PARS: County of Contra Costa

Third Quarter 2016

Presented by Andrew Brown, CFA



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DISCUSSION HIGHLIGHTS

U.S. Economic and Market Overview

Over the past year, we have ended each quarter looking back at the unusual events that transpired over the prior three months, we are continually encouraged/surprised by the market's reaction to such events and the resilience of this long lived bull market. The third quarter of 2016 was no exception. The quarter stated off with heightened uncertainty, revolving around the outcome of the "Brexit" vote in favor of the UK exiting from the European Union (EU). Perhaps just as surprising as the vote to leave the EU in late June was how quickly financial markets shrugged off a significant geopolitical development. After a brief sell-off in risky assets, quick responses by global central banks, once again served to soothe the fears of investors, sending capital back into risk assets and fueling a continued rally in the equity markets. Even European equity markets, that presumably would be most adversely affected by "Brexit", enjoyed strong performance during the third quarter of 2016.

Once again, the resilience of risk assets in the face of turmoil highlights the power of monetary policy to influence investor's sentiment, while raising the question of "how much longer will it continue to work?" Signs of diminishing returns from aggressive monetary policy are showing up in weakening global economic activity indicators. In order to avoid a liquidity trap, a growing chorus of voices are calling for a coordinated fiscal policy response to take the baton from central banks. A lack of political will and already high sovereign debt levels, however, will challenge such a movement.

In the U.S. we watched our own shocking political campaigns transpire, with headlines that would rival a tabloid cover story. The current political battle here in the U.S. outlines the success of the populist movement and underscores the rising dissatisfaction with the status quo of both parties among the electorate. Tepid economic growth and rising income inequality appear to be the main culprits. The current U.S. sentiment towards the establishment is eerily similar to that of the UK surrounding the "Brexit" vote. Could political and market analysts be in for another surprise at the end of the U.S. election? With election day in sight, investors may now turn their focus to a narrow set of potential outcomes. While there is sure to be heightened volatility in the near-term, for long-term investors, the bigger question is what either candidate can actually accomplish with an increasingly partisan Congress. As such, the margin of victory, along with any changes to the party makeup of Congress, will be just as important as which candidate is ultimately elected. The investment implications of the political landscape are only increasing. When limits of monetary policy effectiveness are tested, more is expected from the fiscal side of the economic equation.



Market overview/Performance Discussion

Total Plan

The County of Contra Costa OPEB Plan returned 2.94% net of investment fees, in the third quarter, which matched the County's Plan benchmark return target of 2.90%. The Plans' overweight to international equities finally bore some fruit, with outperformance supportive of returns. Fixed income investments outperformed the benchmark, but bond markets offered up paltry returns (Bloomberg Barclays Aggregate Index +0.46%). The strongest area of performance contribution came from large cap equities, which performed favorably vs. the Russell 1000, while mid cap equities neither added nor subtracted from performance with returns in-line with the benchmark. REIT equities offered negative returns in the quarter, as investors began to discount a future interest rate hike. While small cap equities offered the strongest absolute return, our managers underperformed the benchmark, which detracted from relative returns. Finally, alternatives lagged the benchmark and detracted from performance due to our manager in the managed futures category.

Domestic Equity

The quarter ended with strong U.S. Census Bureau data showing that median household income posted its first significant increase (+5.2%) in over eight years. Improving median income, coupled with the low unemployment rate, has been positive for the domestic equity market. However, the problem that remains is the U.S. labor market strength has not yet translated into strength for the wider economy as measured by GDP growth. In fact, increases in household income and subsequent boosts in consumer spending have been among the only positive contributions to tepid U.S. GDP growth. How then does one reconcile these seemingly conflicting data points – a strong labor market yet weak GDP numbers?

While the labor market is improving, productivity has not. Productivity growth, one of the pillars of the economy, remains below historical averages and is likely to remain low, creating challenges for both economic growth and equity markets. Productivity growth since 2007 has been half that of the pre-recession period. This is not surprising when you see that business investment growth, historically the major determinant of overall productivity growth, has largely been absent as the current business cycle matures. Many companies have been opting to spend free cash flow to buy back shares and pay dividends, a trend that helps support equity markets in the short-term but does not create productive assets to support long-term earnings growth. Additionally, earnings have been declining now for over a year. A scenario where corporate earnings are falling, does not exude confidence that this trend can continue.

While the U.S. economy is showing conflicting signs that give both bulls and bears ammunition to argue their points, the bulls appear to be in the lead. In the third quarter of 2016 all the major U.S. equity indices were up nicely with the Russell 1000 Index returning +4.0%, the Russell Mid Cap Index returning +4.5%, and the Russell 2000 Index leading the group with a 9.1% return. During the quarter, we saw a clear reversal of the risk-off trend witnessed earlier in 2016, as cyclical sectors outperformed at the expense of defensive sectors. The standout performer for the quarter was the Technology sector with a 12.9% return.



- The Plan's large cap segment returned 5.22% in the quarter, which outperformed the Russell 1000 Index return of 4.03%.
- The iShares Russell 1000 ETF returned 4.0% in the third guarter.
- The Columbia Contrarian Core Fund returned 4.27% in the quarter, which outperformed the benchmark. The Fund ranked in the 36th percentile of the Morningstar Large Cap Blend Universe.
- The Harbor Capital Appreciation Fund returned 8.16% in the quarter, which outperformed the Russell 1000 Growth Index's return of 5.59%. The Fund ranked in the 11th percentile of the Morningstar Large Cap Growth Universe.
- The T. Rowe Price Growth Stock Fund returned 7.88% in the quarter, which outperformed the Russell 1000 Growth Index. The Fund ranked in the 14th percentile of the Morningstar Large Cap Growth Universe.
- The Dodge and Cox Stock Fund returned 8.79% in the quarter, which outperformed the Russell 1000 Value Index's return of 3.48%. The Fund ranked in the 2nd percentile of the Morningstar Large Cap Value Universe.
- The Loomis Sayles Value Fund posted a 3.07% return in the quarter, which underperformed the Russell 1000 Value Index. The Fund ranked in the 62nd percentile of the Morningstar Large Cap Value Universe.
- The mid cap equity segment returned 4.41% in the quarter, which was in-line with the Russell Mid Cap Equity return of 4.52%.
 - The iShares Russell Mid Cap ETF returned 4.45% in the third quarter.
- The small cap equity segment returned 8.13% in the quarter, which trailed the Russell 2000 Index return of 9.05%.
 - The iShares Russell 2000 ETF returned 9.04% in the third quarter.
 - The T. Rowe Price New Horizons Fund returned 7.77% in the quarter, and underperformed the Russell 2000 Growth Index return of 9.22%. The Fund ranked in the 52nd percentile of Morningstar's Small Cap Growth Universe.
 - The Columbia Small Cap Value Fund II returned 7.30% in the quarter, and underperformed the Russell 2000 Value Index's return of 8.87%. The Fund ranked in the 46th percentile of Morningstar's Small Cap Value Universe. *We sold out of this Fund at the end of September*



Real Estate

After three quarters in a row where REITs were the top returning segment in the Plan, REITs declined in the third quarter, with the Wilshire REIT Index returning -1.21%. REITs started off strong in July, as they were viewed as an asset class with only limited impact from "Brexit". However, as the quarter progressed, and as the possibility that the Federal Reserve might raise interest rates, REITs came under pressure. Industrial (+6.7%), Single Family (+3.3%), and Office (+3.3%) were three bright spots in the REIT universe. REIT returns were held back by sizable sell-offs in Data Centers (-9.0%), Specialty (-9.9%), Self-storage (-12.2%), Shopping Centers (-3.3%), and Regional Malls (-3.1%). The announcement that Macy's was looking to close 100 stores, led to some concerns that mall occupancy might decline. An additional negative for shopping centers, were the bankruptcy announcements from several restaurant chains in the quarter: Cosi Inc, Garden Fresh, Last Call Guarantor, Zio's, Logan's Roadhouse, and Rita Restaurants. The concern here relates to both a loss of tenants for REIT enterprises, but also a decline in casual dining may portend weakness in the economy.

The Nuveen Real Estate Securities Fund returned -1.41% in the quarter, which underperformed the Wilshire REIT Index return of -1.21%. The Fund placed in the 49th percentile of the Morningstar Real Estate Manager's Universe.

Global/International Equity

For a while now, there has been a divergence in performance between the U.S. equity market and international markets, in both developed and emerging markets. While the emerging market countries started showing strength in the first quarter of 2016, their developed market counterparts continued to lag behind the U.S. The third quarter of 2016 saw a turn in the long trend of developed international underperformance. The MSCI EAFE Index returned 6.4% in the third quarter vs. 4.03% for the Russell 1000 Index. Emerging markets performed even better with an impressive 9% return, in USD terms. International equities have lagged behind the U.S. for most of the recovery since the 2008 financial crisis. While the U.S. led the way into the recession, they also recovered more quickly, by implementing aggressive monetary policies aimed to stimulate a battered domestic economy. Foreign counterparts where much slower to act, and had many additional structural problems to deal with, many of which are still being addressed today. Currently, we have a U.S. equity market near all-time highs, stretched valuations, and a central bank ready to increase interest rates (tighter monetary policy). In contrast, international markets have relatively attractive valuations and earnings growth potential supported by the early stages of economic recovery in many countries. While there is the potential for more risk in international markets, there is compensatory potential reward relative to domestic stocks.



In the third quarter, developed international equities were led by Japan with an impressive 8.6% return, and the rest of the Pacific region (Australia, Hong Kong, and Singapore) with a collective 8.2% return. Europe Ex-UK, added to the outperformance, returning 6%. Even the U.K., with the added uncertainty of the "Brexit" vote, outperformed the U.S. with a 4% return measured in USD. Emerging markets continued their display of strong 2016 performance by returning 9% collectively for the third quarter. Emerging Asia led the way as fears of a hard economic landing in China declined again (EM Asia +10.5, China +14%). Other bright spots were the commodity reliant economies, as energy prices stabilized and a more favorable outlook for energy supply and demand equilibrium gained traction. Russia (+30.6% YTD) and Brazil (62.9% YTD) continued their relative outperformance with returns of 8.4% and 11.3%, respectively for the quarter. While emerging market equities have been a welcome boost to performance in 2016, event risk—including a hard landing in China and a rapid, destabilizing Yuan devaluation—seem high relative to potential reward. A seemingly successful round of Chinese fiscal and monetary stimulus combined with a pause in U.S. monetary normalization has reduced this risk over the near-term. The U.S. now seems intent on continuing a policy of increasing interest rates, and thus a major question mark remains. Will EM equities be negatively impacted by tighter U.S. monetary policy? While it feels like a long time ago, the heightened volatility that surrounded the last U.S. interest rate increase is a reminder of how quickly sentiment can turn.

- The Plan's international/global equity segment returned 6.32% in the quarter. This return slightly lagged the MSCI EAFE Index 6.43%, and outperformed the MSCI ACWI Index return of 5.30%.
 - The iShares MSCI EAFE Index ETF returned 6.36% in the quarter.
 - The Nationwide Bailard International Equity Fund returned 4.87% in the quarter, which underperformed the MSCI EAFE Index. The Fund ranked in the 83rd percentile of the Morningstar Foreign Large Blend Universe.
 - The Dodge & Cox International Stock Fund returned 10.15% in the quarter and outperformed the MSCI EAFE Index. The Fund ranked in the 4th percentile of the Foreign Large Blend Universe as measured by Morningstar.
 - The MFS International Fund returned 6.48% in the quarter and outperformed the MSCI EAFE Index. The Fund ranked in the 38th percentile for foreign large cap growth managers as measured by Morningstar.
 - The iShares MSCI ACWI Index ETF returned 5.19% in the quarter
 - The American Funds New Perspective Fund recorded a 5.74% return in the third quarter, which outperformed the MSCI ACWI Index and ranked in the 43rd percentile within the Morningstar World Stock Universe
 - The MFS Global Equity R5 Fund returned 5.10%, which underperformed the benchmark and ranked in the 58th percentile of the Morningstar World Stock Universe.
 - The Schroder Emerging Market Equity Fund returned 10.28% during the quarter and outperformed the MSCI Emerging Market benchmark return of 9.03%. The Fund ranked in the 9th percentile of the Morningstar Emerging Market Universe.



Fixed Income

After a volatile first half of the year, financial markets were relatively calm during the third quarter as the Bloomberg Barclays U.S. Aggregate Bond index returned 0.46%, while Treasury bonds sold off slightly and risk assets performed well. A modest 15 basis point rise in five-year U.S. Treasury yields led to a -0.3% quarterly loss for the Treasury sector, while investment-grade corporate bonds returned 1.4%, and BBB rated corporate issuers gained 2.1%. Further down the quality spectrum, high yield bonds had another outstanding quarter with a return of 5.5%, and an impressive year-to-date return of 15.1%. Commodity prices, the source of much of the volatility early in the year, were modestly lower this quarter as the CRB declined -3.3%, while WTI oil and gold were fractionally lower. Among corporate bonds, the best performing industries this quarter were Energy, Basic Industry, Communications, and Airlines. Index laggards included Diversified Manufacturing, Machinery, Consumer Products, and Utilities.

Credit spreads continued to narrow this quarter, despite slowing revenue and declining corporate earnings. Revenue growth for U.S. companies has slowed to 1½% over the past year, while the third quarter could well be the sixth consecutive quarter of year-over-year declines in earnings per share. Despite this slowdown, investment-grade corporate bond spreads narrowed another 19 basis points this quarter, while high yield spreads narrowed by an impressive 124 basis points. Corporate spreads typically widen as revenue growth and earnings fall, but the continued tightening is likely due to central bank accommodation. The Federal Reserve, the ECB, the Bank of Japan, and the Bank of England together hold nearly \$13 trillion of purchased assets on their balance sheets. In just the past twelve months they have collectively added another \$2 trillion, representing the fastest rate of balance sheet expansion since 2009. The combination of these asset purchases and low inflation resulted in a global bond rally that set a new record low of 1.3% for the U.S. ten year Treasury yield early in the quarter. For perspective, 1.3% is a few basis points below the previous low reached in 2012 during the height of the U.S. budget crisis and the political stalemate which ultimately led to the U.S. losing its AAA credit rating. It was also below the level reached in February this year when collapsing commodity prices sent financial markets into panic mode as crude oil plunged below \$30, causing double digit declines in risk assets in the U.S., Europe, China, and Japan while Treasury bonds rallied.

Just weeks after reaching a new low on July 8, Treasury yields began to rise as the BOJ decided against expanding Japan's extraordinary monetary policies, and in September the ECB chose not to extend their bond purchase plan, which is currently set to expire in March 2017. Additionally, both the Bank of Japan and the European Central Bank have called for official reviews of the effects of quantitative easing, disappointing the markets and causing a further retreat in bond prices. At the same time, the Fed is desperate to move away from historically low interest rates and is trying to convince the market that an interest rate increase is likely at the December meeting. The markets are sensing some hesitation by central banks to expand their already extraordinary support, which may mean that we have finally reached the outer limits of unconventional monetary policy. If so, the markets are likely to experience greater volatility in the future, and risk premiums will rise.



- The Plan's fixed income segment returned 0.69% in the quarter, which outperformed the Bloomberg Barclays Aggregate return of 0.46%.
 - The separately managed fixed income portfolio returned 0.50% which was in-line with the benchmark. The portfolio would have ranked approximately in the 78th percentile of the Morningstar Intermediate Term Bond Universe.
 - The PIMCO Total Return Bond Fund posted a 1.24% in the quarter, which placed it in the 27th percentile of Morningstar's Intermediate-Term Bond Universe. The Fund outperformed the Index.
 - The Prudential Total Return Bond Fund returned 1.41% in the quarter. This ranked in the 19th percentile of Morningstar's Intermediate-Term Bond Universe and outperformed the benchmark.

Alternative Investments

The Alternatives portion of the portfolio returned 0.16% in the third quarter. Performance from two of the three alternative mangers was strong: Eaton Vance Global Macro Fund (+2.14%), and the AQR Equity Market Neutral Fund (+1.39%). The AQR Managed Futures Fund (-2.6%) dragged down returns considerably in the quarter. Trend following strategies experienced losses in the quarter as numerous markets, especially across commodities, fixed income, and equities experienced reversals. Coordinated action on output from OPEC and Russia in the energy sector, led to a reversal in the energy markets. Fixed income markets experienced a reversal when Central Banks began to hold back on additional stimulus measures. The AQR Equity Market Neutral Fund was aided by exposure to U.S. and Canadian equity holdings. Top contributors came from the energy and financial sectors. The Eaton Vance Global Macro Fund was aided by investments in Eastern Europe and Asia. Top performing contributors were long investments in the Icelandic Krona, Sri Lankan Rupee, and Macedonia Credit. Shorts in Saudi Arabian rate investments, also aided returns

- The alternative investment segment returned 0.16% in the third quarter, which underperformed the Wilshire Liquid Alternatives Index return of 1.45%.
 - The AQR Equity Market Neutral Fund added 1.39%, and ranked in the 28th percentile of the Morningstar Market Neutral Universe.
 - The Eaton Vance Global Macro Absolute Return Fund posted a 2.14% return, which placed in the 47th percentile of the Morningstar Non-Traditional Bond Universe.
 - The AQR Managed Futures Fund's return of -2.60% ranked in the 67th percentile of Morningstar's Managed Futures Fund Universe



Asset Allocation/Portfolio Transitions

During the quarter, we replaced our small cap value manager, the Columbia Small Cap Value Fund with the Undiscovered Managers Behavioral Value Fund. While this fund has an unusual name, it has a strong track record of outperforming the benchmark. The managers seek to identify small cap stocks that are subject to specific human biases, which lead to underperformance (and undervaluation) and look to insider buying signals as an indicator of a company's future potential.



Manager Watch List

Name of Fund	Date on watch list	Date exiting watch list	Recommendation	Rationale
Pimco Total Return Bond Fund	4Q 2014	<u> </u>	Review	Peer ranking, while improving, is still below median for 3-year period.
Eaton Vance Global Macro Absolute Return Fund	3Q 2015	3Q 2016	Remove from watch list	Investment returns have been in-line with expectations.
Dodge and Cox International Stock Fund	2Q 2016		Review	The manager's performance was in the fourth percentile in the third quarter. On a three year basis, the managers are still below the median of managers in the Morningstar Foreign Large Blend Universe.
Loomis Sayles Value Fund	3Q 2016		Review	Peer ranking on a 3-year basis, has lagged the median within the Morningstar Large Cap Value Universe for three consecutive quarters.



Asset Allocation Period Ending September 30, 2016

Asset Allocation		6/30/2016 arket Value	6/30/2016 % of Total	D.F	9/30/2016 arket Value	9/30/2016 % of Total	Target Allocation
Asset Allocation	IVIC	irket value	% Of Total	IVI	arket value	% 01 10ta1	Allocation
Large Cap Equities							
Columbia Contrarian Core Z		6,200,751	3.2%		6,639,285	3.3%	-
iShares Russell 1000 ETF		10,897,070	5.6%		11,615,115	5.8%	
Dodge & Cox Stock Fund		4,240,056	2.2%		4,592,954	2.3%	
Loomis Sayles Value Fund		4,281,600	2.2%		4,543,448	2.3%	
Harbor Capital Appreciation Instl		2,365,457	1.2%		2,558,547	1.3%	
T. Rowe Price Growth Stock Fund		2,361,967	1.2%		2,548,118	1.3%	-
Total Large Cap Equities	\$	30,346,900	15.5%	\$	32,497,466	16.1%	17.0%
			Range			Range	13-32%
Mid Cap Equities							
iShares Russell Mid-Cap ETF		6,612,783	3.4%		7,085,236	3.5%	
Total Mid Cap Equities	\$	6,612,783	3.4%	\$	7,085,236	3.5%	6.0%
			Range			Range	2-10%
Small Cap Equities							
iShares Russell 2000 ETF		7,054,598	3.6%		7,574,698	3.8%	
Columbia Small Cap Value Fund II		6,198,509	3.2%				
Undiscovered Mgrs Behavioral Value Inst					6,635,753	3.3%	
T. Rowe Price New Horizons Fund		2,895,666	1.5%		3,120,539	1.6%	
Total Small Cap Equities	\$	16,148,773	8.3%	\$	17,330,990	8.6%	8.0%
			Range			Range	4-12%
International Equities							
Nationwide Bailard Intl Equities I		5,060,956	2.6%		5,648,967	2.8%	
iShares MSCI EAFE Index Fund		6,820,646	3.5%		8,071,718	4.0%	
Dodge & Cox International Stock Fund		2,709,793	1.4%		3,024,798	1.5%	
MFS International Growth Fund		2,755,682	1.4%		3,127,849	1.6%	
Schroder Emerging Market Equity		2,999,151	1.5%		3,307,426	1.6%	
Total International Equities	\$	20,346,227	10.4%	\$	23,180,758	11.5%	9.0%
			Range			Range	4-16%
Global Equities							
MSCI iShares ACWI Index ETF		6,552,201	3.4%		7,194,598	3.6%	
American Funds New Perspective F2		2,831,922	1.4%		3,045,046	1.5%	
MFS Global Equity FD CL R5 #4818		2,818,603	1.4%		3,047,818	1.5%	
Total Global Equities	\$	12,202,727	6.2%	\$	13,287,462	6.6%	7.0%
			Range			Range	4-12%



Asset Allocation Period Ending September 30, 2016

Asset Allocation	M	6/30/2016 arket Value	6/30/2016 % of Total	M	9/30/2016 larket Value	9/30/2016 % of Total	Target Allocation
Paul Fatata							
Real Estate		0.050.540	4.50/		0.040.004	4.40/	
Nuveen Real Estate Secs I Fund		8,852,548	4.5%	_	8,943,831	4.4%	
Total Real Estate	\$	8,852,548	4.5%	\$	8,943,831	_4.4%	4.0%
			Range			Range	0-8%
Fixed Income							
Core Fixed Income Holdings		53,865,308	27.6%		57,826,648	28.7%	
PIMCO Total Return Instl Fund		8,582,406	4.4%		8,565,618	4.3%	
Prudential Total Return Bond Q		8,459,784	4.3%		8,579,339	4.3%	
PIMCO High Yield Instl		3,578	0.0%				
Total Fixed Income	\$	70,911,076	36.3%	\$	74,971,605	37.3%	38.0%
			Range			Range	30-50%
Alternatives			<u> </u>			, and the second	
AQR Managed Futures I		8,400,224	4.3%		8,182,141	4.1%	
Eaton Vance Glbl Macro Abs Ret I		8,112,085	4.2%		8,534,269	4.2%	
AQR Equity Market Neutral I		4,776,932	2.4%		5,558,644	2.8%	
Total Alternatives	\$	21,289,241	10.9%	\$	22,275,054	11.1%	10.0%
	•	,,	Range	•	, -,	Range	5-20%
Cash			,gu			· iange	0 = 0,1
Money Market		8,759,419	4.5%		1,681,261	0.8%	
Total Cash	\$	8,759,419	4.5%	\$	1,681,261	0.8%	1.0%
	Ť	-, 3 -,	Range	•	, ,	Range	0-5%
TOTAL	\$	195,469,693	100.0%	\$	201,253,665	100.0%	100.0%



Investment Summary Period Ending September 30, 2016

Investment Summary	Thi	rd Quarter 2016	Ye	ear to Date 2016
Beginning Value	\$	195,885,034.30	\$	175,078,576.28
Net Contributions/Withdrawals		-39,944.37		14,959,999.01
Fees Deducted		-45,187.25		-132,741.45
Income Received		1,087,359.87		2,953,806.91
Market Appreciation		4,781,743.33		8,826,225.87
Net Change in Accrued Income		-54,683.92		-71,544.66
Ending Market Value*	\$	201,614,321.96	\$	201,614,321.96

Investment Summary	Th	ird Quarter 2015	Ye	ar to Date 2015
Beginning Value	\$	173,251,842.30	\$	155,218,379.57
Net Contributions/Withdrawals		-43,438.67		15,040,527.02
Fees Deducted		-44,070.96		-130,618.60
Income Received		956,321.65		2,117,972.48
Market Appreciation		-7,268,241.25		-5,594,084.50
Net Change in Accrued Income		-178,107.55		22,129.55
Ending Market Value	\$	166,674,305.52	\$	166,674,305.52

^{*}Ending Market Value differs from total market value on the previous page due to differences in reporting methodology. The above ending market value is reported as of trade date and includes accruals. The Asset Allocation total market value is reported as of settlement date.



INVESTMENT STRATEGY

As of September 30, 2016

Tactical Asset Allocation

Asset Class	<u>%</u>	Portfolio Wei	ghting	<u>Rationale</u>
	<u>Target</u>	Current Portfolio	Over/Under <u>Weighting</u>	
Cash	1.0%	1.0%	-	
Fixed Income	38.0%	37.5%	-0.5%	 We believe the Fed will likely raise rates 1 – 2 times in calendar year 2017. Our year-end 2017 target for the 10-year treasury is 2.0%- 2.25%, which implies modest return expectations from current levels.
Alternatives	10.0%	11.0%	+1.0%	 Alternatives serve to mitigate the impact of a decline in the bond market, due to a potential rise in interest rates. Additionally near-term expectations for cash and equities remain depressed due to the low interest rate environment, equity market valuations, and earnings growth expectations.
Real Estate (REITS)	4.0%	4.5%	+0.5%	 Earnings and cash flow fundamentals are improving for REITs. Employment trends are providing additional support for REITs. Our expectation of a modest increase in interest rates by the Federal Reserve should not be too restrictive to REITs.
Global Equity	7.0%	6.5%	-0.5%	 Global equities remain at reasonable valuations due to the international equity component of the MSCI ACWI benchmark.
International (Developed)	9.0%	10.0%	+1.0%	Developed international equity markets are viewed as attractive on a relative valuation basis, with superior earnings growth potential supported by earlier stages of the economic recovery cycle. We are monitoring the potential headwinds from the "Brexit".
International (Emerging)	0.0%	1.5%	+1.5%	Strong recent emerging market performance has been supported by global policy stimulus. Modest interest rate normalization in the U.S. should be gradual and should not lead to strong gains for the USD. Emerging market valuations are reasonably attractive and earnings revision downgrades have stopped.
Total Domestic Equity	31.0%	28.0%	-3.0%	
Large Cap	17.0%	16.0%	-1.0%	• The multi-year outperformance of domestic equities has generated stretched valuations, thereby reducing risk premiums and degrading the near-term risk/reward outlook.
Mid Cap	6.0%	3.5%	-2.5%	We continue to remain underweight based on valuation concerns, with the Russell Mid-Cap Index trading at a 18X forward PE ratio.
Small Cap	8.0%	8.5%	+0.5%	• We maintain a slight overweight to small cap stocks. Earnings estimates have come down considerably for small cap equities. Additionally, there is low analyst dispersion related to earnings, which tends to imply less uncertainty.



Selected Period Performance

PARS/COUNTY OF CONTRA COSTA PRHCP

Account 6746038001 Period Ending: 09/30/2016

		Year to Date				Inception to Date
Sector	3 Months	(9 Months)	1 Year	3 Years	5 Years	(68 Months)
Cash Equivalents	.06 . <i>0</i> 3	.20 . <i>0</i> 8	.22	.09 .04	.06 .03	.06
iMoneyNet, Inc. Taxable	.03	.06	.09	.04	.03	.03
Fixed Income ex Funds	.50	6.34	5.65	4.02	3.47	4.24
Total Fixed Income	.69	6.35	5.81	3.97	3.88	4.29
BC US Aggregate Bd Index	.46	5.80	5.19	4.03	3.08	3.87
Total Equities	5.43	7.38	12.59	6.66	13.27	8.21
Large Cap Funds	5.22	6.35	13.34	9.77	16.10	10.66
Russell 1000 Index	4.03	7.92	14.93	10.78	16.41	11.93
Mid Cap Funds	4.41	10.13	13.44	7.53	14.24	9.34
Russell Midcap Index	4.52	10.26	14.25	9.70	16.67	11.53
Small Cap Funds	8.13	10.82	14.55	7.88	17.43	11.42
Russell 2000 Index	9.05	11.46	15.47	6.71	15.82	10.20
REIT Funds	-1.58	9.22	18.52	13.79	15.35	11.17
Wilshire REIT Index	-1.21	9.75	17.94	14.34	15.82	12.05
International Equities	6.32	5.67	9.50	1.88	8.56	3.57
MSCI AC World Index	5.30	6.60	11.96	5.17	10.63	6.25
MSCI EAFE Index	6.43	1.73	6.52	.47	7.39	3.06
MSCI EM Free Index	9.03	16.02	16.78	56	3.03	-1.23
Alternatives	.16	1.38	.38	3.27		
Dynamic Alternatives Index	1.45	2.42	1.29	1.74	07	75
Total Managed Portfolio	2.97	6.15	8.35	5.13	8.55	5.91
Total Account Net of Fees	2.94	6.07	8.25	5.01	8.42	5.79
County of Contra Costa	2.90	6.57	9.13	5.67	8.53	6.53

Inception Date: 02/01/2011

Returns are gross-of-fees unless otherwise noted. Returns for periods over one year are annualized. The information presented has been obtained from sources believed to be accurate and reliable. Past performance is not indicative of future returns. Securities are not FDIC insured, have no bank guarantee, and may lose value.



^{*} Benchmark from February 1, 2011 to June 30, 2013: 18% Russell 1000 Index, 6% Russell Midcap Index, 8% Russell 2000 Index, 8% MSCI ACWI Index, 10% MSCI EAFE Index, 45% Barclays Aggregate Index, 4% DJ Wilshire REIT Index, 1% Citigroup 3 Month T-Bill Index. From July 1, 2013 to June 30, 2015: 17% Russell 1000 Index, 6% Russell 2000 Index, 8% Russell 2000 Index, 7% MSCI AC World US Index, 9% MSCI EAFE Index, 38% Barclays Aggregate Index, 4% DJ Wilshire REIT Index, 10% HFRI FOF Market Defensive Index, 1% Citigroup 3 Month T-Bill Index, 10% Russell 1000 Index, 8% Russell 1000 Index, 8% Russell 2000 Index, 7% MSCI AC World Index, 9% MSCI EAFE Index, 38% Barclays Aggregate Index, 4% DJ Wilshire REIT Index, 10% Wilshire Liquid Alternative Index, 1% Citigroup 3 Month T-Bill Index

^{**} Dynamic Alternatives Index represents the HFRI FOF Market Defensive Index from 07/01/2013 until 06/30/2015, and then the Wilshire Liquid Alternatives Index from 07/01/2015 forwards.

For Period Ending September 30, 2016

	LARGE CAP EQUITY FUNDS												
		3-Month		YTD		1-Year		3-Year		5-Year			
Fund Name	Inception	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank		
Columbia Contrarian Core Z	(7/13)	4.27	36	6.65	46	14.97	18	11.09	6	17.42	1		
T. Rowe Price Growth Stock I		7.88	14	1.47	78	10.25	54	11.11	19	17.41	22		
Harbor Capital Appreciation Instl		8.16	11	0.89	85	9.05	70	11.28	17	15.99	21		
Loomis Sayles Value Fund	(7/11)	3.07	62	4.57	87	9.92	83	7.15	65	15.16	32		
Dodge & Cox Stock	(10/14)	8.79	2	9.55	27	14.53	33	8.91	25	17.10	48		
iShares Russell 1000	(3/15)	4.00	39	7.82	54	14.80	51	10.65	42	16.26	59		
Idx: Russell 1000		4.03	-	7.92	-	14.93	-	10.78	-	16.41	-		
		MID (CAP EQ	UITY FUN	IDS								
iShares Russell Mid-Cap	(3/15)	4.45	43	10.09	38	14.04	42	9.51	18	16.48	70		
Russell Mid Cap TR USD		4.52	-	10.26	-	14.25	-	9.70	-	16.67	-		
		SMALL	. CAP E	QUITY FL	JNDS								
Undiscovered Mgrs Behavioral Value Inst	(9/16)	7.21	51	11.68	51	17.66	27	10.51	2	20.65	1		
ldx: Russell 2000 Value		8.87	-	15.49	-	18.81	-	6.77	-	15.45	-		
iShares Russell 2000	(3/15)	9.04	15	11.50	65	15.57	54	6.77	67	15.87	62		
T. Rowe Price New Horizons I		7.77	52	8.76	33	14.37	24	9.45	5	18.96	1		
Idx: Russell 2000 Growth		9.22	-	7.48	-	12.12	-	6.58	-	16.15	-		
		INTERNA	TIONAL	. EQUITY	FUNDS								
Dodge & Cox International Stock		10.15	4	4.74	26	5.62	58	0.06	60	8.17	21		
Nationwide Bailard Intl Eqs Instl		4.87	83	0.76	75	4.99	65	2.71	11	8.93	22		
MFS International Growth I		6.48	38	8.71	8	12.81	14	2.22	40	8.39	15		
MFS Global Equity R5	(3/15)	5.10	58	8.04	22	12.27	25	6.21	22	13.55	16		
iShares MSCI EAFE	(3/15)	6.36	40	1.74	79	6.45	75	0.37	72	7.27	100		
iShares MSCI ACWI	(3/15)	5.19	43	6.79	75	12.32	62	5.44	46	10.84	-		
American Funds New Perspective F2	(3/15)	5.74	43	4.04	68	11.14	38	7.25	13	13.21	5		
Idx: MSCI EAFE		6.43	-	1.73	-	6.52	-	0.48	-	7.39	-		
Idx: MSCI ACWI		5.30	-	6.60	-	11.96	-	5.17	-	10.63	-		
Schroder Emerging Market Equity	(11/12)	10.28	9	16.25	34	16.92	39	-0.43	50	4.25	26		
Idx: MSCI Emerging Markets		9.03	-	16.02	-	16.78	-	-0.56	-	3.03	-		

Data Source: Morningstar, SEI Investments

Returns less than one year are not annualized. Past performance is not indicative of future returns. The information presented has been obtained believed accurate and reliable. Securities are not FDIC insured, have no bank guarantee and may lose value.



For Period Ending September 30, 2016

		REI	IT EQUI	TY FUND	S						
			1-Year		3-Year		5-Year				
Fund Name	Inception	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
Nuveen Real Estate Secs Y		-1.41	49	9.99	35	18.50	15	13.94	24	15.52	6
Idx: Wilshire REIT Index		-1.21	-	9.75	-	17.94	-	14.34	-	15.82	-
BOND FUNDS											
Core Fixed Income Portfolio		0.50	78	6.34	37	5.65	36	4.02	35	3.47	50
Pimco Total Return Inst'l		1.24	27	5.18	76	5.69	35	3.51	64	4.18	5
Prudential Total Return Bond Fund Class	(5/16)	1.41	19	8.08	5	7.27	5	5.33	3	5.14	2
Idx: BarCap US Aggregate Bond		0.46	-	5.80	-	5.19	-	4.03	-	3.08	-
ML US HY BB-B Constrained		5.00	-	13.29	-	12.01	-	5.60	-	8.01	-
		ALT	ERNAT	IVE FUND	S						
AQR Managed Futures	(7/13)	-2.60	67	-0.49	55	-4.01	65	6.15	33	4.09	-
AQR Equity Market Neutral I	(2/16)	1.39	28	1.66	51	3.97	31	-	-	-	-
Eaton Vance Glbl Macro Abs Ret	(7/13)	2.14	47	3.68	53	6.22	24	3.47	21	2.79	-
Idx: Dynamic Alternatives		1.45	-	2.42	-	1.29	-	1.74	-	-0.07	-

Data Source: Morningstar, SEI Investments

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For Period Ending December 31, 2015

			LARGE	E CAP EQ	UITY F	UNDS							
		2015		2014		2013		2012		2011		2010	
Fund Name	Inception	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
Columbia Contrarian Core Z	(7/13)	3.02	9	12.92	31	35.73	17	18.67	10	-0.93	52	16.21	17
T. Rowe Price Growth Stock		10.85	4	8.83	65	39.20	12	18.92	14	-0.97	39	16.93	35
Harbor Capital Appreciation Instl		10.99	4	9.93	53	37.66	17	15.69	43	0.61	24	11.61	82
Loomis Sayles Value Fund	(7/11)	-4.19	58	10.76	48	35.54	14	19.70	4	-2.81	66	11.94	72
Dodge & Cox Stock	(10/14)	-4.49	62	10.40	54	40.55	2	22.01	2	-4.08	74	13.49	47
iShares Russell 1000 ETF		0.82	34	13.08	42	32.93	37	16.27	12	1.36	60	15.94	49
ldx: Russell 1000		0.92		13.24		33.11		16.42		1.50		16.10	
			MID	CAP EQU	ITY FUI	NDS							
iShares Russell Mid-Cap ETF		-2.57	39	13.03	17	34.50	74	17.13	52	-1.67	42	25.25	73
			SMALL	CAP EQ	UITY F	UNDS							
Columbia Small Cap Value II Z		-2.90	15	4.61	42	40.14	20	14.57	61	-2.39	30	25.64	52
ldx: Russell 2000 Value		-3.83		4.22		34.52		18.05		-5.50		24.50	
T. Rowe Price New Horizons		4.50	7	6.10	19	49.11	10	16.20	22	6.63	2	34.67	12
ldx: Russell 2000 Growth		-1.38		5.60		43.30		14.59		-2.91		29.09	
iShares Russell 2000 ETF		-4.33	31	4.94	55	38.85	76	16.39	47	-4.19	56	26.76	69
			INTERN	ATIONAL I	EQUITY I	UNDS							
Dodge & Cox International Stock		-11.35	98	0.08	9	26.31	8	21.03	16	-15.97	81	13.69	6
Nationwide Bailard Intl Eqs InSvc		0.86	24	-1.94	15	21.68	28	20.87	17	-15.58	74	11.85	32
MFS International Growth I		0.30	55	-5.10	58	13.84	79	19.71	31	-10.62	40	15.24	35
iShares MSCI EAFE Index Fund		-0.90	45	-5.04	78	22.62	19	17.22	41	-12.18	25	7.52	92
Idx: MSCI EAFE		-0.81		-4.90		22.78		17.32		-12.14		7.75	
Schroder Emerging Market Equity	(11/12)	-12.68	37	-4.61	70	-2.28	54	21.73	19	-16.70	20	13.49	92
ldx: MSCI Emerging Markets		-14.92		-2.19		-2.60		18.22		-18.42		18.88	
SPDR EURO STOXX 50 ETF	(6/14)	-4.26	84	-8.36	73	27.43	34	20.48	55	-16.42	48	-8.94	95
American Funds New Perspective F2		5.56	6	3.46	41	27.11	39	39.00	15	-7.39	44	13.01	46
MFS Global Equity R5		-1.34	48	4.08	33	27.93	34	34.00	4	-5.13	25	10.95	55
iShares MSCI ACWI		-2.39	46	4.64	34	22.91	54	54.00	30	-7.60	71	12.31	34
Idx: MSCI ACWI		-2.36		4.16		22.80		16.13		-7.35		12.67	
			RE	IT EQUIT	Y FUND	S							
Nuveen Real Estate Secs Y		3.48	37	31.28	17	1.32	58	18.34	22	7.96	50	30.57	12
ldx: Wilshire REIT		4.23		31.78		1.86		17.59		5.52			

Data Source: Morningstar, SEI Investments

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For Period Ending December 31, 2015

	BOND FUNDS												
		2015		2014		2013		2012		2011		2010	
Fund Name	Inception	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
Core Fixed Income Portfolio		0.78	14	4.74	70	-1.40	41	5.42	69	8.41	5		-
Pimco Total Return Inst'l		0.73	15	4.69	71	-1.92	60	10.36	12	4.16	87	8.83	26
ldx: BarCap US Aggregate Bond		.55		5.97		-2.02		4.21		7.84		6.54	
PIMCO High Yield Instl	(11/14)	-1.85	22	3.31	13	5.77	68	14.55	52	4.00	38	14.24	45
ldx: Merrill Lynch US High Yield BB-B		-2.79		3.49		6.31		14.59		5.39		14.26	
			ALT	ERNATIV	E FUNI	os							
Arbitrage I (Sold 11/15)	(7/13)	0.90	39	1.64	39	1.15	67	0.44	48	4.74	20	1.76	16
AQR Managed Futures	(7/13)	2.00	31	9.69	40	9.40	6	2.99	5	-6.37	29	0.00	0
Eaton Vance Glbl Macro Abs Ret	(7/13)	2.63	7	3.03	18	-0.24	58	4.11	79	-0.39	44	4.75	61
JPMorgan Research Market Neutral Instl	(7/13)	-3.61	74	3.38	25	2.26	56	4.51	9	-7.04	86	-0.90	36

Data Source: Morningstar, SEI Investments

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