SIM SPRING 2016

HEALTH CARE SECTOR

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The Ohio State University
Fisher College of Business
AGENDA

Overview → Business Analysis → Economic Analysis → Financial Analysis → Valuation Analysis → Recommendation
OVERVIEW
SECTOR MARKET SHARE

Sector size: $4.13 T
Market weight: 14.7%
Third Largest weight

Market Share of Each Sector in S&P 500

- Information Technology: 20.40%
- Financials: 15.60%
- Health Care: 14.70%
- Consumer Discretionary: 12.90%
- Consumer Staples: 10.70%
- Industrials: 10.10%
- Energy: 6.60%
- Utilities: 3.40%
- Materials: 2.80%
- Telecommunication Services: 2.80%

Overview | Business Analysts | Economic Analysis | Financial Analysis | Valuation Analysts | Recommendation
---|---|---|---|---|---

The Ohio State University
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INDUSTRIES WITHIN SECTOR

Market Share of Each Industry Within Sector

- Pharmaceuticals: 48.18%
- Biotechnology: 18.69%
- Health Care Equipment & Supplies: 13.18%
- Health Care Providers & Services: 14.88%
- Health Care Technology: 1.23%
- Life Sciences Tools & Services: 4.03%
# Sector Major Companies (Top 10)

<table>
<thead>
<tr>
<th>Top Ten Market Cap Companies</th>
<th>Market Cap</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnson &amp; Johnson</td>
<td>$296.63B</td>
<td>U.S.</td>
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<tr>
<td>Pfizer</td>
<td>$182.12B</td>
<td>U.S.</td>
</tr>
<tr>
<td>Novartis AG</td>
<td>$172.53B</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Merck &amp; Company</td>
<td>$145.01B</td>
<td>U.S.</td>
</tr>
<tr>
<td>Novo Nordisk A/S</td>
<td>$141.99B</td>
<td>Denmark</td>
</tr>
<tr>
<td>Medtronic plc</td>
<td>$137.35B</td>
<td>U.S.</td>
</tr>
<tr>
<td>Gilead Sciences</td>
<td>$123.39B</td>
<td>U.S.</td>
</tr>
<tr>
<td>UnitedHealth Group Incorporated</td>
<td>$120.47B</td>
<td>U.S.</td>
</tr>
<tr>
<td>CVS Health Corporation</td>
<td>$111.58B</td>
<td>U.S.</td>
</tr>
<tr>
<td>Agmen</td>
<td>$109.44B</td>
<td>U.S.</td>
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</table>
SECTOR PERFORMANCE

**Year-To-Date**
- -7.05% (Source From Fidelity)
- Last Sector

**Sector VS S&P 500**

[Graph showing comparison between Health Care and S&P 500]
BUSINESS ANALYSIS
BUSINESS CYCLE

- Underperform
- Consistently Outperform
- No Clear Pattern
- Consistently Outperform

Early  Mid  Recession  Late
DEMAND & SUPPLY

Demand
• Increase

Supply
• Increase
Porter’s five forces:

- **Power of Suppliers:**
  - Depend
  - New drugs come out: high power
  - Patent expires: low power

- **Power of Buyers:**
  - Low

- **Entry Barriers:**
  - High

- **Level of Substitutes:**
  - Low

- **Competition:**
  - High

- **Recommendation:**

- **Overview**
- **Business Analysis**
- **Economic Analysis**
- **Financial Analysis**
- **Valuation Analysis**
- **Recommendation**

- **Conclusions:**
  - Defensive industry & inelastic demand
  - Aging population
  - Pharma/Biotech: pharmacies, retailers
  - M&A increase: more power
  - Pressure from the expiration of the patents

- **Factors:***
  - High power
  - Low power
  - Time consuming and expensive R&D
  - Strict Federal and States guidelines
  - Existing large players
  - New drugs come out
  - Patent expires
  - Entry barriers
  - Level of substitutes
  - Competition
  - Pressure from expiration of patents
  - M&A increase
  - Pharma/Biotech
  - Aging population
  - Defensive industry
  - Inelastic demand
  - Pharmacy
  - Retailers
Porter’s five forces: High Competition

**High competition in generic drugs**
(huge demand, inflated price)

**Low competition in patented drug**
(High profit margins, extend lifecycles, and differentiate)

**More frequent M&A activities**
(Decrease competition, avoid uncertain R&D, and increase bargaining power)

**Difficult for small companies and startups to enter**
ECONOMY BACKGROUND

Economic Outlook
- Late Part of Business Cycle
- Low Interest Rates
- Low Inflation
- Slow U.S. Economic Growth
- Strong U.S. Dollar
- Slowing Growth in China
- Recession Fears in Europe

U.S. Trends
- Aging Population
- Defensive Industry
- Consolidation
- Demand Inelasticity
• Raw Beta .807
• Adj. Beta .871
• R(Correlation) .845
FINANCIAL ANALYSIS  Healthcare Sector vs. S&P 500

Healthcare Sector

S&P 500
## Healthcare Sector Financial Performance

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<tbody>
<tr>
<td><strong>Total Revenue Growth %</strong></td>
<td>12.67%</td>
<td>(1.00%)</td>
<td>5.55%</td>
<td>11.18%</td>
<td>11.48%</td>
<td>10.16%</td>
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<tr>
<td><strong>Margin Analysis</strong></td>
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<tr>
<td><strong>Gross Margin %</strong></td>
<td>33.96%</td>
<td>34.80%</td>
<td>33.98%</td>
<td>34.02%</td>
<td>33.02%</td>
<td>33.01%</td>
</tr>
<tr>
<td><strong>Operating Margin %</strong></td>
<td>12.14%</td>
<td>12.54%</td>
<td>11.95%</td>
<td>12.28%</td>
<td>11.97%</td>
<td>11.92%</td>
</tr>
<tr>
<td><strong>Net Income Margin %</strong></td>
<td>7.14%</td>
<td>7.67%</td>
<td>8.18%</td>
<td>7.80%</td>
<td>7.40%</td>
<td>7.35%</td>
</tr>
<tr>
<td><strong>Profitability</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Return on Equity %</strong></td>
<td>15.66%</td>
<td>14.85%</td>
<td>14.95%</td>
<td>16.26%</td>
<td>15.38%</td>
<td>15.25%</td>
</tr>
<tr>
<td><strong>Return on Common Equity %</strong></td>
<td>15.42%</td>
<td>14.89%</td>
<td>15.03%</td>
<td>16.36%</td>
<td>15.43%</td>
<td>15.30%</td>
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<tr>
<td><strong>Short Term Liquidity</strong></td>
<td></td>
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<tr>
<td><strong>Current Ratio</strong></td>
<td>1.72x</td>
<td>1.67x</td>
<td>1.73x</td>
<td>1.72x</td>
<td>1.50x</td>
<td>1.50x</td>
</tr>
<tr>
<td><strong>Quick Ratio</strong></td>
<td>1.24x</td>
<td>1.19x</td>
<td>1.21x</td>
<td>1.25x</td>
<td>1.09x</td>
<td>1.09x</td>
</tr>
<tr>
<td><strong>Payout Ratio</strong></td>
<td>34.49%</td>
<td>37.21%</td>
<td>35.56%</td>
<td>36.74%</td>
<td>39.31%</td>
<td>39.49%</td>
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<tr>
<td><strong>Levered Free Cash Flow</strong></td>
<td>8.87%</td>
<td>9.61%</td>
<td>8.27%</td>
<td>9.97%</td>
<td>10.30%</td>
<td>10.26%</td>
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### Valuation Analysis

#### Overview
- Both the Healthcare Sector and the S&P500 Index are experiencing decreasing multiples.

#### Multiples

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</thead>
<tbody>
<tr>
<td>Price/Earnings</td>
<td>Healthcare</td>
<td>12.12</td>
<td>13.63</td>
<td>17.20</td>
<td>22.04</td>
<td>23.02</td>
<td><strong>20.11</strong></td>
<td>15.19</td>
<td>13.64</td>
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<tr>
<td></td>
<td>S&amp;P500</td>
<td>14.44</td>
<td>14.39</td>
<td>16.15</td>
<td>17.60</td>
<td>18.37</td>
<td><strong>18.54</strong></td>
<td>16.69</td>
<td>15.04</td>
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<tr>
<td>Price/Book Value</td>
<td>Healthcare</td>
<td>2.42</td>
<td>2.65</td>
<td>3.23</td>
<td>3.76</td>
<td>4.00</td>
<td><strong>3.61</strong></td>
<td>3.21</td>
<td>2.94</td>
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<td></td>
<td>S&amp;P500</td>
<td>2.07</td>
<td>2.14</td>
<td>2.41</td>
<td>2.65</td>
<td>2.80</td>
<td><strong>2.78</strong></td>
<td>2.60</td>
<td>2.47</td>
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<tr>
<td>Price/Sales</td>
<td>Healthcare</td>
<td>1.20</td>
<td>1.29</td>
<td>1.59</td>
<td>1.85</td>
<td>1.92</td>
<td><strong>1.68</strong></td>
<td>1.59</td>
<td>1.50</td>
</tr>
<tr>
<td></td>
<td>S&amp;P500</td>
<td>1.28</td>
<td>1.34</td>
<td>1.52</td>
<td>1.73</td>
<td>1.82</td>
<td><strong>1.83</strong></td>
<td>1.79</td>
<td>1.68</td>
</tr>
<tr>
<td>Price/EBITDA</td>
<td>Healthcare</td>
<td>7.50</td>
<td>8.09</td>
<td>10.46</td>
<td>12.94</td>
<td>13.65</td>
<td><strong>12.04</strong></td>
<td>9.61</td>
<td>8.87</td>
</tr>
</tbody>
</table>

#### Diagram

- **Price/Earnings**
- **Price/Book Value**
- **Price/Sales**
- **Price/EBITDA**
RECOMMENDATION
Benefits

- Consistently outperforms in the Late & Recessionary parts of the Business Cycle
- Many mature businesses with long track records of performance
- Frequent M&A activity

Risks

- Government regulation
- Strong dollar
- Margin pressure
WEIGHTING RECOMMENDATIONS

Healthcare 14.70% of S&P500
- 3rd largest holding in S&P500

Healthcare 13.06% of SIM fund
- 4th largest holding in SIM fund

Healthcare 15% of SIM fund
- 2nd largest holding in SIM fund