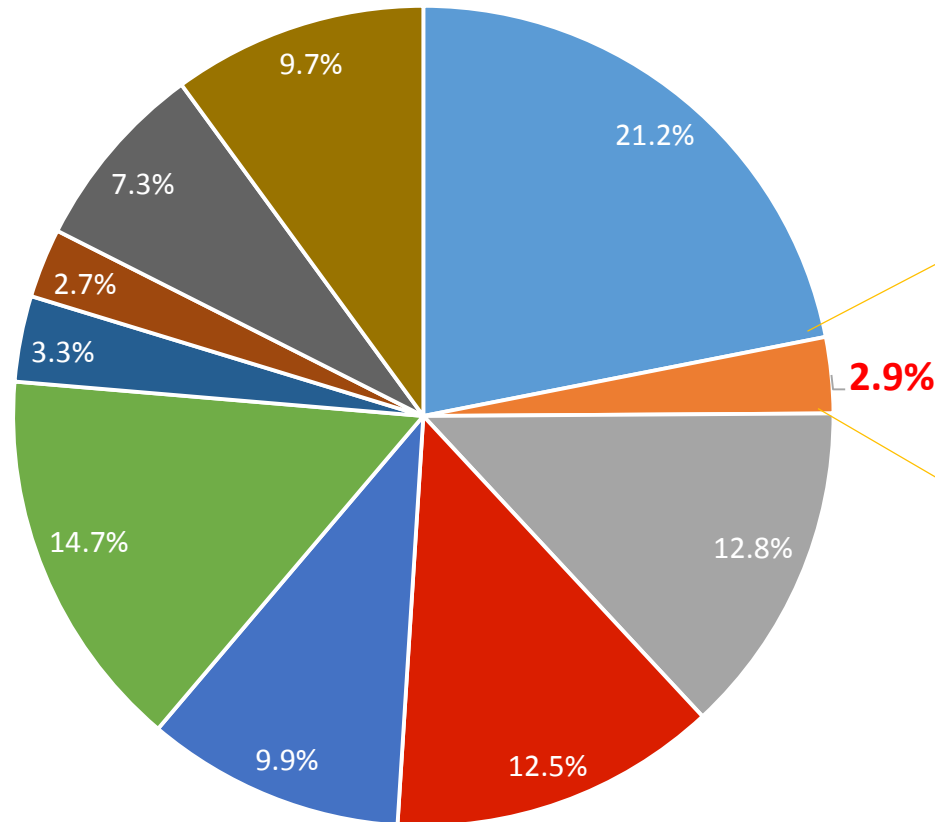
Sector	% Over/Under
Tech	-1.99%
Healthcare	-1.23%
Financials	4.91%
Consumer Cyclical	0.14%
Consumer Staples	0.81%
Industrials	1.00%
Energy	-0.37%
Utilities	-0.71%
<b>Materials</b>	<b>0.42%</b>
Telecom	0.07%
Real Estate	-3.06%

- Technology
- Basic Materials
- Financial Services
- Consumer Cyclical
- Consumer Staples
- Healthcare
- Utilities
- Communication Services
- Energy
- Industrials
- Real Estate

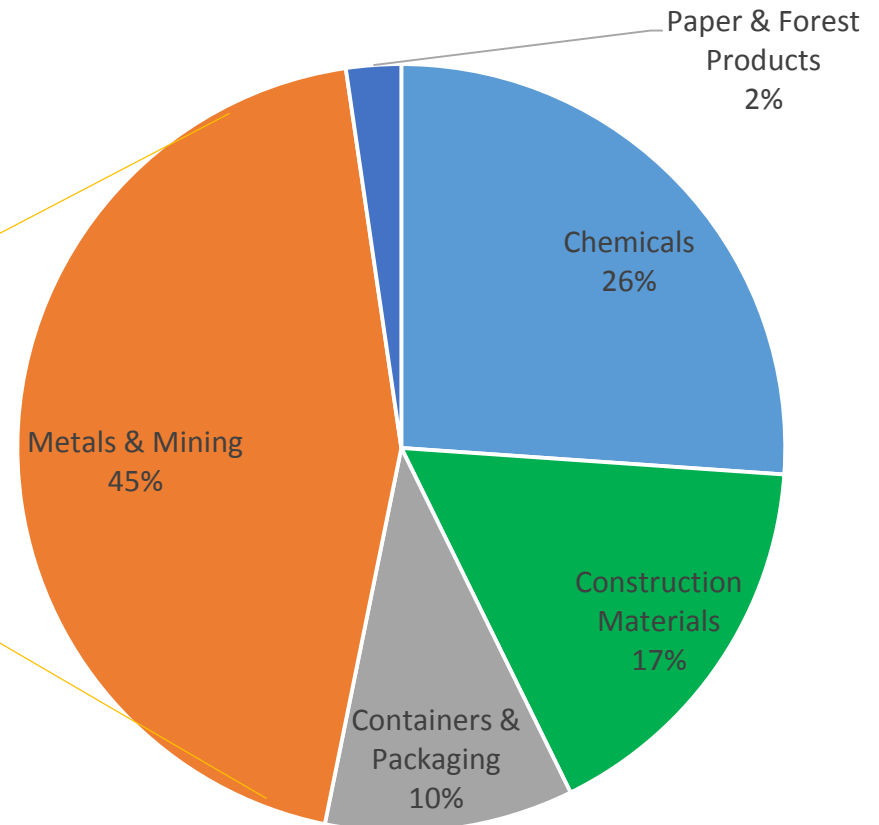


# Basic Materials Sector Breakdown

## S&P 500 Allocation



## Basic Materials Composition (By Industry)



# Largest Basic Material Firms by Industry

Industry	# of Companies	Market Capitalization	P/E TTM	5 Yr EPS%	3 Yr Rev.%	5 Yr ROE%
<b>Metals &amp; Mining</b>	<b>496</b>	<b>40.4B (Avg)</b>	<b>493.2</b>	<b>19.09%</b>	<b>-7.65%</b>	<b>5.22%</b>
BHP Billiton Limited		56.6B	-	-	-16.90%	11.49%
Rio Tinto Plc		47.0B	1339.1	-	-11.90%	5.09%
HK Graphene Tech Corp.		26.9B	-	-	-	-
<b>Chemicals</b>	<b>161</b>	<b>23.7B (Avg)</b>	<b>20.8</b>	<b>8.49%</b>	<b>-0.91%</b>	<b>22.38%</b>
BASF SE (ADR)		79.5B	18.1	-2.64%	-0.78%	19.24%
Dow Chemical Co.		60.6B	8.2	27.82%	-4.94%	19.05%
Syngenta AG (ADR)		36.7B	31.2	-0.63%	-1.89%	18.85%
<i>Lyondellbasell Industries</i>		<u>33.4B</u>	<u>8.7</u>	<u>-11.6%</u>	<u>-10.3%</u>	<u>34.6%</u>
<i>The Mosaic Company</i>		<u>8.7B</u>	<u>15.5</u>	-	-	-
<b>Construction Materials</b>	<b>38</b>	<b>15.1B (Avg)</b>	<b>32.6</b>	<b>13.47%</b>	<b>10.58%</b>	
Lafargeholcim Ltd		32.4B	-	-	3.68%	2.13%
CRH Plc (ADR)		27.1B	25.8	7.70%	9.33%	4.11%
Vulcan Materials Co		14.9B	41.4	-	10.05%	1.67%
<b>Containers &amp; Packaging</b>	<b>40</b>	<b>9.5B (Avg)</b>	<b>27.4</b>	<b>6.39%</b>	<b>2.82%</b>	<b>15.88%</b>
International Paper Co.		19.0B	24.7	6.98%	0.78%	16.49%
Ball Corp		13.9B	37.1	-7.60%	-2.90%	33.51%
Amcor Limited		13.3B	56.0	-6.04%	-1.06%	21.01%
<i>Crown Holdings</i>		<u>7.6B</u>	<u>17.4</u>	<u>17.4%</u>	<u>26.4%</u>	<u>25.9%</u>
<b>Paper &amp; Forest Products</b>	<b>49</b>	<b>2.1B (Avg)</b>	<b>61.6</b>	<b>-0.59%</b>	<b>7.47%</b>	
UPM-Kymmene Corp.		12.2B	12.6	9.79%	-1.14%	2.78%
Stora Enso		5.8B	8.6	1.02%	-2.45%	6.03%
Klabin SA		5.0B	11.9	-	10.96%	2.51%

↓ SIM Holdings ↓

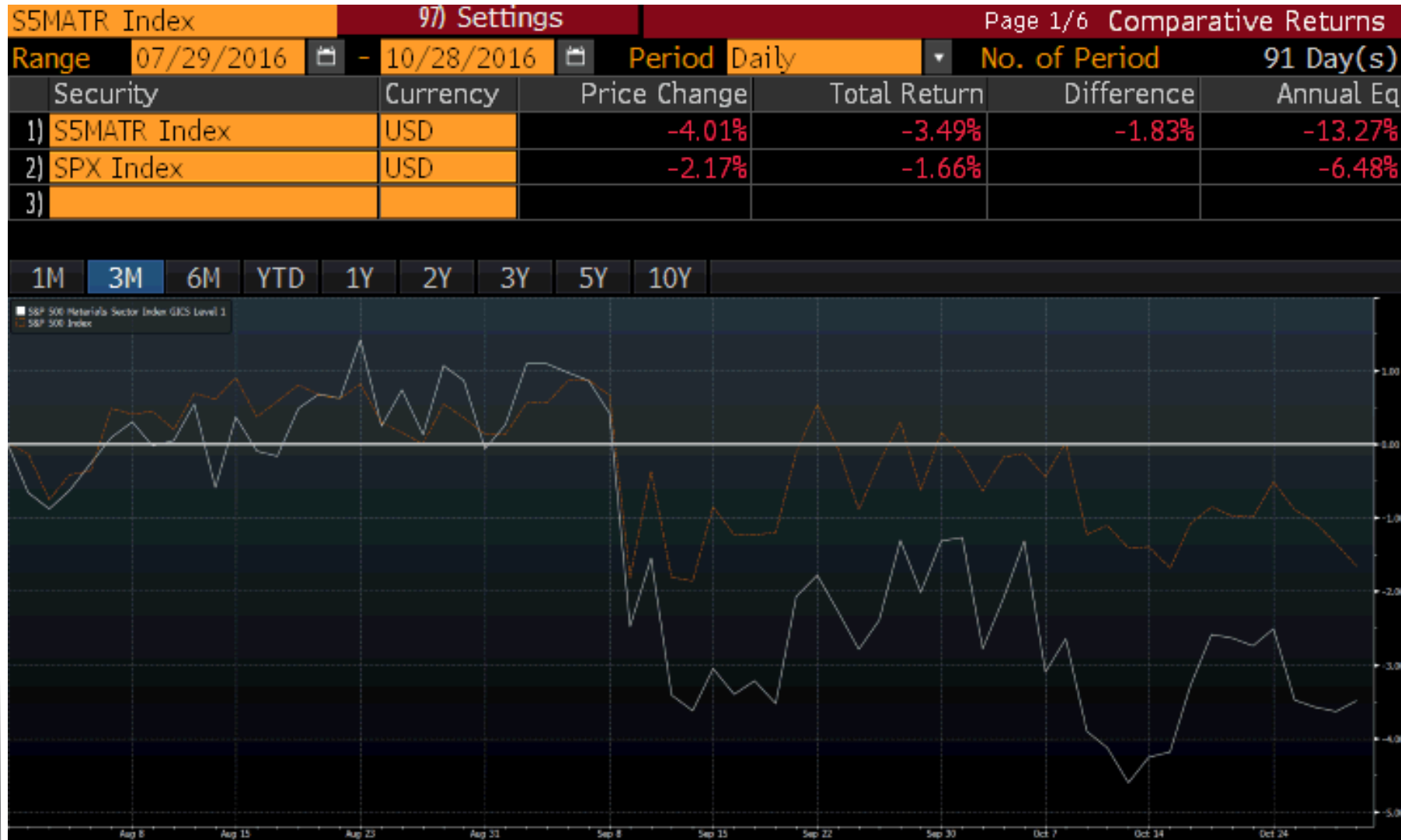
lyondellbasell

Mosaic

CROWN



# Historic Performance of Materials Sector Vs S&P 500 Index

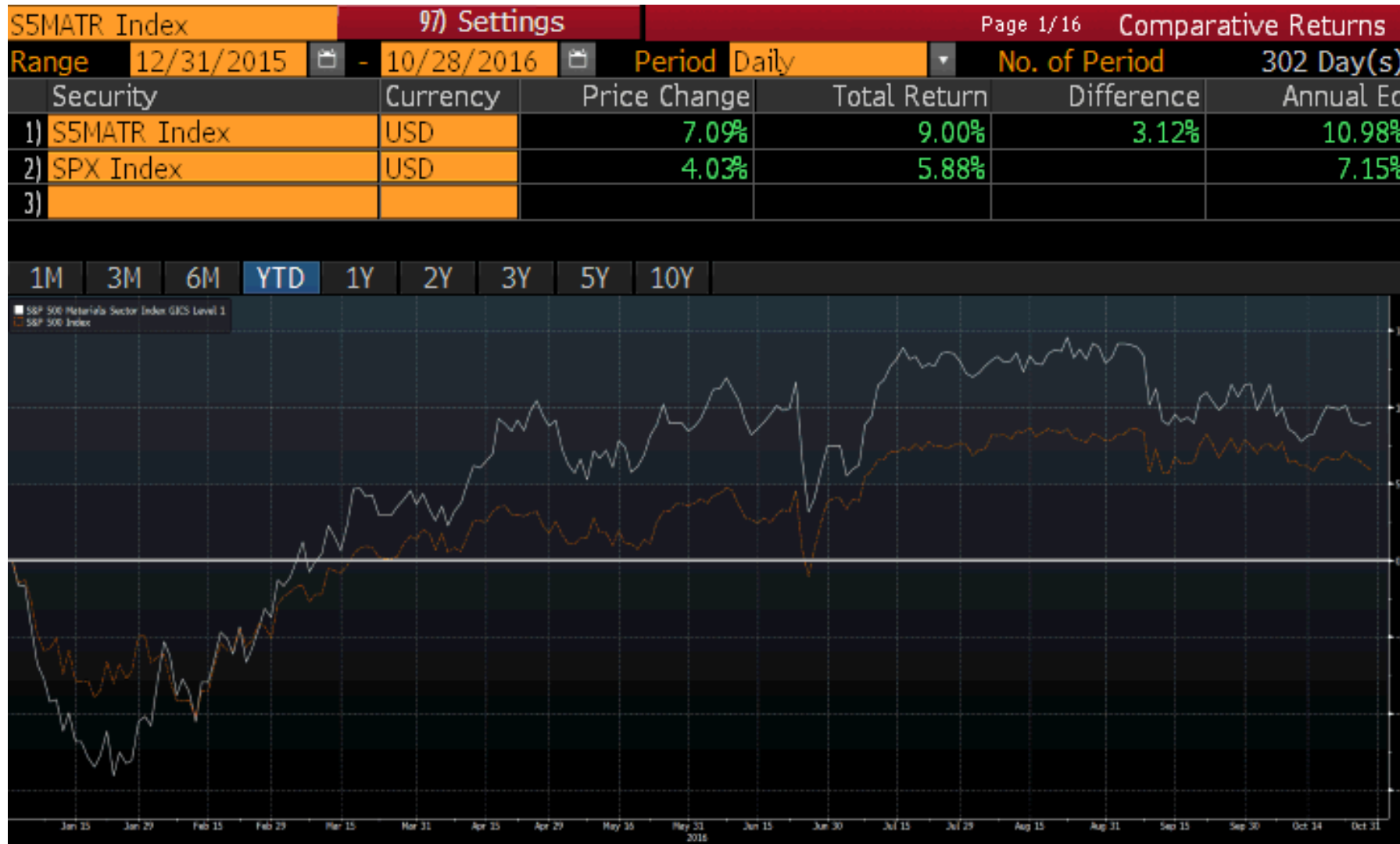


## 3 Month Highlights

White Line = Materials  
Orange Line = S&P 500

- Materials has **Underperformed** S&P by Total Return of 1.83%

# Historic Performance of Materials Sector Vs S&P 500 Index

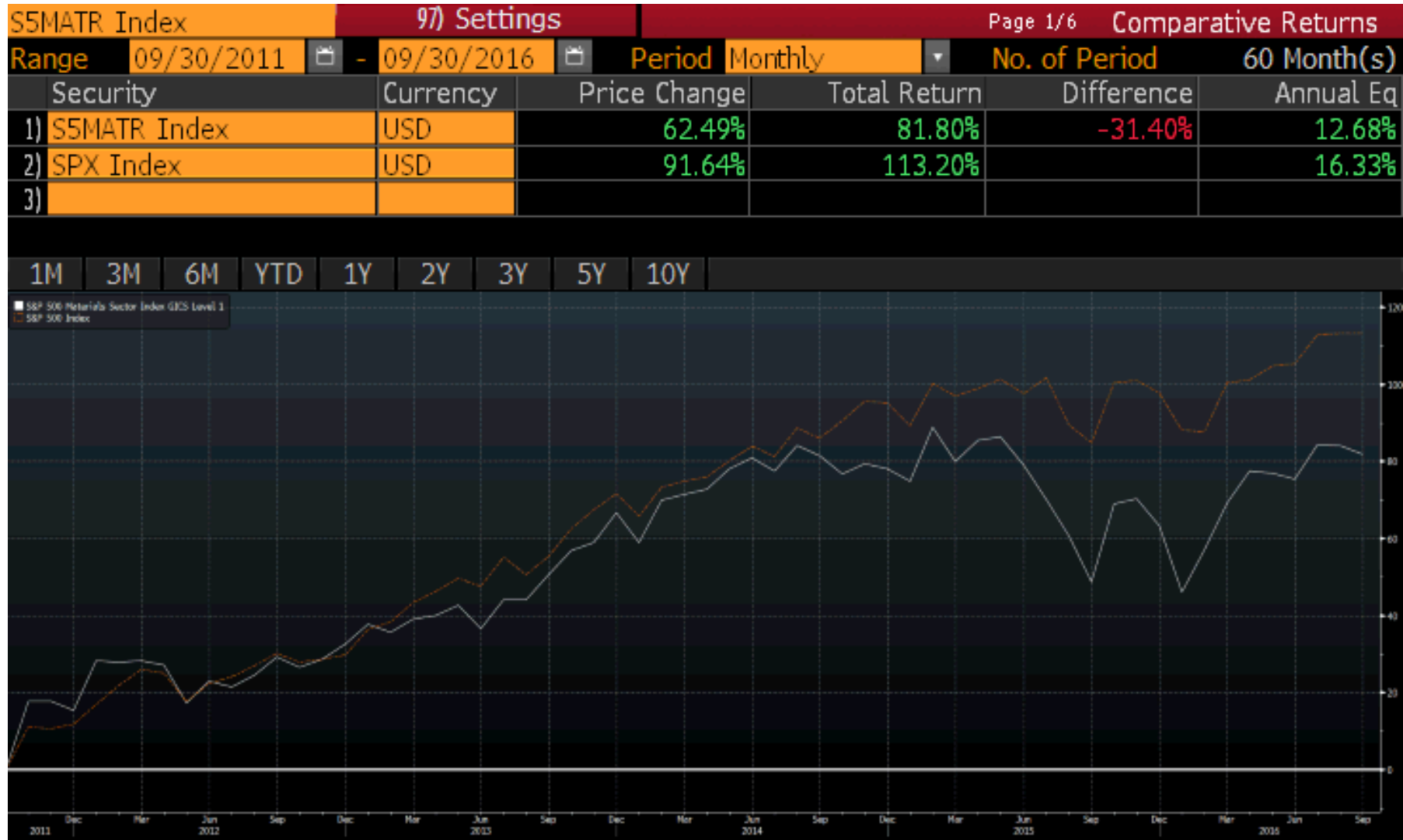


## YTD Highlights

White Line = Materials  
Orange Line = S&P 500

- Materials has **outperformed** S&P by Total Return of 3.12%

# Historic Performance of Materials Sector Vs S&P 500 Index



## 5 Year Highlights

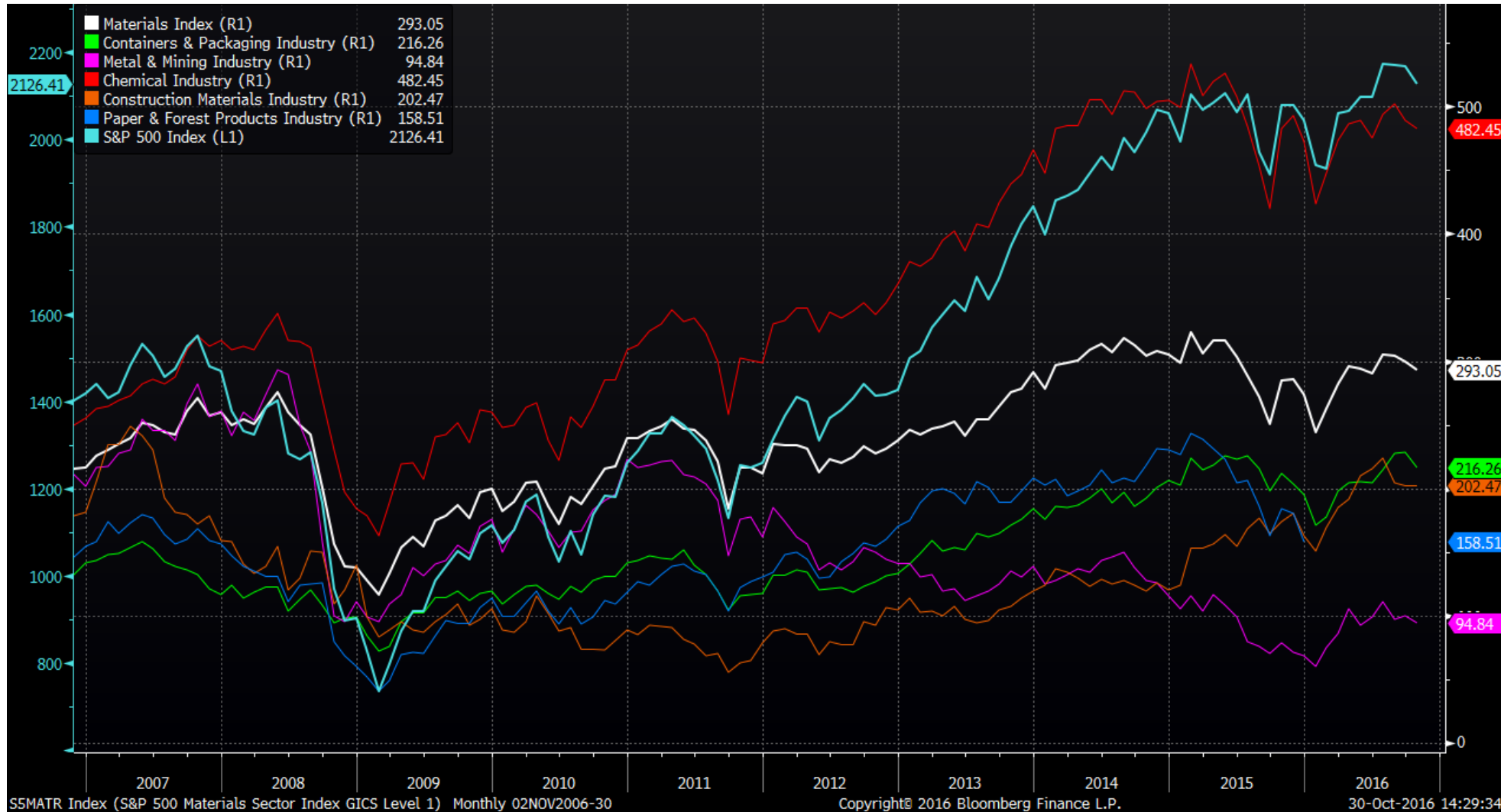
White Line = Materials  
 Orange Line = S&P 500

- Materials has **Underperformed** S&P by Total Return of 32%



# Industry Performance Within Materials Sector

MATERIALS INDUSTRY - SECTOR OVERVIEW



## Takeaways:

- Materials Index lagging when compared to S&P 500
- Metals/Mining index currently in decline
- Chemical index tracks S&P and has the highest value relative to the other industries



# Agenda

Sector Overview

Business Analysis

Economic Analysis

Financial Analysis

Valuation

Recommendations



# Key Sector Influences

## ➤ Economic Growth/Stability

- Economic conditions largely determine demand
- Level of demand determines pricing of products and commodities

## ➤ Commodity Prices

- COGS intensive businesses have major pressures on company margins from commodity prices
- Sector is mainly comprised of companies dealing directly with processing/extracting raw materials

## ➤ Development Costs

- Costs to acquire land, build factories, develop mines, and find new resources are high & uncertain

## ➤ Production Costs

- COGS is heavily dependent on cost of commodities and labor
- Slim Margins in most cases

## ➤ Regulations

- Government regulations can disturb the economic cycle and the ability to attain resources or labor

# Sector Performance by Business Cycle Phase

## Cycle Phases

### EARLY

- Activity rebounds (GDP, IP, employment, incomes)
- Credit begins to grow
- Profits grow rapidly
- Policy still stimulative
- Inventories low; sales improve

### MID

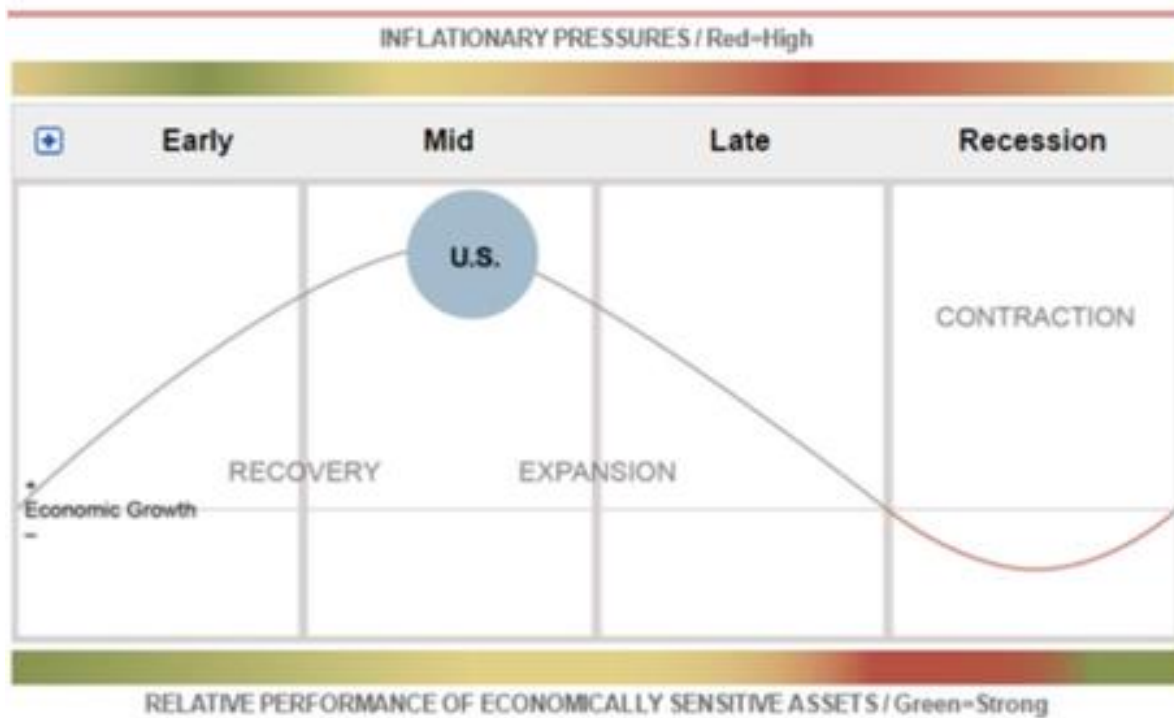
- Growth peaking
- Credit growth strong
- Profit growth peaks
- Policy neutral
- Inventories, sales grow; equilibrium reached

### LATE

- Growth moderating
- Credit tightens
- Earnings under pressure
- Policy contractionary
- Inventories grow; sales growth falls

### RECESSION

- Falling activity
- Credit dries up
- Profits decline
- Policy eases
- Inventories, sales fall



Sector	Early	Mid	Late	Recession
Consumer Discretionary	++		--	
Consumer Staples	-		+	++
Energy	--		++	
Financials	+			-
Health Care	-		++	++
Industrials	++	+		--
Information Technology	+	+	--	--
<b>Materials</b>		--	++	-
Telecommunication Services	--			++
Utilities	--	-	+	++

++ Consistently Overperform    -- Consistently Underperform    □ No Clear Pattern  
 + Overperform    - Underperform

# Positive Sector Catalysts

Increasing Demand from Emerging markets

Continued infrastructure creation

Beneficial Economic Policies

Low Chinese Inflation



# Notable Sector Risks

Decreasing demand in China

Oversupply – Rising Inventory levels

Increasing Labor Costs

Fixed level of non-renewable resources

# Porter's 5 Forces

## Power of Suppliers- Low

- Majority of firms are vertically integrated backward down supply chain toward source material
- Existence of Suppliers - Limited

## Existing Competition Rivalry- High

- Established firms in mature industries
- Low differentiation in products offered between competitors

## Threat of Substitutes - Low

- Limited substitutes for raw materials

## Bargaining Power of Buyer - High

- Little to no product differentiation between companies in each industry
- Low switching costs between suppliers

## Threat of New Entrants – Low

- Large Initial Capital Investments
- Must acquire resources (Mines, Forests, Land)
- Environmental Regulations
- Limited Geography



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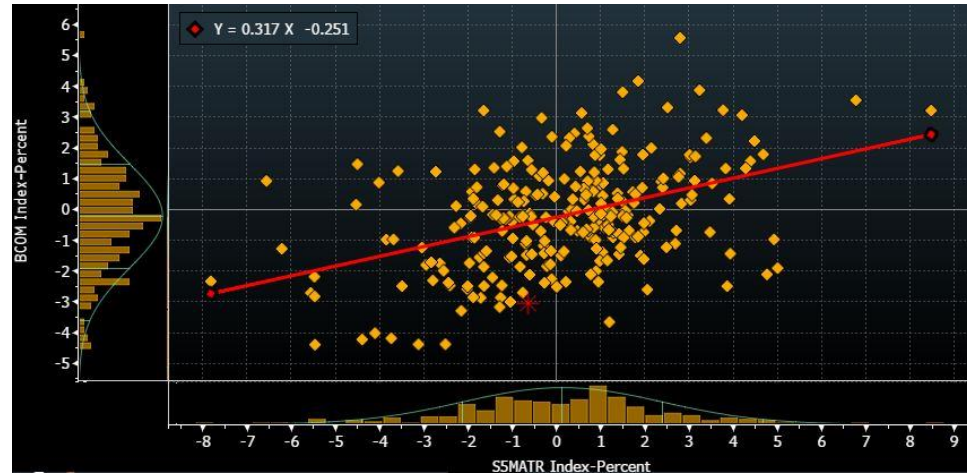
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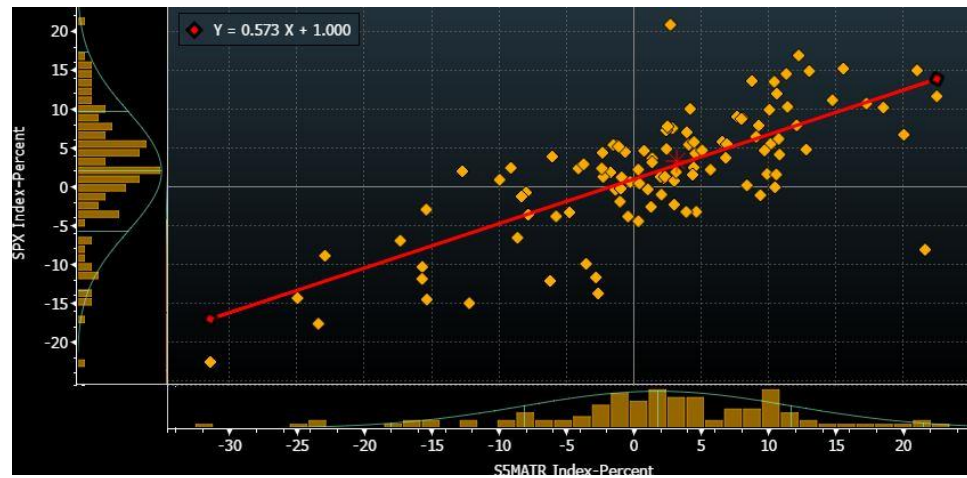


# Important Economic Factors

Commodities



S&P 500



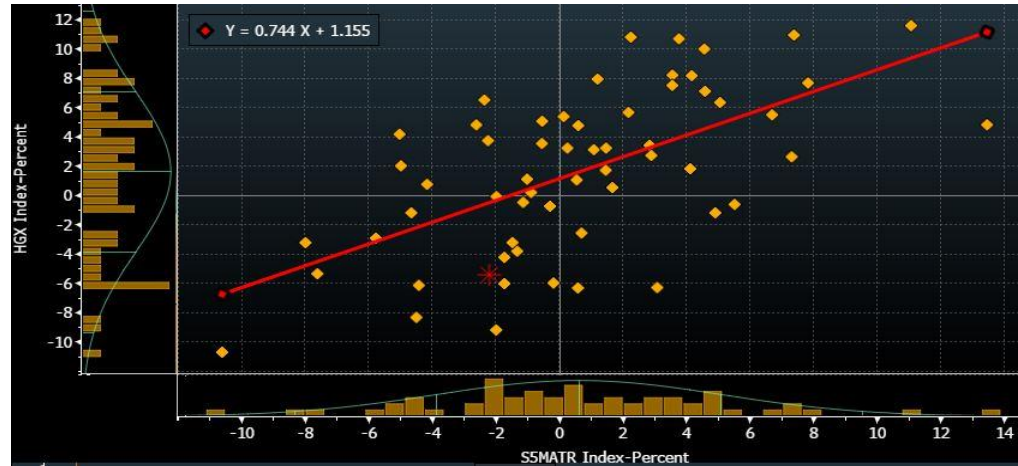
## Takeaways:

- Both of these factors have high correlation with the Materials sector
- Commodities act as a good predictor because they are the inputs for Materials companies
- The S&P 500 also acts as a predictor because if demand for goods is dropping, the demand for the raw material inputs decrease as well

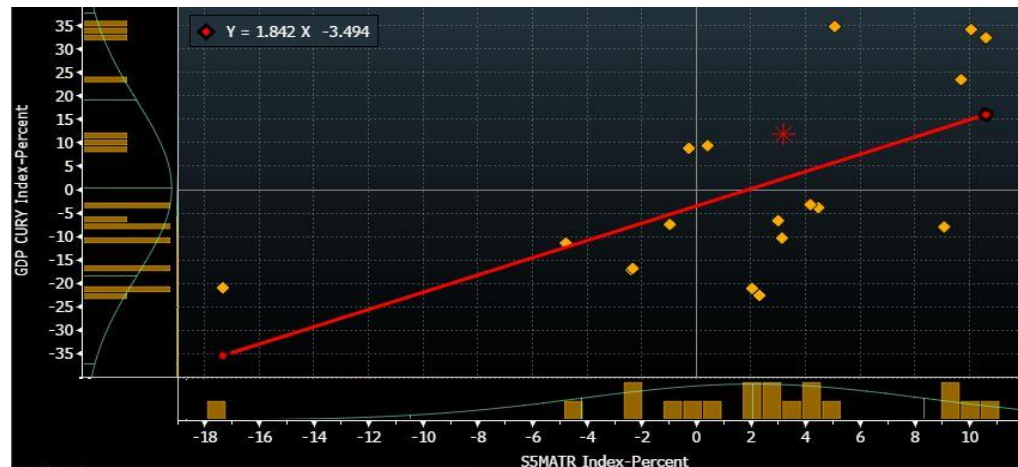


# Important Economic Factors

Housing Starts



GDP



## Takeaways:

- Both of these factors also have some correlation with the Materials sector
- New Housing Starts acts as a good predictor because the inputs for construction are supplied by Materials companies
- GDP also acts as a predictor because if demand for goods is dropping, the demand for the raw material inputs decrease as well





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# Financial Analysis

	CY 2012	CY 2013	CY 2014	CY 2015	Current	CY 2016 Est	CY 2017 Est
12 Months Ending	12/31/2012	12/31/2013	12/31/2014	12/31/2015	11/07/2016	12/31/2016	12/31/2017
<b>Valuation Metrics</b>							
Price/Earnings	16.33	18.92	18.40	17.14	18.57	18.37	15.88
Price/Earnings, Positive	15.84	18.24	18.40	16.75	18.57	18.37	15.88
Price/Earnings before X0	21.16	25.47	23.14	38.25	30.80		
Price/Book Value	2.63	2.91	3.49	3.32	3.57	3.47	3.05
EV/Sales	1.48	1.74	1.90	1.90	2.18	2.19	2.09
EV/EBIT	12.94	15.53	17.09	23.96	23.69		
EV/EBITDA	8.98	10.46	11.37	13.54	14.01	10.04	9.15
Dividend Yield	2.55	2.24	2.12	2.31	2.23	2.26	2.37
<b>Fundamentals</b>							
Gross Margin	24.13	24.22	25.88	25.49	26.62		
Operating Margin	11.46	11.20	11.03	7.99	9.24		
Profit Margin	5.91	6.93	7.02	4.57	5.32		
Return on Assets	4.50	5.06	5.08	2.95	3.27	5.76	6.74
Return on Equity	12.92	14.60	14.44	9.54	11.04	18.67	20.75

## Takeaways:

- Sales and Earnings growth rates are expected to remain stable in to the near future
- Margins have remained fairly constant and that trend is expected to continue
- One very positive sign is that Return on Equity is expected to pick up substantially in the coming two years

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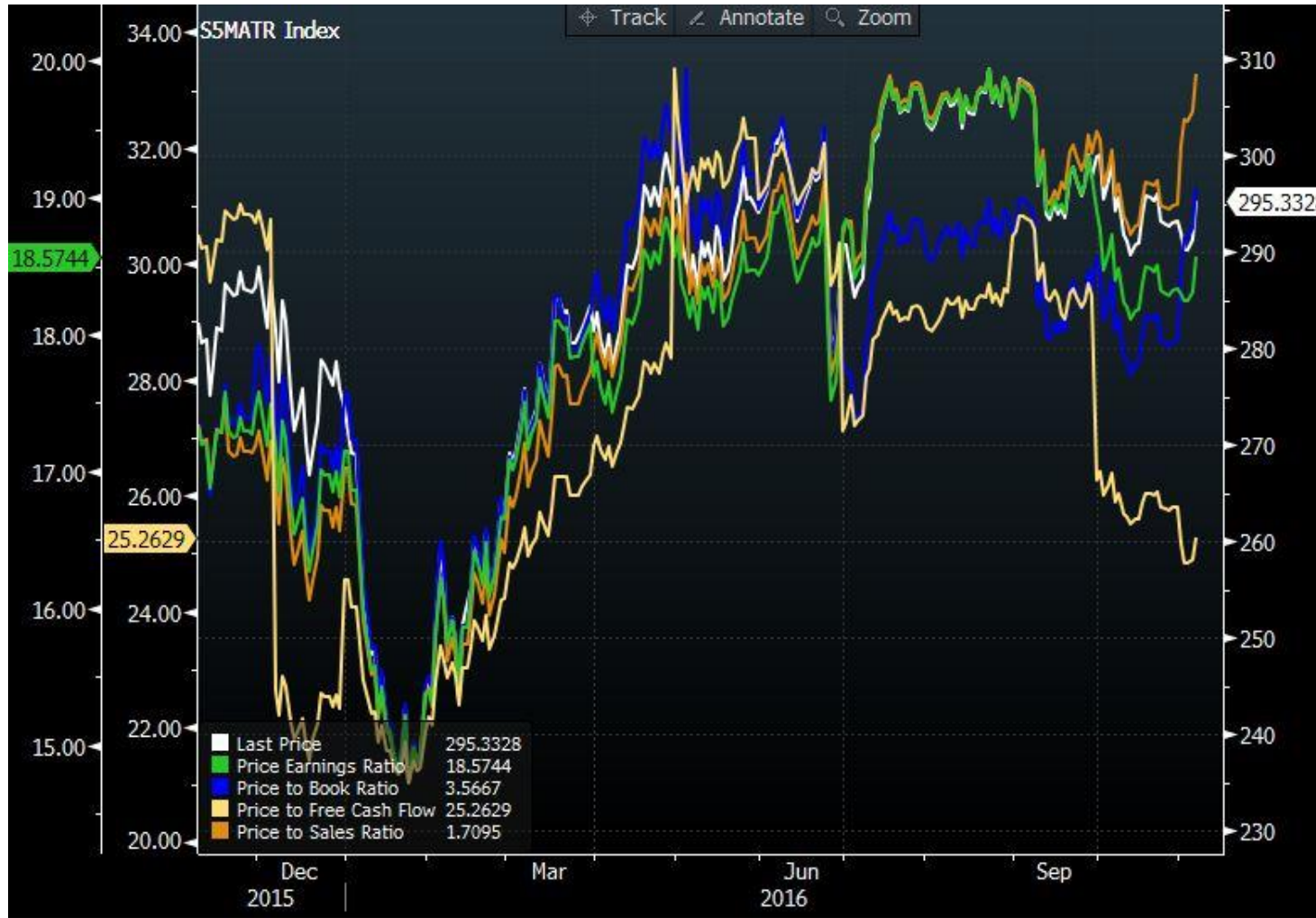
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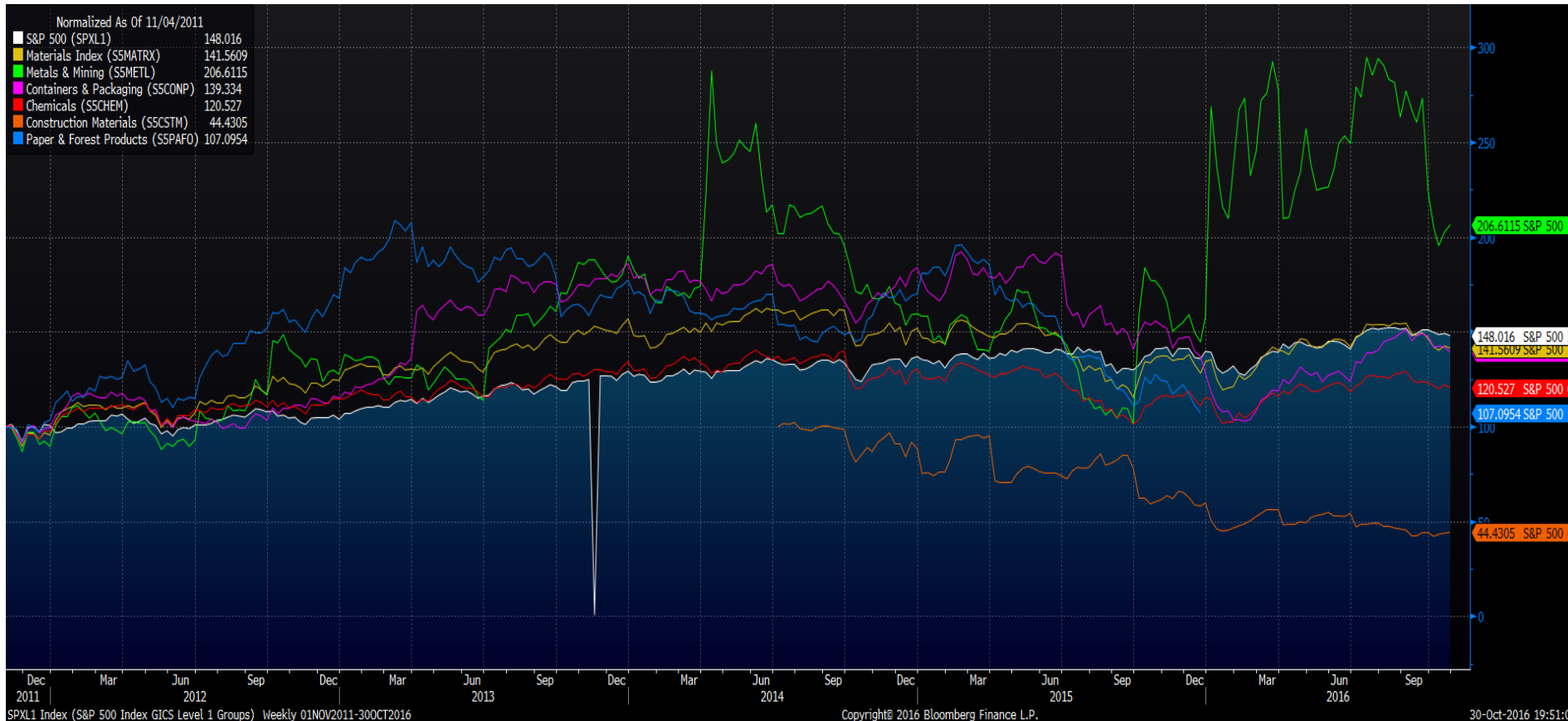
# Materials Sector Valuation Overview



## Takeaways:

- Price/Sales is at its 52 week high
- Price/Free Cash Flow is lagging significantly compared to other metrics
- Price/Book has seen a rebound recently
- Price/Earnings is at 18.57 for the Materials sector

# Price/Earnings



## Takeaway:

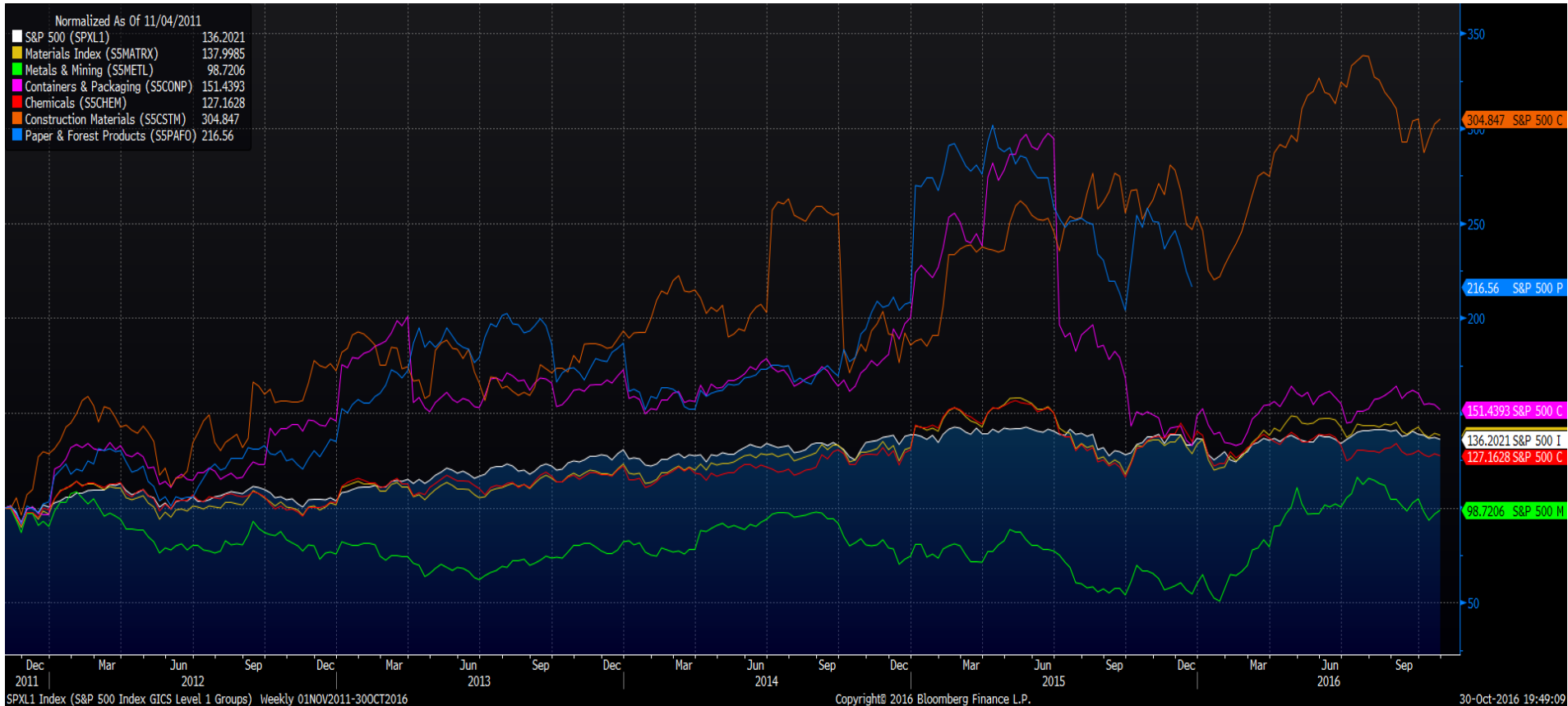
- Most of the P/E ratios in this sector are below the overall market as shown by the relative position of the S&P 500

\*Chart shows **P/E** of each sector compared to Materials sector whole and S&P

\*Chart is normalized using a factor so the values are not actual P/E's



# Price/Book

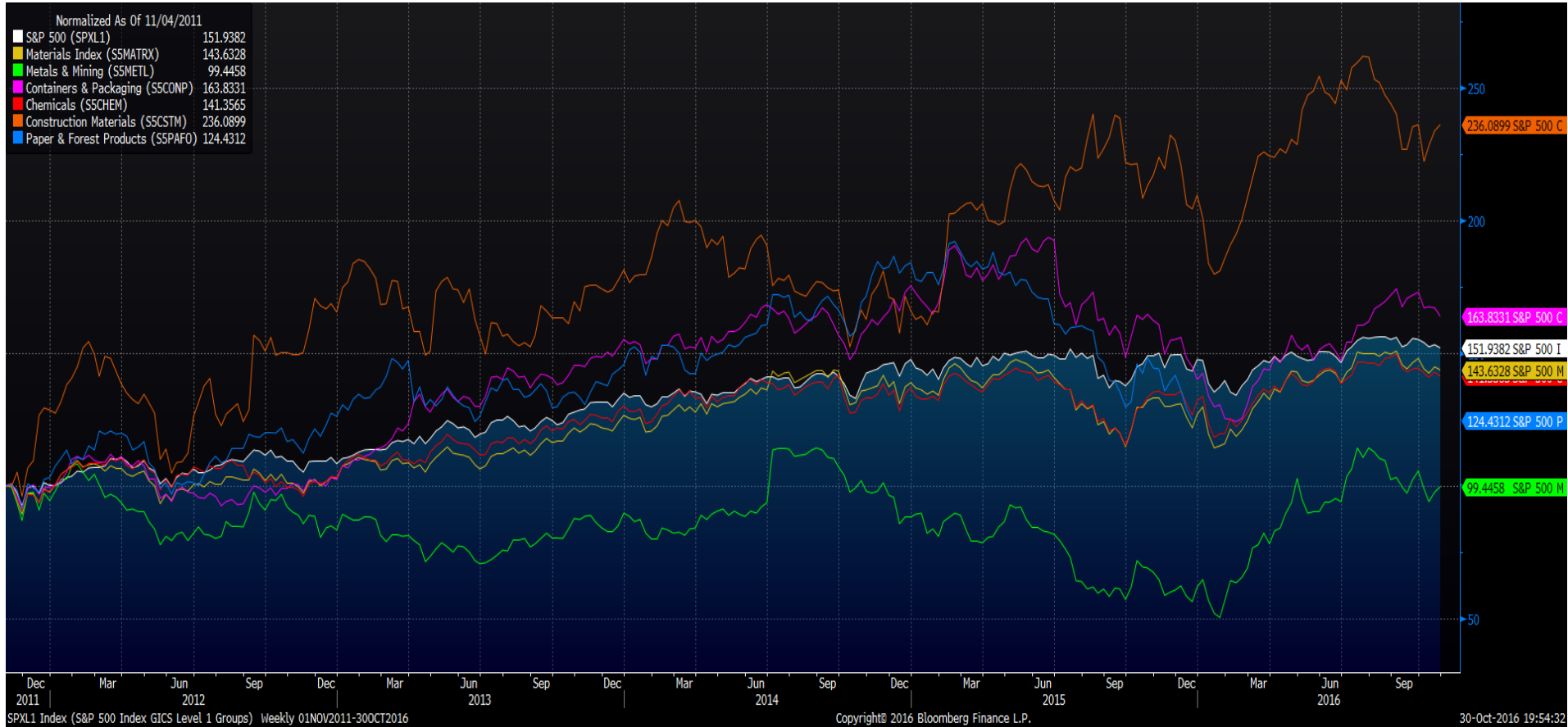


## Takeaway:

- The Price/Book ratios in this sector are widely dispersed, with the S&P 500 falling in the middle



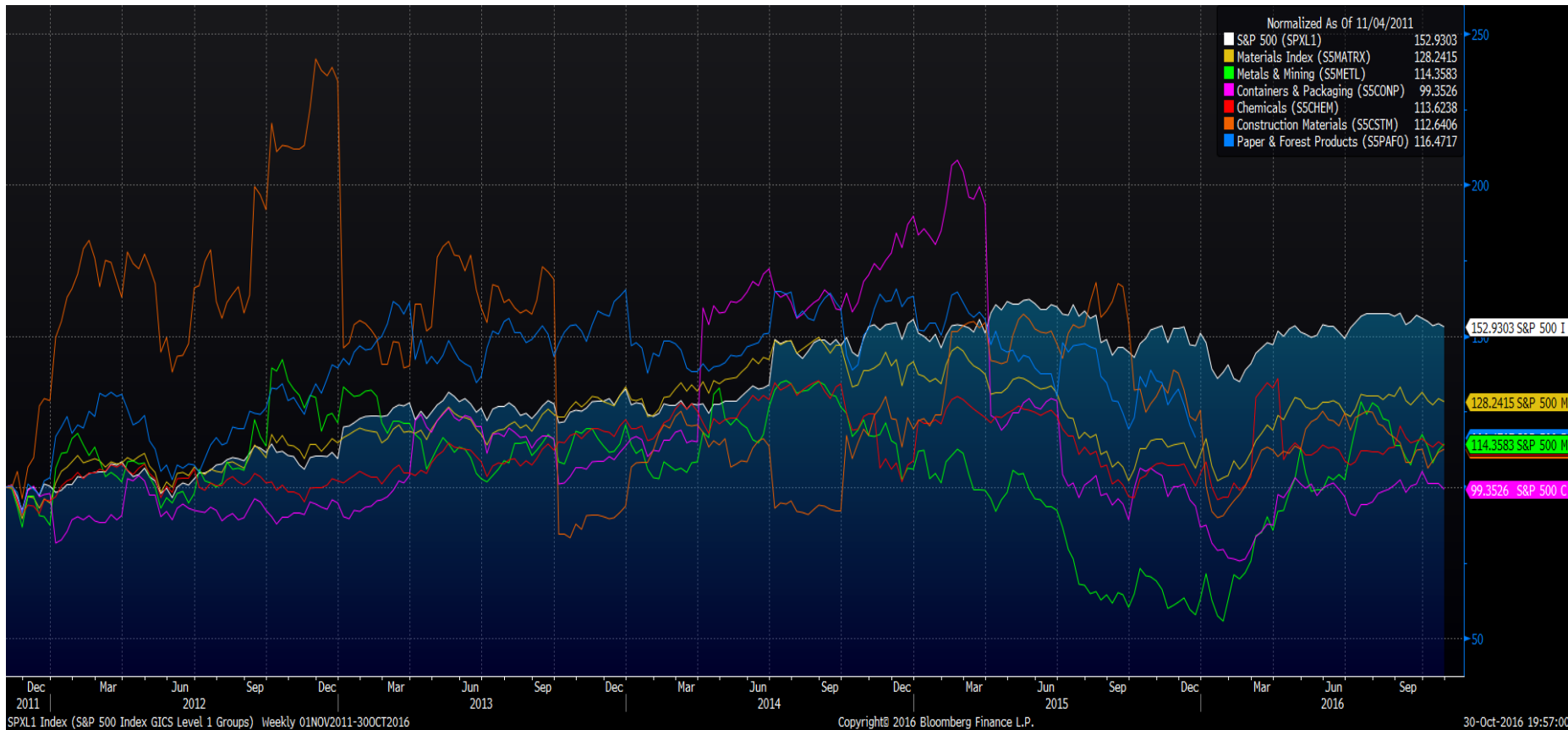
# Price/Sales



## Takeaway:

- The Price/Sales ratios in the Materials sector are generally lower than the overall market

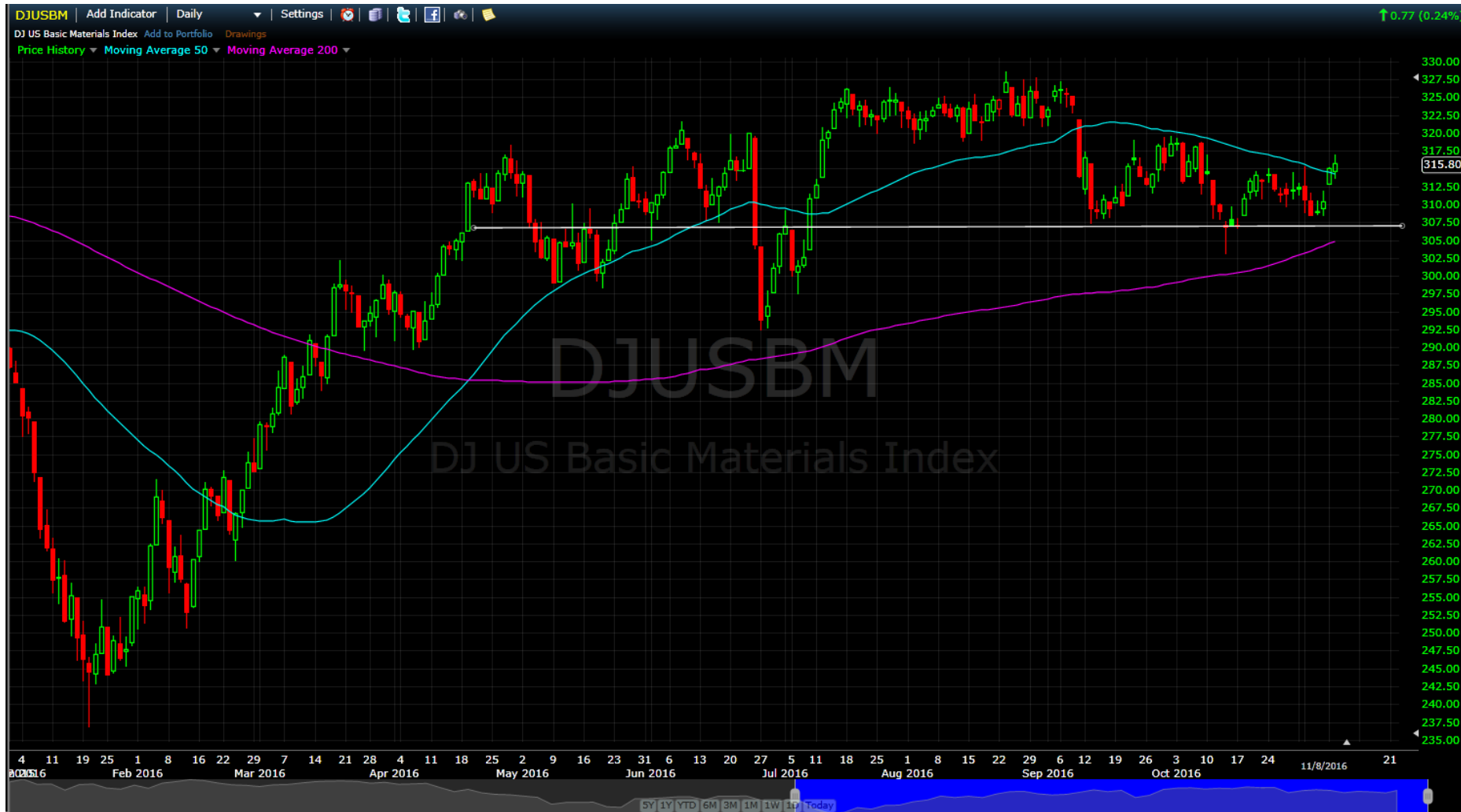
# Price/Cash Flow



## Takeaway:

- The Price/CF in the Materials sector is significantly lower than that overall market

# Technical Analysis



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# Recommendations

*Equal Weight* Materials Sector

**Positives:** Emerging Markets and Infrastructure Investment

**Risks:** Rising Inventory Levels and Labor Costs

**Overweight:** Chemicals industry

**Avoid:** Metals & Mining industry



A photograph of a large brick building with a courtyard. The building is made of red brick and has many windows. In the foreground, there is a paved area with some steps and a railing. The sky is bright and hazy. A dark blue banner is overlaid across the middle of the image, containing the text "Q&A" in white serif font.

# Q&A