SIM SPRING 2016

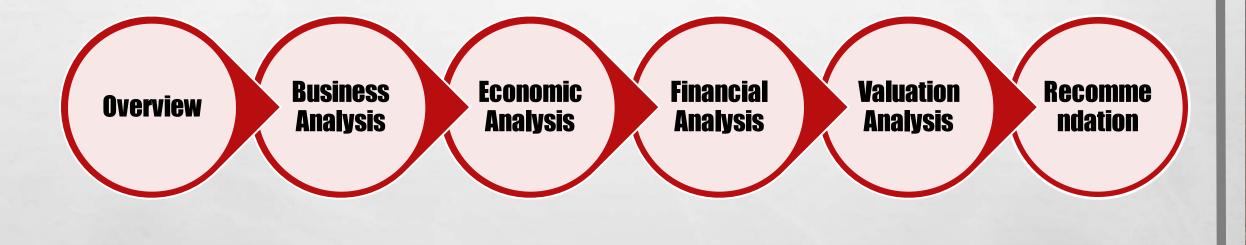
HEALTH CARE SECTOR EDUARDO MORAES GRANT WILLIAMS LIXIN XU SIYU ZOU



AGENDA

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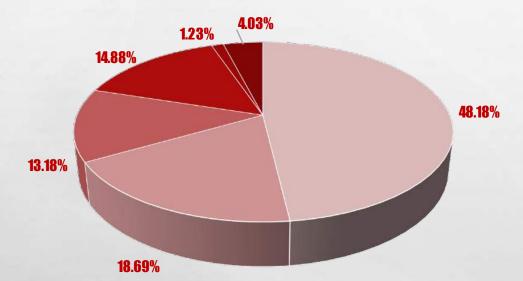
SECTOR MARKET SHARE

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Market Share of Each Sector in S&P 500

2.80% 2.80% Information Technology 3.40% 20.40% 6.60% Financials Health Care 10.10% Sector size: \$4.13 T Consumer Discretionary Market weight: 14.7% Consumer Staples Industrials Third Largest weight 15.60% 10.70% Energy Utilities Materials 12.90% 14.70% Telecommunication Services THE OHIO STATE UNIVERSITY **Overview** ISHER COLLEGE OF BUSINESS

INDUSTRIES WITHIN SECTOR



Overview

Market Share of Each Industry Within Sector

- Pharmaceuticals
- Biotechnology
- Health Care Equipment & Supplies
- Health Care Providers & Services
- Health Care Technology
- Life Sciences Tools & Services



SECTOR MAJOR COMPANIES (TOP 10)

TOP TEN MARKET CAP COMPANIES	MARKET CAP	COUNTRY
Johnson & Johnson	\$296.63B	U.S.
Pfizer	\$182.12B	U.S.
Novartis AG	\$172.53B	Switzerland
Merck & Company	\$145.01B	U.S.
Novo Nordisk A/S	\$141.99 B	Denmark
Medtronic plc	\$137.35B	U.S.
Gilead Sciences	\$123.39B	U.S.
UnitedHealth Group Incorporated	\$120.47B	U.S.
CVS Health Corporation	\$111.58B	U.S.
Agmen	\$109.44B	U.S.

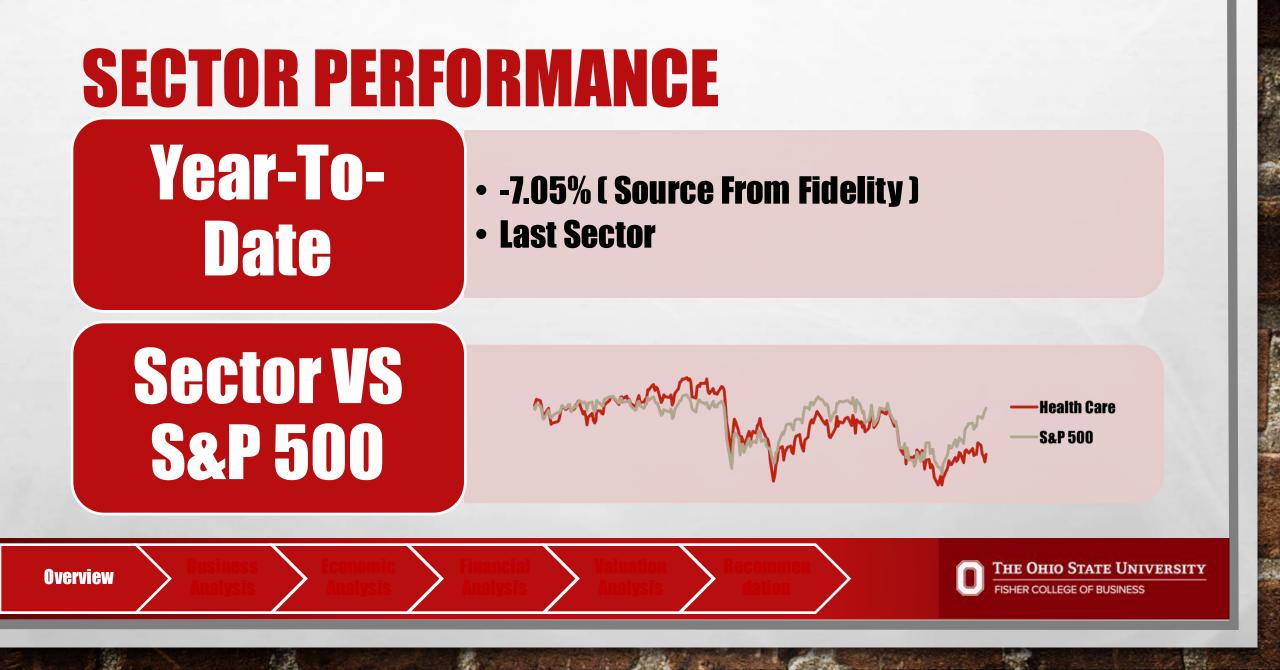
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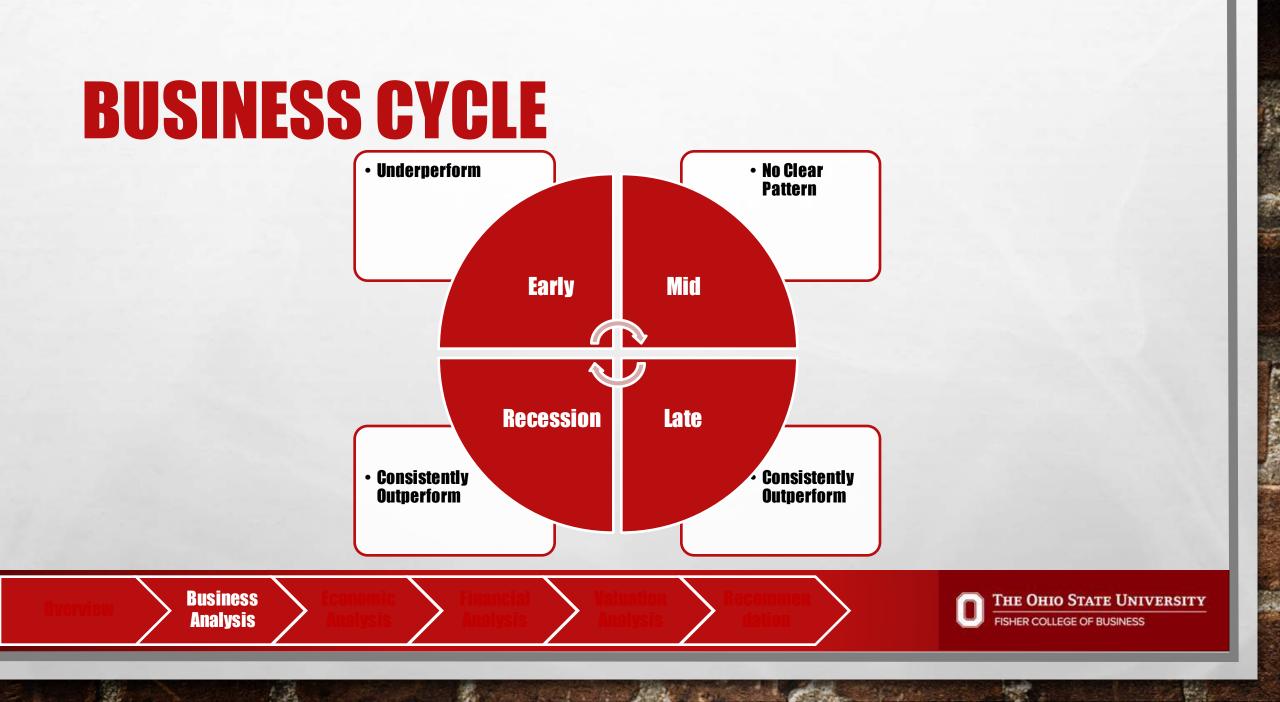
BUSINESS ANALYSIS

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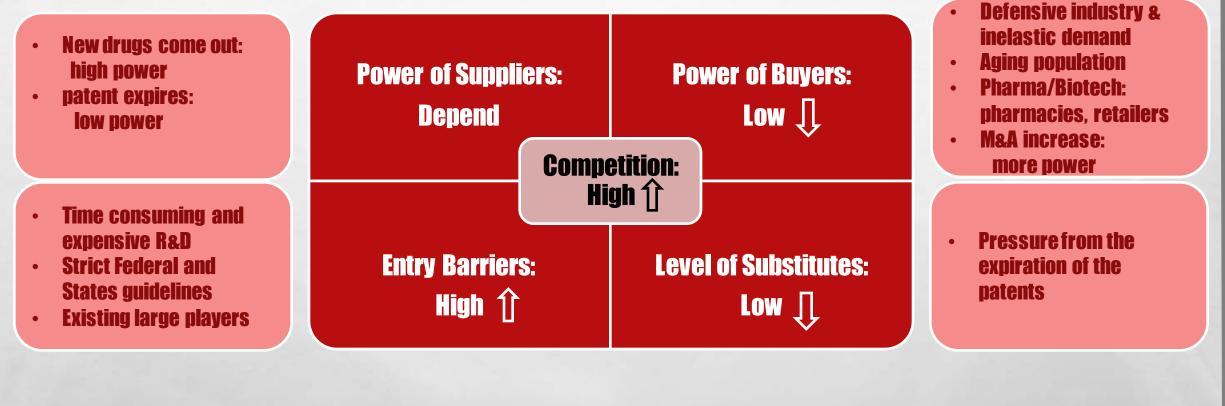
DEMAND & SUPPLY





Porter's five forces:

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Overview Business Economic Financial Valuation Recommendation Discommendation Financial University Analysis Financial Individed Financi Individed Financial Individed Financial Individed

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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)

Business

Analysis

Difficult for small companies and startups to enter



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ECONOMIC ANALYSIS

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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

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• Recession Fears in Europe

U.S. Trends

- Aging Population
- Defensive Industry
- Consolidation
- Demand Inelasticity



Economic Analysis

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REGRESSION ANALYSIS



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Economic

Analysis

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• Raw Beta .807

- Adj. Beta .871
- R(Correlation) .845

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FINANCIAL ANALYSIS



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Financial Analysis

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FINANCIAL ANALYSIS

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Healthcare Sector vs. S&P 500



Financial

Analysis

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FINANCIAL ANALYSIS

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Healthcare Sector Financial Performance

For the Period Ending	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CQ1 2016	
Total Revenue Growth %	12.67%	(1.00%)	5.55%	11.18%	11.48%	10.16%	Low
Margin Analysis							
Gross Margin %	33.96%	34.80%	33.98%	34.02%	33.02%	33.01%	
Operating Margin %	12.14%	12.54%	11.95%	12.28%	11.97%	11.92%	Stable
Net Income Margin %	7.14%	7.67%	8.18%	7.80%	7.40%	7.35%	
Profitability							
Return on Equity %	15.66%	14.85%	14.95%	16.26%	15.38%	15.25%	Stable
Return on Common Equity %	15.42%	14.89%	15.03%	16.36%	15.43%	15.30%	219mc
Short Term Liquidity							
Current Ratio	1.72x	1.67x	1.73x	1.72x	1.50 x	1.50x	
Quick Ratio	1.24x	1.19x	1.21x	1.25x	1.09x	1.09 x	Decrease, more recent M&A?
Payout Ratio	34.49%	37.21%	35.56%	36.74%	39.31%	39.49%	
Lougrad Free Gook Flow							Inorodoo
Levered Free Cash Flow	8.87%	9.61%	8.27%	9.97%	10.30%	10.26%	Increase

Financial

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VALUATION ANALYSIS

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Valuation Analysis

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VALUATION ANALYSIS

Price/ EarningsHealthcare12.1213.6317.2022.0423.0220.1115.1913.64SaP50014.4414.3916.1517.6018.3718.5416.6915.04Price/ Book ValueHealthcare2.422.653.233.764.003.613.212.94Price/ SalesHealthcare1.202.142.412.652.802.782.602.47Price/ SalesHealthcare1.201.291.591.851.921.681.591.50SalesSaP5001.281.341.521.731.821.831.791.68Price/ EBITDAHealthcare7.508.0910.4612.9413.6512.049.618.87O5.00	Multiples	Entity	2011	2012	2013	2014	2015	Current	2016E	2017E
Price/ Book Value Healthcare 2.42 2.65 3.23 3.76 4.00 3.61 3.21 2.94 Price/ Sales SaP500 2.07 2.14 2.41 2.65 2.80 2.78 2.60 2.47 Price/ Sales Healthcare 1.20 1.29 1.59 1.85 1.92 1.68 1.59 1.50 Price/ Sales Healthcare 1.20 1.29 1.59 1.85 1.92 1.68 1.59 1.50 Sales Bap500 1.28 1.34 1.52 1.73 1.82 1.83 1.79 1.68 Price/ EBTDA Healthcare 7.50 8.09 10.46 12.94 13.65 12.04 9.61 8.87 SaP500 6.93 7.33 8.52 9.03 10.15 10.66 8.87 8.13 25.00 20.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.	Price/	Healthcare	12.12	13.63	17.20	22.04	23.02	20.11	15.19	13.64
Book Value S&P500 2.07 2.14 2.41 2.65 2.80 2.78 2.60 2.47 Price/ Sales Healthcare 1.20 1.29 1.59 1.85 1.92 1.68 1.59 1.50 Price/ Sales Mealthcare 1.20 1.34 1.52 1.73 1.82 1.83 1.79 1.68 Price/ EBITOA Mealthcare 7.50 8.09 10.46 12.94 13.65 12.04 9.61 8.87 25.00 SaP500 6.93 7.33 8.52 9.03 10.15 10.66 8.87 8.13 25.00 SaP500 6.93 7.33 8.52 9.03 10.15 10.66 8.87 8.13 15.00 SaP500 6.93 7.33 8.52 9.03 10.15 10.66 8.87 8.13 0.00 SaP500 SaP50 SaP5	Earnings	S&P500	14.44	14.39	16.15	17.60	18.37	18.54	16.69	15.04
Price/ Sales Healthcare 1.20 1.29 1.59 1.85 1.92 1.68 1.59 1.50 Price/ Sales Residuation 1.20 1.29 1.59 1.85 1.92 1.68 1.59 1.50 Price/ EBITDA Healthcare 7.50 8.09 10.46 12.94 13.65 12.04 9.61 8.87 25.00 20.00 15.00 10.00 0.01 7.33 8.52 9.03 10.15 10.66 8.87 8.13 05.00 00.00 9.01 9.03 10.15 10.66 8.87 8.13	Price/	Healthcare	2.42	2.65	3.23	3.76	4.00	3.61	3.21	2.94
Sales S&P500 1.28 1.34 1.52 1.73 1.82 1.83 1.79 1.68 Price/ EBITDA Healthcare 7.50 8.09 10.46 12.94 13.65 12.04 9.61 8.87 S&P500 6.93 7.33 8.52 9.03 10.15 10.66 8.87 8.13 25.00 20.00 15.00 10.00 05.00 00.00 Image: Content of the set of th	Book Value	S&P500	2.07	2.14	2.41	2.65	2.80	2.78	2.60	2.47
Price/ EBITDA Healthcare 7.50 8.09 10.46 12.94 13.65 12.04 9.61 8.87 25.00 20.00 15.00 10.00	Price/	Healthcare	1.20	1.29	1.59	1.85	1.92	1.68	1.59	1.50
EBITDA S&P500 6.93 7.33 8.52 9.03 10.15 10.66 8.87 8.13 25.00 20.00 15.00 10.00 </th <th>Sales</th> <th>S&P500</th> <th>1.28</th> <th>1.34</th> <th>1.52</th> <th>1.73</th> <th>1.82</th> <th>1.83</th> <th>1.79</th> <th>1.68</th>	Sales	S&P500	1.28	1.34	1.52	1.73	1.82	1.83	1.79	1.68
25.00 20.00 15.00 05.00 00.00	Price/	Healthcare	7.50	8.09	10.46	12.94	13.65	12.04	9.61	8.87
20.00 15.00 10.00 05.00 00.00	EBITDA	S&P500	6.93	7.33	8.52	9.03	10.15	10.66	8.87	8.13
	15.00 10.00 05.00 00.00	2011 2012	201	3 2	2014	2015	Current	2016	je 2	017E

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Valuation

Analysis

• Both the Healthcare Sector and the S&P500 Index are experiencing decreasing multiples.



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RECOMMENDATION

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 Consistently out performs in the Late & Government regulation Many mature businesses with long track records of performance Frequent M&A activity Margin pressure 	Benefits	Risks
	Recessionary parts of the Business Cycle Many mature businesses with long track	

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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

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