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Review for the Period Ending December 31, 2016

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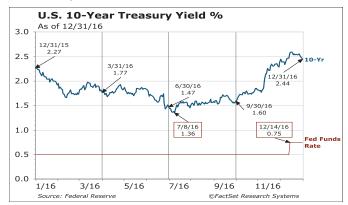




### **Executive Summary**

- Early in 2016, global equity markets witnessed a sharp decline in equity prices due largely to worries about China, anemic global GDP growth, and plunging oil prices, leading many investors to chase yield and lower volatility assets.
- The second half of the first quarter saw a strong rebound of risk assets. Risk-on periods in the second and third quarters were driven by sharp rebounds in Energy, Materials, and other cyclical sectors, supported by a rebound in commodity prices.
- During the fourth quarter, domestic equity markets rebounded strongly postelection on optimism surrounding a Trump administration's potential plans for increased fiscal stimulus, tax reform/repatriation, and deregulation coupled with the Federal Reserve (Fed) pointing to higher interest rates over the next 12 months.
- International equity markets declined across the board in the fourth quarter, though they advanced moderately in 2016. These markets traded largely in line with one another early in the year, with concerns of a Chinese recession in large part sparking a selloff early in 2016. Following the Brexit vote in the United Kingdom in late June, emerging markets separated from the pack and outperformed developed non-U.S. equities through the balance of the year, as investors sought pockets of growth and cyclical sectors led.
- The strengthening of the U.S. dollar continued in the fourth quarter and negatively affected international equity returns for unhedged U.S. investors amid concerns of stricter immigration laws and potential renegotiation of international trade policies/treaties, among other issues.
- Falling U.S. Treasury yields through first-half 2016 reversed course, rising sharply during the fourth quarter. Through first-half 2016, fixed income securities with longer duration and less credit outperformed their shorter duration, more credit-oriented counterparts. During the fourth quarter, a federal funds rate hike, surprisingly robust U.S. economic fundamentals, and increased investor optimism around future fiscal stimulus helped buoy risk assets, generally at the expense of safe-haven Treasuries.
- Demand for risk assets continued during the fourth quarter, with credit option-adjusted spreads tightening moderately in both investment grade and high yield. Concerns about global growth and suppressed commodity prices led to spread widening across credit markets through mid-February. Starting late-February, risk assets rallied, largely shrugging off political shocks such as the Brexit vote and the U.S. presidential election.







### **Executive Summary**

**Major Asset Classes Total Returns** 

As of 12/31/16

Asset Class	Index	3 Month	1 Yr	3 Yrs*	5 Yrs*	10 Yrs*
Global Equity	MSCI ACWI (USD)	1.3%	8.5%	3.7%	10.0%	4.1%
US Equity	S&P 500®	3.8%	12.0%	8.9%	14.7%	6.9%
	Russell 1000®	3.8%	12.1%	8.6%	14.7%	7.1%
	Russell 1000® Growth	1.0%	7.1%	8.6%	14.5%	8.3%
	Russell 1000® Value	6.7%	17.3%	8.6%	14.8%	5.7%
	Russell MidCap®	3.2%	13.8%	7.9%	14.7%	7.9%
	Russell 2000®	8.8%	21.3%	6.7%	14.5%	7.1%
Non-US Equity	MSCI World ex USA (USD)	-0.3%	3.3%	-1.1%	6.6%	1.4%
	MSCI EAFE (USD)	-0.7%	1.5%	-1.2%	7.0%	1.2%
	MSCI World Ex USA Small Cap (USD)	-2.7%	4.7%	1.7%	9.4%	3.1%
	MSCI Emerging Market (USD)	-4.1%	11.6%	-2.2%	1.6%	2.2%
Global Fixed Income	Barclays Global Aggregate	-7.1%	2.1%	-0.2%	0.2%	3.3%
US Fixed Income	Barclays US Aggregate (1-3 Y)	-0.4%	1.3%	0.9%	1.0%	2.5%
	Barclays US Intermediate Aggregate	-2.0%	2.0%	2.4%	1.9%	4.0%
	Barclays US Intermediate Govt/Credit	-2.1%	2.1%	2.1%	1.8%	3.8%
	Barclays US Aggregate	-3.0%	2.6%	3.0%	2.2%	4.3%
	Barclays US Govt/Credit	-3.4%	3.0%	3.0%	2.3%	4.4%
	Barclays US High Yield	1.8%	17.1%	4.7%	7.4%	7.5%
	S&P/LTSA Leverage Loan Index	2.2%	10.9%	2.9%	4.8%	4.5%
	Barclays US TIPS	-2.4%	4.7%	2.3%	0.9%	4.4%
Non-US Fixed Income	Citigroup Non-USD WGBI	- 10.8%	1.8%	-2.2%	-1.9%	2.5%
	JPM EMBI Global	-4.2%	10.2%	5.6%	5.4%	6.8%
Commodities	Bloomberg Commodity Index	2.7%	11.8%	- 11.3%	-9.0%	-5.6%
Public Real Estate	NAREIT All Equity REIT	-2.9%	9.3%	12.4%	12.0%	4.7%
Private Real Estate	NCREIF National Property Index*	1.8%	9.2%	11.3%	11.2%	7.2%
Private Equity	Cambridge Private Equity Index**	3.7%	8.3%	10.6%	13.1%	10.7%
Hedge Funds	HFRX Equal Weighted Strategies	1.3%	3.9%	0.6%	2.1%	-0.1%

Source: FTSE Russell, MSCI, S&P Dow Jones Indices, Bloomberg Barclays Indices, Citigroup, JP Morgan, NAREIT, NCREIF, HFR Indices, Cambridge Associates

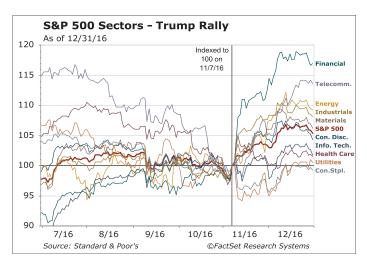
Note \*NCEIF Data as of 9/30/16, \*\* Cambridge Private Equity Index as of 9/30/16

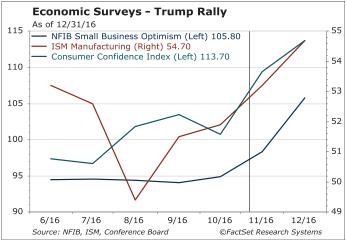


### Postelection Stock Market Rally and Bond Selloff

# Since the election, financial asset prices have quickly recalibrated to reflect President-Elect Donald Trump's anticipated agenda.

- Following the presidential election, the stock market rallied sharply, led by sectors expected to benefit from rising inflation, lower regulation, higher infrastructure spending, and lower taxes.
- Energy, Financials, Materials, and Industrials performed the best. Utilities, normally viewed as a higher-yielding sector, sold off the most, while Information Technology also lagged as many investors expected President-Elect Trump's policies to be detrimental to many industries in the sector.
- There is still a great deal of uncertainty about Mr. Trump's proposed policies; however, several measures of optimism have increased noticeably since the election. With the new administration and a Republican-controlled Congress, fiscal neutrality may be coming to an end, in our view.
- We believe reflation is likely over the next few years as a result of more stimulative fiscal policies that are not likely to be completely negated by an aggressive tightening of monetary policy. Interest rates moved sharply higher in anticipation of a pickup in economic growth and inflation.





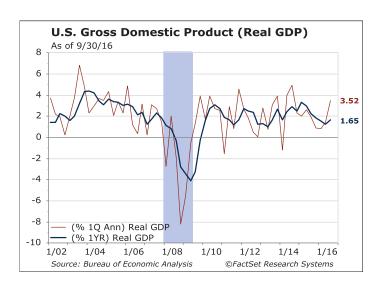




### U.S. Economic Review

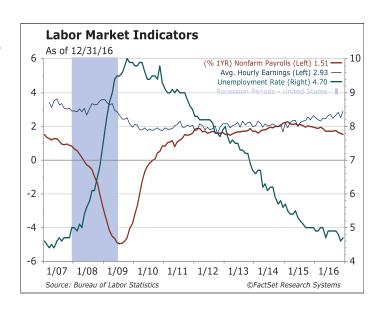
Economic data continue to be firm but largely uninspiring. Real GDP growth of 3.5% during the third quarter was certainly welcome after a very weak first-half 2016.

- The third and final estimate for thirdquarter GDP showed the U.S. economy increased at an annual rate of 3.5%, a material acceleration from just 1.4% in the second guarter.
- The acceleration in the quarter reflected contributions from consumer spending, exports, inventory investment, nonresidential fixed investment, and federal spending. Residential fixed investment was a small headwind during the quarter.
- The Federal Reserve Bank of Atlanta's GDPNOW® series indicates fourth-quarter GDP at an annual rate of 2.9%.



# Unemployment rate ended the year at 4.7%, below the Federal Open Market Committee's (FOMC's) longer-run projections. Wage growth has been moderately accelerating.

- The unemployment rate has decreased significantly since its recession peak of 10% in October 2009. Many market observers are quick to highlight the drop in the labor force participation rate, which has decreased from 67% to under 63%.
- The U-6 measure of unemployment (or underemployment) has also made significant declines from a peak of 17% during the recession down to 9.2%.
- Payroll growth grew 1.75% in 2016, which is a bit slower than 2015's pace but on track with the prior five years. Wage growth, on the other hand, has accelerated over the past five years to a 2.6% annual rate—as we would expect in the later stages of the business cycle.

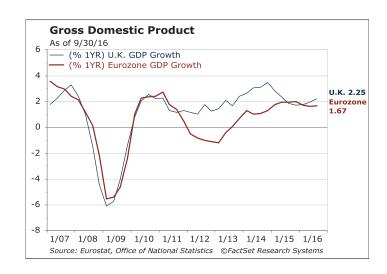




#### International Economic Review

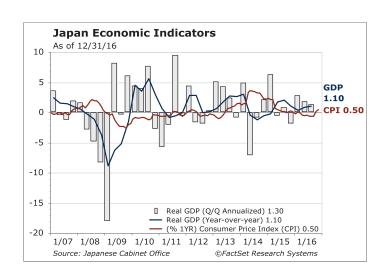
# Economic data in the Eurozone continue to mostly reflect relative stability rather than an acceleration in growth.

- Real GDP in the Eurozone grew 1.7% annualized in the third quarter.
- The European Central Bank (ECB), acknowledging the economy still needs significant policy accommodation, announced an extension of its asset program through December 2017.
- Similar to what is occurring in the United States, support is increasing for economic stimulus via structural reforms and increased infrastructure spending.
- Broadly, Eurozone growth has not yet been affected by the Brexit vote, and the U.K. economy has also remained resilient. Our view is that Brexit will take its toll on U.K. growth over time. Article 50 triggers and negotiations are key items to monitor closely.



# Large downward revision in Japanese GDP, while stocks hit new highs as the yen retreats.

- Third-quarter GDP was revised down sharply to an annualized rate of 1.3% (1.1% year over year) versus the initial report of 2.2%. This revised rate of growth is more consistent with what we believe to be the country's current trend line growth.
- If interest rate differentials between the United States and Japan continue to widen, we would expect additional yen weakness.
- A weaker yen and slightly steeper Japanese yield curve are likely tailwinds to profit margins for Japanese manufacturers and financial firms. Higher corporate profits may help support further wage increases.





### Global Monetary Policy

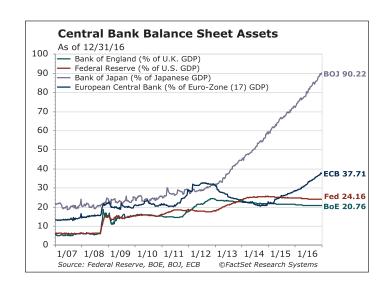
The Federal Reserve (Fed) raised the federal funds target range by 25 basis points (bps) in December. Current Fed "dot plot" projections imply three additional rate increases in 2017.

- As the market expected, the Fed raised the federal funds target range by 0.25 percentage point to 0.50-0.75% at the December Fed meeting.
- Projections for U.S. economic growth in 2017 were marginally increased from 2.0% to 2.1%; the Fed's "dot plot" survey of Federal Open Market Committee participants implies three additional federal funds rate increases during 2017.
- The PNC Economics team's baseline forecast is for <a href="two">two</a> federal funds rate hikes in 2017. With President-Elect Trump and a Republican-controlled House and Senate likely to chart a more expansionary fiscal policy course in 2017, we believe risks are tilted toward more hikes than included in our forecast, rather than fewer.

9/21 12/14	'16	`17	'18	19	Long Run
Real GDP	1.8 1.9	2.0 2.1	2.0	1.8	1.8
PCE	1.3 1.5	1.9	2.0	2.0	2.0
Fed Funds	0.6	1.1 1.4	1.9 2.1	2.6 2.9	<del>2.9</del> 3.0
Source:	Federal	Reserv	e e	-	

# Like the European Central Bank (ECB), the Bank of Japan (BOJ) looks set to continue with its aggressive quantitative easing program in 2017.

- In December, the ECB announced it will taper its asset purchases beginning in April, from €80 billion per month to €60 billion until December 2017.
- ECB deposit rates were left unchanged at -0.4%; the Governing Council broadened the scope of asset purchases to include bonds with remaining maturities of one year or more. The decision may effectively push interest rates even lower.
- Despite weakening inflation expectations, the BOJ did not change its monetary policy stance or implementation.
- The short-term policy rate remains at negative 0.1%; annualized exchangetraded fund purchases of ¥6.0 trillion will target a 10-year Japanese government bond yield around "zero-percent" in an attempt to stave off deflation.

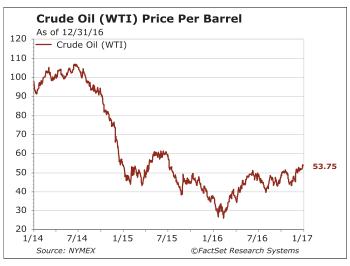




### Oil Prices and Earnings Stability

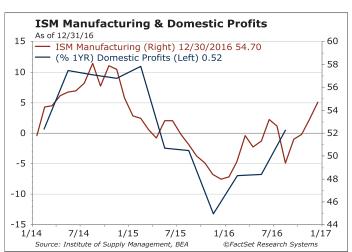
The February low in oil prices marked a 75% decline from the July 2014 high point. Oil prices have increased more than 105% from February through the end of 2016.

- OPEC and non-OPEC oil production deals were reached during December, helping to propel oil prices significantly higher.
- Prices for West Texas Intermediate (WTI) crude oil moved from just over \$45 per barrel to above \$53 per barrel after an agreement was reached between OPEC member nations to cut its overall production by 1.2 million barrels a day.
- An additional agreement was reached between large oil-producing non-OPEC members (namely Russia) to cut its overall production by 558,000 barrels per day.
- Actual compliance and enforcement with these agreements are often an issue, but we view this newfound cooperation as supportive of oil prices going forward.



# Stability in oil prices have helped form a bottom in manufacturing activity and energy, further translating into a bottom in aggregate corporate profits.

- The Institute for Supply Management (ISM) Manufacturing Index, which we view as one of the best leading indicators of economic activity, bottomed around the same time as oil prices during the first quarter of the year.
- Declines in the trailing four quarters operating earnings for the S&P 500®, which fell more than 10% in the early part of 2016, have since begun to moderate.
- Year-over-year earnings-per-share growth turned positive in the third quarter, and consensus is for it to remain positive in the fourth quarter.





### U.S. Equity Markets

#### Economically sensitive sectors continued their rally in the fourth quarter, and defensive sectors extended their retreat from the third quarter.

- The Financials sector led the equity market advance during the fourth quarter largely on prospects for higher interest rates and looser regulations largely benefiting banks, capital markets, and insurance companies. The cyclical sectors of Energy, Industrials, and Materials gained on the expected rampup in U.S. infrastructure spending and an improved global outlook as commodity prices stabilized.
- The bond proxy sectors of Real Estate and Utilities, and the defensive sectors of Health Care and Consumer Staples, came under pressure on the assumption of higher interest rates and increased U.S. economic growth, which may put upward pressure on inflation.
- Despite the declines in the defensive and higher-yielding sectors during the second half of the year, only Health Care finished the year lower.
- On a market capitalization basis, small caps dramatically outperformed large caps, as smaller companies stand to benefit from possible tax reform and any potential repeal of the Affordable Care Act. Smaller companies are also viewed as possible safe havens from potentially disruptive trade policies and currency effects. Higher interest rates may lead some companies to explore merger and acquisition activity to help supplement organic growth.
- Value posted strong results during the fourth quarter across the market cap spectrum and capped off strong 2016 returns, with economically sensitive sectors rallying after the election.
- Growth posted more muted results during the quarter, with exposure to Health Care, Information Technology, and Consumer Discretionary pressuring overall returns.



**Domestic Equity Total Returns** 

As of 12/31/16	3 Month	1 Year	
Russell 3000®	4.2%	100000000000000000000000000000000000000	
S&P 500®	3.8%		
Growth	0.5%	6.9%	
Value	7.3%	17.4%	
Consumer Discretionary	2.3%	6.0%	
Consumer Staples	-2.0%	5.4%	
Energy	7.3%	27.4%	
Financials	21.1%	22.8%	
Health Care	-4.0%	-2.7%	
Industrials	7.2%	18.9%	
Information Technology	1.2%	13.8%	
Materials	4.7%	16.7%	
Real Estate	-4.4%	3.4%	
Telecom Services	4.8%	23.5%	
Utilities	0.1%	16.3%	
Russell 1000®	3.8%	12.1%	
Growth	1.0%	7.1%	
Value	6.7%	17.3%	
Russell Midcap®	3.2%	13.8%	
Growth	0.5%	7.3%	
Value	5.5%	20.0%	
Russell 2000®	8.8%	21.3%	
Growth	3.6%	11.3%	
Value	14.1%	31.7%	

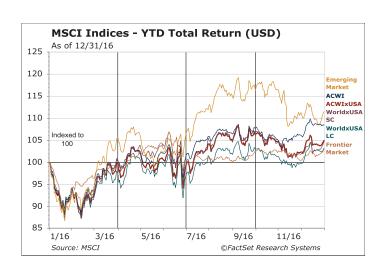
Source: Standard & Poor's, FTSE Russell



### Non-U.S. Equity Markets

# International equity markets declined across the board in the fourth quarter, though they advanced moderately in 2016.

- In 2016, performance across market cap ranges was fairly consistent, though emerging markets significantly outperformed developed markets. Value style continued to outperform growth.
- In a reversal from the third quarter, small cap underperformed large cap, largely the result of many investors expecting exporters to benefit from weakening domestic currencies relative to the dollar.
- Value outperformed growth in the fourth quarter and for the year due to strong performance in cyclical sectors such as Energy and Materials, while Health Care and Consumer Discretionary underperformed.
- The strength of the dollar continued in the fourth quarter and negatively affected international returns for unhedged U.S. investors.
- In Europe, equity returns remained subdued largely due to an overhang from political uncertainty, including the Italian referendum, upcoming French and German elections in 2017, the U.K.'s expected Brexit negotiations, and deflationary pressures.
- In local currency terms, Japanese equities rose during the fourth quarter, leading all developed-world equity markets and benefiting from a weakening yen and optimism about the U.S. and Chinese economies boosting exporters. In U.S. dollar terms, Japanese equities were little changed.



#### Non-US Equity Total Returns (In USDs)

As of 12/31/16	3 Month	1 Year
MSCI ACWI ex USA	-1.2%	5.0%
MSCI World ex USA	-0.3%	3.3%
Growth	-5.2%	-1.5%
Value	4.7%	8.1%
MSCI World ex USA Small Cap	-2.7%	4.7%
Growth	-5.3%	1.1%
Value	-0.1%	8.4%
MSCI EAFE	-0.7%	1.5%
North America	3.5%	12.3%
Europe & Mid. East	-0.5%	-0.1%
Europe	-0.4%	0.2%
Pacific	-1.0%	4.5%
Japan (YEN)	15.0%	-0.4%
Japan (USD)	-0.1%	2.7%
MSCI Emerging Markets	-4.1%	11.6%
BRIC	-3.8%	12.4%
EM Latin America	-0.8%	31.5%
EM EMEA	1.9%	20.5%
EM Europe	9.5%	26.3%
EM Asia	-6.0%	6.5%
China	-7.1%	1.1%
MSCI Frontier Markets	0.5%	3.2%

Source: MSCI

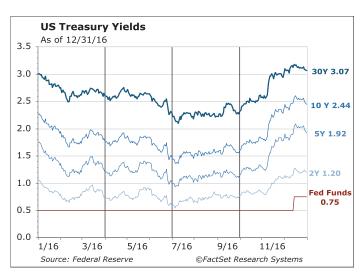
LOC = Local Currency, USD = US Dollar Denominated



#### Taxable Fixed Income Markets

# Falling U.S. Treasury yields through first-half 2016 reversed course, rising sharply during the fourth quarter and pressuring fixed income returns.

- Through the first half of 2016, bonds with longer duration and less credit outperformed their shorter duration, more credit-oriented counterparts.
- U.S. Treasury yields rose across the yield curve during the fourth quarter, jumping in November amid growing anticipation of a December rate hike by the Federal Reserve.
- A federal funds rate hike, stronger-thanexpected U.S. economic fundamentals, and investor optimism around future fiscal stimulus helped buoy risk assets during the fourth quarter, generally at the expense of safe-haven Treasuries.
- Securitized agency credits broadly outpaced Treasuries and corporate securities during the quarter, with agency mortgage-backed securities and asset-backed securities experiencing less downside due in part to shorter durations as rates increased.
- Global yields stretched further into positive territory, with the last two negative-yielding issuers, Japan and Finland, seeing yields turn positive in late October. Within the G-10, non-U.S. sovereigns, losses ranged from 5% to 15%.
- During the quarter, emerging market corporates posted modest losses relative to hard-dollar government issues due in part to the greater duration in sovereigns and the resilience in metals & mining issues.
- For the year, emerging market bonds performed well due in part to the commodities rebound that began in February, especially for commodityrelated sovereigns and industrial securities.



#### Global Fixed Income Total Returns

As of 12/31/2016	3 Month	1 Year
U.S. Aggregate	-3.0%	2.6%
Short 1-3 Year	-0.4%	1.3%
Intermediate Aggregate	-2.0%	2.0%
U.S. Govt/Credit	-3.4%	3.0%
Intermediate Govt/Credit	-2.1%	2.1%
U.S. Treasury	-3.8%	1.0%
U.S. Treasury (1-3)	-0.8%	1.0%
U.S. Treasury (3-5)	-2.1%	1.3%
U.S. Treasury (5-7)	-3.8%	1.3%
U.S. Treasury (7-10)	-5.6%	1.1%
U.S. Treasury (10-20)	-7.3%	1.0%
U.S. Treasury (20+)	-12.2%	1.4%
U.S. TIPS	-2.4%	4.7%
U.S. Credit	-3.0%	5.6%
Securitized	-2.0%	1.8%
US MBS Fixed Rate	-2.0%	1.7%
US ABS	-0.7%	2.0%
Barclays US Universal	-2.6%	3.9%
Barclays Global Aggregate	-7.1%	2.1%
Ex. U.S.	-10.3%	1.5%
Citigroup Non-USD WGBI	-10.8%	1.8%
Hedged USD	-2.2%	5.1%
JP Morgan EMBI Global	-4.2%	10.2%

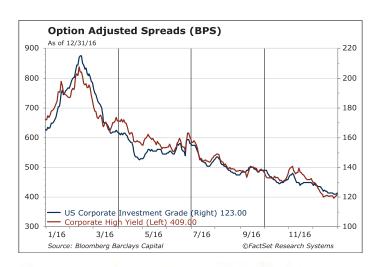
Source: Bloomberg Barclays Indices, Citigroup, JP Morgan



#### Taxable Fixed Income Markets

Demand for risk assets continued during the fourth quarter, with credit option-adjusted spreads tightening moderately in both investment grade and high yield.

- Concerns about global growth and suppressed commodity prices was a factor leading to spread widening across credit markets through mid-February.
- From late-February onward, risk assets rallied sharply and consistently through the year, largely shrugging off political shocks such as the Brexit vote and the U.S. presidential election.
- Despite producing losses during the fourth quarter, corporate investmentgrade securities produced solid investment gains for the year. Financial and utilities securities lagged industrials, which benefited from strong performance of energy and basic materials.
- High yield fixed income securities, particularly lower credit quality securities, posted modest gains for the fourth quarter and produced equity-like gains for the year, with spreads in the high yield index narrowing from over 850 basis points in mid-February to near 400 basis points at year end.
- Spreads on both investment grade and high yield fixed income securities ended the year modestly tighter than historical averages.



#### **Corporate Fixed Income Total Returns**

As of 12/31/16	3 Month	1 Year
US Corporate Invest. Grade	-2.8%	6.1%
Industrials	-3.1%	7.2%
Basic	-2.5%	13.7%
Capital Goods	-3.1%	4.8%
Communications	-4.3%	7.0%
Consumer Cyclicals	-3.3%	5.3%
Consumer Non-cyclicals	-4.1%	4.7%
Energy	-0.5%	13.9%
Technology	-2.4%	5.7%
Transportation	-2.4%	5.7%
Utilities	-4.2%	6.0%
Electric	-4.2%	6.1%
Natural Gas	-4.0%	5.5%
Financial Institutions	-1.9%	4.0%
Banking	-1.6%	3.5%
Asset Managers	-2.2%	4.8%
Finance Company	-2.1%	6.0%
Insurance	-2.6%	5.3%
REITs	-2.6%	4.7%
AAA-Rated	-4.9%	3.4%
AA-Rated	-3.0%	3.6%
A-Rated	-3.1%	4.6%
BAA-Rated	-2.5%	8.0%
US Corporate High Yield	1.8%	17.1%
Ba-Rated	0.4%	12.8%
B-Rated	2.0%	15.8%
CAA-Rated	4.7%	31.5%

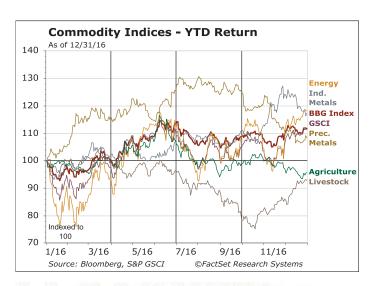
Source: Bloomberg Barclays Indices



#### Alternatives - Commodities

Commodities posted a return of 2.7% for the fourth quarter and 11.8% for full-year 2016, marking the first year of gains since 2010.

- Energy contributed the most to the quarter's return, with oil advancing on news of an OPEC production cut. Also, the price of natural gas rose on tightening inventories and colder weather.
- Industrial metals also performed well, led mainly by copper, which benefited from better economic data out of China and expectations of increased infrastructure spending in the United States.
- Precious metals was the worst performing sector for the quarter, with gold declining due to a stronger dollar and postelection expectations of better economic growth and additional rate hikes.
- On the back of higher energy prices, natural resources and master limited partnerships (MLPs) produced positive returns in the fourth quarter, but infrastructure reported a loss of 4.3% due to a selloff in utilities, airports, and toll roads. These sectors were negatively affected by a combination of rising interest rates and, in the case of airports and toll roads, increased uncertainty about future European unity.
- Despite mixed performance for the quarter, infrastructure, natural resources, and MLPs all reported substantial gains in 2016.



Commodit	v Spot Ra	te Tota	Returns
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As of 12/31/2016	3 Month	1 Year
Bloomberg Commodity Index	2.7%	11.8%
GS Commodity Index	5.8%	11.4%
Energy	7.3%	27.4%
Crude Oil	6.7%	8.0%
Natural Gas	13.6%	9.5%
Heating Oil	8.9%	34.2%
Gasoline	13.9%	6.1%
Industrial Metals	5.7%	17.6%
Aluminum	0.9%	9.7%
Copper	13.6%	17.3%
Lead	-5.8%	10.2%
Nickel	-5.6%	11.8%
Zinc	7.5%	57.3%
Precious Metals	-13.2%	8.4%
Gold	-12.7%	7.7%
Silver	-17.2%	14.0%
Agriculture	-3.1%	-4.2%
Wheat	-2.6%	-24.1%
Corn	2.1%	-9.8%
Cotton	3.0%	10.5%
Livestock	18.4%	-7.3%
Cattle	14.8%	-7.4%
Hogs	30.4%	-2.9%

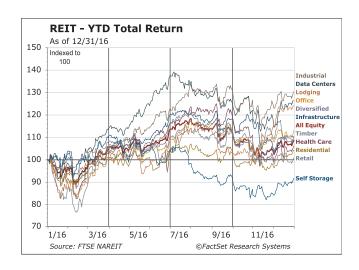
Source: Bloomberg, S&P Goldman Sachs Commodity Index



### Alternatives - Real Estate Investment Trusts (REITs)

REITs reported a loss of 3.3% in the fourth quarter and a gain of 8.6% for full-year 2016. The year was really a tale of two halves for REITs, both in terms of sector leadership and performance relative to broader equities.

- During the first half of 2016, REITs rose 13.7% and outperformed the S&P 500® by almost 1,000 basis points (bps). Conversely, during second-half 2016, REITs declined 4.4% and underperformed the S&P 500 by over 1,200 bps. During the second half of the year, stronger economic data increased the likelihood of a Federal Reserve rate hike later in the year, causing many investors to shy away from higher-yielding sectors. This phenomenon accelerated postelection as yields and expectations of future economic growth rose.
- Lodging and apartments were the best performing sectors in the fourth quarter. Lodging outperformed all other sectors by over 1,800 bps, with expectations for better economic growth leading many investors to believe this could positively affect travel. Lodging and apartments also have shorter leases that are generally able to reset more quickly in response to improving growth and higher inflation.
- Conversely, free-standing retail and health care, which have some of the longest leases and are the most interest-rate-sensitive sectors, were some of the worst performing sectors during the quarter. Regional malls also underperformed on concerns about retailer bankruptcies and store closings, as well as e-commerce trends.
- The top performing sectors for the year were industrial, data centers, and lodging. Industrial benefited from a favorable supply/demand balance and e-commerce trends, and lodging mainly showed strong performance in the fourth quarter.
- The worst performing sectors for the year included self-storage, regional malls, and apartments. After being the sector to report the largest gains in 2015, self-storage underperformed in 2016 partly due to concerns about an increasing level of supply.



#### **REIT Total Returns**

As of 12/31/16	3 Month	1 Year
All Equity REITs	-3.3%	8.6%
All Equity Infrastructure	-7.0%	10.0%
All Timber	-3.5%	8.3%
Equity REITs	-2.9%	8.5%
Data Centers	0.8%	26.4%
Diversified	-2.1%	10.3%
Health Care	-10.8%	6.4%
Industrial	-0.3%	30.7%
Lodging/Resorts	20.4%	24.3%
Office	0.6%	13.2%
Residential	1.1%	4.5%
Retail	-10.7%	0.9%
Self Storage	0.2%	-8.1%

Source: FTSE NAREIT



### Alternatives – Hedge Funds

- **Multi-Strategy:** Multi-strategy performance was mixed on the year, depending on exposures to manager substrategy. For example, funds with high exposure to managed futures generally struggled while many absolute return strategies (such as event driven) or higher beta strategies outperformed.
- Commodity Trading Advisor (CTA)/Global Macro: Performance among global macro hedge funds was mixed during the fourth quarter and throughout 2016. Generally, systematic trend following strategies underperformed while some discretionary managers were able to successfully navigate volatility across geographies to end with positive performance. Managers that succeeded were generally able to capitalize on the following themes: 1) long dollar assets; 2) short developed Europe, especially the euro; and 3) long emerging markets, specifically Latin America and India.
- **Event Driven:** Event-driven managers were the strongest performers among the four major hedge fund strategies during the fourth quarter, with the HFRX Event Driven Index posting a return of 3.65%. This puts the HFRX Event Driven Index up 11.08% for the year. Among the event-driven substrategies, Activists and Distressed/Restructuring managers performed the best. Merger arbitrageurs achieved smaller gains on the quarter.
- **Relative Value:** Relative value managers generally posted gains during the quarter. The corporate credit/high yield market got off to a strong start in October but struggled late in the month, as fears of higher rates and anticipation about the upcoming U.S. election came to the forefront. This muted the positive performance of many managers and pushed others into negative territory.
- equity long/short funds. The HFRX Hedged Equity Index was up 0.8% in the quarter, bringing year-to-date results to 0.1%. This compares to the 12% return for the S&P 500<sup>®</sup>. Global equity long/short alpha was negative in December, causing the fourth quarter to be the second worst quarter since 2010 (first-quarter 2016 was the worst). 2016 is also the first year where alpha generation among equity long/short funds was negative. Longs were challenging throughout the fourth quarter, while shorts were difficult immediately after the U.S. election but started to perform better toward year end.

**Hedge Fund Total Returns** 

As of 12/31/16	3 Month	1 YR	3 YRS*	5 Yrs*	10 Yrs*
HFRI Fund of Funds Composite	1.1%	0.7%	1.3%	3.5%	1.3%
HFRI Fund Weighted Composite	1.3%	5.5%	2.4%	4.5%	3.4%
HFRX Global Hedge Fund	1.2%	2.5%	-0.6%	1.6%	-0.6%
HFRX Equity Hedge	0.8%	0.1%	-0.3%	2.9%	-1.2%
Equity Market Neutral	-1.2%	-5.1%	1.2%	0.1%	-0.4%
HFRX Event Driven	3.7%	11.1%	-0.3%	3.7%	1.0%
Distressed Securities	5.4%	19.7%	2.3%	2.6%	-2.6%
Merger Arbitrage	1.1%	4.3%	4.9%	3.9%	4.0%
HFRX Macro	-1.8%	-2.9%	0.1%	-0.5%	-1.0%
HFRX Relative Value Arbitrage	1.3%	1.0%	-1.8%	0.2%	-0.5%
Convertible Arbitrage	0.6%	5.8%	-1.4%	2.5%	-3.5%

Source: HFR Indexes



### **Capital Markets Outlook**

#### Economic and Asset Class Outlook

Ultimately, we expect fiscal stimulus to take the reins from increasingly impotent monetary policy, helping to create an environment that is likely to prove more fundamentally supportive than what we have seen in recent years.

- Since the election, financial asset prices have quickly recalibrated to reflect President-Elect Donald Trump's anticipated agenda of sharply higher interest rates and equity prices in anticipation of a pickup in economic growth and inflation.
- For now, **the fundamental backdrop still poses some distinct challenges** valuations are elevated, significant credit expansion appears unlikely, global growth has yet to show signs of a meaningful acceleration, and productivity gains have been rather poor.
- The outcome for financial markets could be binary in 2017, with expectations high for fiscal policy to propel fundamental growth.
  - If investors continue to believe that broad tax cuts/reforms, infrastructure spending, and reduced regulation will steepen the U.S. growth trajectory, then we believe it is easy to make the case for a late-cycle bull market surge and possibly an extension of the current business cycle.
  - However, if clear progress is not made and in rather short order, or adverse international political or trade developments were to occur, optimism may very well give way to pessimism, increasingly bearish sentiment, and possibly a more rapid end to the current cycle.

Growth is unlikely to accelerate organically (and significantly) in the coming quarters, but we believe the outcome of the election is likely to boost confidence enough in the near term to support at least a modest improvement in overall economic conditions.

- Our outlook for **domestic equities** is one of cautious optimism. Chances of a recession remain low, and we believe prices can move even higher from their current lofty levels. But upward momentum is mostly a function of the *potential* for an acceleration in growth on the heels of possible policy changes the new administration might begin to implement.
- Even though **developed international** valuation multiples appear relatively more attractive versus domestic equities, we see more potential risks and disruptions and fewer positive growth catalysts. A stronger U.S. dollar in 2017 may present headwinds to U.S. investors. We think **emerging markets equities** are very likely to remain under pressure in 2017. We are similarly cautious on **emerging market debt**.
- We believe there are still a number of secular factors in place that will likely enable a lower-for-longer interest rate environment to persist, including a global savings glut, demographic tends, and high and rising debt levels. The market's anticipation of potential changes (higher growth and inflation, a more hawkish Federal Reserve) may be all that matters in the short run for interest rate movements, in our view. **We expect to**maintain neutral duration positioning throughout 2017. The overall environment is generally supportive of high yield credit, and we expect default rates to continue to moderate, if not fall, from present levels.



**Investment Policy Statement** 

#### **EXHIBIT 4**

#### **CLEVELAND PUBLIC LIBRARY**

Finance Committee June 14, 2016

#### RESOLUTION REVISING THE LIBRARY'S INVESTMENT POLICY

- WHEREAS, On March 20, 2014, the Board of Library Trustees approved the Library's Investment Policy; and
- WHEREAS, It is now deemed necessary to amend the Library's Investment Policy; now therefore be it
- RESOLVED, That the Board of Library Trustees approves the attached Cleveland Public Library Investment Policy to become effective June 16, 2016; and be it further resolved
- RESOLVED, That the Fiscal Officer obtain the required acknowledgments and convey this policy to the Auditor of State.

#### CLEVELAND PUBLIC LIBRARY INVESTMENT POLICY

#### I. Introduction

The purpose of this investment policy is to establish priorities and guidelines regarding the investment management of the Library's investment funds [hereinafter referred to as the "Portfolio" (section II)] and the Library's endowment funds [hereinafter referred to as the "Endowments" (section III)]. Overall priorities and guidelines for the Portfolio are based upon *Ohio Revised Code* Chapter 135.14 and prudent money management. Guidelines for the Endowments are based upon *Ohio Revised Code* Chapter 2109.37 and 2109.371 as delineated by a 1975 Cuyahoga County Probate Court Order and a ruling from the Cuyahoga County Prosecutor's Office.

The effective date of this policy is June 16, 2016 and represents a revision to the previously submitted policy, dated March 20, 2014. It is the fourth revision to the original policy dated June 17, 2000 (1st revision September 18, 2003; 2nd revision September 15, 2005, 3rd revision March 20, 2014, 4th revision June 16, 2016). This policy includes [totally or partially] sections of the statute in order to describe eligible investments. In some sections, the policy places further limits upon the use of eligible investments or investment transactions.

#### II. The Portfolio

#### A. Investment Objectives

The investment objectives of the Portfolio, in priority order, include:

- 1. Compliance with all Federal and State laws
- 2. Safety of principal

Safety of principal is the most important objective. The investment of Library funds shall be conducted in a manner that seeks to ensure the preservation of capital within the context of the following criteria:

#### Credit Risk

Credit risk is the risk of loss due to the failure of a security issuer to pay principal or interest, or the failure of the issuer to make timely payments of principal or interest. Eligible investments, pursuant to Chapter 135.14 ORC, affected by credit risk include certificates of deposit, commercial paper, and bankers acceptances. Credit risk will be minimized by (1) diversifying assets by issuer; (2) ensuring that required, minimum credit quality ratings exist prior to the purchase of commercial paper and bankers acceptances; and (3) maintaining adequate collateralization of certificates of deposit and other deposit accounts pursuant to the method as determined by the Fiscal Officer.

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#### Market risk

The market value of securities in the Library's portfolio will increase or decrease based upon changes in the general level of interest rates. The effects of market value fluctuations will be mitigated by (1) maintenance of adequate liquidity so that current obligations can be met without a sale of securities; (2) diversification of maturities; (3) diversification of assets.

#### 3. Liquidity

The portfolio shall remain sufficiently liquid to meet all current obligations of the Library. Minimum liquidity levels [as a percentage of average investable funds] may be established in order to meet all current obligations. The portfolio may also be structured so that securities mature concurrently with cash needs.

#### 4. Yield

The portfolio shall be managed to consistently attain a market rate of return throughout budgetary and economic cycles. Whenever possible, and consistent with risk limitations and prudent investment management, the Library will seek to augment returns through the implementation of active portfolio management strategies.

#### B. Authorized Investments (itemized)

- U.S. Treasury Bills, Notes, and Bonds; various federal agency securities including issues of Federal National Mortgage Assn. (FNMA), Federal Home Loan Mortgage Corp. (FHLMC), Federal Home Loan Bank (FHLB), Federal Farm Credit Bank (FFCB), Government National Mortgage Association (GNMA), and other agencies or instrumentalities of the United States. Eligible investments include securities that may be "called" [by the issuer] prior to the final maturity date. Any eligible investment may be purchased at a premium or a discount. All federal agency securities shall be direct issuances of federal government agencies or instrumentalities.
- Bonds and other obligations of this state, or the political subdivisions of this state, provided that, with respect to bonds or other obligations of political subdivisions, all of the following apply:
- (a) The bonds or other obligations are payable from general revenues of the political subdivision and backed by the full faith and credit of the political subdivision.
- (b) The bonds or other obligations are rated at the time of purchase in the three highest classifications established by at least one nationally recognized standard rating service and purchased through a registered securities broker or dealer.
- (c) The aggregate value of the bonds or other obligations does not exceed twenty per cent of interim moneys available for investment at the time of purchase.

(d) The Library is not the sole purchaser of the bonds or other obligations at original issuance.

No investment shall be made under 135.14 (B)(4) of the ORC unless the Chief Financial Officer has completed additional training for making the investments authorized by 135.14 (B)(4). The type and amount of additional training shall be approved by the treasurer of the state and may be conducted by or provided under the supervision of the treasurer of state.

Up to forty per cent of interim moneys available for investment in either of the following:

- Commercial paper notes issued by an entity that is defined in division (D) of section 1705.01 of the Revised Code and that has assets exceeding five hundred million dollars, to which notes all of the following apply:
- (a) The notes are rated at the time of purchase in the highest classification established by at least two nationally recognized standard rating services.
- (b) The aggregate value of the notes does not exceed ten per cent of the aggregate value of the outstanding commercial paper of the issuing corporation.
  - (c) The notes mature not later than two hundred seventy days after purchase.
- (d) The investment in commercial paper notes of a single issuer shall not exceed in the aggregate five per cent of interim moneys available for investment at the time of purchase.
- Bankers acceptances of banks that are insured by the federal deposit insurance corporation and that mature not later than one hundred eighty days after purchase.

No investment shall be made pursuant to 135.14 (B)(7) ORC unless the Chief Financial Officer has completed additional training for making the investments authorized by 135.14 (B)(7). The type and amount of additional training shall be approved by the treasurer of state and may be conducted by or provided under the supervision of the treasurer of state.

- Interim deposits in the eligible institutions applying for interim moneys as provided in Section 135.08 ORC.
- No-load money market mutual funds, as defined in 135.14(B)(5), rated in the highest category by at least one nationally recognized rating agency, investing exclusively in the same types of eligible securities as defined in Division B(1) or B(2) under 135.14 ORC, and repurchase agreements secured by such obligations. Eligible money market funds shall comply with 135.01 ORC, regarding limitations and restrictions.
- Repurchase agreements with any eligible institution mentioned in section 135.03 ORC, or any eligible securities dealer pursuant to (M) of 135.14 ORC of this section, except that such eligible securities dealers shall be *restricted to primary government securities dealers*.

- Repurchase agreements will settle on a delivery versus payment basis with collateral held at a qualified custodian or agent, designated by the Library. Eligible repo collateral is restricted to securities listed in division (B)(1) or (B)(2) under 135.14 ORC. The market value of securities subject to a repurchase agreement must exceed the principal value of the repo amount by at least 2%. Prior to the execution of any repo transaction, a master repurchase agreement will be signed by the Library and the eligible parties. The Chief Financial Officer may determine that an additional market value of collateral will be required.
- The state treasurer's investment pool [STAROHIO], pursuant to Section 135.45 ORC, and any other investment alternative offered to political subdivisions by the Treasurer of State.
  - The use of derivative securities, as defined in 135.14 (C), is expressly prohibited.
- All eligible investments will mature within five years from the date of settlement, unless the investment is matched to a specific future obligation or debt of the Library, and the investment is specifically approved by the Board of Trustees.

The Chief Financial Officer shall determine, or approve, the method of calculating the average portfolio when percentage limitations must be determined for the investment in certain eligible investments, such as commercial paper, bankers acceptances, and obligations of political subdivisions.

#### C. <u>Prohibited Investments</u>

In addition to any express requirements of Chapter 135 or Section 351.20 of the Ohio Revised Code, the following are prohibited investment activities of the Library:

- The use of derivative securities, as defined in various sections of Chapter 135 of the Ohio Revised Code, specifically Section 135.14 ORC.
- A repurchase agreement under the terms of which the Library agrees to sell securities to a purchaser and agrees with that purchaser to unconditionally repurchase those securities (reverse repurchase agreement).
  - The issuance of taxable notes for the purpose of arbitrage.
- The use of leverage, in which the Library uses its current investment assets as collateral for the purpose of purchasing other assets.
- Contracting to sell securities, not owned by the Library, for the purpose of purchasing such securities at a later date on the speculation that bond prices will decline (short selling).
- Any investment made pursuant to this section must mature within five years from the date of settlement, unless the investment is matched to a specific obligation or debt of the subdivision, as provided for under [135.14(D) ORC].

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#### D. Safekeeping and Custody

Securities purchased for the Library will be held in safekeeping by a qualified trustee [hereinafter referred to as the "Custodian"), as provided in Section 135.37 ORC. Securities held by the custodian will be evidenced by a monthly statement describing such securities. The custodian may safekeep the Library's securities in (1) Federal Reserve Bank book entry form; (2) Depository Trust Company (DTC) book entry form in the account of the custodian or the custodian's correspondent bank; or (3) Non-book entry (physical) securities held by the custodian or the custodian's correspondent bank. All securities transactions will settle using standard delivery-vs-payment (DVP) procedures. The records of the custodian shall identify such securities in the name of the Library. Under no circumstances will the Library's investment assets be held in safekeeping by a broker/dealer firm, or a firm acting on behalf of a broker/dealer firm.

#### E. The Board of Trustees of the Library

The Library Board of Trustees shall meet as necessary to review the Portfolio. Specific areas of review include the investment inventory, transactions for the period, and realized income. The Chief Financial Officer may also recommend changes to the existing investment policy. Any amended policy that has been approved by the Library Board shall be filed with the Auditor of State.

#### F. Portfolio Reporting

The Library shall maintain an inventory of all portfolio assets. A description of each security will include security type, issue/issuer, cost [original purchase cost or current book value], par value [maturity value], maturity date, settlement date [delivery versus payment date of purchased or sold securities], and any coupon [interest] rate. The investment report will also include a record of all security purchases and sales. Regularly issued reports will include a monthly portfolio report and a quarterly portfolio report to the Library detailing the *current* inventory of all securities, all investment transactions, any income received [maturities, interest payments, and sales], and any expenses paid. The report will also include the purchase yield of each security, the average-weighted yield and average-weighted maturity of the portfolio.

The portfolio report shall state the name(s) of any persons or entity effecting transactions on behalf of the investing authority.

#### G. Investment Advisors, Qualified Dealers and Financial Institutions

The Library may retain the services of a registered investment advisor. The investment advisor will manage the Library's portfolio and will be responsible for the investment and reinvestment of such investment assets, including the execution of investment transactions.

Upon the request of the Fiscal Officer, the investment advisor will attend meetings and will discuss all aspects of the Library's portfolio, including bond market conditions affecting the value of the Library's investments. The investment advisor will be required to issue portfolio reports as defined under section II-E of this investment policy ["Portfolio Reporting"].

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The investment advisor may transact business (execute the purchase and/or sale of securities) with eligible Ohio financial institutions, primary securities dealers regularly reporting to the New York Federal Reserve Bank, and regional securities firms or broker dealers licensed with the Ohio Department of Commerce, Division of Securities, to transact business in the State of Ohio.

Under no circumstances will brokers or broker/dealer firms act as an investment advisor or in a similar capacity as an investment advisor, either directly or indirectly, if such broker/dealer participates in transaction business (purchase and sale of securities) with the Fiscal Officer or the Fiscal Officer's investment advisor.

All persons or entities transacting investment business with the Library are required to sign the approved investment policy as an acknowledgment and understanding of the contents of said policy.

#### H. Sale of Securities Prior to Maturity

Portfolio securities may be "redeemed or sold" prior to maturity under the following conditions:

- (1) To meet additional liquidity needs
- (2) To purchase another security to increase yield or current income
- (3) To lengthen or shorten the portfolio's average maturity (average duration)
- (4) To realize any capital gains and/or income
- (5) To adjust the portfolio's asset allocation

Such transactions may be referred to as a "sale and purchase" or a "bond swap". For purposes of this section, redeemed shall also mean "called" in the case of a callable security.

#### I. Procedures for the Purchase and Sale of Securities

Securities will be purchased or sold through approved broker/dealers on a "best price and execution" basis. All such investment transactions will be communicated by electronic transmission to the Fiscal Officer or to an authorized representative, designated by the Fiscal Officer. A purchase or sale of securities will be represented by transaction advices issued by the Library's investment advisor, which will describe the transaction, including par value, coupon (if any), maturity date, and cost. A facsimile transmission will also be sent to the Library's designated custodian bank and will serve as an authorization to said custodian to receive or deliver securities versus payment. Confirmation advices, representing the purchase or sale of securities, will be issued by the eligible broker/dealer and sent to the investing authority. Copies of such advices will be sent to the Library's investment advisor.

#### III. The Endowment

#### A. Investment Objectives

The Library seeks to maximize the long-term total return of its Endowments. As a result, the maintenance and growth of the funds are the primary objectives. The Library's ability to achieve these returns will depend upon the acceptance of moderate risk, recognizing that a reasonable degree of volatility in market value is necessary to achieve long-term capital appreciation.

#### B. Authorized Investments

In recognition of the expected returns and volatility from financial assets, the Library will be invested in the following ranges with the target allocation noted:

	Range	<u>Target</u>
Equities	50-70%	60%
Fixed Income	15-35%	25%
Alternatives	0-30%	15%
Cash Equivalents	0-10%	

The midpoints of the above ranges will be considered the long-term or policy allocation. Any deviations beyond this mix of securities must have prior approval by the Board of Library Trustees. Allocations to cash equivalents are to be considered a subset of the Fixed Income allocation along with Convertible Assets.

Within the above ranges, the Library's Endowment Fund Manager will make all tactical asset allocation decisions (over-and-under-weights). Deviations outside of the above ranges require prior approval from the Library.

#### C. Equity Guidelines

**Objective** – Achieve long term returns which exceed those of the overall equity market. Specialty equities (styles differing from the S&P 500) have been incorporated into this policy with the intention of delivering superior long-term performance and improved diversification.

In evaluating long term (full market cycle) performance, overall equity returns will be compared to the indices noted below.

In recognition of the expected returns and volatility provided by different segments of the equity market, equity assets will be invested in the following ranges with the policy allocation noted:

	Range	% Allocation
Large-Cap Stocks	50-90%	60%
Mid-Cap Stocks	0-20%	10%
Small-Cap Stocks	0-20%	10%
International Equities	10-30%	20%

Equity assets will be managed in accordance with the following:

- Equity investments should be broadly diversified. The equity investment in any single company should not exceed 5 percent of the equity portfolio, based on market value. Investments in mutual funds are not be subject to this limit. Short sales, private securities, letter stock, commodities, and put and call contracts are expressly prohibited.
- Investments in Mid-Cap, Small Cap and International Equities may be made through the use of funds. Funds selected will be diversified and generally conform to the above-mentioned company and industry guidelines.
- Real Estate investment will be implemented through REIT investments or through the use of a REIT-based mutual fund.
- The overall equity benchmark is the MSCI ACWI. Managers will be measured against their respective category benchmark (i.e. Russell 2000 Index).

#### D. Fixed Income Guidelines

**Objective** – Achieve returns that exceed those of the investment grade aggregate bond market and to provide additional long-term performance. The Fixed Income Investment style returns will be compared to the Barclays Capital U.S. Aggregate Bond Index.

Fixed income assets will be managed in accordance with the following:

• Minimum criteria for direct investment in a bond:

Par Value of issue	\$100 million outstanding at time of
	purchase
Quality of issue	A or better by Standard & Poor's
	Or A2 or better by Moody's

• The Market value of the aggregate holdings of an individual corporate debtor should not exceed 5% of the organization's debt related assets.

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- The average maturity of the bond portfolio should be within a +/- 25% range of the Barclays Capital U.S. Aggregate Bond Index. The investment manager will have full discretion to determine the average maturity within this range.
- The maximum maturity for individual U.S. Treasuries, Agencies, and corporate bonds will be 20 years.
- Individual mortgage-backed securities (MBS) and asset-backed securities (ABS) may have maturities of greater than 20 years but the duration should not exceed 12 years.
- Fixed Income mutual funds may be used to further enhance diversification, provide better coverage of the yield curve, and/or improve liquidity.

#### E. Liquidity Guidelines

**Objective** – Cash equivalents will be invested in an appropriate cash-equivalent fund. Returns should be comparable to or benchmarked to the 90-day Bank of America Merrill-Lynch Treasury Bill Index.

Cash equivalent investments must be made in high quality obligations of the U.S. Government and its Agencies. Money market mutual funds may be used, so long as these mutual funds meet the high standards suitable for the funds of this nature.

#### F. Prohibited Investments

The investment manager is prohibited from investments in the followings:

- Fixed Income securities not denominated in U.S. Dollars or Eurodollars
- Venture Capital
- Guaranteed Insurance Contracts
- Commodities
- Precious Metals or Gems
- Options, futures, or any contract whose value is derived from the price of an underlying asset or index (Derivatives)
- Short-selling and other hedging strategies
- Private Placements or "restricted" stock
- No investments in securities deemed to be in violation of prohibited transaction standard of ERISA.
- It is understood that investments into funds (i.e. mutual or ETF's) may utilize derivatives and are exempted from the above exceptions.

#### G. Investment Review

**Objective** – Achieve financial returns for the Library which preserve the principal asset value and are competitive relative to those offered by the financial markets.

**Review** – The Investment Committee will compare the investment performance of the Investment Manager to the following benchmarks:

• The blended performance of 60% MSCI ACWI 40% Barclays Capital U.S. Aggregate Bond Index policy benchmark over a full market cycle.

In addition, the Investment Committee will compare the various asset classes to the following benchmarks:

- 1. The annual total return of U.S. equity securities will be compared to the Russell 3000 Index measured over a three to five year time period.
- 2. Within each equity allocation/style, performance will be compared to the respective manager benchmark.
- 3. The annual total return of fixed income securities will be compared to the Barclays Capital U.S. Aggregate Bond Index over a three to five year time period.
- 4. Real Estate investment will be compared to the NAREIT (applicable benchmark) Index; Convertible Assets will be compared to BoA/Merrill Lynch Investment Grade Convertible Securities index.
- 5. The annual total return of cash equivalents will be compared to the BoA/Merrill Lynch 90 day T-Bill Index.

#### H. Endowment Fund Manager

The Board of Library Trustees shall select an endowment fund manager and custodian for the Library's Endowments by authorizing Board resolution. The Board of Library Trustees shall approve a separate written agreement with its selected endowment fund manager governing terms of service, compensation, and related issues.

Revised: June 16, 2016

#### IV. **Statements of Compliance**

This investment policy has been approved by the investing authority and the governing board and filed with the Auditor of State, pursuant to Ohio Revised Code 135.14 (N)(1).

All brokers, dealers, and financial institutions executing transactions initiated by the Library or the Library's investment advisor have signed the approved investment policy. Investment policies [signed by such brokers, dealers, and financial institutions] are filed with the Fiscal Officer of the Library.

The Library's Portfolio and Endowment investment advisors are registered with the Securities and Exchange Commission and/or the Comptroller of the Currency and possesses public funds investment management experience, specifically in the area of state and local government investment portfolios. The investment advisor has additionally signed the approved investment policy and the signed policy is filed with the Fiscal Officer of the Library.

Any amendments to this policy will be filed with the Auditor of State [Attn: Clerk of the Bureau, P.O. Box 1140, Columbus, OH, 43216-1140] within fifteen days of the effective date of the amendment.

The following broker/dealer/financial institution/investment advisor or endowment fund manager has signed, herein, this approved investment policy, having read the policy's contents thereby acknowledging comprehension and receipt:

Signature of Register Representative

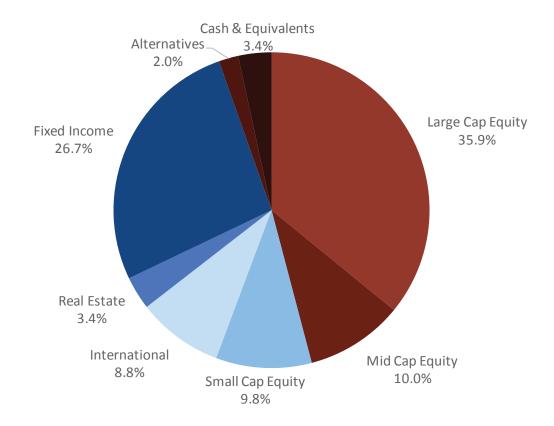
Financial Institution Representative

Type Name of Registered Representative Financial Institution Representative

Portfolio Review

### **Asset Allocation**

#### As of 12/31/2016



	Market Value	Portfolio Allocation	Policy Range
Large Cap Equity	\$7,839,074	35.9%	
Mid Cap Equity	\$2,189,246	10.0%	
Small Cap Equity	\$2,132,459	9.8%	
International	\$1,928,517	8.8%	
Real Estate	\$735,735	3.4%	
Total Equity	\$14,825,031	67.9%	50% - 70%
Fixed Income	\$5,822,561	26.7%	15% - 35%
Alternatives	\$439,862	2.0%	0% - 30%
Cash & Equivalents	\$749,779	3.4%	0% - 10%
Total	\$21,837,234	100.0%	



## Portfolio Holdings

As of 12/31/2016

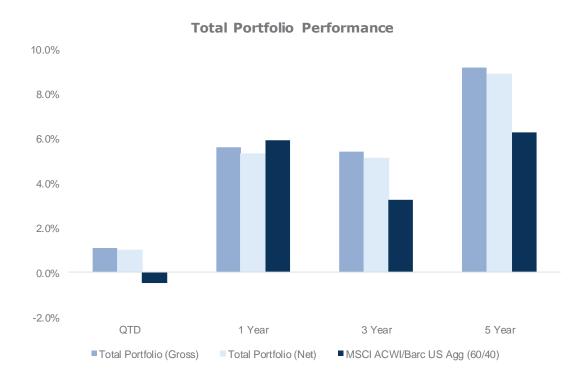
Description	Heita	Duine	Market	% of
Description	Units	Price	Value	Total
Large Cap Core				
iShares Tr S&P 500 Index ETF	17,639	\$224.99	\$3,968,599	18.2
PNC Large Cap Core	17,000	ΨΖΖ-1.00	\$3,870,475	17.7
1110 Lange Cap Co.10			φο,ο. ο, ο	
Mid Cap Core				
iShares Russell Midcap	12,240	\$178.86	\$2,189,246	10.0
Small Cap Core				
PNC Small Cap Core	88,815	\$24.01	\$2,132,459	9.8
International	00.000	<b>0.10.10</b>	<b>*</b> 404 400	0.0
PNC International Equity Fund	80,326	\$18.48	\$1,484,420	6.8
Seafarer Overseas Growth	39,865	\$11.14	\$444,097	2.0
Real Estate				
T Rowe Price Real Estate Fund	25,815	\$28.50	\$735,735	3.4
1 Nowe Frice Near Estate Fund	25,615	Ψ20.30	Ψ133,133	3.4
Total Equity			\$14,825,031	67.9
			<b>4</b> 1 1,0 <b>2</b> 0,00 1	0110
Fixed Income				
PNC Capital Advisors			\$5,822,561	26.7
Total Fixed			\$5,822,561	26.7
Alternatives				
AQR Long-Short Equity	33,654	\$13.07	\$439,862	2.0
<b>-</b>			<b>A</b> 400 000	
Total Alternatives			\$439,862	2.0
Short Torm				
Short Term	740 770	\$1.00	¢740.770	3.4
Cash & Equivalents	749,779	φ1.00	\$749,779	3.4
Total Short Term			\$749,779	3.4
I Star Short I Gilli			Ψ143,113	5.4
Total for Account			\$21,837,234	100.0
			<del>+</del> ,••.,=• <del>+</del>	10010



**Investment Performance** 

### Total Portfolio Performance

#### As of 12/31/2016



	QTD	1 Year	3 Year	5 Year
Total Portfolio (Gross)	1.09%	5.60%	5.41%	9.20%
Total Portfolio (Net)	1.02%	5.31%	5.12%	8.90%
MSCI ACWI / Barclays U.S. Aggregate (60/40)	-0.48%	5.92%	3.26%	6.63%
MSCI ACWI / Barclays Global Aggregate (60/40)	-2.16%	5.69%	1.94%	5.76%
Total Equity	2.53%	7.57%	7.16%	13.04%
MSCIA ACWI (Net	1.19%	7.87%	3.13%	9.36%
Russell 3000	4.21%	12.73%	8.43%	14.67%
Total Fixed	-2.03%	1.57%	1.83%	1.70%
Barclays Global Aggregate	-7.07%	2.09%	-0.18%	0.21%
Barclays U.S. Aggregate	-2.98%	2.65%	3.03%	2.23%



### Manager Performance

### As of 12/31/2016

	QTD	1 Year	3 Year	5 Year
Large Cap Core				
iShares Tr S&P 500 Index ETF	3.81%	11.90%	8.81%	14.59%
S&P 500 TR	3.82%	11.96%	8.87%	14.66%
PNC Large Cap Core	2.61%	6.80%	9.13%	13.21%
S&P 500 TR	3.82%	11.96%	8.87%	14.66%
Mid Cap Core				
iShares Russell Midcap	3.20%	13.66%	7.77%	14.53%
Russell Midcap	3.21%	13.80%	7.92%	14.72%
Small Cap Core				
PNC Small Cap Fund	8.25%	10.04%	6.10%	15.71%
Russell 2000	8.83%	21.31%	6.74%	14.46%
Total International				
PNC International Equity Fund	-4.50%	0.49%	-1.25%	9.08%
MSCI ACWI Ex US Net	-1.26%	4.49%	-1.78%	5.00%
Seafarer Overseas Growth	-6.47%	9.34%	1.46%	n/a
MSCI Emerging Market Net	-4.16%	11.19%	-2.55%	1.28%
Other Equity				
T Rowe Price Real Estate Fund	-1.83%	6.04%	12.96%	11.74%
NAREIT ALL Equity Reits	-3.28%	8.63%	12.66%	11.98%
Fixed Taxable				
PNC Intermediate Govt Credit SMA	-2.03%	1.57%	1.83%	1.70%
Barclays Intermediate Govt/Credit	-2.07%	2.08%	2.09%	1.85%
<b>Total Alternatives</b>				
AQR Long-Short Equity	4.86%	11.09%	14.32%	n/a
HFRX Equity Hedge	0.79%	0.10%	-0.28%	2.92%

#### **Inception Dates**:

iShares S&P 500 ETF - 11/2016
PNC Large Cap Core SMA - 9/2009
iShares Russell Midcap ETF - 1/2013
PNC Small Cap Fund - 7/2004
PNC International Equity Fund - 8/1997
Seafarer Overseas Growth & Income - 12/2016
T Rowe Price Real Estate Fund - 05/2014
PNC Intermed Govt Credit SMA - 12/1990
AQR Long-Short Equity Fund - 12/2016

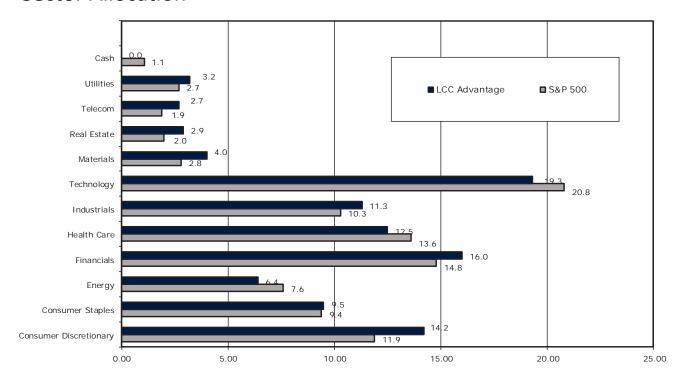


# Large Cap Core Advantage Portfolio As of 12/31/16

#### Portfolio Valuation

	Number of Holdings	Dividend Yield
PNC Large Cap Core Advantage	68	1.5%
S&P 500	505	2.0%

#### **Sector Allocation**



### Top 10 Holdings

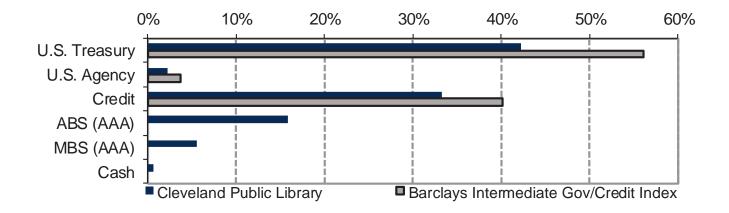
S	Security Name		
1	JP Morgan Chase & Co	3.55%	
2	Alphabet Inc	2.86%	
3	Apple Inc	2.56%	
4	Facebook Inc Cl A	2.37%	
5	Comcast Corp Cl A	2.13%	

S	Security Name			
6	Johnson & Johnson	2.05%		
7	Home Depot 2			
8	Constellation Brands Inc	1.94%		
9	Pfizer Inc	1.91%		
10	Walt Disney Co	1.90%		



### Fixed Income Allocation

As of 12/31/2016



	Market Value	Current Weight	Index Weight*	Difference
U.S. Treasury	\$2,465,331	42.3%	56.1%	-13.8%
U.S. Agency	\$121,708	2.2%	3.7%	-1.5%
Credit	\$1,940,665	33.3%	40.2%	-6.9%
ABS (AAA rated)	\$928,438	15.9%	0.0%	+15.9%
MBS (AAA rated)	\$323,163	5.6%	0.0%	+5.6%
Cash	\$43,256	0.7%	0.0%	+0.7%
Total Portfolio	\$5,822,561	100.0%	100.0%	-

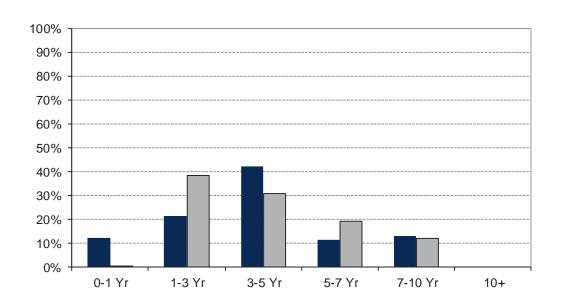


<sup>\*</sup>Barclays Intermediate Gov/Credit Index

#### **Portfolio Statistics**

	Duration	YTM	Avg. Life	Avg. Coupon
Cleveland Public Library	3.91 yrs	2.04%	4.37 yrs	2.38%
Barclays Intermediate Gov/Credit Index	4.03 yrs	2.11%	4.39 yrs	2.44%

#### **Effective Duration Buckets**



■ Cleveland Public Library

■ Barclays Intermediate Gov/Credit Index

#### **Quality Allocation**

	AAA	AA	А	BBB	Avg.
Cleveland Public Library	72%	8%	20%	1%	Aa1
Barclays Intermediate Gov/Credit Index	65%	5%	13%	17%	Aa2



Market Outlook



### PNC's Market Outlook 4Q16 Positives (+), Negatives (-), and Uncertainties (~) in the Current Environment

Economy	+	<ul> <li>We expect sustainable global and U.S. GDP growth for 2017, while downside risks remain.</li> <li>The unemployment rate was 4.7% as of December 2016, within the Federal Reserve (Fed) target range.</li> <li>We expect U.S. economic growth to continue in 2017, with real GDP growth of 2.4%.</li> </ul>
Interest Rates	2	<ul> <li>Rates and yield-curve slope remain stimulative. Long-term interest rates remain low, with a flight-to-safety market response to global growth concerns. The Fed remains supportive of maintaining low short-term rates, even as the unemployment rate has dropped below 5%.</li> <li>In December 2016, the Fed raised interest rates for the second time since 2006. Forward interest rate projections predict a low and slow raise. PNC expects two rate increases in 2017 and four in 2018.</li> </ul>
Inflation	+	<ul> <li>We expect inflation will begin to move higher with the rise in oil pressures; however, we expect the rate will remain below the Fed's 2% target.</li> <li>Muted wage growth suggests a containment of inflation and subdued core inflation.</li> <li>Commodity prices are not posing an inflationary threat near term, in our view.</li> </ul>
Earnings	+	<ul> <li>We estimate earnings growth for S&amp;P 500® companies should be in the mid-single digits for 2017.</li> <li>Fourth-quarter 2016 estimates have S&amp;P 500 earnings rising year over year, led by Financials, and as the large declines in earnings from the Energy sector begin to taper off.</li> <li>We believe companies have room to beat expectations, with potential upside to 2017 earnings should the incoming administration's proposals for tax reform and fiscal stimulus come to fruition.</li> </ul>
Valuation	2	<ul> <li>Valuations remain supportive relative to bonds and cash.</li> <li>Modest inflation and low interest rates help support a higher market multiple on normalized earnings.</li> </ul>
Supply/ Demand	2	<ul> <li>Share buybacks and significant positive dividend actions have continued partly because companies have amassed large liquid asset levels.</li> <li>Appetite for deals continues, aided by record cash on balance sheets.</li> </ul>



#### Disclosure

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