

# BIENVILLE MACRO REVIEW

*Healthcare: Near-term Catalyst Within A Secular Growth Story*

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# HEALTHCARE: NEAR-TERM CATALYST WITHIN A SECULAR GROWTH STORY

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## Summary

*Recently, the healthcare sector has begun to outperform with the Affordable Care Act (ACA) serving as a near-term catalyst within the healthcare industry's long-term secular growth story. The effects of the ACA are significant given healthcare's breadth and diversity. Sub industries range from pharmaceuticals and biotech to healthcare providers and medical equipment, all of which are benefitting from two significant tailwinds: an aging demographic and longer lifespans...*

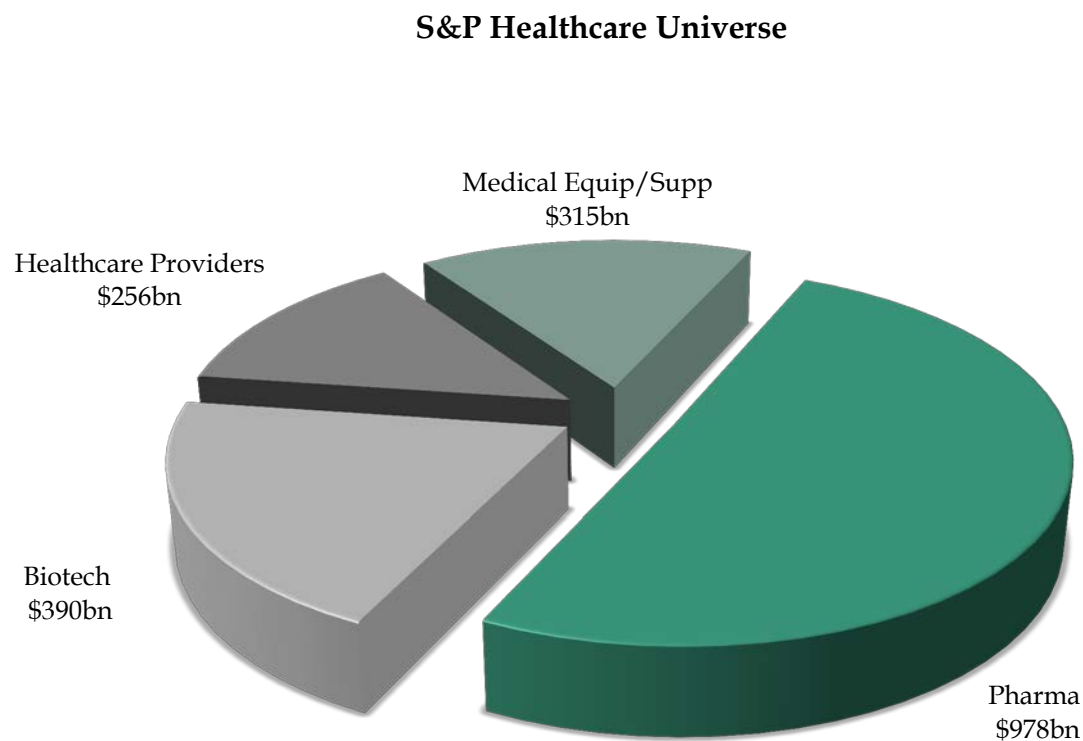
- The Affordable Care Act is an effort to help bring affordable health insurance to the uninsured. Technically, the ACA refers to two separate pieces of legislation: the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010. Changes will become effective on January 1, 2014
- According to the Congressional Budget Office, 24 million people over the next 10 years will gain access to health insurance under the ACA. If the legislation is implemented as originally written, then over the next 10 years, the CBO expects an additional \$1.36 trillion of net federal spending
- Dedicated healthcare spending in the U.S. today is \$3 trillion, roughly one-sixth of GDP. The Center for Medicare and Medicaid Services estimates that healthcare spending will increase by 64% to nearly \$5 trillion by 2020 (a 7.3% annualized rate, far outpacing expected nominal GDP growth)
- Over the coming years, demographic tailwinds will add persistent demand, requiring investment today. It is projected that the total world population over the age of 60 will double by 2050. Additionally, scientific innovation is allowing people to live longer, leading to higher overall medical spending
- Healthcare is a \$2 trillion investable universe, representing 12.5% of the S&P 500
- Debate in Washington over the ACA has had similar effects on the healthcare sector today as it did during Hillarycare. In the '90s, once the gridlock was finally resolved, healthcare stocks outperformed the overall market by nearly 80%. Similarly, healthcare stocks lagged amidst the initial debates over the ACA, yet since its resolution, they began to outperform
- Healthcare includes 4 of the top 15 subsectors with the highest industry-specific risk, reflecting the idiosyncratic nature of the companies within the sector. High idiosyncratic risk translates into low subsector correlations to the S&P, especially relative to other sectors, making it an attractive allocation within investment portfolios
- Despite this year's rally, healthcare valuations remain low relative to history. In particular, Pharma and Biotech currently trade at half to one-third of their valuations from over a decade ago



# HEALTHCARE: NEAR-TERM CATALYST WITHIN A SECULAR GROWTH STORY

The healthcare sector is a \$2 trillion investable universe, representing 12.5% of the S&P 500...

*Due to the idiosyncratic nature of the sector, healthcare exhibits low correlation to the S&P and overall economic growth...*



*Figures are monthly, Since 2002*

Source: Bloomberg

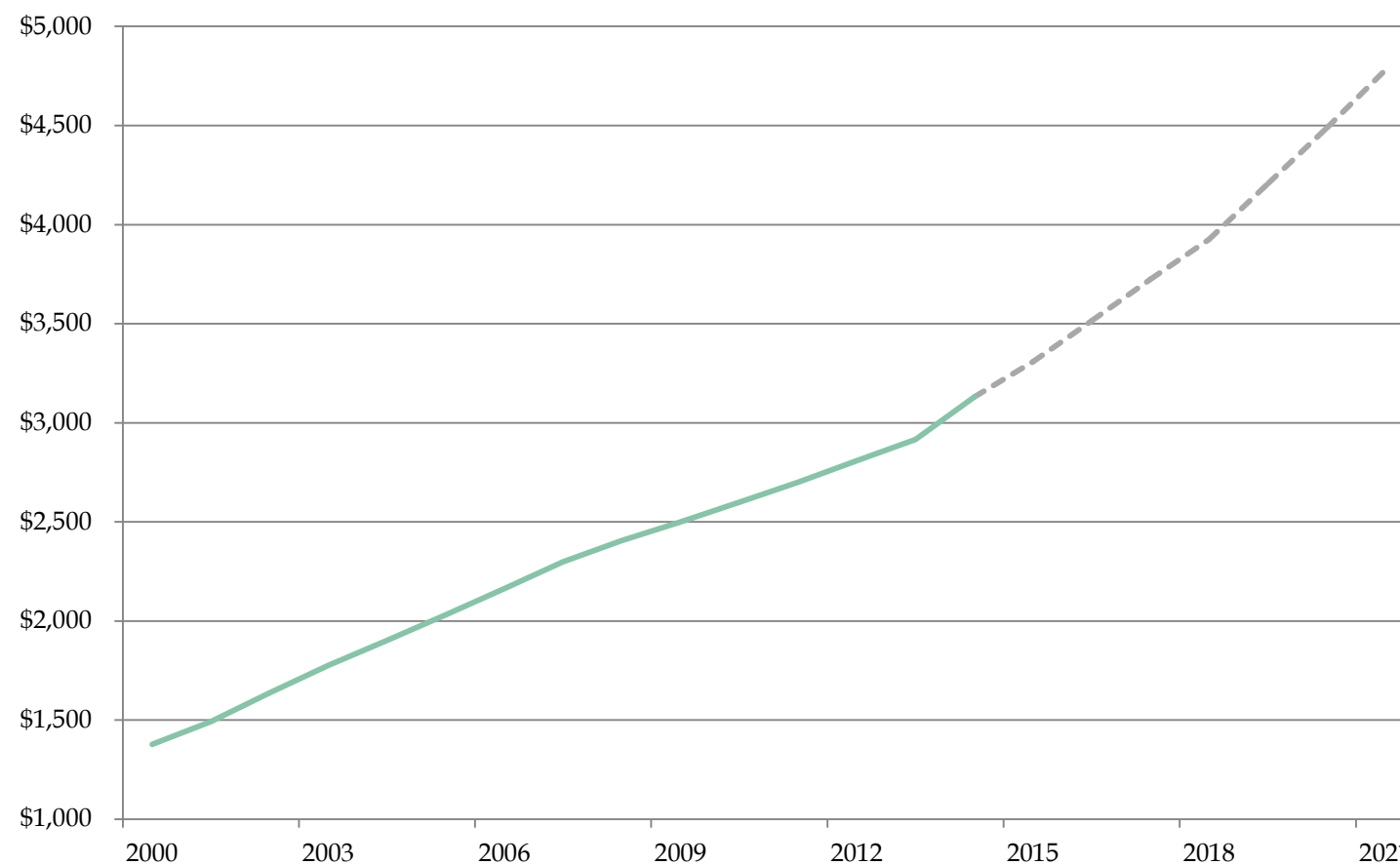


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Healthcare spending in the U.S. is currently \$3 trillion annually, equating to roughly one-sixth of U.S. GDP. The Center for Medicare and Medicaid Services estimates that healthcare spending will increase 64% over the next 7 years...

*The growth in healthcare spending should provide a tailwind to the sector...*

**Total U.S. Healthcare Spending (\$bn)**



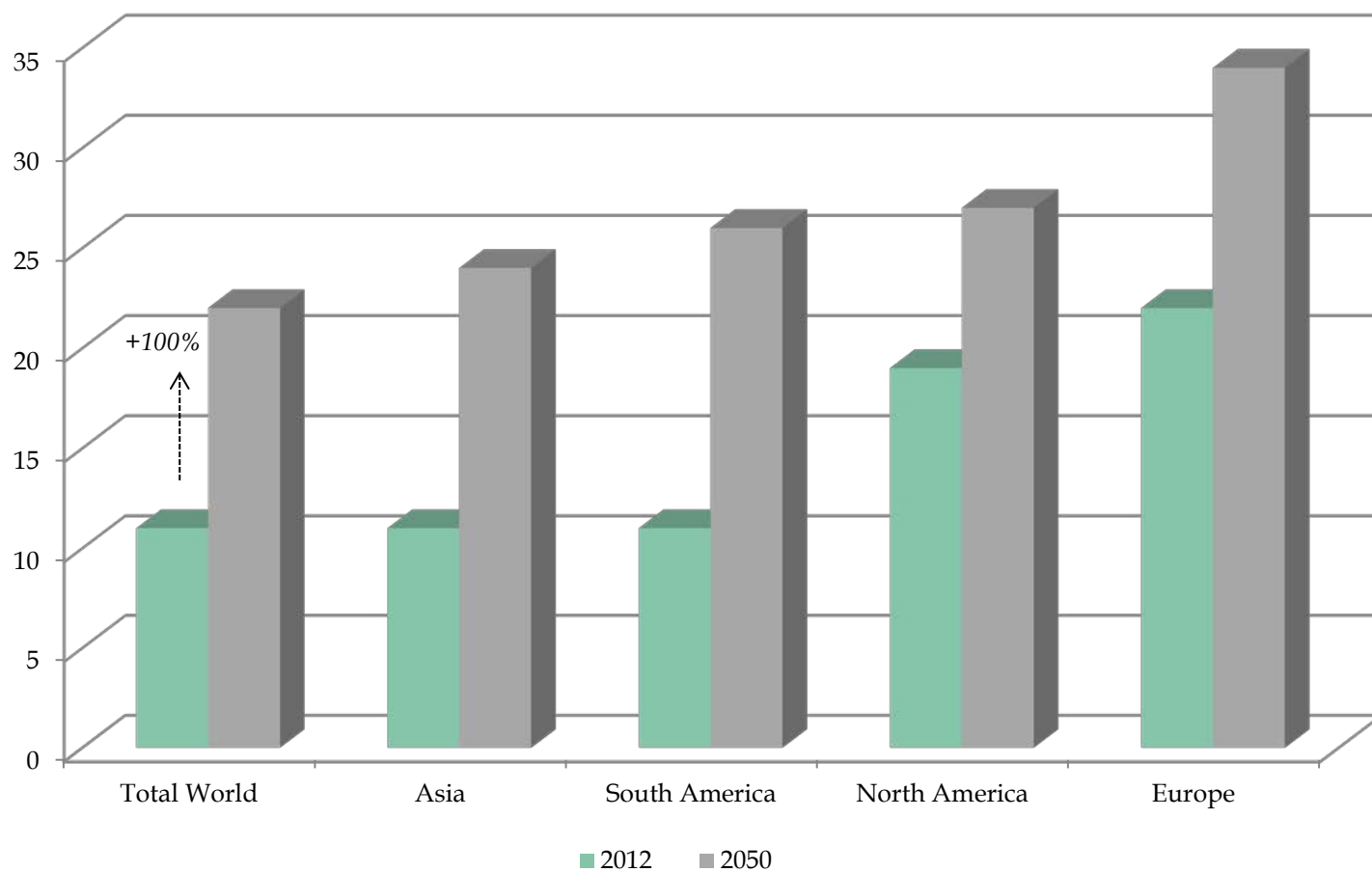
Source: Centers for Medicare & Medicaid Services, Bienville Capital Management, LLC



# HEALTHCARE: NEAR-TERM CATALYST WITHIN A SECULAR GROWTH STORY

U.S. and European Baby Boomers create both an immediate and persistent demand for healthcare...

**% of Population over 60 Years of Age**



*The total world population over the age of 60 will double by 2050...*

Source: United Nations. Department of Economic and Social Affairs, Population Division

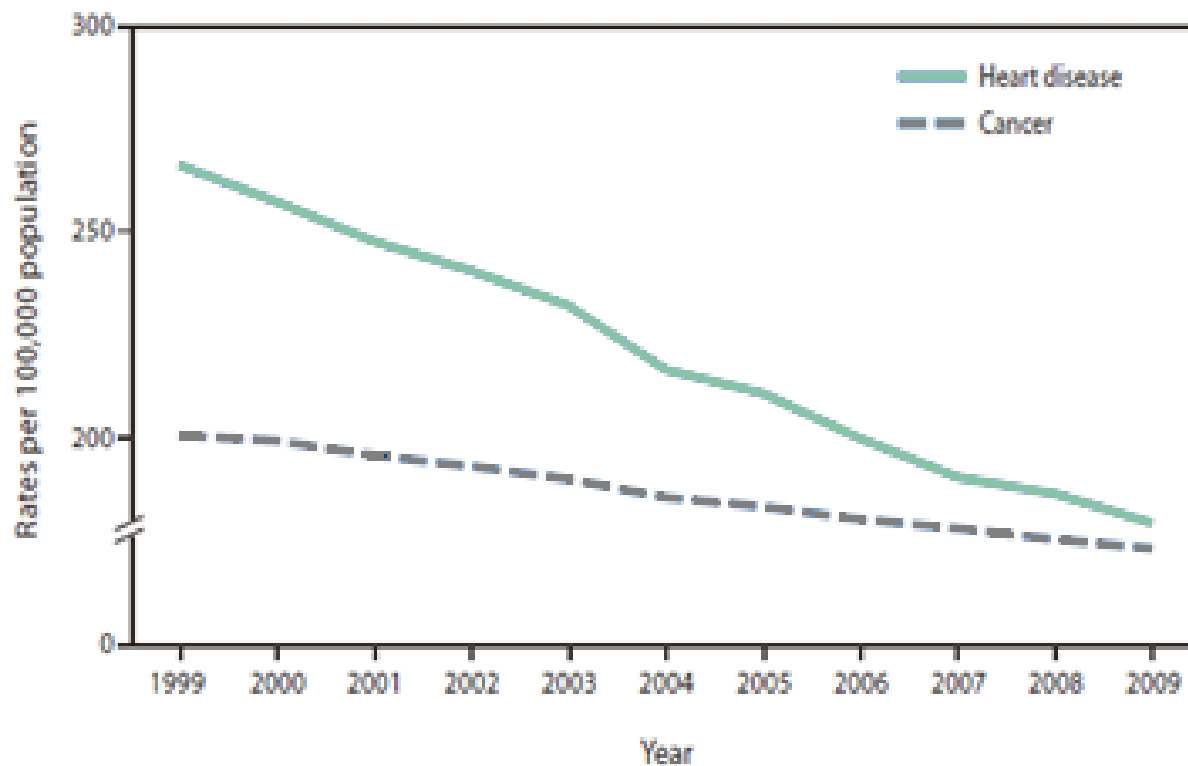


# HEALTHCARE: NEAR-TERM CATALYST WITHIN A SECULAR GROWTH STORY

Scientific and technological innovation are allowing people to live longer, which leads to higher medical costs over time...

*As scientific advancements have improved the lifespans of humans, so to have medical costs. As people live longer, the expenses surrounding an aging individual have increased...*

**U.S. Age-Adjusted Death Rates for Heart Disease & Cancer**



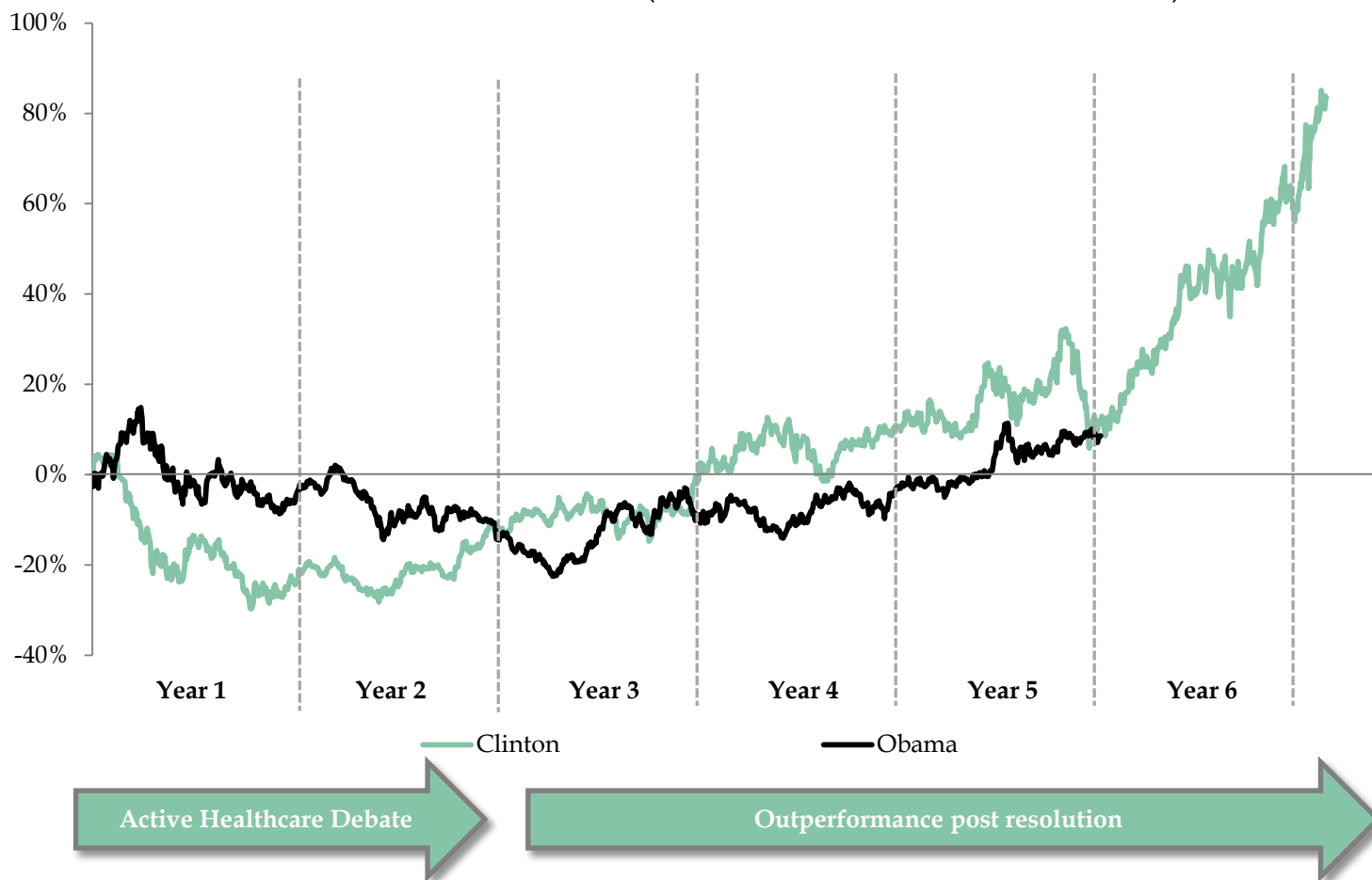
Source: CDC, National Vital Statistics System. Mortality public use data files for 1999-2007, and preliminary data for 2008 and 2009



# HEALTHCARE: NEAR-TERM CATALYST WITHIN A SECULAR GROWTH STORY

There are interesting parallels to observe on the impact on the healthcare sector by the past two Democratic presidents. Under Clinton, after a few years of active debate, healthcare outperformed the overall market dramatically once the industry got comfortable with the new rules of the game...

**S&P Healthcare versus S&P 500 (Under Healthcare-Focused Presidents)**



*During the first two years of Clinton's Presidency, health care reform ("Hillarycare") was debated almost daily. Once it failed, healthcare outperformed substantially...*

*Debating healthcare reform was also the main feature of the first two years of Obama's Presidency. Since it became law, healthcare has started to outperform*



## HEALTHCARE: NEAR-TERM CATALYST WITHIN A SECULAR GROWTH STORY

Idiosyncrasies within the healthcare sector present alpha generating opportunities on both the long and short side, while healthcare's low correlation relative to other sectors makes it an attractive allocation within investment portfolios...

### Industry-Specific Risk

Industry	Industry Specific Risk %
Diversified Consumer Services	60.8%
Airlines	57.8%
Multi-Utilities	56.0%
Biotechnology	54.1%
Electric Utilities	53.7%
Wireless Telecom Services	48.1%
Thrifts & Mortgage Finance	44.4%
Food Products	44.3%
Ind. Power Prod/Energy Traders	40.6%
Multiline Retail	34.4%
Gas Utilities	34.0%
Textiles, Apparel, & Lux. Goods	33.6%
Pharmaceuticals	32.2%
Life Sciences Tools & Services	30.6%
Healthcare Equip. & Supplies	28.8%

### Sector Correlation vs. S&P 500

Consumer Discretionary	Financials	Industrials	Technology	
0.91	0.87	0.93	0.88	
Healthcare Index	Pharma	Biotech	Payors	Medtech
0.77	0.69	0.68	0.56	0.75

*High industry-specific risk leads to lower correlation and more attractiveness within an overall investment portfolio...*

Source: Morgan Stanley, Bloomberg & Zephyr. Correlation is monthly over past 10 years. Industry-specific risk is calculated as  $(1-R^2)$  against the S&P 500 from September 2012-September 2013

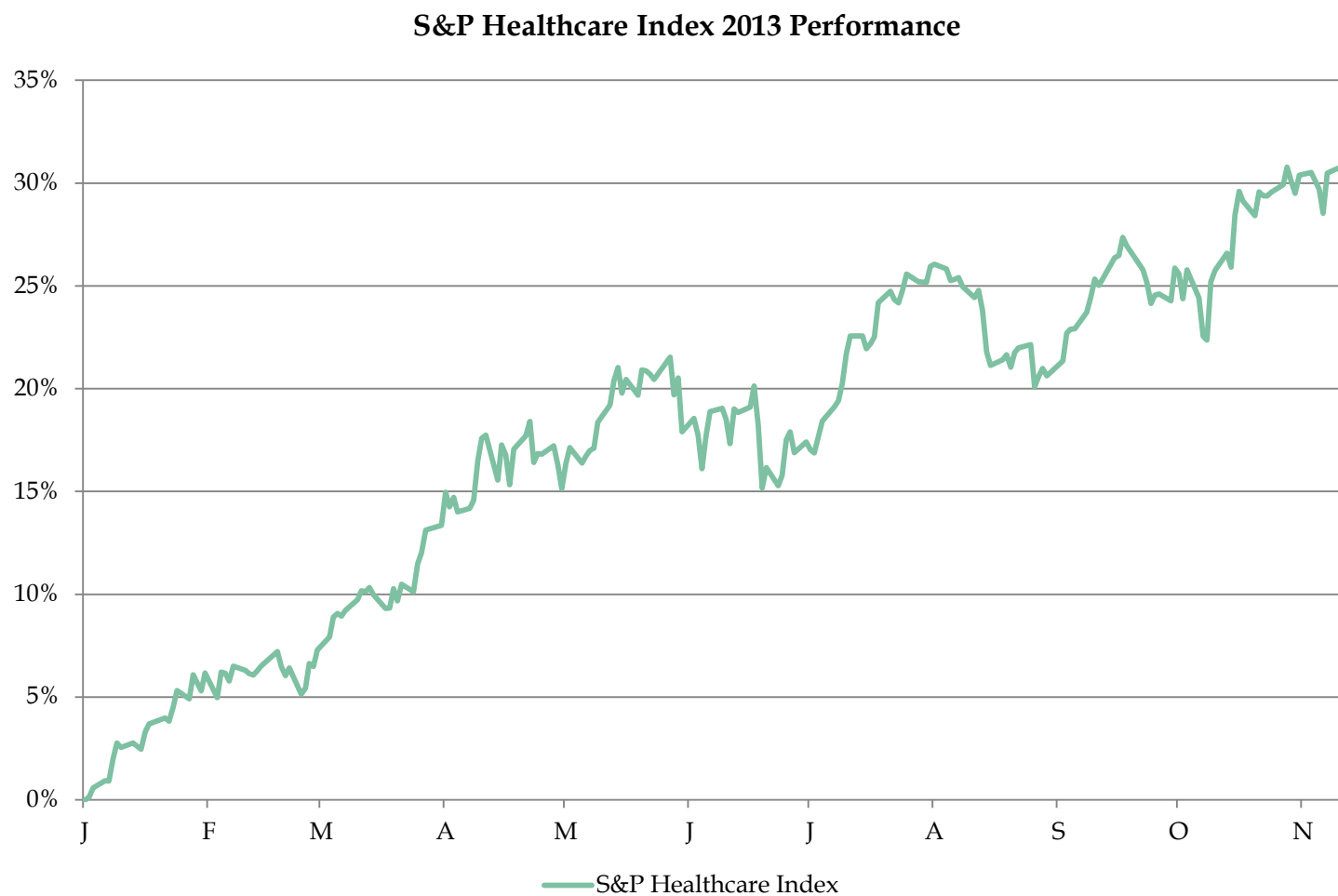




# HEALTHCARE: NEAR-TERM CATALYST WITHIN A SECULAR GROWTH STORY

Year to date, the S&P Healthcare Index has performed very well, returning just over 30%...

*Healthcare has outperformed the S&P so far in 2013...*



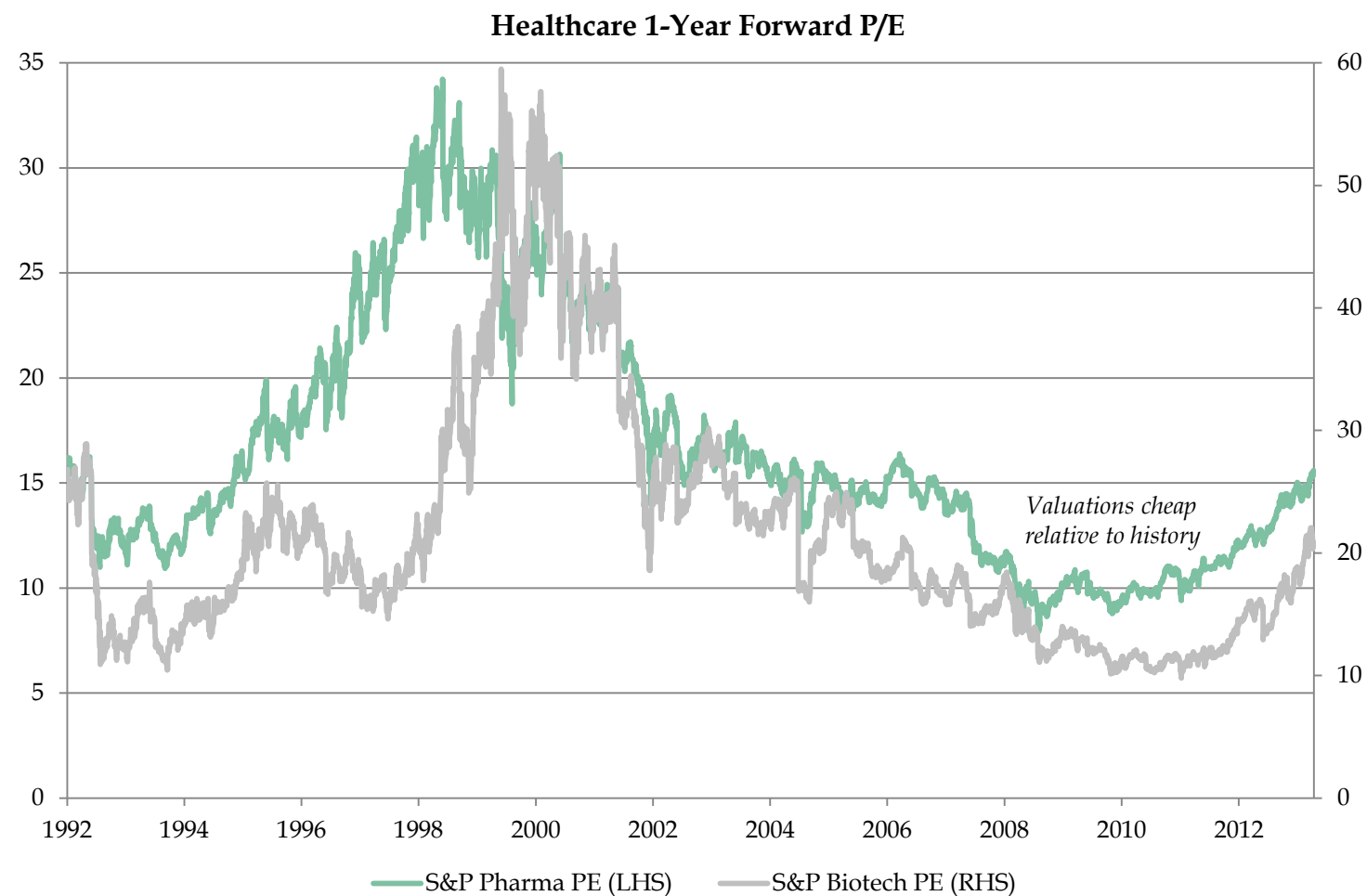
Source: Bloomberg. Data through November 13, 2013



# HEALTHCARE: NEAR-TERM CATALYST WITHIN A SECULAR GROWTH STORY

Despite recent strong performance, healthcare companies are trading at historically low valuations...

*Pharma and Biotech still trade at half to one-third of the valuations witnessed more than a decade ago...*



Source: Bloomberg



# HEALTHCARE: NEAR-TERM CATALYST WITHIN A SECULAR GROWTH STORY

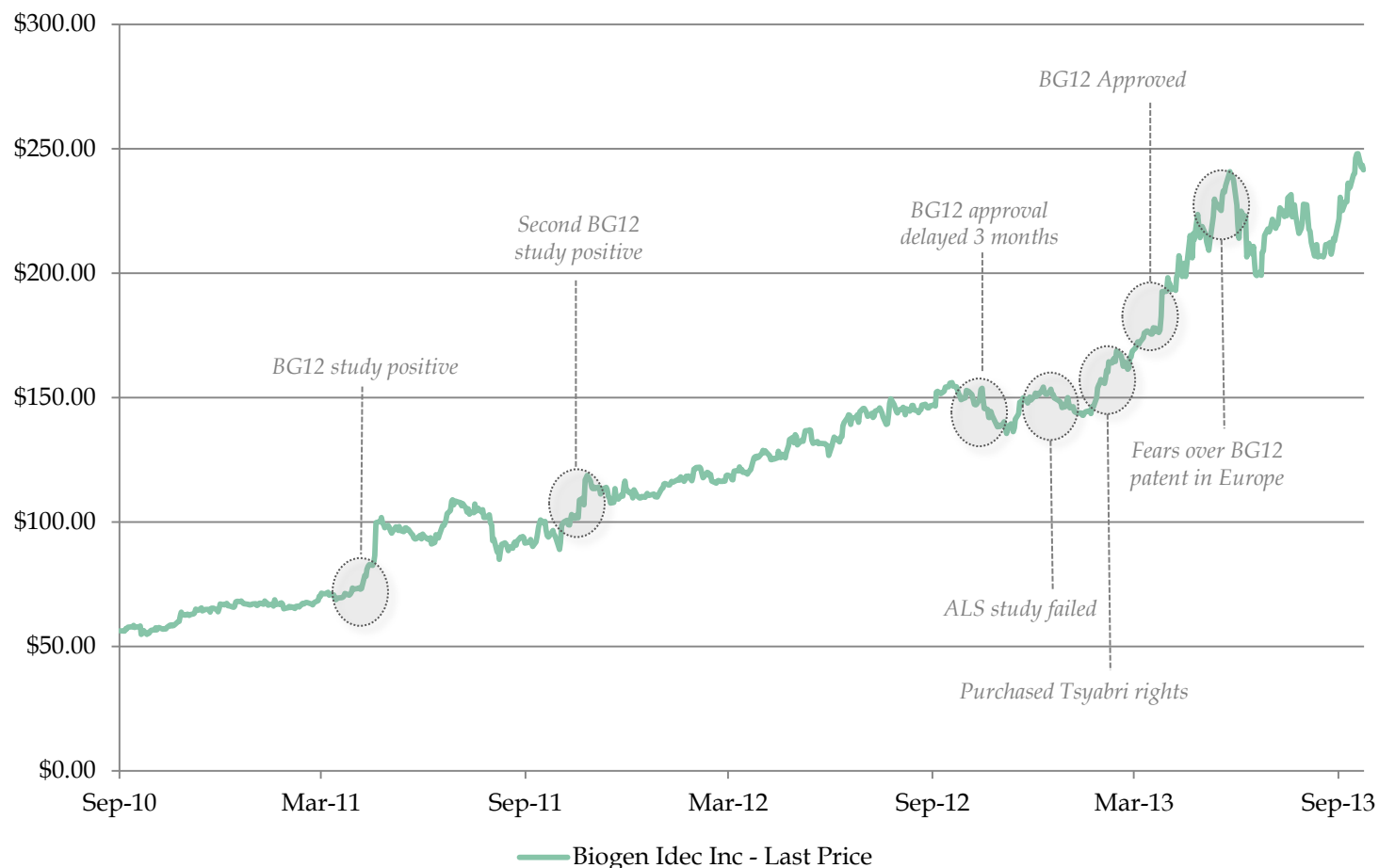
*Biogen Idec Inc. is an example of a long term secular growth story with significant earnings leverage:*

*During the year 2012, EPS guidance rose from low \$6.00 to \$6.50 with revenue growth rising from low-to-mid single digits to mid-to-high single digits by YE2012...*

*2013 EPS and revenue guidance has increased every quarter this year. Guidance has gone from \$7.15-\$7.25 and revenue +10% in 1Q13 to \$8.65-\$8.85 and revenues +25% in 3Q13*

Peak earnings of \$20.00

Healthcare companies that can leverage new and disruptive products are able to grow their earnings per share (EPS) quite significantly. Biogen Idec Inc. (BIIB) and their BG12 drug exemplifies this well...



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