INVESTMENT REPORT

TENNESSEE CONSOLIDATED RETIREMENT SYSTEM

Second Quarter
Fiscal Year 2015 - 2016

October 1, 2015 – December 31, 2015

Prepared for:
Board of Trustees

March 18, 2016

Investment Advisory Council

Pursuant to T.C.A. Section 8-37-108, the State Treasurer shall nominate, with the advice and consent of the Board of Trustees, the Investment Advisory Council, comprised of five senior investment professionals in the Tennessee investment community, who shall have at least five years professional experience as a portfolio manager, economist or an investment advisor in any field of which investments of TCRS funds are authorized. The term of appointment is for five years. Also, the treasurer may nominate two (2) additional members for the three year terms.

The TCRS investment staff consults at least semi-annually with the Advisory Council on a formal basis for strategy and guidance, and on an informal basis as needed.

The current members are as follows:

Council Member	Expiration of Term	Appointed Term
Frederick S. Crown, Jr., CFA 124 Longwood Place Nashville, TN 37215 Phone: 615-347-0343 E-mail: **crownf1@gmail.com**	June 30, 2017	5 year
Susan Logan Huffman, CFA Managing Director Reliant Investment Management, LLC 1715 Aaron Brenner Drive, Suite 504 Memphis, TN 38120 Phone: 901-843-0600 / Fax: 901-843-0325 E-mail: **shuffman@reliantllc.com**	June 30, 2016	5 year
George B. Stadler, CFA 5130 Ashland City Hwy Nashville, TN 37218 Phone: 615-416-3455 cell E-mail: **george@hmscm.com**	June 30, 2015	5 year
Carol Womack, Principal Diversified Trust Company 3102 West End Avenue, Suite 600 Nashville, TN 37203 Phone: 615-386-7302 E-mail: **cwomack@diversifiedtrust.com**	June 30, 2015	3 year

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Minutes from the Investment Advisory Council Meeting
March 10, 2015

Mr. George Stadler, Chairman of the Investment Advisory Council (IAC), convened the meeting at 1:39 p.m. in the 13th Floor conference room of the Andrew Jackson State Office Building. IAC members present included Chairman Stadler, Ms. Carol Womack, Mr. Fred Crown, Treasurer David H. Lillard, Jr (ex officio) and Mr. Michael Brakebill (ex officio). Investment Staff members present included Andrew Palmer, Michael Keeler, Tim McClure, Roger Henry, Jennifer Selliers, Roy Wellington, Kushal Gupta, JP Rachmaninoff, Matthew Haitas, Justin Denery, Daniel Crews, Michael Giggie, Thomas Kim, Rhonda Myers, Derrick Dagnan and Daniel Toomey.

Chairman Stadler opened the meeting by requesting a motion to approve the minutes from the IAC meeting on December 8, 2014. Upon a motion by Mr. Crown and seconded by Ms. Womack, the minutes were unanimously approved with no additions or corrections.

Mr. Brakebill began his comments with an update on the investment policy. He noted Jennifer Selliers, Compliance Officer, had gone through the policy and re-written the policy to reflect changes in law and regulation. These small changes will not have much impact on actual investments and there were no significant changes in the direction of the policy.

Mr. Brakebill noted there were four areas of change in the proposed policy that would impact the investment portfolio. The dollar threshold at which the Investment Committee must approve a private equity, real estate or strategic lending investment will increase from $30 million to $75 million. This change is meant to reduce the administrative load on the Investment Committee as the number of transactions increases due to growing investment allocation and commitment sizes. In another change, current policy permits up to 20% of the real estate portfolio be invested in non-core investments. The proposal raises that limit to 30% to prevent a policy exception as investments in non-core assets reach 20%. The policy also provides a specific definition of "international security" to facilitate compliance measurement. Finally, the proposed policy provides for delegation by the Board to the Treasurer the authority to procure services necessary for TCRS and to determine appropriate alternative procurement procedures.

A question was raised regarding what performance impact can be expected as a result of filling the 20% allocation to non-core real estate. The Real Estate team replied they believed the changes may improve performance by 0.5%.

A motion, made by Ms. Womack and seconded by Mr. Crown, to affirm the aforementioned changes to the investment policy was approved, unanimously.

Mr. Brakebill then discussed TCRS current investment allocation. Looking forward to next year, staff and the general consultant will be researching potential changes to the investment policy target portfolio construction that may be advisable to pursue in the next asset allocation review. These potential changes might require legislative initiatives. Research is beginning now to allow time for the legislative process.

A question was raised about the efficacy of modeling standard deviation in private assets. A brief discussion ensued during which Mr. Brakebill suggested using public market equivalents as a proxy for modeling the standard deviation of TCRS private investments.

Mr. Brakebill then discussed several investing concepts he and the team continue to monitor but do not currently plan to implement, including Low Volatility Equities, Hedge Funds, Infrastructure, Real Return, Commodities, Master Limited Partnerships, Risk Parity. Beta and Alpha Overlay, De-risking, and Liability Driven Investment.

Mr. Brakebill then addressed the team's progress on several key initiatives. The fixed income team hired Daniel Toomey to assist Thomas Kim with management of the credit portfolio. Recruiting for summer interns led by Carrie Green and Markus Klar has yielded two interns who will be joining TCRS this summer. The private equity consultant contract will expire this year. An RFP for a new contract, including work on the strategic lending portfolio, is being prepared. Process initiatives in both trading and legal remain ongoing.

Mr. Brakebill then kicked off a discussion of overall fund performance noting the fund returned 16.7% in fiscal 2014 and ranked in the 48th percentile among other public funds greater than $1 billion (median of 16.43%). The composite fund returned 2.25% for the fourth quarter of calendar 2014 and ranked in the 27th best percentile (median of 1.30%). For the full calendar year 2014, the fund outperformed its policy (8.76% vs. 8.69%) and ranked in the 5th percentile among large public funds (median of 5.60%), beating 90%+ of its peers. The 7 year return has been 5.7% (median fund did 4.9%). He noted this performance coincides with the financial crisis.

Mr. Keeler discussed initiatives in the public equity portion of the investment portfolio and noted staff has been working on long range initiatives including updating evaluation processes for research & miscellaneous service providers. Mr. Wellington, Mr. Gupta and Mr. Keeler have been reviewing the long term strategic plan for domestic equities and will discuss it with Mr. Brakebill in the next month or so. Lastly, the team has several projects lined up for the summer interns in order to help with various projects and provide a meaningful experience for them.

Moving to the equity portion of the portfolio, Mr. Keeler said stocks were fairly strong through most of the December quarter, although global economic concerns put a damper on enthusiasm late in the period. Size factors (smaller was better) dominated relative returns during the period. Still, growth provided only a modest boost. Domestic equities lagged the S&P 1500 benchmark return for the quarter as mid and small cap stocks recovered somewhat from an extended period of underperformance while the fund remained underexposed. In addition, the large cap funds underperformed their benchmarks during the quarter. Poor performance in the Energy sector was detrimental to all portfolios. The team is looking to add to small cap and mid-cap assets on anticipation that the strong dollar will benefit smaller rather than larger companies.

Mr. Gupta noted the Quant Fund saw sector rotation in the December quarter, out of technology and into utilities, healthcare and others and away from companies with high risk from a strong dollar and collapsing oil prices. Oil prices slid 40%+ in calendar 4Q14. Forward earnings multiples were little changed for the market and most sectors with one exception – Energy. Earnings forecasts for the sector were slashed in December as oil continued to fall. Momentum and quality-based factors were the top-performing factors in 2014. The worst performing factors in 2014 were Price Volatility, Price Reversal, and Traditional Value. Utilities was the best performing sector in 2014 and Energy went from the best performing sector in the third quarter to the worst performing sector in the fourth quarter and the 2014 year. The quant fund underperformed in the quarter versus the benchmark. We reduced the portfolio beta and tightened the tracking error to further neutralize the risks. These changes helped and, as of the time of the meeting, the portfolio was up over 50 bps this quarter relative to the index.

Mr. Wellington said the Sector Fund is positioned for economic expansion with over weights to industrials, information technology and health care. Fourth quarter performance was hurt by the fall in oil prices despite the underweight to Energy. Most of the underperformance during the calendar 4Q came from the surprise forced bankruptcy of GT Advanced Technologies (GTAT), a would be supplier of sapphire cover glass to Apple and an acquisition bid for Baker Hughes by portfolio holding Halliburton.

The Mid Cap Fund underperformed the S & P Mid Cap 400 return during the quarter. Good stock selection in the Healthcare and Technology sectors was more than offset by difficulties in the Energy Sector.

The International managers benefited from good overall stock picking, continuing a string of good quarters. As previously reported, TCRS cut the allocation to Barings due to personnel turnover and performance. American Century migrated from a small-mid capitalization strategy to pure small cap during the quarter. Across developed market portfolios, a slight preference towards Europe was instituted as it appears that positive economic news, a weak euro and quantitative easing has arrested a long period of underperformance. Additional buying in Emerging Market ETFs has brought that portfolio to almost $2bn.

Mr. Palmer began his review of the Fixed Income portfolio by discussing an initiative to coordinate the internal research effort that was begun at the beginning of the fiscal year. Thomas Kim is coordinating the effort. Mr. Klar has put together a treasury curve model used by the Fed to analyze the possible future path of interest rates. During this process, Mr. Klar came up with a probability surface model to analyze scenarios that has been very helpful to the team. He used it to analyze the major rally in interest rates in January and it recommended we get short duration, which benefited our performance in February as rates sold off significantly. From a performance perspective, Mr. Palmer reported that portfolios underperformed during the quarter. The two basic drivers of performance were less sensitivity to falling interest rates in a period of falling rates and as in the equity portfolios, an asset allocation bias towards the service sector portion of the Energy sector. Mr. Brakebill then noted calendar year 2014 performance for Fixed Income was over 12% which contributed to the good total fund performance.

Mr. Palmer then continued with his review of the fixed income portfolio. 10yr and longer credit widened out as non-US money flowed into treasuries and not into credit; treasury yields fell and corporate bond yields only fell marginally. In the portfolio, credit quality has been overweight BBB for some time. Treasury Inflation Protected securities (TIP) underperformed due to our short duration curve allocation. Shorter dated TIPs were hurt by lower energy prices as a sign of falling inflation.

Mr. Rachmaninoff began by discussing the current diversification of the real estate portfolio. He noted that there were no major changes from the prior quarter. He next reviewed the closed transactions in the quarter. The fund closed on a grocery-anchored retail center in suburban Atlanta and committed to a new opportunistic fund that was 25% invested at the time of closing. TCRS was also awarded an attractive retail opportunity in Washington DC. This transaction closed in the first quarter and is TCRS's first direct investment in Washington DC.

Mr. Rachmaninoff noted that there was a recent change in the valuation process for TCRS's direct real estate investments. Historically, all real estate assets were valued on an annual basis. All real estate assets will now be valued on a quarterly basis. This change contributed meaningfully to the outperformance of the portfolio in the recent quarter as TCRS had three quarters of price appreciation relative to one quarter for the index. Mr. Rachmaninoff reported that Staff continues to look for an addition to the real estate team and hopes to have a hire finalized in the next 60 days.

In response to a question about rent trends across the portfolio, Mr. Rachmaninoff noted strength in the San Francisco office market as well as both the CBD Boston and suburban Boston office markets. In general, pricing leverage is shifting towards landlords in the office space. On the other hand, Houston is seeing new office space being delivered at a time when it is not needed given the pullback in the energy space.

Mr. Crews then gave several comments on the fund's private equity (PE) investments. Venture capital appears to be getting a little frothy based on current valuations. He noted Jet.com is valued at $600 million and has yet to even launch its shopping website, has no revenue and has no profits. He added that Mr. Brakebill was invited to participate in a panel which focused on the idea that PE, as an industry, is moving to more standardization and transparency.
The team closed two funds in the first quarter, working with Fairview and Oaktree.

Moving on to strategic lending, Mr. Dagnan commented the high yield market was very weak in the fourth quarter, led by the sell-off in energy. However, despite being underweight in energy the fund still underperformed. An overweight in low quality issuers was the primary driver while Euro exposure also had a negative impact. He noted that transaction terms have moved back into the lenders' favor as evidenced by the elimination of covenant light deals.

Under the authority provided in the initial investment approval and further approval of the Treasurer, the fund increased allocations to Beachpoint and Brigade, by $25 million each, at the end of December, after the oil and high yield markets bottomed on December 15th. New allocations were made with Blackstone, GSO and Orbimed. Mr. Dagnan discussed different investment opportunities staff is currently considering and noted he finds European and liquid markets to be more attractive than a year ago.

As part of an operational update, Mr. Palmer discussed moving away from soft dollars and instead paying for research and other broker services directly.

Mr. Henry provided the update on securities lending. Mr. Henry stated that the securities lending program has been under way just over 13 months. Earnings from inception to present day (March 10th, 2015) are approximately $25 million. Lastly, Mr. Henry noted securities lending income is allocated to each portfolio in which the income was derived.

Mr. Palmer then continued with a review of derivatives activity before moving onto mortgage TBA and currency which is awaiting ISDA approval.

Before wrapping up, Council Members Stadler, Crown and Womack offered their view of the markets and macro-economics.

Given no further questions or comments, Chairman Stadler adjourned the meeting at 3:28 p.m.

Performance Review
December 2015

Absolute comparison

- 1 quarter return of 2.5%
- 1 year return of -0.1% (median fund did 0.3%)
- 3 year return of 7.1% (median fund did 7.4%)
- 5 year return of 7.7% (median fund did 7.1%)
- 7 year return of 9.2% (median fund did 9.8%)

Benchmark (relative) comparison

- Qtr return beat allocation index by 0.1%
- 1 year return beat allocation index by 0.7%
- 3 year return beat allocation index by 0.7%
- 5 year return beat allocation index by 0.7%

Peer comparison

- 1 quarter return ranked at 49% (0% = best)
- 1 year return ranked at 60%
- 3 year return ranked at 59%
- 5 year return ranked at 32%
- 7 year return ranked at 71%

Risk Adjusted Returns (Sharpe Ratio)

The Sharpe ratio measures the amount of return generated per unit of risk taken.

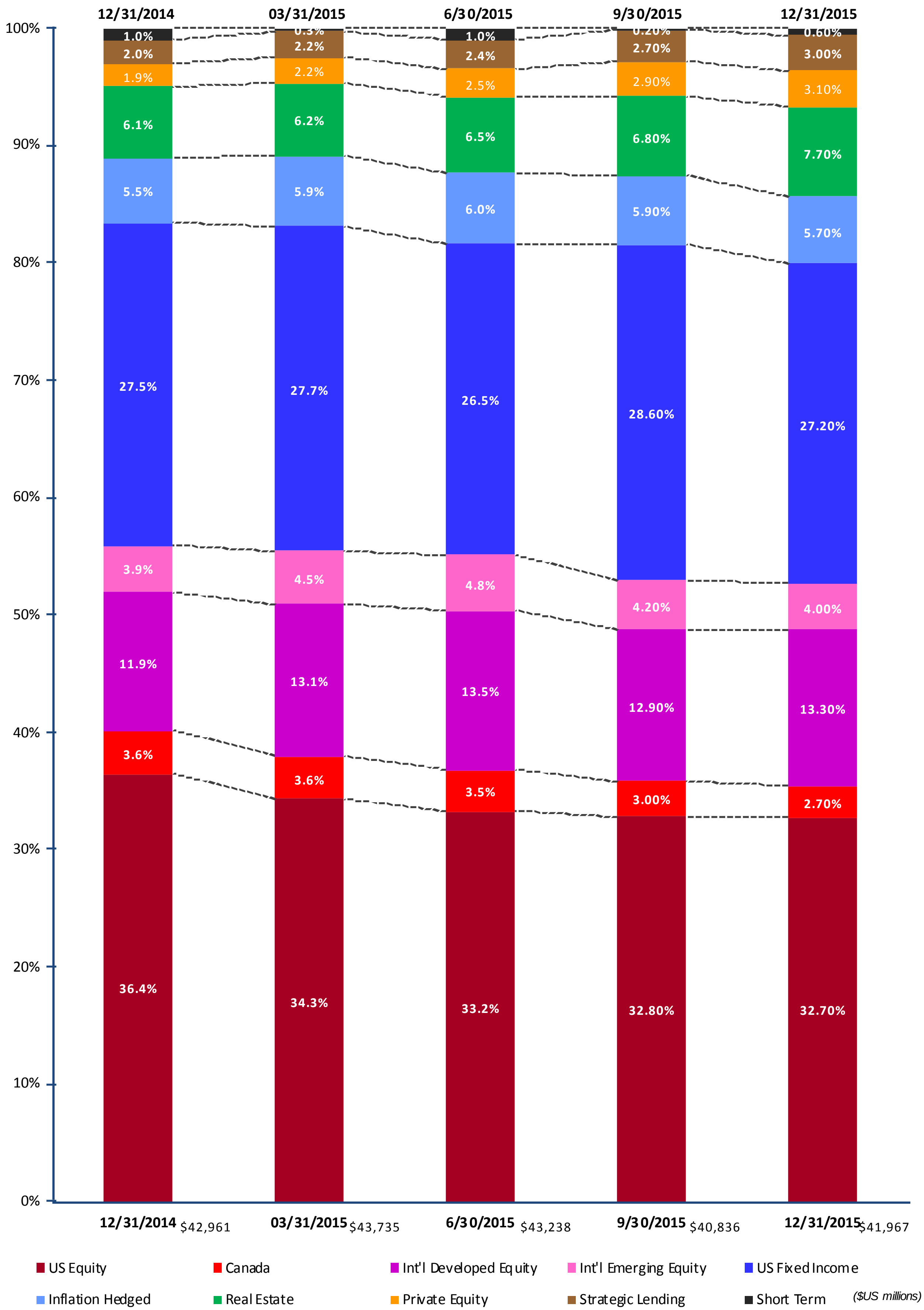
TCRS beat 40% of peers as measured via the Sharpe ratio for the trailing 3 year period and 76% for the trailing five year period.

Key Initiatives
December 2015

- **People**
  - Recruiting for a Fixed Income Portfolio Manager
  - Recruiting for an Alternatives Investment Analyst
  - Recruiting for a Quantitative Analyst
  - Recruiting for a Strategic Lending Portfolio Manager
  - Recruiting for Summer 2016 Interns

- **Process**
  - Verus (formerly SIS) operations review
  - Verus asset allocation study
  - Relationship management system implementation
  - Improve external manager engagement process
  - Review custodial service requirements
  - Legislative initiatives
  - Policy, process, and guidelines adjustments

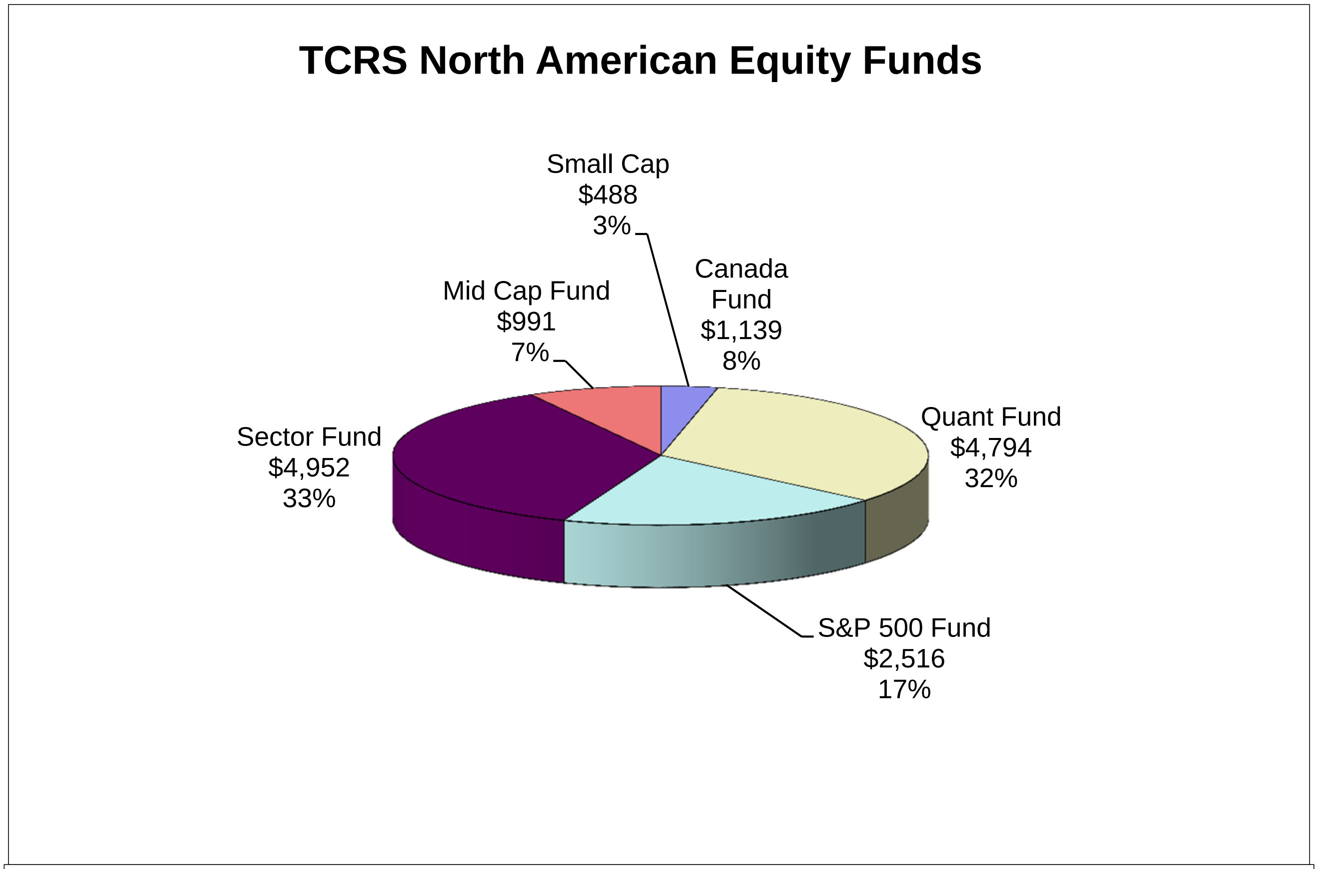
- **Portfolio**
  - Tactical allocation – underweight in Canada and EM
  - Strategic Allocation

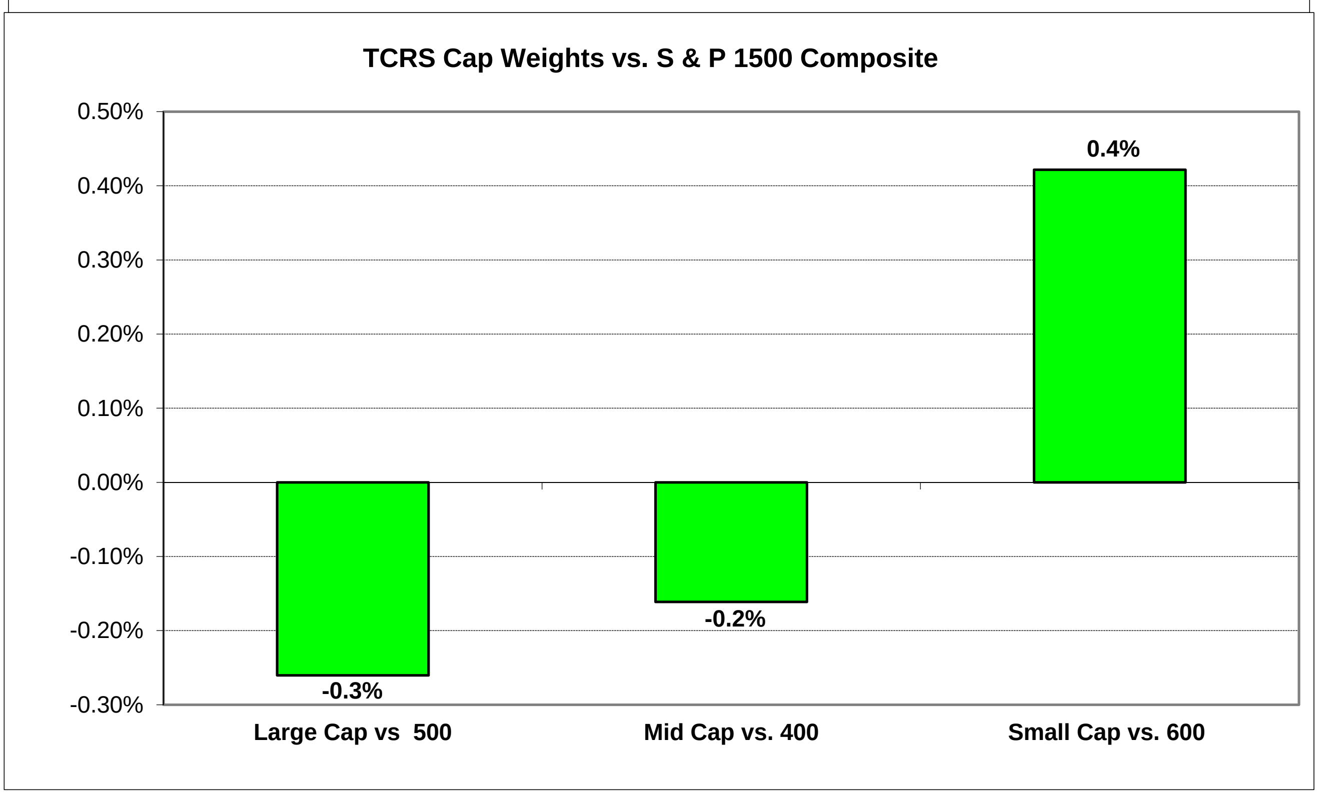


Source: Verus, Inc.

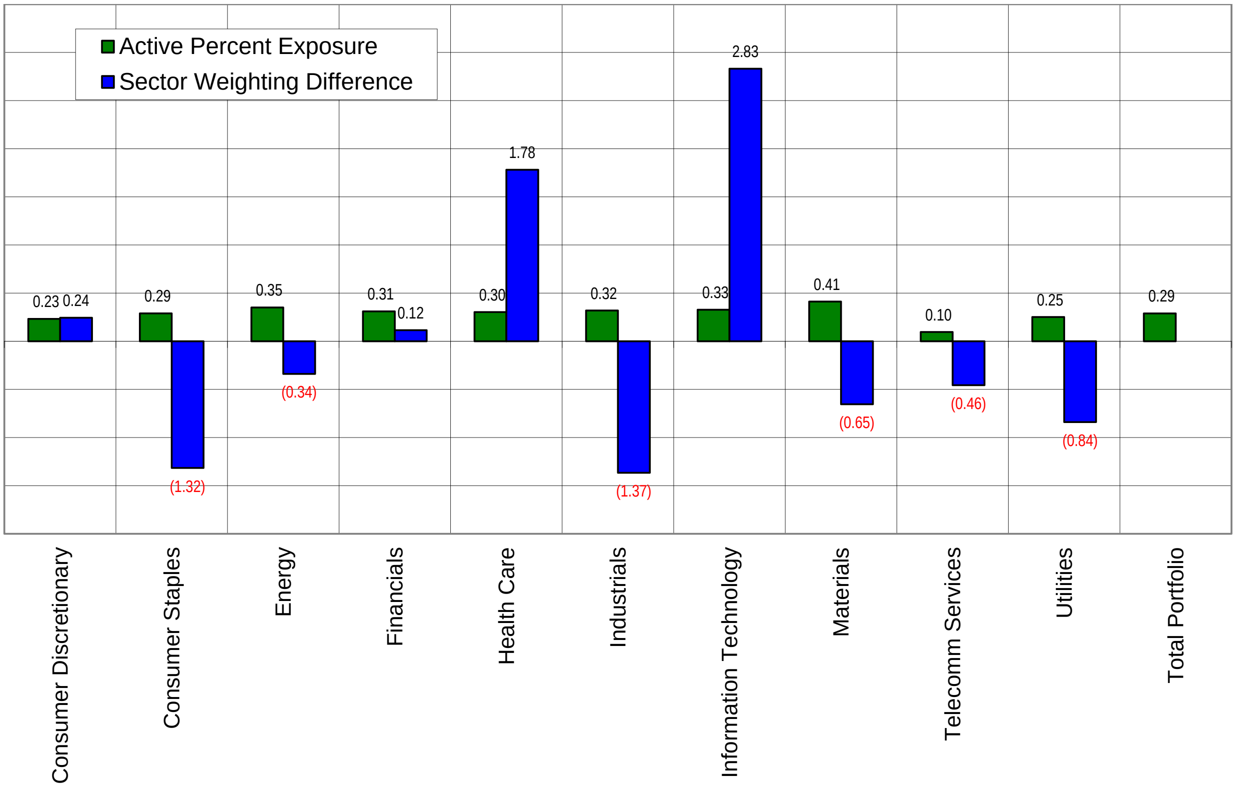
Domestic Equity Portfolio Overview

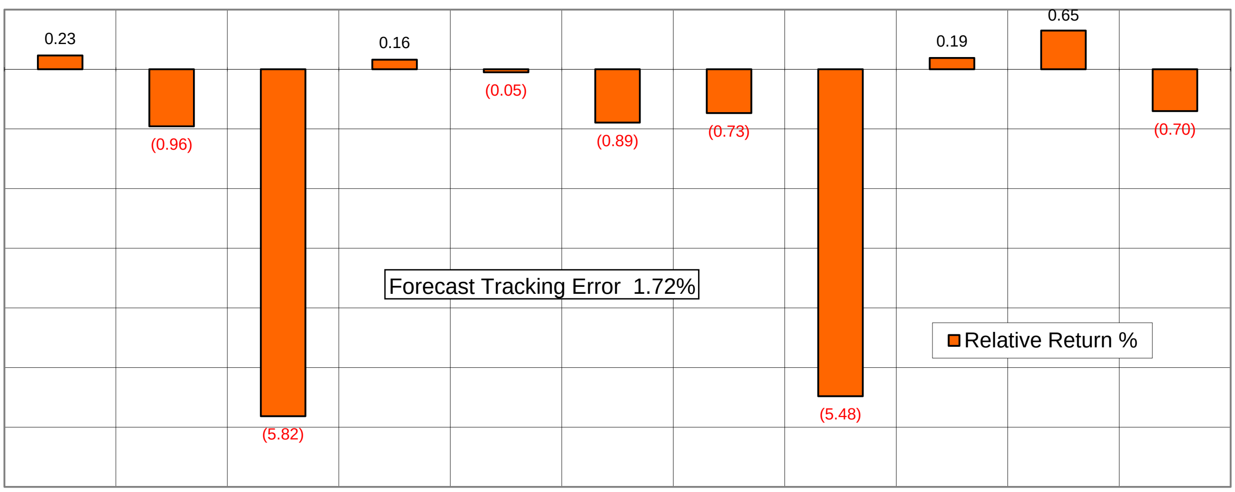
Michael Keeler, CFA





Quant Fund
Kushal Gupta, CFA, CAIA



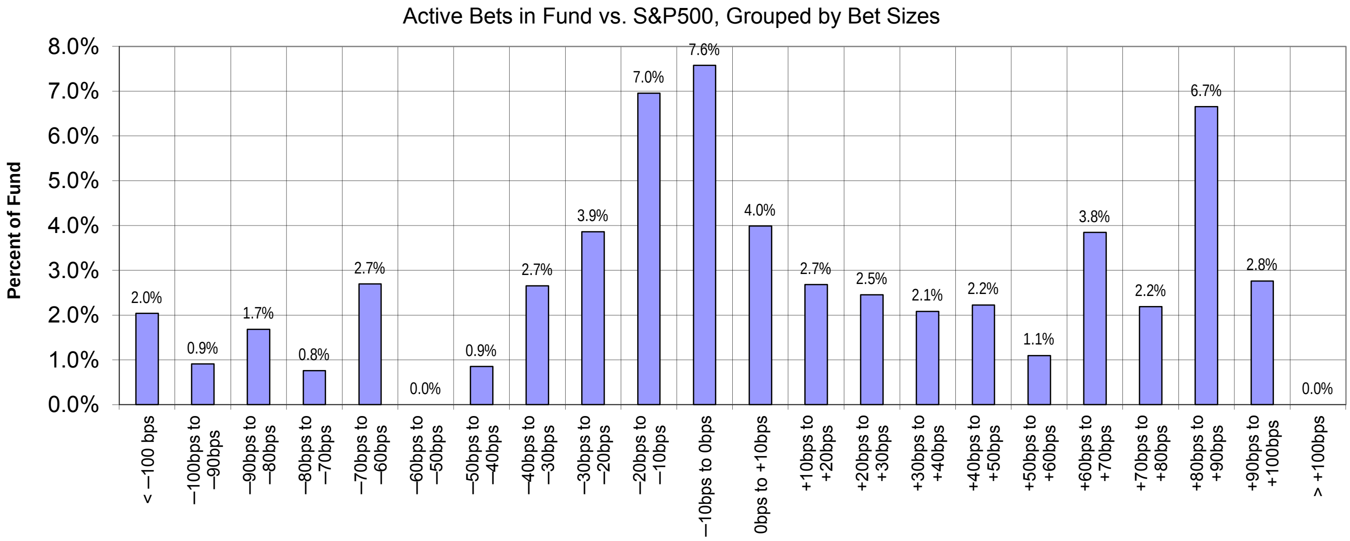


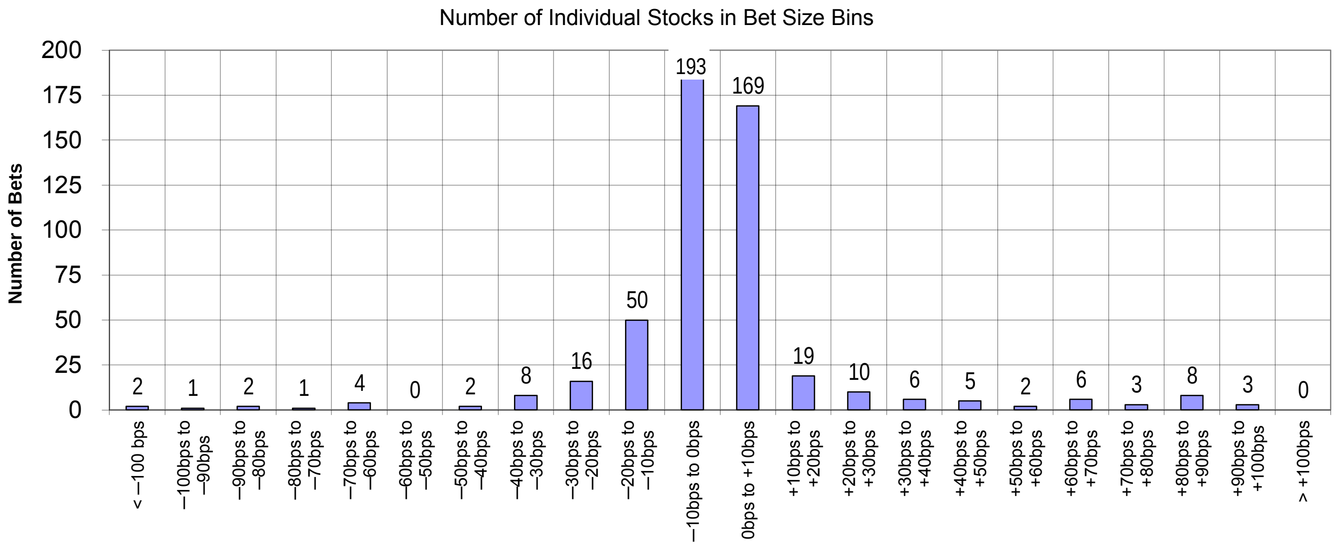
The S&P 500 was propped up by the best performers; returns would have been negative without the top three contributors (AMZN, MSFT & GE). The S&P 500 was hit hard by its losers, Energy and Materials.

Large cap and high quality won in 2015. Lastly, the Russell 1000 Growth benchmark outperformed the Russell 1000 Value benchmark by 9.5%, the widest spread since 2008 as corporate profits meaningfully decelerated and growth grew even scarcer. "Growth at any price" has generally worked over the last few years of weak growth. Over the long term, Value has outperformed Growth.

Currently, the Quant Fund has a projected annualized tracking error of 1.72% and a projected beta of 1.02, both were reduced from the last quarter and are well within our risk target range. At 30%, APE is same as the last report.

Large Cap Quant Fund
Kushal Gupta, CFA, CAIA





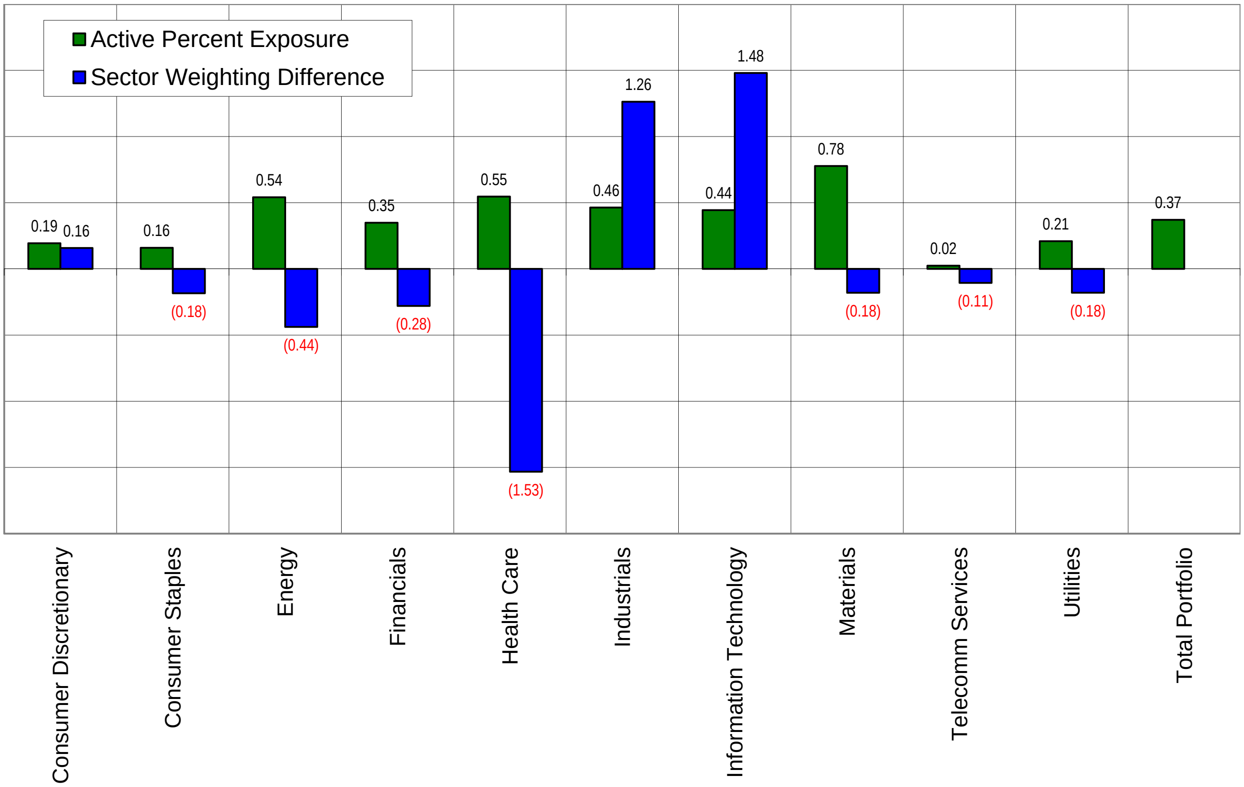
Largest Overweights by Stock in Fund

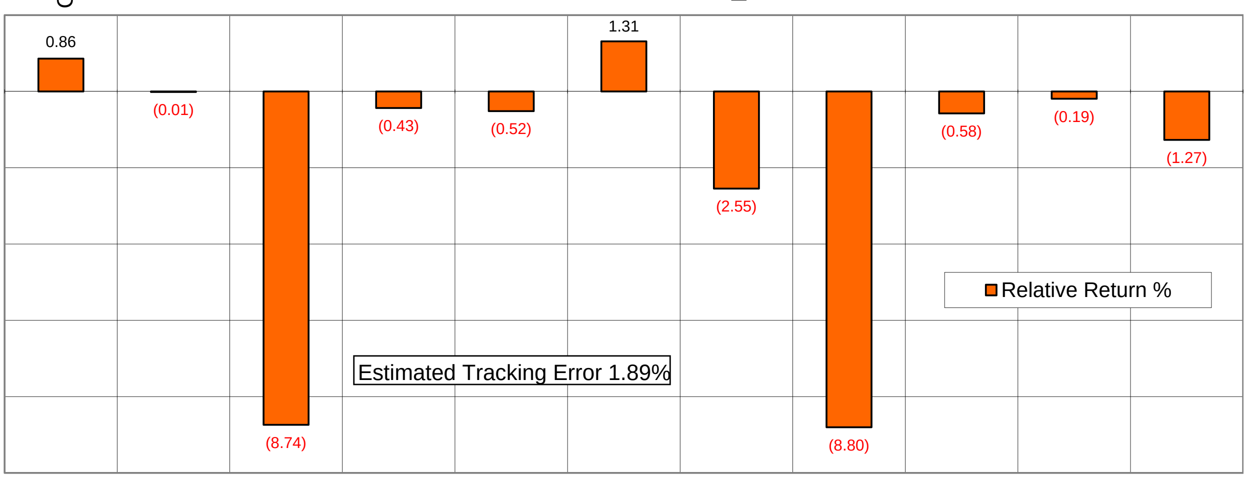
Ticker	Description	Bps Over
AVGO	Broadcom Limited	95
SWKS	Skyworks Solutions, Inc.	91
BIIB	Biogen Inc.	91
BAC	Bank of America Corporation	89
SYNA	Synaptics Incorporated	87
C	Citigroup Inc.	83
NXPI	NXP Semiconductors NV	83
GOOG	Alphabet Inc. Class C	82
AMZN	Amazon.com, Inc.	81
MU	Micron Technology, Inc.	81
AAPL	Apple Inc.	80
JPM	JPMorgan Chase & Co.	75
MO	Altria Group, Inc.	72
WLL	Whiting Petroleum Corporation	71
AGN	Allergan plc	68
WFC	Wells Fargo & Company	68
ENDP	Endo International Plc	65
GOOGL	Alphabet Inc. Class A	62
SWN	Southwestern Energy Company	62
LYB	LyondellBasell Industries NV	60

Largest Underweights by Stock in Fund

Ticker	Description	Bps Under
JNJ	Johnson & Johnson	-102
BRK.B	Berkshire Hathaway Inc. Class B	-101
INTC	Intel Corporation	-91
CVX	Chevron Corporation	-85
PG	Procter & Gamble Company	-84
PM	Philip Morris International Inc.	-76
IBM	International Business Machines Co	-69
KO	Coca-Cola Company	-68
MRK	Merck & Co., Inc.	-68
ORCL	Oracle Corporation	-65
UTX	United Technologies Corporation	-44
T	AT&T Inc.	-41
UPS	United Parcel Service, Inc. Class B	-37
WMT	Wal-Mart Stores, Inc.	-37
SPG	Simon Property Group, Inc.	-34
DD	E. I. du Pont de Nemours and Comp	-33
COP	ConocoPhillips	-32
TMO	Thermo Fisher Scientific Inc.	-32
CSCO	Cisco Systems, Inc.	-31
ABT	Abbott Laboratories	-30

Large Cap Sector Fund
Roy Wellington, CFA





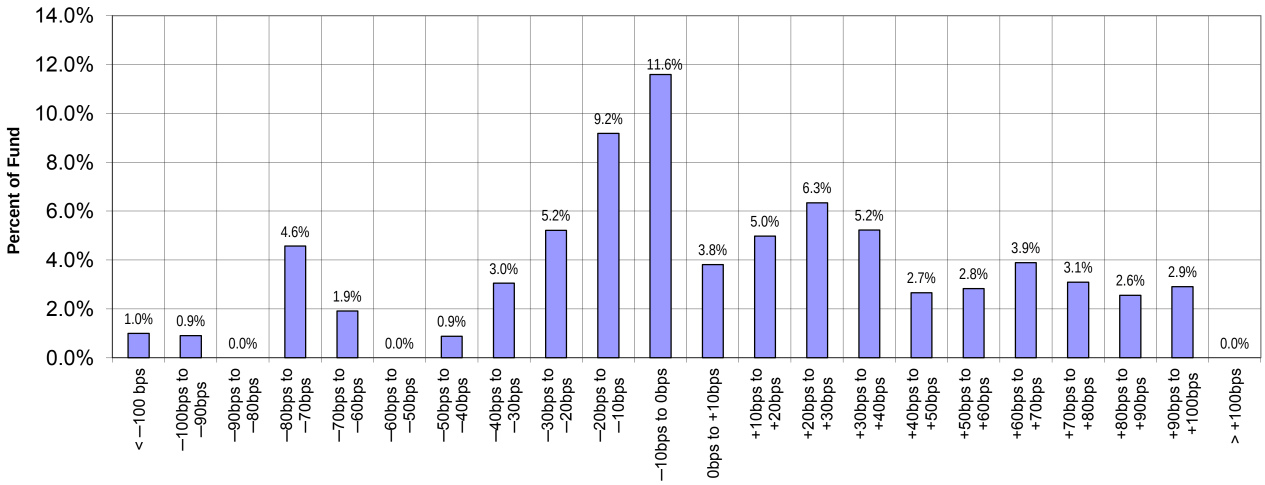
The Sector Fund is positioned for continued economic growth; this leads to the small overweight to Industrials and Information Technology. The markets adopted a "lower for longer" attitude towards commodities, a misreading of economic reality as lower commodity prices is clearly hastening the destruction of supply. Finally, activist hedge funds got their way and forced the resignation of the CEO of DuPont and acquisition by Dow making the weaker company the better performer.

The Sector Fund continues to reassess its processes and positions knowing that we must be right with both the economic realities and its valuation by the market. Eventually the market will express a sentiment other than fear, reward those businesses that grow through the cycle, and support value wherever it is found.

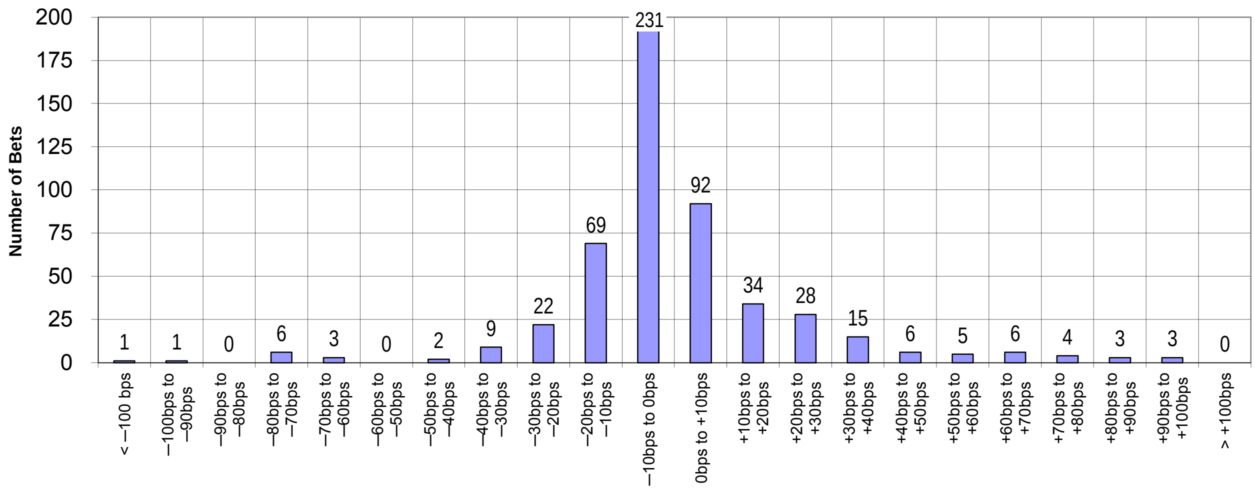
It is important to recognize what we got right in the quarter. Industrials was foremost in highlighting the softness in the economy and profited in stock selection as did Consumer Discretionary in realizing the consumer is in good shape. The relative sector weights as shown by the blue bars in the top graph also added to returns.

Large Cap Sector Fund
Roy Wellington, CFA

Active Bets in Fund vs. S&P500, Grouped by Bet Sizes



Number of Individual Stocks in Bet Size Bins



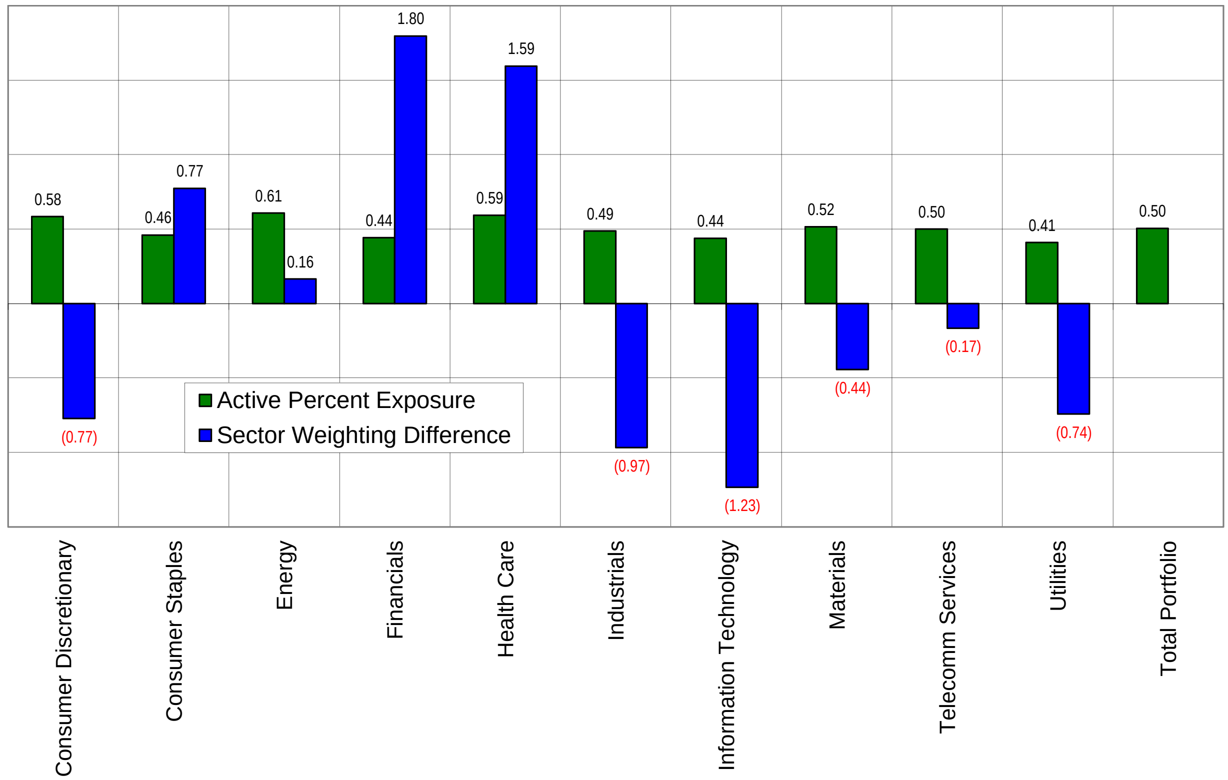
Largest Overweights by Stock in Fund

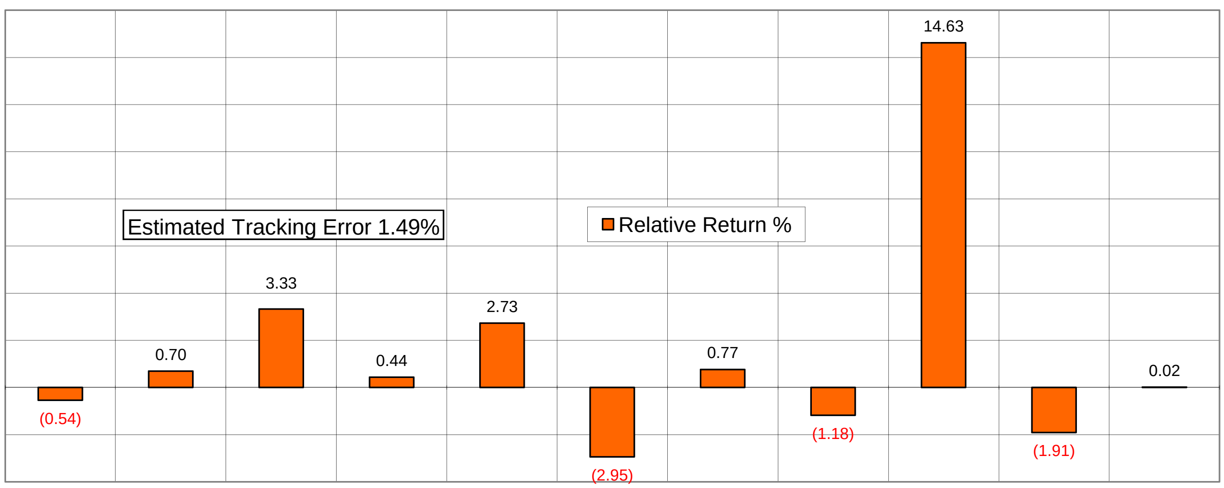
Ticker	Description	Bps Over Index Wt
AVGO	Broadcom Limited	99
NXPI	NXP Semiconductors NV	99
SWN	Southwestern Energy Company	93
AAPL	Apple Inc.	89
SYNA	Synaptics Incorporated	84
SNDK	SanDisk Corporation	82
ZBH	Zimmer Biomet Holdings, Inc.	78
MU	Micron Technology, Inc.	78
SWKS	Skyworks Solutions, Inc.	77
BDX	Becton, Dickinson and Company	76
MYL	Mylan N.V.	68
AMAT	Applied Materials, Inc.	66
LH	Laboratory Corporation of America H	66
CERN	Cerner Corporation	66
PRGO	Perrigo Co. Plc	62
LYB	LyondellBasell Industries NV	61
MDT	Medtronic Plc	59
AGN	Allergan plc	58
WFC	Wells Fargo & Company	57
BIIB	Biogen Inc.	55

Largest Underweights by Stock in Fund

Ticker	Description	Bps Under
MSFT	Microsoft Corporation	-101
INTC	Intel Corporation	-91
CVX	Chevron Corporation	-78
JNJ	Johnson & Johnson	-77
CSCO	Cisco Systems, Inc.	-77
PFE	Pfizer Inc.	-76
MRK	Merck & Co., Inc.	-75
XOM	Exxon Mobil Corporation	-73
ORCL	Oracle Corporation	-65
BMY	Bristol-Myers Squibb Company	-64
UNH	UnitedHealth Group Incorporated	-63
LLY	Eli Lilly and Company	-46
QCOM	QUALCOMM Incorporated	-42
BRK.B	Berkshire Hathaway Inc. Class B	-38
ABT	Abbott Laboratories	-37
ACN	Accenture Plc	-36
ESRX	Express Scripts Holding Company	-33
DD	E. I. du Pont de Nemours and Comp	-33
AMGN	Amgen Inc.	-32
COP	ConocoPhillips	-32

Mid Cap Fund
Mike Keeler, CFA

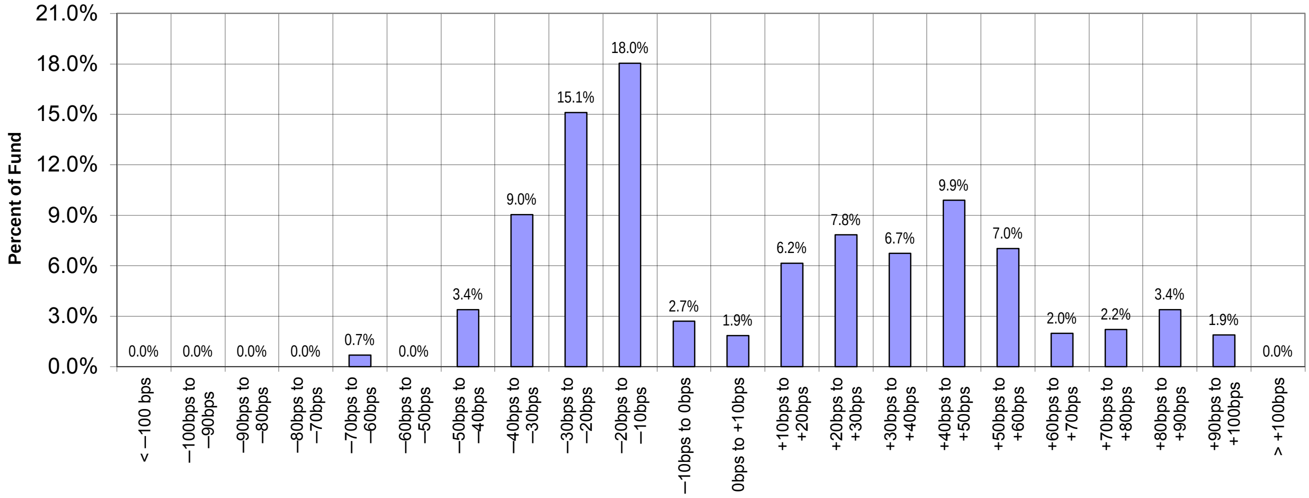




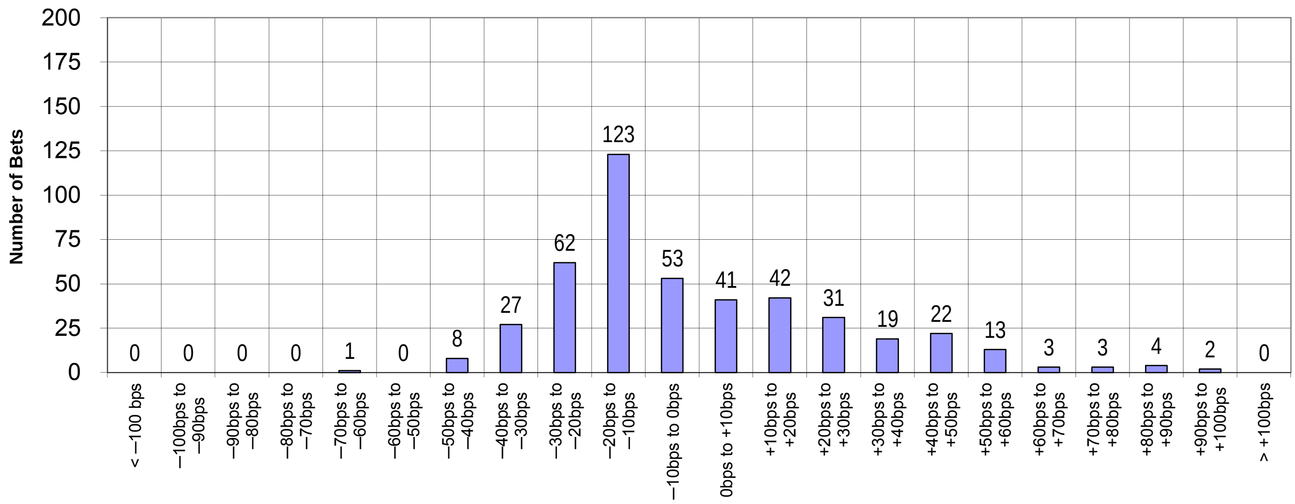
The Mid Cap Fund finished slightly ahead of the S&P Mid Cap 400 during the period as good stock selection in the Health Care/Life Sciences industry and the Energy sector just barely offset difficulties in the Capital Goods and Utility sectors. Industry and Sector diversification accounted for all of the excess return vs. the benchmark as stock selection was essentially neutral for the quarter.

Mid Cap Fund
Mike Keeler, CFA

Active Bets in Fund vs. S&P400, Grouped by Bet Sizes



Number of Individual Stocks in Bet Size Bins



Largest Overweights by Stock in Fund

Ticker	Description	Bps Over
JAH	Jarden Corporation	96
GPN	Global Payments Inc.	93
LDOS	Leidos Holdings, Inc.	89
UTHR	United Therapeutics Corporation	89
ALK	Alaska Air Group, Inc.	81
MSCI	MSCI Inc.	80
HII	Huntington Ingalls Industries, Inc.	77
AIZ	Assurant, Inc.	73
CRL	Charles River Laboratories Internati	72
WOOF	VCA Inc.	70
THG	Hanover Insurance Group, Inc.	67
CFR	Cullen/Frost Bankers, Inc.	62
NDAQ	Nasdaq, Inc.	59
CHD	Church & Dwight Co., Inc.	58
FL	Foot Locker, Inc.	57
CNC	Centene Corporation	56
EWBC	East West Bancorp, Inc.	56
ALGN	Align Technology, Inc.	54
NWL	Newell Rubbermaid Inc.	53
AHL	Aspen Insurance Holdings Limited	53

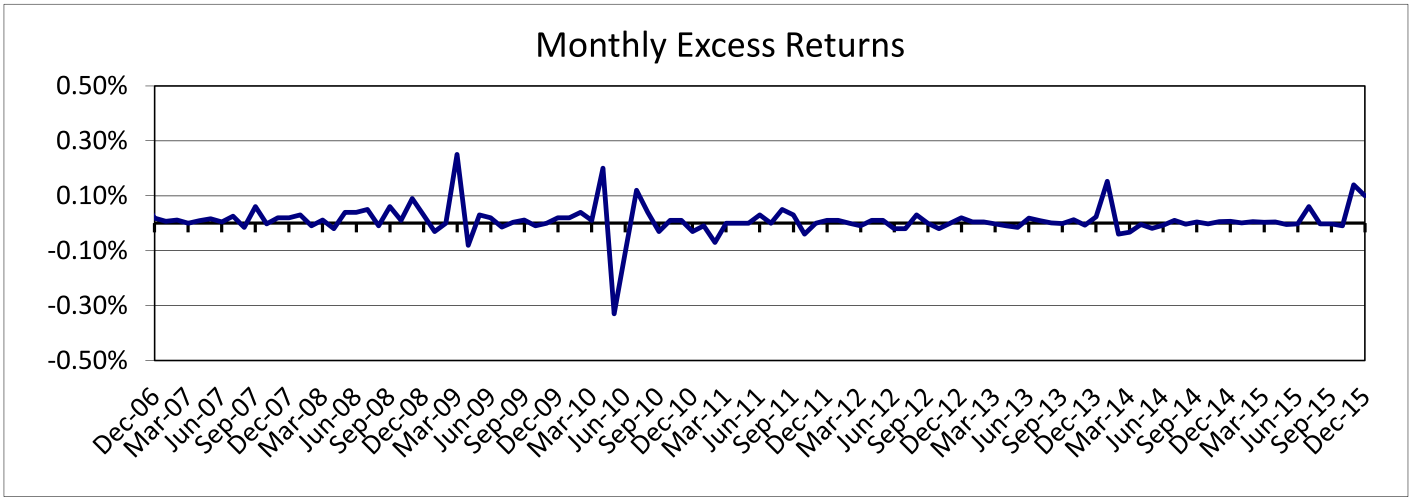
Largest Underweights by Stock in Fund

Ticker	Description	Bps Under
AYI	Acuity Brands, Inc.	-69
LKQ	LKQ Corporation	-46
STE	STERIS Plc	-44
ALB	Albemarle Corporation	-43
MAN	ManpowerGroup Inc.	-42
DPZ	Domino's Pizza, Inc.	-41
HOLX	Hologic, Inc.	-41
NVR	NVR, Inc.	-41
WR	Westar Energy, Inc.	-41
RPM	RPM International Inc.	-40
AOS	A. O. Smith Corporation	-39
TYL	Tyler Technologies, Inc.	-38
ULTI	Ultimate Software Group, Inc.	-38
TFX	Teleflex Incorporated	-37
UDR	UDR, Inc.	-36
HNT	Health Net, Inc.	-36
OA	Orbital ATK, Inc.	-36
SCI	Service Corporation International	-35
PACW	PacWest Bancorp	-33
SFG	StanCorp Financial Group, Inc.	-33

Passive Domestic Equity Funds
Michael Giggie & Chris Denny

Index Fund vs. S&P 500

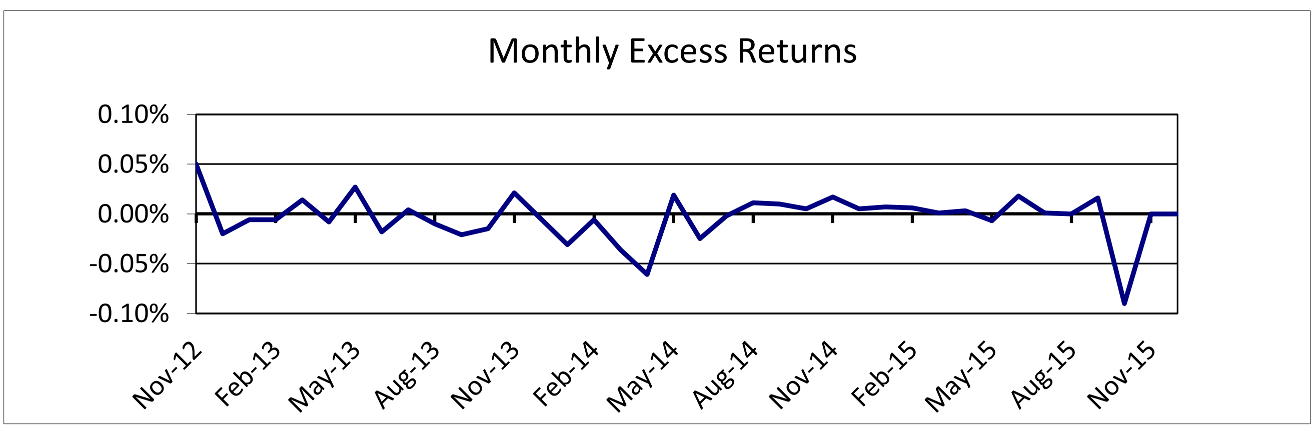
Assets as of December 2015: $2.5B



	1 Quarter	1 Year	3 Years	Since Inception
Index Fund	7.30%	1.68%	15.29%	7.10%
S&P 500	7.05%	1.39%	15.13%	6.97%
Excess Return	0.25%	0.30%	0.16%	0.13%
Tracking Error	0.27%	0.17%	0.14%	0.20%

Small Cap Fund vs. S&P 600

Assets as of December 2015: $450M

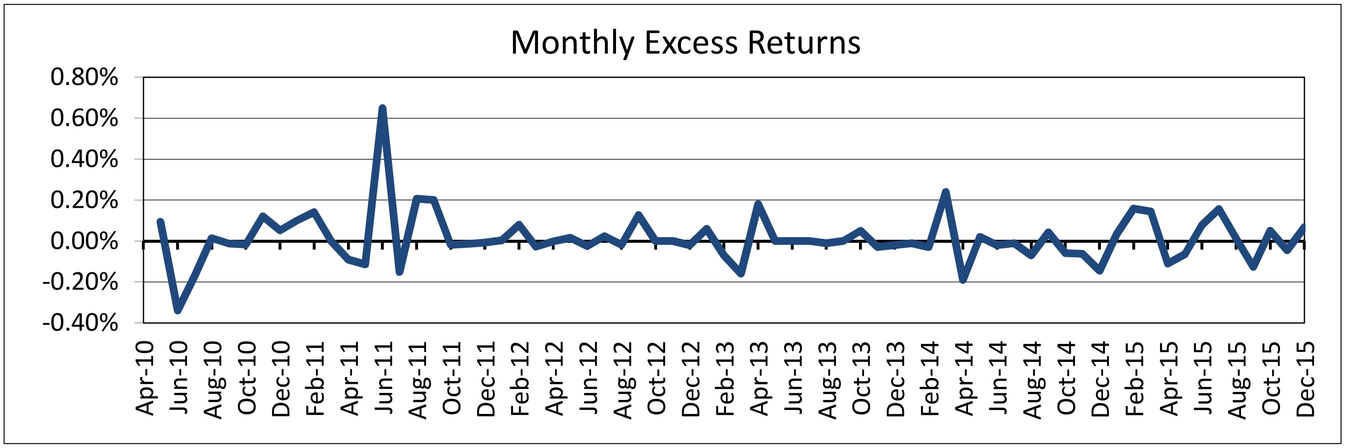


	1 Quarter	1 Year	3 Years	Since Inception
Small Cap Fund	3.64%	-2.01%	13.51%	14.51%
S&P 600	3.73%	-1.97%	13.57%	13.23%
Excess Return	-0.09%	-0.04%	-0.06%	1.28%
Tracking Error	0.18%	0.10%	0.08%	2.09%

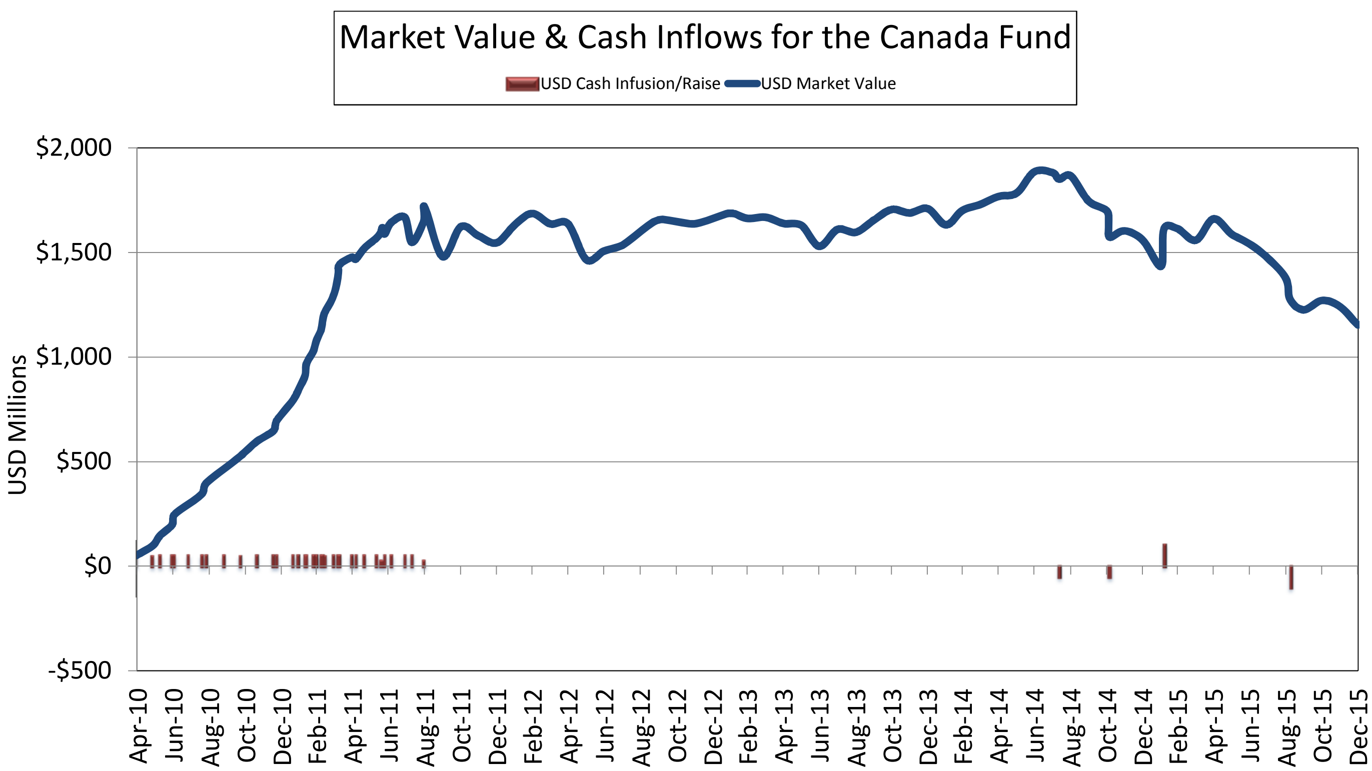
Canada Fund
Kushal Gupta, CFA, CAIA

Canada Fund vs. SPTSX60 Index

Assets as of December 31, 2015 : $1.22B



	1 Quarter	1 Year	3 Years	Since Inception
Canada Fund	-5.05%	-22.81%	-5.49%	-0.38%
SPTSX60 Index	-5.13%	-23.09%	-5.52%	-0.54%
Excess Return	0.07%	0.28%	0.02%	0.15%
Tracking Error	0.21%	0.35%	0.33%	0.45%

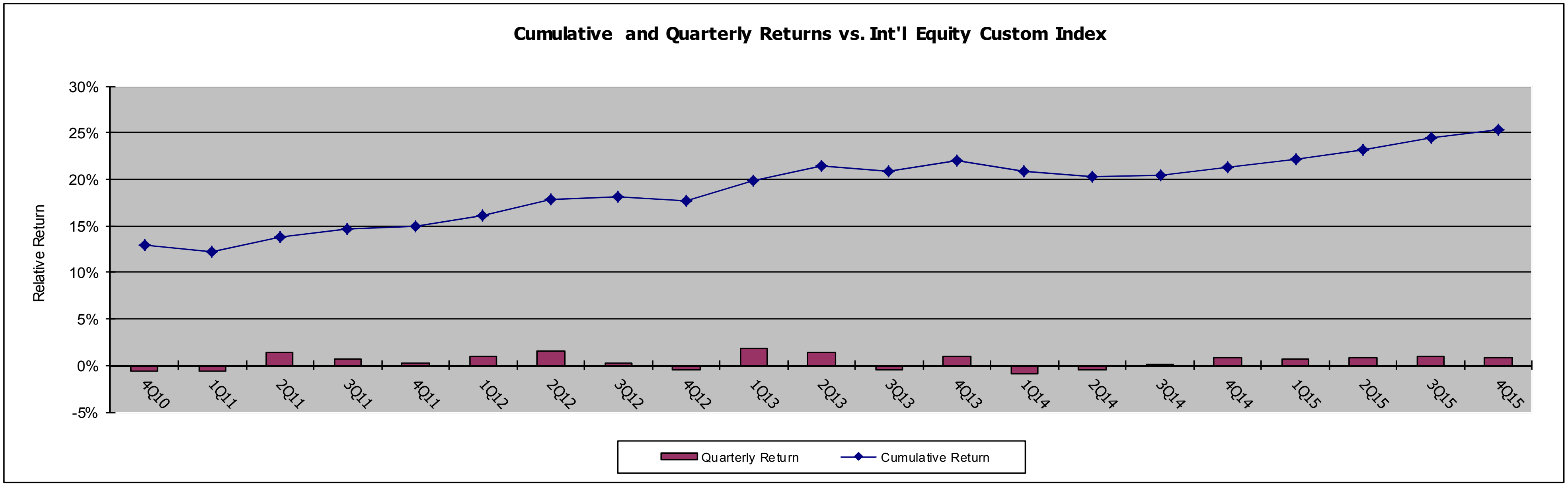


Manager Returns For The Quarter

Manager	Manager Return	Benchmark	Benchmark Return
American Century	6.84	MSCI EAFE Small Cap	6.79
Baring Asset Mgmt	6.83	MSCI EAFE	4.71
Emerging Market ETF	-0.71	MSCI Emg Mkts Net Custom	0.08
FIAM	7.24	MSCI EAFE Small Cap	6.79
GE Asset Mgmt	3.12	MSCI Europe	2.49
Marathon	5.91	MSCI EAFE net	4.71
Pacific Indexed Portfolio[1]	8.24	MSCI Pacific net	9.00
PanAgora Asset Mgmt	6.69	MSCI EAFE	4.71
TT International	5.06	MSCI EAFE	4.71
Walter Scott	7.19	MSCI EAFE net[2]	4.71
International Equity	4.38	Int'l Equity Custom[3]	3.61

Manager Returns For Five Years

Manager	Manager Return	Benchmark	Benchmark Return
American Century	9.63	MSCI EAFE Small Cap	6.32
Baring Asset Mgmt	4.79	MSCI EAFE	3.60
Emerging Market ETF		MSCI Emg Mkts Net Custom	
FIAM	8.20	MSCI EAFE Small Cap	6.32
GE Asset Mgmt	4.35	MSCI Europe	3.88
Marathon	7.36	MSCI EAFE net	3.60
Pacific Indexed Portfolio[1]	2.88	MSCI Pacific net	3.18
PanAgora Asset Mgmt	6.60	MSCI EAFE	3.60
TT International	5.57	MSCI EAFE	3.60
Walter Scott	5.26	MSCI EAFE net[2]	3.60
International Equity	3.84	Int'l Equity Custom[3]	1.61



[1] *Effective as of 9/4/10, internally managed by TCRS staff. Amundi Pacific terminated.*

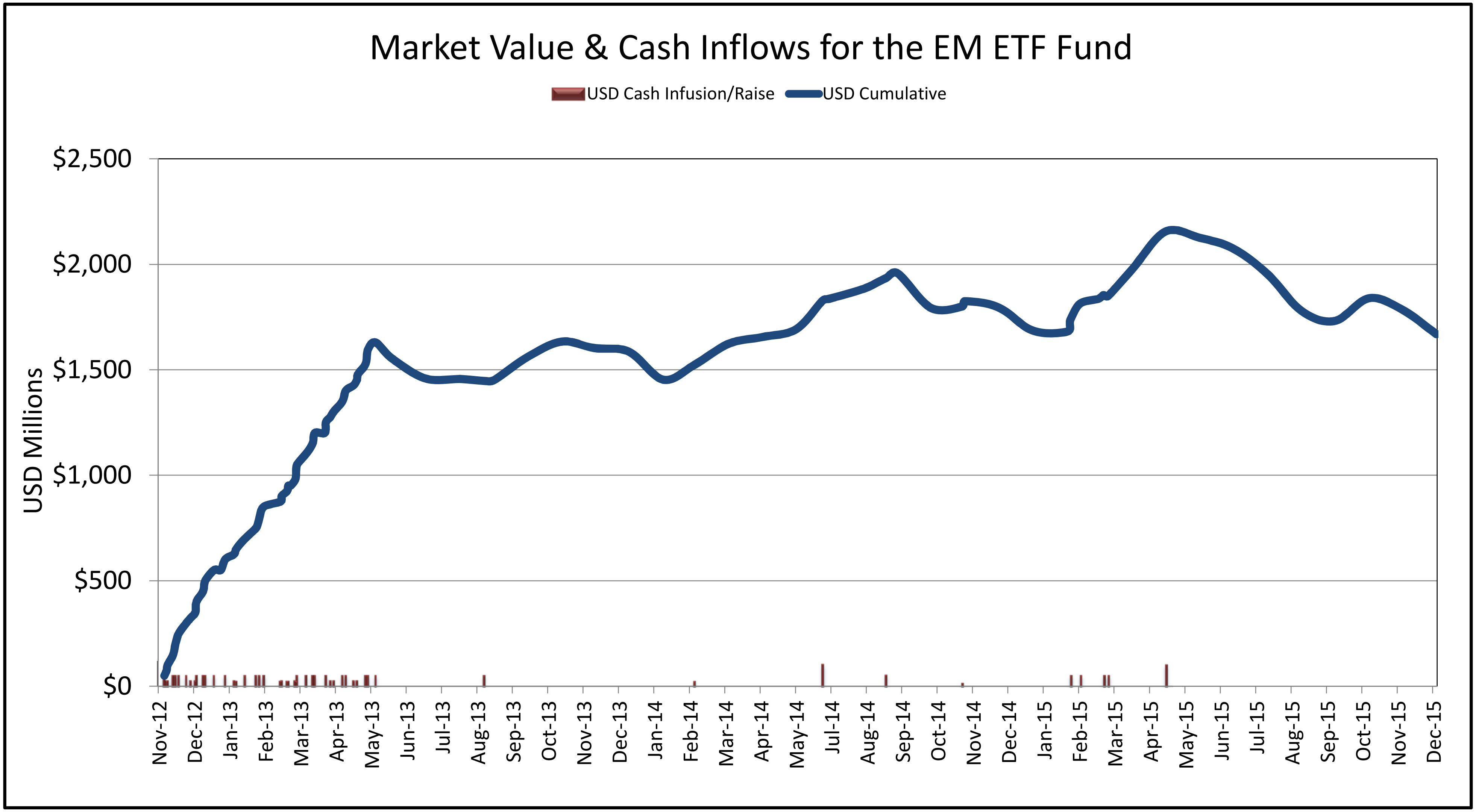
[2] *Effective 3/1/09. Benchmark is linked to MSCI Europe Index.*

[3] *Effective 1/1/13, benchmark is 72.22% MSCI EAFE IMI net/ 27.78% MSCI Emerging Mkts net; linked to 100% MSCI IMI net.*

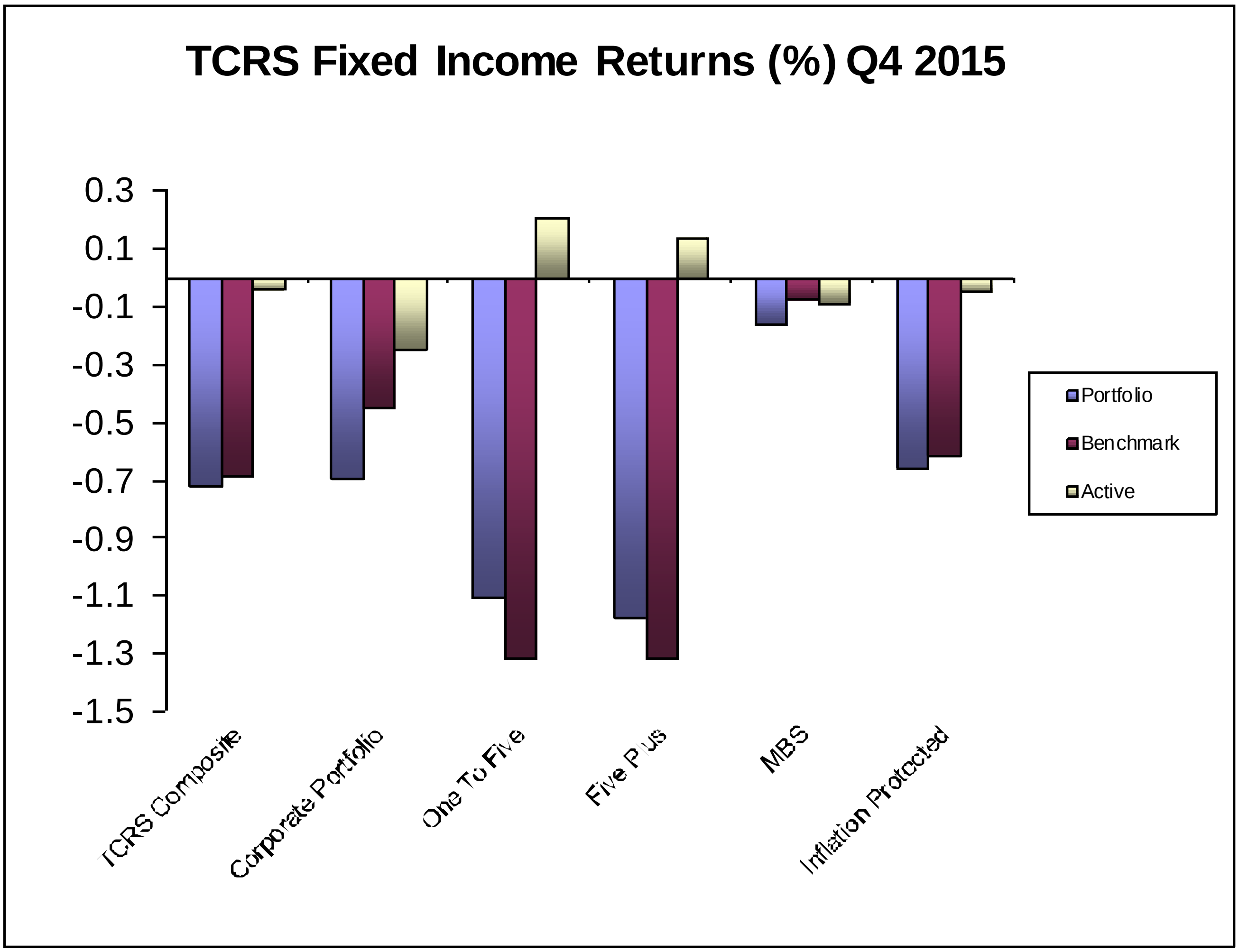
Emerging Markets ETF Fund

Kushal Gupta, CFA, CAIA

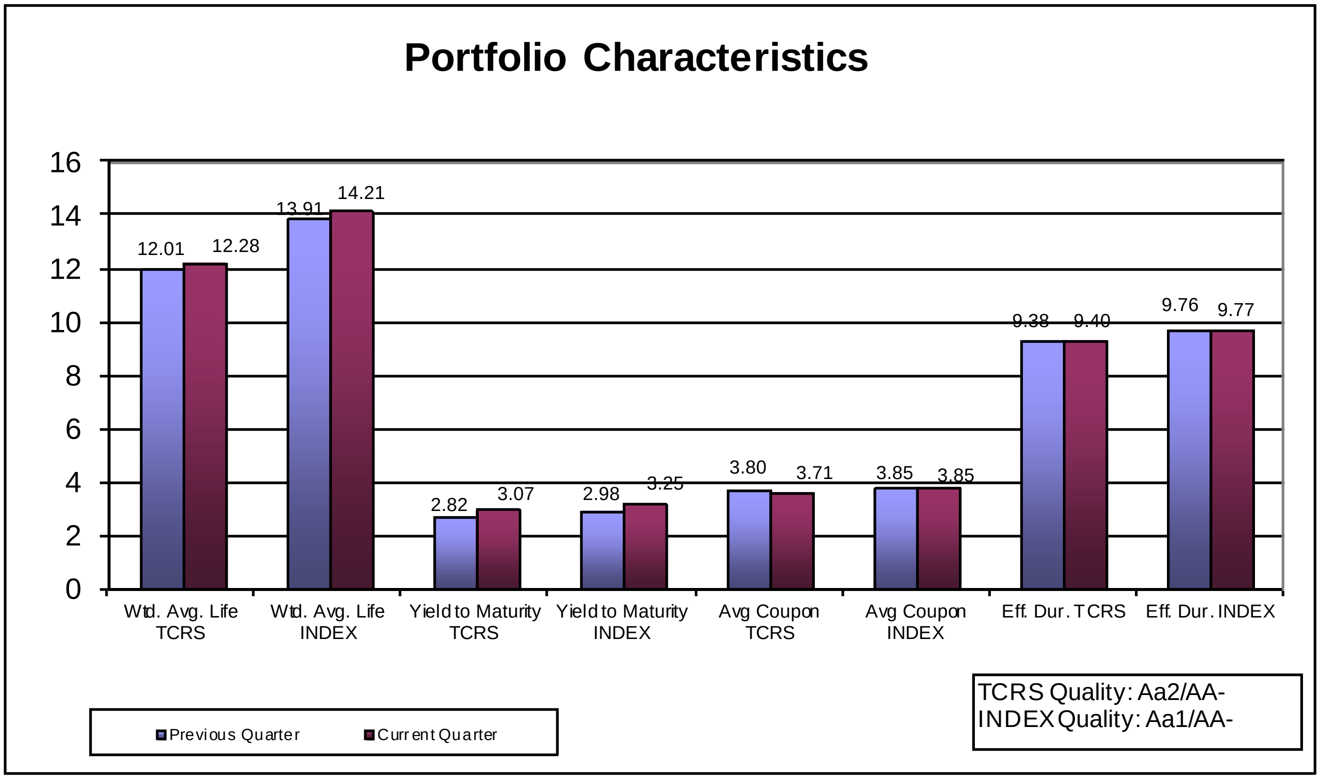
Assets as of December 31, 2015: $1.66B



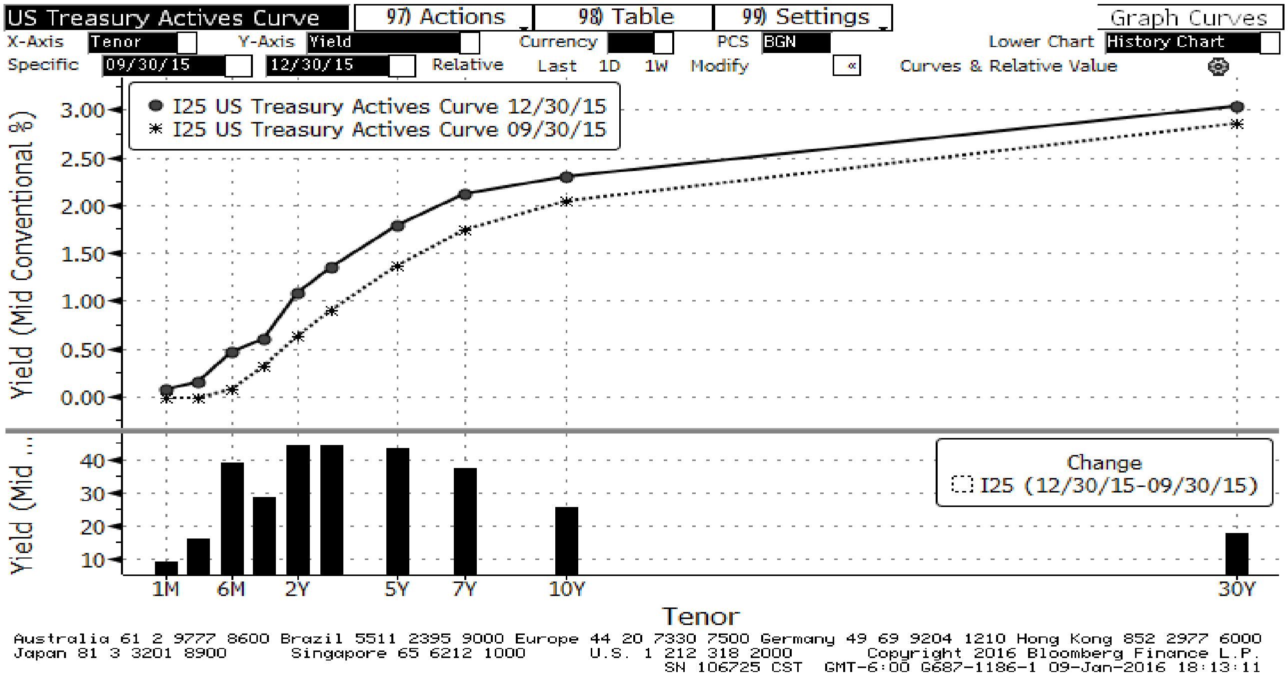
Portfolio	Value (Yield Book) ($MMs)	Portfolio Return	Benchmark Return	Active Return
TCRS Domestic Fixed Income Composite	$11,394	(0.72)	(0.68)	(0.04)
Corporate Portfolio	$3,322	(0.69)	(0.45)	(0.24)
Government One To Five Years	$2,083	(1.10)	(1.31)	0.21
Government Five Plus Years	$2,109	(1.17)	(1.31)	0.14
Mortgage Portfolio	$3,829	(0.16)	(0.07)	(0.08)
TCRS Inflation Protected Securities	$2,387	(0.66)	(0.61)	(0.04)



We are close to the benchmark duration due to volatility in the market



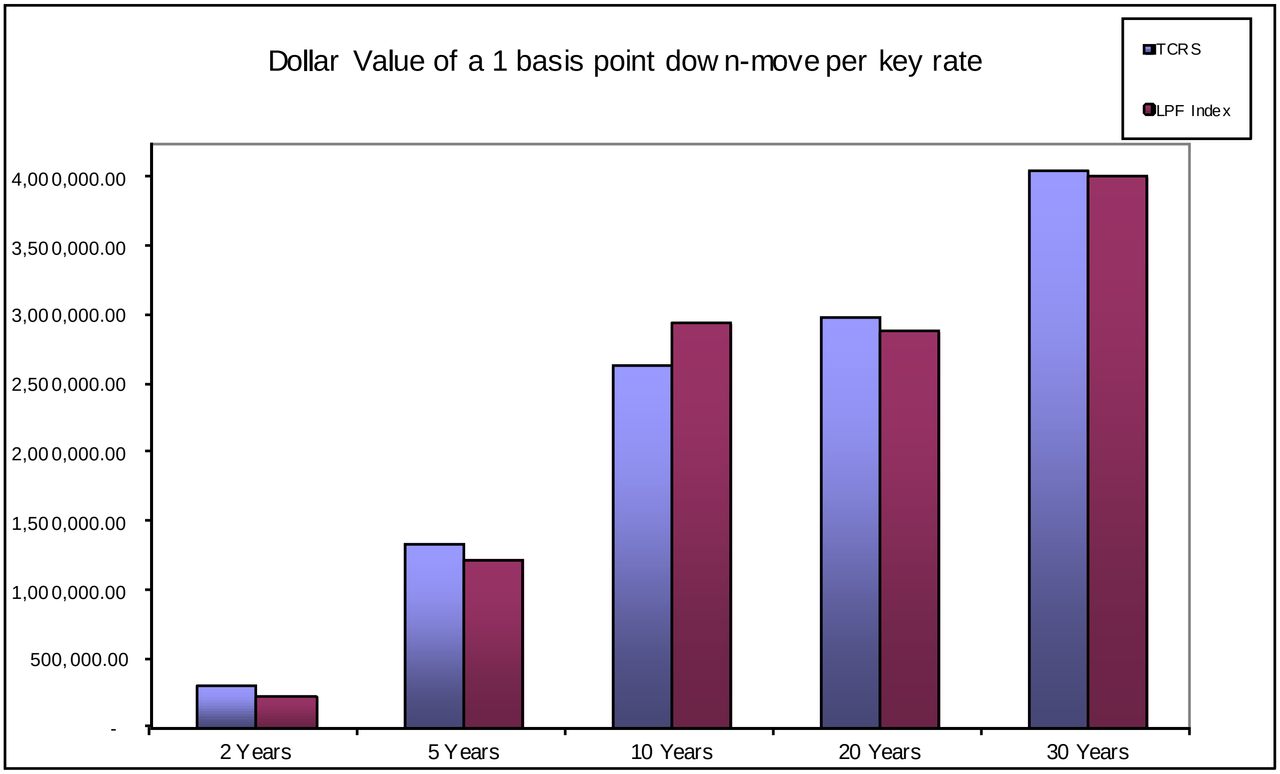
The Yield Curve steepened

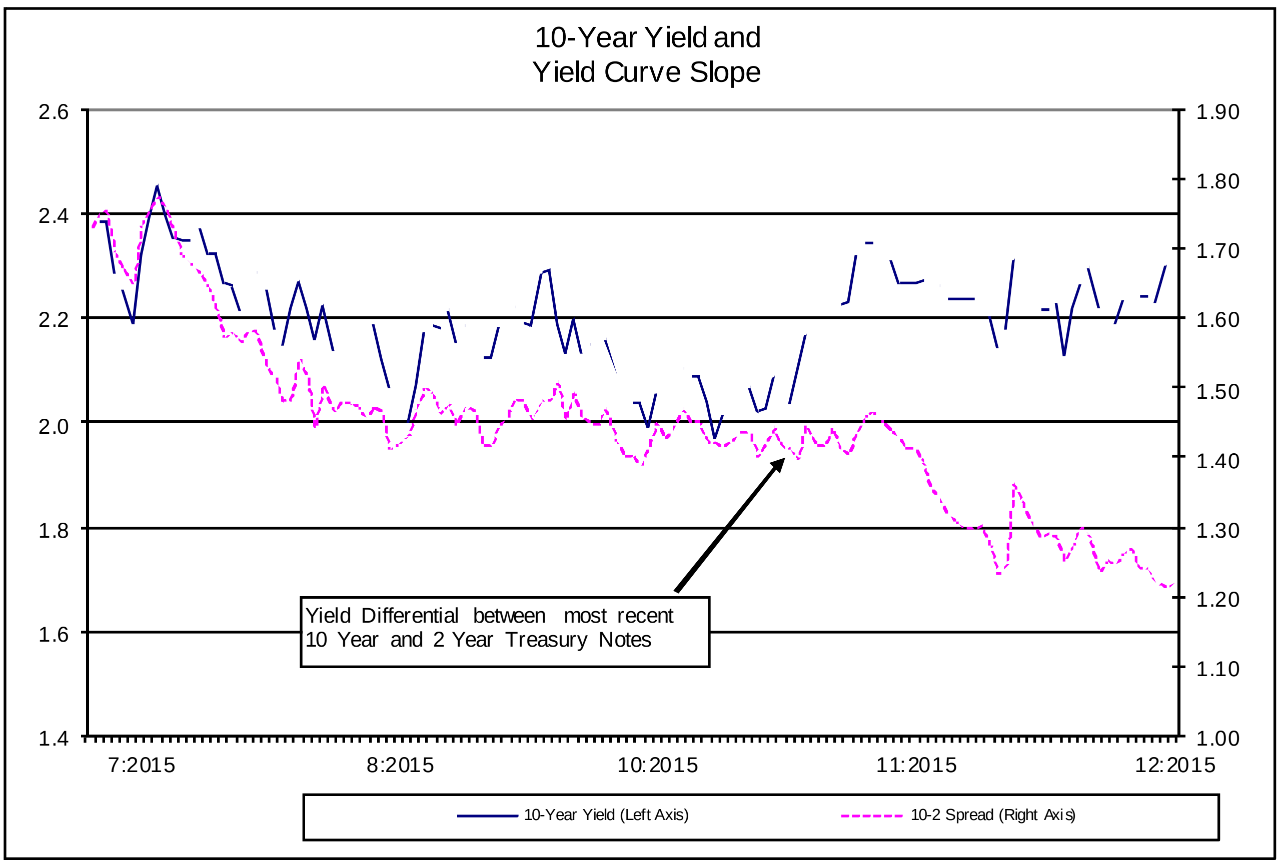


Curve Positioning

Thomas Kim, CFA

Curve positioning reflects our view that the risk of further hikes of the overnight interest rate by the Federal Reserve in 2016 has diminished, so we made efforts to neutralize curve impacts.

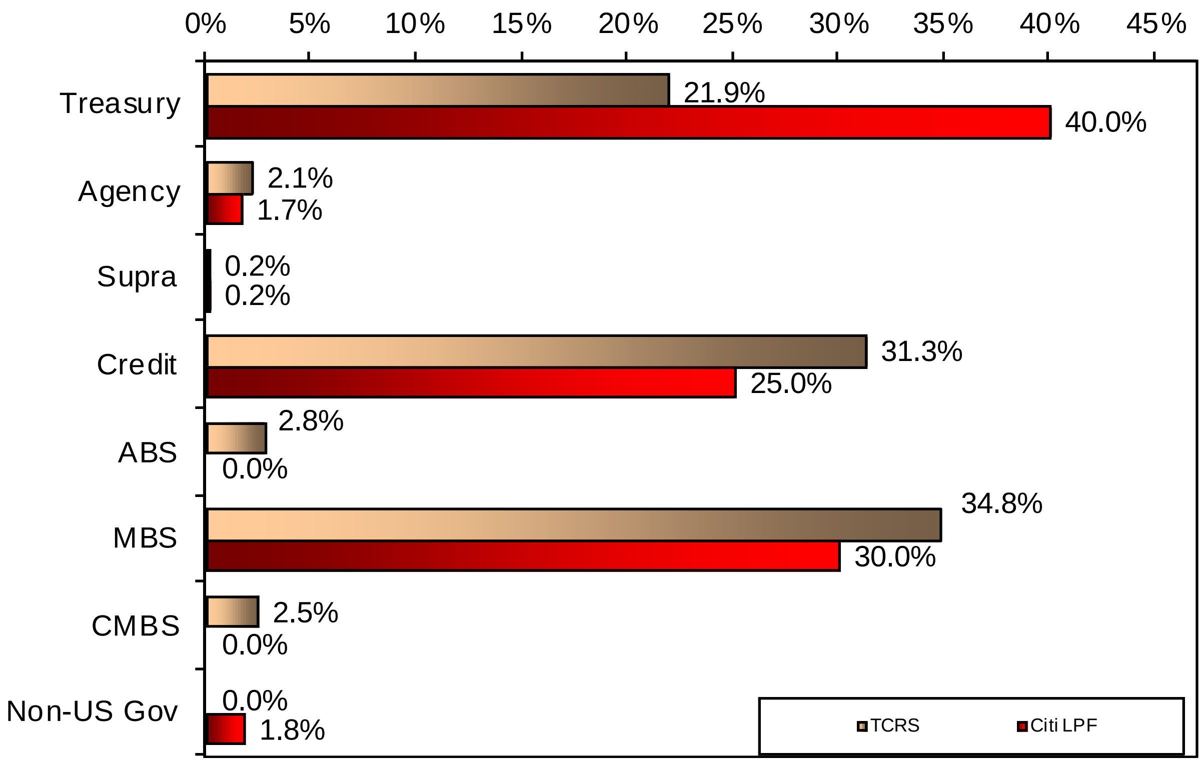




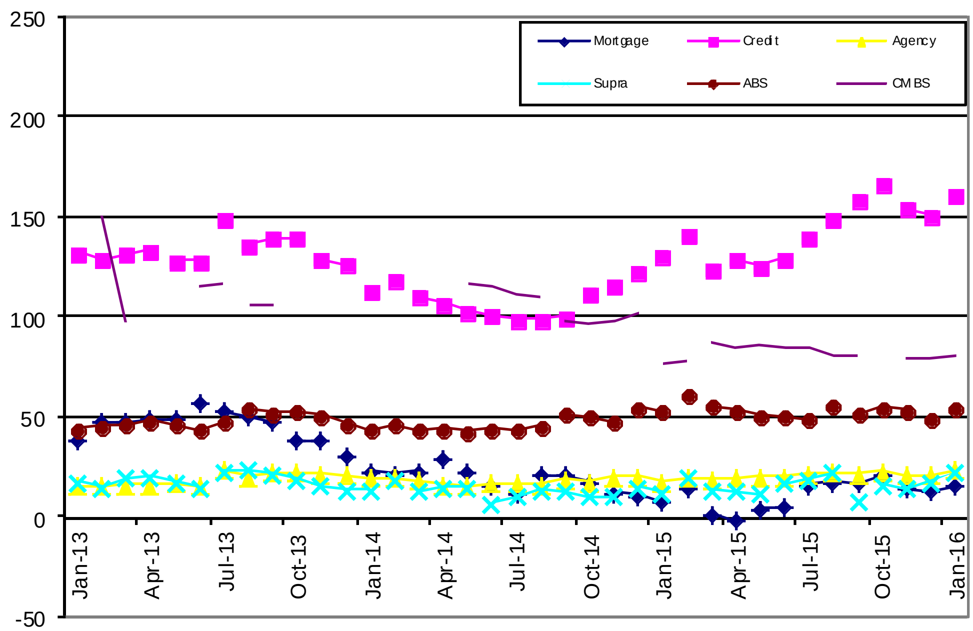
source: Bloomberg

Credit spreads marginally tightened during the quarter. We took the opportunity to further reduce credit risk exposure,and increase mortgage and high-quality fixed income products.

Sector Allocation v. Index
(% market value)



Spread to Treasuries by Asset Class
(in basis points, index data)



source: Yield Book

Allocation by Credit Quality

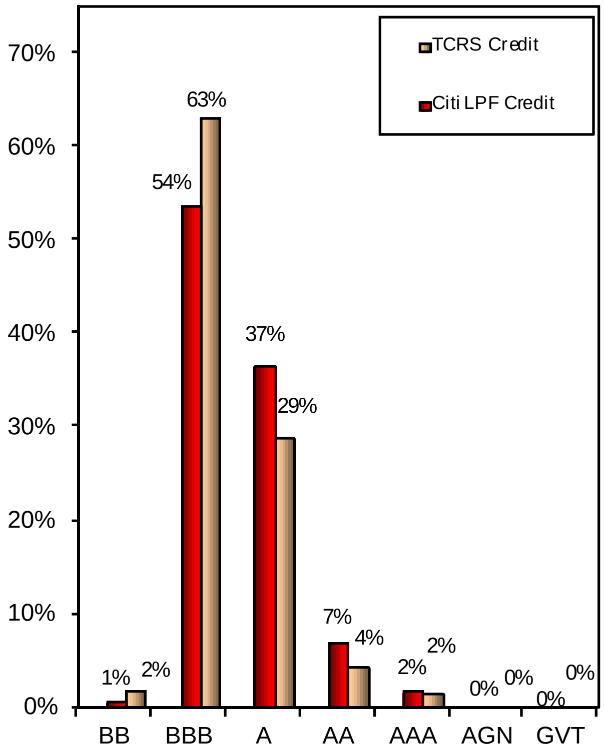
Thomas Kim, CFA

Credit Spreads tightened during the quarter

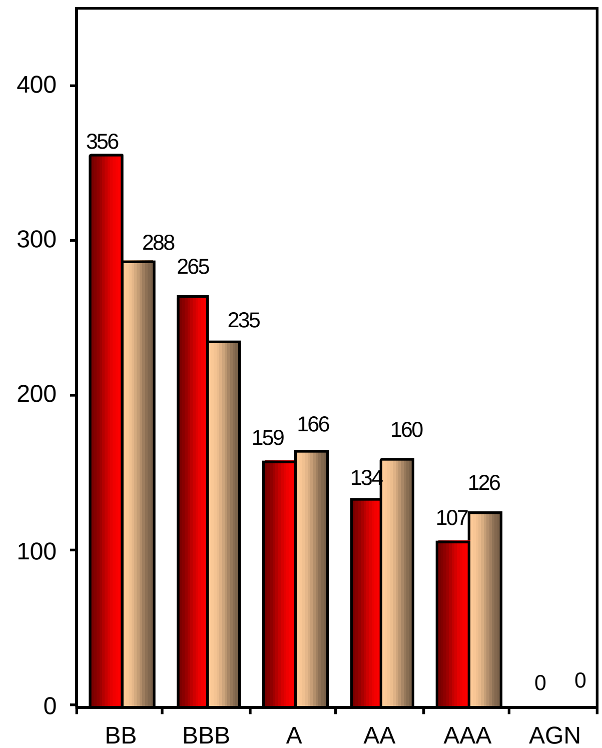
BBB- allocation has been reduced and focused more on high quality assets.

However, spreads reflect a higher liquidity risk in higher quality issuers.

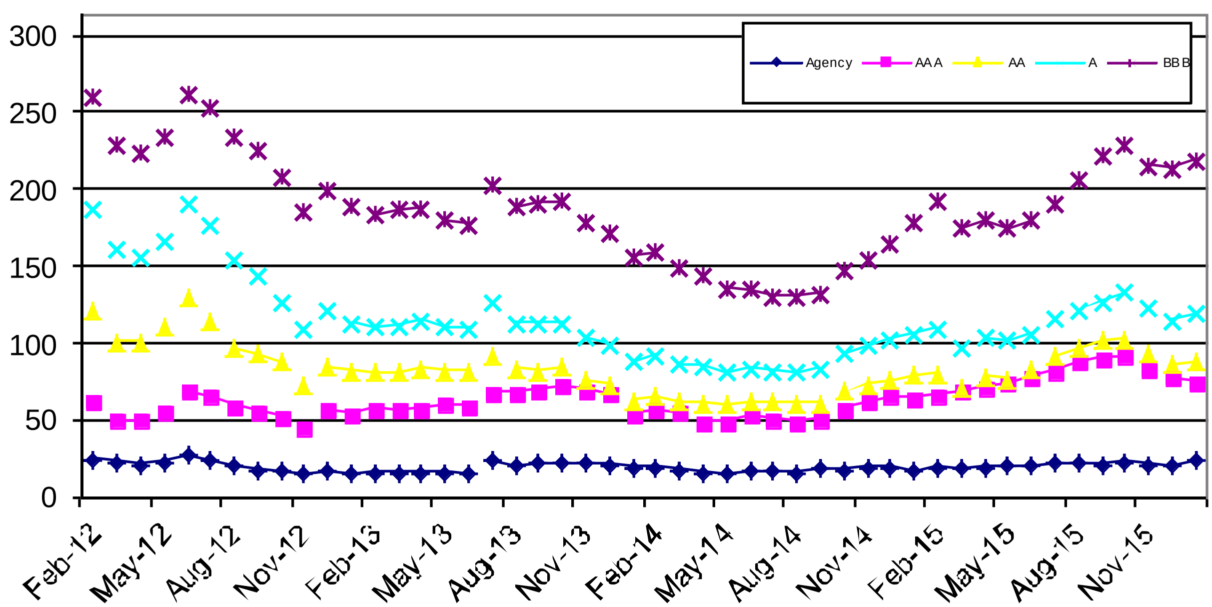
Credit Allocation v. Index
(% market value)



OAS by Credit Allocation



Spread to Treasury by Credit Rating
(in basis points, index data)

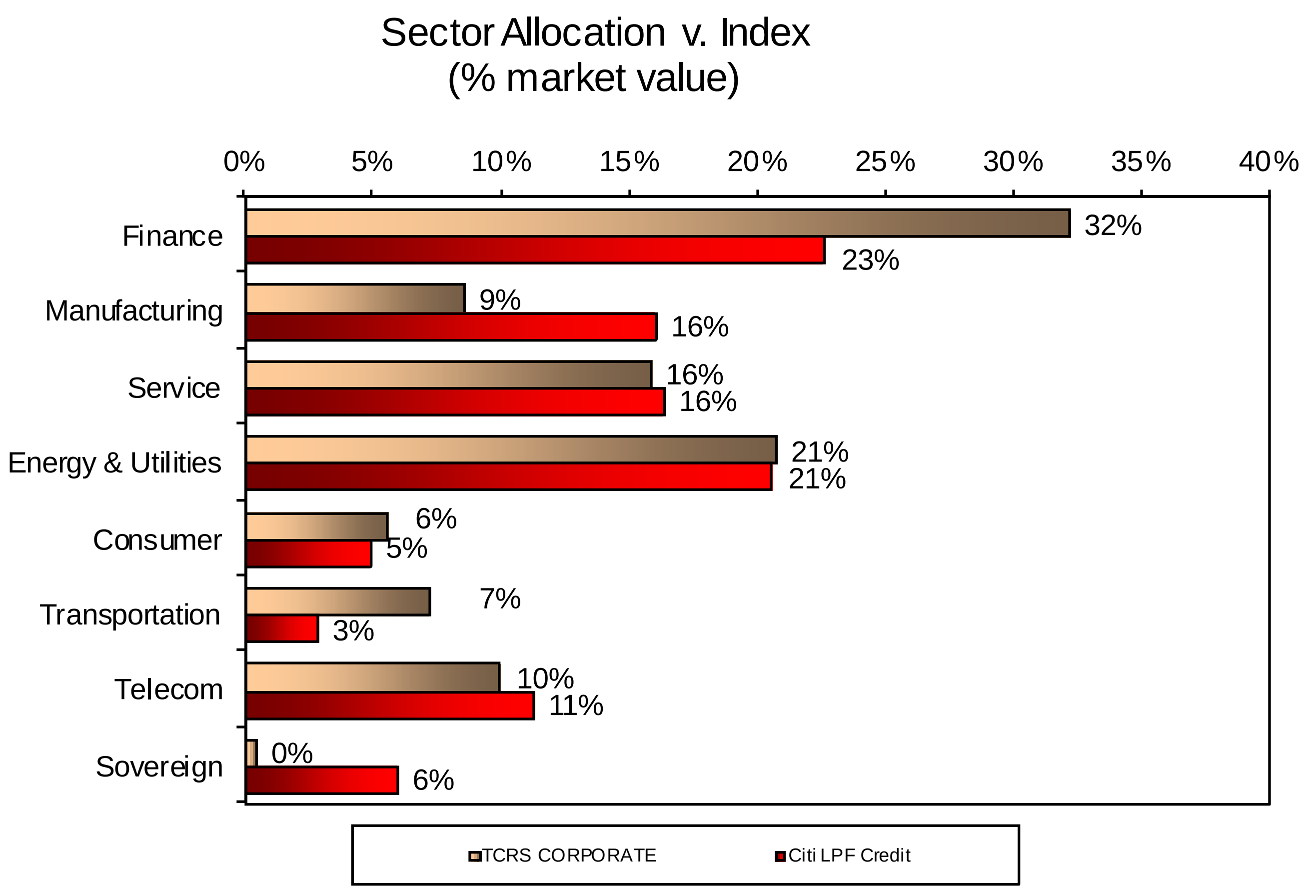


Allocation by Credit Sector

Thomas Kim, CFA

Top 5 Credit Holdings (by Market Value)	MktVal	% MktVal
METROPOLITAN GOVT NASHVILLE	35,403	1.1
NEW YORK CITY WATER & SEWER	35,051	1.0
ARMY HAWAII FAMILY HOUSING TRUST	30,692	0.9
CITIGROUP INC	30,155	0.9
CVS CORP	29,125	0.9

Top 5 Credit Holdings (by Dollar Duration)	DV01	% DV01
NEW YORK CITY WATER & SEWER	53,721	1.4%
AT&T INC	50,792	1.2%
METROPOLITAN GOVT NASHVILLE	43,332	1.2%
ARMY HAWAII FAMILY HOUSING TRUST	43,282	1.1%
J.P. MORGAN & CO INC	39,720	1.0%

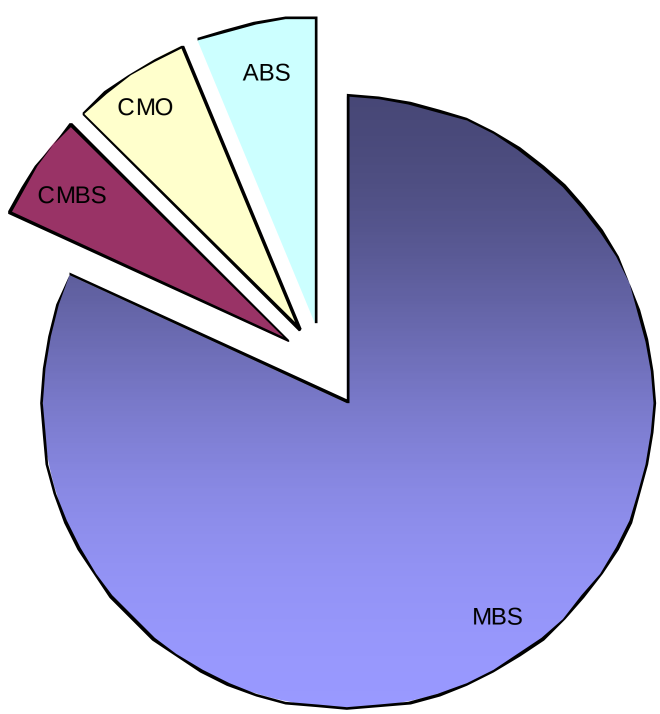


Securitized Product Breakdown

Thomas Kim, CFA

	Market Value ($MM - Yield Book)	TCRS % of portfolio	CITI % of portfolio	Differenc
Agency Mortgage Backed Securities	$3,699,302	32.7	30.2	2.5
GNMA				
15-Yr	$17,320	0.2	0.0	0.1
30-Yr	$870,228	7.7	8.5	-0.8
FNMA				
10-, 15- & 20-Yr	$294,694	2.6	2.6	0.0
30-Yr	$1,334,170	11.8	11.6	0.2
FHLM				
15-Yr	$138,424	1.2	1.4	-0.2
30-Yr	$972,726	8.6	6.0	2.6
Agency Hybrid	$71,740	0.6	0.0	0.6
Commercial Mortgage Backed Securities	$255,305	2.3	0.0	2.3
CMO and Non Agency Passthroughs	$282,325	2.5	0.0	2.5
Asset Backed Securities	$283,015	2.5	0.0	2.5
Total Securitized Product	**$4,519,947**	**39.9**	**30.2**	**9.7**

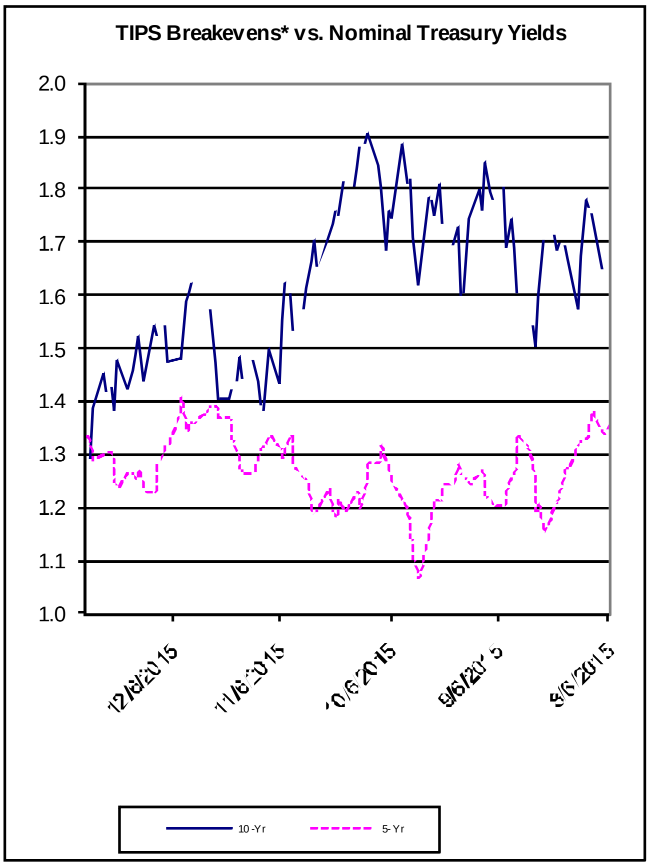
Percent of Securitized Product

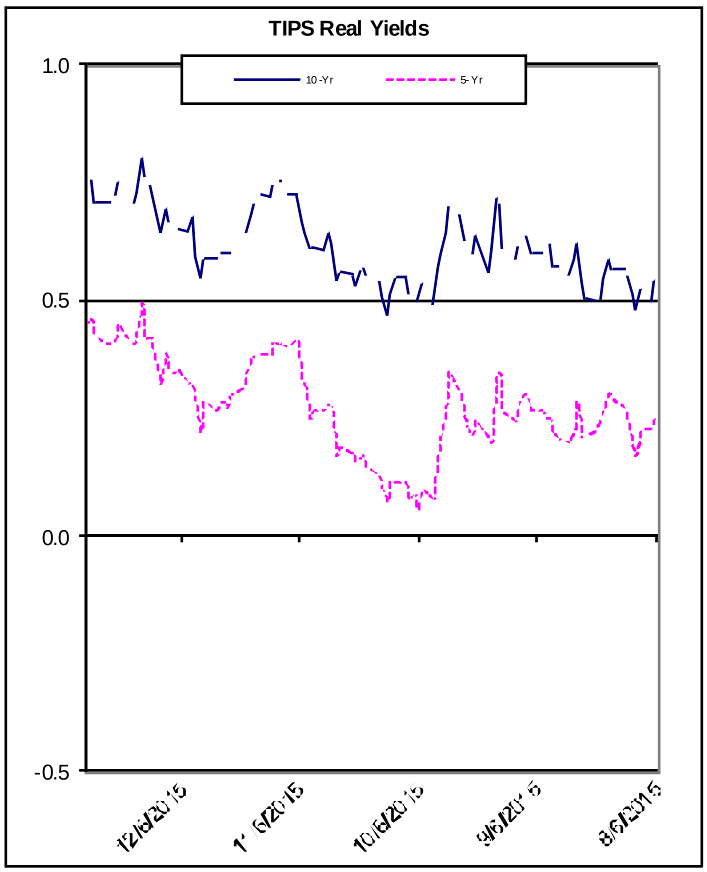


Portfolio Value (Yield Book):	$2,386,917,161
Portfolio Return:	-0.66%
Citigroup ILSI Index:	-0.61%
Active Return:	**-0.04%**

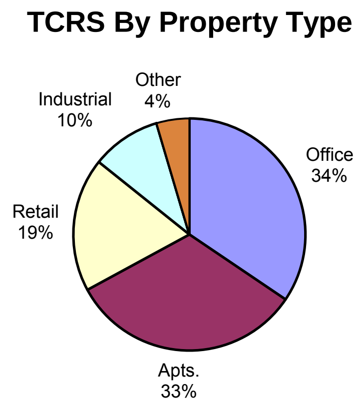
% Market Value by Duration

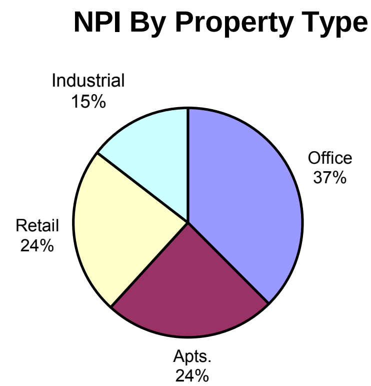
	TCRS	CITI	Difference
0-2	14.6	17.2	-2.6%
2-4	29.5	25.7	3.8%
4-6	21.0	22.2	-1.2%
6-8	19.5	21.7	-2.2%
8-10	2.3	0.8	1.5%
10+	13.2	12.4	0.8%

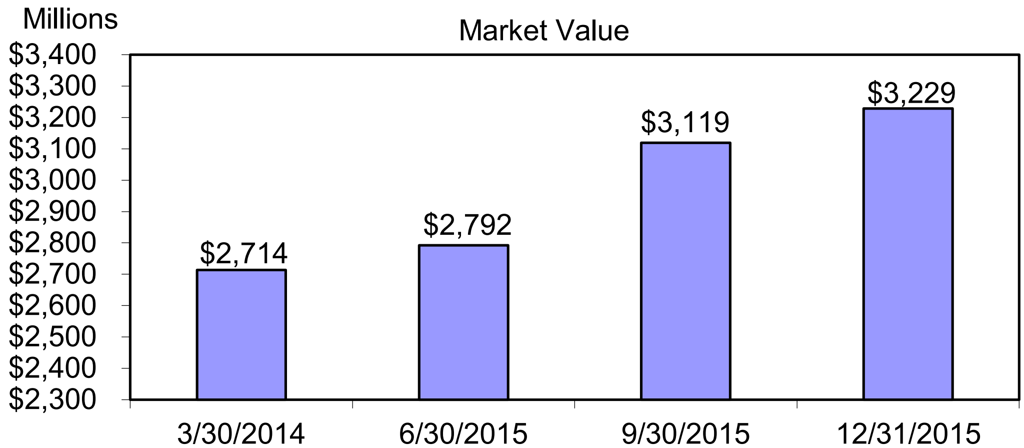


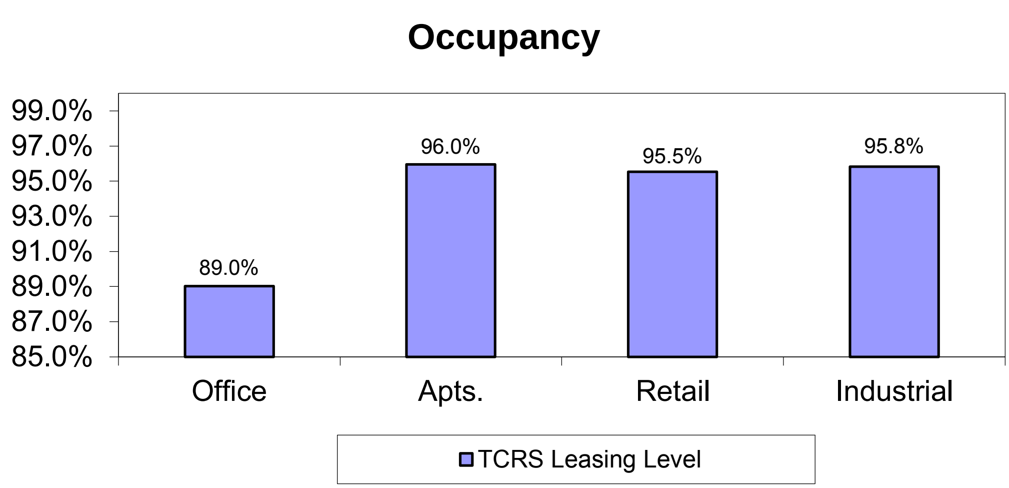


* The "breakeven" rate is the expected rate of inflation at which investment in TIPS yield the same return as investment in Treasuries



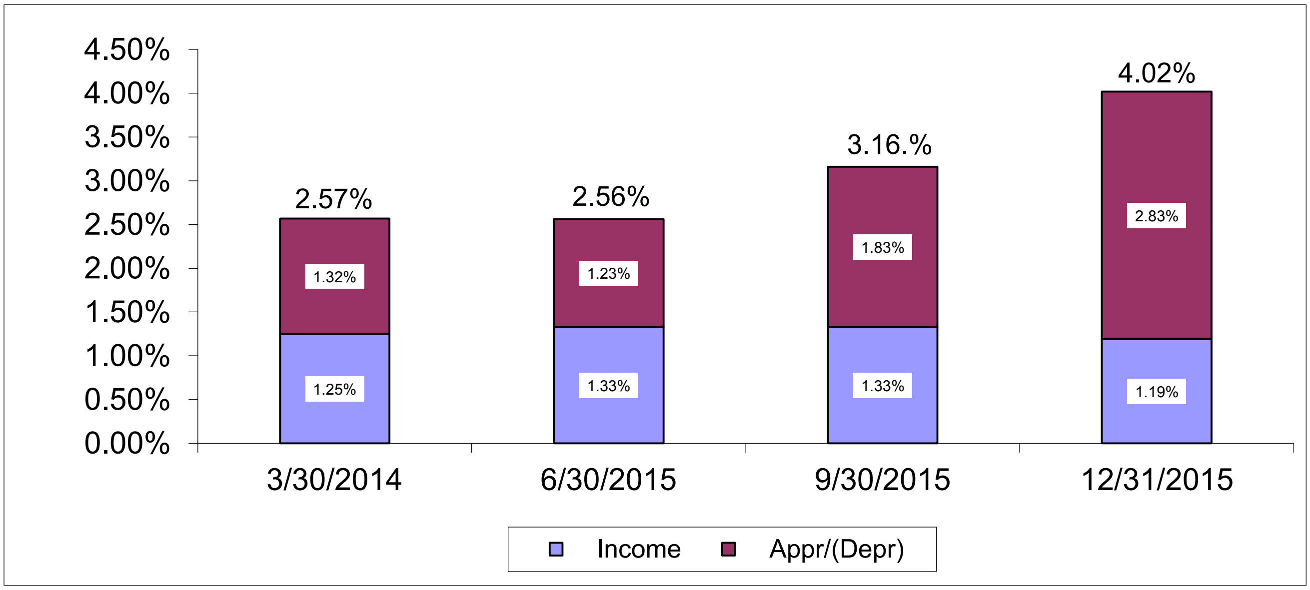






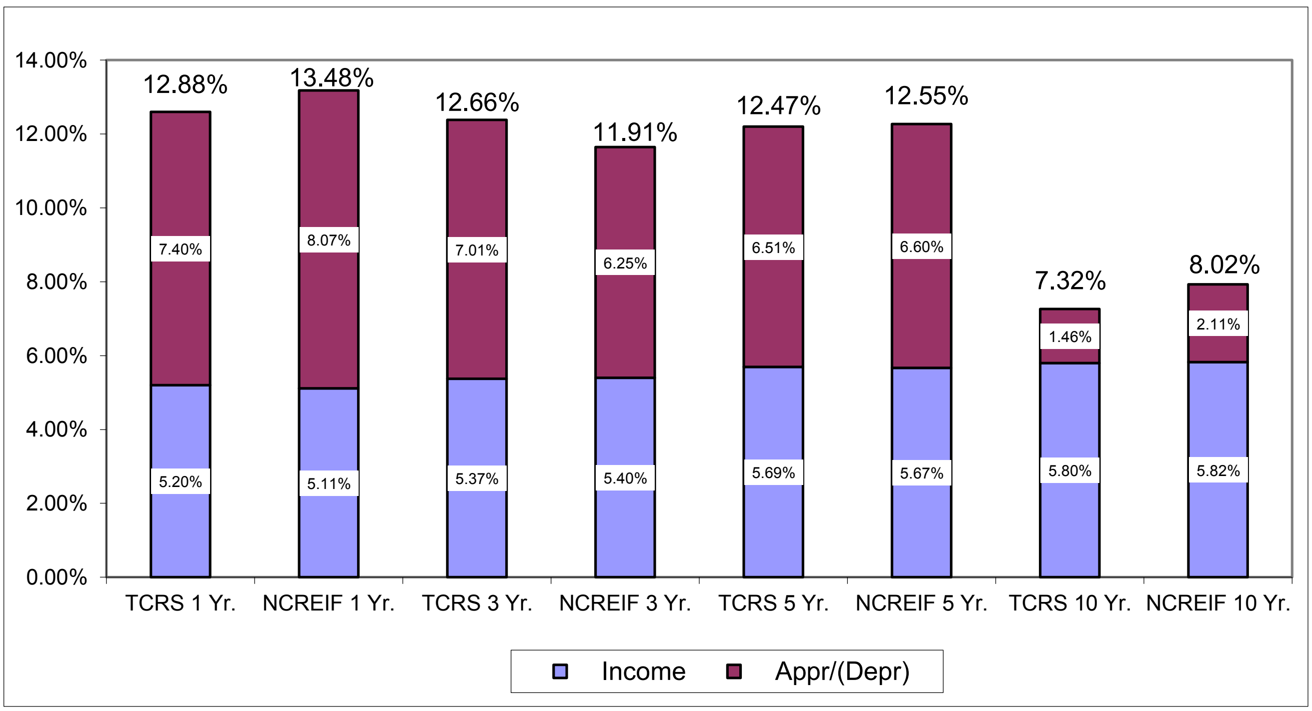
*Occupancy data does not include non-core investments.

The NPI is the National Property Index of the National Council of Real Estate Investment Fiduciaries (the index used for US core properties).



All returns shown above are reported one quarter in arrears

Budgeted Annual Income Return for calendar year 2015 (excluding funds) 5.15%



All returns shown above are reported one quarter in arrears

Daniel Crews, CFA CAIA

We have finalized our fiscal 2Q2016 results (the period ending 9/30/15), and are pleased to report that the program continues to demonstrate positive momentum.

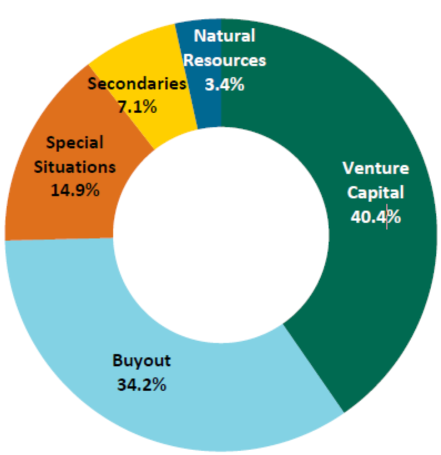
PORTFOLIO BENCHMARK

AS OF SEPTEMBER 30, 2015	1 QTR	1 YEAR	3 YEARS	5 YEARS	SINCE INCEPTION	TVPI
TCRS Private Equity	0.8%	15.8%	18.6%	17.0%	17.0%	1.3x
S&P 500 + 300 bps	-5.7%	0.6%	11.0%	12.2%	12.3%	NA
Value Added	*6.5%*	*15.2%*	*7.6%*	*4.8%*	*4.7%*	*NA*

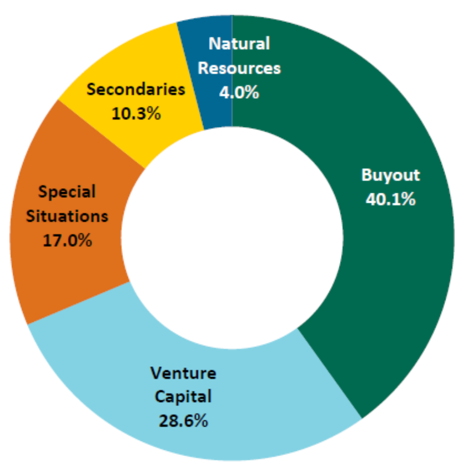
PEER BENCHMARK

AS OF SEPTEMBER 30, 2015	1 QTR	1 YEAR	3 YEARS	5 YEARS	SINCE INCEPTION	TVPI
TCRS Private Equity	0.8%	15.8%	18.6%	17.0%	17.0%	1.3x
Cambridge Associates	0.6%	9.0%	14.6%	13.9%	13.9%	1.3x
Value Added	*0.2%*	*6.8%*	*4.0%*	*3.1%*	*3.1%*	*0.0x*

The following chart shows the total exposure to the sub-asset classes based on valuations and unfunded commitments through the end of September 2015. By total exposure, the portfolio is very close to its neutral target weights for each segment of the portfolio. By Net Asset Value (NAV), a divergence is evident between Buyouts and Venture, indicating the timing differences of the program's commitments in those categories. Venture is experiencing meaningful gains in recent funds but distributions remain low, while Buyout firms are net sellers and are generally slow in drawing capital committed to recent funds.



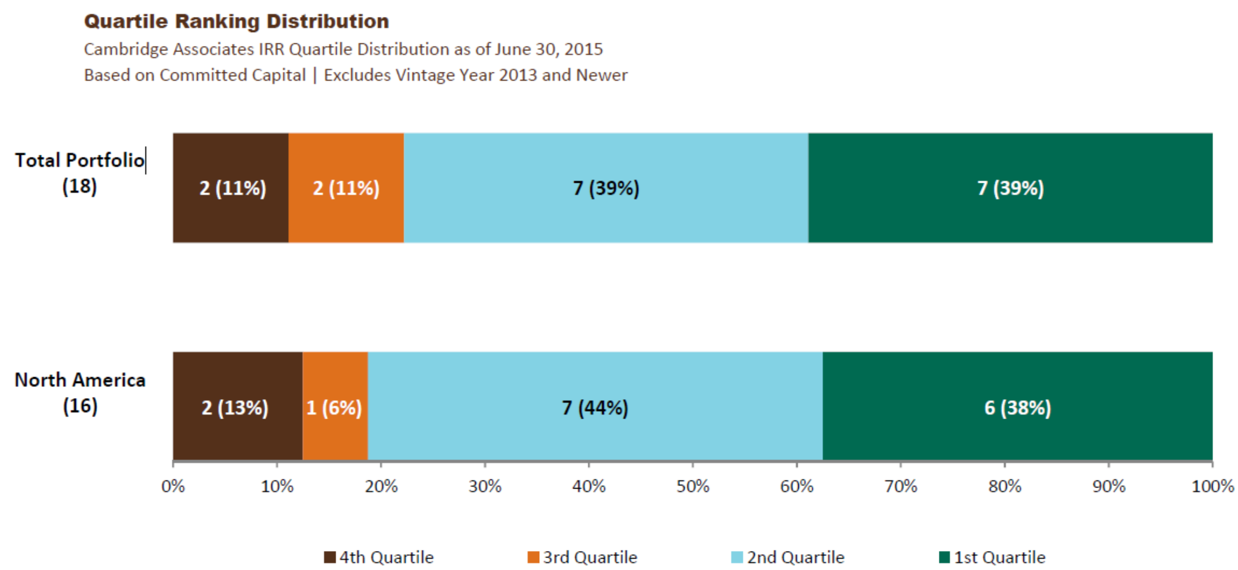
Fair Market Value



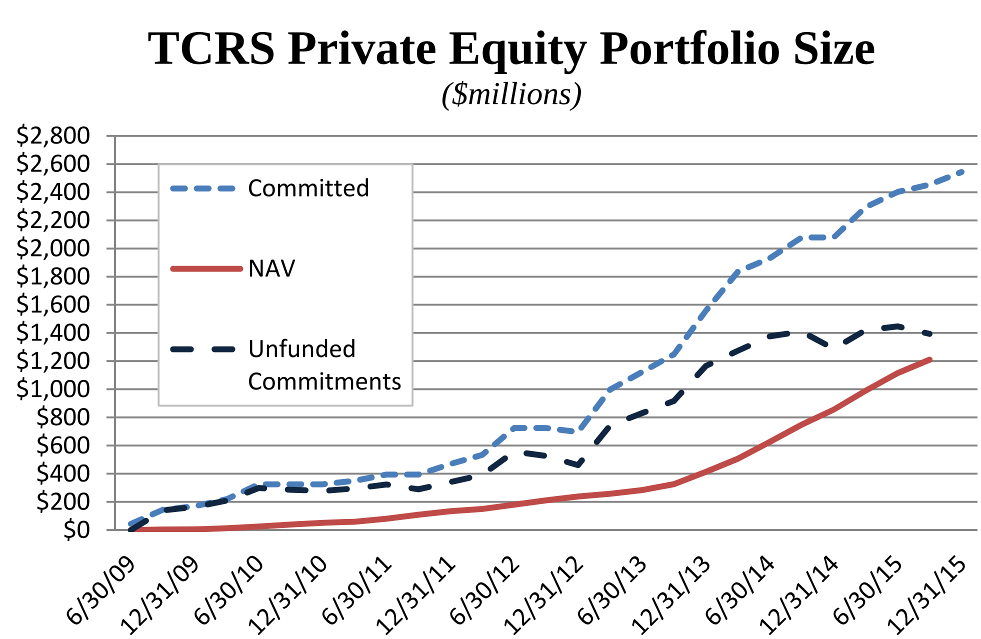
Total Exposure

Daniel Crews, CFA CAIA

Manager selection continues to add incremental value to the portfolio, as the proportion of seasoned funds in the portfolio in the 1st and 2nd performance quartiles are significantly above 50%.

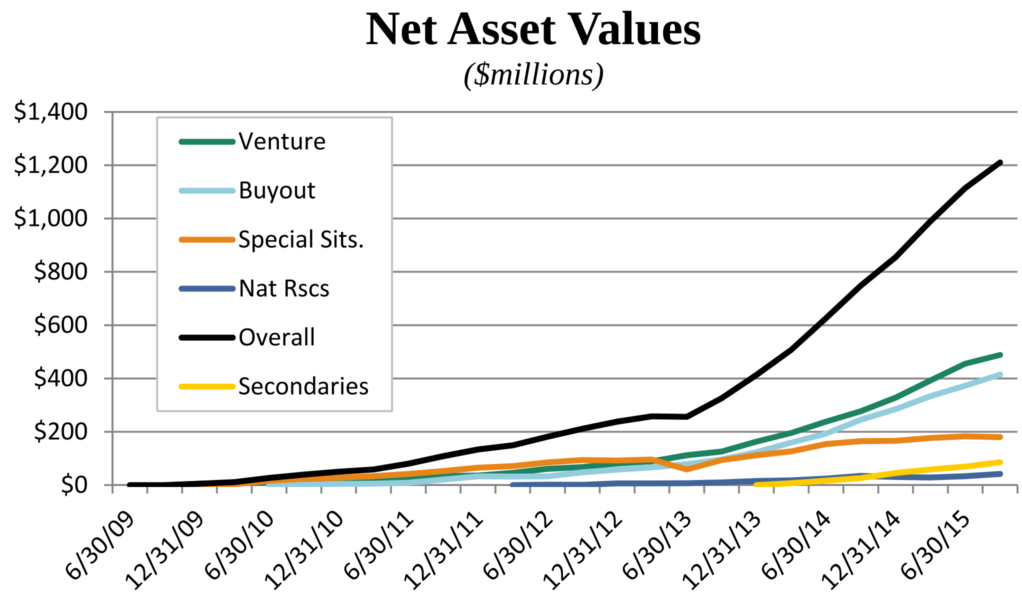


The next chart shows the overall size and growth of the TCRS portfolio in terms of cumulative commitments, unfunded commitments, and net asset value.



Daniel Crews, CFA CAIA

The chart below illustrates the net asset value of each subcategory since the program's inception. As expected, NAVs have accelerated significantly as the portfolio begins to reflect gains from early commitments.



Staff continues to pursue implementation of eFront, a Contact Resource Management (CRM) software program, and focus on pipeline and monitoring activities.

A key project during 2016 will be the outlining of a systematic framework for dealing with any funds that experience unexpected negative issues.

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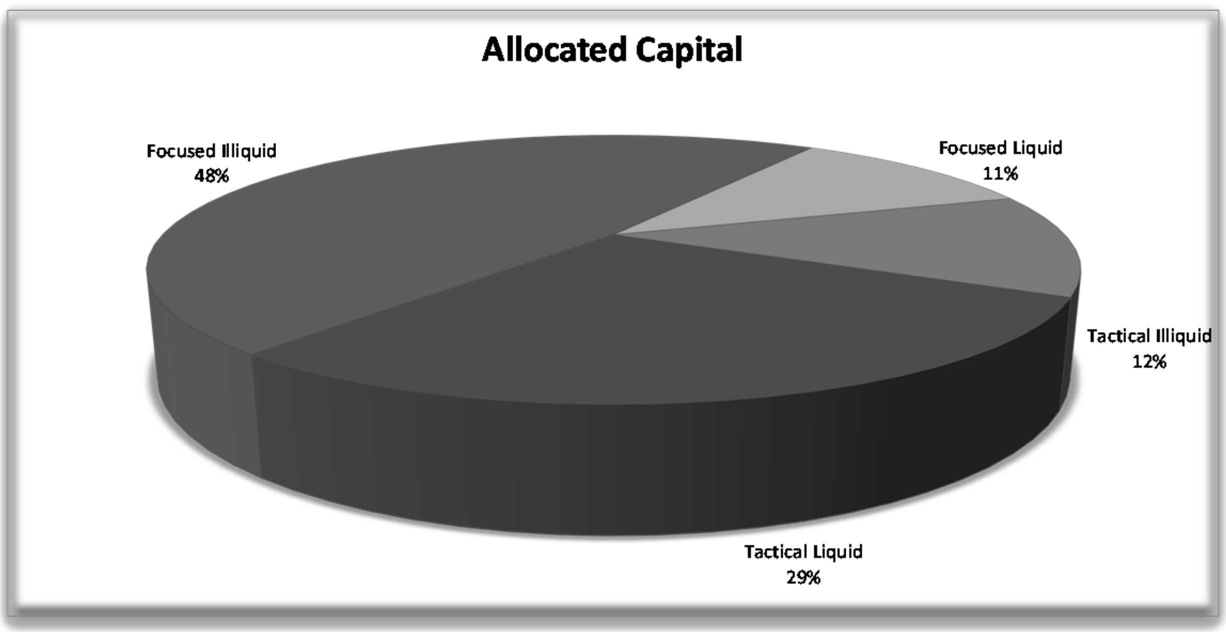
Tennessee Consolidated Retirement System
Strategic Lending Portfolio
Fiscal Q2 2016 Update
Derrick Dagnan, CFA

During calendar 2015, the Strategic Lending Portfolio has made investments focused on diversifying the portfolio from a concentration on below investment grade corporate credit. Also, Staff developed tools and procedures that help indicate when market dislocations create attractive capital deployment opportunities.

As of December, TCRS had committed approximately $2.2 billion with $1.3 billion being invested in eight larger separate accounts and eight co-mingled funds. The eight separate accounts amount to $1.6 billion of the allocation and can be cancelled on short notice and approximately $500 million is committed to the other eight, less liquid, lock-up vehicles.



Market Outlook

During the fiscal second quarter of 2016, the liquid U.S. below-investment grade market continued to deteriorated as the oil and commodity sell-off in June created renewed stress in the bonds of energy and mining companies. In addition, this stress has now leaked into the Retail and Telecom sectors. The Barclays High

Yield Bond Index returned -2.1% and the Credit Suisse Leveraged Loan Index returned -2.0% during the quarter. For the full calendar year 2015, the bond index returned -4.4% and the loan index returned -0.4%. The relative outperformance of loans was driven by the lower energy and commodity exposure in the loan market. The Strategic Lending benchmark (50/50) outperformed the Barclays Long TIPS Index by 2.4% in calendar 2015 and underperformed the long TIPS Index by 160 basis points in the quarter.

During the fiscal second quarter, the U.S. below investment grade credit markets showed continued stress with a light new issue calendar and fund outflows. Even relatively “high quality” high yield issuers faced significant spread widening and spreads now approach levels typically experienced during a recession. While default rates do remain low, it is clear that without a rebound in commodity prices in 2016 a number of commodity-related companies will become distressed leading to elevated default rates and losses.

With respect to the private debt market, it appears that originators have recently begun adjusting to the wider spreads in the liquid market. At this point, the U.S. liquid markets should post a more attractive risk-adjusted return in calendar 2016.

Recent Developments

During the fiscal second quarter, staff continued investing in a new separate account focused on high yield asset backed securities with an initial investment of $100 million. In addition, Staff increased the allocation to an opportunistic credit separate account by $50 million and increased the allocation to a liquid leveraged loan separate account by $50 million. At this time, staff continues to favor loans over bonds, senior over junior debt, and liquid over illiquid investments.

Future Activity

Recently, Staff has focused more on a consultant transition, new software program implementation, hiring personnel, and three new potential investments. Additionally, staff continues to focus on portfolio monitoring, process, procedures, internal investment capabilities, and other key program initiatives.

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TCRS Equity Derivative Report

Domestic Stock Index Futures

Roy Wellington, CFA

No Activity

TCRS Currency Derivative Report

Currency Forwards Activity

Albert Chang

2016 2nd Quarter Activity

NO ACTIVITY

TCRS MORTGAGE PORTFOLIO

END OF QUARTER MORTGAGE TBA POSITIONS

Albert Chang

	PRICE	PAR ($milion)	MARKET ($million)	SETTLE	FIRM
15yr FNMA 2.5	100.81	2	2.02	OCT	SOC GEN
30yr FNMA 3.0	100.01	20	20.00	OCT	BARC
30yr FNMA 3.0	100.01	29	29.00	OCT	DB
30yr FNMA 3.0	100.01	25	25.00	OCT	WFS
30yr FNMA 3.5	103.17	30	30.95	OCT	BARC
30yr FNMA 3.5	103.17	30	30.95	OCT	BNPP
30yr FNMA 3.5	103.17	44	45.40	OCT	BOA
30yr FNMA 3.5	103.17	12	12.38	OCT	C
30yr FNMA 3.5	103.17	22	22.70	OCT	NOM
30yr FGLMC 3.5	102.96	5	5.15	OCT	BARC
30yr FGLMC 4.0	105.65	42	44.37	OCT	C
30yr GNMA II 3.0	101.34	30	30.40	OCT	JPM
	Total	**291**	**298**		

By Firm	($million)
BARC	56.10
BNPP	30.95
BOA	45.40
C	56.75
DB	29.00
JPM	30.40
NOM	22.70
SOC GEN	2.02
WFS	25.00
Total	**298.32**

Tim McClure, CTP

Trading – TCRS's Equity Trading Group transacted approximately 120 million shares and $6.6 billion of notional value during the time period of October 1, 2015 – December 31, 2015. When compared with the previous 3 month period, these numbers illustrate an 8.8% decrease in shares volume quarter over quarter.

TCRS used 26 broker counterparties during this time period, and this represents a slight decrease when compared to the previous quarter (27 broker counterparties). As always, broker performance is diligently monitored to ensure best execution practices. In addition, the work with Abel Noser's Transaction Cost Analysis group helps to verify the trading desk's analysis with hard data on broker performance.

Total commission dollars, during this time period, were approximately $1.63 million. This represents an almost -13% decrease in commissions from the prior three month period ($1.63 million vs $1.87 million). Total commission dollars spent dropped at a more accelerated rate than the volume of shares traded. The strategic shift towards lower cost broker service providers, initiated in mid-2015, is the main reason for the improved outperformance on the commission side. This shift has not come at the expense of performance; Abel Noser data illustrates that the trading strategy outperformed over half of the top 15 full-service brokers during the quarter.

Operations – Operations continues to support the Treasury Managed Fund and the additional responsibilities associated with the program, such as the reconciliation process that is so critical to the accuracy of the daily operation. The operations team has been assisting the portfolio managers associated with alternative assets to implement eFront, a CRM software package. Full implementation of the software package will streamline communication of capital calls and distributions and eliminate much of the manual process that exists currently.

Securities Lending – The TCRS securities lending program has been using Deutsche Bank as its securities lending agent since January 30, 2014 (24 months). As of December 31, 2015, TCRS earnings since inception totaled $50.4 million ($8.6 million of that was earned fourth quarter 2015). All cash collateral continues to be invested in indemnified repurchase agreements.

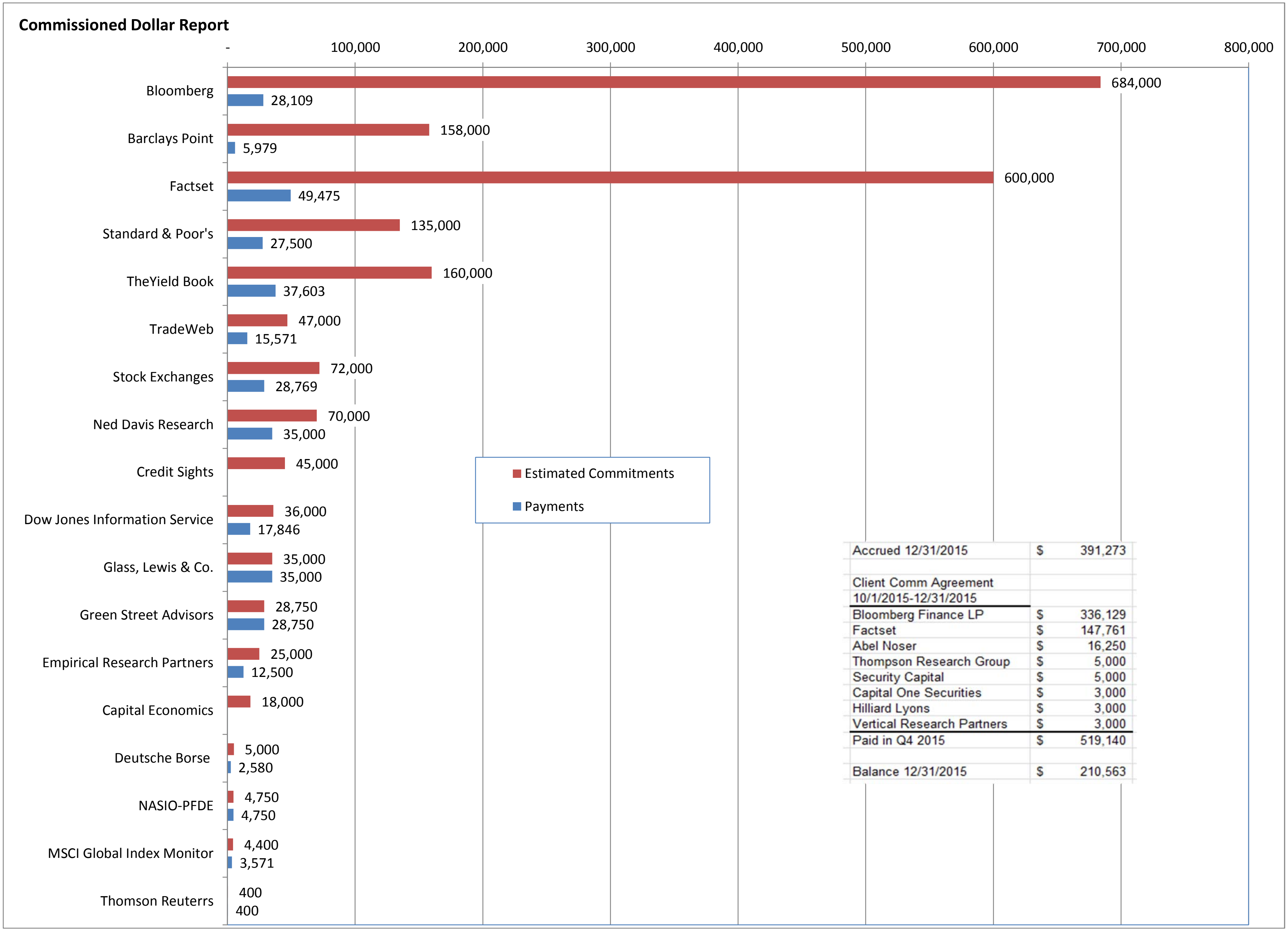
The average on loan balance since inception was $5.1 billion with a spread of 57 bps. The average on loan balance for Q4 2015 was $6.7 billion with spread of 57 bps. The largest earnings contributor since inception was Domestic Equities making up 43% of the total (52% as well for Q4 2015) followed by Emerging Market Equities 29% (28% Q4 2015), Fixed Income 20% (16% Q4 2015), and International Equities 8% (4% Q4 2015).

Tim McClure, CTP

With regards to balances in the 4th Quarter 2015, the top 5 borrowing counterparties were Merrill Lynch (representing 16% of the total on loan balance), JP Morgan (15%), BNP Paribas (11%), Morgan Stanley (11%), and SG Americas (7%).

The majority (3 out of the 5) of TCRS' top 5 earners for the period of January 30, 2014 to December 31, 2015 occurred within the ETF space. The overall leader for the 24 month period was iShares MSCI Brazil (EWZ) (6.67% or $3.36 million). This was closely followed by Armbarella (5.84% or $2.94 million) and GoPRO (4.32% or $2.2 million). The other two places were held by the following: iShares MSCI Taiwan (EWT) (3.87% or $1.95 million), and iShares MSCI Indonesia (EIDO) (3.11% or $1.57 million). These 5 securities accounted for 24% or $12.1 million of the TCRS earnings since inception.

	Jan 1, 2014 - Dec 31, 2015	**July 1, 2015 - Sept 30, 2015**	**Oct 1, 2015 - Dec 31, 2015**
TCRS Earnings $	50.4M	7.5M	8.6M
Lending	25.6M	2.8M	4M
Reinvest	24.8M	4.7M	4.6M
Avg On Loan	5.1B	6.8B	6.7B
Spread	57 BPS	48 BPS	57 BPS
Domestic Equities	43%	42%	52%
Emerging Market Equities	29%	32%	28%
Fixed Income	20%	22%	16%
International Equities	8%	4%	4%



Accrued 12/31/2015	$	391,273
Client Comm Agreement 10/1/2015-12/31/2015		
Bloomberg Finance LP	$	336,129
Factset	$	147,761
Abel Noser	$	16,250
Thompson Research Group	$	5,000
Security Capital	$	5,000
Capital One Securities	$	3,000
Hilliard Lyons	$	3,000
Vertical Research Partners	$	3,000
Paid in Q4 2015	$	519,140
Balance 12/31/2015	$	210,563