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INVESTMENT STRATEGY OUTLOOK – LARGE CAP EQUITY

March 31, 2019

The FMI Large Cap portfolios returned approximately 10.8% in the March quarter compared to 13.65% for the Standard & Poor's 500 Index. From a sector perspective, Producer Manufacturing, Process Industries and Retail Trade helped during the quarter, while Finance, Electronic Technology and Communications lagged. Masco, eBay and Schlumberger added to results and Berkshire Hathaway, CenturyLink and UnitedHealth Group hurt. After strong relative performance but difficult absolute results in the December quarter, stocks roared ahead in calendar quarter one. Fears that Fed Chief Powell would be different than former chairs Yellen and Bernanke proved ill-placed. Investors have been treated to more candy, i.e. easy money, or in this case, additional delays in returning to "normal rate policy" after more than a decade of "emergency rate actions." Stocks and most other financial assets rebounded dramatically from only moderately depressed fourth quarter levels, leaving valuations back near all-time highs. Market participants have learned not to bet against central banks, regardless of the underlying fundamentals. Investors, after a one-quarter respite, have returned to growth stocks, continuing a decade-long love affair they believe will never end. Since 1900 (using the Dow Jones Industrial Average), there have been 21 bull markets, and excluding the present one, the median duration was 2.6 years and the cumulative price gain was 94.2%. The current bull market is 10 years old and has gained 296% on the same basis. Oddly, fundamental growth over this period has been below-average. As value-oriented investors, we often modestly lag growth stock-fueled markets, and this bull market has been no different. The real measure of performance, however, comes after a full market cycle, which few see coming but history says is inevitable. Since 1900, there have been 21 bear markets with a median duration of 1.43 years and a price return of -37.2%. As investors increasingly abandon risk-sensitive investments chasing growth and index products, we remain steadfast in our belief that in the end, fundamentals win -- not momentum or popularity.

Unemployment and inflation rates are low. Personal and corporate income tax rates have been cut. Stocks are higher. What's not to like about today's environment? While we are gratified to be near the government's definition of full employment, we wonder why so many people are not working. The Federal Reserve Bank of St. Louis reports that in February of 2019, the employed-to-population ratio was 60.7%, compared to 64.6% in February of 2000. The labor participation rate is significantly lower than a decade ago. Ten years past the last recession, the number of people on SNAP, the Supplemental Nutrition Assistance Program ("food stamps"), remains approximately 38 million, which is significantly higher than the last recession. Additionally, 10 million individuals are categorized as disabled (almost double from 20 years ago).

Despite a return to fiscal stimulus and a dramatic rise in the budget deficit, the data suggests the United States economy has slowed considerably in recent months, and many economies around the globe are experiencing the same thing. At the beginning of the year, the Blue Chip consensus for first quarter U.S. GDP growth was over 2%. The estimate is less than 1.5% as of late March, while the Atlanta Fed's GDPNow forecast (as of 3/10/19) for the first calendar quarter had fallen to just 0.4%. The yield spread between the 3-Month Treasury Bill and the 10-Year Treasury Bond recently inverted, which is often a precursor to recession. The Organisation for Economic Co-operation and Development (OECD) world growth estimate for first quarter real GDP is now 3.3%, down from 3.6% last year. Germany and China's economies have experienced notable weakening, with Germany's GDP growth barely above recession levels. The German 10-year bond yield is negative as of March 26th. China's growth is expected to slow to 6.2% from 6.5%, according to the World Bank. While Chinese data is notoriously unreliable (a recent Brookings Institute study suggests China's economy is 12% smaller than the official figures), anecdotal information such as electricity usage, equipment orders, and the resumption of stimulative monetary and fiscal actions suggest significant slowing. Early this March, just three months after ending the long-term quantitative easing program, the European Central Bank said it would hold interest rates at subzero levels at least through the end of 2019 and provide capital [from where?] to boost bank lending. Does anyone ever stop to wonder why, after years of artificially low interest rates and extraordinarily accommodative fiscal policies, economic growth is not higher?

At some point, people will begin to understand that economic growth is a function of labor hours and productivity (Figure 1). With U.S. productivity growth, population growth, and labor hours growth relatively low from a historical perspective, it is not surprising that GDP growth has been significantly less than long-term averages. The Eurozone is in even tougher shape, as population growth and productivity growth are lower than in the United States, as the accompanying chart from the *Financial Times* attests (Figure 2).

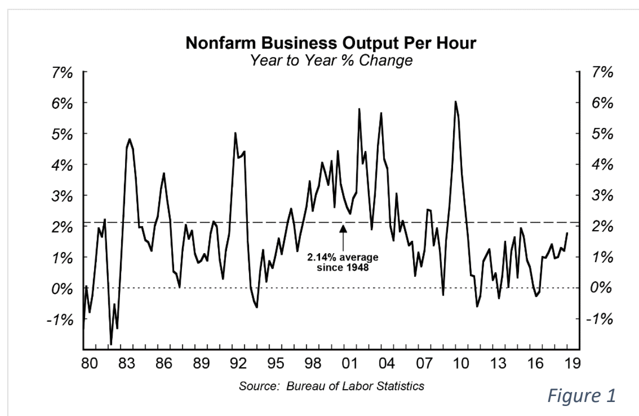


Figure 1

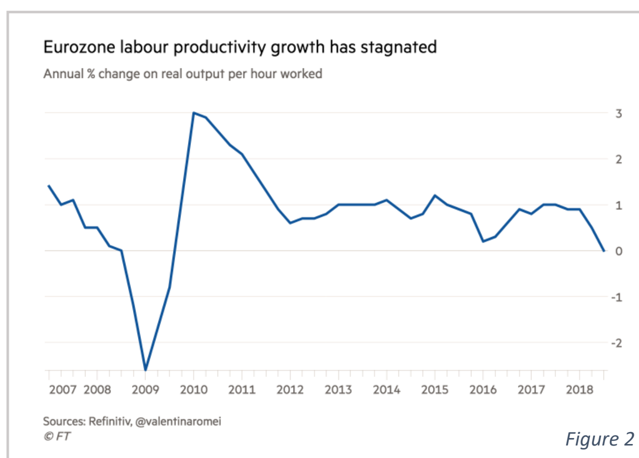


Figure 2

In previous letters we have shown that over long periods of time, corporate sales and earnings growth essentially mirrors nominal GDP growth. Corporate performance is, in a sense, a proxy for GDP (most economic activity involves buying products and services from companies). Historically, growth in sales, earnings, and GDP has clustered around 5%, although recently it has been less than this. In March, The Leuthold Group published the sales and earnings growth of the S&P 500 from the 2007 cycle peak through March of 2019. *The S&P 500 sales per share advanced at a 2.6% rate, and earnings per share grew at a 3.8% clip* -- both figures benefitting from strong stock repurchases. Most analysts find these figures shockingly low, especially juxtaposed to the earnings growth rates bandied about on CNBC or Bloomberg. The disconnect from the actual figures and "excellent earnings growth" one constantly hears from the media comes back to the phenomenon we have illuminated in recent missives: "adjusted earnings." The massive write-offs at Kraft Heinz, General Electric, Teva and many others, along with the multitude of smaller, ever-recurring write-downs most companies are reporting, are really a true-up of formerly inflated earnings. And there is simply no explaining away 2.6% sales growth. We live in a slow-growth world, yet stocks seem to live on a different planet; in bull markets, realism is in short supply.

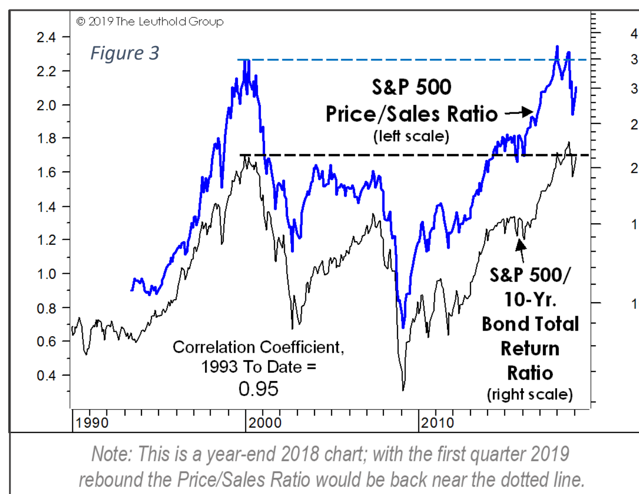


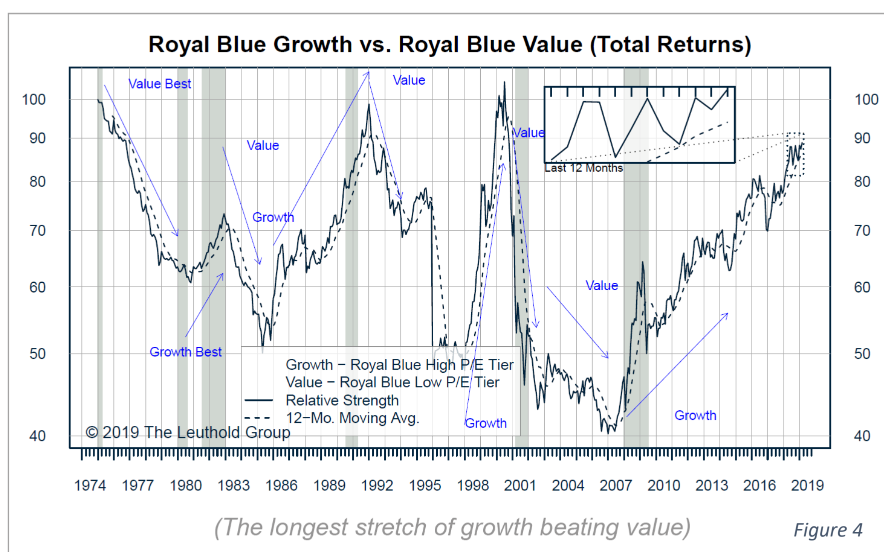
Figure 3

Note: This is a year-end 2018 chart; with the first quarter 2019 rebound the Price/Sales Ratio would be back near the dotted line.

With equities advancing faster than underlying earnings, adjusted or otherwise, it leaves valuations back near historical highs (Figure 3). The late 2018 swoon was quickly wiped away by the "Powell Put" further ingraining in investors' minds that there is no real or lasting risk to owning financial assets. The length and magnitude of this stock market cycle seems to have dulled the senses of investors. They want the performance of growth stocks, or at least the index, regardless of the underlying fundamentals or valuations (Figure 4). Although Wall Street-adjusted earnings growth estimates (not to mention GAAP[1] estimates) for the S&P 500 have slowed to zero or lower for the March quarter, it doesn't seem to affect stock prices. Neither does a budget deficit again exceeding $1 trillion, federal debt surpassing $22 trillion, total debt-to-GDP of 250% (Figure 5), a venomous political climate, or a majority of young people -- and even some high-profile politicians -- favoring socialism over capitalism.

[1] Generally Accepted Accounting Principles.

We are actually quite optimistic that the U.S. and the world will overcome most of the aforementioned negatives; there is a long history of problems being fixed. High valuations and the depth of some of the challenges, however, influence our opinion of what to expect out of stocks in the near-to-intermediate term, as well as the style that will win in the long run. Historically, value stocks have provided better protection on the downside, and have typically outperformed over a full market cycle; unless a hundred years of market history are no longer valid, we stand firm in this belief.



(The longest stretch of growth beating value) *Figure 4*

Before discussing a couple of investments that epitomize our approach, we'd like to take a moment to review the portfolio's sector weightings, with specific emphasis on areas we are avoiding.

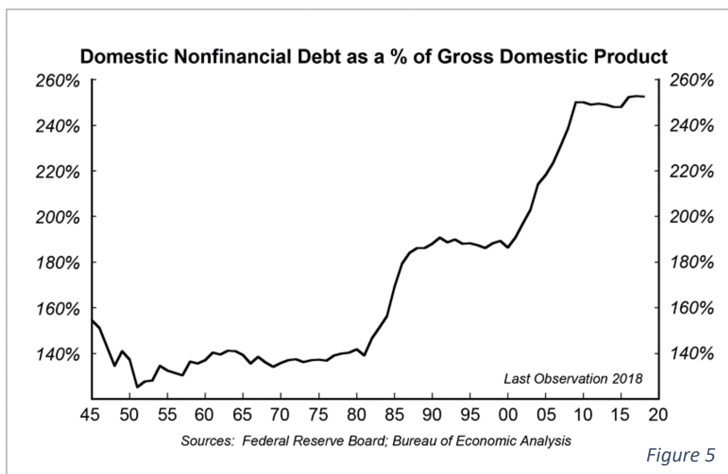


Figure 5

Since inception, the strategy has usually been underweight most technology-related sectors due to a few factors. First, the reward-to-risk ratio is not high enough; though there are periodic big winners in the Technology sector, there are also many losers. In portfolios where diversification doesn't matter, one could let a winning stock overcome the bad ones; however, in professionally-managed portfolios or mutual funds, wherein there are either regulatory or self-imposed position size limits, the winning stock must usually be trimmed, mitigating some of the ability to cover the decliners. Next, when we study the return on invested capital (ROIC) for various Technology sectors, we don't find the spread over the rest of the universe great enough to justify a large exposure. Finally, we are underweight Technology because the time required to stay on top of fast-moving and knowledge-intensive industries is tremendous; it is counterproductive to spend a disproportionate amount of time on something that won't deliver a commensurate reward. So, in high-tech we tend to focus on service companies and downstream technology stocks, where the customer base is stickier and the information paper chase is less time-consuming.

The Utilities and the Energy sectors, specifically Exploration & Production (E&P), are two additional areas wherein we are perennially underweight. Even when multiples are cheap (which they are not), we generally find utilities unattractive. It is questionable whether most utility companies even earn their true cost of capital, but, being charitable, let's just say that it is a very low return business; additionally, growth is almost non-existent or negative in many regions. Finally, utility companies are generally very levered businesses. The E&P space is also a low-returning sector over a full cycle. Discipline is in short supply, and illogical capital flows tend to ruin the economics of this business; E&P has wonderful "trading" moves from time to time, but it is a difficult place for long-term buy-and-hold type investors.

The last area where we have little exposure today is the "Big Pharma" sector. Since 2010, Deloitte has tracked the research and development (R&D) productivity for the top twelve global publicly-listed pharmaceutical companies:

Amgen, AstraZeneca, Bristol-Myers Squibb, Eli Lilly, GlaxoSmithKline, Johnson & Johnson, Merck & Co., Novartis, Pfizer, Roche, Sanofi, and Takeda.[2] R&D returns for the cohort have plunged, falling from 10.1% in 2010 to just 1.9% in 2018.

The reason that returns have deteriorated is twofold: costs are rising rapidly and forecast revenue is falling – a toxic combination. The cost to bring a compound to market has increased by over 80% the past eight years, from $1.188 billion in 2010 to $2.168 billion in 2018. At the same time, forecasted peak sales per compound have more than halved since 2010, falling from $816 million to $407 million. Even with record-low interest rates, it's very difficult to make the case that Big Pharma has been earning its cost of capital in recent years. For years, Big Pharma has seen the writing on the wall and has opted to shoot their way out with expensive mergers and acquisitions (M&A). *Informa Pharma Intelligence* estimates that in 2018, biopharma M&A activity reached an astounding ~$265 billion, up 26% versus 2017. Takeda's $64 billion acquisition of Shire led the charge. In early 2019, Bristol Myers Squibb announced a ~$95 billion acquisition of Celgene, in the largest pharmaceutical deal on record. While it might be easier to buy growth than to build it, acquisitions often fail to earn their cost of capital, especially at today's lofty valuations.

Studying the long-term fundamentals of Big Pharma is instructive. For the cohort, total ROIC peaked at 29.8% in 2000. ROIC has since collapsed, averaging just 11.4% over the last five years, down by over 60%. To make matters worse, the 5-year average is overstated, as it fails to capture the tens of billions of dollars of impairments and write-downs that are ignored by Wall Street but help to inflate the ROIC calculation (i.e., lower invested capital, depreciation, and amortization in subsequent years). While some of our peers focus on relatively low "adjusted" price-to-earnings (P/E) multiples, we think the Big Pharma stocks are more expensive than they appear and the structural challenges are far deeper than commonly perceived.

The Large Cap portfolio typically does not have any major sectors that are always overweight. Today, some of our overweight contingent includes Producer Manufacturing, Industrial Services, Consumer Services, Consumer Non-Durables, Retail Trade and Process Industries. Our focus is on individual securities and the diversity that each company brings in terms of sales, earnings and geographic exposure. We strive for broadly diversified portfolios and often address industries through downstream exposure. For example, we get energy exposure by owning Schlumberger, who provides the proverbial picks and shovels to the energy producers. We get health care exposure by owning UnitedHealth Group, Cerner, Smith & Nephew, and Quest Diagnostics, which is a combination of claims management, insurance, service provider, software, product manufacturer and lab services. Our utility exposure is through the utilities owned within Berkshire Hathaway.

Today, the strategy is positioned relatively defensively. In the difficult fourth quarter of 2018, the portfolios outperformed, and that has historically been the pattern in difficult markets. In the current environment we remain cautious and are prudently deploying capital to deliver both good absolute and risk-adjusted returns.

Below we highlight two Large Cap investments.

Fox Corporation (FOX/FOXA)

(Analyst: Dan Sievers)

Description

Following the sale of certain 21st Century Fox assets to Disney, Fox Corporation is almost wholly focused on U.S. news and sports content that will continue to be watched live, unlike scripted comedies and dramas, which are increasingly watched "on-demand." Fox will be organized into three primary operating segments: Television (Fox Broadcast Network + 28 owned and operated television stations), Cable News (Fox News + Fox Business), and Cable Sports (Fox Sports 1 & 2, and 51% of Big 10 Network). Fox's three segments are a portfolio of networks for which carriage is collectively

[2] "Unlocking R&D productivity: Measuring the return from pharmaceutical innovation 2018." Published electronically by Deloitte.

negotiated and contracted. For fiscal year 2019, Morgan Stanley estimates the following segment contributions: Television (51% of revenues), Cable News (28%), and Cable Sports (21%). Revenues will be comprised of 49% monthly fees (affiliate fees, retransmission fees, reverse-retransmission fees), 45% advertising, and 6% other.

Good Business

- Fox is focused on U.S. news and sports, which will continue to be viewed live.
- 49% of Fox revenues (and a higher percentage of profits) are generated by monthly fees from multi-year contracts with annual escalators that add some visibility to growth.
- Fox News is both a cash cow and growth engine (Morgan Stanley and UBS expect a 6% and 9% compound annual growth rate, respectively, for revenue and profit growth) and functions as a strategic centerpiece: Fox News is too valuable for a pay TV operator to attempt to drop any Fox channels. Cable News is expected to generate a segment margin of 67% in the 2019 fiscal year.
- While the Fox Broadcast network and its stations will remain important strategic portfolio assets, the combination is generating just a ~7% margin, which we think can increase with further gains in retransmission and reverse retransmission fees. Similarly, the Cable Sports segment is generating an 18% segment margin, which may increase as recent step-ups in sports content volumes have temporarily weighed on margins. The Cable Sports segment is expected to grow around 7%-8% over the foreseeable future.
- The company's balance sheet is sound; we expect net debt-to-EBITDA[3] to be 1.6-1.9 times at fiscal year-end (June 30, 2019).
- Fox will have limited capital requirements and likely a very high return on tangible assets.
- The estimated net present value of the Disney deal's tax savings is $2.6 billion; other assets comprise Fox Studio Land (>$1 billion), 12% of Draft Kings ($65 million), Caffeine ($100 million) and Other Unconsolidated Assets ($300 million).

Valuation

- Fox currently trades at approximately 13.5 times fiscal 2020 estimates. GAAP earnings will be affected by the accounting treatment related to the Disney deal. We expect economic earnings to grow at a double-digit rate over the next several years.
- Our best estimate of the sum-of-the-parts value for Fox is over 20% higher than the current stock price. Fox will have a variety of minority and non-earning assets that it may monetize (e.g., Fox Studio Land, Roku shares, and Draft Kings shares).

Management

- The Murdoch family presently controls nearly 40% of the voting interest in FOX. Lachlan Murdoch (47) will be CEO, although we expect Rupert, Lachlan and James Murdoch all to be involved in the company.
- The Murdochs must be given credit for fully monetizing much of the value they created in 21st Century Fox's general entertainment and international assets. That said, we regard capital allocation as among the biggest risks at Fox. While copious free cash flow will go towards reinvestment, a small dividend, and share repurchases, we expect some modest M&A activity.

Investment Thesis

The Murdoch clan can certainly be mercurial at times, but they should be given credit for creating and realizing value for outside shareholders at 21st Century Fox. They have rebooted Fox Corporation as an enterprise focused on news and sports franchises, where live viewing is preferred. The market remains concerned about dependence on pay TV packages, but we believe this risk is manageable. The business should generate excellent cash flow growth in the coming years, and with a solid balance sheet and a low valuation, we think the reward-to-risk ratio is attractive.

[3] Earnings before interest, taxes, depreciation and amortization.

PPG Industries, Inc. (PPG)

(Analyst: Andy Ramer)

Description

PPG is one of the largest manufacturers of paints and coatings in the world, with sales of more than $15 billion. The company has a diversified portfolio of products across consumer and industrial end markets and two reportable business segments: Performance Coatings (59% of sales and 57% of earnings before interest and taxes [EBIT]), and Industrial Coatings (41% and 43%). Sales by subsegment break down as: Performance Coatings, which include Architectural Coatings (35%), Automotive Refinishing (11%), Aerospace (8%), and Protective & Marine (5%). Industrial Coatings comprise: Automotive OEM (17%), Industrial (15%), Packaging (5%), and Specialty Coatings & Materials (4%). The U.S. accounts for 40% of sales.

Good Business

- PPG holds a top three global share in all major paints and coatings end markets. The intensifying technical specifications and performance qualifications of customers is benefiting large sophisticated companies like PPG. Industry consolidation is leading to an R&D critical mass that few can replicate.
- The products are used by customers to protect their assets from corrosion (thus extending useful lives) and for aesthetic and functional purposes, such as managing reflection and absorption of various light wavelengths.
- The industry has pricing power. Prices have generally kept up with cost inflation (albeit with a lag) and remain resilient in periods of cost deflation, thereby improving margins. The cost of the product is typically small compared to either the labor or capital costs of the customer's application process, but the product is critical to end customer satisfaction.
- PPG generates half of its sales from the aftermarket (maintenance), which typically helps to provide some earnings and cash flow stability throughout the cycle. Almost everything gets painted.
- The ROIC is in the mid-teens. Write-offs over the last decade have been de minimis.
- PPG is focused on what is in its control, like costs and new product introductions, irrespective of the economic backdrop. The business is capital-light and labor-intensive, the supply chain is relatively short since paint is heavy to ship, and the company employs a batch manufacturing process, thus making it easier for PPG to react to business cycles.
- This is an understandable business.
- The company has an industry-leading balance sheet with a leverage ratio of 1.6 times and a solid investment-grade credit rating. Free cash flow is typically equal to, or greater than, net income.

Valuation

- Shares of PPG have underperformed the market for some time, as the company has been challenged by higher raw materials costs and mixed sales growth.
- At the current share price, the stock is being valued at an enterprise value-to-last 12 months sales multiple of 1.9, which puts PPG at below its 5-year average of 2.0.
- The P/E multiples on 2019 and 2020 estimates are 17.0 and 15.2, respectively. The enterprise value-to 2019 estimated EBIT multiple is equivalent to 12.6, on a tax-adjusted basis.

Management

- Michael McGarry has been CEO since September 2015 and Chairman since September 2016. He has been characterized as a strong operator who is focused on accelerating profitable organic volume growth through innovation. Vincent Morales has been CFO since March 2017.
- Compensation for executive officers is tied in part to the company achieving a 12% cash flow return on capital.
- With record levels of stock buybacks in the past three quarters, the year-end 2018 share count is expected to be down by approximately 10% from the time when PPG abandoned its bid for AkzoNobel.

- Trian Partners announced its investment in PPG in October 2018. The prominent activist investor owned 4.1 million shares as of September 30, 2018, stating: "Coatings is one of the most attractive sub-segments within chemicals on account of its $140 billion addressable market, rapidly consolidating industry landscape, resilient margins and highly value-add product lines."

Investment Thesis

The investment case for PPG is predicated upon margin recovery through price increases, stabilization of raw material prices, renewed organic volume growth and effective deployment of capital. If the company can deliver on these and return to earnings per share growth of at least 10%, investors will likely re-rate the stock. A recession or poor automotive cycle will temporarily hurt the story, and those fears are currently affecting the multiple. Trian will not challenge PPG's board of directors at its 2019 shareholder meeting after the company met some of the activist's demands, which include an exploration into separating architectural from industrial coatings, de-staggering the board, and removing supermajority voting.

Thank you for your confidence in Fiduciary Management, Inc.

Fiduciary Management Inc.
Large Cap Equity Composite
12/31/2008 - 12/31/2018

Year	Total Return Gross of Fees %	Total Return Net of Fees %	*Benchmark Return %	Number of Portfolios	Dispersion %	Three Year Ex-Post Standard Deviation		Total Composite Assets End of Period ($ millions)	Total Firm Assets End of Period ($ millions)	Percentage of Firm Assets %
						Composite	*Benchmark			
2009	30.92	30.09	26.46	252	1.22	n/a	n/a	$ 3,820.3	$ 7,008.9	54.51%
2010	12.52	11.81	15.06	394	0.31	n/a	n/a	$ 5,923.2	$ 9,816.0	60.34%
2011	2.35	1.74	2.11	509	0.37	18.34%	18.70%	$ 8,434.8	$ 12,273.6	68.72%
2012	16.02	15.32	16.00	575	0.32	13.94%	15.09%	$ 11,270.3	$ 15,253.5	73.89%
2013	31.87	31.10	32.39	685	0.31	11.38%	11.94%	$ 15,785.5	$ 19,705.3	80.11%
2014	13.52	12.81	13.69	725	0.25	8.54%	8.98%	$ 16,084.1	$ 21,001.1	76.59%
2015	-1.54	-2.16	1.38	655	0.27	9.94%	10.48%	$ 14,304.1	$ 21,042.9	67.98%
2016	14.85	14.16	11.96	636	0.32	10.48%	10.59%	$ 12,562.9	$ 22,626.7	55.52%
2017	19.90	19.24	21.83	628	0.32	9.70%	9.92%	$ 12,722.2	$ 25,322.0	50.24%
2018	-3.07	-3.62	-4.38	540	0.29	9.85%	10.80%	$ 9,901.1	$ 19,833.6	49.92%

*Benchmark: S&P 500 Index®

Returns reflect the reinvestment of dividends and other earnings.
The above table reflects past performance. Past performance does not guarantee future results. A client's investment return may be lower or higher than the performance shown above. Clients may suffer an investment loss.

Fiduciary Management, Inc. (FMI) claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. FMI has been independently verified for the periods 12/31/1993 - 12/31/2018. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. The Large Cap Equity composite has been examined for the periods 12/31/2000 - 12/31/2018. The verification and performance examination reports are available upon request. Benchmark returns are not covered by the report of independent verifiers.

FMI was founded in 1980 and is an independent investment counseling firm registered with the SEC and the State of Wisconsin. The firm manages over $19.8 billion in assets of pension and profit sharing trusts, mutual funds, Taft-Hartley funds, insurance company portfolios, endowments and personal trusts. The firm includes both institutional and mutual fund business. Although the firm has participated in wrap programs, it is a separate and distinct business, and is excluded from firm-wide assets.

The FMI Large Cap Equity Composite was created in December 2000. These accounts primarily invest in medium to large capitalization US equities.

The FMI Large Cap Equity Composite reflects time-weighted and asset-weighted returns for all discretionary accounts with a market value greater than $500,000 as of month end beginning January 1, 2012. From December 31, 2000 thru September 30, 2002 all accounts included were managed for at least one quarter, from October 1, 2002 to present all accounts were managed for at least one month. All returns are calculated using United States Dollars and are based on monthly valuations using trade date accounting. All accounts in this composite are fee paying. Gross of fees returns are calculated gross of management fees, gross of custodial fees, gross of withholding taxes and net of transaction costs. Net of fees returns are calculated net of actual management fees and transaction costs and gross of custodial fees and withholding taxes.
Dispersion is calculated using the equal weighted standard deviation of all accounts in the composite for the entire period. As of 12/31/2011, the trailing three year annualized ex-post standard deviation for the Composite and Benchmark are required to be stated per GIPS®.

Currently, the advisory fee structure for the FMI Large Cap Equity Composite portfolios is as follows:

Up to $25,000,000	0.60%
$25,000,001-$50,000,000	0.55%
$50,000,001-$100,000,000	0.45%
$100,000,001 and above	0.35%

The firm generally requires a minimum of $3 million in assets to establish a discretionary account. High Net Worth individuals may establish an account with a minimum of $1,000,000, however, the firm reserves the right to charge a minimum dollar fee for High Net Worth individuals depending on the client servicing involved. The minimum account sizes do not apply to new accounts for which there is a corporate, family, or other substantial relationship to existing accounts. In addition, the firm reserves the right to waive the minimum account size and minimum annual fee under certain circumstances. A complete list and description of all firm composites is available upon request.
Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

The S&P 500 Index® is widely regarded as the best single gauge of the U.S. equities market. This index includes 500 leading companies in leading industries of the U.S. economy. Although the S&P 500® focuses on the large cap segment of the market, with approximately 75% coverage of U.S. equities, it is also an ideal proxy for the total market.
The Large Cap Equity composite uses the S&P 500 Index® as its primary index comparison.