SUNTRUST

Date:

August 5, 2014

To:

McKnight Brain Research Foundation Trustees

Henry H. Raattama, Jr. Legal Counsel

From:

Melanie Cianciotto

Subject:

MBRF Meeting: August 13 – 15, 2014 (Bethesda, Maryland)

Enclosed you will find the meeting package for the August Trustees meeting to be held in Bethesda, Maryland. Included in this package for your review are the following items: the agenda, investment review, final draft of the minutes for the April 23, 2014 board meeting, minimum distribution calculation and other supporting material for the agenda items.

The meeting on August 13th will start at 12:00 p.m. in the Bethesda B Conference Room.

Reservations have been made at the Hyatt Regency Bethesda located at One Bethesda Metro Center, Bethesda, Maryland, 20814. Following are room confirmation numbers:

Dr. J. Lee Dockery 328BNL3T Dr. Michael Dockery 328BNL3T Dr. Gene Ryerson 328BNL5L Mr. Hank Raattama 328BNK24

I look forward to seeing everyone in Bethesda!

MC/nd

cc: Mike Hill

Enclosures

MCKNIGHT BRAIN RESEARCH FOUNDATION

August 13, 2014

Hyatt Regency Bethesda Bethesda B Conference Room Call in number: 877-934-2901 Participant code: 8630398

AGENDA

Wednesday, August 13, 2014

12:00 p.m.

1. Call to Order/Lunch

Melanie Cianciotto

2. Investment and Investment Policy Review Asset Allocation

Michael Hill

Asset Allocation Efficient Frontier Lighthouse Update

3. Approval of Minutes Board Meeting April 23, 2014 Melanie Cianciotto

- 4. Minimum Distribution Calculation
- 5. Eighth Inter-Institutional Meeting Proposed Budget
- 6. Travel Award Program
 McKnight Inter-Institutional Neuroimaging Core Proposal
- 7. University of Miami Gift Agreement Update
- 8. Upcoming Dates & Events
 - ❖ Board Meeting October 14 − 15, 2014 Miami, FL
 - Society for Neuroscience November 16, 2014 Washington, D.C.
- 9. Old Business
- 10. New Business
- 11. Adjournment

Agenda

Cognitive Aging RFA Awardees Annual Meeting August 14th and 15th, 2014 Building 31, Room 6C (6th floor) NIH Campus Bethesda, MD

Day one		
8:30-8:45	Welcome and Introductions Molly Wagster, PhD and Jonathan King, PhD	
0.30-0.43	, g , , , , , , , , , , , , , , , , , ,	
	National Institute on Aging	
	Opening Remarks Lee Dockery, MD	
	Trustee – McKnight Brain Research Foundation	
8:45-12:00	Interventions for Remediation of Age-related Cognitive Decline	
8:45	Ellen Binder, MD - Presenter	
	Washington University School of Medicine	
	Ellen Binder, MD and Mark McDaniel, PhD – Multi-Pis	
	Combining Exercise and Cognitive Training to Improve Everyday Function (R01-AG034581)	
9:15	Christian Habeck, PhD - Presenter	
9.13	Columbia University	
	Yaakov Stern, PhD - Pl	
	Combined exercise and Cognitive Training Intervention in Normal Aging (R01-AG034178)	
9:45	Jeffrey Burns, MD - Presenter	
	University of Kansas Medical Center	
	Jeffrey Burns, MD - PI	
	Dose Response Study of Exercise in Older Adults (R01-AG034614)	
10:15-10:30	BREAK	
LV.LJ-LV.JV	DICAR	
10:30	Robert Krikorian, PhD - Presenter	
	University of Cincinnati College of Medicine	
	Robert Krikorian, PhD - Pl	
	Omega-3 and Blueberry Supplementation in Age-Related Cognitive Decline (R01-AG034617)	
11:00	Victor Henderson, MD, MS - Presenter	
	Stanford University School of Medicine	
	Victor Henderson, MD, MS - PI	
	Tai Chi and Guided Autobiography for Remediation of Age-Related Cognitive Decline (R01-AG03463	9)
11:30	Gary Turner, PhD - Presenter	
	University of California at Berkeley	
	Mark D'Esposito, MD - PI	
	A Brain-based Approach to Enhancing Executive Control Functions in Healthy Aging (R01-AG034642))

12:00 - 1:15	**************************************
1:15-2:30	Discussion: Future Planning and Collaborative Activities
2:30-3:30	Behavioral Mechanisms of Age-related Cognitive Change
2:30	Patricia Boyle, PhD - Presenter Rush University School of Medicine Patricia Boyle, PhD - Pl Characterizing the Behavior Profile of Healthy Cognitive Aging (R01-AG034374)
3:00	Archana Singh-Manoux, PhD - Presenter INSERM Archana Singh-Manoux, PhD and Mika Kivimaki, PhD — Multi-Pls Health Behaviors over the Adult Life-course and Cognitive Aging (R01AG034454)
3:30- 3:45	Break
3:45-5:00	Neural Mechanisms of Age-related Cognitive Change - Imaging Approaches
3:45	Julius (Trey) Hedden, PhD - Presenter Mass General Hospital Randy Buckner, PhD - PI Harvard University Neural Processes Underlying Cognitive Aging (R01-AG034556)
4:15	William Jagust, MD - Presenter University of California at Berkeley William Jagust, MD - PI Neural and Biochemical Mechanisms of Cognitive Aging (R01-AG034570)
4:45	Craig Stark, PhD University of California at Irvine Craig Stark, PhD - Pl High Resolution Structural and Functional Brain Imaging of the Medial Temporal Lobe (R01-AG034613)
5:15	Closing Remarks
6:30	No-Host Dinner TBD

Day two	
9:00-1:00	Neural Mechanisms of Age-related Cognitive Change – Molecular & Cellular Approaches
	The state of the s
9:00	Coleen Murphy, PhD - Presenter
	Princeton University
*	Coleen Murphy, PhD - PI
	Molecular Mechanisms Regulated Age-Related Cognitive Decline in C. elegans (R01-AG034446)
9:30	Scott Small, MD - Presenter
	Columbia University School of Physicians and Surgeons
	Scott Small, MD - PI
	Histone Acetylation and Cognitive Aging (R01AG034618)
10.00	Alforda Williams at DLD Donorator
10:00	Alfredo Kirkwood, PhD - Presenter
	Johns Hopkins University Alfredo Kirkwood, PhD - PI
	Synaptic Function and Plasticity in CA3 Circuits in the Aging Hippocampus (R01-AG034606)
	Synaptic Function and Plasticity in CAS Circuits in the Aging Hippotampus (ROI-AG034606)
10:30	Philip Landfield, PhD - Presenter
	University of Kentucky
	Philip Landfield, PhD - Pl
	Hippocampal Electrophysiology and Myelinogenesis in Healthy Cognitive Aging (R01-AG034605)
10:30- 11:00	Break
11:30	Carl Cotman, PhD - Presenter
	University of California at Irvine
	Carl Cotman, PhD PI
	Gene Expression, Compensation Mechanisms and Successful Cognitive Aging (R01-AG034667)
12:00-1:00	Discussion of Collaborative Activities
1:15	Closing Remarks
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Evelyn F. McKnight Brain Research Foundation

Period Ending June 30, 2014

August 13, 2014

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Executive Summary



Executive Summary

Market Environment (through June 30, 2014)

- Equity markets tacked on additional gains in June, aided by improving economic trends as well as newly announced stimulus measures from the European Central Bank and dovish comments from US Fed Chair Janet Yellen. The MSCI All Country World Index (ACWI) gained 1.9% in June, bringing its year-to-date return to 6.2%. Emerging markets, bolstered by strong returns in Brazil, India, and Russia outperformed, while US stocks set another record high. Impressively, the S&P 500 has now risen for six straight quarters, its best stretch since 1996. At the same time, volatility remained remarkably low as the S&P 500 has gone over 50 consecutive days without a 1% up or down move.
- Interest rates rose modestly across the yield curve in June with all US Treasuries from 6-months to 30-years showing a slight increase. The benchmark 10-year US Treasury increased a mere 5 basis points to end the month at 2.53%. However, with the Federal Funds rate near 0%, the trend for 2014 has been a flattening yield curve with both mid-term and long-term rates falling below their January highs. Year to date, the Barclays 10-year Treasury Bellwethers Index has returned 6.1%, while the Barclays Aggregate Bond Index rose 3.9%.US corporate bonds posted their best performance since 2009 in the first half of 2014.
- Building on May's gains, hedge fund returns were largely driven by the broader equity rally, positive overall net hedge fund buying, stable US Treasury yields and tighter corporate bond spreads. The HFRI Fund Weighted Composite Index underperformed stocks but outpaced core bond returns both during June and the quarter. While returns have been muted in recent years, new allocations and performance gains have pushed hedge fund assets to record levels in 2014.
- Recent US data has rebounded—particularly on the jobs front—from the awful first quarter. The sizable downward revision to first-quarter GDP, however, led many economists—including the Federal Reserve—to lower 2014 GDP growth projections, but the consensus 2015 forecast held steady at around 3%.
- **OUTLOOK**: The bull market for stocks is aging, but we believe modest upside potential remains through year-end. From a global perspective, we retain a US bias due to better economic and earning trends relative to most regions. We maintain our underweight to emerging markets, although we expect them to perform more inline with global markets after sharply underperforming for the past several years. We still see value in international small companies, which should benefit from easier monetary policies overseas. Within fixed income, we continue to recommend that investors remain neutral-to-moderately short maturity weightings, while overweighting the credit sector.

Portfolio Objectives and Policy Asset Allocation

The target total return objective for the Foundation is 8.7% and takes into account expenses, inflation (as measured by BRDPI), and annual distributions. The 10-year horizon expected return is 6.98% based on SunTrust Capital Market Assumptions and efficient frontier analysis as of July 2014.



Executive Summary (continued)

Asset Allocation

- The Foundation has a 67.3% target to public equity, a 11.4% target to fixed income (including cash) and a 18.6% target allocation to alternative assets (including a 2.5% allocation to private equity).
- As of quarter end, the public equity allocation was 71.8%, the allocation to fixed income (including cash) was 10.9% and the allocation to alternative investments was 17.3%.

Portfolio Performance

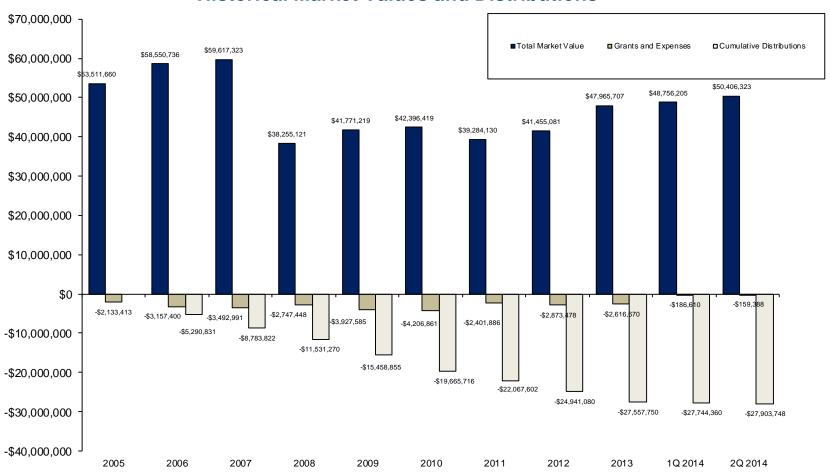
• For the quarter period ending June 30, 2014 the total return for the portfolio was 3.72% versus 3.82% for the Investment Policy Statement Index.



Portfolio Review



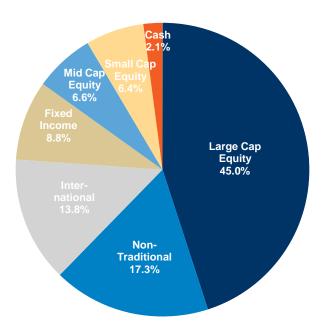
Historical Market Values and Distributions



Source: First Rate Performance System.



Portfolio Composition % Portfolio



					As of June 30, 2014									
Assets	Current Market Value	Current Allocation	Prior Qtr Allocation	Δ in Allocation	Target Allocation	Range	Variance from Target							
Total Portfolio	\$50,406,323	100.0%	100.0%											
Total Equities	\$36,186,230	71.8%	72.9%	(1.1%)	<u>67.3%</u>		4.5%							
Large Cap Equities	\$22,668,387	45.0%	45.8%	(0.8%)	43.4%	30-60%	1.6%							
T. Rowe Price Large Cap Growth	\$4,548,257	9.0%	9.3%	(0.3%)										
iShares Russell 1000 Growth	\$2,312,895	4.6%	4.6%	(0.0%)										
Hartford Dividend & Growth	\$1,639,886	3.3%	3.3%	(0.0%)										
iShares Russell 1000 Value	\$3,114,660	6.2%	6.2%	(0.1%)										
John Hancock Disciplined Value	\$1,911,504	3.8%	4.0%	(0.2%)										
Vanguard Institutional Index	\$9,141,183	18.1%	18.4%	(0.3%)										
Mid Cap Equities	\$3,344,454	6.6%	6.7%	(0.1%)	6.0%	<u>5-14%</u>	0.6%							
iShares Russell Mid Cap Growth	\$1,650,680	3.3%	3.3%	(0.1%)										
iShares Russell Mid Cap Value	\$1,693,773	3.3%	3.4%	(0.0%)	0.00/	0.450/	0.00/							
Small Cap Equities	\$3,222,349	6.4%	6.6%	(0.2%)	6.6%	<u>0-15%</u>	-0.2%							
iShare Russell 2000 Growth	\$1,577,573	3.1%	3.3%	(0.1%)										
Cambiar Small Cap	\$1,644,776	3.3%	3.3%	(0.1%)	40.00/		1.0%							
International Equities	\$6,951,041	13.8%	13.8%	0.0%	12.8%	E 150/	1.0%							
DFA International Core Equity I Artisan International Value Investor	\$2,189,535 \$2,043,948	4.3% 4.1%	4.4% 4.1%	(0.1%)	8.5%	<u>5-15%</u>								
Oppenheimer Developing Markets	\$2,717,558	5.4%	5.3%	0.1%	5.5%	3-10%								
Total Fixed Income	\$4,441,804	8.8%	9.4%	(0.5%)	10.2%	0-20%	-1.4%							
High Yield	\$1,833,200	3.6%	3.9%	(0.3%)	2.5%	0-10%	1.1%							
iShares iBoxx High Yield Bond	\$778.165	1.5%	1.6%	(0.1%)	<u>=10 70</u>	<u>0 1070</u>	,0							
Eaton Vance Senior Floating rate	\$1,055,035	2.1%	2.3%	(0.1%)										
Intermediate	\$1,562,889	3.1%	3.3%	(0.2%)	2.5%	0-10%	0.6%							
PIMCO Total Return Bond	\$1.562.889	3.1%	3.3%	(0.2%)										
International	\$1,045,715	2.1%	2.2%	(0.1%)	2.5%	0-10%	-0.4%							
PIMCO Emerging Local Bond	\$220,492	0.5%	0.5%	(0.0%)										
Templeton Global Bond	\$825,223	1.6%	1.7%	(0.1%)										
Total Non-Traditional	\$8,739,976	17.3%	17.6%	(0.3%)	18.6%	10-30%	-1.3%							
Hedge	\$7,984,372	15.8%	16.4%	(0.6%)	16.1%	10-30%	-0.3%							
Lighthouse Global Long/Short	\$2,849,999	5.6%	6.0%	(0.3%)										
Lighthouse Diversified	\$2,867,826	5.7%	5.8%	(0.2%)										
Lighthouse Credit Opportunities	\$2,266,547	4.5%	4.6%	(0.1%)										
Private Equity	\$755,604	1.5%	1.2%	0.3%	2.5%	0-10%	-1.0%							
Hall Capital	\$586,335	1.2%	1.0%	0.2%										
Spring Harbour	\$169,269	0.3%	0.2%	0.1%										
Total Cash	\$1,038,312	2.1%	0.1%	1.9%	<u>1.2%</u>		0.9%							



Investment Performance

As of June 30, 2014										
Assets	Quarter	YTD	1 Year	3 Years	5 Years					
Total Portfolio	3.72%	5.81%	20.37%	10.79%	13.49%					
2013 Efficient Frontier Target ⁽¹⁾	3.82%	5.53%	17.81%	10.55%	13.35%					
Spending Policy Benchmark			8.50% ⁽²⁾	8.20% (3)	8.50% (4)					
65% Russell 3000 / 35% Barclays Agg	3.88%	5.89%	17.65%	12.06%	14.34%					
Total Equities	4.66%	6.01%	24.85%	13.18%	17.15%					
Domestic Equities	4.33%	6.19%	25.63%	15.00%	18.44%					
International - Developed	5.16%	4.98%	22.98%	8.42%	13.67%					
International - Emerging	7.88%	6.02%	19.75%	2.89%						
Total Fixed Income	2.14%	3.44%	5.87%	5.38%	6.94%					
Total Non-Traditional	0.46%	6.06%	12.06%	6.21%	8.03%					

^{(1) 2013} Efficient Frontier Target consists of: 45.9% S&P500, 6% Russell Mid Cap, 6.6% Russell 2000, 8.5% MSCI EAFE, 5.5% MSCI Emerging Markets, 15.6% HFR Fund of Funds, 10.2% Barclays Aggregate Index, 0.5% Bloomberg Commodity and 1.2% 91 Day T-Bills.

Source: First Rate Advisor.

Returns are gross of fees unless otherwise noted. Returns greater than one year are annualized.



⁽²⁾ Distributions 5%, Expenses 1%, Inflation (BRDPI for FY 2013) 2.5% = 8.5%

⁽³⁾ Average 3 Year BRDPI Inflation of 2.2% + 5% Distribution + 1% Expenses = 8.2%

⁽⁴⁾ Average 5 Year BRDPI Inflation of 2.5% + 5% Distribution + 1% Expenses = 8.5%

Manager Performance

As of June 30, 2014								
Assets	Ticker Symbol	Quarter	YTD	1 Year	3 Years	5 Years		
Large Cap Equities								
T. Rowe Price Large Cap Growth	TRLGX	3.26%	3.34%	31.87%	18.06%	20.52%		
iShares Russell 1000 Growth	IWF	5.07%	6.20%	26.64%	16.03%	19.00%		
Russell 1000 Growth		5.13%	6.31%	26.92%	16.26%	19.24%		
Hartford Dividend & Growth	HDGYX	5.17%	8.05%	23.50%	15.64%	17.41%		
Vanguard Institutional Index	VINIX	5.23%	7.05%	24.56%	16.55%	18.81%		
S&P 500		5.23%	7.14%	24.61%	16.58%	18.83%		
John Hancock Disciplined Value	JVLIX	2.39%	4.95%	21.65%	17.19%	18.78%		
iShares Russell 1000 Value	IWD	5.04%	8.16%	23.52%	16.66%	18.98%		
Russell 1000 Value		5.10%	8.28%	23.81%	16.92%	19.23%		
Mid Cap Equities								
iShares Russell Mid Cap Growth	IWP	4.31%	6.40%	25.74%	14.31%	20.91%		
Russell Mid Cap Growth		4.37%	6.51%	26.04%	14.54%	21.16%		
iShares Russell Mid Cap Value	IWS	5.57%	11.01%	27.41%	17.31%	22.70%		
Russell Mid Cap Value		5.62%	11.14%	27.76%	17.56%	22.97%		
Small Cap Equities								
iShares Russell 2000 Growth	IWO	1.73%	2.22%	24.78%	14.61%	20.55%		
Russell 2000 Growth		1.72%	2.22%	24.73%	14.49%	20.50%		
Cambiar Small Cap	CAMZX	2.96%	4.39%	25.85%	14.17%	22.54%		
Russell 2000		2.05%	3.19%	23.64%	14.57%	20.21%		
International Equities								
DFA International Core Equity I	DFIEX	3.83%	6.03%	27.32%	8.07%	13.00%		
Artisan International Value Investor	ARTKX	6.20%	6.42%	27.64%	14.61%	18.13%		
MSCI EAFE		4.09%	4.78%	23.57%	8.10%	11.77%		
Oppenheimer Developing Markets	ODVYX	7.88%	6.02%	19.75%	5.16%	14.07%		
MSCI Emerging Markets		6.60%	6.14%	14.31%	(0.39%)	9.24%		

Source: Morningstar & First Rate Advisor



Manager Performance

As of June 30, 2014								
Assets	Ticker Symbol	Quarter	YTD	1 Year	3 Years	5 Years		
Fixed Income								
iShares iBoxx High Yield Bond	HYG	2.29%	5.03%	10.87%	8.61%	12.26%		
iBoxx Liquid High Yield		2.30%	5.04%	11.03%	8.74%	12.46%		
Eaton Vance Senior Floating rate	EIBLX	0.79%	1.35%	4.15%	4.67%	7.77%		
S&P/LSTA Leveraged Loan		1.38%	2.60%	5.59%	5.43%	8.72%		
PIMCO Total Return Bond	PTTRX	2.37%	3.70%	4.88%	4.32%	6.39%		
Barclays US Aggregate Bond		2.04%	3.93%	4.37%	3.66%	4.85%		
PIMCO Emerging Local Bond	PELBX	4.63%	6.50%	4.06%	0.88%	7.61%		
JPM GBI EM Global Diversified		4.02%	5.99%	3.91%	1.16%	7.42%		
Templeton Global Bond	TGBAX	2.68%	3.46%	7.41%	4.76%	8.42%		
Citi WGBI		2.27%	5.00%	6.85%	1.57%	3.60%		
Non - Traditional								
Lighthouse Global Long/Short		0.99%	1.77%	11.31%	8.32%	7.20%		
Lighthouse Credit Opportunities		2.55%	5.80%	14.45%	7.97%	12.00%		
Lighthouse Diversified		1.95%	4.92%	14.13%	6.55%	7.44%		
HFRI FoF : Composite		1.61%	2.17%	7.69%	3.33%	4.26%		

Source: Morningstar & First Rate Advisor



Peer Group Analysis

As of June 30, 2014

				Morningstar Percentile
	Ticker	Morningstar Category	Benchmark	2 Quarter YTD 1 YR 3 YR 5 YR
LARGE CAP GROWTH				
T Row e Price LC Grow th Russell 1000 Grow th - Total Return	TRLGX	Large-Cap Grow th Large-Cap Grow th	Russell 1000 Grow th - Total Return	79 75 7 4 8 23 22 40 19 20
LARGE CAP CORE				
Vanguard Institutional Index S&P 500 - Total Return	VINIX	Large-Cap Core Large-Cap Core	S&P 500 - Total Return	20 27 38 20 20 20 27 38 20 19
LARGE CAP VALUE				
Hartford Dividend & Grow th Y John Hancock Disc Value Russell 1000 Value - Total Return	HDGYX JVLIX	Large-Cap Value Large-Cap Value Large-Cap Value	Russell 1000 Value - Total Return	28 23 30 38 48 96 88 59 7 17 31 17 27 11 11
SMALL CAP VALUE				
Cambiar Small Cap Russell 2000 Value - Total Return	CAMZX	Small-Cap Value Small-Cap Value	Russell 2000 Value - Total Return	31 37 25 52 8 57 59 66 49 59
LARGE CAP INTERNATIONAL				
DFA International Core Equity Fund	DFIEX	International Large-Cap Core	MSCI EAFE - Gross Return	57 32 13 30 12
Artisan Intl Value MSCI EAFE - Gross Return	ARTKX	International Large-Cap Core International Large-Cap Core	MSCI EAFE - Gross Return	4 10 2 1 1 39 25 14 21 38
EMERGING MARKETS EQUITY				
Oppenheimer Develping Markets	ODVYX	Emerging Markets	MSCI EMF (Emerging Markets) - Gross Return	17 45 12 7 2
MSCI EMF (Emerging Markets) - Gross Return		Emerging Markets		53 43 48 53 45
CORE PLUS FIXED				
PIMCO Total Return Instl	PTTRX	Intermediate Investment Grade	, , , , , , , , , , , , , , , , , , , ,	23 71 51 41 39
Barclays Capital US Aggregate		Intermediate Investment Grade		58 61 63 64 77
Global Bond				
Templeton Global Bond	TGBAX	Global Bond	Citi WGBI Non USD	37 82 44 25 14
PIMCO Emg Local Bond JPM GBI Global Diversified	PELBX	Global Bond	Citi WGBI Non USD	45 47 70 75 68 72 62 72 71 70
BANK LOAN				
Eaton Vance Floating Rate	EIBLX	Bank Loan	Credit Suisse Leveraged Loan	75 92 84 61 46



Credit Suisse Leveraged Loan

Bank Loan

Attribution Analysis – Second Calendar Quarter 2014

	2013 Efficient Frontier Target	Weig	hts (%)	Asse	et Qtrly Retui	ns (%)			Attribution Effect	s
<u>Asset</u>	<u>Benchmark</u>	2013 E.F.	Active (1)		Index Style Index(3) Portfolio			Allocation	Style Allocation	Selectio
		<u>Target</u>					vs. Target			
Large Cap	LC Policy Index(4)	43.4	45.4	5.1	5.2	4.5	1.23	0.03	0.03	-0.25
T Rowe Price LC Growth	Russell 1000 Growth Index		9.2	5.1		3.3			0.00	
Vanguard Instl Index	S&P 500 Index		18.3	5.2		5.2			0.02	
iShare Russell 1000 Growth	Russell 1000 Growth Index		4.6	5.1		5.1			0.00	
Hartford Dividend & Growth Y	Russell 1000 Value Index		3.3	5.1		5.2			0.00	
iShare Russell 1000 Value	Russell 1000 Value Index		6.2	5.1		5.0			0.00	
John Hancock Disc Value	Russell 1000 Value Index		3.9	5.1		2.4			0.00	
Mid Cap	Russell MidCap Index	6.0	6.6	5.0	5.0	4.9	0.54	0.01	0.00	0.00
iShare Midcap Value	Russell Midcap Value Index		3.4	5.6		5.6			0.02	
iShare Midcap Growth	Russell MidCap Growth Index		3.3	4.4		4.3			-0.02	
Small Cap	Russell 2000 Index	6.6	6.5	2.1	2.1	2.4	(0.20)	0.00	0.00	0.02
iShares Russell 2000 Growth	Russell 2000 Growth Index		3.2	1.7		1.7	` ′		-0.01	
Cambiar SC Value	Russell 2000 Value Index		3.3	2.4		3.0			0.01	
International	MSCI EAFE + EM Index	14.0	13.8	4.9	5.1	6.1	0.87	0.00	0.03	0.17
DFA International Core Equity	MSCI EAFE		4.4	4.1		3.8			-0.03	
Artisan International Value	MSCI EAFE		4.1	4.1		6.2			-0.03	
Oppenheimer Developing	MSCI Emerging Mkts Index		5.4	6.6		7.9			0.09	
Alternative (includeds PE allocation)	HFRI FOF Index	18.6	17.5	1.5	1.5	1.6	1.34	0.03	0.00	0.03
Lighthouse Credit Opportunites	HFRI FOF Index		4.6	1.6		2.6			0.01	
Lighthouse Global Long/Short	HFRI FOF Index		5.8	1.6		1.0			0.01	
Lighthouse Diversified	HFRI FOF Index		5.8	1.6		2.0			0.01	
Private Hall Capital		2.5	1.1							
Spring Harbour			0.3							
Fixed Income (includes cash)	Barcap Aggregate	11.4	10.2	0.6	1.8	1.9	(0.07)	0.04	0.13	0.14
Eaton Vance Senior Floating Rate	S&P Leveraged Loan		2.2	1.4		8.0			0.02	
Pimco Total Return Bond	Barclays Aggregate		3.2	2.0		2.4			0.05	
iShares High Yield	iBoxx Liquid HY		1.6	2.3		2.3			0.03	
Templeton Global Bond	Citi World Bd		1.7	2.3		2.7			0.03	
Pimco Emerging Mkt Local	Citi World Bd		0.5	4.0		4.6			0.02	
Cash Equivalent	91 Day T-Bills	1.2	1.1	0.0		0.0	(0.11)	0.00	-0.01	0.00
Period End Static Return		100.0	100.0	3.7		3.9 (2	l 2)	0.10	0.19	0.10
						0.0				
Total - Actual Return (Plugged)				3.8		3.7		1		

Notes:



⁽¹⁾ Portfolio active weights are an average of beginning and ending quarter percentages

⁽²⁾ Portfolio return is estimated using a weighted average and does not take into account the timing of cash flows; therefore, it may not exactly match the actual return.

⁽³⁾ The Style Index is the portfolio's fund weight x benchmark style index within each asset class

⁽⁴⁾ Large Cap Policy Index = 33.3% SP500, 33.3% R1000G, 33.3% R1000V

Efficient Frontier Analysis



Capital Market Assumptions – 2014

	RETURN	HISTORICAL RETURNS AND STATISTICS ENDING DECEMBER 31, 2013						
ASSET CLASS	Annualized 10 Year Return		Correlation to S&P 500	1 Year Historical Return	10 Year Historical Return	Long-Term Historical Return	Long-Term Risk	Long-Term Correlation to S&P 500
CASH	1.25	1.0	-0.1	0.1	1.7	3.7	1.3	0.0
FIXED INCOME								
US Intermediate Term Core Taxable Bonds	2.75	3.6	-0.3	-2.0	4.6	6.8	4.4	-0.1
US Government Bonds	2.00	4.9	-0.6	-2.6	4.1	6.6	5.3	-0.3
US TIPS	2.50	5.8	-0.1	-9.4	4.9	6.2	5.3	-0.3
US Mortgage-Backed Securities	3.00	2.8	-0.4	-1.4	4.6	6.8	3.6	-0.1
US Investment Grade Corporate Bonds	3.75	6.5	0.3	-1.5	5.3	7.5	5.8	0.2
US Leveraged Loans	4.50	13.0	0.7	6.2	5.1	6.0	8.0	0.6
US High Yield Corporate Bonds	5.50	16.0	0.6	7.4	8.5	8.8	10.5	0.7
Non-US Developed Markets Bonds	2.25	9.2	0.0	-4.6	4.1	6.2	10.3	0.0
Emerging Markets Bonds	5.75	14.5	0.7	-8.5	8.6	11.0	12.3	0.5
Intermediate Term Municipal Bonds	2.75	2.9	-0.2	0.8	3.9	5.5	3.0	-0.1
High Yield Municipal Bonds	5.50	13.0	0.5	-5.5	5.2	5.5	8.4	0.4
EQUITY								
Global Equity	7.25	19.8	1.0	23.4	7.7	7.4	18.6	0.9
US Large Cap Core Equity	7.25	18.0	1.0	33.1	7.8	10.4	18.1	1.0
US Mid Cap Core Equity	8.00	21.5	1.0	34.8	10.2	12.1	20.5	0.9
US Small Cap Core Equity	8.00	22.4	0.9	38.8	9.1	10.2	22.9	0.9
US Real Estate Securities	6.75	24.0	0.8	2.9	8.6	10.5	21.7	0.6
Non-US Developed Markets Equity	7.00	21.7	0.9	23.3	7.4	5.3	20.2	0.8
Emerging Markets Equity	8.75	31.0	0.8	-2.3	11.5	11.1	30.3	0.7
Non-US Developed Markets Small Cap Equity	7.75	25.8	0.8	29.7	9.9	9.3	24.3	0.8
NON-TRADITIONAL								
Commodities	3.75	21.0	0.5	-9.5	0.9	4.1	16.6	0.2
Managed Futures	5.50	11.3	0.0	-2.6	3.2	5.1	12.0	-0.3
Low Volatility Strategies	3.75	8.5	0.7	7.7	2.7	6.4	5.5	0.6
Diversified Strategies	5.50	9.5	0.8	7.6	3.3	6.9	7.8	0.6
Hedged Equity	6.25	11.5	0.8	10.6	3.9	9.6	11.2	0.6
Private Equity	8.75	18.0	0.7	13.0	12.6	13.7	11.5	0.7

Notes

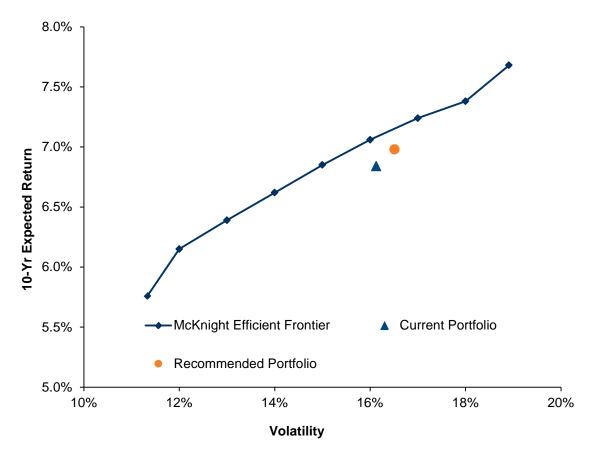
Estimated returns reflect SunTrust's current average annual return assumptions (calculated using a geometric mean) over the next 10 years for each asset class as of January 2014, are not guaranteed and are subject to revision without notice. Estimated returns are derived from a combination of fundamental research incorporating business cycle analysis and long-term secular themes along with quantitative methods and mean-reversion analysis. Estimated standard deviations are derived from quarterly10-year historical data and may be adjusted according to our research and professional judgment. Historical data shown is based on the last 25 years (depending on the availability of data). Data Source: Morningstar, CSFB/Tremont Hedge Index, Hedge Fund Research, Inc., MSCI, JP Morgan, S&P/Citigroup



Efficient Frontier

McKnight Efficient Frontier		
	Standard	Expected
	Deviation	Return
Standard Deviation = 11.33	11.33	5.76
Standard Deviation = 12	12.00	6.15
Standard Deviation = 13	13.00	6.39
Standard Deviation = 14	14.00	6.62
Standard Deviation = 15	15.00	6.85
Standard Deviation = 16	16.00	7.06
Standard Deviation = 17	17.00	7.24
Standard Deviation = 18	18.00	7.38
Standard Deviation = 18.91	18.91	7.68
Balanced Portfolio Constrained		

Balanced Portfolio Constrained		
	Standard	Expected
	Deviation	Return
Current Portfolio	16.13	6.84
Recommended Portfolio	16.51	6.98





Asset Allocation/ Benchmark Analysis

						Portfolio Allocations and Statistics (%)				
		ANNUALIZED HISTORICAL RETURN (%) ³	10-YR FWD EST RETURN (%) ³	10-YR FWD EST STD DEV (%) ³	10-YR FWD EST CORREL TO S&P 500 ³	65/35 Benchmark	65/35 Benchmark v2	McKnight Current Portfolio	McKnight Recommended Portfolio	Highest Leve of Return on Efficient Frontier
Asset Class: Equity	Equity Benchmark					65.0	65.0	71.8	71.4	79.
US Large Cap Core Equity	S&P 500	10.26	7.25	17.6	1.00			18.1	18.5	30.
US Multi Cap Core Equity	Russell 3000	10.39	7.50	18.5	1.00	65.0	65.0			
US Large Cap Growth	Russell 1000 Growth	9.91	7.25	18.0	0.97			13.6	11.9	
US Large Cap Value	Russell 1000 Value	10.55	7.25	18.0	0.98			13.3	11.6	
US Mid Cap Core Equity	Russell Mid Cap	12.14	8.00	21.5	0.97					13.
US Mid Cap Growth	Russell Mid Cap Growth	11.08	8.00	21.9	0.95			3.3	3.4	
US Mid Cap Value	Russell Mid Cap Value	12.27	8.00	21.7	0.96			3.3	3.4	
US Small Cap Core Equity	Russell 2000	10.20	8.00	22.4	0.94					14.
US Small Cap Growth	Russell 2000 Growth	8.48	8.00	23.3	0.93			3.1	3.2	
US Small Cap Value	Russell 2000 Value	11.45	8.00	22.3	0.91			3.3	3.4	
Non-US Developed Markets Equity	MSCIEAFE	5.32	7.00	21.7	0.89			8.4	8.6	5.
Non-US Developed Markets Small Cap Equity	MSCIEAFE Small Cap	9.30	7.75	25.8	0.84				2.0	
Emerging Markets Equity	MSCI Emerging Markets	11.11	8.75	31.0	0.77			5.4	5.5	
Asset Class: Fixed Income	Fixed Income Benchmark					35.0	35.0	8.8	8.8	0.
US Intermediate Term Core Taxable Bonds	Barclays US Aggregate Bond	6.83	2.75	3.6	-0.26	35.0		3.1	3.1	
US Intermediate Term Core Taxable Bonds	Barclays US Intermediate Govt/Credit Bond	6.35	2.25	3.4	-0.23		35.0			
US Leveraged Loans	Credit Suisse Leveraged Loan	5.97	4.50	13.0	0.71			2.1	2.1	
US High Yield Corporate Bonds	BofAML Hi-Yld Master	8.84	5.50	16.0	0.62			1.5	1.5	
Emerging Markets Bonds Local Currency	JPM GBI-EM Global	10.96	5.75	14.5	0.67			2.1	2.1	
Asset Class: Non-Traditional	Non-Traditional Benchmark					0.0	0.0	17.3	19.3	20.
Diversified Strategies	HFRI Fund of Funds Diversified	6.92	5.50	9.5	0.76			5.7	5.7	
Hedged Equity	HFRI Fund of Funds Strategic	9.55	6.25	11.5	0.79			5.6	5.6	
Credit Opportunities	HFRIED: Distressed/Restructuring Index	12.06	6.00	16.0	0.79			4.5	4.5	0.
Private Equity	Cambridge Associates US Private Equity	14.20	8.75	18.0	0.74			1.5	3.5	
Asset Class: Reserves	Reserves Benchmark	20	00		0	0.0	0.0		0.5	
Reserves	BofAML U.S. 3 month T-Bill	3.66	1.25	1.0	-0.11	0.0	0.0	2.1	0.5	
110001100	TOTALS	0.00	1.20	1.0	0.11	100.0	100.0	100.0	100.0	
	TOTALO					100.0	100.0	100.0	100.0	100.
Expected Return (%) ³						5.84	5.66	6.84	6.98	7.6
						11.75			16.51	
Expected Standard Deviation (%) ³						11./5	11.80	16.13	76.51	18.9
Historical Return (%) ³						9.14	8.98	9.53	9.68	10.6
Historical Standard Deviation (%) ³						11.80	11.74	14.91	15.11	17.3
1-Yr Best Case Scenario (%) (Mean+2 Stand	dard Deviations) ⁴					29.3	29.3	39.1	40.0	45.
1-Yr Worst Case Scenario (%) (Mean-3 Stan	dard Deviations) ⁴					-29.4	-29.7	-41.6	-42.6	-49.
Expected Sharpe Ratio (R _F = 1.25%)						0.39	0.37	0.35	0.35	0.3



Asset Allocation Disclosures

Asset Allocation Analysis Table Notes

- 1. The Asset Allocation Strategies may change at any time without notice. Statistics are prepared using Morningstar Encorr.
- 2. Data sources include: Morningstar Encorr, HFRI
- 3. Estimated returns, standard deviations and correlations are forward-looking assumptions over the next 10 years. These assumptions reflect our current expectations for each asset class. They are not guaranteed and are subject to revision without notice. Estimated returns are derived from a combination of mean-reversion analysis using historical returns over the last 25 years (if available), Black-Litterman Model, and fundamental research incorporating business cycle analysis and long-term secular themes. Estimated standard deviations and correlations are derived from 10-year quarterly historical data (ending 12/31/2013) and may be adjust according to our research and professional judgment. Our process also incorporates adjusted standard deviations and correlations for asset classes and strategies exhibiting a high degree of serial correlation. Historical returns are based on the quarterly dataset of 1/1989-12/2013 (depending on the availability of data) and are calculated using a geometric mean.
- 4. Best and worst case scenarios are calculated from probabilities based on a normal return distribution; however, actual results may be better or worse than shown.
- 5. Mean-Variance Optimization assumes that return distributions are normal; however, hedge funds/private equity funds/real estate funds usually do not have normal distributions. Therefore, negative events may occur more often in actual than what is estimated by the optimizer. There may be risks that are not accounted for in the mean-variance optimization. Investing in hedge funds is intended for experienced and sophisticated investors who meet the accredited/investor-qualified purchaser standards only who are willing to bear the high economic risks of the investment. Investors should carefully review and consider potential risks before investing. Allocations to hedge funds may not be as liquid as long-only investments in traditional stock and bonds and may be subject to lock-ups.
- 6. Tactical Portfolios: Shorter-term opportunities are not embedded in our capital market assumptions and, therefore, comparing their forward estimated returns with those of the strategic portfolios may not be relevant.
- 7. This analysis was performed using representative benchmarks and assumes a static mix over both the historical and the forward time period.
- 8. Recommended portfolios may require changes to the client's Investment Policy Statement.



Economic Overview



Investment Overview

Global stock rally reached fifth month, led by emerging markets once again

- Stocks around the globe rallied early in June, supported by a new easing plan by the European Central Bank (ECB) and dovish comments from Fed Chair Janet Yellen; the MSCI ACWI rose 1.9% for June, while the S&P 500 gained 2.1%, pushing it to yet another all-time high and bringing its year-to-date gain to 7.1%
- Emerging markets rose 2.7% for June and is up 6.1% for 2014; after back-to-back solid months, it is more in line with other stock indices; strong returns in Japan boosted the MSCI EAFE, which rose 1.0% for the month
- REIT returns moderated following several strong months for the FTSE NAREIT All Equity Index, up 1.1% in June and 16.3% for the year; the DJ-UBS Commodity Index overcame sharp agriculture segment declines to increase 0.6% for the month

Interest rates gyrated during June, but most bond indices ended roughly flat for the month

- As global bond markets digested the ECB's easing plan and a lowered economic outlook for the US, the yield on the benchmark 10-year US Treasury was nearly unchanged, closing the month at 2.53% from 2.48% a month ago
- The Barclays Aggregate Bond Index edged up 0.5% in June and 2.0% for the second quarter; similarly, most bond indices ended roughly flat for the month

US economic data continued to rebound, but many lowered 2014 growth outlooks

- Most US data rebounded as nonfarm payrolls added more than 200,000 jobs for the fourth straight month, new and existing home sales jumped, and several manufacturing gauges ticked up; however, first-quarter US gross domestic product (GDP) was revised significantly lower, to -2.90% from -1.0%, largely due to lower than expected health care spending
- Accordingly, many economists—including the Federal Reserve—lowered 2014 GDP growth projections to the 2.1% and
 2.3% range from nearly 3%, but the consensus forecast kept 2015 growth around 3%
- However, the Federal Reserve remained steadfast: ratcheting down its monthly US Treasury bond purchases beginning in July to \$15 billion and mortgage-backed securities to \$20 billion, its fourth straight cut of \$10 billion since January

June 2014 Market Returns

Total Return* Periods ending June 30, 2014							
	QTD	YTD	1 Year				
Global Markets (in US \$)							
Global Equity (MSCI AC World net)	5.0%	6.2%	22.9%				
Global Bonds (Citi WGBI USD)	2.3%	5.0%	6.8%				
US Equity							
Large-Cap (S&P 500)	5.2%	7.1%	24.6%				
Small-Cap (Russell 2000)	2.0%	3.2%	23.6%				
Real Estate Sec. (FTSE NAREIT ALL Equity)	7.1%	16.2%	13.0%				
Non-US Equity							
Developed Markets (MSCI EAFE net)	4.1%	4.8%	23.6%				
Emerging Markets (MSCI EM net)	6.6%	6.1%	14.3%				
US Fixed Income							
US Treasury Bonds (Benchmark 10 Yr.)	2.7%	6.1%	2.9%				
Core Taxable Bonds (Barclays Aggregate)	2.0%	3.9%	4.4%				
HYTaxable Bonds (BofAML High Yield Master)	2.6%	5.6%	11.8%				
Municipal Bonds (Barclays 1-15 Year)	1.9%	4.2%	5.2%				
Non-US Bonds							
Developed Markets (Citi WGBI NonUSD)	2.6%	5.9%	8.9%				
Emerging Markets (JPM GBI EM Global)	4.0%	6.0%	3.9%				
Non-Traditional							
Global Hedge Funds (HFRX Glb Hedge Fund)	0.6%	1.8%	5.3%				
Commodities (Bloomberg Commodity)	0.1%	7.1%	8.2%				

^{*} All returns in US dollars Data Source: Factset

- Global stocks rallied early in June, supported by a new easing plan by the European Central Bank (ECB) and dovish comments from Fed Chair Janet Yellen. The MSCI ACWI rose 1.9% for June, while the S&P 500 gained 2.1%, pushing the all-time high further and up 7.1% for 2014. Emerging markets gained 2.7% for June and 6.1% for 2014 after back-to-back solid months, bringing it more in line with other stock indices. Strong returns in Japan boosted the MSCI EAFE, which rose 1.0% for the month.
- As global bond markets digested the ECB's easing plan and a lowered outlook for the US, the yield on the benchmark 10-year US Treasury was nearly unchanged, closing the month at 2.53% from 2.48% a month ago. The Barclays Aggregate Bond Index edged up 0.5% in June and 2.0% for the second quarter. Similarly, most bond indices ended roughly flat for the month.
- REIT returns moderated following several strong months for the FTSE NAREIT All Equity Index, up 1.1% in June and 16.3% for the year. The DJ-UBS Commodity Index overcame sharp agriculture segment declines to increase 0.6% for the month.

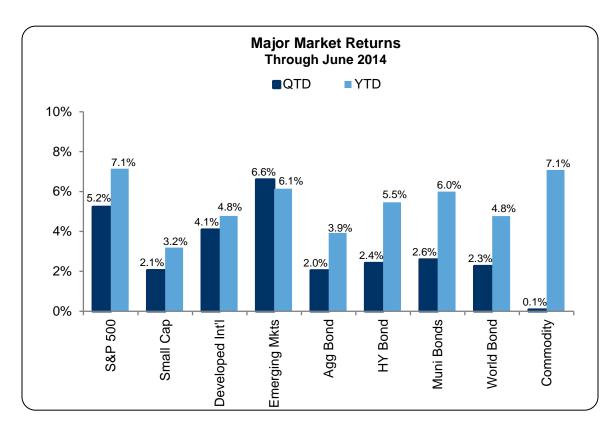


Market Overview

Global stock rally reached fifth month, led by emerging markets once again

Global stocks rallied early in June, supported by a new easing plan by the European Central Bank and dovish comments from Fed Chair Janet Yellen.

Leading markets higher in the first half of 2014 were the S&P 500, which hit yet another alltime high, and emerging markets. The yield on the benchmark 10-year US **Treasury was nearly** unchanged in June. Consequently, most bond indices ended roughly flat for the month, maintaining solid returns year to date. Returns for REITs and commodities lagged following several strong months, but both are among the top performer for 2014.



Data source: Morningstar and Barclays Live; Returns are represented by the following indices: S&P500 Stock Index, Russell 2000 Stock Index, MSCI EAFE Index, MSCI Emerging Markets Index, Barclays Aggregate Bond Index, Barclays US Corporate High Yield Index, Barclays Municipal Bond Index, Citi World BIG Index, Bloomberg Commodity Total Return Index.



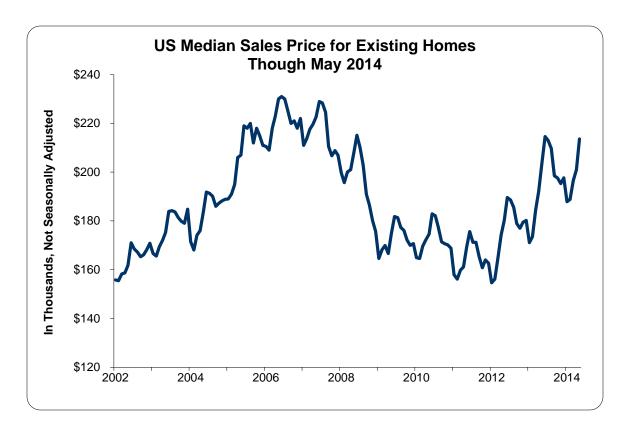
Economic Overview

Housing and employment have shown increased momentum recently

Two major areas that had not participated as strongly in 2013—housing and employment—are showing increased momentum.

Median home prices continued to rise, returning near the highest level since the 2006 peak.

New homes sales surged 18.6% in May and existing home sales rose 4.9%. Although housing and employment still need further repair, each provides an additional boost to the economy.



Data source: National Association of Realtors

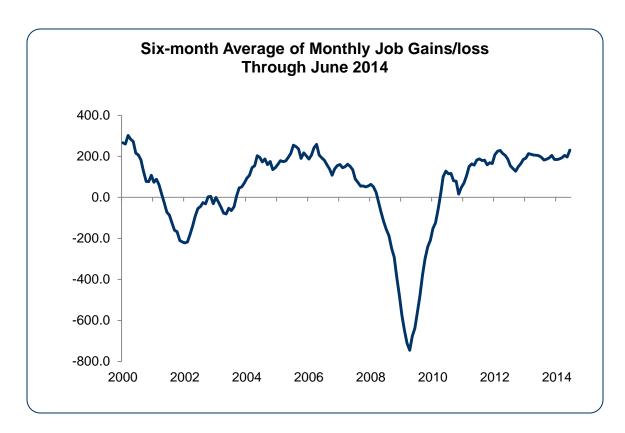


Economic Overview, continued

Most US data for May and June, including jobs figures, continued to show a rebound in economic activity

Most US data rebounded from the wicked winter months. The US created 288,000 new jobs in June, the fifth straight month over 200,000, which takes the six-month average to 231,000, the best pace since April 2006. Meanwhile, the unemployment rate fell 0.2% to 6.1% in June, its lowest level since September 2008.

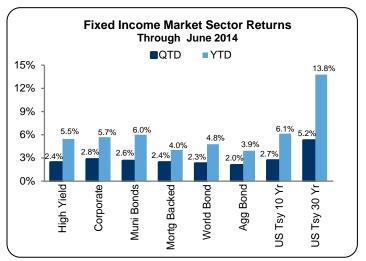
Additionally, new and existing home sales jumped, and several manufacturing gauges ticked up.



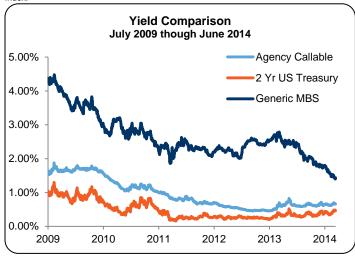
Data source: Bureau of Labor Statistics



Taxable Bond Market Overview



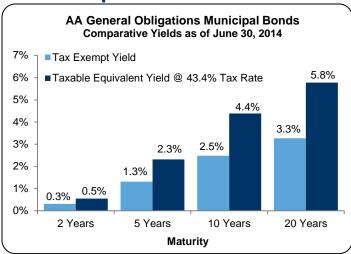
Returns are represented by the following indices: Barclays Municipal Bond Index, Citi World BIG Index, Barclays Aggregate Bond Index, Barclays US Corporate High Yield Index, Barclays Bellwether 10 and 30 year US Treasury Index, Barclays Financial Institutions Bond Index, Barclays MBS Fixed Rate Bond Index and Barclays US Investment Grade Corporate Index.



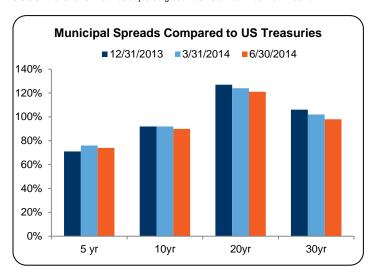
Data source: Strategas

- As global bond markets digested the ECB's easing plan and a lowered outlook for the US, the yield on the benchmark 10-year US Treasury was nearly unchanged, closing the month at 2.53% from 2.48% a month ago.
- The Barclays Aggregate Bond Index edged up 0.5% in June and 2.0% for the second quarter. Similarly, most bond indices ended roughly flat for the month.
- With low levels of volatility in yields, we expect to see rates only moderately higher at year-end. However, short-term rate increases are likely be followed by declines as the market reacts to technical factors, economic data or geopolitical uncertainty. We continue to recommend that investors remain neutral-to-moderately short maturity weightings within portfolios, while overweighting the credit sector.
- Mortgage backed securities (MBS) had its biggest first half gain since 2010 as a drop in supply outweighed the reduction in purchases by the Federal Reserve. Investors reaching for yield have narrowed spreads to their lowest levels since January 2013 as the average yield on a 30-year Fannie Mae MBS security fell to 108 basis points over Treasuries from 122 basis points at year-end.

Tax-Exempt Bond Market Overview



43.4% is the top marginal federal tax bracket of 39.6% plus net investment income tax of 3.8% on the lower of modified adjusted gross income or net investment income.



Data source: Bond Buver: Thomson Municipal Market Monitor

- Like most bond sectors, municipal bonds struggled as interest rates bounced around during June. Still, the Barclays Municipal Bond Index edged up 0.6% for June and 6.0% for the year.
- High-profile negative headlines—most notably, Detroit and Puerto Rico—reemerged during June. Nonetheless, municipal bond mutual fund inflows have continued. Municipal mutual funds had inflows for the first three weeks of June (the most recent data) and have seen inflows for 20 of the 25 weeks thus far in 2014, according to Lipper US Fund Flows data.
- High-grade municipal bonds remain appealing on an after-tax basis, especially in a low yield environment. However, the spread over treasuries for longer dated municipal bonds—out 20 to 30 years—are now less than six months ago. For example, the spread for a 30-year muni has gone from an attractive 106% of treasuries at the start of 2014 to 98% currently. We prefer a modified barbell approach going out 2-4 years on the shorter end of the curve and 10-15 years for better valuations compared to treasuries.

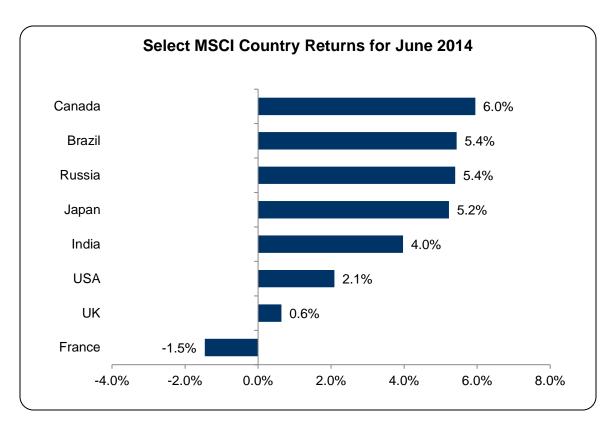
A portion of income may be subject to state taxes and federal alternative minimum tax (AMT) for individuals and corporations. Capital gains earned on tax exempt investments are taxable.



Equity Market Overview

Global stocks pushed to new cycle highs in June, capping off a strong first half

Equity markets tacked on additional gains in June, aided by improving economic trends as well as newly announced stimulus measures from the **European Central Bank and** dovish comments from US Fed Chair Janet Yellen. The MSCI **All Country World Index** (ACWI) gained 1.9% in June, bringing its year-to-date return to 6.2%. Emerging markets, bolstered by strong returns in Brazil, India, and Russia outperformed, while US stocks set yet another record high.



Data source: MSCI, country returns represented by MSCI indices in USD on net basis



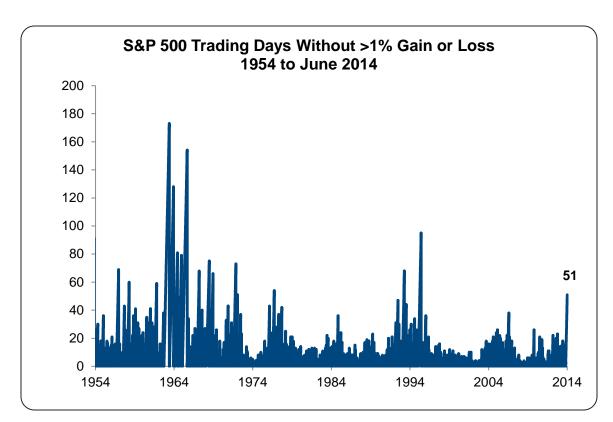
Equity Market Overview, continued

US stocks have been remarkably placid during the first half of 2014

The S&P 500 gained 2.1% during June, pushing it to yet another all-time high. It has gained 7.1% year to date.

Impressively, the S&P 500 has now risen for six straight quarters, its best stretch since 1996. At the same time, volatility remained remarkably low as the S&P 500 has gone over 50 consecutive days without a 1% up or down move.

Eight of the ten sectors within the S&P 500 were positive during June. Now all ten sectors are positive on a yearto-date basis. For the year, the utilities sector is the leader by a wide margin, while consumer discretionary remains the biggest laggard, up 0.6%.



Data source: FactSet

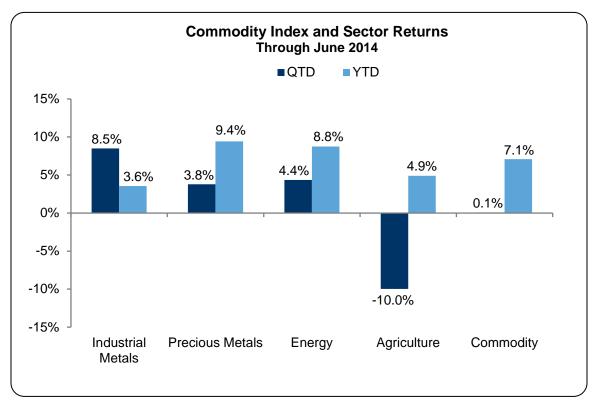


Non-Traditional Investments Overview

Commodities disappoint in the second quarter and underperform global equities by a wide margin

Three of the four major commodity sectors increased for the month, pushing the DJ-UBS Commodity Index up 0.6% for the month and a 7.1% gain for the year.

The leading sectors were precious metals, industrial metals and energy, which was boosted by crude oil price gains following tensions in Iraq. Both gold and silver had strong gains. Conversely, the agriculture sector was dragged down by the grains, which were crushed by plunging soybean prices due to record acreage.



Returns are represented by the follow indices: Bloomberg Commodity Index and the following Sector Sub-Indexes of the Bloomberg Commodity Index: Industrial Metals, Precious Metals, Energy and Agriculture. Data source: Morningstar.

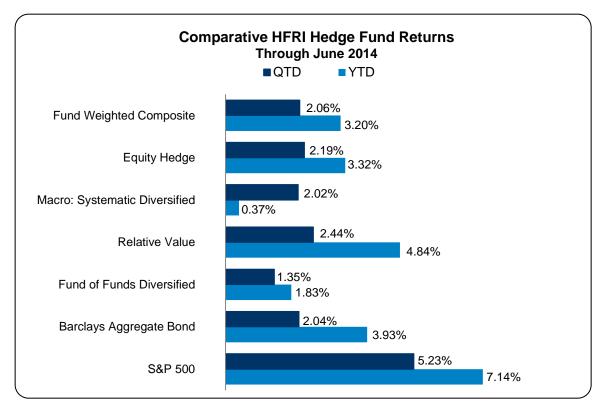


Non-Traditional Investments Overview, continued

Hedge funds notched gains in June, but lagged for the second quarter

The HFRI Fund Weighted
Composite Index
underperformed stocks but
outpaced core bond returns
both during June and the
quarter. Hedged equity
strategies primarily
contributed to June's
performance benefitting from
broad gains across most
regions and sectors, and a
reprieve in US small-cap
equity volatility, though
leaders were the Energy and
Technology sectors.

Fixed income relative value strategies rose for the tenth consecutive month, supported by stable government bond yields and tighter credit spreads.



Data Source: Hedge Fund Research, Factset

Hedge fund investing involves substantial risks and may not be suitable for all clients. Hedge funds are intended for sophisticated investors who can bear the economic risks involved. Hedge funds may engage in leveraging and speculative investment practices that may increase the risk of investment loss, can be illiquid, and are not required to provide periodic pricing or valuation information to investors. Hedge funds may involve complex tax structures, have delays in distributing tax information, are not subject to the same regulatory requirements as mutual funds and often charge higher fees.



Strategy Summary July 2014

These positions represent SunTrust's outlook regarding the attractiveness of asset classes and strategies versus our benchmark over a tactical time horizon in a balanced portfolio. Our opinions are informed by the assessment of global economic variables, financial stress indicators, valuation metrics and technical analysis under a broad range of potential risk and return scenarios.

Category	U	nderweight <	Neutral	Overweigh	nt	Investment Rationale
PORTFOLIO RISK						Improving economy and record corporate profitability vs. a maturing economic cycle, fair equity valuations, still fragile European recovery and emerging market risks.
EQUITY			•			Stocks are reasonably valued and offer dividend yields competitive with bond yields.
US Large Cap			•			US leads recovery; reasonable valuations, strong balance sheets, and diverse revenue.
US Small & Mid Cap				•		Earnings growth potential, improved lending conditions and increased M&A activity.
Master Limited Partnerships	0					Valuations at rich levels and expectations for rising rates to increase borrowing costs.
Non-US Developed Markets		•				Improving economies, but these markets remain vulnerable and structural issues remain.
Non-US Dev. Mkts. Small Cap					•	Improving growth and credit environment is especially positive for smaller-cap companies.
Emerging Markets		•				While economically important and favorably priced, these markets still face headwinds.
Real Estate Securities					•	Should be a near-term beneficiary of a moderately improving economy and labor market.
Natural Resources	0					Though valuations are fair, commodity supply dynamics are not favorable.
FIXED INCOME		•				With a better economy and a transition in Fed policy, rates should move higher; we continue to underweight the more interest-rate sensitive bond market sectors.
US Government		•				Particularly vulnerable to a rise in rates; TIPS continue to provide some relative value.
US Mortgage-Backed Securities	П		•			Tend to outperform government bonds when rates rise and have a slightly higher yield.
US Investment Grade Corporate		•				Within credit, investment-grade bonds have lower yields and a longer duration profile.
US Preferred Securities	0					High risk profile and sensitivity to interest rates increase chance for negative returns.
US Convertible	0					Opportunity relative to US equity and credit is not compelling.
Municipal		•				Attractive on an after-tax basis, but underweight due to potential for rising rates.
US High Yield					•	Better yield, lower duration and current environment supports low default expectations.
US Leveraged Loans					•	Provides duration management and return opportunity should rates rise.
Non-US Developed Markets	0					Yields likely to remain lower than US as economic trends/monetary policy lag.
Emerging Markets					•	Attractive yields and diversification opportunity, but volatility may persist near term.
NON-TRADITIONAL					•	Allocations to hedge funds should smooth returns and expand the opportunity set as stock market returns moderate and a move up in interest rates pressures fixed income.
Alternative Strategies					•	Offers differentiated sources of return and lower risk profile vs. equity. Hedged equity should benefit from falling intra-stock correlations.
Real Assets	0					Current data do not support adding inflation protection to portfolios. Commodities expected to be pressured by a stronger dollar, slower growth in China and improving supply.

Allocations based on a balanced portfolio. Neutral = within 10% of benchmark weight; Over/Underweight = over 11% deviation from benchmark weight. Opportunistic allocations are out-of-benchmark and are made within a range of 0-20%. Benchmark = 50% MSCI All Country World Index, 50% Barclays Aggregate Bond Index.

○ = No Allocation; ● = Current Allocation; ● = Opportunistic Allocation

Performance Summary Through June 2014

Index Performance (%)	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr
MSCI ACWI (net)	1.88	5.04	6.18	22.95	10.25	14.28
MSCI World (net)	1.79	4.86	6.18	24.05	11.81	14.99
MSCI EAFE LCL (net)	0.18	3.41	3.12	17.91	10.42	10.90
MSCI EAFE USD (net)	0.96	4.09	4.78	23.57	8.10	11.77
MSCI Emerging Markets LCL (net)	2.39	5.14	4.58	13.73	4.08	9.55
MSCI Emerging Markets USD (net)	2.66	6.60	6.14	14.31	(0.39)	9.24
Dow Jones Industrial Average	0.75	2.83	2.68	15.56	13.57	17.83
S&P 500	2.07	5.23	7.14	24.61	16.58	18.83
NASDAQ Composite	3.90	4.98	5.54	29.53	16.70	19.16
Russell 1000	2.27	5.12	7.27	25.35	16.63	19.25
Russell 1000 Growth	1.95	5.13	6.31	26.92	16.26	19.24
Russell 1000 Value	2.61	5.10	8.28	23.81	16.92	19.23
Russell MidCap	3.29	4.97	8.67	26.85	16.09	22.07
Russell Mid Cap Growth	3.13	4.37	6.51	26.04	14.54	21.16
Russell Mid Cap Value	3.46	5.62	11.14	27.76	17.56	22.97
Russell 2000	5.32	2.05	3.19	23.64	14.57	20.21
Russell 2000 Growth	6.20	1.72	2.22	24.73	14.49	20.50
Russell 2000 Value	4.42	2.38	4.20	22.54	14.65	19.88
FTSE NAREIT All Equity REITs	1.07	7.13	16.25	13.02	11.89	23.65
Bloomberg Commodity Index	0.60	0.08	7.08	8.21	(5.17)	1.99
Barclays Aggregate	0.05	2.04	3.93	4.37	3.66	4.85
Barclays Intermediate Govt & Credit	(0.07)	1.23	2.25	2.86	2.83	4.09
Barclays U.S. MBS Index	0.26	2.41	4.03	4.66	2.80	3.92
BofAML U.S. Treasury Master	(0.16)	1.56	3.22	2.29	3.03	3.61
BofAML U.S. Treasuries Inflation-Linked	0.32	4.12	6.38	4.74	3.73	5.68
Barclays U.S. Treasury Bellwethers (2 Yr)	(0.07)	0.26	0.44	0.74	0.55	1.19
Barclays U.S. Treasury Bellwethers (10 Yr)	(0.31)	2.66	6.14	2.86	4.98	4.98
Barclays Municipal Bond Blend 1-15 Year	0.01	1.93	4.24	5.19	4.27	4.81
BofAML U.S. Corporate Master	0.17	2.89	5.95	7.98	6.25	8.27
BofAML High Yield Master	0.85	2.57	5.64	11.80	9.27	13.94
Citigroup Non-USD WGBI (USD)	1.17	2.64	5.95	8.88	1.03	3.59
Citigroup Non-USD WGBI (USD) Hedged	0.62	2.01	4.45	5.97	5.03	4.02
JP Morgan GBI-EM Global Diversified	1.00	4.02	5.99	3.91	1.16	7.42

Rates (%)	6/30/14	6/30/14	3/31/14	12/31/13	9/30/13	6/28/13
U.S. Fed Funds Rate	0.25	0.25	0.25	0.25	0.25	0.25
European Central Bank Rate	0.15	0.15	0.25	0.25	0.50	0.50
Bank of England Rate	0.50	0.50	0.50	0.50	0.50	0.50
Bank of Japan Rate	0.10	0.10	0.10	0.10	0.10	0.10
USA LIBOR - 3 Month	0.23	0.23	0.23	0.25	0.25	0.27
TED Spread (bps) - 3 Month	0.21	0.21	0.19	0.18	0.24	0.24
2 Yr U.S. Treasury	0.46	0.46	0.42	0.38	0.33	0.36
10 Yr U.S. Treasury	2.53	2.53	2.72	3.04	2.61	2.49
10-2 yr slope	2.07	2.07	2.30	2.65	2.28	2.13
Barclays Municipal Bond Blend 1-15 Year (YTW)	1.81	1.81	2.06	2.39	2.32	2.26
BofAML High Yield Master (YTW)	5.01	5.01	5.33	5.67	6.24	6.56
BofAML Corporate Master (YTW)	2.97	2.97	3.19	3.35	3.36	3.40

Currencies	6/30/14	6/30/14	3/31/14	12/31/13	9/30/13	6/28/13
Euro (\$/€)	1.37	1.37	1.38	1.38	1.35	1.30
Yen (¥/\$)	101.31	101.31	102.99	105.11	98.13	99.34
GBP (\$/£)	1.71	1.71	1.67	1.66	1.62	1.52

Commodities	6/30/14	6/30/14	3/31/14	12/31/13	9/30/13	6/28/13
Light Crude Oil (\$/barrel)	105.37	105.37	101.58	98.42	102.33	96.56
Gold (\$/ozt)	1,322.00	1,322.00	1,283.80	1,202.30	1,327.00	1,223.70

CBOE Volatility Index	6/30/14	6/30/14	3/31/14	12/31/13	9/30/13	6/28/13
CBOE VIX	11.57	11.57	13.88	13.72	16.60	16.86

Hedge Fund Performance (%)	MTD	QTD	YTD	1 Yr	3 Yr	5 Yr
HFRX Global Hedge Fund Index	0.93	0.65	1.77	5.27	1.53	2.97
HFRX Equity Hedge Index	1.52	0.02	1.27	7.61	1.36	2.11
HFRI Fund of Funds	0.86	1.43	1.99	7.50	3.26	4.22
HFRX Macro	0.08	0.31	(0.73)	(1.45)	(2.11)	(2.63)
HFRX Distressed Securities Index	2.28	3.23	6.68	9.64	1.20	3.16
HFRX Absolute Return Index	0.67	0.50	1.82	3.68	1.31	0.25

U.S. Style % Total Returns (Russell Indexes)									
	QTD				YTD				
Value	Core	Growth		Value	Core	Growth			
5.10	5.12	5.13	Large	8.28	7.27	6.31			
5.62	4.97	4.37	Mid	11.14	8.67	6.51			
2.38	2.05	1.72	Small	4.20	3.19	2.22			



Data Source: FactSet

It is not possible to invest directly in an index.



Appendix





National Institutes of Health Bethesda, Maryland 20892

DATE: January 15, 2014

SUBJECT: Biomedical Research and Development Price Index (BRDPI): Fiscal Year 2013

Update and Projections for FY 2014-FY 2019

Summary

• The estimated growth in the BRDPI for FY 2013 is 1.9 percent.

- The updated growth rate for FY 2012 is 1.3, 0.1 percent lower than the preliminary estimate of 1.4 percent posted last year. The slight decrease is driven primarily by a slower than expected growth in general inflation, especially as manifested in a slower growth in academic salaries.
- The following pattern of growth in the BRDPI is projected: 1.9 percent for FY 2014, 2.2 percent for FY 2015, 2.5 percent for FY 2016, 2.9 percent for FY 2017, 3.2 percent for FY 2018, and 3.3 for FY 2019.
- The modest BRDPI growth rate of 1.9 percent for FY 2013 reflects the effect of the NIH extramural investigator salary limitation ("cap") of \$179,700 and the continued freeze on salaries of Federal civilian employees for that year.
- The projected 1.9 percent growth for FY 2014 assumes a one percent increase for Federal salaries and for the limits on extramural investigator salaries starting in January 2014.
- Primarily because of the freeze on Federal civilian employee salaries and the cap on compensation of extramural investigators, the rate of growth of the BRDPI during the years FY 2012 through FY 2014 has been relatively low compared with its historical relationship with general inflation as represented by the growth of the GDP Price Index. The projections for each of the following five years, FY 2015 through FY 2019, assume the growth of the BRDPI will gradually revert to the historical pattern observed from FY 2004 through FY 2013 of faster growth relative to the growth of the GDP Price Index.

Definition of the BRDPI

The BRDPI measures changes in the weighted-average of the prices of all the inputs (e.g., personnel services, various supplies, and equipment) purchased with the NIH budget to support research. The weights used to construct the index reflect the actual pattern (or the proportion) of total NIH expenditures on each of the types of inputs purchased. Theoretically, the annual change in the BRDPI indicates how much NIH expenditures would need to increase, without regard to efficiency gains or changes in government priorities to maintain NIH-funded research activity at the previous year's level.

Background on the BRDPI Estimation Process

In the early 1980s, the Bureau of Economic Analysis (BEA) in the U.S. Department of Commerce developed the Biomedical Research and Development Price Index (BRDPI). Under an interagency agreement with the NIH, each December the BEA provides an estimate of the BRDPI for the most recently completed fiscal year. In December 2013, for example, BEA transmitted information for FY 2013. This estimate is referred to as "preliminary" because the

initial data on prices available to the BEA in December are typically revised during the following year. Consequently, each December the BEA also provides a revised estimate for the prior fiscal year, i.e., the estimate for FY 2012 was revised in December 2013.

The Office of the Director at NIH projects future year values based on a methodology described below. An updated table of BRDPI annual estimates and future-year projections is posted on the NIH website each year shortly after the release of the President's Budget (PB), typically in early February. Please refer to the following link

http://officeofbudget.od.nih.gov/gbiPriceIndexes.html, or use the search engine at http://www.nih.gov/ to find "BRDPI."

Adjusting the BRDPI for Changes in Federal Policies

Beginning with the BRDPI estimate for FY 2011, which was developed in December 2011, NIH began making explicit adjustments for changes in federal policy regarding the cap on salaries on extramural awards.

Every year since 1990, Congress has legislatively mandated a provision limiting the direct salary that an individual may receive under an NIH grant.¹ The cap has been increased most years at a moderate rate. Although the increase is generally somewhat below the average growth in academic salaries, in past years the impact of the salary cap on the estimated growth of the BRDPI was negligible. However, for FY 2011 the NIH salary cap was frozen at the previous year's level. The cap "freeze" has a noticeable effect on the estimated change of the BRDPI for FY 2011.

The limitation on the direct salary that an investigator may receive under an NIH award might not reduce the investigator's effective income. The host institution or another funding source may make up the difference. However, changes in the cap affect what NIH pays for an investigator subject to the salary cap. Given the definition of the BRDPI as an input price index for the NIH budget, the effect of the cap on the price NIH pays for an investigator's effort must be taken into account.

For FY 2012, the level of the cap actually dropped from \$199,700 to \$179,700. The reduction in the cap on investigator salaries, flat civilian Federal salary levels, and limits on the growth of fellowship and training stipends and related expenses on training awards combined to reduce the estimated BRDPI growth for FY 2012 and the projected growth for subsequent years.

NIH estimated the share of academic salaries subject to each of the two salary caps. Using a sample of successful applications for new competitive NIH awards and competitive renewals, NIH extracted data on salaries from the detailed budget requests submitted as part of each application. Our best estimate is that for NIH awards to academic institutions:

- 12.9% of requested salaries are subject to the original cap of \$199,700;
- 14.4% of requested salaries are subject to the lower cap of \$179,700;

 $[\]frac{1}{http://grants.nih.gov/grants/policy/salcap_summary.htm} \ \ and \ \ \underline{http://grants.nih.gov/grants/guide/notice-files/NOT-OD-11-073.html}$

• -10.7% is the average reduction due to lowering the cap (from \$199,700 to \$179,700) for the 14.4% of salaries subject to the lower cap.²

Revision of FY 2012 BRDPI Growth and the FY 2013 Update

This year, the posted estimate for growth of the BRDPI adjusted for the cap on extramural salaries is 1.3 percent for FY 2012, and the preliminary estimate is 1.9 percent for FY 2013.³ The revised estimate of 1.3 percent for FY 2012 decreased by 0.1 percent from the 1.4 percent preliminary estimate posted last year.⁴

The 1.3 percent rate of growth for FY 2012 is the lowest annual rate of growth in the history of the BRDPI and the first time that the BRDPI increased at a slower rate than the GDP Price Index (1.8 percent). For FY 2013, the preliminary BRDPI estimate of 1.9 percent is still low by historical standards. However, at least it is once again growing at a higher rate than the GDP Price Index (1.5 percent).

The sample of project budgets was stratified by types of award (e.g., "R01, R21, P01), whether the award was made to a medical school or to a non-medical component of a university, and whether the degree of the corresponding principal investigator (PI) was an MD (including dual MD and PhD degrees) or something else (primarily a PhD).

The results for each cell in the three-dimensional sampling strata were then aggregated to estimate the overall share or requested salaries subject to each cap. The relative weight for each combination of type of award, medical/nonmedical component, type of degree was based on the distribution of all award amounts to academic institutions for FY 2011.

BEA estimated the growth in academic salaries for the BRDPI at 2.82 percent for FY 2011 and 3.24 percent for FY 2012. These estimates were based on the AAMC survey of salaries of medical school faculty and the AAUP survey of university salaries, Adjusting for the freeze on the salary cap for FY 2011 and the reduction of the salary cap for FY 2012, the estimated growth in academic salaries was reduced to 2.46 percent and 1.23 percent respectively.

At the request of the NIH, the BEA re-estimated the BRDPI using the rates of growth of academic salary rates adjusted for the cap freeze and the cap reduction. The revised estimates of BRDPI growth captured the direct effects of reduced growth in academic salaries on the growth of the overall BRDPI. It also captured the indirect effects of academic salary growth through its effects on growth of fringe benefit rates, academic indirect costs and estimates of growth of compensation for consultants and for personnel on awards to non-academic institutions.

² Information on base salaries and requested salaries for each member of the proposed research staff can be found in the detailed budget tables included as part of the project proposal. The salary information must be extracted from a sample of PDF file copies of applications and placed in Excel files for analysis.

³ As a reminder, the estimate for the most recent fiscal year (e.g., FY 2013 in December 2013) is referred to as "preliminary" because the initial data on prices available to the BEA each December are often revised during the following months. Consequently, each December the BEA also provides a revised estimate for the prior fiscal year (e.g., the estimate for FY 2012 was revised in December 2013).

⁴ At the risk of confusion we point out that the BRDPI increase for FY 2012, unadjusted for the drop in the salary cap, was estimated at 2.6 percent last year and was revised downward slightly to 2.5 percent this year. This slight reduction reflects the cumulative effect of revisions in preliminary values of several price series (including the growth of academic salaries) used to develop the estimate of FY 2012 last year. The reported growth in the BRDPI for FY 2012 was adjusted down from 2.5 percent to 1.3 percent. This adjustment reflects the effect of the "reduction" of the NIH investigator salary limitation ("cap") from \$199,700 to \$179,700 for FY 2012 as well as for the growth of stipends and related expenses on fellowships and training awards. Again this adjusted growth of 1.3 percent is slightly lower than the adjusted growth of 1.4 percent reported last year.

Last January, as is standard practice (see next section) NIH "projected" a growth rate for the (then) out-year FY 2013. The projected value of 2.5 percent turned out to be higher than the 1.9 percent estimated this past December for BRDPI growth during FY 2013. The primary driver for this lower estimate appears to be a slowdown in the general rate of inflation. In December 2012, the OMB projected 2.1 percent growth of the GDP Price Index (a comprehensive measure of price change for all final goods and services produced in the U.S.) in FY 2013. This past December, growth in the GDP Price Index was estimated at only 1.5 percent for FY 2013. This slower growth in the general rate of inflation was reflected in several of the input prices used to calculate the BRDPI. Especially notable was the slowdown in the growth of academic salaries (unadjusted for the salary cap). Academic salaries were estimated to grow at 2.5 percent during FY 2013, compared to growth of 3.0 percent during FY 2012.

Projections for FY 2014-2019

The BRDPI provides the best historical estimate of inflation for the NIH budget for any completed fiscal year. However, development of future NIH budgets benefit from consideration of how prices of the goods and services NIH expects to purchase in future years might change. We could simply project that the rate of change for FY 2013 will hold for the next few years. However, it would be unrealistic to assume the BRDPI will change at a fixed rate when the general rate of economic activity and the average growth of prices is expected to change from year to year. Also, we might wish to adjust future year projections for any anticipated changes in Federal policy that might influence the prices NIH pays for goods and services used to support R&D.

A more sophisticated, but still simple, projection methodology for future annual changes in the BRDPI embodies two considerations. The first is the expected general rate of inflation of prices for the U.S. economy. The second is the expected relationship between the general rate of inflation and changes in the BRDPI.

NIH defers judgments on the general rate of inflation to the Office of Management and Budget (OMB). We use the most recently issued OMB projections of the annual rate of growth of the GDP Price Index. The GDP Price Index increased by 1.5 percent for FY 2013. OMB projects an increase of 1.5 percent for FY 2014, 1.7 percent for FY 2015, 1.9 percent for FY 2016, and 2.0 percent per year for FY 2017 through FY 2019.

The historical relationship between the BRDPI and the GDP Price Index is summarized by a statistically estimated linear equation (by ordinary least squares regression) that relates the annual percent change in the BRDPI to the annual percent change in the GDP Price Index. Using the data for the most recent ten years (FY 2004 through FY 2013) the estimated equation is:

⁵ Again, risking confusion, we point out that the estimate of BRDPI growth unadjusted for the salary cap was 2.5 percent for FY 2012 and 2.1 percent for FY 2013. After adjusting for the salary cap policy, the posted estimates for FY 2012 and FY 2013 are 1.3 and 1.9 respectively. Notice that the FY 2012 estimate was adjusted downward much more severely, 0.6 percent versus a 0.2 percent reduction for growth during FY 2013. The difference reflects that the salary cap was lowered for FY 2012, while it was held constant during FY 2013. The 14.4 percent of academic salaries subject to the cap experienced an average reduction of 10.7 percent during FY 2012. During FY 2013 they experienced zero growth, rather than a reduction. The effect on average adjusted salary growth is much less severe.

(Projected annual percent change in the BRDPI) = 1.91 + 0.73 x (annual percent change in GDP Price Index).

If we assume the historical relationship will persist in the future, we simply plug the OMB projected values of the GDP Price Index into the equation and use the predicted growth of the BRDPI as the corresponding out-year projections of the BRDPI.

However, for FY 2013 the estimated growth of 1.9 percent for the BRDPI, is 1.1 percentage points lower than the 3.0 percent growth predicted with the equation above based on the 1.5 percent growth in the GDP Price Index for FY 2013. Because of all the limits on investigator and trainee compensation on extramural awards and the freeze on Federal salaries, there is reason to believe the BRDPI will grow at a rate lower than predicted by the historical relationship between the BRDPI and the GDP Price Index.

Consequently, we project a 1.9 percent growth in the BRDPI for FY 2014. This projection assumes a one percent growth in Federal salaries, and the cap on investigator salaries remains fixed at the Executive Level II with a one percent increase in 2014 (\$181,500). Notice that the fixed cap with a one percent increase does not have as severe an effect on the growth of investigator salaries as the reduction in the cap for FY 2012. Growth for about 14.4 percent of requested salaries is increased by 0.75 percent for FY 2014 rather than a zero percent increase as in FY 2013. The less severe limit leads to a higher projected growth for academic salaries and for the BRDPI.

The projected growth for FY 2014 of 1.9 percent also includes an adjustment for the expected steadying of the general rate of inflation. The GDP Price Index increased by 1.5 percent during FY 2013. OMB projects an increase of 1.5 percent for FY 2014 as well.

At this time (January 2014), there is no indication that the cap on investigator salaries will be raised to its previous level (Executive Level I). While there will potentially be an increase in the growth of compensation for fellowship and training awards during FY 2014, it will not be enough to have a significant impact on the FY 2014 BRDPI estimate. Fellowship and training awards comprise less than two percent of the NIH overall budget.

Primarily because of the freeze and minimal increase in FY 2014 on Federal civilian employee salaries and the cap on compensation of extramural investigators, the rate of growth of the BRDPI during the years FY 2012 through FY 2014 has been relatively low compared with its historical relationship with general inflation as represented by the growth of the GDP Price Index. As the economy improves and the government resolves the various fiscal issues related to balancing overall Federal expenditures with tax revenues, we expect that growth of Federal salaries and the growth of caps on investigator and trainee salaries eventually will return to historical trend rates. Just when this will happen remains uncertain.

Thus, to generate reasonable projections of BRDPI growth to support budget planning, we assume that after FY 2014 the growth of the BRDPI will gradually revert to the historical pattern observed from FY 2004 through FY 2013 of faster growth relative to the growth of the GDP Price Index.

To summarize, the following pattern of growth in the BRDPI is projected: 1.9 percent for FY 2014; 2.2 percent for FY 2015; 2.5 percent for FY 2016; 2.9 percent for FY 2017, 3.2 percent for FY 2018, and 3.3 for FY 2019.

Forecasting the future path of price changes is an inherently imprecise exercise. We cannot expect OMB projections of growth in the GDP Price Index to be realized precisely each year. Likewise, the complex relationship between the general rate of inflation and the BRDPI can change from year to year. However, we strive for an unbiased process—i.e., the projections miss high roughly as frequently as they miss low.

Summary Tables

Table A depicts values of the annual percent change in the GDP Price Index and the BRDPI for FY 1980 through FY 2013. Table B includes projected values of the BRDPI and the GDP Price Index for FY 2014 through FY 2019.

For the convenience of the reader, Table C illustrates how to translate <u>annual changes</u> into <u>annual levels</u> of the BRDPI. After designating a reference year, for which the value of the BRDPI is specified as 100, projections of the <u>annual levels</u> of the BRDPI can be constructed using the following recursive relationship:

BRDPI (for year t) = BRDPI (for year t-1) $x [1 + {Annual Percent Change (for year t)}]$

In Table C, the calculations are presented for FY 1989 through FY 1992 using FY 1989 as the reference year (1989 = 100). To calculate the value for FY 1991, for example, the formula would be: $110.5 = 105.4 \times 1.048$. In other words, to derive the BRDPI value for FY 1991 (110.5), start with the FY 1990 BRDPI value (105.4) and multiply by one plus the annual change for FY 1991 (1+ [4.8/100] = 1.048).

Attachments

ATTACHMENTS

- 1. Supplementary Tables
- 2. References to BEA Price Index Methodology
- 3. Modification of the Methodology Used to Estimate the BRDPI

TABLE A
HISTORICAL ANNUAL PERCENT CHANGES

Fiscal Year	GDP Price Index	BRDPI
Col.(1)	Col.(2)	Col.(3)
1980	8.7%	9.8%
1981	9.8%	10.4%
1982	6.9%	8.6%
1983	4.4%	6.2%
1984	3.5%	5.9%
1985	3.3%	5.6%
1986	2.3%	4.2%
1987	2.2%	5.3%
1988	3.2%	5.0%
1989	4.0%	5.2%
1990	3.6%	5.4%
1991	3.5%	4.8%
1992	2.4%	4.4%
1993	2.4%	3.4%
1994	2.2%	3.9%
1995	2.1%	3.5%
1996	1.9%	2.6%
1997	1.8%	2.8%
1998	1.2%	3.4%
1999	1.3%	3.2%
2000	2.1%	3.7%
2001	2.4%	3.3%
2002	1.6%	3.3%
2003	1.9%	3.5%
2004	2.5%	3.7%
2005	3.1%	3.9%
2006	3.3%	4.6%
2007	2.7%	3.8%
2008	2.1%	4.7%
2009	1.2%	2.9%
2010	0.9%	3.0%
2011	2.0%	2.9%
2012	1.8%	1.3%
2013	1.5%	1.9%

TABLE B
PROJECTED ANNUAL PERCENT CHANGES

Fiscal Year	GDP Price Index	BRDPI
Col.(1)	Col.(2)	Col.(3)
2014	1.5%	1.9%
2015	1.7%	2.2%
2016	1.9%	2.5%
2017	2.0%	2.9%
2018	2.0%	3.2%
2019	2.0%	3.3%

TABLE C

Conversion of Annual Changes into Annual Levels

Fiscal Year Annual Percent		[1+(Percent Change/100)]		Previous Year		Annual Level
	Change			Value		BRDPI
Col.(1)	Col.(2)	Col.(2)		Col.(3)		Col.(4)
1989						100.0
1990	5.4%	1.054	*	100.0	=	105.4
1991	4.8%	1.048	*	105.4	=	110.5
1992	4.4%	1.044	*	110.5	=	115.4

References to BEA Price Index Methodology

Robert P. Parker and Eugene P. Seskin, "Annual Revision of the National Income and Product Accounts: Annual Estimates 1993-96, Quarterly Estimates 1993:1-1997:1," <u>Survey of Current Business</u>, 77, No. 8 (August 1997), pp 6-35.

J. Steven Landefeld and Robert P. Parker, "Preview of the Comprehensive Revision of the National Income and Product Accounts: BEA's New Featured Measures of Output and Prices," <u>Survey of Current Business</u>, 75, No. 7 (July 1995), pp 31-38.

Allan H. Young, "Alternative Measures of Change in Real Output and Prices, Quarterly Estimates for 1959-1992," <u>Survey of Current Business</u>, 73, No.11 (March 1993), pp 31-41.

Allan H. Young, "Alternative Measures of Change in Real Output and Prices," <u>Survey of Current Business</u>, 72, No. 4 (April 1992), pp 32-48.

Jack E. Triplett, "Economic Theory and BEA's Alternative Quantity and Price Indexes," <u>Survey of Current Business</u>, 73, No. 4 (April 1992), pp 49-52.

Modification of the Methodology Used to Estimate the BRDPI (2006)

This section is included for users interested in more of the technical details regarding methods used to estimate annual values of the BRDPI.

As stated in the memo above, the weights used to construct the BRDPI reflect the actual pattern (or the proportion) of total NIH expenditures spent on each of the types of inputs purchased with the NIH budget (e.g., personnel services, various supplies, and equipment). In fact, the use of weights specific to the NIH budget is what distinguishes the BRDPI from other price indexes designed to reflect different patterns of expenditures.

Until FY 2006, the BEA estimated the BRDPI using a fixed weight (or Laspeyres) index. This type of index compares prices over several years using a fixed set of weights based on the composition of expenditures in a single, specified base year (say 1993 or 2003).

Beginning with the revised estimate for FY 2005 (published in December 2006) the BEA now estimates the BRDPI using a Fisher chain-weighted index methodology. The chain-weighted methodology improves the accuracy of the BRDPI and is consistent with the methodology BEA adopted in 1996 to estimate the Gross Domestic Product and its component series. For the interested reader, five articles in BEA's publication, *Survey of Current Business*, discuss the reasons BEA now uses the chain-weighted methodology. (See the references to BEA Price Index Methodology above.)

In less technical terms, the move to chain weighting means primarily that the expenditure weights used to estimate the BRDPI will be updated each year. Also, when estimating the growth of the BRDPI between two consecutive years (say 2005 and 2006) the Fisher Price Index reflects the average experience of two slightly different indexes: the first index uses first year weights (e.g., 2005) to estimate average growth in prices; the second index uses second year weights (e.g., 2006) to develop the estimate. To estimate growth over several years, the consecutive year indexes are multiplied, or chained. (As an analogy, think of calculating compound growth on your retirement portfolio over ten years as the mix of stocks and bonds changes from year to year.)

By contrast, to the chain weighting methodology, the previously used fixed-weight (or Laspeyres) index approach can result in a "substitution bias" that tends to overstate price increases for periods after the base year and understate price increases for periods before the base year. This bias occurs because use of the fixed-weight index implicitly assumes the composition of the items being priced does not change over time. In fact, the mix of items purchased and included in a price index tends to shift over the years. The shift in purchases may be a response to changes in relative prices or to advances in technology which provide new opportunities and new tools for investigation (e.g., more computers and automated test equipment and fewer laboratory assistants). Or the mix may reflect changes in policy with a larger share of the NIH budget allocated to support of extramural research and less to inside NIH activities, including intramural research and administration of extramural research.

During periods close to the base year, differences in the composition are usually fairly small, and a fixed-weight index provides a good approximation. Farther away from the base period, however, larger differences in expenditure composition are likely. Consequently, weighting formulas that allow for changes in composition over time provide a better measure of both year-to-year price changes and long-term trends.

In response to BEA recommendations, in past years the expenditure weights used to estimate the BRDPI were updated, or rebased, occasionally to overcome the problem of substitution bias. In the BRDPI Table of Annual Values listed on the NIH website and in the attached Table A, the values of the BRDPI for FY

1999-2004 are constructed using the FY 2003 expenditure weights; the FY 1991-1998 values are based on FY 1993 weights; the FY 1986-1990 values are based on FY 1988 weights; and the FY 1979-1985 values are based on FY 1984 weights. The pre-1979 values of the BRDPI were estimated using a preliminary methodology with a less-detailed set of expenditure weights. As a result of the less precise methodology, the pre-1979 values are not likely to be as accurate as the later year values.

McKnight Brain Research Foundation Amended and Restated Investment Policy

The McKnight Brain Research Foundation (the "MBRF")

The MBRF is a Florida trust that, for federal income tax purposes, is an exempt organization (IRC § 501(c)(3)), and classified as a private foundation (IRC § 509(a)). The only tax paid by the MBRF is the annual IRC § 4940 excise tax of 2% (or 1%) of investment income. All of the MBRF assets were contributed by Mrs. Evelyn F. McKnight and no additional contributions are expected. At the present time, it is anticipated that the MBRF will make grants to carry out its charitable purpose. The specific purpose for which the MBRF was established is "to provide support for medical research of the brain to accomplish alleviation of memory loss of the aging". The MBRF expects to exist in perpetuity. The only required distribution is the 5% of fair market value IRC § 4942 annual distribution.

Governance

The MBRF is a Florida charitable trust. The MBRF is governed by six Trustees. There are five individual Trustees and one Corporate Trustee.

Introduction

This policy presents the investment process of the MBRF. The Trustees have prepared this policy in consultation with its investment consultants and legal counsel. For purposes of investing assets, the Trustees have looked to the Corporate Trustee as its investment consultant and any references herein to investment counsel are references to the Corporate Trustee.

Prudent Investor Rule

The Trustees have adopted this Investment Policy to evidence compliance with the Florida Prudent Investor rule. §§518.10-14 FLA.STATS. The Investment Policy will be interpreted and implemented consistent with the prudent investor rule. The Trustees have delegated certain investment function to the Corporate Trustee as allowed by and in accordance with the requirements of §518.112 FLA.STATS.

Investment Goals

The investment goal is to provide a long term real total rate of return that will increase the purchasing power of MBRF assets net of expenses and distributions. In order to achieve its investment goal, the MBRF will adopt a strategic asset allocation that will achieve its long term return goal with acceptable volatility.

McKnight Brain Research Foundation Amended and Restated Investment Policy Adopted at 7/31/2013 Trustee Meeting Page 2 of 10

Long Term Investor

The MBRF will exist in perpetuity. As such, it is a long term investor who seeks a high rate of return consistent with reasonable volatility. The MBRF understands that volatility can be reduced by allocating assets among asset classes, among investment styles and strategies within asset classes. The MBRF will adopt strategic targets for each asset class and will, from time to time, rebalance between asset classes, investment styles and strategies to maintain its strategic targets.

Target Rate of Return

The Trustees will adopt a target rate of return that incorporates the MBRF investment goals and spending policy. It is recognized that the target rate of return, investment goals and volatility are interrelated and must be viewed as such. It is also recognized the investment horizon of the MBRF is long term (perpetuity) and the target rate of return will reflect that long term view. The target rate of return will change from time to time and is set forth on Appendix A.

Spending Policy

The MBRF will adopt a spending policy that balances a realistic achievable rate of return, expenses, and its investment goals. Appendix A is the current spending policy adopted by the MBRF. The spending policy will be reviewed annually at a minimum.

Income, Appreciation and Gains

The Trustees recognize that the MBRF pays only a 2% excise tax on investment income and, therefore, the investments are not tax sensitive. Its distributions are not limited by income and, therefore, the Trustees will ignore income and principal analysis when implementing its investment goals and implementing its spending policy.

Cash Flow

Because it will exist in perpetuity, its only cash flow needs will be to cover expenses (and tax) and the annual IRC § 4942 5% of fair market value distribution. It is recognized that additional spending can be controlled and that the MBRF from time to time may distribute more than the minimum required by tax laws.

Performance/Style Measurement

The Trustees have adopted a market driven benchmark for each asset class and management style. For the portfolio as a whole, the Trustees will adopt a benchmark that consists of a suitable passive index for each asset class weighted in accordance with the strategic asset allocation. The Trustees will also adopt appropriate peer group data to measure the performance of each managed portfolio and passive investment. The Trustees expect performance of each managed portfolio to be in the top one-third of the peer group data base for that particular management style or strategy. The peer group data base is set out in Exhibit B. The Trustees

McKnight Brain Research Foundation Amended and Restated Investment Policy Adopted at 7/31/2013 Trustee Meeting Page 3 of 10

will evaluate ongoing investment performance over a three to five year period, anticipating it will not make changes on the basis of short term (less than two years) results. However, the Trustees recognize there are factors, including, but not limited to, changes in personnel, that would require immediate attention and action.

Performance should be measured in a manner consistent with the standards of the CFA Society.

The performance measurement will include an analysis of managers adherence to the investment styles set forth in Exhibit B.

The Foundation recognizes enhanced performance results from asset allocation, as well as selection of particular managers and passive investments. Therefore, the Foundation will compare portfolio returns and the benchmark portfolio, as well as compare individual manager returns and the designated index, as shown on Exhibit B.

Investment Preference

The Foundation prefers, but does not require, that managers avoid investment in companies whose primary or significant (greater than 30% of gross revenue) businesses are the growing, cultivation, manufacture, or distribution of tobacco or tobacco products. This shall not apply to investments in indexed or mutual funds.

Security Voting

The Corporate Trustee will vote on securities when a vote is requested. The Trustees will receive an annual report of voting decisions.

Specific Functions of the Board of Trustees

- 1. Establish investment objectives for the portfolio.
- 2. Establish and review its spending policy.
- 3. Set strategic asset allocation for the Trust.
- 4. Establish and continue to update the investment policy.
- 5. Establish, monitor and update the investment process.
- 6. Review investment performance in accordance with its performance measurement policy.
- 7. Review at least quarterly investment activity to insure compliance with the investment policy and adherence to investment style.

McKnight Brain Research Foundation Amended and Restated Investment Policy Adopted at 7/31/2013 Trustee Meeting Page 4 of 10

8. Terminate managers and passive investments in accordance with this investment policy.

Specific Functions of the Corporate Trustee

- 1. The Corporate Trustee shall review regularly all investments of the MBRF.
- 2. The Corporate Trustee shall recommend to the Board of Trustees such investment and investment related policies, including strategic asset allocations, as it deems appropriate, and as may be requested.
- 3. The Corporate Trustee shall make periodic investment performance reports (no less than quarterly) to the Board of Trustees.
- 4. The Corporate Trustee shall implement the investment policy, including selecting and terminating managers and passive investments in accordance with this investment policy.
- 5. The Corporate Trustee may, in its discretion, "tilt" the strategic asset allocation within the applicable range, as set forth in Exhibit B.

Asset Allocation

- 1. To achieve its investment objective, the Foundation's assets shall be allocated among various asset classes, including, but not limited to, equity, cash/cash equivalents, fixed income and alternative investments/hedge funds. The current strategic asset allocation adopted by the Board is contained in Appendix B. The strategic asset allocation and asset classes will change periodically based upon monitoring and objective analysis of changes in the economy.
- 2. The Foundation investments will be allocated among asset classes and diversified within asset classes. Within each asset class, securities, for example, will be allocated further by economic sector, industry, quality and size. The purpose of allocation and diversification is to provide reasonable assurance that no single security or class of securities will have a disproportionate impact on performance of the total fund. As a result, the unsystematic risk (volatility associated with diversification risk) level associated with the portfolio should be significantly reduced.

McKnight Brain Research Foundation Amended and Restated Investment Policy Adopted at 7/31/2013 Trustee Meeting Page 5 of 10

- 3. In any asset class, no more than 5% at investment cost or 10% at market may be held in the securities of a single issuer.
- 4. Allocation by investment style is also an important step in reducing the risk (volatility) of the Foundation's portfolio. Investment styles within equity asset classes are defined in Appendix C.

Custodian

The Corporate Trustee will be the custodian for the MBRF. The Corporate Trustee shall recommend to the Board appropriate policies and procedures for custodianship and access to securities held by the Foundation as it may deem appropriate.

Soft Dollars

The Corporate Trustee will annually review the "soft dollar" policy and activity of each actively managed portfolio and report the findings to the Trustees. Each active manager is expected to enter into equity transactions on a best execution basis. The Trustees may designate certain brokers by which commissions may be recaptured or provide for the payment of services rendered to the MBRF.

Guidelines for Corrective Action

Corrective action will be taken during the review of active management. The following are instances where immediate corrective action, or termination of active management, may be in order:

- Organizational and/or personnel changes in the active manager. Failure to notify the MBRF of such changes is grounds for immediate termination.
- Violation of terms of any investment management agreement between the Trustees and an active manager.
- Change by an active manager in the management style for which the manager was selected. The MBRF, through the Corporate Trustee, will closely track the investments of each active manager to insure adherence to management style for which the active manager was retained.

Corrective action ordinarily will be taken by all of the Trustees. If, in an emergency, it is not feasible to contact one or more of the Individual Trustees, action may be taken by the Corporate Trustee acting alone.

McKnight Brain Research Foundation Amended and Restated Investment Policy Adopted at 7/31/2013 Trustee Meeting Page 6 of 10

Rebalancing Procedure

Should the range for a particular management style be violated by reason of gains, losses, changes in an active management, or any other reason, the Trustees will meet or conference to decide whether to rebalance the assets to the target class and style allocation policies. In addition, the Trustees shall review the actual allocations at each quarterly meeting in order to insure conformity with the adopted strategic allocation. The assets will not be automatically rebalanced on any set schedule.

McKnight Brain Research Foundation Amended and Restated Investment Policy Adopted at 7/31/2013 Trustee Meeting Page 7 of 10

APPENDIX A

Spending Policy of McKnight Brain Research Foundation

Expenses as Permitted	1.0%
Allowance For Inflation**	2.7%
Distribution From Foundation	5.0%
Target Total Return	8.7%

^{**} Real inflation is Biomedical Research and Development Price Index ("BRDPI") published by the U.S. Bureau of Economic Analysis for the 12 months ending 09/30/2013.

McKnight Brain Research Foundation Amended and Restated Investment Policy Adopted at 7/31/2013 Trustee Meeting Page 8 of 10

APPENDIX B

McKnight Brain Research Foundation Portfolio Guidelines

Asset Class	2013 Efficient	Range	<u>Benchmark</u>	Peer Group*
Large Cap Equity	<u>Frontier</u> 43.4%	30% - 60%	S & P 500	Pure Large Cap Core
Mid Cap Equity	6.0%	5% - 14%	Russell Mid Cap	Mid Cap
Small Cap Equity	6.6%	0% - 15%	Russell 2000	Broad Small Cap
International Developed	8.5%	5%-15%	MSCI - EAFE	Broad Int'l Equity
International Emerging	5.5%	3%-10%	MSCI – Emerging Mkts	
Hedge Funds	15.6%	10% - 30%	HFR Fund of Funds Index	
Commodities	.5%	0-5 %	Dow Jones UBS Commodity Index	
Real Estate – U.S.	0%	0% - 10%	NAREIT Equity	
Real Estate – Non U.S.	0%	0% - 10%	DJW Global ex-U.S. Real Estate	
Private Equity	2.5%	0% - 10%	Cambridge Associates	
			U.S. Private Equity	
Fixed Income	10.2%	0% - 20%	Barclays Agg Index	
Cash	1.3%			
	100%			

Static Benchmark #1		Spending Policy Benchmark		
Russell 3000 Index	65%	Distribution	5.0%	
Barclays U.S.		Expenses	1.0%	
Aggregate Index	<u>35%</u>	Inflation**	2.7%	
	100%		8.7%	

^{*} Mobius Group

M-Search Data Base System – Universes

Universes for peer group comparison – recommended by SunTrust and adopted by Trustees on 7/12/00. SunTrust advises there are no Alt/Hedge Fund, Real Estate or International Fixed Income Peer Groups.

^{**} Real inflation is Biomedical Research and Development Price Index ("BRDPI") published by the U.S. Bureau of Economic Analysis for the 12 months ending 09/30/2013.

McKnight Brain Research Foundation Amended and Restated Investment Policy Adopted at 7/31/2013 Trustee Meeting Page 9 of 10

APPENDIX C

Market Capitalization – Market value of a corporation calculated by multiplying the number of shares outstanding by the current market price. The classification* of the capitalization ranges is as follows:

- * Large Capitalization Classification Market cap of \$10 billion and greater
- * Mid Capitalization Classification Market cap of \$2 billion to \$10 billion
- * Small Capitalization Classification Market cap of \$50 million to \$2 billion

International Equity – International equity investments are permitted in listed equity securities traded on developed non U.S. markets. Developed markets are defined as those included in the Morgan Stanley Capital International, Inc. Europe Asia Far East (MSCI EAFE) Index plus Canada. American depository receipts (ADRs) traded on major U.S. markets are considered to be domestic securities.

Growth Equity Style – Investment in companies that are expected to have above average prospects for long term growth and earnings and profitability.

Value Equity Style – Investment in companies believed to be undervalued or possessing lower than average price/earnings ratios, based on their potential for capital appreciation.

Core Equity Style – Investment in companies whose characteristics are similar to that of the broader market as represented by the Standard's & Poor's 500 Index, with the objective of adding value over and above the Index, typically from sector or issue selection. The core portfolio exhibits similar risk characteristics to the broader market as measured by low residual risk with Beta and R-squared values close to 1.00.

Alternative Investments/Hedge Funds — Hedge funds are strategies utilized by professional money managers or group of managers that permit the management of a private, unregistered investment pool of capital and/or securities, and investments in a variety of investment techniques normally prohibited in other types of funds. Hedge funds are typically skill-based investment strategies attempting to provide "absolute" return based on the specialized strategy of the trader or manager and offer diversification and reduce systematic risk due to a low correlation to traditional asset classes. The following are some of the hedge fund strategies utilized by managers:

Direct Hedge - Hedging one asset, such as common stock, with another asset that has similar price movements and trades similarly. Example: using call options to hedge a common stock position.

Cross Hedge - Hedging an investment with an unlike instrument. Example: Buying stocks and hedging the position with Treasury futures.

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^{*} From Morningstar Analytical Services, Inc.

McKnight Brain Research Foundation Amended and Restated Investment Policy Adopted at 7/31/2013 Trustee Meeting Page 10 of 10

Static Hedge - Hedging out every dollar of a portfolio in an effort to eliminate risk.

Dynamic Hedge - Changing the amount of puts in a position over time as the market changes.

Market Neutral - As a long/short strategy, equal amounts of capital are invested long and short in an attempt to neutralize market risk. The goal is to purchase undervalued securities and short overvalued securities.

Market Timing - Anticipates market movements and allocates assets by switching between stocks, bonds and cash as the market and economic outlook change.

Short Selling - Identifying overvalued securities and "shorting" or selling these stocks. This involves borrowing the stocks to sell them, in the hope of buying them back later at a lower price.

Growth Fund - Investing in growth stocks with the basic goal of capital appreciation. This may include hedging by short selling or using options.

Distressed Securities - Investing in securities of a company in bankruptcy or facing it. These securities are purchased inexpensively and with the hope that they will appreciate as the company emerges from bankruptcy.

Sector Funds - Concentrated investments in various sectors. May involve long and short investments and options.

Emerging Markets - Investing in securities of companies in emerging or developing countries. This could involve purchasing government or corporate debt and/or equity.

Global Fund - Investing in shifts in global economies. Derivatives may be used to speculate on interest rate and currency movements. These funds search for and exploit opportunistic investment possibilities wherever they may arise.

Opportunistic - Using a variety of strategies as opportunities arise. Several strategies could be used simultaneously.



Q12014 QUARTERLY REPORT

SpringHarbour 2013 Private Equity Fund L.P.

This report contains highly confidential information, including trade secrets, commercial and financial information, regarding HarbourVest Partners Funds (each a "Fund") and the Fund's investments. The information included in this report is for use only by our investors and solely for the purpose of evaluating and monitoring their investment in the Fund. Any disclosure of this information could cause competitive harm to HarbourVest Partners, LLC and its affiliates, the Fund, and its underlying investments. By accepting delivery of this report, each recipient and its representatives acknowledge the highly confidential nature of the information contained herein and agree that this information will not be reproduced in any manner, or disclosed to any other person, without the express written consent of HarbourVest Partners, LLC. If you cannot agree to the above, please return this report to HarbourVest Partners, LLC immediately.

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SpringHarbour 2013 Private Equity Fund L.P.

To Our Limited Partners:

We are pleased to present a March 31, 2014 Update and Capital Account Statements for SpringHarbour 2013 Private Equity Fund L.P. ("SpringHarbour 2013" or the "Fund"). SpringHarbour 2013 is focused on building a portfolio of investments in private equity partnership funds (primary investments) located primarily in the U.S., complemented by investments in secondary purchases of private equity assets and direct co-investments in companies. These investments are made through HarbourVest-managed funds.

Year to Date 2014 Activity

Fund

SpringHarbour 2013 did not call capital or distribute proceeds during the first quarter of 2014. The investment pace is expected to continue to accelerate as the portfolio grows and the underlying private equity partnerships call additional capital for new investments. During the second quarter of 2014, the Fund called 9.5% of capital and is 32.5% called through the end of June.

After making its initial distribution in the amount of \$250,000 in December 2013, SpringHarbour 2013 distributed an additional \$300,000 in June 2014. Through June 30, 2014, distributions total 7.4% of contributed capital. The distribution included proceeds received from the primary, secondary, and direct portfolios, the largest source of which was the January 2014 sale of direct co-investment **Digital Insight Corporation** to NCR.

The total value (including distributions) of SpringHarbour 2013 at March 31, 2014 is \$6.1 million, or 1.2 times contributed capital (unchanged from year-end 2013).

Portfolio

The current SpringHarbour 2013 portfolio contains approximately 2,600 companies, the ten largest of which represent 18.5% of net asset value. The largest holding in the portfolio at March 31, 2014 is French natural ingredient supplier *Diana*, which is held in the secondary portfolio via Motion Equity Partners (Cognetas) and announced its sale to Symrise in April 2014.

HarbourVest is in the process of building the portfolio, with new commitments to partnerships managed by the groups below, as well new secondary and direct co-investments. The investment team is currently performing due diligence on additional investment opportunities and has a strong pipeline for the remainder of the year. Performance for each of the HarbourVest funds in the portfolio was positive during the first quarter of 2014, driven by unrealized valuation gains for a number of companies.

HarbourVest CONFIDENTIAL

Venture	Buyout	Direct and Secondary Investments
Accel Partners	Charlesbank Capital Partners (2Q)	Callcredit (DMWSL 620)
Andreessen Horowitz	H.I.G. Capital	Catalina Marketing (2Q)
Bain Capital Ventures (2Q)	The Jordan Company	Korea Bulk Shipping (2Q)
Insight Venture Partners (2Q)	Marlin Equity Partners	Project Bell (Motion/Cognetus)
Lightspeed Venture Partners	Sun Capital Partners	Project Boulder (multiple managers) (2Q)
Spark Capital (2Q)	Thoma Bravo	Project Fort (Fortress)
Credit		Project Hornets (multiple managers) (2Q)
ABRY Partners		Project Pam (Pamlico) (2Q)
Alchemy Partners		
Aion Capital Partners		

IPO and M&A Activity

Within the existing portfolio, there were multiple IPOs and M&A events for underlying companies during the first quarter of 2014, the vast majority of which are held in the more mature secondary portfolio.

1Q 2014 PORTFOLIO COMPANY IPOs				
VENTURE		BUYOUT		
Company (Ticker)	Manager(s)	Company (Ticker)	Manager(s)	
Aerohive Networks (HIVE)	Lighthouse Capital Partners, NEA	Brit Insurance Holdings (BRIT)	Apollo, CVC Europe	
Applied Genetics Technologies (AGTC)	InterWest Partners	EP Energy (EPE)	Apollo	
Care.com (CRCM)	NEA	ISS (ISS)	EQT	
Castlight Health (CSLT)	U.S. Venture Partners	Lenta (LNTA)	TPG	
Everyday Health (EVDY)	Technology Crossover	Santandar Consumer USA (SC)	KKR	
GlycoMimetics (GLYC)	NEA			
Q2e Banking (QTWO)	Battery Ventures			
Revance Therapeutics (RVNC)	Essex Woodlands, Lighthouse			
Square 1 Financial (SQBK)	TL Ventures			

Distributions and Liquidity

The June 2014 distribution included cash proceeds from the primary, secondary, and direct portfolios, the sources of which are highlighted below.

2014 PROCEEDS	
Primary Buyout Portfolio	Secondary Portfolio
Thoma Bravo Fund X Thoma Bravo Special Opportunities Fund I	Project Charlotte
Digital Insight (acquired by NCR)	Ripplewood Partners II (Gogo (GOGO))
Network Instruments (acquired by JDS Uniphase)	 Apollo Investment Fund VII (CKE Restaurants acquired by Roark Capital)
Direct Buyout Portfolio	Trident IV (Sedgwick CMS acquired by KKR)
Digital Insight Corporation January 2014 sale to NCR (2.0 cost)	 Funds managed by Clayton, Dubilier & Rice, Green Equity, Crestview, and CVC Capital Partners
	Project Panama (Vintage I)
	Magnum Capital (Teknon Healthcare acquired by Grupo Quiron)

Global Private Equity Market Commentary

Taking advantage of the strong public markets and steady demand for M&A events around the world, private equity managers remain focused on liquidity. Fundraising and investment activity continues to be tied to economic growth, which is expected to gain momentum in 2014. Many managers remain cautious as they closely monitor the Federal Reserve's stimulus tapering, the re-emergence of growth in Europe, and other economic and political activity in Asia and the emerging markets. Backing experienced managers with proven management teams, strong networks, and available capital is critical in order to capitalize on the compelling opportunities created within the current environment.

U.S. Buyout

Buyout fundraising is on pace through the first half of 2014 to match the healthy amount raised in 2013. Investment activity remained muted as managers continue to be cautious and highly selective given elevated pricing. Strong public and financing markets are fueling record amounts of liquidity through IPOs, public market sales, dividend recapitalizations, and M&A events. Given high prices for traditional buyout investments and increased competition, opportunities for outperformance can be found in unique and transformational transactions such as corporate carve-outs; buy and builds and roll-ups; complex situations and turnarounds; and high growth businesses.

U.S. Venture

With many of the industry's top-performing managers returning to market in early 2014, U.S. venture capital fundraising is on track to have its strongest year since 2008. Consolidation remains a significant trend as a few managers are responsible for an increasingly larger share of the capital raised. Venture investment activity through the first five months of 2014 has been steady, with an increase in capital flowing to information technology compared to healthcare and non-technology businesses. The liquidity environment is strong, with public markets receptive to IPOs and significant demand for assets from strategic acquirers. Rising valuations, particularly in later-stage rounds, remains a concern in the current environment and emphasizes the importance of backing proven managers that have navigated prior venture cycles and that can maintain disciplined portfolio construction.

Europe

The European economy continues to stabilize, with stronger GDP growth expected across the region in 2014. The recovery is being led by strong performance in the U.K., and Spain and Italy are expected to return to positive growth in 2014 after several years of recession. Private equity fundraising continues to be challenged while investment activity has been stable in the first part of the year. Accommodating debt markets are supporting liquidity for refinancing and recapitalization activity, and strong equity markets are stimulating record levels of IPOs. M&A exits remain a viable exit option for growing companies. Opportunities to create value are available in middle market businesses focused on generating operational improvements, professionalizing smaller businesses. and finding growth through companies in niche sectors of the economy.

Asia

Fundraising in Asia during 2014 has once again been characterized by a flight to quality, where a select group of experienced managers have successfully raised some of the largest funds in their histories. Investment activity has been subdued as many investors are awaiting the results of elections and other political and economic policy outcomes, particularly in India, Indonesia, and Thailand. While ongoing activity will also be closely tied to fiscal tapering in the west, investor sentiment has already improved in several Asian economies. Liquidity through the public markets remains challenged due to volatility and limited IPO demand. Strategic sales have increased, driven by a few large exits. As the market matures, several funds are expected to come to market with differentiated and sophisticated strategies that include stressed and distressed, special situation, credit, and buyout opportunities.

Emerging Markets (excluding Asia)

The macroeconomic outlook for the emerging markets remains positive, as growth in domestic consumption and the rising demand for infrastructure are creating attractive areas to invest. Many markets in the region continue to experience short-term volatility and political uncertainty. Private equity fundraising has remained slow in the first half of 2014 but is expected to increase as proven managers return to raise successor funds in the second half of the year. Investment activity increased nearly 50% during the first quarter of 2014 over the first quarter of 2013. Investments in fast-growing Sub-Saharan African markets increased, while Latin America has seen fewer deals completed to date in 2014. The political unrest surrounding the current situation in Ukraine will have some impact on private equity activity in the region going forward. While private equity activity in the MENA region has slowed recently, it could increase in the near term as investors are gaining confidence. Manager selection remains critical in the ever-changing emerging markets, and investors must be prepared for short-term volatility in order to take advantage of the significant long-term growth potential in these regions.

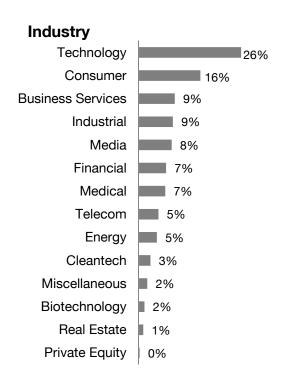
We thank you for your support and encourage you to contact us with your feedback, suggestions, or questions.

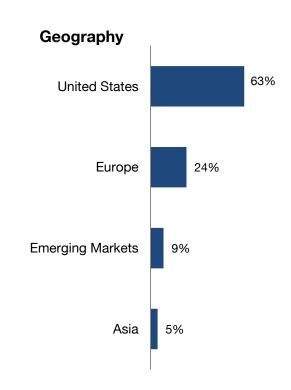
Sincerely, The HarbourVest Team

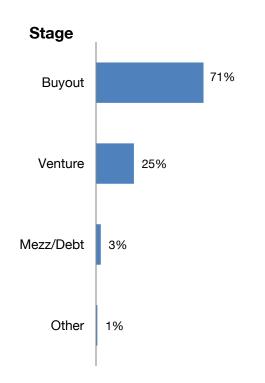
Company Diversification - Based on Total Cost

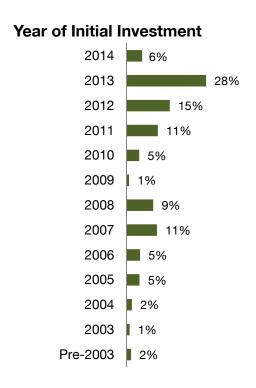
March 31, 2014

Percentages may not total 100% due to rounding.





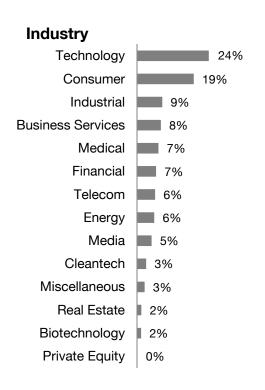


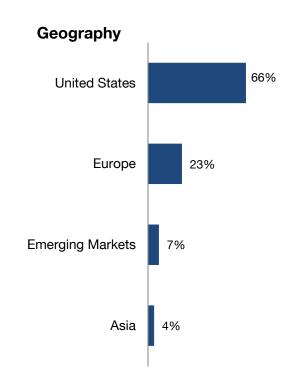


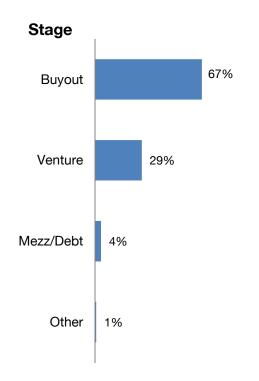
Company Diversification - Based on Current Value

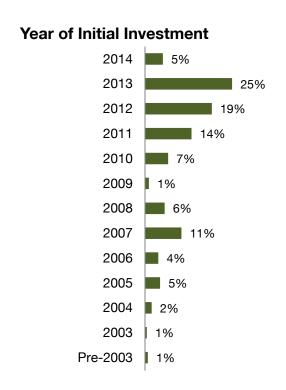
March 31, 2014

Percentages may not total 100% due to rounding.









Portfolio Summary

TOP TEN HOLDINGS (NAV) AT MARCH 31, 2014				
Company	Manager(s)	Location	% of NAV	
Diana S.A.S.	Motion Equity Partners (Cognetas)	France	3.4%	
Tokheim	Motion Equity Partners (Cognetas)	France	2.4%	
Lightower Fiber Networks	HarbourVest (direct)	U.S.	2.1%	
Zayo Group	HarbourVest (direct), GTCR, Media Communication Partners	U.S.	2.0%	
Callcredit Information Group	HarbourVest (direct), GTCR	U.K.	1.5%	
Morrison Utility Services	Motion Equity Partners (Cognetas)	U.K.	1.5%	
Enviroserv	Rockwood (Absa)	South Africa	1.5%	
Tsebo Outsourcing	Rockwood (Absa)	South Africa	1.4%	
Towne Park	HarbourVest (direct), TA Associates	U.S.	1.4%	
ERICO Global	HarbourVest (direct), Court Square Capital Partners	U.S.	1.3%	

TOP TEN MANAGERS (NAV) AT MARCH 31, 2014				
Manager	Strategy	Geography		
HarbourVest*	Buyout/Venture/Credit	Global		
Motion Equity Partners (Cognetas)	Buyout	Europe		
Bridgepoint Development Capital	Buyout	Europe		
Rockwood (Absa)	Buyout	Rest of World (South Africa)		
KKR	Buyout	U.S.		
Thoma Bravo	Buyout	U.S.		
Battery Ventures	Venture	U.S.		
Vista Partners	Buyout	U.S.		
GTCR	Buyout	U.S.		
Lightspeed Venture Partners	Venture	U.S.		

^{*} HarbourVest is the manager of the direct co-investments in the SpringHarbour 2013 portfolio.

Fund Summary

(in \$ except percentages and multiples)

	March 31,	December 31,	
	2014	2013	Change
Capital Contributions			
Total Committed Capital (Fund Size)	22,750,000	22,750,000	-
Less Capital Subscriptions Receivable	17,517,500	17,517,500	-
Total Contributed Capital	5,232,500	5,232,500	-
Fund Summary			
Fund IX Buyout Investment	1,764,511	1,748,855	15,656
Fund IX Venture Investment	1,524,493	1,467,916	56,577
Dover Street VIII Investment	1,150,309	1,171,595	(21,286)
HarbourVest Partners 2013 Direct Investment	640,658	1,048,530	(407,872)
Fund IX Credit Investment	334,589	323,713	10,876
Other Net Assets (Liabilities)	406,499	79,869	326,630
Partners' Equity	5,821,059	5,840,478	(19,419)
Distributions to Partners	250,000	250,000	-
Total Fund Value	6,071,059	6,090,478	(19,419)
Fund Multiple (Total Fund Value/Contributed Capital)	1.2x	1.2x	-



HCP Private Equity Fund V, L.P. Statement of Partner's Capital For the period ended March 31, 2014 (unaudited)

Investor: SunTrust Bank as Co-Trustee with J. Lee Dockery, MD, Michael Dockery, MD, Nina Raim, MD, and John G. Clarkson, MD for The McKnight Brain Research Foundation

Capital Account Balance and Activity

	Curr	ent Quarter	Ye	ar-to-Date
Beginning period reported balance	\$	516,335	\$	516,335
Contributions		50,000		50,000
Transfers		-		-
Distributions		(30,000)		(30,000)
Adjusted beginning capital balance		536,335		536,335
Investment income		2		2
Management fees		(2,375)		(2,375)
Other investment expenses		(635)		(635)
Total investment expenses ¹		(3,010)		(3,010)
Realized gains (losses)		11,200		11,200
Change in unrealized gains (losses)		16,988		16,988
Total realized and unrealized gains (losses) ²		28,188		28,188
Ending capital balance	\$	561,515	\$	561,515

Contributions and Remaining Commitment

		Amount
Partner's total commitment amount	\$	1,000,000
Contributions:		
Inception through December 31, 2013		(480,000)
January 01, 2014 through March 31, 2014		(50,000)
Total Contributions		(530,000)
Remaining capital commitment	\$	470,000
Distributions:	_	
Inception through December 31, 2013	\$	20,007
January 01, 2014 through March 31, 2014		30,000
Total Distributions ³	\$	50,007
Total Fund commitment	\$	69,915,000
Partner's ownership percentage in Fund		1.43%

Explanations and Disclosures

Capital balances for the Limited Partners of HCP Private Equity Fund V, L.P. are reported when the percent of underlying Portfolio Funds reported in HCP Private Equity Fund V, L.P. exceeds 85%.

This statement contains confidential information intended solely for a specific purpose and for a specific individual or entity; it should not be disclosed in any form to unauthorized parties. Limited Partners of HCP Private Equity Fund V, L.P. are subject to confidentiality obligations as set forth in the definitive agreements with the General Partner. Information contained herein is unaudited. Past performance is not necessarily indicative of future results. Balances may not sum due to rounding.

Please contact Viet Nguyen or Cindy Liang at Hall Capital Partners with any questions or inquiries at 415.288.0544

¹ Includes General Partner management fees and direct fund expenses

² Includes realized and unrealized gains (losses), net of underlying manager fees and incentive accruals

³ A portion of distributions may be subject to recall as stated in Section 3.1 of the Limited Partnership Agreement.



May 29, 2014

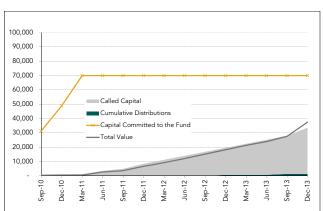
HCP PRIVATE EQUITY FUND V SUMMARY1

FUND SUMMARY as of March 31, 2014		FUND PERFORMANCE as of December	FUND PERFORMANCE as of December 31, 2013		
Capital Committed to the Fund	\$69.9 million	Capital Called	\$33.6 million		
Percentage of Capital Called	53%	Reported Value (NAV) ²	\$36.1 million		
Number of Managers	22	Cumulative Distributions	\$1.4 million		
Number of Funds	23	Total Value (Reported + Distributions) ²	\$37.5 million		
Vintage Year	2010-2011	Internal Rate of Return (IRR) ³	8.9%		
		Multiple of Called Capital	1.1x		

Portfolio Allocation as of March 31, 2014

Cash Flow Summary as of December 31, 2013





Important disclosures can be found on the last page of this document.

Private and Confidential

San Francisco | New York

¹ Past performance is no guarantee of future results. Performance shown is current only through the date shown and does not reflect subsequent developments in the global markets. Performance returns are based on returns reported by portfolio funds, which Hall Capital Partners has not independently verified. Performance is specific to the onshore vehicle of the Fund and is net of fees and expenses, including management fees and incentive allocations to underlying managers and to Hall Capital Partners. Differences in performance between onshore and offshore funds may occur as a result of operating expense variances. Performance among investors in a particular vehicle may also vary depending on size of investments and corresponding management fee percentages to Hall Capital Partners.

² Estimated based on 100% of managers reporting. There can be no assurances that the estimated reported value, total value, and investment multiple can be realized upon liquidation of the Fund.

³ Not meaningful. In our view, private equity vintage year funds formed since 2010 are too young to have produced meaningful returns.

⁴ Percentages are rounded to the nearest tenth of one percent and therefore may not add up to one hundred percent (100%).



PORTFOLIO HIGHLIGHTS

The HCP Private Equity Fund V ("Fund V" or the "Fund") is a 2010 vintage fund with \$69.9 million in commitments. The Fund is approximately 53% called and has distributed approximately \$3.5 million (or 5.0% of commitments) as of March 31, 2014. During the first quarter, the Fund called \$3.5 million (or 5.0% of commitments) and made a distribution of \$2.1 million (or 3.0% of commitments). As of December 31, 2013, the Fund had generated a 1.1x net multiple and an 8.9% net IRR. Total current value (current NAV and distributions) increased significantly quarter-over-quarter in Q4.

The Fund and its underlying funds are very early in their respective life cycles. As a result, new and follow-on investment activity across the Fund's buyout/growth and venture capital segments are expected to be quite robust over the coming quarters.

As anticipated, new deal activity was strong during the quarter. A few of the publicly disclosed investments made during the first quarter included:

- **Bain Capital XI's** agreement to acquire Grupo Notre Dame Intermedica, a Sao Paolo, Brazil, provider of health and dental plans.
- **BC European Capital IX's** agreement to acquire a majority stake in Car Trawler, a car rental technology platform, from the company's founders, other individual shareholders, and ECI Partners.
- **Qiming Fund III's** participation in TutorGroup's \$100 million Series B funding round. TutorGroup is an online education platform.

Even though the Fund and its portfolio funds are still early in their life cycles, the Fund saw several realizations during the quarter. Some of the publicly disclosed liquidity events during the first quarter included:

- Warburg Pincus XI sold JHP Pharmaceutical, a pharmaceutical company that acquires, develops, manufactures, and sells sterile injectable drugs, to TPG Capital for \$490 million only one year after acquiring the company.
- Freestyle Capital Fund I and other venture backers sold Impermium, a cyber-security startup, to Google.
- **Centerbridge II's** portfolio company, Santander Consumer USA, a provider of car loans, launched its IPO during the quarter raising approximately \$1.9 billion.



FUND V INVESTMENTS as of March 31, 2014

Manager Name	Fund Name	Year	Commitment Amount	% of Portfolio ⁵				
US and Global Mid-Large Buyout/	Growth			13.4				
Bain Capital	Bain Capital Fund XI	2013	3,600,000	5.6				
Warburg Pincus	Warburg Pincus Private Equity XI ⁶	2012	\$5,000,000	7.8				
US and Global Small-Mid Buyout/0	Growth	·		10.0				
Berkshire Partners	Berkshire Fund VIII	2011	\$4,440,000	6.9				
Thoma Bravo	Thoma Bravo Fund X	2011	\$2,000,000	3.1				
Non-US (Developed) Mid-Large Buyout/Growth								
BC Partners	BC European Capital IX	2011	\$5,273,568	8.6				
Emerging Markets Buyout/Growth	1			17.3				
CDH Investments	CDH China Fund V ⁶	2013	\$1,500,000	2.3				
New Horizon Capital	New Horizon Capital IV ⁶	2011	\$5,000,000	7.8				
Patria Investimentos	Patria Brazilian Private Equity Fund IV	2011	\$1,666,666	2.6				
Primavera Capital	Primavera Capital Fund	2010	\$3,000,000	4.7				
Distressed/Special Situations ⁷		•		21.5				
Ares Management	Ares Corporate Opportunities Fund IV	2012	\$4,000,000	6.2				
Centerbridge Partners	Centerbridge Capital Partners II	2010	\$4,000,000	6.2				
Littlejohn & Co.	Littlejohn Fund IV	2010	\$2,500,000	3.9				
Oaktree Capital Management	Oaktree European Principal Fund III	2011	\$3,335,000	5.2				
US and Global Venture Capital		·		21.5				
Baseline Ventures	Baseline Core Fund Baseline Increased Exposure Fund	2011	\$2,500,000	3.9				
Freestyle Capital Management	Freestyle Capital	2011	\$1,500,000	2.3				
General Catalyst Partners	General Cataylst Group VI	2011	\$2,000,000	3.1				
Greycroft Managers	Greycroft Partners III	2012	\$1,000,000	1.6				
Khosla Ventures	Khosla Ventures IV + Seed B	2011	\$1,835,000	2.8				
Thrive Capital Partners	Thrive Capital Partners II	2011	\$1,500,000	2.3				
Thrive Capital Partners	Thrive Capital Partners III	2011	\$1,000,000	1.6				
Vivo Ventures	Vivo Ventures Fund VII	2011	\$2,500,000	3.9				
Emerging Markets Venture Capita	I .			7.8				
Qiming Venture Capital Group	Qiming Venture Partners III	2011	\$2,500,000	3.9				
SAIF Partners India	SAIF Partners India IV Limited	2011	\$2,500,000	3.9				
Total Investments			\$64,388,434	100.0				
Reserves ⁸			\$5,526,566					
HCP Private Equity Fund V			\$69,915,000					

 $^{^{5}}$ Percentages are rounded to the nearest tenth of one percent and therefore may not add up to one hundred percent (100%).

⁶ Investment was made through a special purpose vehicle formed and managed by Hall Capital Partners specifically to invest in the underlying portfolio fund

portfolio fund

Funds in this category have broad, flexible mandates and often have meaningful exposure to buyout/growth investments.

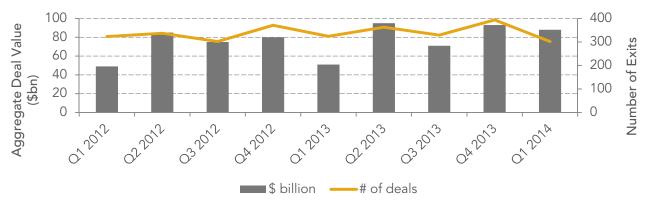
⁸ Reserved for currency fluctuations and estimated fees and expenses. As of 12/31/13, \$3,096,057 of the reserves had already been spent for fees and expenses; \$2,497,143 remains.



PRIVATE EQUITY MARKET OVERVIEW

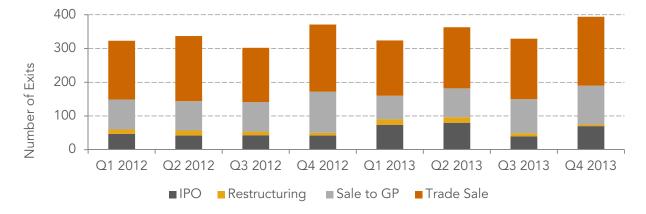
After a notably strong year for exits in 2013, realization activity remained robust through the first quarter of 2014. Our managers remain focused on exiting fully valued businesses, while also capitalizing on the strength of the credit markets to refinance and take dividends when appropriate. While current market conditions have made the investment environment largely more difficult to navigate, across strategies our managers are focused on developing differentiated viewpoints on opportunities, as well as relationships with entrepreneurs and management teams, in order to more effectively identify, evaluate, and compete for the most attractive investments. Over recent months, our managers have executed investments in businesses that have the potential to generate sustained top line growth, even against a more muted macro backdrop, as well as attractively priced assets that are misunderstood in today's market.

Global Exit Volume9



Q1 2014 was the second highest first quarter on record for exit activity, with 302 exits valued at \$87.7 billion. While the volume declined from Q4 2013, the majority of activity occurred towards the end of the quarter, which is promising for continued momentum over the near term. The technology sector was a material driver of this activity, with approximately \$65.2 billion of M&A activity announced during the quarter. Initial public offering ("IPO") activity continued to be strong during the quarter with both US and European markets relatively open to new issues.

Global Exit Activity⁸

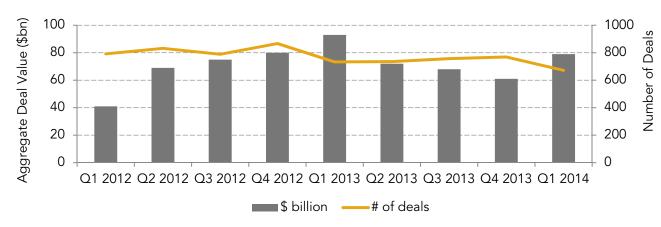


⁹Preqin



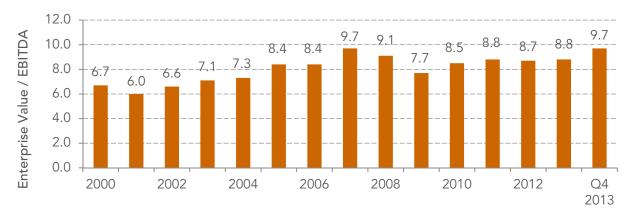
Sponsor M&A activity (i.e., sale to another private equity firm) continued to be a material component of overall exit activity, comprising approximately 30% of total M&A activity. As we've noted in prior letters, our managers have gotten comfortable making secondary investments primarily in instances where there is a clear opportunity to drive value in a differentiated way from the previous private equity owner, rather than simply riding the continued growth trajectory of the business.

Global New Deal Volume



Private equity investment activity remained robust in the first quarter of the year. While the number of deals declined from the previous quarter, the aggregate value of investment activity was materially greater than in Q4 2013. This increase was primarily driven by large scale LBO activity, with more than 60% of deals having a value of more than \$1 billion. The decline in the number of deals reflects the challenging environment private equity investors are facing for deploying capital, which is due to a number of factors including robust public equity markets (which not only put upward pressure on valuations but also act as an alternate exit route for high quality companies), heightened valuation expectations from sellers, and accommodating credit markets.

Purchase Multiples⁸



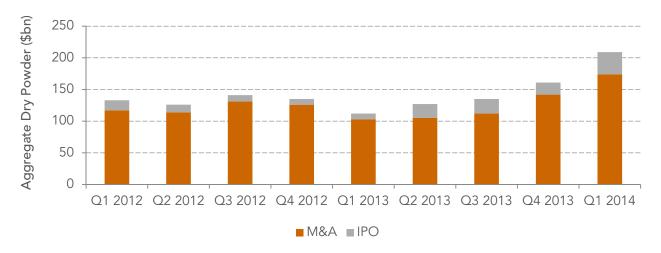
Average purchase multiples have been fairly consistent for global private equity investments over the past few years. As we've noted in past letters, we believe the stability of the averages masks the idiosyncrasies occurring within segments of the market. These idiosyncrasies are more evident in the Q4 2013 purchase multiple, which increased materially from the previous quarter. This increase was primarily due to valuations paid for large cap (>\$50 million EBITDA) companies. During the quarter the average purchase



multiple for large cap deals was 10.6x EBITDA, compared to 8.6x EBITDA for middle market companies. This difference is a reflection of what is occurring in the debt markets, with large cap deals having an average leverage ratio (debt/EBITDA) of 6.0x EBITDA in Q1 2014, an increase from 5.4x EBITDA in 2013. In contrast, the debt multiple for the middle market in Q1 2014 was 4.3x EBITDA, versus 4.8x EBITDA in 2013.

As we've noted in past letters, while valuations in parts of the market remain robust, valuations are not necessarily increasing broadly across the market. Recent increases in valuations are driven largely by the premiums paid for company growth, which are robust by historical standards. There continues to be a notable gap in valuations between companies perceived to be resilient with solid balance sheets and strong growth trajectories, and more "complex" transactions that are misunderstood by the broader market and are often in need of a high level of operational value add. While this gap is narrowing in certain parts of the market, there continue to be attractively priced opportunities for investors who are capable of adding transformative operational value to companies. In the face of a more robust valuation environment, our managers have placed an even greater emphasis on proactive sourcing efforts, as well as focusing their efforts on opportunities where the team believes it has a differentiated viewpoint or expertise, which helps with both evaluating and ultimately competing for deals.

Venture Capital Exit Activity¹⁰



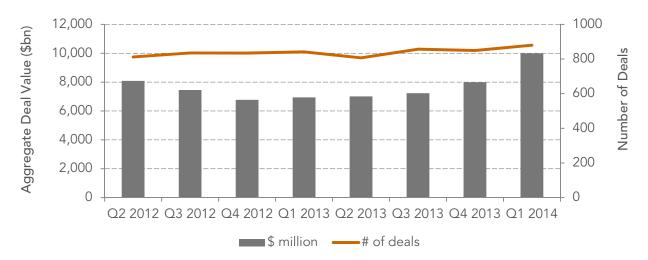
Demonstrating continued appetite for high-growth/earlier stage investments, venture-backed companies held 35 initial public offerings ("IPOs") in the first quarter, the highest amount since Q3 2000. The IPOs raised \$3.3 billion, more than four times the number raised a year prior. Healthcare companies continued to comprise a material portion of this activity, with 22 IPOs (versus 4 in Q1 2013), including the largest IPO of the quarter, Castlight Health. The 13 technology IPOs in Q1 marked the highest tally since Q1 2012, and a more than threefold increase compared to the same quarter last year. Venture-backed M&A also increased in the first quarter with 174 acquisitions, a 69% increase from Q1 2013. Among the largest venture-backed exits in Q1 were Facebook's acquisitions of WhatsApp (\$19 billion) and Oculus VR (\$2 billion), as well as the acquisition of Nest Labs (\$3.2 billion) by Google.

¹⁰CB Insights

¹¹National Venture Capital Association

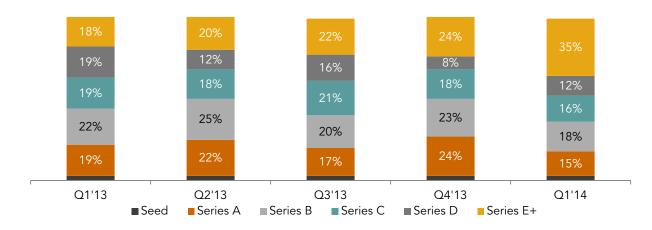


Venture Capital Investment Activity9



More capital was deployed into venture capital investments during the first quarter of 2014 than in any other since the end of the "dotcom boom" in 2001. Valuations and round sizes remain notably robust, with the average investment per financing round reaching its highest level in 14 years during the quarter. Later stage rounds (typically Series D and E) in particular have grown significantly over the past few years, with the amount of capital invested into these deals increasing by almost 50% in Q1 2014, including a record nine rounds of more than \$100 million. Notably, there were as many financing rounds at \$1 billion-plus valuations in the first quarter as there were in all of 2013.

Venture Capital Investment Activity by Stage (Based on Dollars Invested)



Activity at the later stages is primarily being driven by the fact that companies are staying private longer, which is also then driving demand from institutional investors looking to generate returns from exposure to high-growth companies in a more muted macro growth environment. Essentially, rounds that would otherwise be done in the public markets are now getting done through private financing rounds. As companies remain private for longer, hedge funds, mutual funds, and other institutional investors have become more active at the later stage as they search for growth opportunities, thereby driving much of the activity in the \$1 billion-plus valuations rounds. YTD through April of this year, there have been 13 funding rounds of tech startups by mutual fund firms, versus 16 in 2013, 9 in 2012 and 3 in 2010. Later



stage rounds also provide liquidity options for investors. On average, approximately a quarter to a third of the capital invested at the later stages is being used to buy shares from employees and early investors ahead of an IPO.

Given the current market dynamics within venture capital, we are being cautious about deploying capital while also continuing to back investors with a thoughtful and disciplined approach. Importantly, we believe that the current environment, though characterized by notably robust valuations, holds many notable differences to the tech bubble of 1999-2001. As such, when the music stops (as it inevitably will) and market conditions evolve, we do not expect the fallout to be as severe as in the period following 2001, both from a capital deployment and return perspective.

In our view, the first notable difference between the current period and the "dotcom boom" of 1999-2001 is the size of the venture capital industry. During the 1999-2001 period, hundreds of new firms materialized and existing firms raised more capital than they could responsibly invest. Since that time, most surviving venture capital firms have raised smaller funds less frequently. For example, fewer than 200 US-based venture capital firms raised just under \$17 billion last year, compared with nearly 500 firms raising around \$80 billion in 2000.

Another notable difference is the number of viable acquirers. In 2000, there were few viable acquirers that could step in to provide liquidity once the IPO window closed. Today, most tech startups can identify multiple potential acquirers at various stages of their development. As such, there are more portfolio companies that a venture capital firm can salvage for real value, as opposed to shut down.

The third key difference is the capital intensity of investments today versus 2000. The cost of starting and building a business has declined materially due to recent advances such as improvements in open source software and the commoditization of cloud infrastructure. Whereas the original dotcom companies had to incur major infrastructure expenses, today's larger rounds are mostly about driving growth and extending a company's runway, rather than launching the business.

All that being said, a downturn in the market would be far from painless for both startups and venture capital firms. As such, while we are excited by the innovative technologies and business models that continue to be developed through the venture capital model, we are aware of the need for discipline in an environment of high investment activity and robust valuations. We believe our current roster of managers exercises such discipline, whether in regards to valuation, follow-on activity, fund size, strategic focus, or return expectations.



We welcome any thoughts or questions that you may have about your investment or the current market environment. Please feel free to contact Jessica Reed Saouaf or Alison Bowe Diessner at (415) 217-2494.

Sincerely,

Hall Capital Partners LLC General Partner

Kathryn A. Hall Chief Executive Officer and Co-Chief Investment Officer Jessica E. Reed Saouaf Director of Research Head of Private Equity



MARKET OVERVIEW

Quarter Ended March 31, 2014

We live in an increasingly global, interconnected world. While that is a bit trite, sometimes we need to be reminded of that, especially we Americans. Russia's taking of Crimea in this quarter was the most recent incarnation of that fact. On a gentler note, two Hall Capital Managing Directors from our Research team just spent a week in London meeting managers and developing a fresh perspective on the world. We thought we'd share some of those observations and insights in addition to talking about the first quarter of 2014.

Quarter in Review

Shakespeare said that life can be "full of sound and fury, signifying nothing." That's a fair description of the past quarter, judging by the equity markets. We had a

Benchmark Performance					
Returns Ending 3/31/2014	1Q14	1-Year Return*	3-Year Return*	5-Year Return*	10-Year Return*
Equities					
S&P 500	1.8%	21.9%	14.7%	21.2%	7.4%
MSCI AC World Index	1.1%	16.6%	8.5%	17.8%	7.0%
MSCI EAFE	0.7%	17.6%	7.2%	16.0%	6.5%
MSCI Emerging Markets	(0.4%)	(1.4%)	(2.9%)	14.5%	10.1%
Fixed Income					
ML 3-month T-Bills	0.0%	0.1%	0.1%	0.1%	1.7%
Barclays Long Term Treasury Index ⁽¹⁾	7.1%	(4.2%)	8.3%	4.8%	6.1%
Barclays Aggregate Bond Index	1.8%	(0.1%)	3.8%	4.8%	4.5%
ML High Yield Master II	3.0%	7.5%	8.7%	18.2%	8.5%
Other Assets					
HFRI Fund Weighted Composite Index	1.1%	6.5%	3.0%	7.9%	5.4%
S&P GSCI Index ⁽²⁾	2.9%	1.1%	(3.4%)	6.8%	0.0%
Dow Jones - UBS Commodity Index ⁽²⁾	7.0%	(2.1%)	(7.4%)	4.2%	0.4%
Gold Spot Price	6.7%	(19.5%)	(3.7%)	6.8%	11.6%

^{*} Average Annualized Total Returns

Source: Bloomberg, Pertrac Indices

new head of the Federal Reserve (the "Fed") take the reins after eight years with Ben Bernanke and his navigating us through the Great Recession; there were abnormally high snowfall amounts around much of the US (and a dousing of rain in the UK described as "biblical") with disappointingly low job creation numbers in the US that even the Fed couldn't say if they were weather-related or telling of a weak economy; then, there was the skirmish in the Ukraine. A government was ousted by a popular movement in Kiev, and vaguely Russian troops showed up all over Crimea (a part of Ukraine) under the pretext of protecting (unthreatened) native Russians. A referendum on sovereignty was quickly called by the occupier; it passed with a suspiciously high 97% approval and a few days later, Vladimir Putin declared that Crimea (and its strategic naval bases) was now legally part of Russia! For all that sound and fury, global equity markets dropped 3-6% in January, pulled back to even in February, and were little changed in March. For the full quarter, most major equity indices had returns marginally either side of flat.

Equity markets showed their skittishness as the developed world came off a strong 2013 in which much of the return was driven by multiple expansion, suggesting high expectations. The downdraft in January had no obvious trigger, but fears of slowing Chinese growth sparked an emerging markets sell-off that rippled back to developed markets that were struggling with surprisingly weak job growth in the US and the continued withdrawal of stimulus from the Fed. In the emerging markets, the growth worries from China and weakness in many emerging market currencies made for a sharply negative January, but broadly positive local markets and some central bank actions to raise interest rates (Turkey and South Africa) made February and March positive for equity markets and currencies. The emerging market bond index (JP Morgan EM Bond+) followed the same pattern with losses in January, a strong February thanks to the currency moves, and a decent March.

Bond buyers sought safety in US Treasuries and the yield on the 10-year bond, which had started the year at 3.0%, dropped to 2.6% in early February and again in early March, having not been that low since last October, two months before Fed tapering began. Consequently, in January, the Long Term Treasury

⁽¹⁾Underlying securities must have a maturity of 10 years or more

 $[\]slash\hspace{-0.6em}$ The S&P GSCI Index has approximately twice the weight in energy as the Dow Jones-UBS Commodity Index



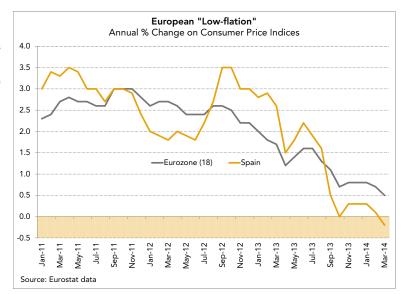
Index had its best month since September 2011. On a technical note, there is evidence that demand for long-term Treasuries was strong from liability-driven pension plans and the Fed. The composition of the Fed's balance sheet has changed over the last few years. Of the \$2.3 trillion in Treasury securities the Fed held at the end of the quarter, the portion that is 10 years or longer in maturity had risen to 27% from 19% four years ago. By shifting its purchases to longer maturities, the Fed is helping to keep long-term interest rates low, thereby softening the impact of the tapering.

Real assets generally had a strong quarter, for a variety of reasons. REITs returned 8.6% for the quarter, which was well above their return for all of 2013, thanks to continued solid fundamentals in commercial and residential real estate. Commodities benefitted from extreme weather and supply problems. Geopolitical concerns drove gold prices higher in January and February, but prices fell somewhat in March, as it seemed the risks of a broader conflict in Eastern Europe subsided, ending with a solid 6.7% return for the full quarter. Stay tuned as the situation in Ukraine continues to unfold in a worrisome way in April...

Our Global World

Our trip to London for manager research reminded us that other issues are at the forefront in other parts of the world. On the mind of one hedge fund manager was Europe, and the question he raised was, "Is Europe at the cusp of a real recovery or stuck in complacency?" There are signs of both. Economic growth has returned to Europe with the International Monetary Fund (IMF) predicting GDP growth of 1.2% this year after negative growth in 2012 and 2013. But, having retreated from the brink of a collapse of the Eurozone, a level of complacency has set in and the necessary structural reforms have stalled. In France, the Eurozone's second largest economy, the pace of reform may have even gone into reverse. Labor unions and some corporations recently agreed to "an obligation to disconnect remote communication tools" for an 11-hour period each day. So, no email or calls to your mobile. While it currently applies to only about 250,000 workers in the consulting and technology industries, it's in addition to the 35-hour work week that applies broadly across the workforce and the top marginal tax rate of 75% on earnings above 1m euros (currently ~\$1.38m). We also heard on our visit of a section of London that has attracted a lot of French entrepreneurs who have left to escape an environment that is unfriendly to business formation. *C'est la vie* may be an apt description of the French approach to life, but something with a bit more vigor will be required to overcome the complacency.

The real concern on most people's mind as to Europe is deflation. Like the Federal Reserve here in the US, the European Central Bank ("ECB") has an inflation target of 2%. However, the amount of slack in the European economy, the slow pace of recovery, and the stringent austerity in some countries have inflation well below that target. As evidence of the concern, the head of the IMF, Christine Lagarde, has coined a new word, "low-flation," and named it a central risk. In the early days of April, inflation statistics were released for March and they were surprisingly low. The overall rate in the Eurozone was



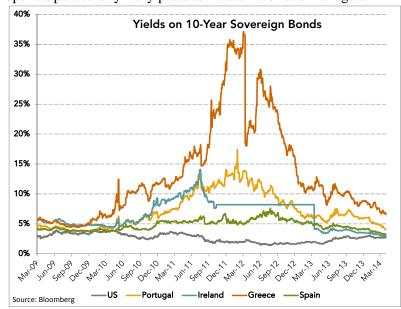


just 0.5% and Spain actually slipped into deflation, registering a -0.2% rate for the month. Admittedly, this is one month's reading and Mario Draghi, head of the ECB, noted that it could have to do with a much later Easter this year (April 20 versus March 31), though he also admitted that policy makers were surprised by the drop and had underestimated the risk of deflation on several occasions in the past. While Spain's "low-flation" is partly due to doing the right thing with their economy (over the past two years, Spain has implemented a series of measures to restore export competitiveness, and holding down public and private salaries has been a key part of that strategy), it puts them in a tough situation as to their high level of indebtedness. With public debt close to 100% of national income, Spain is one of the most indebted countries in Europe. Deflation is especially problematic when debt levels are high because the fixed value of debt becomes a heavier burden when it must be paid with money that is worth less.

Taking a page from the Fed's playbook, ECB President Mario Draghi gave the strongest hint yet that various forms of quantitative easing are being actively considered. "The governing council is unanimous in its commitment to using also unconventional instruments within its mandate in order to cope effectively with risks of a too-prolonged period of low inflation," he said in early April. He clarified that such efforts could include purchases of government or corporate debt as well as cutting the interest rate that the ECB pays when banks park cash there. This certainly would be an unconventional and dramatic move because that rate now stands at zero. Negative rates would punish sidelined cash and encourage that liquidity to find other more profitable venues, like lending to companies. Pressing on the banks is a more appropriate option for Europe because the European economy is very dependent on the banking system for funding, whereas the US relies largely on the capital markets.

This is constructive, definitive action in a place where it seems needed and by an ECB President who has watched the powerful impact of simply saying that the central bank will do "whatever it takes" to preserve the euro—hooray! And, yes, markets have cheered, but are they properly pricing the risks? We think not. It's not that we think Europe is a particularly risky place to invest—we have managers

doing just that in equities, debt, and private equity, and we believe there are certainly opportunities as that region reforms and recovers. However, it seems some investors have forgotten risk while they chase yield. Consider the chart to the right of the yield on 10-year sovereign debt of four of Europe's more challenged economies and that of the US. With the yield on a US 10-year Treasury bond at 2.7% at quarterend, the proximity of the other four seems imprudent. As a startling point of reference, Spain's yield on its 5-year sovereign debt fell below that of a US Treasury 5-year bond in early April.



The most notable recent example of the search for yield and the amnesia of the markets is the return of Greece to the bond market recently. Their flotation of 3 billion euros of 5-year sovereign debt was oversubscribed and came to market with a yield of 4.95%. Considering that Greece's public debt is now 175%



of GDP and Moody's rates the debt nine notches below investment grade while S&P and Fitch rate it six notches below investment grade, many market observers were surprised at a yield below 5%.

As a wrap-up to this European tour, it is important to emphasize this point amidst some of the challenging broad market metrics...we believe there are opportunities for sound and profitable investment across asset classes in Europe and we are invested with several managers that are devoting resources and allocating capital there. We also have several managers with a European focus in our due diligence pipeline, so we hope to have additional high-quality opportunities to invest. Europe has strong crosscurrents to it markets, economies, and policy infrastructures and we seek the best guides we can find to navigate those opportunities and risks.

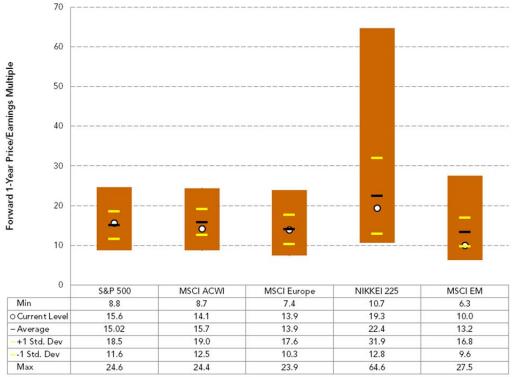
Valuations

Last quarter's letter focused on the expectations that seemed embedded in markets after strong 2013 returns, which were mostly driven by expanding valuation multiples. The prime example was the US market, as characterized by the S&P 500 Index, which rose 32% during 2013. We estimate that roughly 23 of those 32 percentage points were from expanding valuation multiples, with the rest from earnings growth and dividends. This relationship was quite notable in the US, but also applied in many developed markets around the world and suggested that we entered 2014 with high expectations for positive follow-through. That generally remains the case and the first quarter's volatility in equity and sovereign bond markets is evidence of the easily rattled expectations. The chart on the next page shows forward price/earnings multiples for various major global indices since 1987; the bars show the minimum and maximum over that period as well as the average P/E and +/- one standard deviation. The white circle marks the current (March 31) P/E and one might infer that there is a mix of some bargains and some markets priced at historical averages. However, these white circles have crept up since last quarter and, with a very strong caveat that Hall Capital generally does not invest in indices, we will say that the bargains are few and the attractive investments are dear. Moving from right to left on the chart:

- Emerging Markets are weighted down with concerns over growth in China and geopolitical risks in Eastern Europe as well as capital outflows as the Fed reduces its stimulus. It is also a bifurcated market with the desirable stocks valued quite richly and others quite low.
- Japan has a history of very high valuations and the current situation is something of an experiment as Prime Minister Abe deploys his "three arrows" of stimulus and reform (monetary stimulus, fiscal stimulus, and economic and regulatory reforms).
- Europe has been discussed above and, while the region has moved out of recession, there will have to be significant improvement for valuations to press past average.
- MSCI ACWI is the "All Country World Index," which encompasses the 44 developed and emerging markets. Its components are mostly the other four bars on this chart (92%), so it is largely an amalgam with all the pluses and minuses.
- The US, as represented by the S&P 500, has had a begrudging recovery since the Great Recession, though is further along than most economies thanks to many things including having control over its own monetary and banking system and being the world's reserve currency and safety asset. However, profit margins are high and the prospect is real for higher interest rates. Both of which leave little room for higher multiples and put more dependence on earnings growth.

As we said last quarter, additional gains from here will depend on reality exceeding the higher expectations that are now priced into many developed markets.





Source: Bloomberg, MSCI. Note: 12-Month Price to Forward Earnings, based on consensus estimates. Monthly data through March 31, 2014.

Our Future World

On a final note about our global, connected world...our current world is also connected through time to the future world that we will either inhabit or pass along to the next generation.

We were reminded of this fact while spending two days in London with one of Hall Capital's global public equity managers that focuses on sustainable investing. That word, *sustainable*, can have different meanings. This manager's approach might be described as trying to understand how the world is changing and then considering which companies might become more or less valuable due to those changes. Environmental, social, and governance factors are incorporated into the analysis as they present strategic challenges and opportunities for companies.

As long-term, fundamentals-driven investors, this approach resonates with us; it is just good diligence. Our efforts are not driven by ideology, but rather a belief that this level of diligence will produce better results over a long time horizon. We look for the managers and companies that are best-positioned to grow in their changing environments. In our view, investing sustainably demands a focus on long-term value creation and a thoughtful consideration of the externalities, or consequences, associated with our actions. These consequences create risks and opportunities that inform our thinking.

We have spent some of our firm's internal energy over the last year considering how these issues might influence our investment decisions. As an outgrowth of that effort, we have developed a framework that we are calling Full Consequence Investing (FCITM). Our goal is to deepen our understanding of these issues and engage in an active dialogue with our managers and clients.

It is clearly an evolving field. You will hear more from us during this year as we continue this dialogue and refine our thinking.



Hall Capital Partners LLC Summary of Returns Ending 3/31/2014	Average Annualized Total Return Statistics								
		3-Ye		5-Y		10-		15-	f ear
	1Q14	Return	StDev	Return	StDev	Return	StDev	Return	StDev
US Equities									
S&P 500	1.8%	14.7%	12.5%	21.2%	14.0%	7.4%	14.7%	4.5%	15.5%
Dow Jones Industrial Average	(0.2%)	13.0%	11.8%	19.8%	13.0%	7.4%	13.7%	5.9%	15.0%
Russell 2000 Index	1.1%	13.2%	16.8%	24.3%	19.0%	8.5%	19.7%	8.9%	20.5%
NASDAQ Composite	0.8%	16.3%	14.2%	23.9%	16.4%	8.8%	17.8%	4.4%	24.7%
Global Equities									
MSCI AC World Index	1.1%	8.5%	14.5%	17.8%	16.2%	7.0%	16.6%	4.4%	16.5%
MSCI The World Index	1.3%	10.3%	14.1%	18.3%	15.8%	6.8%	16.1%	4.2%	16.1%
International Equities									
MSCI EAFE	0.7%	7.2%	16.8%	16.0%	18.5%	6.5%	18.3%	4.5%	17.6%
FTSE 100	(0.5%)	9.6%	16.2%	19.2%	18.6%	7.4%	17.7%	4.4%	17.1%
MSCI Europe Ex UK	3.5%	8.0%	20.8%	16.9%	22.5%	7.7%	21.5%	5.2%	21.2%
Nikkei 225	(6.5%)	8.6%	13.9%	13.8%	15.4%	5.7%	16.9%	0.9%	18.8%
Emerging Equities									
MSCI Emerging Markets	(0.4%)	(2.9%)	19.5%	14.5%	21.6%	10.1%	24.0%	10.0%	23.5%
Ibovespa Index	2.3%	(19.1%)	30.9%	4.5%	32.4%	11.2%	33.9%	8.8%	38.6%
Hang Seng Composite Index	(5.1%)	1.1%	21.2%	13.6%	21.5%	9.9%	22.8%	N/A	N/A
Shanghai SE Composite	(6.5%)	(7.7%)	18.3%	0.9%	23.3%	6.5%	29.8%	7.5%	28.1%
BSE SENSEX 30 Index	9.5%	(3.4%)	26.9%	16.1%	31.3%	13.0%	31.6%	11.9%	29.9%
US Bonds									
ML 3-month T-Bills	0.0%	0.1%	0.0%	0.1%	0.0%	1.7%	0.6%	2.3%	0.6%
Barclays 7-10 Year Treasury Index	2.6%	5.2%	6.0%	3.9%	6.3%	5.0%	6.6%	5.9%	6.5%
Barclays Long Term Treasury Index ⁽¹⁾	7.1%	8.3%	12.6%	4.8%	11.9%	6.1%	11.2%	6.9%	10.5%
Barclays 1-5 Year Municipal	0.5%	2.4%	1.3%	2.7%	1.5%	3.1%	2.0%	3.7%	2.1%
Barclays Municipal Bond Index (4-6)	1.0%	3.7%	2.5%	4.0%	2.7%	3.9%	3.1%	4.5%	3.2%
ML High Yield Master II	3.0%	8.7%	6.5%	18.2%	8.7%	8.5%	10.3%	7.4%	9.9%
•	1.8%	3.8%	2.8%	4.8%	2.8%	4.5%	3.4%	5.4%	3.5%
Barclays Aggregate Bond Index	1.0/0	3.0%	2.0/0	4.0 /0	2.0/0	4.5 /0	3.4%	3.4 /0	3.3%
Global Bonds	2.00/	4.707	2 (0)	4.70/	2 50/	4.50/	2.70/	F 10/	2.70/
Barclays Global Aggregate (U.S. \$ Hedged)	2.0%	4.6%	2.6%	4.7%	2.5%	4.5%	2.7%	5.1%	2.7%
Barclays Government-Credit Bond Index	2.0%	4.2%	3.3%	5.1%	3.3%	4.4%	4.1%	5.4%	4.2%
J.P. Morgan Emerging Mkts Bond+	3.4%	6.6%	8.6%	10.9%	8.0%	8.3%	9.2%	10.8%	10.2%
Alternative Assets	4.40/	2.00/	F 40/	7.00/	F 00/	F 40/	4.404	7.00/	4.004
HFRI Fund Weighted Composite Index	1.1%	3.0%	5.4%	7.9%	5.9%	5.4%	6.4%	7.3%	6.8%
HFRI Fund of Funds Composite Index	0.2%	2.3%	4.2%	4.8%	4.3%	3.1%	5.6%	5.0%	5.6%
HFRI Equity Hedge Index	1.4%	3.7%	8.1%	9.5%	8.3%	5.0%	8.7%	7.3%	9.3%
HFRI Event-Driven Index	1.8%	5.2%	5.4%	11.0%	5.7%	6.8%	6.6%	8.6%	6.6%
Other Assets									
NAREIT All - Total	8.6%	10.6%	15.7%	27.3%	20.5%	7.4%	24.6%	11.1%	21.2%
ML U.S. Treasury Inflation Linked	2.2%	2.8%	5.7%	4.5%	5.4%	4.3%	6.6%	6.4%	6.3%
S&P 500 Energy	0.8%	5.7%	18.4%	16.5%	18.8%	13.0%	20.9%	10.8%	19.9%
S&P GSCI Index ⁽²⁾	2.9%	(3.4%)	16.7%	6.8%	19.0%	0.0%	24.0%	5.6%	23.1%
Dow Jones - UBS Commodity Index ⁽²⁾	7.0%	(7.4%)	15.2%	4.2%	16.0%	0.4%	18.0%	5.6%	16.9%
Oil Spot Price (WTI) ⁽³⁾	3.2%	(1.9%)	24.1%	15.2%	26.3%	10.9%	30.9%	12.7%	31.6%
Oil Spot Price (Brent) ⁽³⁾	(2.7%)	(2.8%)	18.7%	17.0%	23.7%	13.1%	29.0%	13.9%	30.4%
Gold Spot Price	6.7%	(3.7%)	21.0%	6.8%	19.8%	11.6%	19.4%	10.7%	18.0%

⁽¹⁾Underlying securities must have a maturity of 10 years or more

 $^{^{(2)}}$ The S&P GSCI Index has approximately twice the weight in energy as the Dow Jones-UBS Commodity Index

⁽³⁾WTI tracks crude oil pricing from refineries in Cushing, Oklahoma, whereas Brent tracks crude oil pricing from refineries in the North Sea Sources: Bloomberg, Pertrac Indices



DISCLOSURES AND DEFINITIONS

HCP Private Equity Fund V, L.P. ("Fund V" and the "Fund") is the fifth in a series of private equity pooled vehicles organized by Hall Capital Partners. Fund V seeks to generate significant capital appreciation and returns that materially exceed those available from public market investments over a five to twelve year period by investing across a broad range of strategies, industries, and geographies.

This summary does not constitute an offer to sell or the solicitation of an offer to purchase an interest in the Fund, which may be made only after a qualified offeree receives a Private Placement Memorandum describing the Fund and the risks of investing in the Fund that an investor should consider carefully before investing. This summary is qualified in its entirety, and is subject to, the information contained in the Fund's Private Placement Memorandum. The Fund is available only to qualified investors who are comfortable with the substantial risks associated with investing in the Fund. There is no assurance that the Fund will achieve its investment objective. Nothing contained herein constitutes investment, legal, tax, or other advice. This document is confidential and intended solely for the recipient, and recipient agrees that it will not distribute or provide this information to any other person.

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Indices are presented as reference points. Investments cannot be made directly in a securities index. Comparison of the Hall Capital performance to the various indices is for illustrative purposes only and actual performance may be impacted by volatility, timing of investors' contributions/withdrawals, or other factors.



Lighthouse Credit Opportunities Fund, L.P.

FIRM AUM

\$8.1 billion[†]

STRATEGY

Credit

FUND INCEPTION

January 2003

FUND AUM

\$528 million[†]

SERIES A

MANAGEMENT FEE

None

PERFORMANCE FEE

10% per annum

WITHDRAWAL TERMS

Semiannual redemptions with at least 135 days written notice

DOMICILE

Delaware

AUDITOR

PricewaterhouseCoopers LLP

ADMINISTRATOR

GlobeOp Financial Services²

INVESTMENT ADVISER

Lighthouse Partners 3801 PGA Boulevard

Suite 500

Palm Beach Gardens, FL 33410

T +1 561 741 0820

F +1 561 748 9046

www.lighthousepartners.com

Performance summary¹

	June 2014	Last 12 months	Last 36 months	Inception (Jan 2003 to date)
Lighthouse Credit Opportunities Fund, L.P. (Net)	1.45%*	15.52%	8.97%	8.44%
Barclays Govt/Credit	-0.04%	4.27%	4.07%	4.68%
ML High Yield Master II	0.84%	11.80%	9.28%	10.18%

Net historical performance¹

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
0.74%	1.99%	0.35%	0.66%	0.67%	1.45%*							6.00%*
1.36%	0.37%	1.11%	0.55%	2.94%	-0.84%	1.45%	-0.12%	1.92%	0.91%	0.98%	3.53%	15.06%
1.92%	1.60%	1.20%	0.34%	-1.08%	0.63%	0.45%	0.27%	1.73%	0.39%	0.37%	1.26%	9.43%
1.70%	1.15%	1.62%	1.26%	0.68%	-0.39%	0.11%	-1.73%	-2.76%	2.24%	-0.66%	-0.20%	2.94%
0.43%	-0.64%	3.05%	1.82%	-2.05%	0.86%	1.49%	0.62%	2.73%	1.70%	0.32%	5.49%	16.79%
1.57%	-0.69%	-1.05%	0.61%	2.96%	1.43%	2.35%	2.74%	3.85%	2.20%	-0.19%	3.06%	20.39%
-0.09%	0.60%	-1.07%	0.67%	0.54%	-1.38%	-2.46%	-1.20%	-6.62%	-9.62%	-6.96%	-7.53%	-30.55%
1.57%	0.95%	0.86%	1.21%	0.96%	0.67%	0.44%	-0.22%	0.80%	1.22%	-0.99%	0.02%	7.72%
1.66%	0.67%	1.09%	1.25%	-0.02%	-0.02%	0.53%	1.06%	0.67%	1.74%	1.84%	1.25%	12.35%
0.05%	1.69%	0.50%	0.05%	0.84%	1.01%	1.68%	1.67%	0.96%	-0.37%	0.68%	1.22%	10.42%
2.38%	0.32%	0.67%	0.71%	-0.16%	1.23%	0.47%	0.63%	0.93%	1.02%	3.04%	2.11%	14.14%
2.89%	0.47%	1.51%	3.21%	1.76%	2.51%	0.63%	0.92%	2.44%	2.16%	1.70%	1.61%	24.08%
	0.74% 1.36% 1.92% 1.70% 0.43% 1.57% -0.09% 1.57% 0.05% 2.38%	0.74% 1.99% 1.36% 0.37% 1.92% 1.60% 1.70% 1.15% 0.43% -0.64% 1.57% -0.69% -0.09% 0.60% 1.57% 0.95% 1.66% 0.67% 0.05% 1.69% 2.38% 0.32%	0.74% 1.99% 0.35% 1.36% 0.37% 1.11% 1.92% 1.60% 1.20% 1.70% 1.15% 1.62% 0.43% -0.64% 3.05% 1.57% -0.69% -1.05% -0.09% 0.60% -1.07% 1.57% 0.95% 0.86% 1.66% 0.67% 1.09% 0.05% 1.69% 0.50% 2.38% 0.32% 0.67%	0.74% 1.99% 0.35% 0.66% 1.36% 0.37% 1.11% 0.55% 1.92% 1.60% 1.20% 0.34% 1.70% 1.15% 1.62% 1.26% 0.43% -0.64% 3.05% 1.82% 1.57% -0.69% -1.05% 0.61% -0.09% 0.60% -1.07% 0.67% 1.57% 0.95% 0.86% 1.21% 1.66% 0.67% 1.09% 1.25% 0.05% 1.69% 0.50% 0.05% 2.38% 0.32% 0.67% 0.71%	0.74% 1.99% 0.35% 0.66% 0.67% 1.36% 0.37% 1.11% 0.55% 2.94% 1.92% 1.60% 1.20% 0.34% -1.08% 1.70% 1.15% 1.62% 1.26% 0.68% 0.43% -0.64% 3.05% 1.82% -2.05% 1.57% -0.69% -1.05% 0.61% 2.96% -0.09% 0.60% -1.07% 0.67% 0.54% 1.57% 0.95% 0.86% 1.21% 0.96% 1.66% 0.67% 1.09% 1.25% -0.02% 0.05% 1.69% 0.50% 0.05% 0.84% 2.38% 0.32% 0.67% 0.71% -0.16%	0.74% 1.99% 0.35% 0.66% 0.67% 1.45%* 1.36% 0.37% 1.11% 0.55% 2.94% -0.84% 1.92% 1.60% 1.20% 0.34% -1.08% 0.63% 1.70% 1.15% 1.62% 1.26% 0.68% -0.39% 0.43% -0.64% 3.05% 1.82% -2.05% 0.86% 1.57% -0.69% -1.05% 0.61% 2.96% 1.43% -0.09% 0.60% -1.07% 0.67% 0.54% -1.38% 1.57% 0.95% 0.86% 1.21% 0.96% 0.67% 1.66% 0.67% 1.09% 1.25% -0.02% -0.02% 0.05% 1.69% 0.50% 0.05% 0.84% 1.01% 2.38% 0.32% 0.67% 0.71% -0.16% 1.23%	0.74% 1.99% 0.35% 0.66% 0.67% 1.45%* 1.36% 0.37% 1.11% 0.55% 2.94% -0.84% 1.45% 1.92% 1.60% 1.20% 0.34% -1.08% 0.63% 0.45% 1.70% 1.15% 1.62% 1.26% 0.68% -0.39% 0.11% 0.43% -0.64% 3.05% 1.82% -2.05% 0.86% 1.49% 1.57% -0.69% -1.05% 0.61% 2.96% 1.43% 2.35% -0.09% 0.60% -1.07% 0.67% 0.54% -1.38% -2.46% 1.57% 0.95% 0.86% 1.21% 0.96% 0.67% 0.44% 1.66% 0.67% 1.09% 1.25% -0.02% -0.02% 0.53% 0.05% 1.69% 0.50% 0.05% 0.84% 1.01% 1.68% 2.38% 0.32% 0.67% 0.71% -0.16% 1.23% 0.47%	0.74% 1.99% 0.35% 0.66% 0.67% 1.45%* 1.36% 0.37% 1.11% 0.55% 2.94% -0.84% 1.45% -0.12% 1.92% 1.60% 1.20% 0.34% -1.08% 0.63% 0.45% 0.27% 1.70% 1.15% 1.62% 1.26% 0.68% -0.39% 0.11% -1.73% 0.43% -0.64% 3.05% 1.82% -2.05% 0.86% 1.49% 0.62% 1.57% -0.69% -1.05% 0.61% 2.96% 1.43% 2.35% 2.74% -0.09% 0.60% -1.07% 0.67% 0.54% -1.38% -2.46% -1.20% 1.57% 0.95% 0.86% 1.21% 0.96% 0.67% 0.44% -0.22% 1.66% 0.67% 1.09% 1.25% -0.02% -0.02% 0.53% 1.06% 0.05% 1.69% 0.50% 0.05% 0.84% 1.01% 1.68% 1.67% 2.38% <t< td=""><td>0.74% 1.99% 0.35% 0.66% 0.67% 1.45%* 1.36% 0.37% 1.11% 0.55% 2.94% -0.84% 1.45% -0.12% 1.92% 1.92% 1.60% 1.20% 0.34% -1.08% 0.63% 0.45% 0.27% 1.73% 1.70% 1.15% 1.62% 1.26% 0.68% -0.39% 0.11% -1.73% -2.76% 0.43% -0.64% 3.05% 1.82% -2.05% 0.86% 1.49% 0.62% 2.73% 1.57% -0.69% -1.05% 0.61% 2.96% 1.43% 2.35% 2.74% 3.85% -0.09% 0.60% -1.07% 0.67% 0.54% -1.38% -2.46% -1.20% -6.62% 1.57% 0.95% 0.86% 1.21% 0.96% 0.67% 0.44% -0.22% 0.80% 1.66% 0.67% 1.09% 1.25% -0.02% -0.02% 0.53% 1.06% 0.67% 0.05% 1.69%</td><td>0.74% 1.99% 0.35% 0.66% 0.67% 1.45%* 1.36% 0.37% 1.11% 0.55% 2.94% -0.84% 1.45% -0.12% 1.92% 0.91% 1.92% 1.60% 1.20% 0.34% -1.08% 0.63% 0.45% 0.27% 1.73% 0.39% 1.70% 1.15% 1.62% 1.26% 0.68% -0.39% 0.11% -1.73% -2.76% 2.24% 0.43% -0.64% 3.05% 1.82% -2.05% 0.86% 1.49% 0.62% 2.73% 1.70% 1.57% -0.69% -1.05% 0.61% 2.96% 1.43% 2.35% 2.74% 3.85% 2.20% -0.09% 0.60% -1.07% 0.67% 0.54% -1.38% -2.46% -1.20% -6.62% -9.62% 1.57% 0.95% 0.86% 1.21% 0.96% 0.67% 0.44% -0.22% 0.80% 1.22% 1.66% 0.67% 1.09% 1.25% -0.02%</td><td>0.74% 1.99% 0.35% 0.66% 0.67% 1.45%* - 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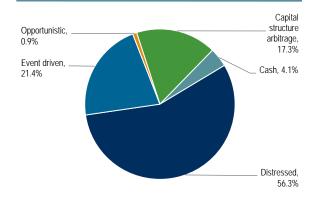
Performance characteristics¹

January 2003 - June 2014

Annualized Compound Return	8.44%
Annualized Standard Deviation	6.60%
Sharpe Ratio (annualized)	1.03
% positive months	80%
Maximum Drawdown	-31.35%
Beta to Barclays Gov/Credit	-0.19
Beta to ML High Yield Master II	0.43

Portfolio composition

June 2014 Strategy Allocations



^{*}Performance is estimated by Lighthouse Investment Partners, LLC and the underlying managers. 2014 performance is unaudited (and subject to change upon final audit).

[†] Firm AUM is estimated. Fund AUM is estimated and includes onshore and offshore fund assets in the above fund. The figure also may include investments made into the strategy by other Lighthouse managed funds. AUM may include transfers from other Lighthouse Funds that occurred on the first of the month. AUM may include transfers from other Lighthouse Funds that occurred on the first of the month.

¹ The performance data contained herein represents the returns to an investor in Lighthouse Credit Opportunities Fund, L.P. Series A shares ("the Fund"). Performance is net of all fees and expenses applicable to a shareholder in the Fund. Results include reinvestment of all income and capital gains. Performance shown for periods over one year has been annualized.

²Onshore funds are administered by GlobeOp Financial Services LLC.

Past performance is not necessarily indicative of future results. No assurance can be given that the Fund's objectives or targets will be achieved. Investing in the Fund is intended for experienced and sophisticated investors only who are willing to bear the high economic risks of the investment. Investors should carefully review and consider potential risks before investing. This document is for informational use only and is not an offer to sell or a solicitation of an offer to buy interests in the Fund or any Lighthouse managed investment vehicle. Please refer to the Fund's Private Offering Memorandum for details of investment terms and conditions.

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Lighthouse Global Long/Short Fund, L.P.

100% managed accounts

FIRM AUM

\$8.1 billion[†]

STRATEGY

Long/Short Equity

FUND INCEPTION

January 2005

FUND AUM

\$1.5 billion[†]

SERIES A

MANAGEMENT FEE

1.5% per annum

PERFORMANCE FEE

None

WITHDRAWAL TERMS

Two options:

(1) Quarterly: 60 days written notice

(2) Monthly: 90 days written notice

DOMICILE

Delaware

AUDITOR

PricewaterhouseCoopers LLP

ADMINISTRATOR

GlobeOp Financial Services²

BLOOMBERG CODE

LHGLGSH US

INVESTMENT ADVISER

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Performance summary¹

	June 2014	Last 12 months	Last 36 months	Inception (Jan 2005 to date)
Lighthouse Global Long/Short Fund L.P. (Net)	1.80%*	11.31%	8.32%	6.48%
MSCI AC World Index	1.93%	23.57%	10.85%	7.20%
S&P 500 (w/dividends)	2.07%	24.62%	16.58%	7.42%

Net historical performance¹

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2014	0.87%	1.75%	-1.66%	-1.96%	1.19%	1.80%*							1.93%*
2013	3.16%	0.54%	2.68%	1.52%	1.03%	0.99%	2.23%	-0.25%	2.15%	1.21%	1.13%	2.42%	20.46%
2012	1.73%	1.67%	1.58%	1.15%	-3.69%	0.51%	0.15%	1.09%	1.33%	-0.12%	0.80%	0.43%	6.71%
2011	-0.17%	1.15%	0.65%	2.13%	-1.12%	-1.45%	0.56%	-3.07%	-0.62%	1.74%	-0.99%	-0.60%	-1.89%
2010	0.03%	0.25%	1.88%	0.64%	-2.44%	-1.74%	1.70%	-0.63%	1.33%	1.83%	0.15%	2.11%	5.11%
2009	0.30%	-0.54%	1.07%	1.27%	2.30%	0.66%	1.58%	1.36%	1.46%	-0.86%	0.31%	0.86%	10.17%
2008	-3.15%	1.21%	-4.67%	1.46%	2.79%	-0.45%	-1.39%	-0.33%	-6.35%	-2.02%	-0.60%	-0.04%	-13.07%
2007	2.74%	0.37%	1.53%	2.62%	3.16%	1.29%	-0.16%	-2.33%	1.80%	3.34%	-2.42%	0.23%	12.64%
2006	2.11%	-0.01%	0.66%	0.59%	-1.96%	-0.27%	0.10%	1.96%	1.78%	1.79%	2.50%	2.43%	12.21%
2005	0.91%	1.14%	-0.51%	-1.19%	1.93%	1.46%	1.99%	0.71%	1.31%	-1.30%	1.19%	2.92%	10.99%

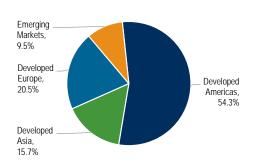
Performance characteristics¹

January 2005 – June 2014

Annualized Compound Return	6.48%
Annualized Standard Deviation	5.83%
Sharpe Ratio (annualized)	0.83
% positive months	69%
Maximum Drawdown	-15.18%
Beta to MSCI AC World Index	0.24
Beta to S&P 500 with dividends	0.25

Portfolio composition

Geography Weightings³



Portfolio composition

Sector Weightings

	Gross	Net		
Consumer Discretionary	38.7%	9.5%		
Consumer Staples	13.0%	-0.8%		
Energy	20.4%	2.9%		
Financials	44.0%	4.8%		
Healthcare	22.8%	7.6%		
Industrials	23.8%	2.4%		
Technology	24.0%	4.8%		
Materials	18.6%	3.2%		
Telecommunications	3.9%	-0.2%		
Utilities	2.5%	0.3%		
Other	4.3%	-0.7%		
Total	216.0%	33.8%		

^{*}Performance is estimated by Lighthouse Investment Partners, LLC and the underlying managers. 2014 performance is unaudited (and subject to change upon final audit).

[†] Firm AUM is estimated. Fund AUM is estimated and includes onshore and offshore fund assets in the above fund. The figure also may include investments made into the strategy by other Lighthouse managed funds. AUM may include transfers from other Lighthouse Funds that occurred on the first of the month.

¹ The performance data contained herein represents the returns to an investor in Lighthouse Global Long/Short Fund, L.P. Series A shares ("the Fund"). Performance is net of all fees and expenses applicable to a shareholder in above fund. Results include reinvestment of all income and capital gains. Performance shown for periods over one year has been annualized.

²Onshore funds are administered by GlobeOp Financial Services LLC.
³Regional data are calculated based on the issuer's domicile, not by the exchange in which the security is traded. Emerging market countries are based on classifications determined by RiskMetrics, Inc.

Pasi performance is not necessarily indicative of future results. No assurance can be given that the Fund's objectives or targets will be achieved. Investing in the Fund is intended for experienced and sophisticated investors only who are willing to bear the high economic risks of the investment. Investors should carefully review and consider potential risks before investing. This document is for informational use only and is not an offer to sell or a solicitation of an offer to buy interests in the Fund or any Lighthouse managed investment vehicle. Please refer to the Fund's Private Offering Memorandum for details of investment terms and conditions.

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Lighthouse Diversified Fund, L.P.

FIRM AUM

\$8.1 billion[†]

STRATEGY

Multi-Strategy

STRATEGY AUM

\$4.6 billion[†]

FUND INCEPTION

August 1996

FUND AUM

\$2.2 billion^{††}

SERIES A

MANAGEMENT FEE

1.5% per annum

PERFORMANCE FEE

WITHDRAWAL TERMS

Quarterly redemptions with at least 135 days written notice

DOMICILE

Delaware

AUDITOR

PricewaterhouseCoopers LLP

ADMINISTRATOR

GlobeOp Financial Services2

BLOOMBERG CODE

LHDVQLP US

INVESTMENT ADVISER

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www.lighthousepartners.com

Performance summary¹

	June 2014	Last 12 months	Last 36 months	Inception (Aug 1996 to date)
Lighthouse Diversified Fund, L.P. (Net)	1.20%*	14.13%	6.55%	8.22%
S&P 500 (w/dividends)	2.07%	24.62%	16.58%	8.42%
Barclays Gov/Credit	-0.04%	4.27%	4.07%	5.93%

Net historical performance¹

	IIDIOIT	cui pe		unce									
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2014	1.44%	1.78%	-0.52%	0.07%	0.67%	1.20%*							4.71%*
2013	1.32%	0.35%	0.94%	0.51%	0.77%	-0.50%	1.30%	0.06%	1.72%	1.77%	1.20%	2.64%	12.73%
2012	1.56%	1.60%	0.84%	0.04%	-0.80%	0.02%	0.65%	0.70%	0.69%	-0.12%	0.39%	0.60%	6.32%
2011	0.92%	1.21%	0.64%	1.32%	-0.28%	-0.86%	0.05%	-2.23%	-1.55%	0.75%	-0.23%	-0.44%	-0.76%
2010	-0.10%	-0.25%	1.28%	0.59%	-1.16%	-0.64%	0.96%	0.53%	1.15%	1.19%	-0.17%	2.64%	6.13%
2009	2.12%	0.47%	-0.32%	1.10%	3.47%	1.43%	2.23%	1.98%	1.97%	0.51%	0.49%	0.88%	17.54%
2008	-1.65%	1.86%	-2.76%	0.69%	1.95%	-0.60%	-2.67%	-1.57%	-6.56%	-6.16%	-3.47%	-3.92%	-22.56%
2007	1.40%	0.92%	1.28%	1.92%	2.11%	1.19%	0.15%	-2.24%	0.80%	2.63%	-0.47%	0.38%	10.45%
2006	2.26%	0.42%	0.96%	1.07%	-0.85%	-0.17%	0.26%	1.03%	1.48%	1.54%	1.80%	2.09%	12.51%
2005	0.47%	0.97%	-0.02%	-0.57%	0.64%	1.13%	1.12%	0.89%	1.26%	-0.31%	1.06%	1.48%	8.40%
2004	1.59%	1.14%	0.44%	-0.48%	-0.46%	0.29%	0.03%	0.14%	0.52%	0.73%	1.95%	0.98%	7.06%
2003	1.13%	0.54%	-0.16%	1.25%	1.30%	0.58%	-0.67%	0.37%	1.44%	0.94%	0.83%	0.24%	8.05%
2002	1.06%	0.34%	1.02%	0.97%	0.61%	0.12%	0.02%	0.59%	0.47%	-0.07%	0.71%	1.45%	7.53%
2001	2.42%	0.42%	0.93%	0.34%	0.20%	0.36%	0.16%	1.00%	-0.62%	0.93%	0.19%	0.85%	7.39%
2000	1.64%	1.31%	1.81%	1.83%	2.66%	0.46%	1.12%	1.18%	-1.13%	1.10%	0.10%	0.57%	13.35%
1999	1.79%	0.21%	2.18%	3.60%	1.09%	3.32%	1.88%	0.92%	0.88%	1.71%	1.36%	3.03%	24.25%
1998	-0.43%	1.90%	2.20%	1.34%	-0.13%	0.50%	0.53%	-4.66%	-1.44%	-1.33%	2.04%	2.11%	2.43%
1997	3.44%	2.57%	-0.59%	0.45%	2.68%	1.71%	3.85%	1.01%	3.30%	0.27%	-0.42%	1.79%	21.86%
1996								2.13%	1.49%	0.89%	2.80%	0.65%	8.20%

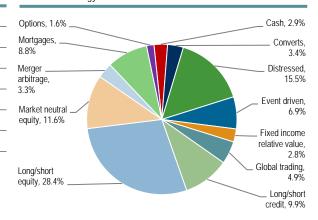
Performance characteristics¹

August 1996 - June 2014

Annualized Compound Return	8.22%
Annualized Standard Deviation	4.91%
Sharpe Ratio (annualized)	1.10
% positive months	79%
Maximum Drawdown	-22.70%
Beta to S&P 500 with dividends	0.16
Beta to Barclays Gov/Credit	-0.01

Portfolio composition

June 2014 Strategy Allocations



^{*}Performance is estimated by Lighthouse Investment Partners, LLC and the underlying managers. 2014 performance is unaudited (and subject to change upon final audit).

[†] Firm AUM is estimated. Strategy AUM is estimated and includes onshore and offshore assets in all Lighthouse multi-strategy funds, including Lighthouse Diversified Fund, Lighthouse V Fund, Lighthouse Multi-Strategy Fund and certain separately managed custom funds. Separately managed custom funds are not open for investment by external investors. The investment approach pursued by other multi-strategy funds, including, without limitation, the composition and size of allocations in underlying managers may vary significantly from the above fund. The figure may also include investments made into the strategy by other Lighthouse managed funds.

The figure may also include investments made into the fund by other Lighthouse managed funds. AUM may include transfers from other Lighthouse Funds that

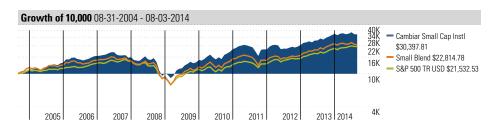
¹ The performance data contained herein represents the returns to an investor in Lighthouse Diversified Fund (OP) II, L.P. Series A shares ("the Fund"). Performance is net of all fees and expenses applicable to a shareholder in the Fund. Results include reinvestment of all income and capital gains. Performance shown for periods over one year has been annualized.
² Onshore funds are administered by GlobeOp Financial Services LLC.

Past performance is not necessarily indicative of future results. No assurance can be given that the Fund's objectives or targets will be achieved. Investing in the Fund is intended for experienced and sophisticated investors only who are willing to bear the high economic risks of the investment. Investors should carefully review and consider potential risks before investing. This document is for informational use only and is not an offer to sell or a solicitation of an offer to buy interests in the Fund or any Lighthouse managed investment vehicle. Please refer to the Fund's Private Offering Memorandum for details of investment terms and conditions.

Cambiar Small Cap Instl CAMZX

Morningstar Analyst Rating

NAV \$	NAV Day Change %	Yield TTM %	Total Assets \$ Bil	Status	Min. Inv.	Load	Expenses	Morningstar Rating™	Category	Investment Style
22.68	↓ -0.05 -0.22	0.00	1.4	Open	\$5	None	1.05%	***	Small Blend	■ Small Blend



Performance 08-01-2014						
	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	9,852	9,364	11,058	14,589	23,970	_
Fund	-1.48	-6.36	10.58	13.42	19.11	_
+/- S&P 500 TR USD	-6.83	-4.03	-4.57	-3.48	2.38	_
+/- Category	0.78	0.47	2.82	0.05	2.72	_
% Rank in Cat	35	28	16	51	7	_
# of Funds in Cat	731	772	693	598	546	340
* Currency is displayed in USD						

Top Holdings 06-30-2014				
	Weight %	Last Price	Day Chg %	52 Week Range
Genesco Inc	2.34	77.39 USD	1.47 🛧	60.03 - 82.98
US Silica Holdings Inc	2.20	59.37 USD	5.87 🛧	21.65 - 63.25
 Key Energy Services Inc 	2.17	6.30 USD	2.77 🛧	6.04 - 10.52
Health Net Inc	2.16	42.74 USD	2.01 🛧	25.40 - 45.61
Regal-Beloit Corp	2.16	70.25 USD	0.29 🛧	62.93 - 80.41

% Assets in Top 5 Holdings 11.03

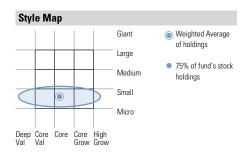
⊕ Increase ⊝ Decrease 🔅 New to Portfolio

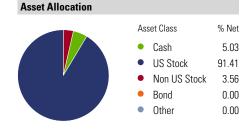
	Fund	3 Yr High	3 Yr Low	Cat Avg	■ Fund ▼ Cat Avg
Consumer Cyclical	20.37	20.37	12.09	15.14	
Financial Services	17.07	17.07	11.96	15.27	
Technology	15.11	25.67	15.11	15.95	
Industrials	12.13	23.40	12.13	18.92	
Energy	10.50	10.50	6.88	5.80	
-					0 10 20 30 40

Dividend and Capital Gains Distributions								
Distribution Date	Distribution NAV	Long-Term Capital Gain	Long-Term Short Gain	Return of Capital	Dividend Income	Distribution Total		
2013-12-12	21.75	2.0600	0.6000	0.0000	0.0000	2.6600		
2012-12-13	18.42	0.2800	0.0000	0.0000	0.0000	0.2800		
2011-12-15	16.09	0.1700	0.3700	0.0000	0.0000	0.5500		

3 Year Average Morningstar Risk Measures						
Risk vs. Category (598) Return vs. Category (598)						
(000)		Low		Avg		High

Pillars		
Process	_	_
Performance	_	_
People	_	_
Parent	_	_
Price	_	_
Rating		





Management	
	Start Date
Ania A. Aldrich	2004-08-31
Brian M. Barish	2004-08-31
Andrew P. Baumbusch	2004-08-31
Timothy A. Beranek	2004-08-31
Maria L. Mendelsberg	2004-08-31
Jeffrey H. Susman	2012-09-01



Vanguard Institutional Index I

Morningstar Analyst Rating 04-02-14



Morningstar Pillars	
Process	Positive
Performance	Positive
People	Positive
Parent	Positive
Price	Positive

Morningstar Analyst Rating

Morningstar evaluates mutual funds based on five key pillars, which its analysts believe lead to funds that are more likely to outperform over the long term on a risk-adjusted basis.

Analyst Ra	ting Spectrum			
🐯 Gold	🐺 Silver	😇 Bronze	Neutral	Negative
Pillar Spec	trum			
Positive		 Negative 		Neutral

Perforn	nance	07-31-1	4		
	1st Qtr	2nd Qtr	3rd Q	tr 4th Qtr	Total
2010	5.39	-11.43	11.2	9 10.75	15.05
2011	5.91	0.10	-13.8	7 11.81	2.09
2012	12.58	-2.75	6.3	5 -0.39	15.98
2013	10.60	2.91	5.2	3 10.50	32.35
2014	1.79	5.23	Ñ	l Ñ	Ñ
Trailing	Total	+/-	+/- Rus	s %Rank	Growth of
	Return%	S&P 500	100	0 Cat	\$10,000
3 Mo	3.02	0.00	0.0	9 34	10,302
6 Mo	9.42	-0.02	0.4	0 25	10,942
1 Yr	16.90	-0.04	-0.1	6 29	11,690
3 Yr Avg	16.81	-0.03	-0.0	3 22	15,938
5 Yr Avg	16.77	-0.02	-0.3	6 19	21,710
10 Yr Avg	8.00	0.00	-0.4	0 28	21,589
15 Yr Avg	4.49	0.02	-0.4	2 47	19,325
Tax Analys	is Tax-A	dj Rtn%	%Rank Cat	Tax-Cost Rat	%Rank Cat
3 Yr (est	imated)	16.20	15	0.53	42
5 Yr (estimated)		16.25	14	0.44	42

Potential Capital Gain Exposure: 35% of assets

10 Yr (estimated)

												0
Histori Return Risk Rating	Above A	Avg	100%	100%	99%	100%	100%	100%	100%	100%	100%	Investment Style Equity Stock %
	Above A	lvg									T	▼ Manager Change 26.0 ▼ Partial Manager Change 22.0
				~~	\lambda .				~~			18.0 Growth of \$10,000 Investment Values of
	~~	سر	~		7	أسر	~ ~~	V				14.0 — Fund Investment Values of S&P 500
\checkmark					,	V —						10.0
												Performance Quartile (within Category)
2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	07-14	History
101.78	110.70	114.01	129.59	134.14	82.54	101.98	115.01	115.04	130.52	169.28	177.18	NAV
28.66	10.86	4.91	15.78	5.47	-36.95	26.63	15.05	2.09	15.98	32.35	5.63	Total Return %
-0.02	-0.02	0.00	-0.01	-0.02	0.05	0.17	-0.01	-0.02	-0.02	-0.04	-0.03	+/-S&P 500
-1.23	-0.54	-1.36	0.32	-0.30	0.65	-1.80	-1.05	0.59	-0.44	-0.76	0.10	+/-Russ 1000
1.91	2.00	1.86	1.98	1.99	1.90	2.70	2.09	2.07	2.48	2.41	0.95	Income Return %
26.75	8.86	3.05	13.80	3.48	-38.85	23.93	12.96	0.02	13.50	29.94	4.68	Capital Return %
26	34	57	21	49	37	52	29	17	35	42	23	Total Rtn % Rank Cat
1.53	2.02	2.05	2.24	2.56	2.52	2.21	2.12	2.36	2.83	3.13	1.61	Income \$
			0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	Capital Gains \$
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		Capital Gairis #
0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	Ñ	Expense Ratio %
0.05 1.74	0.05										Ñ Ñ	
0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	Ñ	Expense Ratio %

Apple Inc

Ticker

VINIX

Status

Open

Yield

1.9%

Portfolio Analysis 06-30-14 Share change since 05-14 Total Stocks:504 Sector

Exxon Mobil CorporationMicrosoft Corp

Johnson & Johnson

⊕ General Electric Co

JPMorgan Chase & Co

Procter & Gamble Co

Berkshire Hathaway Inc C

Verizon Communications I

International Business M

Wells Fargo & Co

Chevron Corp

Pfizer Inc.

AT&T Inc

Total Assets

\$175,529 mil

Mstar Category

Large Blend

Ratir	ng and Ri	sk		
Time Period	Load-Adj Return %	Morningstar Rtn vs Cat	Morningstar Risk vs Cat	Morningstar Risk-Adj Rating
1 Yr	16.90			
3 Yr	16.81	+ Avg	-Avg	****
5 Yr	16.77	+ Avg	Avg	****
10 Yr	8.00	+ Avg	Avg	****
Incept	9.60			

Other Measures	Standard Index	Best Fit Index
	S&P 500	S&P 500
Alpha	0.0	0.0
Beta	1.00	1.00
R-Squared	100	100
Standard Deviation	12.26	
Mean	16.81	
Sharpe Ratio	1.31	

Morningstar's Take by Michael Rawson 04-02-14

19

0.39

18

While it's not possible to invest directly in an index, Vanguard Institutional Index is the next best thing.

For investors who can meet the \$5 million minimum, this fund has had better performance and lower tracking error than any other S&P 500 Index fund. Vanguard 500 Index VFIAX may be more appropriate for investors of more modest means. While there are many S&P 500 Index funds, this fund's low expense ratio, tax efficiency, and minimal tracking error set it apart. During the past 10 years through February 2014, the fund has beaten S&P 500 Index by 4 basis points. In terms of index fund management, no one has done it better. Hence, this fund's Morningstar Analyst Rating of Gold.

The S&P 500 Index has proved to be a difficult benchmark for active managers to beat over the long term, after fees. In simply tracking this benchmark, this fund outpaced more than two thirds of its surviving peers in the large-blend Morningstar Category. Its aftertax performance looks even better, partly because of the index's low turnover.

As a market-cap-weighted index, the S&P 500 Index puts most of its emphasis on large-cap companies, though it also includes some mid-cap stocks. Investors looking for comprehensive exposure to the U.S. stock market could pair this fund with a small-cap fund or a completion index fund. Vanguard Total Stock Market Index VTSAX may also be a suitable alternative. It charges 0.05% but covers a broader swath of the equities market.

Investors in this fund should be prepared for the risk inherent in the stock market. Volatility has averaged about 15% in the last decade, and the index fell 37% in 2008. While it did rebound during the past several years, risk-averse investors or those with a short-term time horizon might consider limiting their allocations to U.S. stocks.

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Inception:	07-31-90	Actual Fees:	Mgt:0.04%	Dist: Ñ	
Advisor:	Vanguard Group, Inc.	Expense Projections:	3Yr:\$13	5Yr:\$23	10Yr:\$51
Subadvisor:	None	Income Distribution:	Quarterly		
NTF Plans:	Vanguard NTF				

Merck & Co Inc.	HIth care		
 ◆ Google Inc Clas ◆ Google Inc Clas ◆ Bank of Americ ◆ Coca-Cola Co ◆ Intel Corp 	ss C	rat	Technolog Technolog Finan Svs Cnsmr De Technolog
Current Investment	Style		Sector
Value Blnd Growth Large Mid Small	Marke Gian Large Mid Sma Micr Avg 68,2	37.0 11.8 II 0.0 0 0.0 \$mil:	Weighting Cycli Basin Cnsr Finan Real Sens
Value Measures Price/Earnings Price/Book Price/Sales Price/Cash Flow Dividend Yield %	17.42 2.39 1.69 7.47 2.29	Rel Category 1.21 1.17 1.34 1.05 1.05	Com Defe Defe Character Under
Long-Term Erngs Book Value Sales Cash Flow Historical Erngs	10.21 7.43 3.03 6.18 8.64	0.98 1.40 1.04 0.91 0.48	Composit
Profitability Return on Equity Return on Assets Net Margin	% 20.55 8.03 14.16	Rel Category 1.07 1.04 1.11	

Technology Technology Finan Svs Cnsmr Def Technology	30.6 30.1 24.4 21.0	4.24 Ñ -1.16 4.02	0 0	.93
Sector Weightings	% of Stocks		3 ' High	
Cyclical •	30.41	1.06		
♣ BasicMa	at 3.36	1.10	4	3
CnsmrC	yc10.35	1.21	12	10
♠ Real Est	1.94	1.33	2	2
Sensitiv	e 43.22	0.99		
☐ CommS	rvs 3.99	1.00	5	
Energy	10.82	1.01	11	10
Industrl Industrl				
Technlg	y 17.21	0.98	19	16
→ Defensi	/e26.38	0.96		
CnsmrD				
HIthcare	13.24	1.12	13	11
Utilities	3.15	0.87	4	3
Composition	- Net			_
		Cash Stocks Bonds Other Foreig (% of S	s 9 n	0.0 0.0 1.7

PE Tot Ret%

17.08

0.79

16.87

15.71

-3.64

17.20

-0.17

6.75

-1.93

1.73

-140

3.19

-2.27

17.34

15.0

13.5

16.2

20.0

18.8

13.1

14.3

15.4

21.0

10.6

18 1

10.3

11.4

Technology

Technology

HIth care

Finan Svs

Finan Svs

Finan Svs

Cnsmr Def

Comm Svs

Comm Svs

Technology

HIth care

Industrl

Energy

Energy

% Assets

3.21

2.48

1.80

1.70

1.51

1.25

1.22

1.22

1.16

1.08

1.05

0.99

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Morningstar Analyst Rating 03-17-14

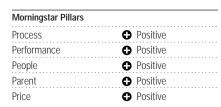
T. Rowe Price Instl Large Cap Growth

Neutral

Ticker Status Yield **Total Assets** TRLGX 0.0% \$10,848 mil Open

Mstar Category Large Growth

🛂 Silver



Morningstar Analyst Rating

Positive

Morningstar evaluates mutual funds based on five key pillars, which its analysts believe lead to funds that are more likely to outperform over the long term on a risk-adjusted basis.

Analyst Ratii	ng Spectrum			
🐯 Gold	 Silver	😇 Bronze	Neutral	Negative
Pillar Spectr	um			

Negative

Perform	nance	07-31-14			
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
2010	3.82	-12.48	14.03	12.24	16.29
2011	6.29	-1.09	-14.40	9.57	-1.40
2012	19.48	-6.70	6.01	-0.53	17.55
2013	8.37	4.45	13.34	12.59	44.44
2014	0.07	3.26	Ñ	Ñ	Ñ
Trailing	Total	+/-	+/- Russ	%Rank	Growth of
Trailing	Total Return%	+/- S&P 500	+/- Russ 1000Gr	%Rank Cat	Growth of \$10,000
Trailing 3 Mo					
3	Return%	S&P 500	1000Gr	Cat	\$10,000
3 Mo	Return% 5.60	S&P 500 2.58	1000Gr 2.08	Cat 17	\$10,000 10,560
3 Mo 6 Mo	8.60 5.60 3.41 21.81	S&P 500 2.58 -6.03	1000Gr 2.08 -4.34	Cat 17 84	\$10,000 10,560 10,341
3 Mo 6 Mo 1 Yr	Return% 5.60 3.41 21.81 17.85	S&P 500 2.58 -6.03 4.87	1000Gr 2.08 -4.34 3.12	Cat 17 84 11	\$10,000 10,560 10,341 12,181

15 Yr Avg	Ñ	1	Ì Ñ	Ñ Ñ	Ñ
Tax Analysis	Tax-A	dj Rtn%	%Rank Cat	Tax-Cost Rat	%Rank Cat
3 Yr (estima	ited)	17.77	3	0.07	13
5 Yr (estima	ited)	18.30	6	0.07	15
10 Yr (estima	ated)	9.68	10	0.16	23

Potential Capital Gain Exposure: 35% of assets

Risk Rating	Above A	k" ∐	97%	97% ▼	99%	99%	99%	98%	99%	99%		Equity Stock % Manager Change 32.0 Partial Manager Change 25.0 Growth of \$10,000 Investment Values of Fund Fund Investment Values of S&P 500
2002	2004	2005	2007	2007	2000	2000	2010	2011	2012	2012		Performance Quartile (within Category)
2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	07-14	History
11.75	12.85	13.83	14.64	15.64	9.22	14.12	16.38	16.12	18.88	27.26	27.92	NAV
38.52	11.09	7.70	6.29	8.69	-40.86	53.40	16.29	-1.40	17.55	44.44	2.42	Total Return %
9.84	0.21	2.79	-9.50	3.20	-3.86	26.94	1.23	-3.51	1.55	12.05	-3.24	+/-S&P 500
8.77	4.79	2.44	-2.78	-3.12	-2.42	16.19	-0.42	-4.04	2.29	10.96	-2.26	+/-Russ 1000Gr
0.12	0.60	0.08	0.29	0.41	0.19	0.25	0.28	0.18	0.43	0.05	0.00	Income Return %
38.40	10.49	7.62	6.00	8.28	-41.05	53.15	16.01	-1.58	17.12	44.39	2.42	Capital Return %
8	22	38	60	74	52	5	41	44	25	3	64	Total Rtn % Rank Cat
0.01	0.07	0.01	0.04	0.06	0.03	0.02	0.04	0.03	0.07	0.01	0.00	Income \$
0.00	0.13	0.00	0.02	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Capital Gains \$
0.65	0.65	0.61	0.58	0.58	0.58	0.57	0.57	0.57	0.57	0.56	Ñ	Expense Ratio %
0.14	0.65	0.24	0.45	0.43	0.21	0.27	0.21	0.19	0.43	0.07	Ñ	Income Ratio %
Ñ	Ñ	64	52	61	66	61	60	58	40	42	Ñ	Turnover Rate %
24	58	204	554	1,445	960	1,680	2,560	3,202	5,698	9,677	10,848	Net Assets \$mil

Ratir	ng and Ri	sk		
Time Period	Load-Adj Return %	Morningstar Rtn vs Cat	Morningstar Risk vs Cat	Morningstar Risk-Adj Rating
1 Yr 3 Yr	21.81 17.85	High	+ Avg	****
5 Yr	18.38	High	High	****
10 Yr	9.86	+ Avg	+ Avg	****
Incept	8.90			

Other Measures	Standard Index	Best Fit Index
	S&P 500	M* U.S. Grwth TR
Alpha	-1.3	-0.3
Beta	1.20	1.12
R-Squared	83	95
Standard Deviation	16.08	
Mean	17.85	
Sharpo Datio	1 11	

Morningstar's Take by Katie Rushkewicz Reichart, CFA 03-17-14

T. Rowe Price Institutional Large Cap Growth continues

The strong market environment during the past couple of years has been a tailwind for this fund, which targets companies that can generate double-digit earnings growth. As the market rewarded risk-taking in 2013, the fund's 44% gain was among the category's best, driven by high fliers Netflix NFLX, priceline.com PCLN, Google GOOG, and the absence of stodgier growers such IBM IBM.

Yet the fund hasn't succeeded simply because its strategy has been in favor. Among its winners last year, the fund counted a variety of stocks across sectors--beyond its favored areas of technology and consumer discretionary--such as Boeing BA and McKesson MCK. Indeed, Morningstar attribution indicates that manager Rob Sharps' stock-picking has been strong across sectors for the past several years, helping the fund beat more than 90% of its peers since his 2001 start.

Sharps' focus on fast growers invites some risk, of

course. Many names in the portfolio have had a tremendous run the past few years, pushing up the fund's price metrics relative to competitors' and the Russell 1000 Growth Index's. That can invite some volatility, particularly if the market pulls back; the fund has historically done a bit worse than the benchmark in down markets.

While the core of the fund remains concentrated in such growth mainstays as Amazon.com AMZN, Sharps is treading a bit more carefully nowadays. He hasn't necessarily been adding to the likes of Facebook FB as they've shot up, and he's weaved in some less traditional growers, including a few airline picks that he expects to benefit from industry consolidation.

Over time, the fund has excelled, with Sharps keenly executing a process that draws on T. Rowe's strong analyst bench. Investors shouldn't expect a repeat of 2013's returns year in and year out, and there's potential for blips along the way. Still, the fund's top-decile risk-adjusted returns under Sharps indicate the strategy pays off long term.

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Web Address:	www.troweprice.com	Management Fee:	0.55%		
Inception:	10-31-01	Actual Fees:	Mgt:0.55%	Dist: Ñ	
Advisor:	T. Rowe Price Associates, Inc.	Expense Projections:	3Yr:\$179	5Yr:\$313	10Yr:\$701
Subadvisor:	None	Income Distribution:	Annually		
NTF Plans	NI/Δ				

Portfolio Analysis 06-30-14				
Share change since 03-14 Total Stocks:72	Sector	PE	Tot Ret%	% Assets
 ◆ Amazon.com Inc ◆ Priceline Group Inc → Glead Sciences Inc ◆ Google Inc Class A ◆ Visa Inc Class A 	Cnsmr Cyc Cnsmr Cyc Hlth care Technology Finan Svs	Ñ 32.1 30.8 30.6 24.1	-18.56 3.49 10.40 4.24 -5.02	3.40 3.21
Google Inc Class C Boeing Co McKesson Corp Danaher Corp Precision Castparts Corp	Technology Industrl HIth care Industrl Industrl	30.1 18.2 33.2 21.3 19.1	2.24	2.94 2.84 2.79 2.73 2.71
 Pioneer Natural Resource Biogen Idec Inc Crown Castle Internation Range Resources Corp Wynn Resorts Ltd 	Energy HIth care Comm Svs Energy Cnsmr Cyc	Ñ 35.1 149.3 48.8 28.1		1.90
 ◆ Sherwin-Williams Co ◆ American Airlines Group ◆ Starbucks Corp ◆ Valeant Pharmaceuticals ◆ Celgene Corp 	Basic Mat Industrl Cnsmr Cyc HIth care HIth care	26.0 Ñ Ñ Ñ 49.8	13.36 41.73 -0.24 -0.01 1.65	1.85 1.75 1.71 1.70 1.66

Value Bind Growth	Market Cap	%
Large	Giant	34.0
Large Mid Small	Large	52.2
S o	Mid	13.8
mal mal	Small	0.0
	Micro	0.0
	Avg \$mil: 42,814	
Value Measures	Rel Ca	itegory
Price/Earnings	24.06	1.34
Price/Book	3.80	1.32
Price/Sales	1.92	1.06
Price/Cash Flow	12.20	1.22
Dividend Yield %	0.63	0.48
Growth Measures	% Rel Ca	itegory
Long-Term Erngs	16.26	1.21
Book Value	11.92	1.16
Sales	9.41	1.17
Cash Flow	20.08	1.55

Current Investment Style

	5			
Price/Bo	ok	3.80	1.32	
Price/Sa	iles	1.92	1.06	
Price/Ca	sh Flow	12.20	1.22	.
Dividend	d Yield %	0.63	0.48	E
				٠
Growth N	/leasures	%	Rel Category	Ω
Long-Te	rm Erngs	16.26	1.21	
Book Va	lue	11.92	1.16	
Sales		9.41	1.17	Cor
Cash Flo)W	20.08	1.55	
Historica	al Erngs	14.38	0.65	
Profitab	ility	%	Rel Category	
Return o	on Equity	15.33	0.73	
Return o	on Assets	7.29	0.75	
Net Ma	rgin	10.85	0.77	

	.tou	0/ of	Dal	2	Voor
Sec We	tor ightings	% of Stocks		3 High	
Դ	Cyclical	36.16	1.26		
æ	BasicMat	4.80	1.57	5	1
A	CnsmrCy	c24.18	2.82	26	19
•	FinanSvs	7.18	0.46	9	5
命	Real Est	0.00	0.00	Ñ	Ñ
w	Sensitive	41.26	0.95		
đ	CommSrv	/s 3.44	0.86	3	2
•	Energy	4.02	0.38	6	4
Ф	Industrl	15.62	1.37	16	13
	Technlgy	18.18	1.04	36	18
→	Defensive	22.57	0.82		
Ξ	CnsmrDe	f 5.50	0.45	6	1
	HIthcare	17.07	1.44	20	13
Ç	Utilities	0.00	0.00	Ñ	Ñ

Composition - Net		
	CashStocksBondsOther	0.3 99.4 0.0 0.3
	Foreign (% of Sto	6.0 ock)

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Templeton Global Bond Adv

Morningstar Analyst Rating 05-15-14



Morningstar Pillars	
Process	Positive
Performance	Positive
People	Positive
Parent	Positive
Price	Positive

Morningstar Analyst Rating

Morningstar evaluates mutual funds based on five key pillars, which its analysts believe lead to funds that are more likely to outperform over the long term on a risk-adjusted basis.

Analyst Ra	ling Spectrum			
℧ Gold	 Silver	≅ Bronze	Neutral	Negative

Pillar Spectrum		
• Positive	■ Negative	Neutral

Perfor	mance	07-31-14			
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
2010	6.44	-2.47	7.40	1.34	13.00
2011	2.15	2.48	-7.73	1.23	-2.21
2012	7.20	-0.99	5.40	3.83	16.15
2013	1.41	-2.73	1.07	2.71	2.41
2014	0.76	2.68	Ñ	Ñ	Ñ
Trailing	Total	+/- BC	+/- SB	%Rank	Growth of
	Return%	Agg Bnd	Wld Govt	Cat	\$10,000
3 Mo	2.44	1.50	2.40	2	10.244

Trailing	Total	+/- BC			Growth of
	Return%	Agg Bnd	Wld Go	vt Cat	\$10,000
3 Mo	2.44	1.50	2.4	10 2	10,244
6 Mo	6.23	4.07	2.9	7 14	10,623
1 Yr	7.25	3.28	1.7	79 16	10,725
3 Yr Avg	4.28	1.24	4.4	19 21	11,340
5 Yr Avg	7.53	3.06	4.6	5 14	14,376
10 Yr Avg	9.42	4.62	4.5	5 1	24,602
15 Yr Avg	9.37	3.76	4.1	6 1	38,324
Tax Analys	is Tax-Adj	Rtn%	%Rank Cat	Tax-Cost Rat	%Rank Cat
3 Yr (estimated)		2.08	30	2.11	97
5 Yr (estimated)		5.41	13	1.97	92

7.15 Potential Capital Gain Exposure: 4% of assets

10 Yr (estimated)

					. 00,	opo		,,		4,21		violia Bolia
Histori Return Risk Rating	cal Prof High High		1	10	8	23	16	11	5	6	15	Investment Style Fixed Income Income Rtn %Rank Cat
	Above A	îvg	∇				سربر	∀		~		▼ Manager Change 26.0 ▼ Partial Manager Change 22.0
						~ /						18.0 Growth of \$10,000
	/				~~							14.0 — Investment Values of Fund
	~											10.0 — Investment Values of BC Agg Bnd
												Performance Quartile (within Category)
2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	07-14	History
10.19	11.11	10.29	11.02	11.40	11.17	12.69	13.56	12.37	13.34	13.09	13.27	NAV
21.64	14.93	-2.84	13.72	11.26	6.47	19.21	13.00	-2.21	16.15	2.41	3.41	Total Return %
17.54	10.59	-5.27	9.39	4.29	1.23	13.28	6.46	-10.05	11.94	4.43	-0.25	+/-BC Agg Bnd
3.12	2.79	6.36	6.78	-0.19	-3.64	14.82	7.79	-7.38	14.64	6.97	-1.21	+/-SB Wld Govt
7.37	5.43	4.66	6.38	7.61	8.56	5.22	6.02	6.29	6.70	4.28	2.00	Income Return %
14.27	9.50	-7.50	7.34	3.65	-2.09	13.99	6.98	-8.50	9.45	-1.87	1.41	Capital Return %
6	2	35	3	5	15	16	5	96	4	4	77	Total Rtn % Rank Cat
0.64	0.54	0.51	0.64	0.81	0.95	0.57	0.75	0.83	0.81	0.56	0.26	Income \$
0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.08	0.17	0.00	0.00	Capital Gains \$
0.85	0.88	0.80	0.78	0.74	0.67	0.67	0.66	0.63	0.64	0.61	Ñ	Expense Ratio %
4.36	4.05	3.66	3.84	4.42	4.53	5.24	4.65	4.01	3.55	3.09	Ñ	Income Ratio %
64	Ñ	28	39	44	30	66	12	26	42	42	Ñ	Turnover Rate %
79	206	299	604	1,613	2,618	7,762	17,972	25,165	30,909	34,854	36,071	Net Assets \$mil

Ticker

TGBAX

Status

Open

Yield

3.9%

SEC Yield

2.15%

Portfolio Analysis 06-30-14

Total Assets

\$72,491 mil

Mstar Category

World Bond

Ratin	ng and Ri	sk		
Time Period	Load-Adj Return %	Morningstar Rtn vs Cat	Morningstar Risk vs Cat	Morningstar Risk-Adj Rating
1 Yr 3 Yr 5 Yr 10 Yr Incept	7.25 4.28 7.53 9.42 8.16	+ Avg + Avg High	High High + Avg	*** **** ****

Other Measures	Standard Index	Best Fit Index
	BC Agg Bnd	MSCI Ac Wrld ND
Alpha	3.6	-1.0
Beta	0.38	0.56
R-Squared	1	74
Standard Deviation	9.32	
Mean	4.28	
Sharpe Ratio	0.54	

Morningstar's Take by Karin Anderson 05-15-14

2.08

90

Templeton Global Bond doesn't shy away from bold bets, which has been one of the keys to its success.

Many of this world-bond portfolio's distinguishing traits have been in place for years. One is manager Michael Hasenstab's avoidance of interest-rate risk. His concern about global inflation pressures has meant he's kept the fund's duration short (under two years) since early 2011. Another key trait is the fund's scant exposure to the U.S., eurozone, the U.K., and Japan, which dominate the Citigroup World Government Bond Index and many rivals' portfolios. Instead he's preferred emerging-markets issues and currencies given those countries' better fiscal and prospects. Lately, the fund has been making headlines for its mid-single-digit stake in dollar-denominated Ukrainian bonds, a position the fund has held since 2011. Hasenstab has indicated that he and his team were never concerned about the country's solvency. And he's recently added to the position citing the ample aid offered by the IMF as well a belief that needed structural reforms can continue into the next administration.

Hasenstab has long shown a willingness to buy what the rest of the market shuns: He loaded up on Irish bonds in the depths of the 2011 eurozone crisis and swooped in on even shakier Hungarian debt that same year. (Both remain larger individual country positions at 10.1% and 7.6% of assets as of March 2014.) Hasenstab's valuation-conscious approach was also on display in last year's emerging-markets sell-off, as he added to longtime positions in South Korea (13.9%) and Mexico (4.7%).

The emerging-markets heavy profile that results from Hasenstab's approach has caused the fund to move in sync with riskier assets, so investors shouldn't be looking to this offering for portfolio protection. But his proven knack for building sound investment themes and his ability to find the right bargains have led to excellent long-term performance within the world-bond category. Hasenstab's experience, a skilled and deep analyst bench, and the funds high-conviction approach set the bar high for the competition.

Address:	500 E Broward Blvd, Suite 2100 Fort Lauderdale, FL 33394-3091	Minimum Purchase: Min Auto Inv Plan:	\$1000000 \$0	Add: \$0 Add: Ñ	IRA: \$0
	800-632-2301	Sales Fees:	No-load		
Web Address:	www.franklintempleton.com	Management Fee:	0.50% mx./0.	38% mn., 0.15	5%A
Inception:	12-31-96	Actual Fees:	Mat:0.39%	Dist: Ñ	
Advisor:	Franklin Advisers, Inc.	Expense Projections:	3Yr:\$204	5Yr:\$356	10Yr:\$798
Subadvisor:	None	Income Distribution:	Monthly		
NTF Plans:	N/A				

Total Fixed-Income:188	Date of Maturity	Amount \$000	Value \$000	% Net Assets
Ireland(Rep Of) 5%	10-18-201	,419,0152	2,372,344	3.28
Poland(Rep Of) 6.25%	10-24-155	,168,6841	,785,873	2.47
Mexico(Utd Mex St) 8%	12-17-15	170,8461	,407,214	1.95
Ireland(Rep Of) 5.4%	03-13-25			1.74
Hungary Rep 6.375%	03-29-21	927,2001	,060,485	1.47
Poland(Rep Of) 4.75%	10-25-163	3,039,4001	,050,988	1.45
Sweden(Kingdom Of) 4.5%	08-12-15 <i>6</i>	6,698,1401	,048,302	1.45
Bk Of Korea 2.9%	12-02-15	Ñ 1	,045,080	1.45
Ireland(Rep Of) 5.9%	10-18-19	572,988	984,065	1.36
Ireland(Rep Of) 5.5%	10-18-17	581,635	927,221	1.28
Malaysia (Govt Of) 3.197	10-15-152	2,938,835	914,691	1.27
Poland(Rep Of) 5%	04-25-162	2,472,048	850,580	1.18
Bk Of Korea 2.78%	02-02-16	Ñ	798,171	1.10
Korea(Republic Of) 2.75%	12-10-15	Ñ	785,333	1.09
Malaysia 4.72%	09-30-152	2,465,400	781,619	1.08
Malaysia (Govt Of) 3.835	08-12-152	,489,025	780,504	1.08
Ireland(Rep Of) 4.5%	04-18-20	471,335	764,317	1.06
United Mexican States 7.	12-15-16	89,531	749,003	1.04
Ukraine Cabinet Of Minis	07-24-17	707,200	717,808	0.99
Poland(Rep Of) 2.72%	01-25-212	2,035,015	660,780	0.91

Current Investment Style					
Duration Ltd Mod Ext					
Quality					
ed					
Med Low	1 figure	provided			
	by fun	d			
Ava Eff Duration 1	Ava Eff Duration 1 1.6 Yrs				
Avg Eff Duration ¹					
Avg Eff Maturity		2.5 Yrs			
Avg Credit Quality		BB			
Avg Wtd Coupon		5.58%			
Avg Wtd Price	105.819	% of par			
Coupon Range	% of Bonds	Rel Cat			
0% PIK	1.8	0.4			
0% to 6%	62.6	0.8			
6% to 8%	27.5	2.3			
8% to 10%	6.1	1.0			
More than 10%	2.1	1.3			
1.00 = Category Averag	e				
Credit Analysis	% bonds (06-30-14			

25-212,03	35,015	660,780)	0.91
Sector B	reakdo	wn	% of a	assets
Governm	ent			61
Agency/0	Quasi-A	gency		0
Supranat	ional			0
Corporat	e Bond			0
Bank Loa	ın			0
Convertib	ole			0
Preferred				0
Agency I	MBS			0
Non-Age	ncy Res	sidential N	ИBS	0
Commer	cial MB	S		0
Asset-Ba				
Covered	Bond			0
Municipa	al			0
Composi	tion - N	et		
Cash	42.3	Bor	nds	56.4
Stocks	0.0	Oth	er	1.3
Special	Securiti	es		

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ВВ

В

Below B

NR/NA

3

0

14

17

28

AAA

AA

BBB

0

Ñ

No

Restricted/Illiquid Secs

Exotic Mortgage-Backed

Emerging-Markets Secs

Options/Futures/Warrants

PIMCO Total Return Inst.

Morningstar Analyst Rating 03-19-14



Morningstar Pillars	
Process	Positive
Performance	Positive
People	Positive
Parent	Neutral
Price	Positive

Morningstar Analyst Rating

Morningstar evaluates mutual funds based on five key pillars, which its analysts believe lead to funds that are more likely to outperform over the long term on a risk-adjusted basis.

Analyst Rating Spectrum

℧ Gold	👽 Silver	≅ Bronze	Neutral	Negative
Pillar Spec	trum			
Positive	:	Negative	:	Neutral

Perforn	nance	07-31-1	4		
	1st Qtr	2nd Qtr	3rd Q	tr 4th Qtr	Total
2010	2.97	2.75	3.8	2 -0.92	8.83
2011	1.11	1.86	-1.0	6 2.22	4.16
2012	2.88	2.79	3.1	5 1.17	10.36
2013	0.60	-3.60	1.1	7 -0.03	-1.92
2014	1.30	2.37	Ñ	Ĭ Ñ	Ñ
Trailing	Total	+/- BC	+/- B		Growth of
	Return%	Agg Bnd	Agg Bn		\$10,000
3 Mo	1.08	0.14	0.1	4 36	10,108
6 Mo	1.78	-0.38	-0.3	8 77	10,178
1 Yr	3.82	-0.15	-0.1	5 66	10,382
3 Yr Avg	3.70	0.66	0.6	6 43	11,152
5 Yr Avg	5.80	1.33	1.3	3 38	13,256
10 Yr Avg	6.20	1.40	1.4	0 6	18,249
15 Yr Avg	6.79	1.18	1.1	8 4	26,789
Tax Analys	sis Tax-A	dj Rtn% 9	6Rank Cat	Tax-Cost Rat	%Rank Cat
3 Yr (esti	imated)	2.11	46	1.54	80
5 Yr (esti	imated)	3.96	44	1.74	90

Potential Capital Gain Exposure: 2% of assets

10 Yr (estimated) 4.15

PTTRX 1.9% 2.02% \$225,216 mil Intermediate-Term Bond Open Investment Style **Historical Profile** Above Avg Fixed Income Return Income Rtn %Rank Cat 28 17 27 66 22 51 72 16 Risk Above Avg Rating ★★★ Above Avg ▼ Manager Change ▼ Partial Manager Change 18.0 16.0 Growth of \$10,000 14.0 Investment Values of 12.0 - Investment Values of 10.0 BC Agg Bnd Performance Quartile (within Category) 2004 2005 2007 2008 2009 2010 2011 2013 07-14 2003 2006 2012 History 10.71 10.67 10.50 10.38 10.69 10.14 10.80 10.85 10.87 11.24 10.69 10.89 NAV 2.89 9.07 13.83 -1.92 Total Return % 5.56 5.14 3.99 4.82 8.83 4.16 10.36 3.15 1.46 0.80 0.46 -0.34 2.10 -0.42 7.90 2.29 -3.68 6.15 0.10 -0.51 +/-BC Agg Bnd +/-BC Agg Bnd 0.80 0.46 -0.34 2.10 -0.42 7.90 2.29 -3.68 6.15 0.10 -0.51 1.46 2 43 5 25 6.01 4 00 4 47 3 48 3 73 4.76 5.26 3 33 2 39 1.08 Income Return % 2.08 2.71 -0.84 -0.77 3.81 -0.43 7.82 5.50 0.16 5.89 -4.31 2.07 Capital Return % 29 12 47 46 26 87 12 60 77 Total Rtn % Rank Cat 0.39 0.53 0.37 0.26 0.49 0.55 0.59 0.35 0.43 0.47 0.27 0.14 Income \$ 0.33 0.08 0.04 0.07 0.49 0.11 0.54 0.00 0.27 Capital Gains \$ 0.18 0.07 0.00 0.43 0.43 0.43 0.43 0.43 0.43 0.45 0.46 0.46 0.46 0.46 0.46 Expense Ratio % 4.17 2.73 2.41 4.09 4.82 5.15 5.37 4.07 2.92 3.11 2.54 2.10 Income Ratio % 234 Ñ 470 325 257 226 300 402 430 584 227 227 Turnover Rate % 69,945 80,240 115,919 144 429 175,137 42 077 45 790 54 598 60 280 138 794 150 959 144 453 Net Assets \$mil

Dantfalia Analysia 02 21 14

Yield

Status

Ticker

SEC Yield

Total Assets

Mstar Category

Rating and Risk						
Time Period	Load-Adj Return %	Morningstar Rtn vs Cat	Morningstar Risk vs Cat	Morningstar Risk-Adj Rating		
1 Yr 3 Yr 5 Yr	3.82 3.70 5.80	Avg Avg	High + Avg	***		
10 Yr Incept	6.20 7.89	High	+Avg	****		
	_					

поорт 7.07		
Other Measures	Standard Index	Best Fit Index
	BC Agg Bnd	BarCap Gt/Ct 1-5TR
Alpha	0.6	-0.6
Beta	1.03	3.07
R-Squared	53	76
Standard Deviation	3.92	
Mean	3.70	
Sharpe Ratio	1.09	

Morningstar's Take by Eric Jacobson 03-19-14 PIMCO Total Return remains a compelling choice.

9

1.93

95

There have been challenges. PIMCO's CEO and co-CIO Mohamed EI-Erian resigned in January and departed in mid-March 2014. The firm also named six deputy CIOs including Andrew Balls, Dan Ivascyn, Mihir Worah, Mark Kiesel, Scott Mather, and Virginie Maisonneuve. Three not on the firm's Investment Committee were added, as was Fed guru Tony

Crescenzi; Marc Seidner left when El-Erian resigned.

All of that came on top of other changes to the Investment Committee in recent years, and Morningstar questioned whether new members would be fit to challenge Gross. The situation is elevated with the impending sabbatical of veteran Chris Dialynas and the promotion of less-seasoned deputy CIOs, but Gross has acknowledged the impact of his domineering style and argues that he has made successful strides to improve the dynamic.

Time will tell whether that effort works, but it's encouraging. And despite other concerns--which drove a decision to lower PIMCO's Parent grade--there are

reasons to maintain great confidence here. For one, Gross is still one of the best around; modest showings in 2011 and 2013 were disappointing, but expectations of perfection weren't realistic either. And while the Investment Committee has changed, it looks more balanced now, boasting new sector-level experts to complement a macro focus that had dominated. It's also backed by an eye-popping 245 portfolio managers, including 73 at senior levels.

The bottom line is that PIMCO as a whole is definitely changing, which has raised enough questions to adjust its Parent rating. And given the nature of the changes that have occurred thus far, it is important to continue watching for additional departures or signs that the new incarnation of the Investment Committee isn't working well. Those changes have not, however, risen to a level that changes Morningstar's overall opinion of this fund. All of its pros and cons still add up to a world-class offering and a Morningstar Analyst Rating of Gold.

Address:	PIMCO Investments LLC distributor	Minimum Purchase:	\$1000000	Add: \$0	IRA: \$0
	New York, NY 10019	Min Auto Inv Plan:	\$0	Add: Ñ	
	888-877-4626	Sales Fees:	No-load		
Web Address:	www.pimco.com/investments	Management Fee:	0.25%, 0.219	6A	
Inception:	05-11-87	Actual Fees:	Mgt:0.46%	Dist: Ñ	
Advisor:	Pacific Investment Management Co LLC	Expense Projections:	3Yr:\$148	5Yr:\$258	10Yr:\$579
Subadvisor:	None	Income Distribution:	Monthly		
NTF Plans:	N/Δ				

Portfolio Analysis	03-31-14				
Total Fixed-Income:17759		ate of aturity	Amount \$000	Value \$000	% Net Assets
Irs Usd 1.500 03/18/15-1	03-	18-16	Ñ	Ñ	15.53
Irs Usd 3.000 09/21/16-1	09-2	21-17	Ñ	Ñ	9.61
5 Year US Treasury Note	06-3	30-14	Ñ	Ñ	8.52
Pimco Fds	10-0	03-141,	,832,858	Ñ	7.90
Irs Usd 1.500 12/16/15-1	12-	16-16	Ñ	Ñ	6.91
US Treasury TIP	07-	15-214,	,931,9225,	082,578	2.19
US Treasury Note 0.75%	02-2	28-184,	,731,0014,	622,519	1.99
US Treasury Note 1.5%	08-3	31-184,	,593,5014,	585,603	1.98
Ois Usd FedI01/1.0 10/15	10-1	15-174,	,473,2014,	414,290	1.90
US TREASURY TIP	01-1	15-253,	,723,8254,	390,332	1.89
US Treasury TIP 2.375%	01-	15-273,	,052,9273,	628,930	1.56
US Treasury Note 0.75%	03-3	31-183,	,695,9003,	604,803	1.55
US Treasury Note 0.75%	03-	15-173,	,577,0003,	563,725	1.54
US Treasury TIP 2.5%	01-1	15-292,	,927,1083,	559,182	1.53
US Treasury Note 1.625%	03-3	31-193,	,495,1003,	477,488	1.50
US Treasury Note 0.75%	01-	15-173,	,117,5003,	113,116	1.34
US Treasury Note 1.5%	02-2	28-193,	,078,3003,	047,757	1.31
Italian Btp Bond	07-	15-152,	,090,9003,	023,162	1.30
US Treasury TIP 1.75%	01-1	15-282,	,456,1242,	725,146	1.18
US Treasury TIP 2%	01-1	15-262,	,375,4382,	708,556	1.17

C		4 C4-1-	
Duration	Investmen	it Style	
Ltd Mod	Ext		
	High	- -	
	Med Low		
	Low	¹ figure by fur	provided nd
Avg Eff [Ouration 1		5.0 Yrs
Avg Eff I	√aturity		5.3 Yrs
Avg Cred	dit Quality		Ñ
Avg Wto	d Coupon		3.05%
Avg Wto	l Price	62.94	% of par
Coupon	Range	% of Bonds	Rel Cat
0% PIK 0% to 69	%	0.5 93.2	0.2 1.1
6% to 89	6	4.2	0.3
8% to 10)%	1.3	0.4
More that	an 10%	0.8	1.4
1.00 = Cat	tegory Avera	ige	
Credit A	nalysis	% bonds	03-31-14
AAA	Ñ	BB	Ñ
AA	Ñ	В	Ñ

Ñ

Ñ

M RNINGSTAR

BBB

15-262,375,4382,708,	556	1.17
Sector Breakdown	% of	assets
US Treasury		8
Non US Government		7
Government Related		2
Corporate		5
Agency MBS Pass-Thr	ough	6
Agency MBS ARM		0
Agency MBS CMO	0	
Non-Agency Residenti	1	
Commercial MBS		1
Asset-Backed		1
Municipal		- 4
Cash & Equivalents		64
Other		0
Composition - Net		
Cash -35.6	Bonds	132.5
Stocks 0.3	Other	2.7
Special Securities		

Special Secur
Restricted/Illic
Exotic Mortga
Emerging-Mar

Restricted/Illiquid Secs	(
Exotic Mortgage-Backed	(
Emerging-Markets Secs	
Options/Futures/Warrants	Ye

Ñ

Below B

NR/NA

JHancock Disciplined Value I

Morningstar Analyst Rating 03-07-14

Morningstar Pillars **Process** Positive Positive Performance People Positive Neutral Parent Price Negative

Morningstar Analyst Rating

🛂 Bronze

Morningstar evaluates mutual funds based on five key pillars, which its analysts believe lead to funds that are more likely to outperform over the long term on a risk-adjusted basis.

Analyst Rating Spectrum

℧ Gold	🐺 Silver	₩ Bronze	Neutral	Negative
Pillar Spec	trum			
Positive		 Negative 		Neutral

Perforn	nance	07-31-14			
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
2010	6.46	-11.80	9.33	10.20	13.12
2011	6.96	-0.22	-17.12	13.50	0.39
2012	14.30	-3.93	7.81	1.32	19.95
2013	10.92	5.73	4.81	10.59	35.93
2014	2.50	2.39	Ñ	Ñ	Ñ
Trailing	Total	+/-	+/- Russ	%Rank	Growth of
	Return%	S&P 500	1000 VI	Cat	\$10,000
3 Mo	2.58	-0.44	0.24	34	10,258
6 Mo	7.11	-2.33	-3.24	87	10,711
1 Yr	13.71	-3.23	-1.76	58	11,371
3 Yr Avg	18.20	1.36	0.64	6	16,514
5 Yr Avg	16.73	-0.06	-0.24	14	21,673
10 Yr Avg	9.75	1.75	1.76	3	25,354
15 Yr Avg	8.27	3.80	2.25	3	32,932
Tax Analys	sis Tax-A	dj Rtn% %l	Rank Cat T	ax-Cost Rat	%Rank Cat
3 Yr (esti	imated)	16.86	9	1.13	73
5 Yr (esti	imated)	15.83	13	0.78	65

Potential Capital Gain Exposure: 12% of assets

10 Yr (estimated) 8.49

Morningstar's Take by Shannon Zimmerman 03-07-14

Led by a team at subadvisor Robeco Boston Partners since its January 1997 inception, John Hancock Disciplined Value has proved resilient not only across complete market cycles but also within many of the distinct market environments that make up those cycles. It outperformed during both 2008's flight to quality and in 2009's stampede to risk, for instance. Last year, it returned 35.5%, earning a spot in the peer group's top quintile with a high-quality portfolio in a year that favored riskier fare. In the last decade, the fund finished in the category's bottom half in just a single calendar year--2010, a year in which it lagged its typical rival by 88 basis points.

Uncommon success here has resulted from a strategy that, in most respects, isn't especially novel. Comanagers Mark Donovan (on board since the fund's inception) and David Pyle (in place since August 2005) focus on bottom-up fundamentals, working with a team of industry-specific research analysts to assess, among other things, how reliable (and ample) a firm's future cash flows are likely to be. As gauged primarily by

	· ·····) · · · · · · · · · · · · · · ·
Address:	John Hancock Funds
	Boston, MA 02210
	800-225-5291
Web Address:	www.jhfunds.com
Inception:	01-02-97
Advisor:	John Hancock Advisers, LLC
Subadvisor:	Robeco Investment Management, Inc.

Robeco Investment Management, Inc

returns on equity, they pay close attention to company management's knack for smart, shareholder-friendly capital allocation, too. Business momentum, the most distinctive feature of the fund's strategy, figures heavily in investment decisions as well, with Donovan and Pyle placing more emphasis than most rivals do on upside earnings surprises as proxies for a company's fundamental health and the likelihood its shares will outperform.

Sensible and successful as the fund has been, there are concerns that prospective investors should bear in mind. With roughly \$7.9 billion in assets, the fund is the largest it has ever been. That's not an unwieldy sum for a fund that typically stakes out reasonable position sizes in large-cap stocks trading at what management believes are substantial discounts to fair value. Donovan and Pyle run more than \$21 billion in this strategy overall, however--also a peak level. Expenses haven't fallen as fast as they should in light of asset growth, either--a significant factor in the fund's Morningstar Analyst Rating of Bronze.

Minimum Purchase:	\$250000	Add: \$0	IRA: \$0
Min Auto Inv Plan:	\$0	Add: Ñ	
Sales Fees:	No-load		
Management Fee:	0.75% mx./0.65	5% mn.	
Actual Fees:	Mgt:0.67%	Dist: Ñ	
Expense Projections:	3Yr:\$268	5Yr:\$466	10Yr:\$1037
Income Distribution:	Annually		

						JVLIX	Oper	n 0.	/%	\$10,484 r	nil	Large Value
Histori Return Risk Rating	ical Prof High Average	9	99%	99%	97%	98%	97%	97%	97%	98%	98%	Investment Style Equity Stock %
	Highest		<i>~</i>	≈ ≈	محر	V	~	\sim	~		30 25 20 15	.0 Growth of \$10,000 Investment Values of Fund Investment Values of S&P 500
												Performance Quartile (within Category)
2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	07-14	History
12.22 25.88 -2.80 -4.15	14.07 16.03 5.15 -0.46	13.43 10.79 5.88 3.74	14.66 19.62 3.83 -2.63	13.71 4.52 -0.97 4.69	9.00 -33.07 3.93 3.78	11.30 26.26 -0.20 6.57	12.64 13.12 -1.94 -2.39	12.24 0.39 -1.72 0.00	14.01 19.95 3.95 2.44	17.99 35.93 3.54 3.40	18.68 3.84 -1.82 -2.59	NAV Total Return % +/-S&P 500 +/-Russ 1000 VI
1.03 24.85	0.88 15.15	1.11 9.68	1.25 18.37	1.33 3.19	1.21 -34.28	0.71 25.55	0.66 12.46	0.96 -0.57	1.38 18.57	0.99 34.94	0.00 3.84	Income Return % Capital Return %
0.10	0.11	0.16	30 0.17	27 0.19	0.17	0.06	53 0.07	38 0.12	0.17	0.14	0.00	Total Rtn % Rank Cat Income \$
0.00	0.00	2.02	1.24	1.40	0.00	0.00	0.07	0.12	0.50	0.14	0.00	Capital Gains \$
1.00	1.00	1.00	0.86	0.75	0.75	0.75	0.80	0.86	0.88	0.87	0.83	Expense Ratio %
0.94	0.73	0.83	1.11	1.20	1.37	1.72	1.01	0.75	1.18	1.26	0.96	Income Ratio %
81 45	N 41	77	58 43	62 43	78 36	52 133	59 341	50 582	1.027	3.095	45 5.206	Turnover Rate % Net Assets \$mil

Ticker

Status

Yield

Total Assets

\$10.494 mil

Mstar Category

Largo Valuo

Ratir	ng and Ri	isk		
Time Period	Load-Adj Return %	Morningstar Rtn vs Cat	Morningstar Risk vs Cat	Morningstar Risk-Adj Rating
1 Yr	13.71			
3 Yr	18.20	+ Avg	+ Avg	****
5 Yr	16.73	+ Avg	Avg	****
10 Yr	9.75	High	Avg	****
Incept	8.97			
Other N	leasures	Stan	dard Index	Best Fit Index

Incept 8.97		
Other Measures	Standard Index	Best Fit Index
	S&P 500	Russ 1000 VI
Alpha	-1.0	-0.4
Beta	1.11	1.05
R-Squared	95	96
Standard Deviation	13.91	
Mean	18.20	
Sharpe Ratio	1.21	

Portfolio Analysis 05-31-14				
Share change since 04-14 Total Stocks:81	Sector	PE	Tot Ret%	% Assets
 Exxon Mobil Corporation Berkshire Hathaway Inc C Wells Fargo & Co Pfizer Inc JPMorgan Chase & Co 	Energy Finan Svs Finan Svs HIth care Finan Svs	13.5 15.4 13.1 18.1 14.3		4.87 3.94 3.93 2.95 2.83
 ◆ Citigroup Inc ◆ Johnson ◆ Capital One Financial Co ◆ Apple Inc ◆ CVS Caremark Corp 	Finan Svs	10.9	-9.58	2.79
	HIth care	20.0	15.71	2.66
	Finan Svs	10.8	4.61	2.60
	Technology	15.0	17.08	2.33
	Cnsmr Def	19.2	6.08	2.29
 Phillips 66 Cisco Systems Inc Occidental Petroleum Cor Express Scripts Lockheed Martin Corp 	Energy	15.8	6.31	2.29
	Technology	16.9	12.39	2.12
	Energy	13.2	4.26	2.04
	Hith care	30.6	-1.30	1.85
	Industri	16.6	9.91	1.81
 ⊕ Comcast Corp Class A ⊕ Tyson Foods Inc Class A ⊕ Time Warner Inc ⊕ Microsoft Corp ⊕ ACE Ltd 	Comm Svs	18.9	4.17	1.75
	Cnsmr Def	13.9	12.64	1.71
	Cnsmr Cyc	16.0	6.01	1.71
	Technology	16.2	16.87	1.65
	Finan Svs	10.0	-1.47	1.44

/alue Blnd Gro	wth	Market Cap	%
	Larg	Giant	44.1
	arge Mid	Large	37.4
	d Smal	Mid	16.9
	nall	Small	1.6
		Micro	0.0
		Avg \$mil:	
		57,179	

	57,1	79
Value Measures		Rel Category
Price/Earnings	14.83	1.13
Price/Book	1.66	0.98
Price/Sales	1.18	1.02
Price/Cash Flow	5.05	0.83
Dividend Yield %	2.46	0.89
Growth Measures	%	Rel Category
Long-Term Erngs	9.18	1.05
Book Value	8.11	1.57
Sales	6.03	4.05
Cash Flow	5.63	1.02
Historical Erngs	15.11	4.33

Historical Erngs	15.11	4.33
Profitability	%	Rel Category
Return on Equity	16.71	1.02
Return on Assets	6.17	1.03
Net Margin	13.62	1.14

Sect Wei	tor ghtings		Rel S&P 500		
J.	Cyclical	37.19	1.29		
A.	BasicMat	0.56	0.18	1	0
A	CnsmrCyc	9.88	1.15	16	10
	FinanSvs	25.71	1.64	30	25
命	Real Est	1.04	0.71	2	1
w	Sensitive	40.76	0.93		
g	CommSr	/s 3.87	0.97	4	3
0	Energy	15.13	1.42	15	8
Ф	Industrl	8.22	0.72	12	6
	Technlgy	13.54	0.77	15	8
→	Defensive	22.06	0.80		
	CnsmrDe	f 4.51	0.37	5	2
٠	HIthcare	15.53	1.31	21	16
·	Utilities	2.02	0.56	3	1

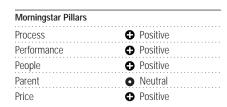
Composition - Net		
	Cash	2.0
	Stocks	98.0
	Bonds	0.0
	Other	0.0
	Foreign	4.8
	(% of Sto	ock)

NTF Plans



Hartford Dividend & Growth Y

Morningstar Analyst Rating 05-27-14 Bronze



Morningstar Analyst Rating

Morningstar evaluates mutual funds based on five key pillars, which its analysts believe lead to funds that are more likely to outperform over the long term on a risk-adjusted basis.

Analyst Rating Spectrum

₩ Gold	€ Silver	₩ Bronze	Neutral	Negative
Pillar Spec	trum			
Positive		 Negative 	!	Neutral

Perfor	mance	07-31-14			
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
2010	4.88	-11.46	11.02	9.68	13.08
2011	6.00	-0.40	-14.44	12.18	1.33
2012	10.17	-2.61	5.30	0.41	13.44
2013	10.73	3.86	4.08	9.83	31.46
2014	2.73	5.17	Ñ	Ñ	Ñ
Trailing	Total	+/-	+/- Russ	%Rank	Growth of

2014	2.73	5.17	Ñ	Ñ	Ñ
Trailing	Total	+/-	+/- Russ	%Rank	Growth of
-	Return%	S&P 500	1000 VI	Cat	\$10,000
3 Mo	2.51	-0.51	0.17	37	10,251
6 Mo	9.65	0.21	-0.70	34	10,965
1 Yr	16.16	-0.78	0.69	18	11,616
3 Yr Avg	16.34	-0.50	-1.22	34	15,747
5 Yr Avg	15.58	-1.21	-1.39	39	20,626
10 Yr Avg	9.07	1.07	1.08	9	23,826
15 Yr Avg	7.12	2.65	1.10	19	28,058
Tax Analys	is Tax-Ac	lj Rtn% %F	Rank Cat Tax	-Cost Rat	%Rank Cat

ran randigoto ran re	aj 1111111	Jortaint Out	ran oost mat	/ortariit ou
3 Yr (estimated)	14.83	39	1.30	80
5 Yr (estimated)	14.43	45	0.99	8
10 Yr (estimated)	7.88	10	1.10	75

Potential Capital Gain Exposure: 42% of assets

Morningstar's Take by Kevin McDevitt, CFA 05-27-14

Hartford Dividend & Growth succeeds by not chasing either

This funds positive early 2014 results owe as much to what it hasnt owned. Lead manager Edward Bousa keeps it out of trouble by tending to underweight whatever has been hot. Although the fund is overweighting health-care and technology stocks relative to most peers, it has avoided the biotech and social-media names, which have flamed out after scorching gains last year. Granted, sticking to dividend-paying stocks (eBay EBAY is the current lone exception) largely eliminates such companies from consideration, but Bousa stays disciplined when it comes to yield as well. A year ago Bousa trimmed popular consumer staples stocks, which had gotten bid up because of their plump dividends and have since been one of the worst-performing sectors.

By balancing dividends and growth the fund avoids the excesses that can result from pursuing either exclusively. The common trait is that Bousa wont stretch for either. None of the holdings has a yield greater than 5%, which can sometimes be a sign of distress. Neither does he over-pursue growth, as the portfolios latest 15.4 average P/E is lower than both the S&P 500 Indexs 18.1 and even the Russell 1000 Value Indexs 16.2. The portfolio tends to be fairly high-quality too with nearly the entire portfolio in large-cap stocks.

But what the fund doesnt own can sometimes hurt too, as the past five years have shown. Thats especially true during rallies, when the fund tends to lag. In the five years through April 2014, the funds 17.5% annualized gain trails the Russell 1000 Value by 2 percentage points and the S&P 500 by nearly 1.7. The funds general avoidance of mid-caps, which are just 4.8% of the portfolio versus 12.6% of the S&P 500 and nearly 20% of the Russell 1000 Value, has been the primary culprit. Within the U.S., the widest performance gap during that time has been between mid- and large-cap value stocks.

The fund has outperformed over the long term, however, by holding up better than the indexes during

	J J.	, . ,	3 1		
Address:	Hartford Mutual Funds Inc Hartford, CT 06115	Minimum Purchase: Min Auto Inv Plan:	\$250000 \$0	Add: \$0 Add: Ñ	IRA: \$0
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Inception: Advisor: Subadvisor:	07-22-96 Hartford Funds Management Company, LLC Wellington Management Company, LLP	Actual Fees: Expense Projections: Income Distribution:	Mgt:0.61% 3Yr:\$208 Quarterly	Dist: Ñ 5Yr:\$362	10Yr:\$810
NTF Plans:	N/A				

Histori	cal Prof	file										Investment Style
Return	Above A	Avg								ш		Equity Stock %
Risk	Below A	vg	97%	97%	98%	96%	98%	97%	97%	97%	98%	Stock %
Rating	***											
	Above A	Avg					∇					 ▼ Manager Change ∇ Partial Manager Change
										2000	26.8	
					 					~~	22.0	O Growth of \$10,000
				_^~			-		~~		18.0	
		ىسر			~ ~			\ \frac{1}{2}			1// (Fund Investment Values of
	par-				7	1//	, o				17.0	S&P 500
					_ `	V /					10.0	
9						V						
												Performance Quartile
												(within Category)
2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	07-14	History
2003 17.44	2004 19.11	2005 19.14	2006	2007	2008 14.25	2009 17.34	2010 19.26	2011 19.14	2012	2013 25.28	07-14 26.71	History NAV
												,
17.44	19.11	19.14	21.21	21.31	14.25	17.34	19.26	19.14	20.91	25.28	26.71	NAV
17.44 26.44	19.11 12.44	19.14 5.87	21.21 20.08	21.31 8.18	14.25 -31.63	17.34 24.22	19.26 13.08	19.14 1.33	20.91 13.44	25.28 31.46	26.71 6.57	NAV Total Return %
17.44 26.44 -2.24	19.11 12.44 1.56	19.14 5.87 0.96	21.21 20.08 4.29	21.31 8.18 2.69	14.25 -31.63 5.37	17.34 24.22 -2.24	19.26 13.08 -1.98	19.14 1.33 -0.78	20.91 13.44 -2.56	25.28 31.46 -0.93	26.71 6.57 0.91	NAV Total Return % +/-S&P 500
17.44 26.44 -2.24 -3.59	19.11 12.44 1.56 -4.05	19.14 5.87 0.96 -1.18	21.21 20.08 4.29 -2.17	21.31 8.18 2.69 8.35	14.25 -31.63 5.37 5.22	17.34 24.22 -2.24 4.53	19.26 13.08 -1.98 -2.43	19.14 1.33 -0.78 0.94	20.91 13.44 -2.56 -4.07	25.28 31.46 -0.93 -1.07	26.71 6.57 0.91 0.14	NAV Total Return % +/-S&P 500 +/-Russ 1000 VI
17.44 26.44 -2.24 -3.59 1.63 24.81	19.11 12.44 1.56 -4.05 1.65 10.79 56	19.14 5.87 0.96 -1.18 1.61	21.21 20.08 4.29 -2.17 1.83 18.25 24	21.31 8.18 2.69 8.35 1.84 6.34	14.25 -31.63 5.37 5.22 1.83 -33.46	17.34 24.22 -2.24 4.53 2.22	19.26 13.08 -1.98 -2.43 1.86	19.14 1.33 -0.78 0.94 1.94 -0.61	20.91 13.44 -2.56 -4.07 2.29	25.28 31.46 -0.93 -1.07 2.17	26.71 6.57 0.91 0.14 0.90	NAV Total Return % +/-S&P 500 +/-Russ 1000 VI Income Return %
17.44 26.44 -2.24 -3.59 1.63 24.81 62 0.23	19.11 12.44 1.56 -4.05 1.65 10.79 56 0.28	19.14 5.87 0.96 -1.18 1.61 4.26	21.21 20.08 4.29 -2.17 1.83 18.25	21.31 8.18 2.69 8.35 1.84 6.34	14.25 -31.63 5.37 5.22 1.83 -33.46	17.34 24.22 -2.24 4.53 2.22 22.00	19.26 13.08 -1.98 -2.43 1.86 11.22	19.14 1.33 -0.78 0.94 1.94 -0.61	20.91 13.44 -2.56 -4.07 2.29 11.15 68 0.43	25.28 31.46 -0.93 -1.07 2.17 29.29	26.71 6.57 0.91 0.14 0.90 5.67 15 0.23	NAV Total Return % +/-S&P 500 +/-Russ 1000 VI Income Return % Capital Return %
17.44 26.44 -2.24 -3.59 1.63 24.81 62 0.23 0.00	19.11 12.44 1.56 -4.05 1.65 10.79 56 0.28 0.19	19.14 5.87 0.96 -1.18 1.61 4.26 46 0.30 0.76	21.21 20.08 4.29 -2.17 1.83 18.25 24 0.34 1.34	21.31 8.18 2.69 8.35 1.84 6.34 9 0.38 1.24	14.25 -31.63 5.37 5.22 1.83 -33.46 12 0.39 0.00	17.34 24.22 -2.24 4.53 2.22 22.00 43 0.31 0.00	19.26 13.08 -1.98 -2.43 1.86 11.22 54 0.32 0.00	19.14 1.33 -0.78 0.94 1.94 -0.61 31 0.37 0.00	20.91 13.44 -2.56 -4.07 2.29 11.15 68 0.43 0.35	25.28 31.46 -0.93 -1.07 2.17 29.29 48 0.44 1.66	26.71 6.57 0.91 0.14 0.90 5.67 15 0.23 0.00	NAV Total Return % +/-S&P 500 +/-Russ 1000 VI Income Return % Capital Return % Total Rtin % Rank Cat Income \$ Capital Gains \$
17.44 26.44 -2.24 -3.59 1.63 24.81 62 0.23 0.00 0.81	19.11 12.44 1.56 -4.05 1.65 10.79 56 0.28 0.19 0.74	19.14 5.87 0.96 -1.18 1.61 4.26 46 0.30 0.76 0.73	21.21 20.08 4.29 -2.17 1.83 18.25 24 0.34 1.34 0.70	21.31 8.18 2.69 8.35 1.84 6.34 9 0.38 1.24 0.69	14.25 -31.63 5.37 5.22 1.83 -33.46 12 0.39 0.00 0.69	17.34 24.22 -2.24 4.53 2.22 22.00 43 0.31 0.00 0.69	19.26 13.08 -1.98 -2.43 1.86 11.22 54 0.32 0.00 0.67	19.14 1.33 -0.78 0.94 1.94 -0.61 31 0.37 0.00 0.66	20.91 13.44 -2.56 -4.07 2.29 11.15 68 0.43 0.35 0.65	25.28 31.46 -0.93 -1.07 2.17 29.29 48 0.44 1.66 0.65	26.71 6.57 0.91 0.14 0.90 5.67 15 0.23 0.00 Ñ	NAV Total Return % +/-S&P 500 +/-Russ 1000 VI Income Return % Capital Return % Total Rtn % Rank Cat Income \$ Capital Gains \$ Expense Ratio %
17.44 26.44 -2.24 -3.59 1.63 24.81 62 0.23 0.00 0.81 1.44	19.11 12.44 1.56 -4.05 1.65 10.79 56 0.28 0.19 0.74 1.44	19.14 5.87 0.96 -1.18 1.61 4.26 46 0.30 0.76 0.73 1.64	21.21 20.08 4.29 -2.17 1.83 18.25 24 0.34 1.34 0.70 1.75	21.31 8.18 2.69 8.35 1.84 6.34 9 0.38 1.24 0.69 1.72	14.25 -31.63 5.37 5.22 1.83 -33.46 12 0.39 0.00 0.69 2.01	17.34 24.22 -2.24 4.53 2.22 22.00 43 0.31 0.00 0.69 2.30	19.26 13.08 -1.98 -2.43 1.86 11.22 54 0.32 0.00 0.67 1.88	19.14 1.33 -0.78 0.94 1.94 -0.61 31 0.37 0.00 0.66 1.84	20.91 13.44 -2.56 -4.07 2.29 11.15 68 0.43 0.35 0.65 2.08	25.28 31.46 -0.93 -1.07 2.17 29.29 48 0.44 1.66 0.65 1.99	26.71 6.57 0.91 0.14 0.90 5.67 15 0.23 0.00 Ñ	NAV Total Return % +/-S&P 500 +/-Russ 1000 VI Income Return % Capital Return % Total Rtn % Rank Cat Income \$ Capital Gains \$ Expense Ratio % Income Ratio %
17.44 26.44 -2.24 -3.59 1.63 24.81 62 0.23 0.00 0.81	19.11 12.44 1.56 -4.05 1.65 10.79 56 0.28 0.19 0.74	19.14 5.87 0.96 -1.18 1.61 4.26 46 0.30 0.76 0.73	21.21 20.08 4.29 -2.17 1.83 18.25 24 0.34 1.34 0.70	21.31 8.18 2.69 8.35 1.84 6.34 9 0.38 1.24 0.69	14.25 -31.63 5.37 5.22 1.83 -33.46 12 0.39 0.00 0.69	17.34 24.22 -2.24 4.53 2.22 22.00 43 0.31 0.00 0.69	19.26 13.08 -1.98 -2.43 1.86 11.22 54 0.32 0.00 0.67	19.14 1.33 -0.78 0.94 1.94 -0.61 31 0.37 0.00 0.66	20.91 13.44 -2.56 -4.07 2.29 11.15 68 0.43 0.35 0.65	25.28 31.46 -0.93 -1.07 2.17 29.29 48 0.44 1.66 0.65	26.71 6.57 0.91 0.14 0.90 5.67 15 0.23 0.00 Ñ	NAV Total Return % +/-S&P 500 +/-Russ 1000 VI Income Return % Capital Return % Total Rtn % Rank Cat Income \$ Capital Gains \$ Expense Ratio %

Ticker

HDGYX

Status

Open

Yield

1.6%

Total Assets

\$7,977 mil

Mstar Category

Large Value

Rating and Risk					
Time Period	Load-Adj Return %	Morningstar Rtn vs Cat	Morningstar Risk vs Cat	Morningstar Risk-Adj Rating	
1 Yr	16.16				
3 Yr	16.34	Avg	-Avg	****	
5 Yr	15.58	Avg	-Avg	***	
10 Yr	9.07	+ Avg	-Avg	****	
Incept	9.41				

Other Measures	Standard Index	Best Fit Index
	S&P 500	Russ 1000 VI
Alpha	0.1	0.5
Beta	0.94	0.89
R-Squared	97	99
Standard Deviation	11.69	
Mean	16.34	
Sharpe Ratio	1.30	

Portfolio Analysis 06-30-14				
Share change since 05-14 Total Stocks:85	Sector	PE	Tot Ret%	% Assets
○ Wells Fargo & Co ○ Merck & Co Inc ○ Chevron Corp ○ JPMorgan Chase & Co ○ Verizon Communications I	Finan Svs	13.1	17.20	4.39
	Hlth care	38.2	17.34	3.56
	Energy	12.7	6.17	2.88
	Finan Svs	14.3	-0.17	2.62
	Comm Svs	10.6	1.73	2.59
 ⊕ Comcast Corp Class A ⊖ Microsoft Corp ⊖ Johnson & Johnson ⊖ Exxon Mobil Corporation ⊖ PNC Financial Services G 	Comm Svs	18.9	4.17	2.54
	Technology	16.2	16.87	2.51
	Hlth care	20.0	15.71	2.44
	Energy	13.5	0.79	2.26
	Finan Svs	11.8	15.97	1.81
	Finan Svs	10.0	-1.47	1.76
	Technology	15.3	20.79	1.71
	Cnsmr Def	19.2	6.08	1.70
	Finan Svs	32.1	-2.59	1.70
	Hlth care	21.1	11.59	1.65
 → Pfizer Inc → Eli Lilly and Co → Anadarko Petroleum Corp → United Parcel Service In → Apple Inc 	Hith care	18.1	-1.40	1.65
	Hith care	17.4	23.82	1.65
	Energy	Ñ	38.58	1.58
	Industri	22.7	-1.03	1.53
	Technology	15.0	17.08	1.48
Current Investment Style Value Blnd Growth Market Cap %	Sector Weightings	% o Stock		3 Year High Low

/alue Blnd Gr	owth	Market Cap	%
	Large	Giant	59.4
	arge Mid Smal	Large	35.5
$\overline{}$	- Sr	Mid	5.1
		Small	0.0
		Micro	0.0
		Avg \$mil:	
		88,610	
/alue Measi	ires	Rel Ca	teaor

		Rei Category
Price/Earnings	15.18	1.15
Price/Book	2.04	1.20
Price/Sales	1.45	1.25
Price/Cash Flow	5.91	0.98
Dividend Yield %	2.85	1.04
Growth Measures Long-Term Erngs	% 9.14	Rel Category 1.04

riistoricai Erriys	12.50	3.00
Profitability	%	Rel Category
Return on Equity	19.92	1.22
Return on Assets	6.66	1.11
Net Margin	13.31	1.11

tor ightings				
Cyclical	29.20	1.01		
BasicMat	1.43	0.47	2	1
CnsmrCyc	6.74	0.79	8	6
FinanSvs	21.03	1.34	22	18
Real Est	0.00	0.00	Ñ	Ñ
Sensitive	43.29	0.99		
CommSrv	s 5.22	1.30	6	4
Energy	11.02	1.03	13	10
Industri	13.02	1.15	14	10
Technlgy	14.03	0.80	15	12
Defensive	27.53	1.00		
CnsmrDe	f 7.52	0.62	10	7
HIthcare	16.87	1.43	18	14
Utilities	3.14	0.87	5	3
	ghtings Cyclical BasicMat CnsmrCyt FinanSvs Real Est Sensitive CommSrv Energy Industri Technlgy Defensive CnsmrDet Hithcare	ghtings Stocks Cyclical 29.20 BasicMat 1.43 CnsmrCyc 6.74 FinanSvs 21.03	Ightings Stocks S&P 500 Cyclical 29.20 1.01 BasicMat 1.43 0.47 CnsmrCyc 6.74 0.79 FinanSvs 21.03 1.34 Real Est 0.00 0.00 Sensitive 43.29 0.99 CommSrvs 5.22 1.30 Industri 11.02 1.03 Industri 13.02 1.15 Technlgy 14.03 0.80 Defensive≥7.53 1.00 CnsmrDef 7.52 0.62 Hlthcare 16.87 1.43	Stocks S&P 500 High Cyclical 29.20 1.01 BasicMat 1.43 0.47 2 CnsmrCyc 6.74 0.79 8 FinanSvs 21.03 1.34 22 Real Est 0.00 0.00 Ñ Sensitive 43.29 0.99 CommSrvs 5.22 1.30 6 Energy 11.02 1.15 14 Technlgy 14.03 0.80 15 Defensive≥7.53 1.00 CnsmrDef 7.52 0.62 10 Hlthcare 16.87 1.43 18

Composition - Net		
	Cash	0.0
	Stocks	97.6
	Bonds	0.0
	Other	2.5
	 Foreign	9.1
	(% of Stor	·k)

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Eaton Vance Floating Rate I

Morningstar Analyst Rating 05-16-14

Morningstar Pillars				
Process	Positive			
Performance	Neutral			
People	Positive			
Parent	Neutral			
Price	Neutral			

Morningstar Analyst Rating

🛂 Silver

Morningstar evaluates mutual funds based on five key pillars, which its analysts believe lead to funds that are more likely to outperform over the long term on a risk-adjusted basis.

Analyst Rating Spectrum

Neutral

Perforn	nance	07-31-14			
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
2010	4.59	-1.32	2.84	3.21	9.55
2011	2.32	0.42	-3.06	2.84	2.44
2012	3.29	0.77	2.56	1.43	8.27
2013	2.02	-0.01	1.17	1.57	4.83
2014	0.56	0.79	Ñ	Ñ	Ñ
Trailing	Total		- S&P/LSTA	%Rank	Growth of
	Return%	Agg Bnd	Lev Loan	Cat	\$10,000
3 Mo	0.81	-0.13	-0.43	50	10,081
6 Mo	0.91	-1.25	-0.99	84	10,091
1 Yr	3.12	-0.85	-1.41	76	10,312
3 Yr Avg	4.62	1.58	-0.75	60	11,451
5 Yr Avg	6.93	2.46	-0.79	45	13,980
10 Yr Avg	4.29	-0.51	-0.92	26	15,220
15 Yr Avg	Ñ	Ñ	Ñ	Ñ	Ñ
Tax Analys	is Tax-A	dj Rtn% %F	Rank Cat Tax	-Cost Rat	%Rank Cat

Potential Capital Gain Exposure: -2% of assets

3 Yr (estimated) 2.95

5 Yr (estimated) 5.24

10 Yr (estimated) 2.43

Morningstar's Take by Sumit Desai, CFA 05-16-14

50

39

22

1 59

1.58

1.78

46

38

59

An experienced team and sensible approach to the floating-rate market give Eaton Vance Floating Rate appeal, but its conservative tilt has led to underperformance recently.

Its well-run management team is one of its charms. Lead manager Scott Page has run floating-rate portfolios for Eaton Vance since the mid-90s, while comanager Craig Russ has more than 15 years of experience with this asset class. They are supported by 13 experienced analysts.

The fund tends to land at the conservative end of its bank-loan Morningstar Category. Analysts assess each issuer on a variety of factors including competitive position, liquidity, and balance-sheet health, along with a review of covenants associated with the underlying loans. The resulting portfolio tends to eschew CCC rated loans (1.4% relative to 7% for its S&P LSTA Leveraged Loan Index) in favor of BB loans (44% versus 47%), giving it a higher-quality bias than many of its peers. That tilt has held it back recently. Over the past year through May 14, 2014, the funds 2.7% return

)	, , = ,	
Address:	Eaton Vance Management	Minimum Pur
	Boston, MA 02110	Min Auto Inv
	800-262-1122	Sales Fees:
Web Address:	www.eatonvance.com	Management
Inception:	01-30-01	Actual Fees:
Advisor:	Boston Management and Research	Expense Proje
Subadvisor:	None	Income Distri

					LIDEA	Орсп	5.0	70 3.7	070	Ψ13,0	7 111111	Darik Loan
Histori Return Risk Rating	Above A	Avg	20	22	37	45	71	73	63	52	65	Investment Style Fixed Income Income Rtn %Rank Cat
Kating	Above A			7								▼ Manager Change 16.0 ▼ Partial Manager Change 14.0
				_								12.0 Growth of \$10,000
					-	\int						10.0 Investment Values of Fund
					`	,						8.0 — Investment Values of BC Agg Bnd
												Performance Quartile (within Category)
2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	07-14	History
9.84	9.89	9.87	9.85	9.38	6.14	8.54	8.96	8.81	9.12	9.19	9.12	NAV
6.12	3.68	4.63	6.48	2.01	-30.25	46.51	9.55	2.44	8.27	4.83	1.33	Total Return %
2.02	-0.66	2.20	2.15	-4.96	-35.49	40.58	3.01	-5.40	4.06	6.85	-2.33	+/-BC Agg Bnd
-3.85	-1.49	-0.43	-0.26	-0.07	-1.15	-5.11	-0.58	0.92	-1.39	-0.46	-1.24	+/-S&P/LSTA Lev Loan
3.79	3.17	4.84	6.69	7.00	5.64	6.76	4.55	4.16	4.71	4.05	2.10	
2.33	0.51	-0.21	-0.21	-4.99	-35.89	39.75	5.00	-1.72	3.56	0.78	-0.77	Capital Return %
84	81	31	34	10	50	26	48	17	70	67	84	
0.36	0.31	0.47	0.64	0.67	0.51	0.40	0.38	0.37	0.41	0.36	0.19	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.84	0.80	0.78	0.76	0.80	0.92	0.87	0.79	0.76	0.77	0.74	Ñ	Expense Ratio %
3.69	3.03	4.45	6.22	6.73	6.22	4.99	4.16	4.09	4.50	3.91	Ñ	Income Ratio %
Ñ	Ñ	57	Ñ	61	7	35	39	56	42	32	Ñ	Turnover Rate %
119	299	393	504	464	304	939	3,239	5,138	5,351	10,142	9,649	Net Assets \$mil

Ticker

FIBI X

Status

Open

Yield

3.8%

SEC Yield

3.70%

Danifalia Analusia OF 21 14

Total Assets

\$13,894 mil

Mstar Category

Bank Loan

Rating and Risk							
Time Period	Load-Adj Return %	Morningstar Rtn vs Cat	Mornings Risk vs (tar Cat	Morningstar Risk-Adj Rating		
1 Yr	3.12						
3 Yr	4.62	Avg	-Avg ★★★		***		
5 Yr	6.93	Avg	-Avg		***		
10 Yr	4.29	+ Avg	Avg		****		
Incept	4.25						
Other N	leasures	Stan	Standard Index		Best Fit Index		
		Bi	C Agg Bnd	Cred	lit Suisse HY USD		
Alpha			5.0		0.6		
Beta			-0.12		0.43		
R-Squa	red		1				

Alpna	5.0	0.
Beta	-0.12	0.4
R-Squared	1	6
Standard Deviation	3.23	
Mean	4.62	
Sharpe Ratio	1.41	

lagged its benchmarks 3.8% return and also trailed 75% of its category peers. During this time, higher-quality BB loans returned only 2.7% while CCC rated loans returned 7.6%, as default rates remained low. The funds longer-term record is better: Its 4.3% return ranks third out of 10 bank-loan funds during Pages 13-year tenure.

Like many funds in the bank-loan category, this portfolio has seen significant inflows over the past year, and it, together with its two sibling portfolios, remains one of the largest funds in the category. The funds burgeoning asset base could make it difficult for Page and his team to stay picky about credit, but thus far thats not apparent in the funds credit-quality statistics, while the fund could get hurt if it suffered significant outflows in a less benign credit environment, especially given that it is typically run with a limited cash stake. Management deserves credit for proactively monitoring the liquidity of its holdings, but the fund is still not completely immune in those situations. Overall, its strengths warrant a

Minimum Purchase:	\$250000	Add: \$0	IRA: \$0
Min Auto Inv Plan:	\$250000	Add: \$50	
Sales Fees:	No-load		
Management Fee:	0.57% mx./0.42	2% mn., 0.15 ¹	%A
Actual Fees:	Mgt:0.64%	Dist: Ñ	
Expense Projections:	3Yr:\$237	5Yr:\$411	10Yr:\$918
Income Distribution:	Monthly		

Portfolio Analysis 05-3	1-14			
Total Fixed-Income:648	Date of Maturity	Amount \$000	Value \$000	% Net Assets
Ev Cash Reserves Fund	07-07-14	756,546	756,546	4.42
Dell Inc.	04-29-20	168,983	168,964	0.99
Asurion	05-24-19	153,168	153,762	0.90
H.J. Heinz Company	06-05-20	149,842	150,806	0.88
Intelsat Jackson Holding	06-30-19	140,759	141,140	0.83
Fortescue Metals Group	06-28-19	135,432	135,442	0.79
Redprairie	12-21-18	113,585	113,556	0.66
Infor Lawson	06-03-20	113,520	113,034	0.66
Hilton Worldwide Finance	10-26-20	112,369	112,103	0.66
Meg Energy Corp.	03-31-20	109,621	110,117	0.64
Avago	05-06-21	109,400	109,879	0.64
Community Health Systems	01-27-21	108,883	109,632	0.64
Getty Images, Inc.	10-18-19	112,615	109,049	0.64
Us Foodservice	03-29-19	107,832	108,086	0.63
Alliance Boots	07-10-17	62,250	104,452	0.61
Biomet Inc.	07-25-17	103,807	104,110	0.61
Virgin Media	06-05-20	104,025	103,326	0.60
Laureate Education, Inc.	06-15-18	104,360	103,055	0.60
Nbty, Inc.	10-01-17	100,070	100,242	0.59
Nuveen Investments, Inc.	05-15-17	97,115	97,434	0.57

Current Inve	stmen	t Style		
Ltd Mod Ext				
	High			
		:		
	Med Low			
	Low	1 figure by fur	provided nd	
Avg Eff Dura	ion 1		0.2 Yrs	
Avg Eff Matu	rity		5.1 Yrs	
Avg Credit Q	uality		В	
Avg Wtd Cou	ipon	4.44%		
Avg Wtd Pric	ė	102.37	% of par	
Coupon Ran	ge	% of Bonds	Rel Cat	
0% PIK		0.7	0.1	
0% to 6%		90.1	1.2	
6% to 8%		6.3	8.0	
8% to 10%		2.6	0.7	
More than 10)%	0.3	0.1	
1.00 = Categor	y Avera	ge		
Credit Analy	sis	% bonds		
AAA	0	BB	44	

15-17	97,115	97,434	0.57				
Sector	Breakdo	wn % of	fassets				
Govern	nment		0				
Corpor	ate Bond		4				
Bank L	oan		90				
Convertible 0							
Preferred 0							
Agenc			0				
Non-Agency Residential MBS 0							
Comm	ercial MBS	S	0				
	Backed		0				
Covere	ed Bond		0				
Munic	ipal		0				
Cash 8	Equivaler	its	6				
Other			0				
Compo	osition - N	et					
Cash	5.5	Bonds	87.3				
Stocks	0.5	Other	6.7				
Snecia	al Securiti	es					

0.1	Stocks	0.5	Other	6.7
-14	Special S	Securities	;	
44	Restricte	d/Illiquid :	Secs	2
48	Exotic M	ortgage-B	lacked	0
1	Emerging	-Markets	Secs	Trace
5	Options/F	utures/W	/arrants	No

NTF Plans:

0 B

0

Below B

NR/NA

AA

BBB

DFA International Core Equity I

Morningstar Analyst Rating 04-01-14

🛂 Bronze

Morningstar Pillars	
Process	Positive
Performance	Positive
People	Positive
Parent	Positive
Price	Positive

Morningstar Analyst Rating

Morningstar evaluates mutual funds based on five key pillars, which its analysts believe lead to funds that are more likely to outperform over the long term on a risk-adjusted basis.

Analyst Rating Spectrum

℧ Gold	🐺 Silver	₩ Bronze	Neutral	Negative
Pillar Spec	trum			
Positive		 Negative 		 Neutral

Perforn	nance	07-31-14			
	1st Qtr	2nd Qtr	3rd Qti	r 4th Qtr	Total
2010	3.01	-13.64	17.41	9.05	13.91
2011	4.18	0.33	-21.27	3.15	-15.11
2012	12.84	-8.63	7.09	7.54	18.74
2013	4.44	-1.57	13.14	6.13	23.43
2014	2.13	3.83	Ñ	Ñ	Ñ
Trailing	Total	+/- MSCI	+/- MSC		Growth of
	Return%	ACW Mearld Sex			\$10,000
3 Mo	-0.13	-2.76	-3.19	58	9,987
6 Mo	6.76	-2.73	-3.81	47	10,676
1 Yr	16.64	1.16	-0.95	19	11,664
3 Yr Avg	7.90	2.04	1.36	30	12,562
5 Yr Avg	10.27	1.43	1.75	15	16,304
10 Yr Avg	Ñ	Ñ	Ñ	Ñ	Ñ
15 Yr Avg	Ñ	Ñ	Ñ	Ñ	Ñ
Tax Analys	is Tax-A	ıdj Rtn% %F	Rank Cat	Tax-Cost Rat	%Rank Cat
3 Yr (esti	imated)	6.63	32	1.18	74

Potential Capital Gain Exposure: 14% of assets

9.10

5 Yr (estimated)

10 Yr (estimated)

DFIEX Open 2.8% \$12,126 mil Foreign Large Value Investment Style **Historical Profile** Return Above Avg Equity Stock % 98% 97% 97% 99% 99% 100% 99% 97% 96% Risk Average Rating ★★★ Above Avg ▼ Manager Change ▼ Partial Manager Change 12.0 Growth of \$10,000 10.0 - Investment Values of Fund Investment Values of MSCI WexUS 6.0 Performance Quartile (within Category) 2004 2005 2006 2007 2008 2009 2010 2011 2013 07-14 2003 2012 History 13.80 Ñ 10.60 13.15 7.47 10.14 11.26 9.26 10.66 12.81 12.98 NAV Ñ 26.94 8.49 44.01 39.29 13.91 18.74 23.43 Total Return % -15.11 3.17 Ñ +/-MSCI WexUS 0.29 -8.16 1.52 -2.16 2.76 -1.40 1.91 8.14 -1.34 Ñ Ñ 1.77 +/-MSCI AC World exUSA Va ND -2.80 -3.82 1.46 -5.00 6.07 -1.91 8.39 -2.63 Ñ Ñ Ñ 2.99 2 24 2 40 3 04 2 45 3 24 2 94 1 88 2.62 Income Return % Ñ Ñ Ñ 24.70 6.09 46.63 36.25 11.46 -18.10 15.50 20.49 1.29 Capital Return % Ñ 56 33 66 26 29 36 Total Rtn % Rank Cat 0.25 0.33 Ñ Ñ 0.04 0.24 0.31 0.36 0.23 0.30 0.31 0.24 Income \$ 0.00 0.04 0.15 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Capital Gains \$ Ñ Ñ 0.40 0.49 0.48 0.41 0.41 0.41 0.40 0.40 0.39 Expense Ratio % Ñ Ñ 1.89 2.35 3.39 3.39 2.84 2.31 2.96 3.18 2.80 Ñ Income Ratio % Ñ Ñ Ñ Ñ Turnover Rate % Ñ 932 2.380 2 418 3.949 5 222 5.089 6 936 10,220 173 12,126 Net Assets \$mil

Status

Ticker

Yield

Total Assets

Mstar Category

Rating and Risk							
Time Period	Load-Adj Return %	Morningstar Rtn vs Cat	Morningstar Risk vs Cat	Morningstar Risk-Adj Rating			
1 Yr 3 Yr	16.64 7.90	+ Avg	Avg	****			
5 Yr	10.27	+ Avg	Avg Ñ	****			
10 Yr	Ñ	Ñ	Ñ	Ñ			
Incept	5.95						

Other Measures	Standard Index	Best Fit Index
	MSCI WexUS	MSCI Wd xUS
Alpha	2.3	0.3
Beta	1.00	1.04
R-Squared	96	97
Standard Deviation	16.87	
Mean	7.90	
Sharpe Ratio	0.54	

Morningstar's Take by Alex Bryan 04-01-14

16

Ñ

1.06

70

Ñ

DFA International Core Equity Portfolio is a solid choice for investors who want diversified exposure to developed-markets stocks with a chance to outperform traditional market indexes.

This Bronze-rated fund offers broad exposure to foreign developed-markets stocks with a small-cap and modest value tilt. Value stocks have historically outperformed their growth counterparts in nearly every market studied over the long term. While there is also some evidence that small-cap stocks have outpaced large-cap stocks over very long stretches, this effect is weaker. In order to further enhance performance, the fund recently added a profitability tilt. Profitable companies historically have generated higher stock returns than their less profitable counterparts over the long term, holding other factors constant. But they also tend to be more expensive. Consequently, this adjustment may slightly moderate the fund's value orientation.

While it lands in Morningstar's foreign large-value category, the fund also has significant exposure to

growth and blend stocks across the market-cap
spectrum. This broad reach makes the fund a suitable
core holding. More than 93% of the fund's portfolio
overlaps with the MSCI World ex USA Investable
Market Index, which tracks developed-markets stocks.
Yet over time, the fund's style tilts can make a
difference. It outpaced this benchmark net of fees by
2.3% annualized over the past five years.

Although it may be possible to capture higher long-run returns by implementing more exaggerated style tilts, this core equity approach offers a couple of advantages. First, it requires lower turnover. In each of the past five years, the fund's turnover as a percentage of the portfolio's value was 5% or less. Second, the fund's broad reach tempers its volatility relative to a small-value fund and makes it less likely to underperform the market for long stretches.

Like most DFA offerings, this fund carries a higher price tag than index fund alternatives. However, its fee is low relative to the category and is reasonable for its unique strategy.

Address:	DFA Investment Dimensions Group Inc	Minimum Purchase:	\$0	Add: \$0	IRA: \$0
	Santa Monica, CA 90401	Min Auto Inv Plan:	\$0	Add: N	
	888-576-1167	Sales Fees:	No-load		
Web Address:	www.dimensional.com	Management Fee:	Ñ		
Inception:	09-15-05	Actual Fees:	Mgt:0.35%	Dist: Ñ	
Advisor:	Dimensional Fund Advisors LP	Expense Projections:	3Yr:\$125	5Yr:\$219	10Yr:\$493
Subadvisor:	DFA Australia Limited	Income Distribution:	Quarterly		
NTF Plans:	N/A				

Portfolio Analysis 04-30-	-14		
Share change since 03-14 Total Stocks	s:4652Sector	Country	% Assets
	Energy Energy Finan Svs Cnsmr Def Hlth care		1.04 0.89 0.80 0.72 0.62
◆ Total SA Daimler AG Vodafone Group PLC ADR National Australia Bank Total SA ADR	Energy Cnsmr Cyc Comm Svs Finan Svs Energy	France Germany U.K. Australia France	0.50 0.43 0.47 0.38 0.38
Banco Santander SA Zurich Insurance Group A Toyota Motor Corp ADR ○ UBS AG BG Group PLC	Finan Svs Finan Svs Cnsmr Cyc Finan Svs Energy	Spain Switzerland Japan Switzerland U.K.	0.3 0.3 0.3 0.3 0.3
Australia and New Zealan ◆ Roche Holding AG ◆ Barclays PLC ADR ◆ Anglo American PLC Toronto-Dominion Bank	Finan Svs HIth care Finan Svs Basic Mat Finan Svs	Australia Switzerland U.K. U.K. Canada	0.33 0.33 0.32 0.32

		_		Market Ca	ıp %	WWC
Value	Blnd	Growth	~	Giant	30.6	٩
			Large	Large	26.4	<u></u>
			Mid	Mid	32.3	A
\vdash		+	Small	Small	9.4	e e
			<u>a</u>	Micro	1.2	1
				Avg \$mil	:	100
				11.068		W
Value	Mea	sures		Rel	Category	•
Price	e/Ear	nings		14.04	1.21	Ф
Price	e/Boo	ok		1.31	1.05	
Price	e/Sal	es		0.70	0.97	_
Price	e/Cas	sh Flov	V	4.89	1.11	
Divid	dend	Yield	%	2.57	0.76	틒

Current Investment Style

Value Measures		Rel Category
Price/Earnings	14.04	1.21
Price/Book	1.31	1.05
Price/Sales	0.70	0.97
Price/Cash Flow	4.89	1.11
Dividend Yield %	2.57	0.76
Growth Measures	· · · · · · · · · · · · · · · · · · ·	Rel Category
Long-Term Erngs	11.74	1.22
Book Value	-9.19	NMF
Sales	-18.44	NMF
Cash Flow	-9.60	NMF
Historical Erngs	-11.07	NMF

0.3 Bonds

96.0

Sector			Rel MSCI		Year
we	ightings	Stocks	WexUS	High	LOW
Դ	Cyclical	49.06	Ñ		
A.	BasicMat	11.33	Ñ	13	11
A	CnsmrCyc	14.52	Ñ	15	12
	FinanSvs	21.11	Ñ	25	21
ıπ	Real Est	2.10	Ñ	3	2
w	Sensitive	35.04			
	CommSrv	s 3.76	Ñ	4	3
0	Energy	8.69	Ñ	10	7
Ф	Industri	15.96	Ñ	17	15
	Technlgy	6.63	Ñ	7	5
→	Defensive	15.91	Ñ		
E	CnsmrDe	6.92	Ñ	8	7
	HIthcare	6.11	Ñ	6	5
Q	Utilities	2.88	Ñ	3	3

Regional Expos	ure	% St	ock
UK/W. Europe	62	N. America	7
Japan .	20	Latn America	0
Asia X Japan	11	Other	0

.0	Country E	xposure	% Stock				
.8	U.K.	20	Switzerland	7			
	Japan	20	Germany	7			
.9	France	8					





Foreign (% of Stock)

Cash

Stocks

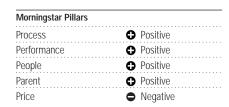
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3

Artisan International Value Investor

Morningstar Analyst Rating 05-30-14

Gold



Morningstar Analyst Rating

Morningstar evaluates mutual funds based on five key pillars, which its analysts believe lead to funds that are more likely to outperform over the long term on a risk-adjusted basis.

Analyst Rating Spectrum Cold ₹ Cilvor

W OUIU	च् _र आरहा	DIVIIZE	Weoman	weyunve
Pillar Spec	trum			
Pocitivo		Avitenal		Moutral

Performance		07-31-14			
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
2010	4.16	-10.27	14.59	11.02	18.90
2011	2.58	2.55	-17.81	7.40	-7.14
2012	11.28	-5.19	8.50	7.29	22.82
2013	7.54	1.16	11.98	7.11	30.49
2014	0.20	6.20	Ñ	Ñ	Ñ
Trailing	Total	+/- MSCI	+/- MSCI	%Rank	Growth of
	Return%	WexUS	WexUS	Cat	\$10,000
3 Mo	1.99	-0.64	-0.64	14	10,199
6 Mo	6.34	-3.15	-3.15	48	10,634
1 Yr	15.20	-0.28	-0.28	11	11,520
3 Yr Avg	14.76	8.90	8.90	1	15,114
5 Yr Avg	15.26	6.42	6.42	1	20,342
10 Yr Avg	11.61	3.65	3.65	1	29,994
15 Yr Avg	Ñ	Ñ	Ñ	Ñ	Ñ

%Rank Cat

Tax-Cost Rat

0.90

0.76

77

76

60

Potential Capital Gain Exposure: 26% of assets

Tax Analysis Tax-Adj Rtn%

3 Yr (estimated) 13.73

5 Yr (estimated) 14.39

10 Yr (estimated) 10.53

ie investor						ARTKX	Close	ed 1.	6%	\$12,403 1	nil	Foreign Large Blend
Histori Return Risk Rating	ical Prof High Low		92%	92%	91%	90%	91%	90%	85%	86%	84%	Investment Style Equity Stock %
	Highest		∇					_				▼ Manager Change 13.6 ▼ Partial Manager Change
							~~~	~~		~~~		32.4 Growth of \$10,000
					1/	1/	~~~	~				24.0 — Investment Values of
			1		ν.	<b>V</b>					1	7.0 — Fund investment Values of MSCI WexUS
											1	0.0
												Performance Quartile (within Category)
2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	07-14	History
16.18	21.06	22.06	27.93	25.52	17.63	23.10	27.11	25.09	30.38	36.77	37.89	NAV
56.59	32.26	10.09	34.46	-0.67	-30.11	33.47	18.90	-7.14	22.82	30.49	3.05	Total Return %
15.76	11.35	-6.53	7.81	-17.32	15.42	-7.98	7.75	6.57	5.99	15.20	-1.46	+/-MSCI WexUS
15.76	11.35	-6.53	7.81	-17.32	15.42	-7.98	7.75	6.57	5.99	15.20	-1.46	+/-MSCI WexUS
0.85	0.67	2.25	2.01	1.82	0.83	2.41	1.53	0.05	1.17	2.07	0.00	Income Return %
55.74	31.59	7.84	32.45	-2.49	-30.94	31.06	17.37	-7.19	21.65	28.42	3.05	Capital Return %
1	13	95	5	74	5	81	71	3	7	1	20	Total Rtn % Rank Cat
0.09	0.11	0.47	0.44	0.51	0.21	0.42	0.35	0.01	0.29	0.63	0.00	Income \$
0.30	0.21	0.60	1.28	1.67	0.00	0.00	0.00	0.07	0.14	2.15	0.00	Capital Gains \$
2.45	1.56	1.31	1.25	1.23	1.23	1.25	1.21	1.18	1.17	1.16	Ñ	Expense Ratio %
1.14	1.61	1.33	2.18	1.34	1.83	0.95	1.34	1.10	1.08	0.85	Ñ	Income Ratio %
9	Ñ	53	43	46	45	55	21	31	20	33	Ñ	Turnover Rate %
45	458	657	1,654	1,404	875	1,947	3,083	3,454	5,651	8,854	9,602	Net Assets \$mil

Ticker

Status

Yield

**Total Assets** 

**Mstar Category** 

Ratin	g and Ri	sk		
Time Period	Load-Adj Return %	Morningstar Rtn vs Cat	Morningstar Risk vs Cat	Morningstar Risk-Adj Rating
1 Yr 3 Yr 5 Yr 10 Yr Incept	15.20 14.76 15.26 11.61 15.45	High High High	Low Low	**** **** ****

Other Measures	Standard Index	Best Fit Index
	MSCI WexUS	MSCI World
Alpha	9.2	2.8
Beta	0.79	0.98
R-Squared	89	94
Standard Deviation	13.84	
Mean	14.76	
Sharpe Ratio	1.05	

#### Morningstar's Take by Greg Carlson 05-30-14

The stage may be set for a stretch of underperformance, but Artisan International Value is a superb long-term holding.

This closed foreign large-blend fund is on an extended roll. It surpassed more than 90% of its peers in 2011s choppy market as well as the strong equity rallies of 2012 and 2013, and it lands in the categorys top quintile in up-and-down 2014 for the year to date through May 23. The fund has also amassed an excellent record since its September 2002 inception, beating all of its peers on both a total-return and risk-adjusted basis and trouncing its MSCI EAFE benchmark. (Its also beaten all of the funds in its former Morningstar Category, foreign small/mid-value).

The funds managers, David Samra and Dan OKeefe, dont necessarily aim to outperform every year. Theyre exceedingly selective when building the portfolio, primarily seeking companies with sturdy balance sheets that generate high returns on capital (or should in the near future) yet are selling at significant discounts to their private-market values. The outcome of this

tough times while modestly lagging, on average, in rallies. Indeed, since its inception, the fund has captured 97% of the gains of the MSCI EAFE in rising markets but just 68% of the indexs losses when stocks The funds unusual outperformance in the hot

strategy has often been strong relative performance in

markets of 2012 and 2013 was a bonus for fundholders, but the managers are now far less enthused about the funds near-term prospects. The portfolios average discount to fair value is as narrow as its ever been, which erodes some of the margin of safety that has buoyed the fund in down markets. Furthermore, the managers see few new bargains market with elevated valuations, and the funds 13 cash stake as of March 2014 is close to its 15% lii To be sure, there's plenty of reason to be confiden the fund's long-term prospects, and owners of this closed fund remain a fortunate group. But this may a good time to ensure they have rebalanced their in the fund back to its targeted weighting in a

Address:	Artisan Funds Inc	Minimum Purchase:	Closed	Add: Ñ	IRA: Ñ
	Milwaukee, WI 53202	Min Auto Inv Plan:	Closed	Add: Ñ	
	800-344-1770	Sales Fees:	No-load, 2.00	1%R	
Web Address:	www.artisanfunds.com	Management Fee:	1.00% mx./0.	93% mn.	
Inception:	09-23-02	Actual Fees:	Mgt:0.93%	Dist: Ñ	
Advisor:	Artisan Partners Limited Partnership	Expense Projections:	3Yr:\$375	5Yr:\$649	10Yr:\$1432
Subadvisor:	None	Income Distribution:	Annually		
NTF Plans:	Fidelity Retail-NTF, CommonWealth NTF				

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stake	Book V
	Sales
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Ñ	Historia
	Compos
	Cash
r:\$1432	Stocks

Portfolio Analysis 06-30-14			
Share change since 03-14 Total Stocks:49	Sector	Country	% Assets
○ Compass Group PLC     ○ Reed Elsevier PLC     ○ TE Connectivity Ltd     ○ Covidien PLC     ① ING Groep N.V.	Cnsmr Cyc Cnsmr Cyc Technology Hlth care Finan Svs	U.K. U.K. Switzerland United States Netherlands	
<ul> <li>Royal Bank of Scotland G</li> <li>Novartis AG</li> <li>Tesco PLC</li> <li>Arch Capital Group Ltd</li> <li>Baidu Inc ADR</li> </ul>	Finan Svs HIth care Cnsmr Def Finan Svs Technology	Switzerland U.K. United States	3.13 3.09 2.96 2.80 2.71
	Energy Technology Technology Finan Svs Cnsmr Def	Canada Korea United States Belgium Japan	2.70 2.64 2.56 2.51 2.37
Stanley Electric Co., Lt     Aon PLC     Oloyds Banking Group PLC     Panalpina Welttransport     Unilever PLC ADR	Cnsmr Cyc Finan Svs Finan Svs Industrl Cnsmr Def	Japan U.K. U.K. Switzerland U.K.	2.28 2.14 2.13 2.06 1.96

Current Investment	t Style	Sector % of Rel MSCI 3 Year	
	Market Cap	%	Weightings Stocks WexUS High Low
Value Blnd Growth	Giant	31.8	າ Cyclical 39.92 Ñ
Large	Large	46.5	➡ BasicMat 0.00 Ñ 3 2
Mid	Mid	20.4	CnsmrCyc17.69 Ñ 19 14
Small	Small	1.3	FinanSvs 22.09 Ñ 23 14
<u>a</u>	Micro	0.0	
	Avg \$mil:		✓ Sensitive 38.28 Ñ
	22,376		CommSrvs 1.01 Ñ 4 1
Value Measures	Rel Ca	tegory	<b>a</b> Energy 6.87 <b>Ñ</b> 7 3
Price/Earnings		1.17	industri 11.78 Ñ 27 11
Price/Book	1.73	1.09	■ Technlgy 18.62 Ñ 19 7
Price/Sales	1.06	1.08	→ Defensive 21.80 Ñ
Price/Cash Flow	9.42	1.74	
Dividend Yield %	1.80	0.65	
2			HIthcare 7.87 N 10 8 Utilities 0.00 Ñ Ñ Ñ
Growth Measures		itegory	Utilities 0.00 IN IN IN
Long-Term Erngs	10.91	0.99	
Book Value	2.78	0.98	
Sales	0.32	0.03	Regional Exposure % Stock
Cash Flow	1.93	0.12	UK/W. Europe 66 N. America 15
Historical Erngs	7.35	0.10	Japan 8 Latn America 0
			Asia X Japan 10 Other 1
Composition - Net			

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14.4

84.1 Other

Bonds

1.5

0.0 Country Exposure

Switzerland

87.9 United States 12

U.K.



Netherlands

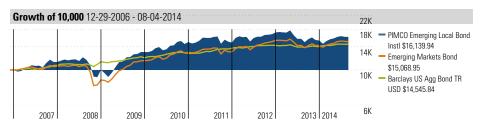
33 Japan

14

# **PIMCO Emerging Local Bond Instl PELBX**

Morningstar Analyst Rating

NAV \$ NAV Day Change % Yield TTM % Total Assets \$ Bil Status Min. Inv. Expenses Morningstar Rating™ **Investment Style** Load Category **↓**-0.01 | -0.11 9.55 4.78 11.4 Open \$1 None 0.90% **Emerging Markets** 



# 3 Year Average Morningstar Risk Measures Risk vs. Category (186) Return vs. Category -Avg Low Avg High

#### **Pillars Process** Positive Performance 0 Positive People 0 Positive 0 Parent Neutral 0 Positive Price Rating 👽 Gold

#### **Investment Strategy**

The investment seeks maximum total return, consistent with preservation of capital and prudent investment management. The fund invests at least 80% of its assets in Fixed Income Instruments denominated in currencies of countries with emerging securities markets, which may be represented by forwards or derivatives such as options, futures contracts or swap agreements. It may invest without limitation in Fixed Income Instruments that are economically tied to emerging market countries. The fund may invest in both investment-grade securities and junk bonds subject to a maximum of 15% of its total assets in securities rated below B. It is non-diversified.

<b>Performance</b> 08-04-2014						
	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	10,536	9,905	10,239	10,088	13,286	_
Fund	5.36	-0.95	2.39	0.29	5.85	_
+/- Barclays US Agg Bond TR USD	1.38	-1.63	-1.89	-2.42	1.22	_
+/- Category	-0.41	-0.25	-2.90	-2.70	-2.09	_
% Rank in Cat	55	67	75	75	72	_
# of Funds in Cat	345	371	317	173	101	48
* Currency is displayed in USD						

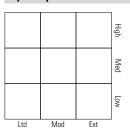
<b>Top Holdings</b> 03-31-2014				
	Weight %	Maturity Date	Amount Mil	Value Mil
→ Poland(Rep Of) 5.5%	3.36	10-25-2019	1,013.04	364.35
Irs Brl Zcs R 11.32/Cdi 09/05/13 Bps	3.27	01-04-2016	958.00	354.72
<ul><li>Standard Bk Of South Africa 8.25%</li></ul>	2.22	09-15-2017	2,490.47	241.57
Mex Bonos Desarr Fix Rt Bd M20	2.21	05-29-2031	28.69	240.35
	2.04	01-15-2020	2,413.24	221.22
% Assets in Top 5 Holdings	13.10			

<b>(</b>	Increase	<ul> <li>Decrease</li> </ul>	

<b>Top Sectors</b> 03-31-2014				
	Fund	BMark	Cat Avg	Fund ▼ Cat Avg
Government	26.96	_	54.49	
Other Government Related	24.30	_	2.90	<b>Y</b>
Corporate Bond	3.93	_	20.31	
Agency/Quasi-Agency	0.12	_	2.01	L. L
Asset-Backed	0.11	_	0.19	, , , , , , , , , , , , , , , , , , ,
				0 15 30 45

<b>Dividend and Capital G</b>	ains Distributior	18				
Distribution Date	Distribution NAV	Long-Term Capital Gain	Long-Term Short Gain	Return of Capital	Dividend Income	Distribution Total
2014-07-31	9.56	0.0000	0.0000	0.0000	0.0400	0.0400
2014-06-30	9.70	0.0000	0.0000	0.0000	0.0400	0.0400
2014-05-30	9.64	0.0000	0.0000	0.0000	0.0400	0.0400
2014-04-30	9.47	0.0000	0.0000	0.0000	0.0400	0.0400
2014-03-31	9.39	0.0000	0.0000	0.0000	0.0400	0.0400

## **Style Map** 03-31-2010



Bond Statistics	Value
Average Effective Duration (Years)	4.52
Average Effective Maturity (Years)	6.29
Average Credit Quality	Not Rated
Average Weighted Coupon	7.29
Average Weighted Price	_

<b>Asset Allocation</b>					
	% Net	% Short	% Long	Bench mark	Cat Avg
<ul><li>Cash</li></ul>	-6.76	80.15	73.39	_	6.61
<ul><li>US Stock</li></ul>	0.00	0.00	0.00	_	0.02
<ul> <li>Non US Stock</li> </ul>	0.00	0.00	0.00	_	0.70
<ul><li>Bond</li></ul>	95.11	2.88	97.99	_	92.57
<ul><li>Other</li></ul>	11.65	0.10	11.75	_	0.11

Management	
	Start Date
Michael A. Gomez	2006-12-29

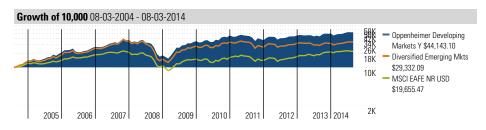
M RNINGSTAR®

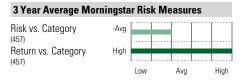
# **Oppenheimer Developing Markets Y** ODVYX

Morningstar Analyst Rating

Silver

NAV \$ NAV Day Change % Yield TTM % Total Assets \$ Bil Status Min. Inv. Expenses Morningstar Rating™ Load Category **Investment Style ↓**-0.03 | -0.08 39.66 0.41 43.2 Limited None 1.01% Diversified Emerging Large Growth



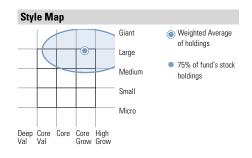


#### **Pillars Process** 0 Positive Performance 0 Positive People 0 Positive Parent 0 Neutral 0 Price Positive Rating 🐺 Silver

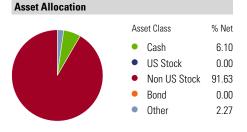


The investment seeks capital appreciation. The fund mainly invests in common stocks of issuers in developing and emerging markets throughout the world and at times it may invest up to 100% of its total assets in foreign securities. Under normal market conditions, it will invest at least 80% of its net assets, plus borrowings for investment purposes, in equity securities of issuers whose principal activities are in a developing market, i.e. are in a developing market or are economically tied to a developing market country. The fund will invest in at least three developing markets.

<b>Performance</b> 08-01-2014						
	YTD	1 Mo	1 Yr	3Yr Ann	5Yr Ann	10Yr Ann
Growth of 10,000	10,559	9,917	11,362	11,727	17,406	44,014
Fund	5.59	-0.83	13.62	5.45	11.72	15.97
+/- MSCI EAFE NR USD	3.64	2.56	0.52	-2.59	2.49	8.98
+/- Category	-0.59	-0.76	1.68	5.31	4.81	4.67
% Rank in Cat	54	78	29	5	2	_
# of Funds in Cat	746	821	654	457	328	161
* Currency is displayed in USD						



<b>Top Holdings</b> 06-30-2014				
	Weight %	Last Price	Day Chg %	52 Week Range
Baidu Inc ADR	4.72	212.38 USD	-1.70 ↓	132.18 - 229.60
Yandex NV	2.48	30.28 USD	0.00 🗸	21.70 - 45.42
OJSC Magnit	2.47	USD	0.45 🛧	6,565.30 - 10,057.00
OAO Novatek GDR	2.43	102.20 USD	0.00 🗸	94.83 - 145.30
<ul> <li>Housing Development Finance Corp Ltd</li> </ul>	2.37	_	_	_
% Assets in Top 5 Holdings	14.46			



Increase	<ul> <li>Decrease</li> </ul>	★ New to Portfolio

	Management	
		Start Date
▼ Cat Avg	Justin Leverenz	2007-05-01

<b>Top Sectors</b> 06-30-2014					
	Fund	3 Yr High	3 Yr Low	Cat Avg	■ Fund ▼ Cat Avg
Consumer Defensive	20.44	23.81	20.44	11.22	<b>—</b>
Consumer Cyclical	16.74	16.96	15.26	11.82	
Financial Services	16.44	16.44	13.49	23.14	
Technology	16.25	17.73	16.01	16.47	
<b></b> Energy	9.19	9.29	8.81	8.25	
_					0 10 20 30 40

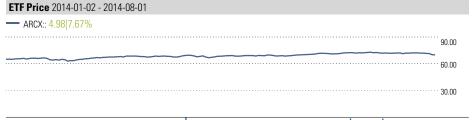
<b>Dividend and Capit</b>	al Gains Distributior	18				
Distribution Date	Distribution NAV	Long-Term Capital Gain	Long-Term Short Gain	Return of Capital	Dividend Income	Distribution Total
2013-12-06	37.07	0.1800	0.0000	0.0000	0.1600	0.3400
2012-12-07	33.82	0.0000	0.0000	0.0000	0.2500	0.2500
2011-12-09	29.56	0.0000	0.0000	0.0000	0.6800	0.6800
2010-12-21 2009-12-07	35.02 28.20	0.0000 0.0000	0.0000 0.0000	0.0000 0.0000	0.1400 0.1800	0.1400 0.1800



# iShares Russell Mid-Cap Value IWS

**Morningstar Analyst Rating** 

Last Price	Day Change	NAV	Open Price	Day Range	52-Week Range	12-Mo. Yield	<b>Total Assets</b>	Expenses	Morningstar Rating [™]	^M Category
\$70.35	<b>↓</b> 1 0.40 0.57 %	69.96 USD	70.11	69.59-70.28	58.43-73.19	1.80 %	6.71 bil USD	0.25%	***	Mid-Cap Value





Weight %	Last Price	Day Chg %	52-Week Range
0.82	99.46	-0.30 ↓	81.77 - 105.25
0.76	70.21	-2.99 🗸	49.65 - 74.40
0.76	91.97	1.33 🛧	72.64 - 97.28
0.75	102.29	1.98 ↑	59.36 - 102.89
0.70	33.02	-0.36 ↓	28.95 - 35.56
3.79			
	0.82 0.76 0.76 0.75 0.70	0.82 99.46 0.76 70.21 0.76 91.97 0.75 102.29 0.70 33.02	0.82 99.46 -0.30 ↓ 0.76 70.21 -2.99 ↓ 0.76 91.97 1.33 ↑ 0.75 102.29 1.98 ↑ 0.70 33.02 -0.36 ↓

Increase	<ul><li>Decrease</li></ul>	☼ New to Portfolio	Portfolio Date: 2014-08-01
----------	----------------------------	--------------------	----------------------------

<b>Top Sectors</b> 08-01-2014									
	Fund	3 Yr High	3 Yr Low	Cat Avg	Fund		Cat Av	/g	
Financial Services	17.86	19.40	17.27	_	▼				
Real Estate	13.62	13.62	12.15	_	▼			-	
Utilities Utilities	11.49	11.49	9.99	_	<b>V</b>				
Technology	11.30	11.60	10.48	_	<b>V</b>				
Consumer Cyclical	10.17	10.17	8.34	_	▼				
_						E	10	10	

Latest Distribu	itions					
Ex Date	Distribution NAV	Income	S/T Cap Gain	L/T Cap Gain	Return Cap	Total
Jul 02,2014	72.30	0.3580	0.0000	0.0000	0.0000	0.3580
Mar 25,2014	68.14	0.2980	0.0000	0.0000	0.0000	0.2980
Dec 23,2013	64.97	0.3990	0.0000	0.0000	0.0000	0.3990
Sep 24,2013	61.16	0.2050	0.0000	0.0000	0.0000	0.2050
Jul 02,2013	58.01	0.3120	0.0000	0.0000	0.0000	0.3120
Mar 25,2013	56.37	0.2080	0.0000	0.0000	0.0000	0.2080
Dec 19,2012	50.38	0.3850	0.0000	0.0000	0.0000	0.3850
Sep 24,2012	49.45	0.2200	0.0000	0.0000	0.0000	0.2200
Jun 26,2012	44.32	0.2370	0.0000	0.0000	0.0000	0.2370
Mar 23,2012	47.89	0.2090	0.0000	0.0000	0.0000	0.2090
Dec 22,2011	43.36	0.2870	0.0000	0.0000	0.0000	0.2870
Sep 23,2011	38.86	0.1880	0.0000	0.0000	0.0000	0.1880

#### Morningstar's Take

Value stocks have historically outperformed their growth counterparts in nearly every market studied over long time horizons. This premium tends to increase as market capitalization decreases. Although that would lead a return-maximizing investor to load up on small-cap value, there is something to be said for size. Larger-cap stocks tend to be less volatile. Consequently, mid-cap value stocks offer an intermediate risk/reward profile. IShares Russell Mid-Cap Value offers diversified exposure to this market segment. It invests in the cheaper half of the Russell Midcap Index, which tracks the 800 smallest stocks from the Russell 1000 Index. Many of the fund's holdings have not yet established sustainable competitive advantages and may not hold up as well as large caps during market downturns. Consequently, this fund is a suitable satellite holding for investors with a relatively high risk tolerance.

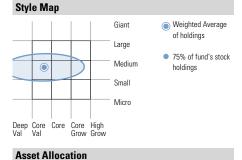
Fair Value Estimate	\$68.47
Consider Buying	\$62.52
Consider Selling	\$72.71
Valuation Rating	Fairly Valued
Expected Return	9.56%
Expected Excess Return	-1.18%

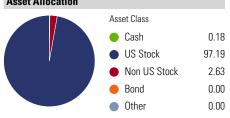
# 3 Year Average Morningstar Risk Measures Risk vs. Category Avg (14) Return vs. Category +Avg (14)

Low

Hiah

Ava







# iShares Russell Mid-Cap Value $\ensuremath{\mathsf{IWS}}$

**Morningstar Analyst Rating** 

Last Price	Day Change	NAV	Open Price	Day Range	52-Week Range	12-Mo. Yield	<b>Total Assets</b>	Expenses	Morningstar Rating [™]	^M Category
\$70.35	<b>↓</b> 1 0.40 0.57 %	69.96 USD	70.11	69.59-70.28	58.43-73.19	1.80 %	6.71 bil USD	0.25%	***	Mid-Cap Value

Market Data	
Premium/Discount	0.084
Volumn	706,904
Average Volumn	444,553.652
Sec Yield	
Bid/Ask/Spread	70 28/70 32/0 057%

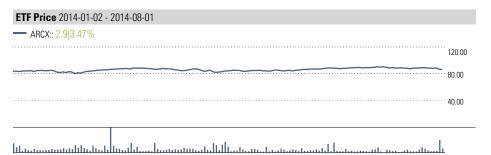


% Assets in Top 5 Holdings

# iShares Russell Mid-Cap Growth IWP

**Morningstar Analyst Rating** 

Last Price	Day Change	NAV	Open Price	Day Range	52-Week Range	12-Mo. Yield	<b>Total Assets</b>	Expenses	Morningstar Rating [™]	[™] Category
\$87.27	<b>↓</b> 1 0.82 0.95 %	86.47 USD	86.65	86.20-87.19	74.43-90.51	0.98 %	4.77 bil USD	0.25%	***	Mid-Cap Growth



<b>Top Holdings</b> 08-01-2014				
	Weight %	Last Price	Day Chg %	52-Week Range
Netflix Inc	0.82	424.11	-0.30 ↓	241.38 - 475.87
⊕ Kroger Co	0.80	49.38	0.26 🛧	35.13 - 51.49
Crown Castle International Corp	0.78	73.20	-0.37 🗸	66.73 - 77.95
⊕ Intuit Inc	0.73	81.12	0.70 🛧	61.50 - 83.54
→ Tesla Motors Inc	0.71	240.01	2 89 🛧	116.10 - 265.00

⊕ Increase ⊝ Decrease 😤 New to Portfolio Portfolio Date: 2014-08-01

3.84

<b>Top Sectors</b> 08-01-2014									
	Fund	3 Yr High	3 Yr Low	Cat Avg	Fund		Cat A	vg	
Consumer Cyclical	21.25	24.35	21.25	_	▼				
ndustrials	19.61	19.61	17.91	_	▼				
Technology	16.34	16.34	14.68	_	▼		-		
Healthcare	11.69	12.29	11.06	_	▼				
Consumer Defensive	8.90	9.81	8.90	_	<b>*</b>	- :	:		
					0	10	3n	20	40

Latest Distribut	tions					
Ex Date	Distribution NAV	Income	S/T Cap Gain	L/T Cap Gain	Return Cap	Total
Jul 02,2014	89.76	0.2530	0.0000	0.0000	0.0000	0.2530
Mar 25,2014	85.55	0.2050	0.0000	0.0000	0.0000	0.2050
Dec 23,2013	83.41	0.2030	0.0000	0.0000	0.0000	0.2030
Sep 24,2013	78.34	0.1850	0.0000	0.0000	0.0000	0.1850
Jul 02,2013	72.37	0.1560	0.0000	0.0000	0.0000	0.1560
Mar 25,2013	68.83	0.1260	0.0000	0.0000	0.0000	0.1260
Dec 19,2012	63.04	0.4060	0.0000	0.0000	0.0000	0.4060
Sep 24,2012	62.78	0.1720	0.0000	0.0000	0.0000	0.1720
Jun 26,2012	57.64	0.1310	0.0000	0.0000	0.0000	0.1310
Mar 23,2012	62.49	0.1170	0.0000	0.0000	0.0000	0.1170
Dec 22,2011	55.05	0.1680	0.0000	0.0000	0.0000	0.1680
Sep 23,2011	50.92	0.1040	0.0000	0.0000	0.0000	0.1040

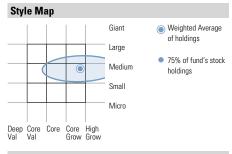
#### Morningstar's Take

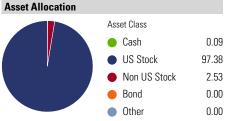
Mid-cap growth stocks tend to offer greater growth potential and risk than their large-cap counterparts, but with slightly less volatility than small-cap growth stocks. IShares Russell Midcap Growth Index IWP offers broad exposure to these stocks by investing in the faster-growing and more expensive half of the market-cap-weighted Russell Midcap Index. Mid-cap stocks are less likely to enjoy sustainable competitive advantages than large caps, and may not hold up as well during market downturns. But they may also offer a little better upside during bull markets. Therefore, this fund is a suitable satellite holding for investors with a strong risk tolerance.

Fair Value Estimate	\$83.81
Consider Buying	\$76.59
Consider Selling	\$89.07
Valuation Rating	Fairly Valued
Expected Return	9.15%
Expected Excess Return	-1.5%

# 3 Year Average Morningstar Risk Measures

Risk vs. Category (13) Return vs. Category (13)	Avg +Avg			
		Low	Avn	High





Market Data	
Premium/Discount	0.104
Volumn	117,511
Average Volumn	288,207.216
Sec Yield	
Bid/Ask/Spread	87.18/87.22/0.046%



# iShares Russell 2000 Growth IWO

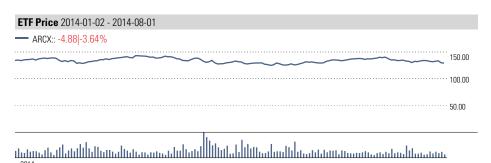
Increase

Decrease

**Morningstar Analyst Rating** 

Morningstar Rating™ Category **Last Price Day Change** NAV Open Price **Day Range** 52-Week Range 12-Mo. Yield **Total Assets** Expenses \$130.61 **↓** 1|1.42|1.10 % 129.21 USD 129.44 128.42-130.84 117.27-143.70 0.76 % 5.36 bil USD 0.25% Small Growth

Portfolio Date: 2014-08-01



<b>Top Holdings</b> 08-01-2014				
	Weight %	Last Price	Day Chg %	52-Week Range
Puma Biotechnology Inc	0.65	232.60	1.78 🛧	33.70 - 241.42
WEX Inc	0.51	107.66	1.15 🛧	78.18 - 111.27
Aspen Technology Inc	0.49	43.69	1.11 🛧	31.29 - 48.39
Team Health Holdings Inc	0.48	56.38	0.68 🛧	36.41 - 57.73
Graphic Packaging Holding Co	0.48	12.11	0.67 🛧	8.05 - 12.54
% Assets in Top 5 Holdings	2.61			

<b>Top Sectors</b> 08-01-2014									
	Fund	3 Yr High	3 Yr Low	Cat Avg	Fund		Cat A	vg	
Technology	23.69	23.69	20.06	_	<b>V</b>				
Healthcare	19.88	19.88	18.19	_	*				
Industrials	17.29	20.70	17.19	_	<b>V</b>		_		
Consumer Cyclical	15.51	16.75	15.51	_	<b>V</b>		•		
Basic Materials	5.99	5.99	5.56	_					
					n	10	20	30	40

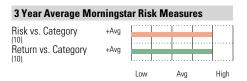
数 New to Portfolio

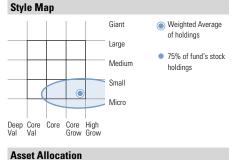
Latest Distribu	ıtions					
Ex Date	Distribution NAV	Income	S/T Cap Gain	L/T Cap Gain	Return Cap	Total
Jul 02,2014	139.33	0.2330	0.0000	0.0000	0.0000	0.2330
Mar 25,2014	136.97	0.2290	0.0000	0.0000	0.0000	0.2290
Dec 23,2013	134.79	0.2900	0.0000	0.0000	0.0000	0.2900
Sep 24,2013	125.47	0.2400	0.0000	0.0000	0.0000	0.2400
Jul 02,2013	113.17	0.2280	0.0000	0.0000	0.0000	0.2280
Mar 25,2013	106.85	0.2110	0.0000	0.0000	0.0000	0.2110
Dec 19,2012	95.19	0.7850	0.0000	0.0000	0.0000	0.7850
Sep 24,2012	96.92	0.2420	0.0000	0.0000	0.0000	0.2420
Jun 26,2012	87.74	0.1930	0.0000	0.0000	0.0000	0.1930
Mar 23,2012	95.42	0.1740	0.0000	0.0000	0.0000	0.1740
Dec 22,2011	84.65	0.2250	0.0000	0.0000	0.0000	0.2250
Sep 23,2011	74.96	0.1620	0.0000	0.0000	0.0000	0.1620

#### Morningstar's Take

Small-cap growth stocks can be speculative. Many command rich valuations, despite only limited operating history and profitability. Intrepid investors can gain access to a portfolio of these stocks through iShares Russell 2000 Growth IWO. It invests in the fastergrowing and more expensive half of the U.S. small-cap market and weights its holdings by market capitalization. While these companies may have greater growth potential than their large-cap counterparts, they also tend to carry greater risk. Most of the fund's holdings lack meaningful competitive advantages and are highly leveraged to the fortunes of the U.S. economy. Consequently, they tend to exhibit greater volatility than large-cap stocks and may underperform during market downturns. But these stocks can also offer a little better upside during bull markets. Because of its volatility, this fund is best suited as a satellite holding for investors with a high risk tolerance.

Fair Value Estimate	\$
Consider Buying	\$
Consider Selling	\$
Valuation Rating	Fairly Valued
Expected Return	10.3%
Expected Excess Return	-3.66%









# iShares Russell 2000 Growth IWO

**Morningstar Analyst Rating** 

 Last Price
 Day Change
 NAV
 Open Price
 Day Range
 52-Week Range
 12-Mo. Yield
 Total Assets
 Expenses
 Morningstar Rating™ Category

 \$130.61
 ↓1|1.42|1.10%
 129.21 USD
 129.44
 129.42-130.84
 117.27-143.70
 0.76 %
 5.36 bil USD
 0.25%
 ★★★
 Small Growth

Market Data	
Premium/Discount	-0.032
Volumn	671,745
Average Volumn	1.26 mil
Sec Yield	
Bid/Ask/Spread	129.8/131.27/1.126%

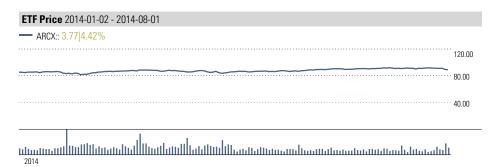


# iShares Russell 1000 Growth IWF

**Morningstar Analyst Rating** 

Last Price	Day Change	NAV	Open Price	Day Range	52-Week Range	12-Mo. Yield	<b>Total Assets</b>	Expenses	Morningstar Rating ^T	[™] Category
\$89.86	<b>↓</b> 1 0.89 1.00 %	89.01 USD	89.25	88.83-89.80	74.77-91.99	1.36 %	23.36 bil USD	0.20%	***	Large Growth

30



<b>Top Holding</b>	<b>s</b> 08-01-2014					
			Weight %	Last Price	Day Chg %	52-Week Range
Apple Inc			5.82	96.17	0.04 ↑	63.89 - 99.44
Microsoft 0	Corp		2.30	43.41	1.28 🛧	30.84 - 45.71
Verizon Cor	mmunications Inc		2.07	50.23	0.80 🛧	45.08 - 53.66
<ul><li>Internation</li></ul>	al Business Mach	ines Corp	1.80	189.82	0.35 🛧	172.19 - 199.21
⊕ Google Inc	Class A		1.62	583.07	1.65 🛧	421.49 - 614.44
% Assets in	Top 5 Holdings		13.61			
<ul><li>Increase</li></ul>	<ul><li>Decrease</li></ul>	☼ New to Portfolio			Port	folio Date: 2014-08-01

<b>Top Sectors</b> 08-01-2014						
	Fund	3 Yr High	3 Yr Low	Cat Avg	■ Fund	
Technology	24.91	27.29	23.21	_	<b>V</b>	
Consumer Cyclical	16.17	17.71	15.08	_	<b>V</b>	 
Industrials	13.33	14.56	13.33	_	<b>V</b>	
→ Healthcare	12.93	12.93	11.47	_	<b>V</b>	
Consumer Defensive	10.70	13.00	10.70	_		

Latest Distribut	tions					
Ex Date	Distribution NAV	Income	S/T Cap Gain	L/T Cap Gain	Return Cap	Total
Jul 02,2014	91.43	0.3400	0.0000	0.0000	0.0000	0.3400
Mar 25,2014	86.50	0.2860	0.0000	0.0000	0.0000	0.2860
Dec 23,2013	84.95	0.3230	0.0000	0.0000	0.0000	0.3230
Sep 24,2013	78.58	0.2640	0.0000	0.0000	0.0000	0.2640
Jul 02,2013	73.10	0.2910	0.0000	0.0000	0.0000	0.2910
Mar 25,2013	70.48	0.2300	0.0000	0.0000	0.0000	0.2300
Dec 19,2012	65.85	0.4120	0.0000	0.0000	0.0000	0.4120
Sep 24,2012	67.53	0.2580	0.0000	0.0000	0.0000	0.2580
Jun 26,2012	61.50	0.2210	0.0000	0.0000	0.0000	0.2210
Mar 23,2012	65.48	0.1930	0.0000	0.0000	0.0000	0.1930
Dec 22,2011	57.63	0.2400	0.0000	0.0000	0.0000	0.2400
Sep 23,2011	53.33	0.1670	0.0000	0.0000	0.0000	0.1670

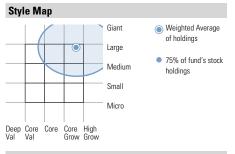
### Morningstar's Take

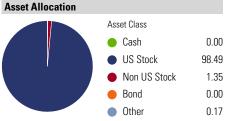
Large-cap growth stocks get a lot of press. These companies tend to have strong profitability, attractive outlooks, and heavy analyst coverage. Investors looking for broad exposure to these quality companies might consider iShares Russell 1000 Growth . It invests in the faster-growing and more expensive half of the Russell 1000 Index. Market darlings such as Gilead Sciences, Google, and Amazon.com carry prominent weightings in the portfolio. However, it also includes slower growing names, such as IBM, Coca-Cola, and Philip Morris. These quality holdings may be able to weather bad times better than their peers. Consequently, the fund is a suitable core holding.

Fair Value Estimate	\$88.36
Consider Buying	\$80.85
Consider Selling	\$94.03
Valuation Rating	Fairly Valued
Expected Return	9.64%
Expected Excess Return	-0.56%

# 3 Year Average Morningstar Risk Measures

Risk vs. Category	-Avg			
Return vs. Category	+Avg			
		Low	Ava	Hiah





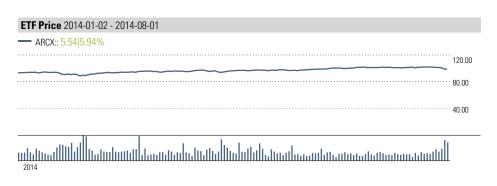
Market Data	
Premium/Discount	0.105
Volumn	971,651
Average Volumn	1.736 mil
Sec Yield	
Bid/Ask/Spread	89.81/89.82/0.011%



# iShares Russell 1000 Value IWD

**Morningstar Analyst Rating** 

Last Price	Day Change	NAV	Open Price	Day Range	52-Week Range	12-Mo. Yield	<b>Total Assets</b>	Expenses	Morningstar Rating [™]	[™] Category
\$99.39	<b>↓</b> 1 0.57 0.58 %	98.77 USD	99.04	98.47-99.59	84.17-102.25	1.99 %	22.60 bil USD	0.20%	***	Large Value



<b>Top Holdings</b> 08-01-2014				
	Weight %	Last Price	Day Chg %	52-Week Range
<ul><li>Exxon Mobil Corporation</li></ul>	4.32	100.13	1.35 ↑	84.79 - 104.76
⊕ General Electric Co	2.59	25.28	-0.28 ↓	22.92 - 28.09
<ul><li>Chevron Corp</li></ul>	2.48	128.20	0.24 🛧	109.27 - 135.10
→ Wells Fargo & Co	2.45	51.00	1.29 🛧	40.07 - 53.08
<ul><li>Johnson &amp; Johnson</li></ul>	2.43	100.20	0.30 🛧	85.50 - 106.74
% Assets in Top 5 Holdings	14.27			

Increase	<ul><li>Decrease</li></ul>	☼ New to Portfolio	Portfolio Date: 2014-08-01
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<b>Top Sectors</b> 08-01-2014								
	Fund	3 Yr High	3 Yr Low	Cat Avg	Fund		,	
Financial Services	23.70	24.85	23.11	_	▼			
<b>♦</b> Energy	13.73	15.89	13.73	_	<b>V</b>	•		
→ Healthcare	13.23	13.23	11.48	_	<b>Y</b>			
Industrials	10.26	10.84	9.64	_				
Technology	9.42	9.42	6.54	_		:		
					0 10	20	30	40

Latest Distribu	tions					
Ex Date	Distribution NAV	Income	S/T Cap Gain	L/T Cap Gain	Return Cap	Total
Jul 02,2014	101.29	0.5220	0.0000	0.0000	0.0000	0.5220
Mar 25,2014	95.71	0.4730	0.0000	0.0000	0.0000	0.4730
Dec 23,2013	93.05	0.5560	0.0000	0.0000	0.0000	0.5560
Sep 24,2013	86.99	0.4200	0.0000	0.0000	0.0000	0.4200
Jul 02,2013	83.68	0.4710	0.0000	0.0000	0.0000	0.4710
Mar 25,2013	80.37	0.3880	0.0000	0.0000	0.0000	0.3880
Dec 19,2012	73.14	0.5210	0.0000	0.0000	0.0000	0.5210
Sep 24,2012	72.95	0.4150	0.0000	0.0000	0.0000	0.4150
Jun 26,2012	65.76	0.3780	0.0000	0.0000	0.0000	0.3780
Mar 23,2012	69.70	0.3620	0.0000	0.0000	0.0000	0.3620
Dec 22,2011	63.39	0.4440	0.0000	0.0000	0.0000	0.4440
Sep 23,2011	56.44	0.3340	0.0000	0.0000	0.0000	0.3340

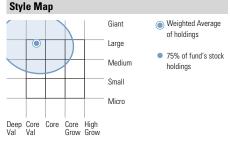
#### Morningstar's Take

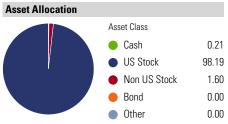
Value stocks historically have outperformed their growth counterparts in nearly every market studied over long time horizons. Investors can take advantage of this premium with iShares Russell 1000 Value Index . It invests in companies representing the cheaper and slower-growing half of the Russell 1000 Index and weights its holdings by market capitalization. While these large-cap stocks tend to exhibit a smaller value premium than their small-cap counterparts, they also tend to be less risky. Many of the fund's holdings are household names, such as Johnson & Johnson , Chevron , AT&T , and General Electric . This fund is a suitable core holding for investors who want to add a value tilt to their portfolios.

Fair Value Estimate	\$100.45
Consider Buying	\$91.88
Consider Selling	\$106.87
Valuation Rating	Fairly Valued
Expected Return	10.47%
Expected Excess Return	0.29%

# 3 Year Average Morningstar Risk Measures

Risk vs. Category (34) Return vs. Category (34)	Avg +Avg			
		Low	Avg	High





Market Data	
Premium/Discount	-0.091
Volumn	1.263 mil
Average Volumn	1.473 mil
Sec Yield	
Bid/Ask/Spread	90.51/108.47/18.052%



# iShares iBoxx \$ High Yield Corporate Bd HYG

**Morningstar Analyst Rating** 

Last Price	Day Change	NAV	Open Price	Day Range	52-Week Range	12-Mo. Yield	<b>Total Assets</b>	Expenses	Morningstar Rating [™]	[™] Category
\$92.10	<b>↓</b> 1 0.19 0.21 %	92.10 USD	92.10	92.10-92.10	92.10-92.10	5.79 %	11.52 bil USD	0.50%	***	High Yield Bond





<b>Top Holdings</b> 08-01-2014				
	Weight %	Maturity Date	Amount Mil	Value Mil
<ul> <li>BlackRock Cash Funds Treasury SL Agency</li> </ul>	1.32	08-04-2014	153.02	153.02
<ul><li>Sprint 144A 7.875%</li></ul>	0.53	09-15-2023	58.05	61.75
Numericable Grp Sa 144A 6%	0.48	05-15-2022	55.20	55.06
First Data 12.625%	0.45	01-15-2021	43.83	52.27
Sprint Nextel 144A 9%	0.42	11-15-2018	42.07	49.01
	3.21			

<b>Top Sectors</b> 08-01-2014								
	Fund	BMark	Cat Avg	Fund		Cat A	vg :	
Corporate Bond	85.39	_	33.64		₩			
Convertible	1.01	_	0.83	<b>*</b>				
Commercial MBS	0.60	_	0.40	*				
Preferred	0.24	_	0.75	•				
Asset-Backed	0.07	_	0.98	▼				
				0	30	60	90	120

Latest Distribut	tions					
Ex Date	Distribution NAV	Income	S/T Cap Gain	L/T Cap Gain	Return Cap	Total
Aug 01,2014	91.91	0.4310	0.0000	0.0000	0.0000	0.4310
Jul 01,2014	94.59	0.4150	0.0000	0.0000	0.0000	0.4150
Jun 02,2014	94.24	0.4290	0.0000	0.0000	0.0000	0.4290
May 01,2014	93.83	0.4230	0.0000	0.0000	0.0000	0.4230
Apr 01,2014	93.78	0.4450	0.0000	0.0000	0.0000	0.4450
Mar 03,2014	94.12	0.4630	0.0000	0.0000	0.0000	0.4630
Feb 03,2014	92.66	0.4620	0.0000	0.0000	0.0000	0.4620
Dec 26,2013	92.50	0.4670	0.0000	0.0000	0.0000	0.4670
Dec 02,2013	92.71	0.4500	0.0000	0.0000	0.0000	0.4500
Nov 01,2013	92.89	0.4500	0.0000	0.0000	0.0000	0.4500
Oct 01,2013	91.05	0.4450	0.0000	0.0000	0.0000	0.4450
Sep 03,2013	90.58	0.4800	0.0000	0.0000	0.0000	0.4800

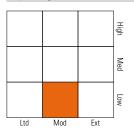
#### Morningstar's Take

For strategic, long-term exposure to U.S. high-yield bonds, investors may consider iShares High Yield Corporate Bond as a small core holding. The fund can also serve as a tactical investment for the satellite portion of a diversified portfolio.

Fair Value Estimate	\$
Consider Buying	\$
Consider Selling	\$
Valuation Rating	
Expected Return	%
Expected Excess Return	%

3 Year Average Mo	rnings	tar Risk l	Measures	
Risk vs. Category (7) Return vs. Category (7)	+Avg Avg			
		Low	Ava	Hiah

#### Style Map 04-30-2014



Average Effective Duration (Years)	3.92
Average Effective Maturity (Years)	_
Average Credit Quality	В
Average Weighted Coupon	6.77
Average Weighted Price	103.69



Market Data	
Premium/Discount	0.128
Volumn	
Average Volumn	0
Sec Yield	4.662
Bid/Ask/Spread	//%





# 2014 Long-term Asset Class Outlook and Capital Market Assumptions

# **Capital Market Assumptions Introduction**

SunTrust's Capital Market Assumptions (CMAs) provide an estimate of return, risk and correlations over a tenyear forward period for every asset class. These CMAs are utilized during the construction of our strategic investment portfolios and are relied upon to deliver longer-term financial planning solutions.

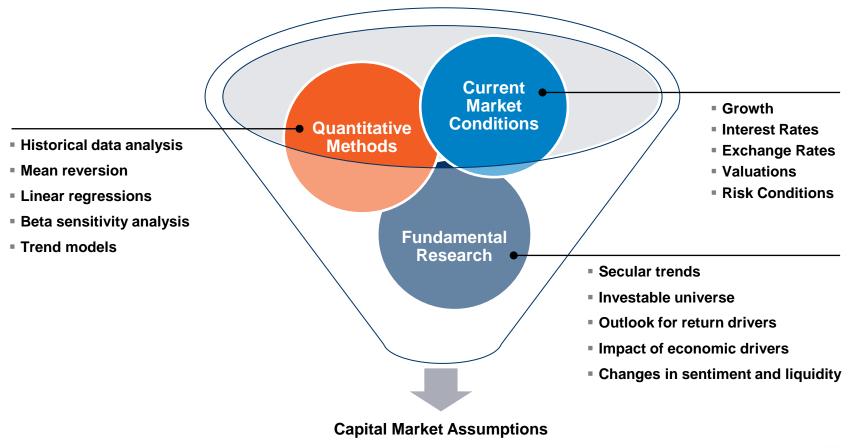
We review our forward looking assumptions annually or when market conditions warrant a change. We routinely monitor the investment landscape to evaluate the consistency of our assumptions. In deriving our assumptions:

- As economic cycles generally range from four to five years in duration, our assumptions are intended to include two full
  cycles including slowdowns and expansions.
- We take a building block approach to the construction of traditional asset class returns and rely on regression analysis to determine the factors that explain the returns for alternative strategies.
- Our outlook is shaped by current rates of global economic growth, interest rates, price stability and risk conditions. We
  then combine fundamental insight with quantitative research and the analysis of long-term trends to determine our
  forward looking projections for asset class returns.
- We leverage internal and third-party research resources as appropriate.



# **Capital Market Assumptions Methodology**

CMAs provide an estimate of return, risk and correlations over a ten year forward period for every asset class. Our outlook is influenced by current market conditions, quantitative methods and fundamental research.





# **2014 Capital Market Assumptions – Results and Impacts**

#### Balanced portfolio returns are not expected to materially change, while diversification and risk improves

Revisions to our long-term capital market assumptions relative to 2013 assumptions involve slightly raising fixed income returns and modestly lowering returns for equity asset classes. As a result, we do not expect a significant change in the projected long-term returns of balanced portfolios.

We began 2014 with a 10-year Treasury yield approximately 125 basis points higher than 2013. Primarily as a result of higher starting yields and our assumption that we will see only one full Federal Reserve tightening cycle in our forecast time horizon, we expect bond returns to rise over those forecasted in 2013, though remain relatively low.

Equity multiples drove the strong returns in developed markets last year. With multiple expansion largely exceeding our forecasts, this component assumption has been revised lower for US equities as we expect valuation increases to play less of a role in the years ahead than they have historically. Also, with the extended gains in small-caps relative to large-caps, we expect a modest contraction in multiples in the next cycle.

Diversification opportunities in risk assets are also expected to improve. Correlations between global equity markets have been elevated since the financial crisis as markets similarly experienced recessionary conditions characterized by corporate and consumer balance sheet restructuring, sovereign debt issues and highly accommodative monetary policy. As the global economy recovers, regional fundamentals should play a larger role in asset class returns.

#### Non-US equity returns to be impacted by global growth expectations and currency returns

We expect the returns of non-US equity to be slightly lower going forward as debt loads, an aging population and subdued labor force growth weigh on global economic growth rates. Moreover, while foreign currencies in aggregate are near fair value, the yen is expected to weaken and emerging markets currencies are likely to display ongoing volatility with downside risk. We are also generally favorable on the US dollar as accommodative monetary policy overseas, higher US growth and the US shale energy boom should aid the dollar's advance.

#### Emerging markets equity remains the highest returning traditional asset class

While we have lowered our return assumption, emerging markets equity should continue to command the highest return among traditional investments over our forecast horizon. Though a disparate group of countries dealing with a variety of structural issues, the emerging markets are characterized by high levels of economic growth and we assigned our largest earnings growth assumption to emerging markets companies. Moreover, these markets possess favorable demographic, potential productivity enhancement and indebtedness trends. In contrast to developed markets, equity multiples declined in 2013 for emerging markets, and our multiple assumption was improved by 75 basis points.

Past performance is not indicative of future results.

Please see Important Disclosures for additional information.

# 2014 Capital Market Assumptions – Results and Impacts, cont'd

#### Merger and acquisition activity to return, aiding US small caps

Given the prolonged trough in deal activity in recent years and healthy corporate balance sheets and cash positions, we expect merger and acquisition activity to begin to materialize. Thus, we have raised our M&A premium assumption for small and mid cap US equity.

#### Higher fixed income yields increase most bond sector returns

With fixed income yields having risen, expected returns for most high quality bond sectors are higher with the most significant impacts in intermediate to long-term maturities. High yield bond return expectations have not changed — while yield levels are near all-time lows, default rates are also at historical lows and are expected to remain in line with longer-term averages of between 3% and 4%.

#### Despite higher yields, currency expectations affect non-US bond returns

Non-US bond market returns have been lowered primarily due to reduced currency return expectations. While in developed markets, currency appreciation has historically added to returns, the yen is expected to gradually weaken. In emerging markets, downside risk in currency valuations remains, and our negative expected currency returns are in line with the 10-year historical average. Emerging markets bonds, are, however, expected to be the highest returning bond market sector, especially given current yield levels, though volatility is also projected to remain high.

#### Commodities to remain pressured

With expectations of moderate global growth, a stronger US dollar, and an improved supply landscape, spot commodity returns were reduced significantly. However, with evidence of less institutional interest in commodities as an investment, our roll assumption (the cost to roll futures contracts forward) was improved, resulting in only a slight reduction in total return expectations for the asset class.

#### Hedge funds expected to retain portfolio return and diversification benefits

We generally forecast hedge fund returns via their sensitivities to traditional asset classes as these strategies invest in the traditional markets but employ alternative trading strategies (e.g., long/short). The slight reduction in many hedge fund strategy returns over last year is a reflection of the revisions we have made to global stock and bond market forecasts. We continue to expect these strategies to offer a favorable risk/return profile due to their ability to exploit market opportunities not available to traditional asset class managers.

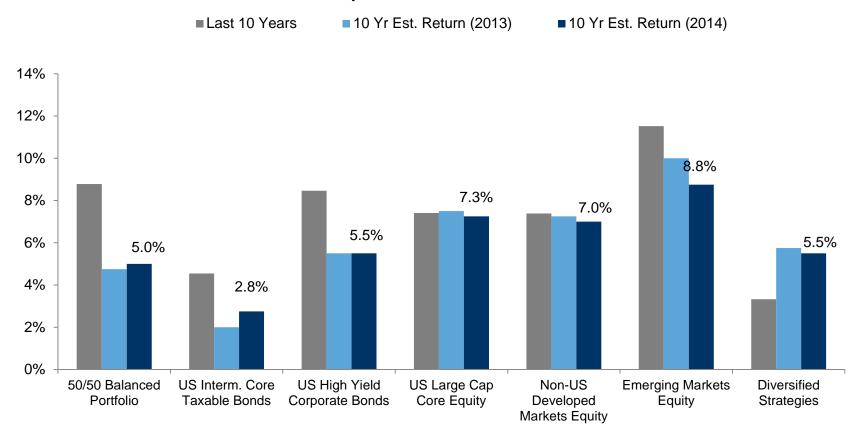
#### Uninvested cash to impact private equity returns

Although we expect merger and acquisition activity to recover over our forecast time horizon, higher than average uninvested but committed cash allocations — which hit a record in 2013 — are expected to weigh on returns.



# **Estimated Capital Market Returns – In Comparison**

## **Compound Annualized Returns**



#### Notes:

Estimated returns reflect SunTrust's current average annual return assumptions (calculated using a geometric mean) over the next 10 years for each asset class as of January 2014, are not guaranteed and are subject to revision without notice. Historical returns are for last ten years ending December 31, 2013. Data sources: Morningstar, CSFB/Tremont Hedge Index, Hedge Fund Research, Inc., MSCI, JP Morgan, S&P/Citigroup



# 2014 Asset Class Return Expectations



## **Ten-Year Fixed Income Returns**

Our process for forecasting fixed income returns begins with the anticipated path of interest rates given the current stage of the business cycle and monetary policy expectations. We then incorporate current yield levels, appropriate spreads and default rates. For non-US fixed income asset classes, we also consider a currency impact.

	2014 Ten-Year Forward Return Assumptions											
	Cash	US Govt Bonds	US Muni Bonds	US IG Corporate Bonds	US Mortgage -Backed Bonds	US Core Int. term Taxable Bonds	US High Yield Corporate Bonds	Non-US Developed Markets Bonds	Emerging Markets Bonds Loc Cur			
Income	1.25%	2.75%	3.25%	4.25%	4.00%	3.50%	8.00%	2.25%	6.25%			
Price	0.00%	-0.75%	-0.50%	-0.50%	-1.00%	-0.75%	-2.50%	-0.25%	0.25%			
Currency								0.25%	-0.50%			
Total Return	1.25%	2.00%	2.75%	3.75%	3.00%	2.75%	5.50%	2.25%	5.75%			
Default Rate							3.50%					
Beginning Yield (12/31/2013)	0.07%	1.43%	2.39%	3.26%	3.26%	2.48%	5.67%	1.69%	7.13%			



## **US Intermediate Term Core Taxable Bond Returns**

Our estimate for core taxable bond returns has been raised primarily due to higher beginning period yields and the assumption of only one full tightening cycle vs. two in last year's return.

	Last 25 Years	Last 10 Years	Last 5 Years	Exp. 10-Yr Return (2013)	Exp. 10-Yr Return (2014)	Rationale
Income Return	5.99%	4.29%	3.39%	3.50%	3.50%	<ul> <li>Although we begin our forecast horizon with a higher starting yield than last year, yield levels throughout the 10 year forecast period are expected to normalize at lower absolute levels than we have seen historically.</li> <li>Moreover, we have incorporated only one Fed tightening cycle in our forecast (which raises yields) as we have pushed out the assumed timing of the next recession.</li> </ul>
Price Return	0.79%	0.24%	1.02%	-1.50%	-0.75%	<ul> <li>The 10-year Treasury yield rose 125 basis points in 2013. The higher starting yield serves to lessen the impact of future negative price returns (as interest rates rise, bond prices fall).</li> </ul>
Total Return	6.83%	4.55%	4.44%	2.00%	2.75%	
Beginning Yield	9.68%	4.15%	3.99%	1.74%	2.48%	<ul> <li>Yields have trended down since the early 1980s and likely hit an inflection point in 2012.</li> </ul>

Source: FactSet, Morningstar and SunTrust Portfolio Strategy Group Data as of December 31, 2013 unless otherwise noted; yields are yield to worst.



# **Intermediate Term Municipal Bond Returns**

Our estimate for municipal bond returns has been raised primarily due to higher current yields and the assumption of only one full tightening cycle vs. two in last year's return.

	Last 20 Years	Last 10 Years	Last 5 Years	Exp. 10-Yr Return (2013)	Exp. 10-Yr Return (2014)	Rationale
Income Return	N/A	4.64%	4.49%	3.25%	3.25%	<ul> <li>Although we begin our forecast horizon with a higher starting yield than last year, yield levels throughout the 10 year forecast period are expected to normalize at lower absolute levels than we have seen historically.</li> <li>We further expect municipal bond yields to remain below government bonds of similar duration as the recently observed premiums revert to longer-term historical average spreads.</li> </ul>
Price Return	N/A	-0.54%	0.30%	-1.25%	-0.50%	<ul> <li>The 10 year Treasury yield rose 125 basis points in 2013. The higher starting yield serves to lessen the impact of negative price returns (as interest rates rise, bond prices fall).</li> </ul>
Total Return	4.93%	4.07%	4.80%	2.00%	2.75%	
Beginning Yield	4.51%	2.99%	3.73%	1.65%	2.39%	<ul> <li>Yields have trended down since the early 1980s and likely hit an inflection point in 2012.</li> </ul>
Beginning Ratio to 10- Year Treasury	0.78	0.70	1.66	0.94	0.79	The ratio of the municipal bond to 10-year     Treasury yields declined over the last year as US     Treasury yields rose.

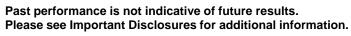
Source: FactSet, Morningstar and Portfolio Strategy Group. Data as of December 31, 2013 unless otherwise noted; yields are yield to worst. A portion of income may be subject to state taxes and federal alternative minimum tax (AMT) for individuals and corporations. Capital gains earned on tax exempt investments are taxable.

# **US High Yield Corporate Bond Returns**

We have not changed our estimate for high yield bond returns. Spreads and default rates are expected to normalize over the forward ten-year period.

	Last 25 Years	Last 10 Years	Last 5 Years	Exp. 10-Yr Return (2013)	Exp. 10-Yr Return (2014)	Rationale
Income Return	9.40%	8.50%	8.44%	8.00%	8.00%	<ul> <li>Although yields declined in 2013, the reduction was not material enough to impact income return assumptions over our forecast period. In addition, estimated interest rate levels are expected to be below those of long-run history resulting in an income return similar to that over that last five years.</li> <li>Our income return includes a default assumption (which can reduce realized income) that is above today's very low levels and in line with longer term averages as we reconcile strong current corporate fundamentals with a ten-year forecast period.</li> </ul>
Price Return	-0.52%	-0.04%	9.49%	-2.50%	-2.50%	<ul> <li>Current spreads are below long-term averages and are expected to rise over time in conjunction with changes in the economic cycle and the normalization of interest rates.</li> </ul>
Total Return	8.84%	8.46%	18.65%	5.50%	5.50%	
Beginning Yield	13.39%	7.56%	19.54%	6.11%	5.67%	Yields are near all-time secular lows.
Default Rate (Average)	3.9%	2.3%	3.2%	3.5%	3.5%	Default rates are at historical lows.

Source: FactSet, Morningstar and SunTrust Portfolio Strategy Group Data as of December 31, 2013 unless otherwise noted; yields are YTW except for 25-year figure.





# **Non-US Developed Markets Bond Returns**

Our estimated non-US developed markets bond returns have declined slightly this year primarily due to a lower currency return assumption offset by a higher starting yield and the assumption of only one full tightening cycle.

	Last 25 Years	Last 10 Years	Last 5 Years	Exp. 10-Yr Return (2013)	Exp. 10-Yr Return (2014)	Rationale
Income	5.06%	3.14%	2.82%	2.25%	2.25%	The non-US developed markets bond market is dominated by the euro zone and Japan. Our income return assumption reflects a monetary policy environment that remains accommodative relative to that in the US (e.g., lag the path of US rates).
Price	0.67%	0.35%	0.37%	-0.75%	-0.25%	<ul> <li>We have raised our bond price assumption (less negative) due to higher starting yields and the assumption of only one tightening cycle over our ten- year forecast horizon. We assume that interest rates in non-US developed markets will rise after US rates, reflecting slower relative growth.</li> </ul>
Currency Return	0.42%	0.60%	-0.93%	1.00%	0.25%	We have lowered currency return assumptions. A more negative outlook on the yen (over a third of the market) has been incorporated as Japan continues an aggressive monetary policy. Other regions' currencies are near fair value, implying a modestly positive gain over the long-term period.
Total Return	6.18%	4.10%	2.27%	2.50%	2.25%	
Beginning Yield	6.51%	2.62%	2.24%	1.49%	1.69%	<ul> <li>Yields have trended down since the early 1980s and are likely to remain low longer than US interest rates due to slower economic growth.</li> </ul>

Source: FactSet, Morningstar, BofAML and SunTrust Portfolio Strategy Group; component returns are estimated. Data as of December 31, 2013 unless otherwise noted **Past performance is not indicative of future results. Please see Important Disclosures for additional information.** 



# **Emerging Markets Bond Local Currency Returns**

Similar to non-US developed markets bonds, our estimated emerging markets bond returns have declined this year primarily due to a lower currency return component offset partly by higher beginning yields.

	Last 10 Years	Last 5 Years	Exp. 10-Yr Return (2013)	Exp. 10-Yr Return (2014)	Rationale
Total Return (Local Currency)	9.01%	8.63%	5.75%	6.25%	<ul> <li>We have raised our local currency return estimate primarily due to higher starting yields and our expectation for yields to remain relatively high as emerging market central banks are required to keep rates attractive to outside investment.</li> <li>There is also an expectation for modest spread widening as the developed markets eventually withdraw monetary stimulus, which elevates the yield assumption.</li> </ul>
Currency Return	-0.39%	-1.05%	0.50%	-0.50%	<ul> <li>Although emerging market currencies have deteriorated since 2011, valuations do not yet appear undervalued.</li> <li>This valuation condition along with our relatively positive outlook for the US dollar lead us to lower our currency return assumption, which we expect to be a slight negative for US based investors.</li> </ul>
Total Return	8.62%	7.58%	6.25%	5.75%	
Beginning Yield	7.01%	7.21%	5.74%	7.13%	Yields have moved higher since the US Federal Reserve announced its intent to taper bond purchases in May 2013.



# **Ten-Year Equity Returns**

Our process for forecasting equity returns begins with an evaluation of the earnings cycle. We then incorporate profit growth, valuation and dividend assumptions. For non-US equities, we also consider a currency impact.

	2014 Te	en-Year Forward Re	eturn Assumptions	5	
	US Large Cap Core Equity	US Mid Cap Core Equity	US Small-Cap Core Equity	Non-US Developed Markets Equity	Emerging Markets Equity
Corporate Earnings Growth	5.00%	5.50%	5.75%	4.00%	6.50%
Valuation Repricing	0.00%	0.00%	- 0.25%	-0.25%	-0.25%
Dividend Yield	2.25%	1.85%	1.50%	2.75%	2.50%
M&A Premium		0.65%	1.00%		
Currency				0.50%	0.00%
Total Return	7.25%	8.00%	8.00%	7.00%	8.75%



# **US Large Cap Core Equity Returns**

Our outlook for US large cap core equity returns includes a revision to our valuation repricing (multiples) component assumptions. Stable corporate earnings growth and yields aid equity returns long term.

	Last 25 Years	Last 10 Years	Last 5 Years	Exp. 10-Yr Return (2013)	Exp. 10-Yr Return (2014)	Rationale
Corporate Earnings Growth	6.75%	6.70%	17.80%	5.00%	5.00%	<ul> <li>Our corporate earnings growth assumption remains steady at 5%. This is at the lower end of a typical earnings cycle range given moderate global economic growth forecasts and elevated margins, which we believe have peaked.</li> <li>Additionally, we expect corporate earnings growth to remain in line with nominal GDP growth over the investment horizon.</li> </ul>
Valuation Repricing	1.27%	-1.38%	-2.11%	0.25%	0.00%	<ul> <li>Our model adjusted equity risk premium declined in 2013 amidst strong equity returns suggesting neutral P/E repricing long-term.</li> </ul>
Dividend Yield	2.24%	2.09%	2.25%	2.25%	2.25%	<ul> <li>Dividend yields should keep pace with recent historical averages due to investor demand for yield and healthy balance sheet cash positions.</li> <li>Moreover, we expect the elevated growth rate in dividends to revert closer to historical averages and remain in line with earnings growth (~5.0%).</li> </ul>
Total Return	10.26%	7.41%	17.94 %	7.50%	7.25%	



# **US Small Cap Core Equity Returns**

Our outlook for US small cap core equity returns includes a revision to our valuation repricing (multiples), dividend yield and M&A premium assumptions. Stable earnings and dividend yields should aid small-cap returns.

	Last 20 Years	Last 10 Years	Last 5 Years	Exp. 10-Yr Return (2013)	Exp. 10-Yr Return (2014)	Rationale
Corporate Earnings Growth	6.75%	6.80%	7.25%	5.75%	5.75%	<ul> <li>Similar to our outlook for large-cap equity, our corporate earnings growth rate remains at the lower end of a typical earnings cycle range given moderate economic growth forecasts.</li> <li>We expect small-cap earnings to enjoy higher growth relative to larger-cap companies due to lower exposure to international markets.</li> </ul>
Valuation Repricing	0.54%	0.50%	9.59%	0.05%	-0.25%	<ul> <li>A lower model adjusted equity risk premium in 2013 amidst strong equity returns suggests reducing our valuation repricing near term.</li> <li>With the extended gains in small-caps relative to large-caps, we expect a modest contraction in multiples in the next cycle.</li> </ul>
Dividend Yield	1.48%	1.42%	1.65%	1.45%	1.50%	<ul> <li>We expect dividend yields to keep pace with recent historical averages due to investor demand for yield and healthy balance sheet cash positions.</li> </ul>
M&A Premium*	0.50%	0.35%	1.59%	0.75%	1.00%	<ul> <li>The recovery in M&amp;A activity from the 2009 trough level should continue due to high cash levels, relatively low levels of debt and attractive borrowing rates.</li> </ul>
Total Return	9.27%	9.07%	20.08%	8.00%	8.00%	

^{*}The merger and acquisition premium is not available for the 10- and 20-year periods and is an estimate derived from the other total return components. Source: FactSet, Morningstar, BofA-Merrill Lynch Securities and SunTrust Portfolio Strategy Group Data as of December 31, 2013 unless otherwise noted



# **Non-US Developed Markets Equity Returns**

We expect non-US developed markets equity returns to be below those of the US due to growth restraining factors – ongoing structural issues in Europe, poor demographic trends, and high sovereign debt loads.

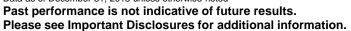
	Last 25 Years	Last 10 Years	Last 5 Years	Exp. 10-Yr Return (2013)	Exp. 10-Yr Return (2014)	Rationale
Corporate Earnings Growth	3.67%	6.67%	-4.70%	4.00%	4.00%	<ul> <li>Earnings growth is expected to be close to the long- term average and below that of the US as headwinds including structural issues in the euro zone (the largest region), poor demographic trends, and heavy sovereign debt loads create a less favorable growth environment for corporations.</li> </ul>
Valuation Repricing	-1.50%	-3.30%	13.39%	-0.75%	-0.25%	<ul> <li>Price-to-earnings ratios expanded last year as earnings improved. Valuations are expected to be in line with the 10-year average discount to the US markets which entails a slight contraction.</li> </ul>
Dividend Yield	2.44%	3.22%	3.50%	3.00%	2.75%	<ul> <li>The dividend yield has been lowered in line with earnings growth and valuation relationships.</li> </ul>
Currency Return	0.69%	0.86%	1.00%	1.00%	0.50%	We have lowered expected returns from currency as a more negative outlook on the yen has been incorporated due to aggressive monetary policy. Other regions' combined currencies are near fair value, implying a modestly positive gain over the long-term.
Total Return	5.32%	7.39%	12.96%	7.25%	7.00%	



# **Emerging Markets Equity Returns**

We expect emerging markets equity returns to be above those of the developed markets.

	Last 18¼ Years	Last 10 Years	Last 5 Years	Exp. 10-Yr Return (2013)	Exp. 10-Yr Return (2014)	Rationale
Corporate Earnings Growth	8.84%	10.73%	4.04%	8.00%	6.50%	<ul> <li>We expect earnings growth to be below the long-term average as many emerging market economies restructure toward stable yet lower-growth domestically focused models. Also impacting earnings growth rates are our expectations for weaker commodity prices, tighter US monetary policy, and a mature credit cycle creating a less favorable environment for economic growth.</li> </ul>
Valuation Repricing	-1.57%	-2.15%	7.31%	-1.00%	-0.25%	<ul> <li>With the decline in the price-to-earnings ratio last year, we have reduced the expected contraction. However, currency volatility along with higher inflation and interest rates could weigh on valuations, holding them to a below-average discount to the US.</li> </ul>
Dividend Yield	2.56%	2.77%	2.74%	2.50%	2.50%	<ul> <li>Dividend yields are not expected to change materially from current levels.</li> </ul>
Currency Return	-2.67%	0.14%	0.38%	0.50%	0.00%	<ul> <li>Although emerging market currencies have deteriorated since 2011, valuations do not yet appear undervalued.</li> <li>This valuation condition along with our relatively positive outlook for the US dollar lead us to lower our currency return assumption.</li> </ul>
Total Return	6.94%	11.52%	15.15%	10.00%	8.75%	

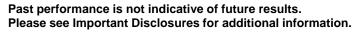




# **Commodity Futures Returns**

The commodity return has been lowered slightly on expectations of moderate global growth, a stronger US dollar, and an improved supply landscape.

	Last 23 Years	Last 10 Years	Last 5 Years	Exp. 10-Yr Return (2013)	Exp. 10-Yr Return (2014)	Rationale
Spot	6.22%	8.81%	9.22%	11.00%	3.50%	While it is fair to expect periods of cyclical price surges due to geopolitical risks and periodic supply/demand imbalances, we expect spot prices to trend below nominal global GDP growth over the forward time period. Moderate levels of global growth, a stronger US dollar, and increasing supplies are expected to pressure commodity prices.
Roll	-4.91%	-8.76%	-7.13%	-8.25%	-1.00%	<ul> <li>With evidence of less institutional investment interest and significant outflows in 2013 (35% of assets under management), our roll return assumption is reduced.</li> <li>Furthermore, as more supply comes on line, the roll return is expected to be less negative.</li> </ul>
Spot + Roll Return	1.00%	-0.72%	1.42%	2.75%	2.50%	Negative roll returns have significantly offset spot price gains over time.
Collateral (T-Bill)	3.09%	1.60%	0.09%	1.25%	1.25%	Short-term rates are expected to remain at low levels through much of our ten-year forecast horizon.
Total Return	4.12%	0.87%	1.51%	4.00%	3.75%	





## **Real Asset Returns**

Our outlook for real assets is supported by reasonably favorable property market fundamentals. Returns have been adjusted, however, for modestly lower inflation expectations and the likelihood of rising global policy rates.

	Last 25 Years	Last 10 Years	Last 5 Years	Exp. 10-Yr Return (2013)	Exp. 10-Yr Return (2014)	Rationale						
US Real Estate Securities	10.53%	8.61%	16.90%	6.75%	6.75%	<ul> <li>Income is expected to remain the major driver of total return and is forecast to be 4.50%. Inflation, which also influences returns via rents, property values and cap rates has been have adjusted modestly lower negatively impacting returns.</li> <li>Given favorable fundamentals and outsized underperformance vs. broader equities, we expect higher valuation multiples for real estate securities.</li> </ul>						
Global Real Estate Securities	10.18%*	8.95%	16.75%	NA	6.00%	<ul> <li>Modest performance differential to US real estate securities over time.</li> <li>Global real estate securities tend to be more sensitive to interest rates than US real estate securities and the potential for higher global rates is expected to pressure the segment.</li> </ul>						
Private Real Estate*	7.47%	8.66%	0.83%	5.00%	4.75%	<ul> <li>Despite supportive property fundamentals, the sector has more sensitivity to rising rates than US real estate securities and could be challenged.</li> </ul>						
Timberland*	11.77%	8.14%	1.82%	6.50%	6.25%	<ul> <li>Timberland returns are driven by inflation, land appreciation and timber growth. Our inflation expectation is combined with our 4% estimate of tree growth (in line with historical averages). We do not expect material land appreciation.</li> </ul>						

^{*}Global real estate securities have an inception of January 1993. Private real estate and timberland data as of September 30, 2013. Source: FactSet, Morningstar, BofA-Merrill Lynch Securities and SunTrust Portfolio Strategy Group Data as of December 31, 2013 unless otherwise noted



# **Estimated Alternative Strategy Returns**

Our process for forecasting alternative strategy returns leverages a regression model which incorporates sensitivities to traditional financial assets and explains almost all of the variability of alternative strategy returns through the cash, global equity and bond markets over time.

	Last 20 Years	Last 10 Years	Last 5 Years	Exp. 10-Yr Return (2013)	Exp. 10-Yr Return (2014)
Diversified Hedge	5.05%	3.33%	4.72%	5.75%	5.50%
Low Vol Hedge	5.19%	2.72%	4.52%	4.50%	3.75%
Hedged Equity	5.92%	3.94%	5.47%	6.75%	6.25%
Credit Strategies	9.73%	7.59%	12.12%	6.25%	6.00%
Managed Futures	5.09%	3.15%	-1.02%	6.50%	5.50%
Private Equity ¹	12.39%	14.65%	5.85%	9.50%	8.75%

¹Cambridge Private Equity series data as of September 30, 2013 Source: Morningstar, SunTrust Portfolio Strategy Group Data as of December 31, 2013 unless otherwise noted

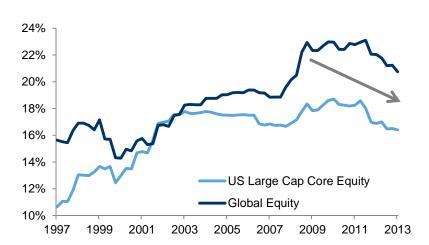


# **Risk and Correlation Statistics Suggest Improved Diversification**

Our assumptions for risk and correlations begin with an evaluation of recent historical data. As appropriate, we then make adjustments – this can include raising the risk assumptions for certain asset classes such as high-yield bonds, certain hedge funds and private equity to account for illiquidity and lagged pricing.

We expect equity risk to return to more normalized levels in the years ahead as heightened volatility since the financial crisis further abates.

Rolling Ten-Year Risk (%)
Data through December 31, 2013



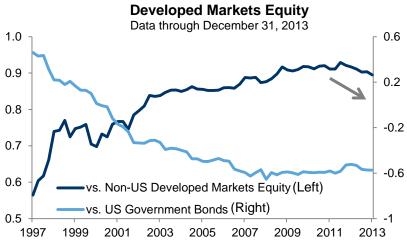
Source: Morningstar, SunTrust Portfolio Strategy Group Data as of December 31, 2013 unless otherwise noted

Past performance is not indicative of future results.

Please see Important Disclosures for additional information.

Correlations, similarly elevated since the financial crisis, are expected to moderate as fundamentals play a larger role in asset class returns going forward, improving diversification.





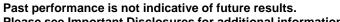


# **Correlation Matrix**

	ASSET CLASS	Cash	US Core Taxable Bonds	US Interm. Gov't Bonds	Interm Term Muni Bonds	HighYield Muni Bonds	US High Yield Corp Bonds	Non-US Dvlpd Markets Bonds	Emerging Markets Bonds	Global Equity	US Large Cap Core Equity	US Mid Cap Core Equity	US Small Cap Core Equity	US Real Estate Sec.	Non-US Dvlpd Markets Equity	Emerging Markets Equity	Non-US Dvipd Markets Small Cap Equity	Commodities	Managed Futures	Low Volatility Strategies	Diversified Strategies	Hedged Equity	Private Equity
	Cash	1.00	0.05	0.11	-0.01	-0.11	-0.17	0.13	0.14	-0.02	-0.11	-0.13	-0.13	-0.04	0.02	0.13	-0.08	0.09	0.15	0.00	0.10	0.11	0.25
	US Core Taxable Bonds	0.05	1.00	0.86	0.89	0.09	-0.02	0.57	0.14	-0.19	-0.26	-0.27	-0.31	0.03	-0.16	-0.03	-0.15	-0.17	0.27	-0.26	-0.25	-0.22	-0.29
ME	US Interm. Gov't Bonds	0.11	0.86	1.00	0.79	-0.24	-0.45	0.47	-0.20	-0.56	-0.58	-0.61	-0.59	-0.27	-0.52	-0.44	-0.52	-0.41	0.29	-0.58	-0.58	-0.55	-0.53
FIXED INCOME	Interm Term Muni Bonds	-0.01	0.89	0.79	1.00	0.09	0.05	0.57	0.12	-0.18	-0.22	-0.25	-0.28	-0.02	-0.16	-0.03	-0.18	-0.24	0.24	-0.22	-0.28	-0.24	-0.35
<u></u>	HighYield Muni Bonds	-0.11	0.09	-0.24	0.09	1.00	0.66	-0.06	0.47	0.51	0.48	0.54	0.43	0.59	0.47	0.56	0.51	0.34	-0.16	0.58	0.54	0.49	0.49
X:	US High Yield Corp Bonds	-0.17	-0.02	-0.45	0.05	0.66	1.00	0.04	0.58	0.69	0.63	0.69	0.59	0.51	0.65	0.75	0.67	0.48	-0.14	0.75	0.63	0.63	0.44
	Non-US Dvlpd Markets Bonds	0.13	0.57	0.47	0.57	-0.06	0.04	1.00	0.46	0.17	0.05	0.03	0.01	0.17	0.26	0.22	0.22	0.12	0.39	-0.08	-0.04	0.01	0.02
	Emerging Markets Bonds	0.14	0.14	-0.20	0.12	0.47	0.58	0.46	1.00	0.78	0.67	0.71	0.66	0.67	0.79	0.83	0.76	0.46	0.27	0.58	0.65	0.69	0.70
	Global Equity	-0.02	-0.19	-0.56	-0.18	0.51	0.69	0.17	0.78	1.00	0.96	0.97	0.90	0.74	0.98	0.90	0.94	0.59	0.05	0.77	0.84	0.88	0.80
	US Large Cap Core Equity	-0.11	-0.26	-0.58	-0.22	0.48	0.63	0.05	0.67	0.96	1.00	0.97	0.94	0.77	0.89	0.77	0.84	0.49	-0.01	0.68	0.76	0.79	0.75
	US Mid Cap Core Equity	-0.13	-0.27	-0.61	-0.25	0.54	0.69	0.03	0.71	0.97	0.97	1.00	0.96	0.79	0.92	0.82	0.90	0.56	0.01	0.77	0.83	0.85	0.78
EQUITY	US Small Cap Core Equity	-0.13	-0.31	-0.59	-0.28	0.43	0.59	0.01	0.66	0.90	0.94	0.96	1.00	0.82	0.85	0.72	0.83	0.43	0.02	0.64	0.71	0.74	0.72
l al	US Real Estate Sec.	-0.04	0.03	-0.27	-0.02	0.59	0.51	0.17	0.67	0.74	0.77	0.79	0.82	1.00	0.71	0.62	0.68	0.38	-0.05	0.39	0.49	0.51	0.60
	Non-US Dvlpd Markets Equity	0.02	-0.16	-0.52	-0.16	0.47	0.65	0.26	0.79	0.98	0.89	0.92	0.85	0.71	1.00	0.90	0.96	0.58	0.08	0.75	0.83	0.87	0.79
	Emerging Markets Equity	0.13	-0.03	-0.44	-0.03	0.56	0.75	0.22	0.83	0.90	0.77	0.82	0.72	0.62	0.90	1.00	0.87	0.65	0.12	0.82	0.86	0.90	0.76
	Non-US Dvlpd Markets Small Cap Equity	-0.08	-0.15	-0.52	-0.18	0.51	0.67	0.22	0.76	0.94	0.84	0.90	0.83	0.68	0.96	0.87	1.00	0.58	0.11	0.76	0.83	0.87	0.76
₽ F	Commodities	0.09	-0.17	-0.41	-0.24	0.34	0.48	0.12	0.46	0.59	0.49	0.56	0.43	0.38	0.58	0.65	0.58	1.00	0.08	0.64	0.67	0.65	0.54
Ň	Managed Futures	0.15	0.27	0.29	0.24	-0.16	-0.14	0.39	0.27	0.05	-0.01	0.01	0.02	-0.05	0.08	0.12	0.11	0.08	1.00	0.13	0.19	0.20	0.17
E	Low Volatility Strategies	0.00	-0.26	-0.58	-0.22	0.58	0.75	-0.08	0.58	0.77	0.68	0.77	0.64	0.39	0.75	0.82	0.76	0.64	0.13	1.00	0.95	0.93	0.74
RA	Diversified Strategies	0.10	-0.25	-0.58	-0.28	0.54	0.63	-0.04	0.65	0.84	0.76	0.83	0.71	0.49	0.83	0.86	0.83	0.67	0.19	0.95	1.00	0.99	0.85
NON-TRADITIONAL	Hedged Equity	0.11	-0.22	-0.55	-0.24	0.49	0.63	0.01	0.69	0.88	0.79	0.85	0.74	0.51	0.87	0.90	0.87	0.65	0.20	0.93	0.99	1.00	0.84
S S	Private Equity	0.25	-0.29	-0.53	-0.35	0.49	0.44	0.02	0.70	0.80	0.75	0.78	0.72	0.60	0.79	0.76	0.76	0.54	0.17	0.74	0.85	0.84	1.00

#### Notes:

Estimated correlations reflect SunTrust's current assumptions for each asset class as of January 2014, are not guaranteed and are subject to revision without notice. Data as of December 31, 2013 with the exception of the Cambridge Associates US Private Equity Index (data as of September 30, 2013)



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International investing entails greater risk, as well as greater potential rewards compared to U.S. investing. These risks include potential economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in emerging market countries, since these countries may have relatively unstable governments and less established markets and economies.

Emerging Markets: Investing in the securities of such companies and countries involves certain considerations not usually associated with investing in developed countries, including unstable political and economic conditions, adverse geopolitical developments, price volatility, lack of liquidity, and fluctuations in currency exchange rates.

Fixed Income Securities are subject to interest rate risk, credit risk, prepayment risk, market risk, and reinvestment risk. Fixed Income Securities, if held to maturity, may provide a fixed rate of return and a fixed principal value. Fixed Income Securities prices fluctuate and when redeemed, may be worth more or less than their original cost.

High Yield Fixed Income Investments, also known as junk bonds, are considered speculative, involve greater risk of default and tend to be more volatile than investment grade fixed income securities.

Investing in smaller companies involves greater risks not associated with investing in more established companies, such as business risk, significant stock price fluctuations, and illiquidity.

Hedge funds may involve a high degree of risk, often engage in leveraging and other speculative investment practices that may increase the risk of investment loss, can be highly illiquid, are not required to provide periodic pricing or valuation information to investors, may involve complex tax structures and delays in distributing important tax information, are not subject to the same regulatory requirements as mutual funds often charge high fees which may offset any trading profits, and in many cases the underlying investments are not transparent and are known only to the investment manager.

Managed Futures and commodity investing involve a high degree of risk and are not suitable for all investors. Investors could lose a substantial amount of money in a very short period of time. The amount you may lose is potentially unlimited and can exceed the amount you originally deposit with your broker. This is because trading security futures is highly leveraged, with a relatively small amount of money controlling assets having a much greater value. Investors who are uncomfortable with this level of risk should not trade managed futures or commodities.

Past performance is not indicative of future results.

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Real Estate Investments are subject to special risks, including interest rate and property value fluctuations, as well as risks related to general economic conditions. Because of their narrow focus, sector investments tend to be more volatile than investments that diversify across many sectors and companies.

Mean reversion analysis is a mathematical concept that assumes an asset class's returns are temporary and will tend to move to the average over time. Mean reversion analysis involves identifying ranges for each component of return and then computing averages using analytical techniques. When recently observed returns are less than the average, the asset class's returns may be revised upward with the expectation that returns will rise. When recently observed returns are above the average, asset class's returns may be revised downward such that deviations from the average are expected to revert to the average.

Asset classes are represented by the following indexes. An investment cannot be made directly into an index.

- Cash is represented by the BofAML US Treasury Bill 3 Month index which is a subset of The Bank of America Merrill Lynch 0-1 Year US Treasury Index including all securities with a remaining term to final maturity less than 3 months.
- US Intermediate Term Core Taxable Bonds are represented by the Barclays US Aggregate Bond index which is the broadest measure of the taxable U.S. bond market, including most Treasury, agency, corporate, mortgage-backed, asset-backed, and international dollar-denominated issues, and maturities of one year or more.
- US Government Bonds are represented by the BarCap US Gov't Intermediate index which is an unmanaged index comprised of all publicly issued, non-convertible domestic debt of the U.S. government or any agency thereof, or any quasi-federal corporation and of corporate debt guaranteed by the U.S. government.
- US TIPS are represented by the Bank of America Merrill Lynch US Treasury Inflation Linked index which is an unmanaged index comprised of U.S. Treasury Inflation Protected Securities with at least \$1 billion in outstanding face value and a remaining term to final maturity of greater than one year.
- US Mortgage-Backed Securities are represented by the U.S. Mortgage-Backed Securities (MBS) Index which covers agency mortgage-backed pass-through securities (both fixed-rate and hybrid ARM) issued by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC).
- US Investment Grade Corporate Bonds are represented by the Barclays US Corporate Investment Grade index which is an unmanaged index consisting of publicly issued US Corporate and specified foreign debentures and secured notes that are rated investment grade (Baa3/BBB- or higher) by at least two ratings agencies, have at least one year to final maturity and have at least \$250 million par amount outstanding.
- US Leveraged Loans are represented by the Credit Suisse Leveraged Loan index which is a representative index of tradable, senior secured, U.S. dollar denominated non-investment-grade loans.
- US High Yield Corporate Bonds are represented by the BofAML US HY Master index which is an index that tracks US dollar denominated below investment grade corporate debt publicly issued in the US domestic market.
- Non-US Developed Markets Bonds are represented by the Citi WGBI NonUSD USD index which is an index covering thirteen government-bond markets: Australia, Austria, Belgium, Canada, Denmark, France, Germany, Italy, Japan, the Netherlands, Spain, Sweden, and the United Kingdom. For inclusion in this index, a market must total at least (U.S.) \$20 billion for three consecutive months.
- Emerging Markets Bonds are represented by the JP Morgan GBI EM Global index which is a comprehensive emerging market debt index that tracks local currency bonds issued by Emerging Market governments. It includes only those countries that are directly accessible by most of the international investor base and excludes countries with explicit capital controls, but does not factor in regulatory/tax hurdles in assessing eligibility.
- Intermediate Term Municipal Bonds are represented by the BarCap Municipal 5 Yr 4-6 index which is defined as composition of tax-exempt U.S. municipal bonds that have a remaining maturity of greater than or equal to 4 years and less than 6 years.
- High Yield Municipal Bonds are represented by the BarCap HY Municipal Bond index which is an unmanaged index made up of bonds that are non-investment grade, unrated, or rated below with a remaining maturity of at least one year.
- Global Equity is represented by the MSCI All World Country (ACWI) Index which is defined as a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. The MSCI ACWI Index consists of 44 country indices comprising 23 developed indices including Australia, France, Germany, Japan, the UK and the US and 21 emerging market country indices which include Brazil, India, Mexico, Taiwan and Turkey.
- US Large Cap Core Equity is represented by the Russell 1000 index which is a measure of the performance of the large-cap segment of the U.S. equity universe. It is a subset of the Russell 3000 Index and includes approximately 1000 of the largest securities based on a combination of their market cap and current index membership. The Russell 1000 represents approximately 92% of the U.S. market.



- US Mid Cap Core Equity is represented by the Russell Mid Cap index which is a measure of the performance of the mid-cap segment of the U.S. equity universe. The Russell Midcap is a subset of the Russell 1000 Index. It includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership. The Russell Midcap represents approximately 31% of the total market capitalization of the Russell 1000 companies.
- US Small Cap Core Equity is represented by the Russell 2000 index which is a measure of the performance of the small-cap segment of the U.S. equity universe. The Russell 2000 is a subset of the Russell 3000® Index representing approximately 10% of the total market capitalization of that index. It includes approximately 2000 of the smallest securities based on a combination of their market cap and current index membership.
- US Real Estate Securities are represented by the FTSE NAREIT All Equity REITs index which is defined as a comprehensive family of REIT performance indexes that span the commercial real estate space across the US economy, offering exposure to all investment and property sectors.
- Non US Developed Markets Equity is represented by the MSCI EAFE index which is defined as a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the US & Canada. The MSCI EAFE Index consists of the following 22 developed market country indices: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom.
- Emerging Markets Equity is represented by the MSCI EM index which is defined as a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey.
- Non-US Developed Markets Small Cap Equity is represented by the MSCI Small Cap Index which includes over 6,000 securities across developed and emerging markets and \$4.4 trillion in free-float market capitalization. Over 4,00 securities are outside of the US.
- Commodities are represented by the DJ UBS Commodity index which is a composition of futures contracts on physical commodities. It currently includes 19 commodity futures in seven sectors. The weightings of the commodities are calculated in accordance with rules that ensure that the relative proportion of each of the underlying individual commodities reflects its global economic significance and market liquidity.
- Global Real Estate Securities are represented by the Dow Jones Global Select Real Estate Securities Index which measures the performance of publicly traded real estate securities designed to serve as proxies for direct real estate investment. The index represents both equity real estate investment trusts (REITs) and real estate operating companies traded globally.
- **Timberland** is represented by the **NCREIF Timberland Index** which is a quarterly time series composite return measure of investment performance of a large pool of individual timber properties acquired in the private market for investment purposes only. All properties in the timberland index have been acquired, at least in part, on behalf of tax-exempt institutional investors.
- Managed Futures are represented by the DJ Credit Suisse Managed Futures index which is an asset-weighted hedge fund index derived from the TASS database of more than 5000 funds. The strategy invests in listed financial and commodity futures markets and currency markets around the world. The managers are usually referred to as Commodity Trading Advisors, or CTA's.
- Low Volatility Strategies are represented by the HFRI FOF: Conservative Index which is defined as strategy seeking consistent returns by primarily investing in funds that generally engage in more "conservative" strategies such as Equity Market Neutral, Fixed Income Arbitrage, and Convertible Arbitrage; exhibits a lower historical annual standard deviation than the HFRI Fund of Funds Composite Index. A fund in the HFRI FOF Conservative Index shows generally consistent performance regardless of market conditions.
- Diversified Strategies are represented by the HFRI Fund of Funds Diversified Index which is defined as strategy exhibiting investment in a variety of strategies among multiple managers; historical annual return and/or a standard deviation generally similar to the HFRI Fund of Fund Composite index; demonstrates generally close performance and returns distribution correlation to the HFRI Fund of Fund Composite Index. A fund in the HFRI FOF Diversified Index tends to show minimal loss in down markets while achieving superior returns in up markets.
- Hedged Equity is represented by the HFRI FOF: Strategic index which is defined as strategy seeking superior returns by primarily investing in funds that generally engage in more opportunistic strategies such as Emerging Markets, Sector specific, and Equity Hedge; exhibits a greater dispersion of returns and higher volatility compared to the HFRI Fund of Funds Composite Index. A fund in the HFRI FOF Strategic Index tends to outperform the HFRI Fund of Funds Composite Index in up markets and underperform the index in down markets.
- Credit Strategies are represented by the HFRI Distressed Debt/Restructuring Index which is focused on corporate fixed income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance or obliged (par value) at maturity as a result of either formal bankruptcy proceedings or financial market perceptions of near term proceedings.
- Private Equity is represented by the Cambridge Associates US Private Equity Index which is based on end-to-end calculation of performance data compiled from U.S. private equity funds (buyout, growth equity, private equity energy and mezzanine funds), including fully liquidated partnerships, formed between 1986 and 2012.



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# MINUTES MCKNIGHT BRAIN RESEARCH FOUNDATION BOARD OF TRUSTEES MEETING April 23, 2014

The Trustee's meeting of the McKnight Brain Research Foundation (MBRF) was called to order at 12:50 p.m. on April 23, in Gainesville, Florida, in the Board Room of the Hilton University of Florida Conference Center, Gainesville, FL.

The following members were present:

Dr. J. Lee Dockery, Trustee

Dr. Michael Dockery, Trustee

Dr. Nina Ellenbogen Raim, Trustee

Dr. Gene G. Ryerson, Trustee

Ms. Melanie Cianciotto, Corporate Trustee

SunTrust Bank Institutional Investment Solutions

#### Others attending:

Mr. Henry H. Raattama, Jr., Legal Counsel

Mr. Michael Hill, Managing Director, SunTrust Institutional Investment Solutions

#### 1. Investment Review

Mr. Hill presented the investment review and commented on key economic and investment factors for the fourth quarter (Attachment 1).

#### A. Market Environment

With strong headwinds, the S&P 500 Index advanced to a new all-time high in February and finished the quarter with a 1.8% gain. U.S. mid cap and small cap equities continued their advances returning 3.53% and 1.12% respectively, and outpaced International developed and emerging markets for the quarter and trailing year.

- Interest rates declined during the quarter and the yield curve flattened as long-term rates declined more than intermediate or short-term rates. The yield on the 10-year U.S. Treasury fell from 3.04% to 2.72% during the quarter. The Barclays Aggregate Bond Index returned 1.84%. High yield and corporate bonds continued to outperform.

 Alternative strategy returns were mixed during the quarter and generally underperformed a 50/50 stock/bond combination. The Hedge Fund Research Inc., Fund of Funds Index (HFRI FOF) was ahead at 0.24%. Hedged Equity strategies performed better with the HFRI Hedged Equity finishing the quarter up 1.35% Action Item 1: The trustees received the investment review for information (Attachment 1).

## 2. Approval of Minutes

The minutes of the February 12, 2014 meeting of the McKnight Brain Research Foundation were reviewed. The minutes were approved as presented (Attachment 2).

Action Item 2: The trustees approved the minutes of the February 12, 2014 meeting as presented (Attachment 2).

## 3. Minimum Distribution Calculation

The trustees reviewed the projected minimum distribution calculation for information (Attachment 3).

Action Item 3: The trustees reviewed the projected minimum distribution calculation for information (Attachment 3).

## 4. Travel Award Program Update

The trustees discussed at length the proposal submitted by Dr. Wright on behalf of the MBRF MRI Working Group to establish a McKnight Inter-Institutional Neuroimaging Core to standardize neuroimaging acquisition and analyses across Institutes and implement a McKnight Brain Aging Registry database of the oldest old (Attachment 4). The proposal contemplates a budget of \$466,612.46 in year one and \$465,147.15 in year two with budget allocations to personnel, supplies and patient care costs

The discussion concluded with the decision by the trustees to discuss the proposal to establish an Inter-Institutional Neuroimaging Core with the members of the Leadership Council at the April 25th Leadership Council meeting. With discussion, it is hoped the obstacles to consideration of the proposal can be sufficiently resolved and the proposal can be reconsidered at the August meeting of the trustees.

Action Item 4: The trustees will discuss the proposal to establish an Inter-Institutional Neuroimaging Core with the members of the Leadership Council at the April 25th Leadership Council meeting and reconsider the proposal at the August meeting of the trustees.

## 5. Electronic Records

Ms. Cianciotto informed the trustees that Foundation Center is in the process of upgrading the MBRF secure website. Once upgraded, Ms. Cianciotto will have the ability to load content to the website. The upgrade will also allow Ms. Cianciotto to bookmark the meeting package.

#### 6. Compensation Review

Ms. Cianciotto presented updated compensation information compiled from information obtained from the Association of Small Foundations (Attachment 5). The trustees discussed their current compensation. The nature of the work continues to emphasize the research grant support relative to the programs funded to date in fulfilling the mission of the MBRF. The scientific research being funded by the MBRF is producing more research outcomes, which the trustees must review and monitor without any reduction in the time devoted to management of the investments. The review of currently funded research projects, requests for new grant support, on site visits by the trustees and review of scientific reports for each of the MBRF funded programs are very important functions of the trustees and require continual monitoring. In order to fulfill the purpose and the mission of the MBRF, the trustees must continuously educate themselves as to the current status and future direction of the research initiatives in learning and memory loss in the aging. The trustees continue to expand and develop research partnerships to encourage increased interest and support of research in learning and memory in the aging.

The trustees discussed the number of hours each spends on Foundation business and confirmed that each spend, on average, a minimum of 4 to 8 hours per week on Foundation matters. The trustees agreed that the \$200 per hour benchmark for trustee compensation initially agreed to in 2000 is, low by today's standards. However, the current hourly rate of \$200 is definitely within the range of the hourly charge that the MBRF would incur if it retained persons, either as staff or independent contractors, with the necessary scientific knowledge and experience to provide the services to the MBRF provided by the trustees. Based on the amount of time devoted to the MBRF business and comparable charges for that type of scientific work and other duties and responsibilities, the trustees approved annual compensation of \$40,000 per trustee is reasonable and appropriate.

The trustees also approved the continued reimbursement of any out of pocket documented expenses, and travel costs, associated with MBRF business.

Action Item 5: The trustees received the updated Annual Compensation Survey for information and unanimously approved the current level of compensation at \$40,000 annually and the continued reimbursement of any out of pocket documented expenses incurred with MBRF business (Attachment 5).

## 7. University of Florida Reports

A. Evelyn F. and William L. McKnight Brain Institute (MBI)

MBRF April 23, 2014 1st Draft May 23, 2014 2nd Draft May 30, 2014 Tetsuo Ashizawa, MD, Director of the MBI and the Melvin Greer Professor and Chairman of the Department of Neurology met with the trustees to provide the trustees with an update on research activities and recruitment and to supplement his written annual report.

B. Evelyn F. McKnight Chair, Learning and Memory in Aging

Thomas Foster, PhD, Evelyn F. McKnight Chair and Professor, Department of Neuroscience, McKnight Brain Institute met with the trustees to provide an update on his research initiatives and to supplement his written annual report.

C. Cognitive Aging and Memory Clinical Translational Program (CAM-CTRP)

Marco Pahor, MD, Professor and Chair, Department of Aging and Geriatric Research, Director,
Institute on Aging and Scientific Coordinator, CAM-CTRP met with the trustees to provide an
update on the development of CAM-CTRP and the recruitment activities for a physician scholar
to advance the clinical translational emphasis of the CAM-CTRP.

Dr. Ron Cohen, Director of Cognitive Aging and Memory Clinical Translational Research Program (CAM-CTRP) met with trustees to provide an update on recruiting activities and to supplement his written annual report. Dr. Cohen reported a recently submitted grant to the NIH has received a perfect score and is expected to be approved for funding.

## 8. Upcoming Dates & Events

A. August 2014 Board of Trustees Meeting

The trustees have agreed to hold the August 2014 meeting of the MBRF in Washington, DC. The trustees will arrive the morning of August 13, 2014 and meet from 12:00 noon – 5:00 p.m. Dr. Wah will host the trustees for a reception and dinner on the evening of August 13th. The trustees will attend the Scientific Investigator's Meeting August 14th from 8:00 a.m. – 5:00 p.m. and again on August 15th from 8:00 a.m. to the early afternoon.

## B. October 2014 Board of Trustees Meeting

The trustees have agreed to hold the October 2014 meeting of the MBRF in Miami. The trustees will arrive the evening of October 13, 2014. The trustees will meet October 14, 2014 from 8:00 a.m. to 5:00 p.m. and have dinner at the Coral Reef Yacht Club. The trustees will visit the University of Miami on October 15, 2014 for a scientific program surrounding the installation ceremonies for the occupant of the endowed chair, pending approval of the Gift Agreement.

## C. Society for Neuroscience 2014 McKnight Poster Session

The poster/reception is an MBRF sponsored and hosted event for graduate students and faculty who will be attending the annual meeting of the SFN from each of the four institutions to which the MBRF provides funding. The reception will feature scientific poster displays from each of the four McKnight Brain Institutes. The trustees are invited to attend the event, which will be held on Sunday, November 16, 2014 at a SfN assigned hotel in Washington, DC.

## 9. University of Arizona Gift Agreement Update

Mr. Raattama provided the trustees with the latest draft of the University of Arizona gift agreement (Attachment 6). The trustees approved the draft as presented. Mr. Raattama will forward a clean copy of the gift agreement to the University of Arizona for their review, approval and execution.

Action Item 6: The trustees approved the draft of the University of Arizona gift agreement as presented (Attachment 6).

Action Item 7: Mr. Raattama will forward a clean copy of the gift agreement to the University of Arizona for their review, approval and execution.

## 10. University of Miami Gift Agreement Update

Dr. Lee Dockery provided the trustees with an update on the University of Miami gift agreement (Attachment 7). The draft agreement is currently in the process of being reviewed by the University of Miami.

There being no further business, the meeting adjourned at 4:45 p.m.

## **Summary of Action Items:**

Respectfully Submitted,

Melanie A. Cianciotto SunTrust Bank, Corporate Trustee McKnight Brain Research Foundation Minimum Distribution Calculation Fiscal years 2000 - 2014

## McKnight Brain Research Foundation

## **Projected Minimum Investment Return Calculations**

(As of 08/05/2014 for fiscal year ending 6/30/2015)

Average I	Fair Market Value	\$47,406,133.52
Less:	Cash held for charitable purposes (1 1/2 %)	(\$711,092.00)
Net value	of non-charitable use assets	\$46,695,041.51
√linimum	Investment Return (5%)	\$2,334,752.08
	investment return	\$2,334,752.08
Less:	investment return  Qualifying Distributions	\$2,334,752.08 (\$2,535,053.79) (\$200,301.71)
Minimum Less: sub total		(\$2,535,053.79)

McKnight Brain Research Foundation Historical Giffs Fiscal years 2000 - 2019

And the second s	IOM Study	\$87,713 (7/2012) \$700,000 (24/2013)														\$87,713								\$87,713 \$700,00	
	Inter-Institutional Bioinformatics Core	\$300,000 (9/12013) \$300,000 (9/1/2014)														eccoa cessoa	\$52,000							\$52,000 \$548,000	
The second secon	Epigenetic Working Group						•									\$18,915.98							agamatan dan dan dan dan dan dan dan dan dan d	\$18,915.98 \$0	Total Special Project Payments \$1,455,156.22
The Committee of the Co	MRV Standardization Working Group															\$20,403.05	\$1,094.20							\$21,497.25 \$0	Total Spec
	Cognitive Test Battery Working Group														\$22,756.59	\$4,273.80								\$27,030.39 \$0	u
Fiscal years 2000 - 2019	FNIH	\$5,000,000 (562208) \$5,000,000 (102013)											\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000		\$10,000,000 \$4,000,000	
	University of Mfami	\$5,000,000 (7/3/2003) \$2,000,000 (date tbd)***		Management			\$1,500,000	\$875,000	\$875,000	\$875,000	\$875,000													\$7,000,000 \$2,000,000	
	University of Florida	\$15,000,000	\$15,000,000																					\$15,000,000 \$0	ıyments* ,000
	University of Arizona	\$5,000,000 (104772006) \$300,000 (71402008) \$5,600,000 (5/1/2014)								\$1,000,000	\$1,000,000	\$1,300,000	\$1,000,000	\$1,000,000				\$200,000	\$1,200,000	\$1,200,000	\$1,000,000	\$1,000,000	\$1,000,000	\$14,500,000 \$5,600,000	Total Giff Payments* \$58,500,000
	University of Alabama	\$5,000,000 (\$145/2004) \$1,000,000 (1019/2005) \$6,000,000 (8/3/2009)						\$2,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,500,000	\$1,500,000	\$1,000,000	\$1,000,000	\$1,000,000							\$12,000,000	
		Commitments	7/1/99 -6/30/00	7/1/00 -06/30/01	7/1/01 - 06/30/02	7/1/02 - 6/30/03	7/1/03 - 6/30/04	7/1/04 - 6/30/05	7/1/05 - 6/30/06	7/1/06 - 6/30/07	7/1/07 - 6/30/08	7/1/08-6/30/09	7/1/09-6/30/10	7/1/10-6/30/11	7/1/11-6/30/12	7/1/12-6/30/13	7/1/13-6/30/14	7/1/14-6/30/15	7/1/15-6/30/16	7/1/16-6/30/17	711/17-6/30/18	7/1/18-6/30/19	7/1/19-6/30/20	Total Balance	

Remaining Balance of Commitments* \$11,600,000

Remaining Balance of Special Project Commitments \$1,248,000

^{*} through July 16, 2014 ** payout dates to be determined when Gift Agreement is finalized

# Tab 5

Will be distributed at August Meeting





Dr. Clinton Wright, M.D, M.S.

Scientific Director

Evelyn F. McKnight Brain Institute

Associate Professor

Departments of Neurology and Epidemiology & Public Health, Neuroscience Program

July 30, 2014

Board of Trustees
McKnight Brain Research Foundation

#### Dear Trustees:

As requested, please find attached a proposed timeline for the block grant to establish a McKnight Inter-Institutional Neuroimaging Core, and to implement the McKnight Brain Aging Registry database of the oldest old. We believe this effort will greatly enhance inter-institutional collaboration among the McKnight Brain Institutes while focusing on advancing the mission of the MBRF.

We are grateful for the positive feedback we received from the trustees of the MBRF during the April meeting, and we hope that the attached timeline will be helpful in further consideration of this block grant proposal. We look forward to answering any questions and/or making adjustments as requested by the Board.

Sincerely,

The McKnight MRI Working Group

Gene Alexander, Ph.D.

Fristina Visscher Kristina Visscher, Ph.D. Ronald Cohan, Ph.D.

Clinton Wright, M.D., M.S. (Contact Principal Investigator)

#### PROPOSED TIMELINE

# McKnight Brain Aging Registry and Inter-Institutional Neuroimaging Core Initiative

Summary: The McKnight Neuroimaging Working Group requests a block grant to be funded by the MBRF that will establish the McKnight Inter-Institutional Neuroimaging Core and Brain Aging Registry to advance cross-institute collaboration and support of the mission of the MBRF. Please refer to the proposal itself for details regarding our plan for the standardization of a Neuroimaging Protocol across all four McKnight Brain Institutes (MBIs), and the establishment of a McKnight Brain Aging Registry of the oldest old. Below we propose a timeline to accomplish our goals. To support the proposed timeline and facilitate progress for the Core and Registry development, we kindly request that the funds are allocated for use by the four McKnight Brain Institute sites over a 2.5 year period. We have made minor adjustments to the budget, but the total amount proposed in the budget submitted to the MBRF remains the same. We have summarized the funds requested in three pay periods spanning 2.5 years. However, we stand ready to provide additional details as may be required by the MBRF. Other than funds for new hires that may be required at the start of the project, we expect to be funded on an expense basis and will work with the MBRF to adjust the payment plan as needed.

Administrative Start-up (prior to funding): Estimated timeframe: Q4 2014 (9/1 to 12/31 2014)

If approved by the MBRF, we would immediately begin the administrative process and paperwork required to establish the block grant accounts to support the Core and Registry development. Based on experience with setting up the Epigenetics Core, we expect it will take approximately three months for the funds to become available at each site. During this period, the four principal investigators will establish regular meetings by phone and video conferences to discuss and plan each step in the initiation of the neuroimaging core and brain aging registry. We will also identify support personnel at each site. We will begin discussing ancillary studies that can be linked with the Registry and continue this process throughout the life of the Core.

Standardization Phase: Estimated timeframe: Q1-Q2 2015 (1/1 to 6/30 2015)

<u>Basic Infrastructure</u>: Once funds are available in Q1 2015, we will post any unfilled support staff positions. (NOTE: Depending on Human Resources requirements at each of the universities, funds available for the entire fiscal year may be required to approve and post specific new positions). Clinical Research Coordinators (CRC) and research assistants will begin work as soon as possible at each site to create and submit IRB protocols and create consent forms. During this phase, we will also put in place protocols for collecting and banking blood specimens.

MRI Standardization: Beginning about halfway through this phase (Q2 2015), investigators across MBIs will begin to refine the brain MRI protocols. Each site will carry out development scans to optimize imaging procedures at each MBI, and across sites (NOTE: MRI standardization and optimization will be an ongoing process that will continue beyond the test scanning into the data collection phase and beyond as quality assurance data becomes available). Quality assurance will be carried out on a regular basis and reviewed at multi-site meetings. A small amount of biostatistics and biophysics support will be needed at this time to analyze preliminary data. Beginning in this phase, investigators will plan to carry out site visits related to standardization of MRI protocols and to meet in-person, in addition to regular teleconferences.

Registry: The UM MBI database manager will develop and test the Registry database and work with CRCs at each of the MBIs to create a working web-based interface using the RedCap system. Advertising will begin at the appropriate time in this phase, based on the anticipated start date for recruitment. Capabilities for Registry data storage will be established.

Recruitment Phase: Estimated timeframe: Q3 2015 through Q2 2017 (7/1 2015 to 6/30 2017)

Registry: In this phase, we will recruit participants into the Registry. Based on our proposed budget and recruitment timeline we expect to complete registry recruitment in mid 2017. Advertising will be ongoing and funds for participant fees and parking will be needed. Salary support for neurology staff will begin at this time and continue throughout this phase. Blood sample processing and banking will begin as we recruit participants. Investigators will meet regularly by phone and video conference.

Future Directions: Once our recruitment goals have been met we plan to seek additional external funding from federal, state, and other sources to continue follow up and expansion of the cohort for use in ancillary translational studies of successful aging interventions. This will also be important in establishing cognitive and aging trajectories and base rates of age-related cognitive decline in advanced aging and to identify participants who continue to age successfully.

Payment Period	Uni	v of Miami	Uni	v of Arizona	Unit	v of Alabama	Unit	of Florida	All
January 1 - December 31, 2015	\$	91,146	\$	81,670	\$	83,519	\$	83,289	\$ 339,623
January 1 - December 31, 2016	\$	101,359	\$	103,738	\$	106,532	\$	103,531	\$ 415,159
January 1 - June 30, 2017	\$	45,913	\$	43,322	\$	44,524	\$	43,218	\$ 176,977
January 1, 2015 - June 30, 2017	\$	238,417	\$	228,730	\$	234,575	\$	230,038	\$ 931,760





Dr. Clinton Wright, M.D, M.S.

Scientific Director
Evelyn F. McKnight Brain Institute
Associate Professor
Departments of Neurology and Epidemiology & Public
Health, Neuroscience Program

April 21, 2014

Board of Trustees McKnight Brain Research Foundation

Dear Trustees:

Please find attached a proposal for a two-year block grant to establish a McKnight Inter-Institutional Neuroimaging Core to standardize neuroimaging acquisition and analyses across Institutes and implement a McKnight Brain Aging Registry database of the oldest old. The purpose of this grant is to collect comprehensive data on participants 85 years and older, including data on brain morphology and function, cognition, and vascular risk. We also propose to store blood for use in the McKnight Epigenetics Core and facilitate other cross-institutional collaborative projects.

We are grateful for the opportunity to submit this proposal for your consideration and believe that the implementation of the proposed inter-institutional effort has tremendous potential to advance collaborative efforts across the McKnight Brain Institutes to identify helpful interventions to reduce the effects of brain aging and age-related memory loss.

Sincerely,

The McKnight MRI Working Group

Gene Alexander, Ph.D.

Kristina Visscher, Ph.D.

Bristina Visscher

Clinton Wright, M.D., M.S. (Contact Principal Investigator)

Ronald Cohan, Ph.D.

#### **PROPOSAL**

# McKnight Brain Aging Registry and Inter-Institutional Neuroimaging Core Initiative

## Summary

The McKnight Neuroimaging Working Group requests a block grant to be funded by the MBRF that will establish and standardize a Common Neuroimaging Protocol across all four McKnight Brain Institutes (MBIs), establish a McKnight Brain Aging Registry of the oldest old that leverage the existence of multiple sites, and provide data to support proposals for translational research to the NIH and other funding sources to identify and evaluate effective interventions for age-related memory loss. Reliable information about the oldest old cohort has been lacking in the field, making estimations of base rates of brain aging difficult or impossible. The addition of a McKnight Brain Aging Registry will address this critical gap in the field, and act as a framework upon which new proposals and research projects can be based.

In this proposal we provide details of the process for getting this accomplished along with a proposed budget, a list of deliverables, and next steps. Our vision is to create a high profile, nationally recognized McKnight Registry linking together the four MBIs with a cohort to advance our understanding of successful cognitive aging and establish critically needed base rates of brain aging. The project will be led by four principal investigators (PI) from the McKnight Neuroimaging Working Group, one at each institute:

UA Tucson: Dr. Gene Alexander

UF: Dr. Ron Cohen

UAB: Dr. Kristina Visscher

UM: Dr. Clinton Wright (contact PI)

# **Background and Significance**

The MBIs are in a unique position to advance the field of research on age-related cognitive changes and successful aging through cross-institutional collaboration. Being in the mission of the MBRF, such cross-collaborative efforts represent a natural outgrowth of the work already being done at each of the four institutes. Importantly, by leveraging the resources across the four MBIs, it will be possible to accrue data from advanced elderly successful aging cohorts that could not be feasibly obtained in sufficient numbers by any one of the sites alone (or, frankly, by almost any other group in the world), thereby providing a much needed answer to the problem of recruiting a large enough sample within the age range that is required (85 plus) and without many of the common diseases associated with age that limit successful aging. The purpose of this block grant is to establish a McKnight Successful Aging Research Network across Institutes to not only facilitate generation of critical data that moves our understanding of successful aging, and in particular cognitive aging, forward, but also to provide the essential infrastructure to rapidly implement clinical trials focused on treating age-related cognitive losses or preventing further declines.

The aging of our population has been the subject of many headlines and it is not news to the MBRF board that older adults will continue to grow as a proportion of the total U.S. and world populations. The National Center for Health Statistics estimates that 16% of men and almost 30% of women age 50 will live to be 90 years old, while at the same time about 50% of those older than 85 will need help and supervision from another person (National Center for Health Statistics, 2006). While a great deal of NIH funding has been spent on the study of Alzheimer disease, an important disease affecting many older adults, this has limited available financial resources to study the determinants of successful aging and age-related losses in cognitive abilities. However, increasing data has

shown that even people independent at 90 years suffer functional declines, thereby limiting their ability to age *successfully* ¹.

Successful aging is a multidimensional construct that incorporates the cognitive, physical, and emotional domains and the aging process affects each ². The MBIs are in a unique position to study successful aging, age-related cognitive decline, and the effect of related losses on functional abilities through expertise available across the MBIs. McKnight investigators are at the forefront of research to understand age-related differences in cognitive performance ³. Also, our sites have expertise in the area of vascular cognitive impairment. It is increasingly recognized that age-related cognitive changes are affected by subclinical vascular brain damage and that such damage is very prevalent in the brains of older adults. This is not surprising since modifiable vascular risk factors, including hypertension, diabetes mellitus, dyslipidemia, and others are almost ubiquitous in the aged. Vascular damage affects and interacts with normal aging, as well as developing neurodegenerative disease, and importantly is preventable. Understanding the role of such damage in age-related cognitive losses is critical to identifying effective interventions and is an area that we can advance as a group.

Neuroimaging provides key biomarkers of aging that can be measured with magnetic resonance imaging (MRI) and positron emission tomography (PET) technology, including measures of agerelated brain volume loss ⁴, atrophy of the medial temporal lobe structures as typically occurs in Alzheimer disease, brain infarction ⁵, white matter lesions, and microbleeds that are the end result of exposure to vascular risk factors, and measures of network connectivity, function, and metabolism. Amyloid PET, and emerging biomarkers such as PET tracers that bind to Tau protein, are increasingly available and provide further understanding of how such developing pathology contributes to cognitive losses that are due to aging. All these structural and functional technologies are present at the four MBIs and are ready for optimization once the key infrastructure is in place to refine their application for multi-site studies of successful aging and age-related interventions ⁶.

## **Update on MRI Standardization Group**

With funding from an MBRF Travel Award, the Group met in-person in New Orleans, LA, in July 2012, where we examined issues surrounding MRI-centered research studies across the MBIs. We 1) reviewed current MR infrastructure at each MBI, 2) outlined deficiencies and obstacles to observational and interventional studies of age-related cognitive decline overall and across MBI sites, and 3) designed a plan to initially evaluate standardization of MR protocols across sites. After our initial meeting, we performed a feasibility study, gathering MRI data on one research subject who traveled to the four MBIs. We subsequently had a second meeting in Houston, in April 2013, after the data were collected. These data provided crucial information regarding compatibility of the different MR machines across MBIs and the technical issues that would need to be surmounted to make cross-institute collaboration valid and reliable.

At the time of the initial meeting our group saw as its mission to create an optimal MR protocol to facilitate cognitive aging studies that would have standardized neuroimaging acquisition, and could be implemented across sites, much in the way that the Cognitive Battery Working Group had begun to do. However, after our initial research scans were done it became clear that more data would be needed for the standardization, requiring many hours of scanner time, in order to collect a suitable number of participants. Due to the already established variability of MR data through the Alzheimer Disease Neuroimaging Initiative (ADNI) and the Biomedical Informatics Research Network (BIRN), as well as that evident from our cross-site scans, we began to identify the resources necessary to standardize neuroimaging of age-related changes across sites to support our advancing multi-site collaborative research across the MBIs.

Because of the recognition that additional infrastructure and a registry to be built across MBIs would be necessary to implement and elevate our plans, we began to explore ways in which such

infrastructure would bear fruit. Our understanding is that both commercial and federal funding opportunities exist for interventions that can ameliorate age-related cognitive decline. On the federal side, we initiated conversations with Dr. Molly Wagster at NIA and were encouraged to continue exploring NIH funding options. It is now our understanding that a multi-institute collaboration focused on successful aging may be a valuable asset to NIH if the next step involves creating a **network or multi-site resources** (i.e. the MBIs) that would allow for access to well characterized successfully aging study participants that could easily be incorporated into clinical trials and/or other interventional studies. Thus, the McKnight Brain Aging Registry would capitalize on the fact that all the essential pieces would be in place to engage participants to be involved in these studies while at the same time providing initial findings to advance the field of cognitive aging and provide the needed supportive data for larger observational studies to be funded by interested sponsors (i.e. NIH, DOD, AHA). There are a number of precedents for this at other NIH institutes, for example the NINDS NeuroNEXT sites of which U Miami is a center. We decided that rather than only standardize and collect neuroimaging data, a more extensive registry of data would be a tremendous asset to all MBI investigators and to the scientific community.

### **Current Infrastructure at MBIs**

There is substantial infrastructure at each site to aid the development of the proposed McKnight Neuroimaging Core and Brain Aging Registry. Similar to the Epigenetics Core infrastructure, the MR equipment at all four MBI sites is state of the art. Each site has at least one, and in some cases more than one, three Tesla research grade MR scanner. Clinical service capabilities (Clinical Research Centers for collecting information and specimens from participants), database infrastructure, and bioinformatics support are all available. In addition, human tissue banking for body fluid processing and storage of our core data is available.

Expertise is present in all key areas as mentioned above, but also including MR physics, high level statistics, database management, as well as the more focused expertise of the established McKnight investigators.

# Support requested from the MBRF

We have two primary goals. The first is to standardize MRI scanning capabilities across sites. This task is not insubstantial as there are multiple MR sequences and modalities that require standardization. To be able to gather this information across sites a number of sequences must be operationalized in common, while others require agreement on software approaches for post-processing of the scans. It is important to recognize that we plan to fully utilize information obtained from ADNI and other multi-site projects, but it is equally important to note that NO prior national efforts (i.e. ADNI, BIRN) have standardized such a deep array of MR capabilities.

Our second goal across MBIs is to establish the McKnight Brain Aging Registry, including essential initial data to demonstrate feasibility for cross-institutional studies to support future interventional proposals. We propose that the MBRF provide the necessary funds to build the Registry that will provide for 200 participants (50 per site) with the following characteristics:

#### Inclusion Criteria

- 1. Age 85 and over
- 2. Successfully aging physically
  - a. No major physical disability
  - b. Independent in basic activities of daily living
- 3. Successfully aging cognitively

- a. Normal cognition defined as not below 1.0 standard deviations for the age and education expected normative values for this group. Participants with and without subjective cognitive complaints will be included.
- b. Independent in instrumental activities of daily living

# Exclusion criteria

- No life threatening medical illness such as cancer, advanced heart disease or heart failure, or pulmonary disease
- 2. Unable to follow study protocol and instructions due to existing cognitive deficits, dysphasia, or hemineglect
- 3. Any uncontrolled medical condition expected to limit life expectancy or interfere with participation in the trial (i.e. unstable cancer, severe depression or anxiety by DSM-IV criteria)
- 4. Active substance abuse or alcohol dependence by DSM-IV criteria
- 5. Less than 6th grade reading level as assessed by the WRAT-IV necessary to complete the cognitive measures
- 6. Vision or hearing deficits that would preclude administration of the cognitive measures
- 7. Unwilling or unable to provide written informed consent

To establish the Registry will require each site to agree on all required infrastructure, establish a common database, create systems and policies for sharing data across sites, and put in place protocols for collecting human tissue for banking. Data will be collected using the Research Electronic Data Capture (REDCAP) system that is utilized by the home institutions housing all four MBIs. Neuroimaging data will be collected in a standardized way across sites.

We propose to collect the following data as part of the McKnight Brain Aging Registry:

- Multi-modal MR imaging data to measure brain profiles of volume, cortical thickness, white matter integrity, functional activity and connectivity, cerebral metabolism and pathology, cortical perfusion, and connectivity
- Cognitive data will leverage existing resources, including the NIH Toolbox Cognition Battery.
   This will be supplemented with tests agreed upon by the McKnight Cognitive Test Battery
   Work Group.
- 3. Motor and sensory data using the NIH Toolbox Motor and Sensory Batteries
- 4. Sociodemographic, behavioral rating scales, and vascular risk factor data
- Blood samples will be drawn, processed, and banked for collaborations with the Epigenetics
  Core, and to facilitate studies involving drug discovery and biomarkers of age-related
  cognitive decline

Timeline and Budget

We are requesting two years of support. As the effort of the PIs from each MBI site is already covered by available funds from either their university or existing MBI funds, the budget is requested to provide critical support for the development of a new database and common methods of collecting data for the proposed registry, including essential effort from key participating investigators, support staff, MR scanner time, image processing, recruitment of participants, and statistical support.

The general cost breakout <u>over two years</u> is as follows (please see site specific Business Plan below for more detail):

#### Personnel

<u>Faculty</u>: As noted above, percent effort is <u>not</u> requested for the four Multiple Principal Investigators (Alexander, Cohen, Visscher, Wright). However, depending on the site, we request 5-10% effort for key personnel in specific areas such as neurology, MR physics, computational resources, and statistics.

<u>Clinical Research Coordinator (CRC)</u>: Each site requests 50% effort for a CRC to establish and manage IRB protocols, recruit and consent participants, schedule scanner time, administer cognitive tests, and manage day to day operations of the study.

Research Assistant: We request 50% effort for research assistants at each site to carry out database management, transfer imaging and other data across sites, and for preparation and analysis of datasets. The RAs across sites will not be redundant, as expertise will be divided as appropriate for the specific strengths of each institution. For example, the RAs at different MBIs will focus on different sequences and approaches (e.g. fMRI, voxel based methods) consistent with the areas of expertise reflected at each MBI.

<u>Statistical support</u>: Statistical support and database management for all four sites will be managed through the UM MBI and an additional 5% effort for a statistician and 20% for a database manager is requested. These resources will be available to all other sites as needed.

# Neuroimaging

Brain MRI: Scanner time costs approximately \$500 per hour at each MBI and we propose to collect 200 scans (50 per site). We estimate being able to acquire all required MRI data within a 1.25 hour time slot.

Amyloid imaging (not budgeted): Scans cost approximately three to four thousand dollars per scan. At about \$700,000 for 200 scans this is prohibitive for this registry effort and we are NOT requesting funds for this purpose from the MBRF. However, understanding the burden of amyloid is of great importance in parsing the underlying causes of age-related memory loss, and we are currently working with a radiopharmaceutical company that is interested in investigator-initiated studies and we may be able to secure complementary funding for some amyloid PET scans to include in our McKnight Brain Aging Registry.

#### Database and regulatory documents

To establish a web-based database that can be accessed by investigators at all sites, the U.M. database manager will tie in with other sites using their local resources. The Research Electronic Data Capture (REDCap) system is implemented free of charge as part of core resources available through the UM Office of Research and all four sites are able to implement this system. We will also need to create IRB protocols and create consent forms in English. Because we have the ability to enrich our sample with Hispanic/Latino participants we will also create Spanish translations for our scales and tests.

## Blood sample processing and storage

Processing of blood samples will allow for DNA extraction, growth of cell lines, and use for other projects. Bloods will be processed locally and banked for future use.

#### Other

We have budgeted for other critical aspects of the core, including the purchase of neuropsychological test materials, data storage fees, participant recruitment, and advertising costs.

#### **Literature Cited**

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- 6. Visscher KM, Weissman DH. Would the Field of Cognitive Neuroscience Be Advanced by Sharing Functional Mri Data? *BMC medicine*. 2011;9:34. PMCID: 3080821

# BUSINESS PLAN McKnight Brain Aging Registry and Inter-Institutional Imaging Initiative

Our vision is to create a McKnight Brain Aging Registry that will prove a catalyst for studies across institutes and provide a resource for interventional and observational studies that enhance our understanding of age-related cognitive decline. Our mission is to standardize the acquisition of neuroimaging and key data and to create the infrastructure necessary for these data to be shared across MBIs. We also plan to collect DNA and blood specimens that will be available for use by the Epigenetics Core. We propose that the funds supporting this block grant are held in a common Inter-Institutional Neuroimaging Core account, and that the core PIs will each have the authority to receive funds to be disbursed from the core account. The core PIs will form an executive committee for the McKnight Inter-Institutional Neuroimaging Core to develop and implement resource sharing policies and provide oversight to facilitate full collaborative use of the core resources and registry data.

#### Deliverables

- 1. Standardized protocol for collecting multiple MR sequences relevant to age-related changes
- 2. Registry of people 85 and older with imaging, sociodemographic, anthropomorphic, vascular risk factor, cognitive, and physical function data available
- 3. Web-based system for accessing Registry data accessible to all MBI investigators
- 4. Blood samples with "buffy coat" and cell lines stored for future collaboration with the Epigenetics Core and other projects
- 5. Registry data to generate high impact publications and advance the field of cognitive aging and enhance recognition of the McKnight brand
- 6. Extramural funding applications will be submitted with the use of the Brain Aging Registry

Below please find site-specific budget information. If approved, more specific information regarding personnel and non-personnel charges will be provided.

# McKnight Brain Aging Registry and Inter-Institutional Neuroimaging Core Initiative University of Arizona Budget

Personnel	Effort		Year 1		Year 2		TOTAL
PI: Gene Alexander (no salary support requested)	5%	\$	-	\$	-	\$	- '
Neurologist: Alex Hishaw, M.D. (Co-I)	10%	\$	12,000.00	\$	12,360.00	\$	24,360.00
MR Physicist: Ted Trouard, Ph.D. (Co-i)	5%	\$	5,896.00	\$	6,072.88	\$	11,968.88
Clinical Research Coordinator	50%	\$	25,750.00	\$	26,522.50	\$	52,272.50
Biophysics/Research Assistant	50%	\$	22,500.00	\$	23,175.00	\$ .	45,675.00
Subtotal Personnel		\$	66,146.00	\$	68,130.38	\$	134,276.38
Fringe Benefits	Effort		Year 1		Year 2		TOTAL
PI: Gene Alexander (no salary support requested)	5%	. \$	-	\$	-	\$	-
Neurologist: Alex Hishaw, M.D. (Co-I)	10%	\$	1,776.00	\$	1,829.28	\$	3,605.28
MR Physicist: Ted Trouard, Ph.D. (Co-I)	5%	\$	1,768.80	\$	1,821.86	\$	3,590.66
Clinical Research Coordinator	50%	\$	7,725.00	\$	7,956.75	\$	15,681.75
Biophysics/Research Assistant	50%	\$	6,750.00	\$	6,952.50	\$	13,702.50
Subtotal Fringe Benefits		\$	18,019.80	\$	18,560.39	\$	36,580.19
Subtotal (Personnel & Fringe)		\$	84,165.80	\$	86,690.77	\$	170,856.57
Travel					•		
PI travel to other sites		\$	2,000.00	\$	2,000.00	Ś	4,000.00
Subtotal (Travel)		\$	2,000.00	\$	2,000.00		4,000.00
Supplies	-						
Program Supplies (Lab consumables)		\$	1,500.00	\$	1,500.00	¢	3,000.00
Subtotal (Supplies)		Ś	1,500.00	Š	1,500.00		3,000.00
- Compression (supplies)		*	2,500.00	*	2,000.00	*	5,000.00
Patient Care Costs							
MRIs (25 in Yr 1, 25 in Yr 2)		\$	14,375.00	\$	14,375.00	\$	28,750.00
Development Scans (10 in Yr 1 at the development scan rate)		\$	2,300.00	\$	-	\$	2,300.00
Blood sample processing (PBMC for later cell line use and DNA) and storage		\$	506.25	\$	506.25	\$	1,012.50
Neuropsych Tests		\$	2,500.00	\$	-	\$	2,500.00
Subtotal (Patient Care Costs)		\$	19,681.25	\$	14,881.25	\$	34,562.50
Other Costs							
Data Storage		\$	1,000.00	\$ .	1,000.00	\$	2,000.00
Participant Parking fees		\$	400.00	\$	400.00	\$	800.00
Subject Payment fees		\$	2,750.00	\$	2,750.00	\$	5,500.00
Recruitment postage and printing		\$	3,000.00	\$	3,000.00	\$	6,000.00
Subtotal( Other Costs)		\$	7,150.00	\$	7,150.00	\$	14,300.00
TOTAL COSTS		\$	114,497.05	\$	112,222.02	\$	226,719.07

# McKnight Brain Aging Registry and Inter-Institutional Neuroimaging Core Initiative University of Alabama Budget

Personnel	Effort		Year 1		Year 2		TOTAL
P1: Kristina Visscher, Ph.D. (no salary support requested)	5%	\$	-	\$	•	\$	_
Neurologist: David Geldmacher, MD	10%	\$	12,000.00	\$	12,360.00	\$	24,360.00
MR Physicist: Mark Bolding, Ph.D.	5%	\$	5,896.00	\$	6,072.88	\$	11,968.88
Clinical Research Coordinator	50%	\$	25,750.00	\$	26,522.50	\$	52,272.50
Biophysics/Research Assistant, Rishi Deshpande	50%	\$	22,500.00	\$	23,175.00	\$	45,675.00
Subtotal Personnel		\$	66,146.00	\$	68,130.38	\$	134,276.38
Fringe Benefits	Effort		Year 1		Year 2		TOTAL
PI: Kristina Visscher, Ph.D. (no salary support requested)	5%	\$		\$		\$	-
Neurologist: David Geldmacher, MD	10%	\$	3,240.00	\$	3,337.20	\$	6,577.20
MR Physicist: Mark Bolding, Ph.D.	5%	\$	5,895.73	\$	6,072.61	\$	11,968.34
Clinical Research Coordinator	50%	\$	8,600.50	\$	8,858.52	\$	17,459.02
Biophysics/Research Assistant, Rishi Deshpande	50%	\$	7,515.00	\$	7,740.45	\$	15,255.45
Subtotal Fringe Benefits		\$	25,251.23	\$	26,008.78	\$	41,543.79
Subtotal (Personnel & Fringe)		\$	91,397.23		94,139.16		175,820.17
Travel							
PI travel to other sites		\$	2,000.00	\$	2,000.00	ς.	4,000.00
Subtotal (Travel)		\$	2,000.00		2,000.00		4,000.00
Supplies							
Program Supplies (Lab consumables)		\$	1,500.00	\$	1,500.00	ć	3,000.00
Subtotal (Supplies)		\$ \$	1,500.00	ب \$	1,500.00	•	·
Subtotal (Supplies)		ð	1,300.00	Þ	1,500.00	,	3,000.00
Patient Care Costs		,	44 275 00		44 275 00	,	
MRIs (25 in Yr 1, 25 in Yr 2)		\$	14,375.00		14,375.00	\$	28,750.00
Development Scans (10 in Yr 1 at the development scan rate)	•	\$	2,300.00	\$		\$	2,300.00
Blood sample processing (PBMC for later cell line use and DNA) and storage		\$	506.25	\$	506.25	\$	1,012.50
Neuropsych Tests		\$	2,500.00	\$		\$	2,500.00
Subtotal (Patient Care Costs)		\$	19,681.25	\$	14,881.25	\$	34,562.50
Other Costs							
Data Storage ·		\$		\$	1,000.00	\$	2,000.00
Participant Parking fees		\$	400.00	\$	400.00	\$	800.00
Subject Payment fees		\$	2,750.00	\$	2,750.00	\$	5,500.00
Recruitment postage and printing		\$	3,000.00	\$	3,000.00	\$	6,000.00
Subtotal( Other Costs)		\$	7,150.00	\$	7,150.00	\$	14,300.00
TOTAL COSTS		\$	121,728.48	\$	119,670.41	\$	241,398.89

# McKnight Brain Aging Registry and Inter-Institutional Neuroimaging Core Initiative University of Florida Budget

Personnel	Effort		Year 1		Year 2		TOTAL
PI: Ronald Cohen, PhD (no salary support requested)	5%	\$	-	\$	-	\$	
Neurologist: Adam Falchook, M.D. (Co-I)	10%	\$	6,000.00	\$	6,000.00	\$	12,000.00
MR Physicist: Song Lai, Ph.D. (Co-I)	5%	\$	5,896.00	\$	6,072.88	\$	11,968.88
Clinical Research Coordinator	50%	\$ .	25,750.00	\$	26,522.50	\$	52,272.50
Eric Porges, Neuroimaging post-doctoral fellow	50%	\$	22,500.00	\$	23,175.00	\$	45,675.00
Damon Lamb, PhD, Computational Specialist	10%	\$	6,000.00	\$	6,000.00	\$	12,000.00
Subtotal Personnel		\$	66,146.00	\$	67,770.38	\$	133,916.38
Fringe Benefits	Effort		Year 1		Year 2		TOTAL
PI: Ronald Cohenr (no salary support requested)	0.05	\$		\$	•	\$	-
Neurologist: Alex Hishaw, M.D. (Co-I)	10%	\$	888.00	\$	888.00	\$	1,776.00
MR Physicist: Song Lai, Ph.D. (Co-I)	5%	\$	1,768.80	\$	1,821.86	\$	3,590.66
Clinical Research Coordinator	50%	\$	7,725.00	\$	7,956.75	\$	15,681.75
Eric Porges, CAM Neuroimaging Fellow	50%	\$	6,750.00	\$	6,952.50	\$	13,702.50
Neuroimaging Computational Specialist/Programmer	10%	\$	888.00	\$	888.00	\$	1,776.00
Subtotal Fringe Benefits		\$	18,019.80	\$	18,507.11	\$	36,526.91
Subtotal (Personnel & Fringe)		\$	84,165.80	\$	86,277.49	\$	170,443.29
Travel							
PI travel to other sites		\$		\$	2,000.00	\$	4,000.00
Subtotal (Travel)		\$	2,000.00	\$	2,000.00	\$	4,000.00
Supplies							
Program Supplies (Lab consumables)		\$	1,500.00		1,500.00	•	3,000.00
Subtotal (Supplies)		\$	1,500.00	\$	1,500.00	\$	3,000.00
Patient Care Costs							
MRIs (25 in Yr 1, 25 in Yr 2)		\$	14,375.00	•	14,375.00	-	28,750.00
Development Scans (10 in Yr 1 at the development scan rate)		\$	2,300.00	\$	-	\$	2,300.00
Blood sample processing (PBMC for later cell line use and DNA) and storage		\$	506.25	\$	506.25	\$	1,012.50
Neuropsych Tests		\$	2,500.00	\$	-	\$	2,500.00
Subtotal (Patient Care Costs)		\$	19,681.25	\$	14,881.25	\$	34,562.50
Other Costs							
Data Storage		\$	1,000.00	\$	1,000.00	\$	2,000.00
Participant Parking fees		\$	400.00	\$	400.00		800.00
Subject Payment fees		\$	2,750.00	\$	2,750.00	\$	5,500.00
Recruitment postage and printing		\$	3,000.00	\$	3,000.00	\$	6,000.00
Subtotal( Other Costs)		\$	7,150.00	\$	7,150.00	\$	14,300.00
TOTAL COSTS		\$	114,497.05	\$	111,808.74	\$	226,305.79

# McKnight Brain Aging Registry and Inter-Institutional Neuroimaging Core Initiative University of Miami Budget

Personnel	Effort	 Year 1	Year 2	TOTAL
PI: Clinton Wright, M.D., M.S. (no salary support requested)	5%	\$ _	\$ -	\$ -
Neurologist: Barry Baumel, M.D.	10%	\$ 4,761.88	\$ 4,904.73	\$ 9,666.61
MR Physicist: Noam Alperin, Ph.D.	5%	\$ 9,075.00	\$ 9,347.25	\$ 18,422.25
Clinical Research Coordinator	50%	\$ 22,556.25	\$ 23,232.94	\$ 45,789.19
Biophysics/Research Assistant, Ahmet Bagci	20%	\$ 9,990.92	\$ 10,290.64	\$ 20,281.56
Statistician, Chuanhui Dong, Ph.D.	5%	\$ 4,740.09	\$ 9,097.69	\$ 13,837.78
Database manager	50%	\$ 12,419.99	\$ 12,792.59	\$ 25,212.58
Subtotal Personnel		\$ 63,544.12	\$ 69,665.84	\$ 133,209.96
Fringe Benefits	Effort	Year 1	Year 2	TOTAL
PI: Clinton Wright, M.D., M.S. (no salary support requested)	5%	\$ -	\$ -	\$ 
Neurologist: Barry Baumel, M.D.	10%	\$ 1,276.18	\$ 1,353.90	\$ 2,630.08
MR Physicist: Noam Alperin, Ph.D.	5%	\$ 2,432.10	\$ 2,580.21	\$ 5,012.31
Clinical Research Coordinator	50%	\$ 9,699.19	\$ 10,289.87	\$ 19,989.06
Biophysics/Research Assistant, Ahmet Bagci	20%	\$ 4,296.09	\$ 4,557.73	\$ 8,853.82
Statistician, Chuanhui Dong, Ph.D.	5%	\$ 1,270.34	\$ 1,801.34	\$ 3,071.69
Database manager	50%	\$ 5,340.60	\$ 5,665.84	\$ 11,006.44
Subtotal Fringe Benefits		\$ 24,314.50	\$ 26,248.89	\$ 50,563.40
Subtotal (Personnel & Fringe)		\$ 87,858.63	\$ 95,914.73 ⁻	\$ 183,773.36
Travel				* **
PI travel to other sites	•	\$ 2,000.00	\$ 2,000.00	\$ 4,000.00
Subtotal (Travel)		\$ 2,000.00	\$ 2,000.00	\$ 4,000.00
Supplies				
Program Supplies (Lab consumables)		\$ 1,500.00	\$ 1,500.00	\$ 3,000.00
Subtotal (Supplies)		\$ 1,500.00	\$ 1,500.00	\$ 3,000.00
Patient Care Costs				
MRIs (25 in Yr 1, 25 in Yr 2)		\$ 14,375.00	\$ 14,375.00	\$ 28,750.00
Development Scans (10 in Yr 1 at the development scan rate)		\$ •	\$ -	\$ 
Blood sample processing (PBMC for later cell line use and DNA) a	and storage	\$ 506.25	\$ 506.25	\$ 1,012.50
Neuropsych Tests		\$ 2,500.00	\$ -	\$ 2,500.00
Subtotal (Patient Care Costs)		\$ 17,381.25	\$ 14,881.25	\$ 32,262.50
Other Costs				
Data Storage		\$ 1,000.00	\$ 1,000.00	\$ 2,000.00
Participant Parking fees		\$ 400.00	\$ 400.00	\$ 800.00
Subject Payment fees		\$ 2,750.00	\$ 2,750.00	\$ 5,500.00
Recruitment postage and printing		\$ 3,000.00	\$ 3,000.00	\$ 6,000.00
Subtotal( Other Costs)		\$ 7,150.00	\$ 7,150.00	\$ 14,300.00
TOTAL COSTS		\$ 115,889.88	\$ 121,445.98	\$ 237,335.86

# Tab 7

Will be distributed at August Meeting

# McKnight Brain Research Foundation Upcoming Dates/Events (2014 - 2015)

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October 2014 MBRF Board of Trustees Meeting	November 2014 Society for Neuroscience
October 14 - 15, 2014 Miami, FL	Nashington, DC Prefer Session/Recention
October 13, 2014 - arrive in evening, no social function October 14, 2014 - 8:00 a.m. to 5:00 p.m. Trustees Meeting Dinner at Coral Reef Yacht Club October 15, 2014 - Scientific program at the University of Miami	November 16, 2014 6:30 pm 8:30 pm.

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February 2015	April 2015	
MBRF Board of Trustees Meeting	MBRF Board of Trustees Meeting Inter-Institutional Meeting	
to be determined	University of Miami April 29 - May 1, 2015	