TEACHER RETIREMENT SYSTEM OF TEXAS MEETING
BOARD OF TRUSTEES
AND
INVESTMENT MANAGEMENT COMMITTEE

(Mr. Barth, Committee Chair; Mr. Colonnetta; Mr. Kelly; Mr. McDonald; & Mrs. Sissney, Committee Members)

AGENDA

April 19, 2012
TRS East Building – Room E 345

1. Consider the approval of the proposed minutes of the December 8, 2011 committee meeting – Todd Barth, Chair

2. Receive an Internal Management annual review of 2011 – Chi Kit Chai, Janis Hydak, Shayne McGuire, David DeStefano, Bernie Bozzelli, and Mohan Balachandran

NOTE: The Board of Trustees (Board) of the Teacher Retirement System of Texas will not consider or act upon any item before the Investment Management Committee (Committee) at this meeting of the Committee. This meeting is not a regular meeting of the Board. However, because a quorum of the Board may attend the Committee meeting, the meeting of the Committee is also being posted as a meeting of the Board out of an abundance of caution.

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Tab 1

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Minutes of the Investment Management Committee

December 8, 2011

The Investment Management Committee of the Board of Trustees of the Teacher Retirement System of Texas met on December 8, 2011, in Room E345 located on the Third Floor of the TRS East Building offices at 1000 Red River Street, Austin, Texas. The following committee members were present:

Todd Barth, Chair
Joe Colonnetta
David Kelly
Eric McDonald
Nanette Sissney

A quorum of the committee was present. Others present:

Charlotte Clifton, TRS Trustee
Karen Charleston, TRS Trustee
Anita Palmer, TRS Trustee
Brian Guthrie, TRS
Ronnie Jung, TRS
Britt Harris, TRS
Jerry Albright, TRS
Conni Brennan, TRS
Ken Welch, TRS
Amy Barrett, TRS
Dr. Keith Brown, Investment Advisor
Steve Huff, Fiduciary Counsel
Steve Voss, Hewitt EnnisKnupp
Brady O'Connell, Hewitt EnnisKnupp
John Claisse, Albourne
Ted Melina Raab, Texas AFT
Leroy DeHaven, TRS Retiree
Vin DeBaggis, State Street
Ann Fickel, Texas Classroom Teachers Association
Craig teDuits, State Street
Jody Wright, Legislative Budget Board
Dale West, TRS
Chi Chai, TRS
Steve LeBlanc, TRS
Jase Auby, TRS
Nigel Lewis, TRS
Mohan Balachandran, TRS
Janis Hydak, TRS
Patricia Cantú, TRS
Curt Rogers, TRS
Ashley Baum, TRS
Sharon Toalson, TRS
Dennis Gold, TRS
Angela Vogeli, TRS
Rebecca Merrill, TRS
Dan Junell, TRS
Lynn Lau, TRS
Hugh Ohn, TRS
Dinah Arce, TRS
Scot Leith, TRS
Terry Harris, TRS
Cindy Haley, TRS

Mr. Barth called the meeting to order at 9:45 a.m.

1. Consider the approval of the proposed minutes of the September 15, 2011 committee meeting

On a motion by Mr. McDonald, seconded by Mr. Colonnetta, the committee approved the minutes of the September 15, 2011 meeting as presented.

2. Review of the Portfolio Strategy and Execution

Mr. Harris provided an overview of the Portfolio Strategy and Execution (PSE) team, which consists of three functional areas: the Tactical Asset Allocation (TAA), the Strategic Asset Allocation (SAA) and tilts, and risk. He noted that the PSE also oversees TRS' investment

policy, strategic partnership network, securities lending and cash management, gold fund, and GGP covered call writing. He noted the four new strategies that are currently under development: the Quantitative Vector Fund (QVF), dynamic factor fund, a currency overlay fund, and regime shifting strategies. He presented the team's responsibility on risk management. He also highlighted the role of the PSE team in the Investment Management Division (IMD).

Mr. Rogers provided an update of the TAA. He stated that the TAA team makes monthly asset class decisions based on a set of quantitative models. He noted that the team's responsibilities do not involve selecting securities and bonds, which are chosen by Internal Public Markets and External Public Markets. Concerning its process, he said, TAA uses internally developed models with standard, regression, and statistical techniques. He stated that the team also incorporates quantitative and qualitative inputs from strategic partners. In terms of the implementation process, he said that the team runs monthly updates of tactical positions, and implements the asset class decisions mainly via futures, swaps, and currency forwards. He noted that the over-the-counter (OTC) counterparty risk is controlled through the daily collateral mechanism.

Presenting the performance of the TAA, Mr. Rogers stated that the team had added about 59 basis points on an annualized basis over the last three years, about $600 million a year as of September 30, 2011 and maintained a three-year track record of exceeding its performance goal at its annual target of 25 basis points (about $250 million annually). He noted that the underperformance of equities and outperformance of Treasury bonds during the months of August and September had cost some performance for the one-year returns in 2011 but the three-year return remained satisfactory.

Mr. Rogers explained the asset-pair models, which produce a signal corresponding to the allocation policy benchmark weights in a range of +/-5 percent. He stated that the team uses the pair models to define a series of factors that may explain the pair's return relationship in order to capture future returns under a combination of factors. He stated that those factors include macro-economic factors, valuation, interest rates, price momentum, and risk. He provided a monthly model snapshot as of October 31, 2011 to explain how staff uses the models to detect the contributing factors and make decisions on positioning. Mr. Rogers confirmed for Mr. McDonald that the model signal is generated on the first of each month. Responding to a question from Mr. Barth, Mr. Rogers stated that the entire TAA is currently an overlay portfolio and completely managed through derivatives. Mr. Kelly asked how staff avoids over-exposure on a portfolio when there is a tactical asset allocation through the use of a derivatives overlay in addition to a dollar allocation. Mr. Rogers explained that staff uses a set of passive portfolios as the safety valves to control the net view of the strategic asset allocation. Dr. Brown noted that staff uses the risk range +/-5% to monitor the weights of the asset class. Mr. Harris further explained the use of leverage by using futures contracts to increase the portfolio exposure while staying within the risk range. Dr. Balachandran stated that the net position of the trust in the end will always stay within the policy no matter what vehicle staff uses for the exposure. Mr. Rogers and Mr. Auby further explained for Mr. Barth how staff uses incrementally cash securities through the strategic asset allocation and derivatives overlays through the tactical asset allocation to reach the desired exposures according to the model's signals.

Mr. Rogers presented the back-tested performance for the asset-pair models as of October 31, 2011. He stated that staff reviews the annualized alpha, information ratio, and correlations

between those decisions, which helps to diversify the decisions and lower risk. He explained the implementation process. He explained that the advantages of using derivative instruments over cash securities are fast and simple execution and efficiency. It also minimizes disruption to the passive portfolios and other managers. Responding to a later question from Ms. Sissney and Mr. Barth, Mr. Rogers clarified that the $3 to 5 million value added by using futures represented the efficiency number, which was the expectation of the value added through using futures instead of cash securities. He emphasized that the actual reasons for using futures are liquidity and speed. He noted that the operations group provides a daily view of all derivative exposures and all internal and external managers. He explained the usage of swaps, futures, and forwards and the tactics staff uses to minimize the risk when using those instruments. Mr. Kelly suggested that staff include the information ratios by asset class in the report. Continuing his presentation of the implementation process, Mr. Rogers stated that the TAA team works closely with the Operations and Trading groups to ensure that the positions are accurate and the potential for error is minimal. He noted that TAA performance and attribution results are calculated by the PSE and Operations team.

Mr. Rogers explained the use of the factor summary for the asset-pair models. He noted that the idea sources are in-house staff, Ned Davis, and Goldman Sachs research. He explained how each factor feeds intuition in deciding which asset class would add the most value. He stated that the factor selection methodology takes all the factors and test them through different calibrations to determine what factors occurred in stocks and bonds and how to model them accordingly. He presented the stocks-and-bonds signal history from 1991 to date, which shows factors favoring stocks and bonds, respectively, and provides preference forecasts for any asset class peer. The model also shows the contribution of each factor and how the influence of each factor changes over time. Responding to a question from Mr. Kelly regarding whether the model provides prediction on the duration of the preference, Mr. Rogers stated that those data have not been generated in the model but staff can include that in the model. Mr. Harris noted that staff follows the model primarily to make decisions but sometimes the decisions are made in the best interest of the fund in the longer term, which may not favor the short-term returns. Mr. Rogers also presented the TAA positioning as of November 30, 2010 and November 30, 2011, and the three new strategies that are under development: dynamic factor model, quantitative vector fund (QVF), and currency trading model. After Mr. Rogers concluded his presentation, Dr. Brown noted that the board will need to be comfortable with the tactical range of asset allocation that the board adopts, as any allocation within that range will potentially become the actual exposure to an asset class once it is adopted.

Dr. Balachandran provided an update of the strategic research and quantitative analysis function. He summarized the five key mandates: the strategic asset allocation (SAA), tilts, portfolio management, liquidity and cash management, and cross-division investments. He explained that the cross-division investments were intended to gain leverage across the trust. He recapped that the Legislature had authorized TRS to increase its allocation to hedge funds from five percent to 10 percent. He stated that the increased allocation will be funded by decreasing the U.S. Small Cap allocation from five percent to two percent and the U.S. Treasuries from 15 percent to 13 percent. He stated that the board also authorized the increase of private equity allocation from 10 percent to 12 percent, which was funded by decreasing the U.S. Large Cap public equity allocation from 20 percent to 18 percent. Per Mr. Kelly's request, Dr. Balachandran explained how staff came up with the proposal relating to those allocation adjustments. He stated

that staff reviewed ten alternative proposals and evaluated which combination would add to the trust the most alpha and reduce volatility. He stated that the recommended proposal was able to reduce the value at risk (VaR) from 7.8 to 7.4, which was the main reason for choosing that proposal. He confirmed for Mr. Kelly that the funding decision was mainly based on its potential risk rather than returns, though ultimately the decision was intended to add returns to the fund. Regarding the decision on increasing the allocation to private equity in light of the recent underperformance of private equities, Dr. Balachandran stated that staff makes decisions on asset allocations based on the long-term returns of the asset instead of the recent market conditions. He stated that staff also makes sure that each month the total allocations to tilts, SPN, internal and external managers and passive comply with the policy.

Dr. Balachandran provided an overview of the portfolio tilts. He explained that the goal of implementing tilts was to modify the trust's strategic asset allocation on a longer term basis (a one-to-three year basis). He explained that the process was completed by analyzing the asset classes and setting up triggers for various asset classes. He stated that the team had implemented an R&D portfolio for high quality, a 0.5 percent short in U.S. Treasuries, and an underweight in REITs. He stated that the REITS position had recently been closed out. He stated that Treasury markets are stretched based on TRS' Fair Value Model, which is based on the long-run Gross Domestic Products (GDP) and Consumer Price Index (CPI). He stated that when Treasuries are 10 percent undervalued, staff will buy Treasuries and when they are 30 percent overvalued, they will sell Treasuries. He stated that the portfolio currently has reduced the target for Treasuries by 0.5 percent. Presenting the REIT tilts, he stated that staff looks at the net asset value of the REIT index and compares it to the market value of the REIT index. He stated that REITs were trading about 30 percent above the NAV premium. He stated that over time the NAV premium came down with the market, a combination that caused the premium to reach its fair value. He noted that the REIT tilts had added about 2 basis points to the trust, about $20 million.

Dr. Balachandran presented some cross-division activities. He stated that the Precious Metals Portfolio had 40 percent returns since inception. He stated that the acquisition of U.S. government lease-backed CMBS bonds had generated 60 percent returns to date. He stated that the covered call program on some REIT holdings should add about $15 to $20 million annually. He also reported that the hedge fund replication program had assisted transitioning the hedge fund allocation to Directional Hedge Funds. Responding to a question from Mr. Colonnetta, Dr. Balachandran further explained the design of the hedge fund replication program. Responding to a question from Mr. Kelly relating to how well the design tracks the index, Dr. Balachandran responded that it tracks very well and staff can also access some of these synthetic strategies through broker-dealers or implement it internally. Further discussion followed regarding reducing the tracking error. Dr. Brown suggested that staff include the returns of the invested hedge funds as a completeness fund when they look at the correlation between the underlying index and the portfolio returns in order to reduce the tracking error. Dr. Brown stated that he believed that with the available technology this can be done easier than in the past.

In conclusion, Dr. Balachandran stated that his team managed the Passive Portfolio with the Trading group with approximately $13 billion in U.S. Long Treasuries and $5 billion in U.S. TIPS. He reported that the U.S. Long Treasuries and U.S. TIPS had added 29 and 31 basis points, respectively, over the last year. He stated that the team also managed Commodities Portfolio internally. He briefly mentioned the activities within the securities lending area.

Mr. Auby provided an overview of the Risk Group mandate. He stated that the risk alarms process applies bubble alarms and the cumulative sum information ratio alarms (CUSUM). He stated that the risk budgeting focuses on tracking error and VaR as the risk measures. He introduced the new Risk Strategies that is used to optimize the risk profile of the Trust. He briefly explained the standard monitoring processes: compliance, monitoring, and certification.

Mr. Auby further discussed risk alarms, risk strategies, and risk monitoring. He explained three types of alarms: policy alarms, asset class alarms, and portfolio alarms. He also explained bubble alarms and stated that staff uses the bubble monitors to track 100 different assets and three factors (relative index change, correlations, and absolute change) to determine whether each asset is in a bubble status. He presented historical bubble signals and highlighted the bubbles occurred in 2008 and 2009, during and after the global financial crisis. Responding to a question from Mr. Colonnetta, Mr. Auby stated that when it reaches the bubble status, theoretically the bubble may deflate. He confirmed for Mr. Barth that staff puts a trailing stop loss on the gold's position to continue to monitor the portfolio and takes necessary steps accordingly. Mr. Auby explained that staff uses CUSUM signals systematically to demand that certain asset managers be re-underwritten at certain points in time. He noted that staff would review other factors before offering a "buy" or "sell" recommendation on the manager. Mr. Auby responded to Mr. Colonnetta that the External Public Markets group would make the "buy" or "sell" decision based on the alarms and the review by the Risk group. Mr. Auby reviewed the accomplishments of the CUSUM alarms since its inception in January 2010. Responding to a question from Mr. McDonald, Mr. Auby stated that the equity market was extremely volatile in August and September 2011 and triggered a large number of alarms. Mr. Harris noted that during that time, only long Treasury bonds outperformed and it was a very difficult time in general for asset managers and investors who were holding a long-term position. Mr. Harris also stated that out of the 12 alarm responses from the TRS portfolio managers, seven received a "buy" rating and five resulted in termination. He noted that the five that had been terminated should have been kept after reconsideration. Mr. Auby stated that with more data available in the future, staff will be able to make better underwriting decisions. Mr. Auby presented and explained the risk alarms chart based on two major factors affecting the performance of the trust assets - inflation and growth. He explained how the factors generated nine different economic regimes. He explained the assets that typically outperforms in each of those regimes and pointed out the efficacy of the model by showing how it tracked inflation growth during the global financial crisis in 2008.

Mr. Auby presented the team's risk monitoring efforts. He stated that staff used the Basel II framework as modified slightly by Basel III as a foundation for managing market risk, credit risk, liquidity risk, and operational risk. He also explained the other two important risk components that staff uses: VaR and tracking error that are outside the Basel framework. Mr. Auby mentioned the monthly publications, the *Risk Monthly* and the *Valuation Monitor*, which highlight staff's monitoring efforts.

Mr. Auby briefly presented the new risk strategies that are currently under development: "TRS advantage" for identifying trades that are unique to TRS, tactical hedging for reducing or limiting unacceptable risks, and insurance hedging for reducing or limiting significant risk events. Mr. Harris noted that despite the fact that insurance hedging is not commonly employed by long-term investors with a large fund size and high liquidity like TRS, staff would like to look

into the strategy to see if the fund will benefit from the additional insurance at a minimal cost. Mr. Kelly and Dr. Brown concurred with Mr. Harris' idea.

3. Review of Strategic Research and Quantitative Analysis

Mr. Barth suggested that Dr. Lewis provide a brief presentation in light of the fact that the meeting has overrun its allotted time. Dr. Lewis provided a brief overview of the strategic research group. He stated that the group monitors global economic trends, manages and coordinates strategic partnership network (SPN) research and external research and analysis, and collaborates on projects with other IMD groups. He stated that the key mandates of the group include capturing information and translating them into a form that can be used by the IMD, providing additional resources on return enhancement and effective risk management. Dr. Lewis briefly noted that risk parity, an asset allocation technique, has benefited both the External Public Markets team and TRS' strategic partner, Neuberger Berman.

The meeting adjourned at 11:25 a.m.

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Committee Chair or Presiding Officer
Board of Trustees Investment Management Committee

Tab 2

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Internal Management Annual Review of 2011

Chi Kit Chai, Mohan Balachandran, and Bernie Bozzelli

April 2012

Agenda

Overview — Overview

IPM — Internal Active Management

Passive — Internal Passive Management

Trading — Trade Management Group

Internal Management

Overview

Internal Management

- $44 billion managed internally (42% of TRS Portfolio)
  - $19 billion managed actively
  - $25 billion managed passively
- Experienced investment teams
- Well developed investment processes with effective risk management
- GBI Flagship would be 4th largest global equity mutual fund in the world
- GBI Flagship ranks in the 36th percentile among peers in 2011

Active Portfolios
(managed by Internal Public Markets)

GBI Flagship	$18 Billion
GBI Gold	$700 Million

Portfolio	1-Year Alpha	3-Year Alpha	Since Inception (annualized)
GBI Flagship	0.1%	0.3%	0.6%
GBI Gold	2.5%	n/a	1.5%

GBI Flagship Portfolio Characteristics

Characteristics	Data
Predicted Beta	1.01
Price/Earnings - Trailing	11.8x
Price/Earnings - Forward	11.0x
Price/Book	2.0x
Dividend Yield	2.6%
ROE	18.8%
EPS Growth	10.7%
Debt/Capital	30.3%
Tracking Error	140 bps

GBI Flagship Barra Factor Exposures

Factor	% of Risk
Region/Currency	39
Stock Specific	37
Sector	17
Volatility	5
Value	1
Growth	0
Momentum	0
Size	0

GBI Flagship Key Policies

Benchmark: MSCI All-Country World

Regions	BM Weight
United States	46%
Europe	24%
Asia Ex Japan	9%
Japan	8%
Latin America & EMEA	5%
Other	8%
	100%

Target Alpha: 50 basis points

Risk Ranges

- **Tracking Error:** 0 to 200 basis points
- **Regional Allocation:** -3% to +3%
- **Sector Allocation:** -3% to +3%

Passive Portfolios
(managed by Portfolio Strategy and Execution)

Long-Term Treasury Bonds	$12.5
Treasury Inflation-Protected Securities (TIPS)	$6.0
REITs	$2.0
Hedge Fund Replication	$2.5
Equity	$1.9

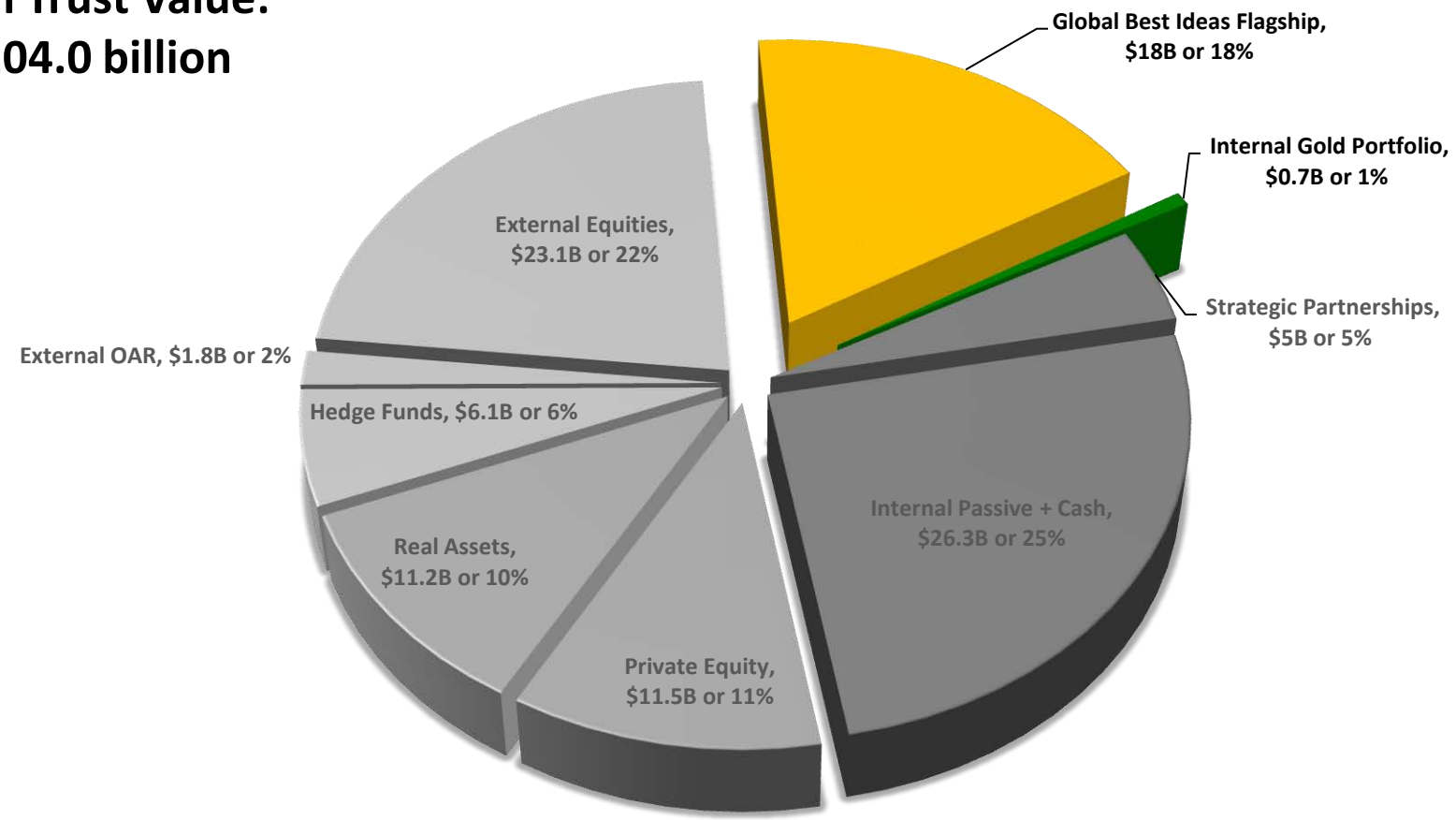
Internal Active Management

Chi Kit Chai
Senior Managing Director
Internal Public Markets

Overview of Internal Active Portfolios

As of December 31, 2011

Total Trust Value: $104.0 billion



Source: State Street Bank

IPM Team

Chi Kit Chai, CFA – BA Virginia Tech, MBA SMU, MA UT

16 yrs experience

IPM MANAGEMENT COMMITTEE

Chi Kit Chai, David DeStefano, Janis Hydak, Shayne McGuire
Mark Albert, Ralph Linn, Patrick Cosgrove

MACRO & QUANT

Janis Hydak, CFA
BA Duke, MAT Wesleyan, MA
Middlebury College, JD Alabama,
MBA St. Edward's
26 yrs experience

Mark Albert, CFA
BA Brandeis, MBA Michigan
18 yrs experience

Phillip Auth, CFA
BA New Mexico, MBA UT
13 yrs experience

Terri Krumnow
BA Concordia at Austin
17 yrs experience

Monica Larson
20 yrs experience

Matt Robertson, CFA
BA Harvard, MBA Chicago
24 yrs experience

Wayne Speer, CFA
BA New Mexico, MBA SMU
11 years experience

GLOBAL SECTOR RESEARCH

Shayne McGuire
BA Fordham, MA & MBA UT
15 yrs experience

Jeremy Aston (Consumer Discretionary)
BBA & MBA UT
4 yrs experience

Tom Cammack, CFA (Materials)
BS Texas Tech, MA Texas A&M
33 yrs experience

Rich Campbell, CFA (Consumer Discretionary/Staples)
BBA Missouri, MBA UT
12 yrs experience

Mark Cassens, CFA (Energy)
BS & MBA UT
11 yrs experience

John DeMichele, CFA (Financials)
BS West Chester, MBA UT
9 yrs experience

Jon Hook (Technology)
BA Northwestern, MBA Rice
3 yrs experience

Amit Kumar (Consumer Discretionary/Staples, Financials)
BA Indian Inst. of Tech, MA Minnesota,
MBA Chicago
7 yrs experience

Kevin Lincoln, CFA (Technology)
BS & MBA UT
14 yrs experience

Stacey Peot, CFA (Energy, Telecom, Utilities)
BA Wisconsin, MBA UT
15 yrs experience

Marshall Reid, CFA (Industrials)
BA Colgate, MBA Michigan
13 yrs experience

Corina Scoggins, CFA (Consumer Staples)
BA Kansas, MA Illinois
20 yrs experience

Tayyib Shah, CFA (Technology, Telecom)
BBA & MBA Inst. of Bus. Admin., Karachi
14 yrs experience

Daniel Steinberg, CFA (Industrials, Materials)
BA UCLA, MBA UT
10 yrs experience

KJ Van Ackeren, CFA (Financials, Technology)
BA Trinity, MBA Texas Christian
11 yrs experience

John Watkins (Health Care)
BA & MHS John Hopkins, MBA UT
12 yrs experience

PORTFOLIO MANAGEMENT

David DeStefano, CFA
BBA & MBA UT
14 yrs experience

Chi Kit Chai, CFA
BA Virginia Tech, MBA SMU, MA UT
16 yrs experience

Patrick Cosgrove, CFA
BA Texas A&M, MBA St. Mary's
19 yrs experience

Kay Cuclis
BA UT
19 yrs experience

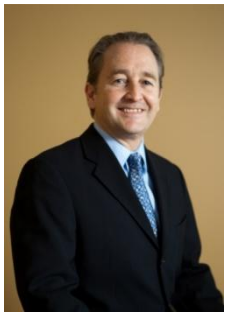
Ralph Linn, CFA
BS, MBA & JD Tulane
18 yrs experience

- **20 CFA Charterholders**
- **33 MBAs/Other Graduate Degrees**
- **15 Average Years of Experience**

IPM Management Committee

Chi Kit Chai, CFA
Head of Internal Public Markets
BA Virginia Tech, MBA SMU, MA UT
Joined TRS in 1996

Janis Hydak, CFA
Head of Macro & Quant
BA Duke, MAT Wesleyan, MA Middlebury College, JD Alabama, MBA St. Edward's
Joined TRS in 1985



Shayne McGuire
Head of Research
BA Fordham, MA & MBA UT
Joined TRS in 2001

David DeStefano, CFA
Head of Portfolio Management
BBA & MBA UT
Joined TRS in 2001

Mark Albert, CFA
Risk and Quant
BA Brandeis, MBA Michigan
Joined TRS in 1999

Patrick Cosgrove, CFA
European Portfolio Manager
BA Texas A&M, MBA St. Mary's
Joined TRS in 1999

Ralph Linn, CFA
US Portfolio Manager
BS, MBA & JD Tulane
Joined TRS in 2002

Internal Active Strategies

- Global Best Ideas Flagship ("GBI Flagship"): $18 billion
  - GBI Flagship would be 4th largest Global Equity Mutual Fund in the world[1]
  - 9 basis points of alpha in 2011
  - 115 basis points of value added over median manager in 1-year peer comparison[2]
- GBI Gold: $706 million
  - GBI Gold ranked 16th in size versus other gold funds[3]
  - 245 basis points of alpha in 2011
- Lower cost, lower turnover, and lower tracking error strategy
- Internal active strategies complementary to externally managed portfolios
  - GBI Flagship tracking error up to 2%

GBI Flagship Performance Since Inception (Dec. 2007)	GBI Gold Performance Since Inception (Oct. 2009)
■ Four consecutive years of beating the benchmark ■ 211 bps of cumulative alpha ■ 59 bps of alpha annualized ■ 83 bps of value added, annualized, over the median manager[2] ■ 1.5% of realized tracking error ■ 0.4 realized information ratio	■ Two years of beating the benchmark ■ 400 bps of cumulative alpha ■ 152 bps of alpha annualized ■ 2.2% of realized tracking error ■ 0.7 realized information ratio

[1]Source: Bloomberg
[2]Source: eVestments Global Equity Funds > $500 Million AUM Active and Passive
[3]Source: Bloomberg

Performance

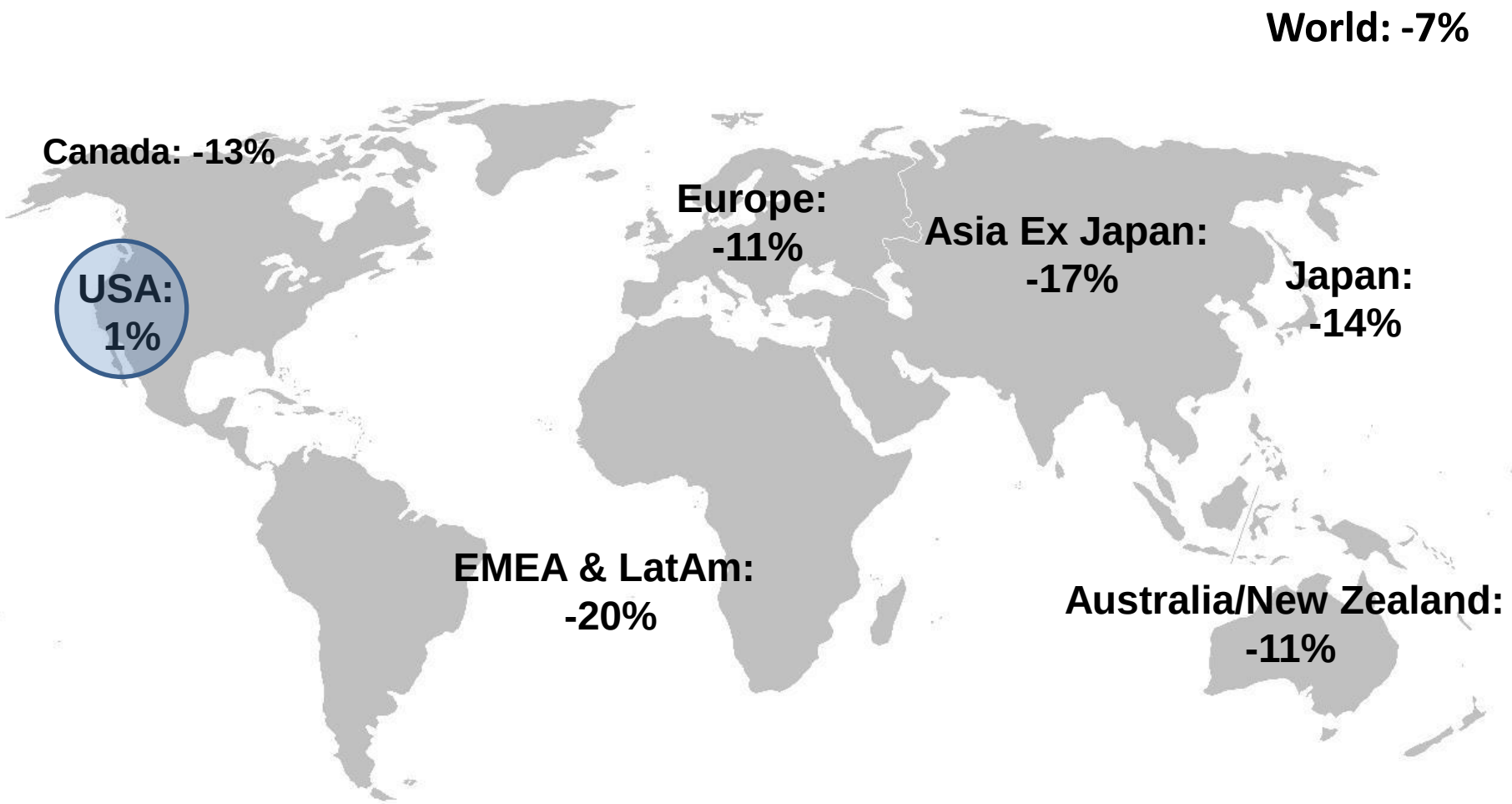
GBI Flagship Performance	2011	2010	2009	2008	2007	Cumulative Since Inception	Since Inception (annualized)
GBI Returns	-7.3%	12.9%	35.4%	-41.5%	2.8%	-14.7%	-3.8%
Benchmark Returns[1]	-7.4%	12.7%	34.6%	-42.2%	2.4%	-16.8%	-4.4%
Value Added (bps)	9	20	78	72	43	211	59

GBI Gold Performance	2011	2010	2009	Cumulative Since Inception	Since Inception (annualized)
GBI Gold Returns	-5.8%	35.3%	5.2%	34.0%	13.9%
Benchmark Returns[2]	-8.3%	34.7%	5.2%	30.0%	12.4%
Value Added (bps)	245	57	-3	400	152

[1]MSCI All-Country World Index
[2]Composite Index: 35% Gold ETF (GLD), 15% Silver ETF (SLV), and 50% Gold Index (XAU)

Source: State Street Bank

Global Equity Market Returns – 1 Year



Source: MSCI

Global Regional Returns

	Annual						Annualized	
Rank	2011	2010	2009	2008	2007	2006	3-Year	5-Year
1	United States 1%	Canada 20%	EMEA & LA 85%	Japan -29%	Asia Ex JP 40%	Europe 34%	Australia 22%	Canada 3%
2	MSCI -7%	Asia Ex JP 20%	Australia 76%	United States -38%	EMEA & LA 37%	Asia Ex JP 33%	EMEA & LA 21%	Australia 3%
3	Australia -11%	EMEA & LA 19%	Asia Ex JP 72%	MSCI -42%	Canada 30%	EMEA & LA 32%	Asia Ex JP 19%	Asia Ex JP 3%
4	Europe -11%	Japan 15%	Canada 56%	Canada -46%	Australia 28%	Australia 31%	Canada 18%	EMEA & LA 2%
5	Canada -13%	United States 15%	Europe 36%	Europe -46%	Europe 14%	MSCI 21%	United States 14%	United States -1%
6	Japan -14%	Australia 15%	MSCI 35%	Australia -51%	MSCI 12%	Canada 18%	MSCI 12%	MSCI -2%
7	Asia Ex JP -17%	MSCI 13%	United States 26%	Asia Ex JP -52%	United States 5%	United States 15%	Europe 8%	Europe -5%
8	EMEA & LA -20%	Europe 4%	Japan 6%	EMEA & LA -54%	Japan -4%	Japan 6%	Japan 2%	Japan -7%

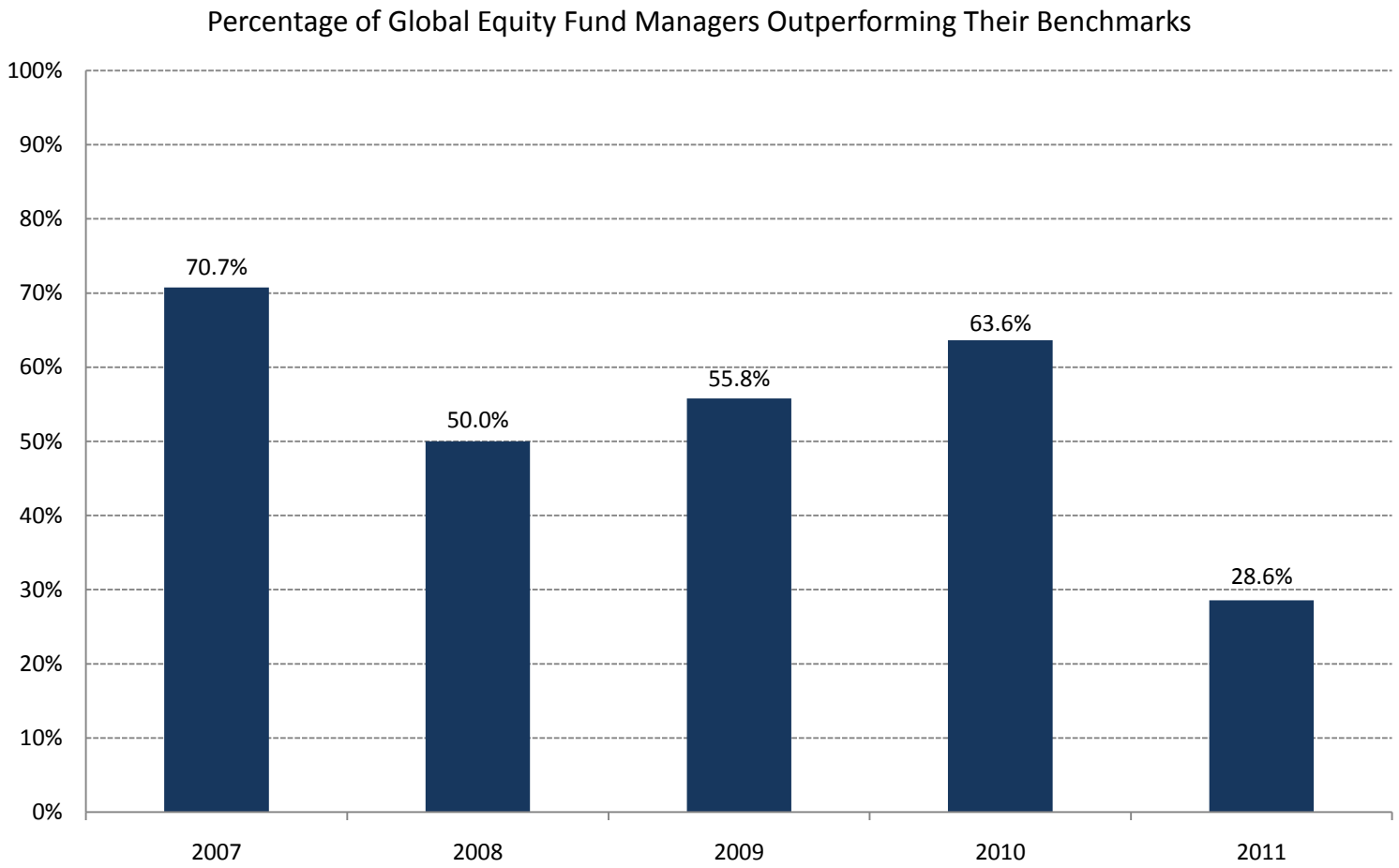
Source: MSCI

Global Sector Returns

	Annual						Annualized	
Rank	2011	2010	2009	2008	2007	2006	3-Year	5-Year
1	Health Care 9%	Discretionary 25%	Materials 70%	Health Care -21%	Materials 38%	Utilities 37%	Discretionary 19%	Staples 7%
2	Staples 8%	Industrials 24%	Technology 58%	Staples -24%	Energy 34%	Telecom 33%	Technology 19%	Energy 2%
3	Telecom 0%	Materials 22%	Discretionary 44%	Utilities -30%	Telecom 27%	Materials 31%	Materials 18%	Health Care 2%
4	Energy -3%	Staples 14%	Financials 37%	Telecom -36%	Utilities 23%	Financials 25%	Staples 15%	Materials 2%
5	Technology -4%	MSCI 13%	MSCI 35%	MSCI -42%	Staples 19%	Staples 21%	Energy 13%	Telecom 1%
6	Utilities -5%	Energy 12%	Energy 33%	Energy -42%	Industrials 19%	MSCI 21%	Industrials 13%	Technology 1%
7	Discretionary -5%	Technology 11%	Industrials 29%	Discretionary -42%	Technology 14%	Discretionary 21%	MSCI 12%	Discretionary -1%
8	MSCI -7%	Telecom 11%	Staples 24%	Technology -45%	MSCI 12%	Energy 20%	Health Care 10%	Industrials -1%
9	Industrials -10%	Financials 6%	Health Care 19%	Industrials -45%	Health Care 4%	Industrials 20%	Telecom 9%	MSCI -2%
10	Financials -19%	Health Care 3%	Telecom 16%	Materials -52%	Discretionary -2%	Health Care 10%	Financials 5%	Utilities -2%
11	Materials -21%	Utilities 0%	Utilities 10%	Financials -54%	Financials -5%	Technology 10%	Utilities 2%	Financials -13%

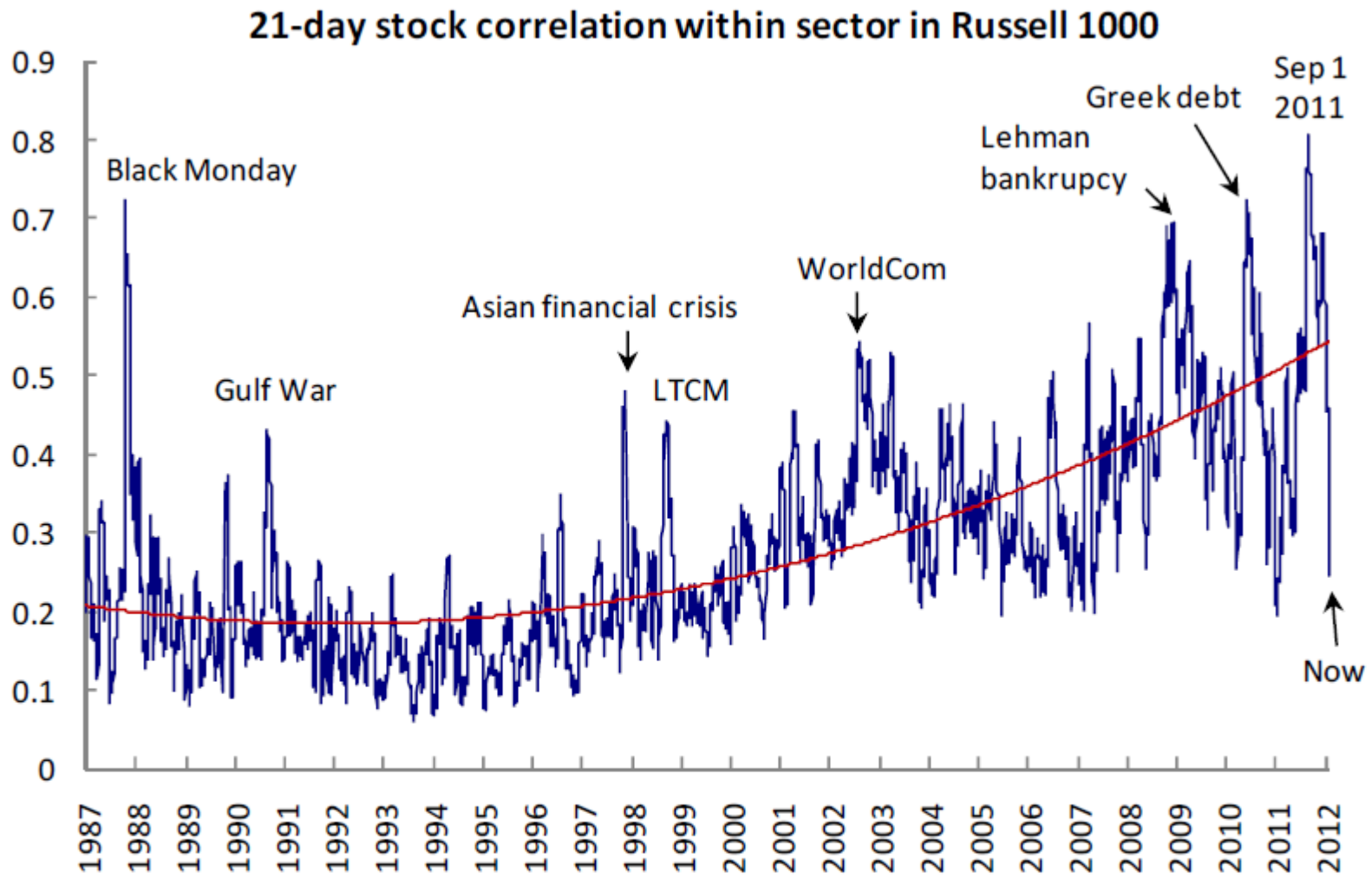
Source: MSCI

Active Equity Managers Faced Headwinds



Source: eVestments

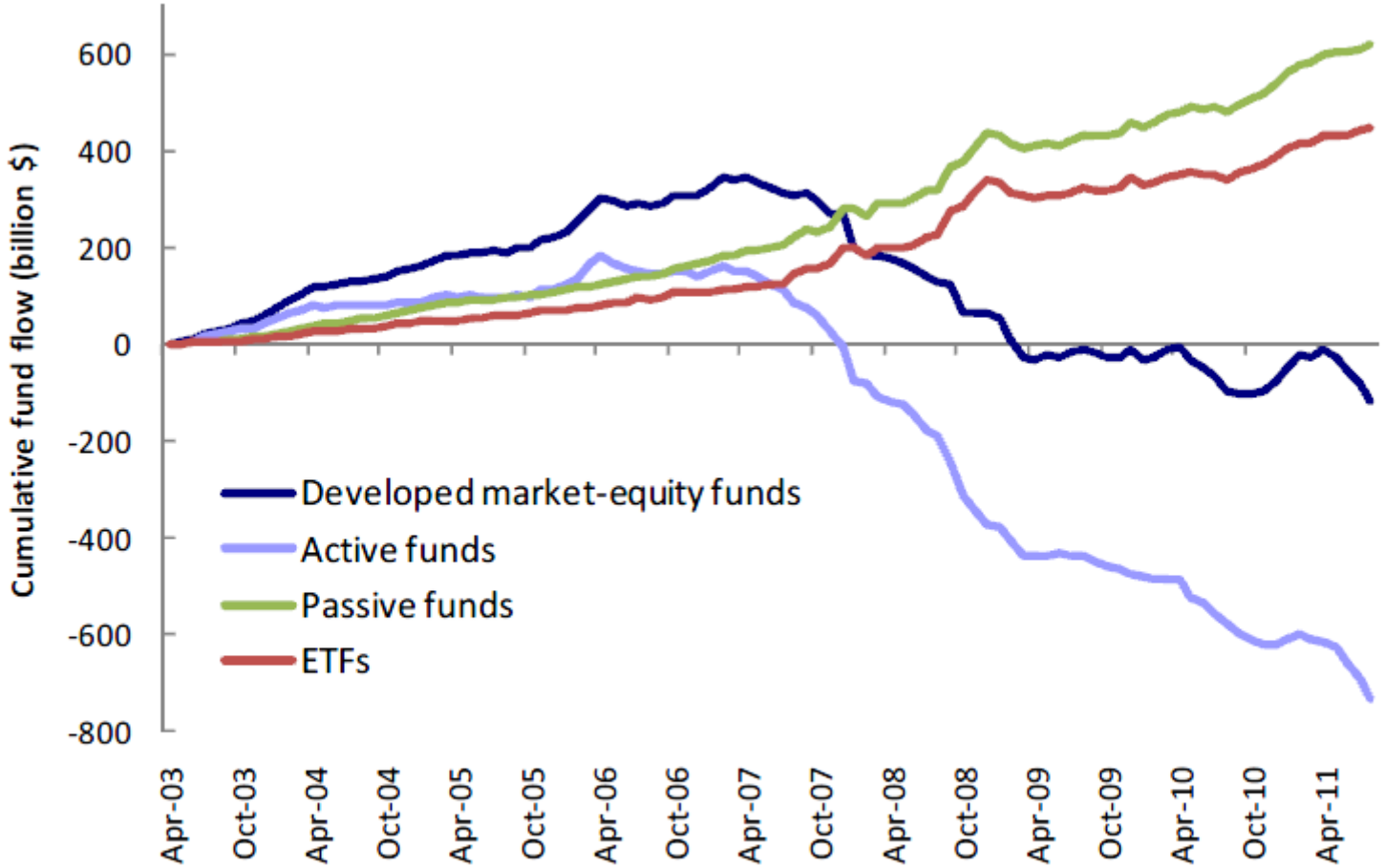
Correlations Reach All-Time High in 2011



Note: Shows 21-day stock correlation within sector, where the averages of all pair-wise stock correlations are calculated within GICS 10 sectors in Russell 1000 universe using 21-day total returns and these correlations are averaged over all GICS 10 sectors. Period of analysis is from 2 January 1987 through 3 February 2012.

Source: Nomura Securities International, Inc., Russell, IDC

Proliferation of Exchange-Traded Funds (ETFs)

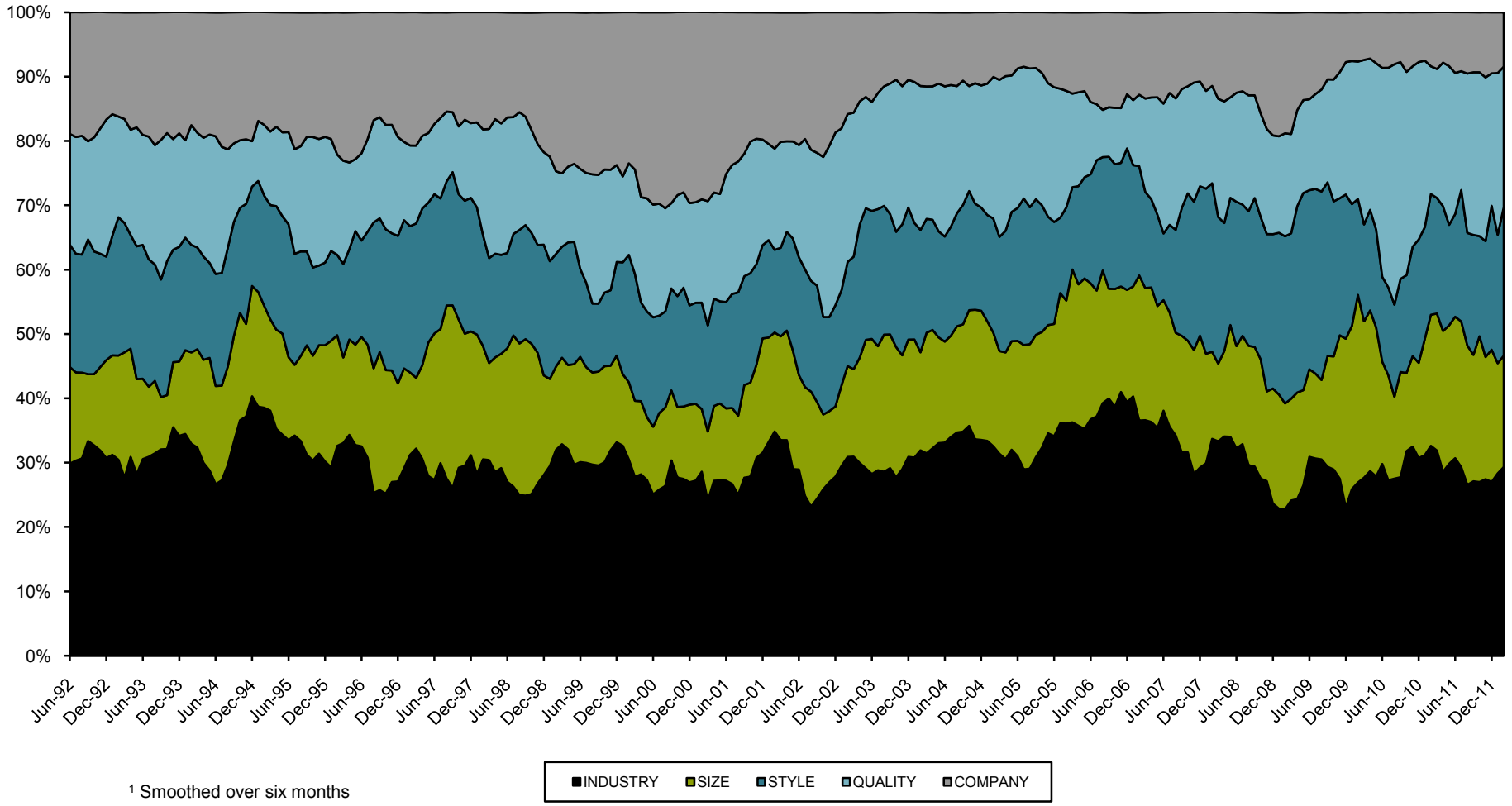


Note: *Shows cumulative fund flow into developed market-equity funds, active funds, passive funds and ETFs. Period of analysis is from April 2003 through August 2011.*

Source: Nomura Securities International, Inc., EPFR

Stock Picking Challenged

North America
Contribution to Monthly Returns Variability[1]
As of February 28, 2012

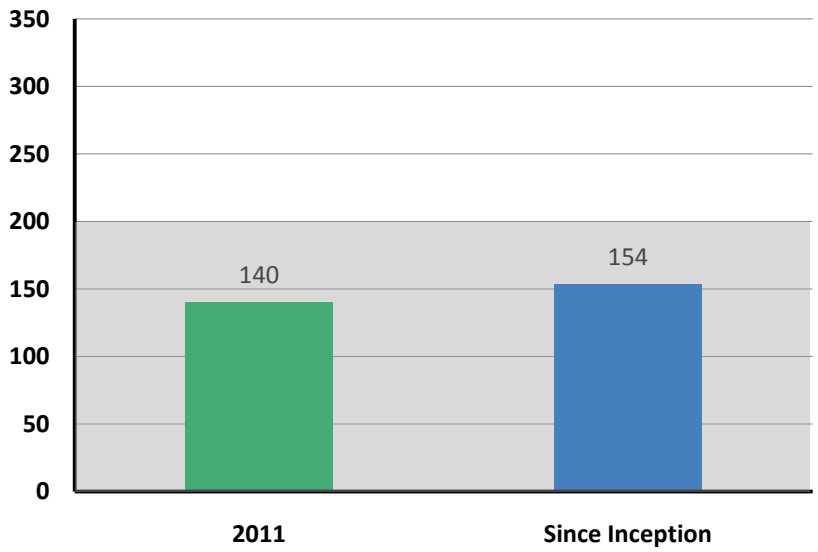


[1] Smoothed over six months

Source: MSCI and Bernstein Analysis

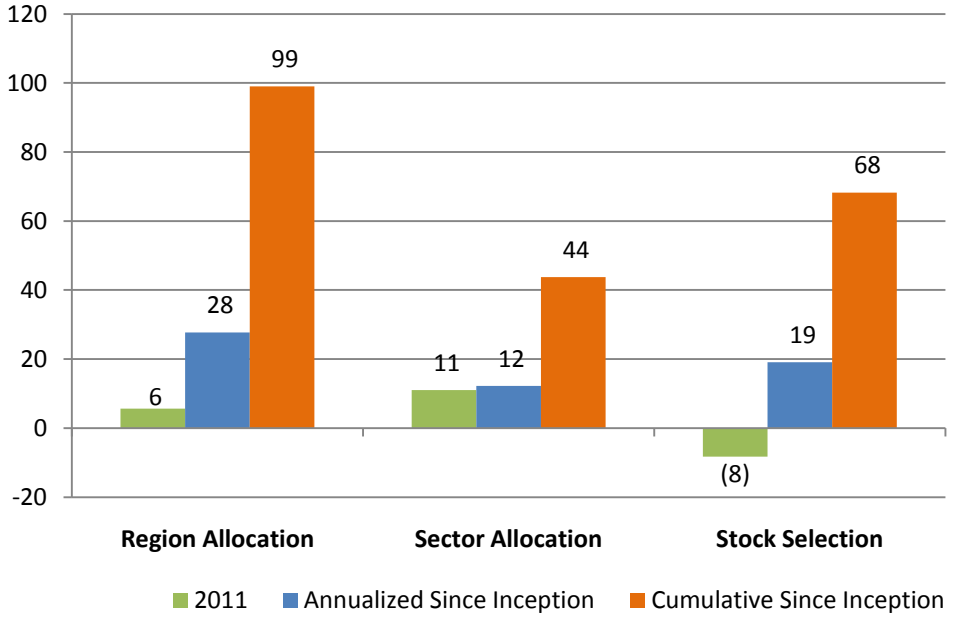
GBI Flagship Risk and Attribution

Realized Portfolio Tracking Error*



* Target range of 0 to 200 basis points.

Performance Attribution



GBI Investment Process

- Top-down allocation and bottom-up security selection
- Quantitative screen, fundamental analysis, and portfolio optimization

Portfolio Construction

Step 1

Top-Down Allocation

Fundamental Inputs

- Secular and Structural Theses
- Economic and Profit Cycle Analysis
- Valuation
- Investor Sentiment and Positioning

Quantitative Inputs

- Internally Developed Models
- Externally Developed Models

Step 2

Bottom-Up Security Selection

Fundamental Inputs

- Global Industry Expertise
- Company Financial Modeling
- Valuation

Quantitative Inputs

- Customized Quantitative Front-End Screen

Step 3

Portfolio Optimization

Risk Budget
+
Portfolio Constraints
+
Factor Outlook

↓

Optimization

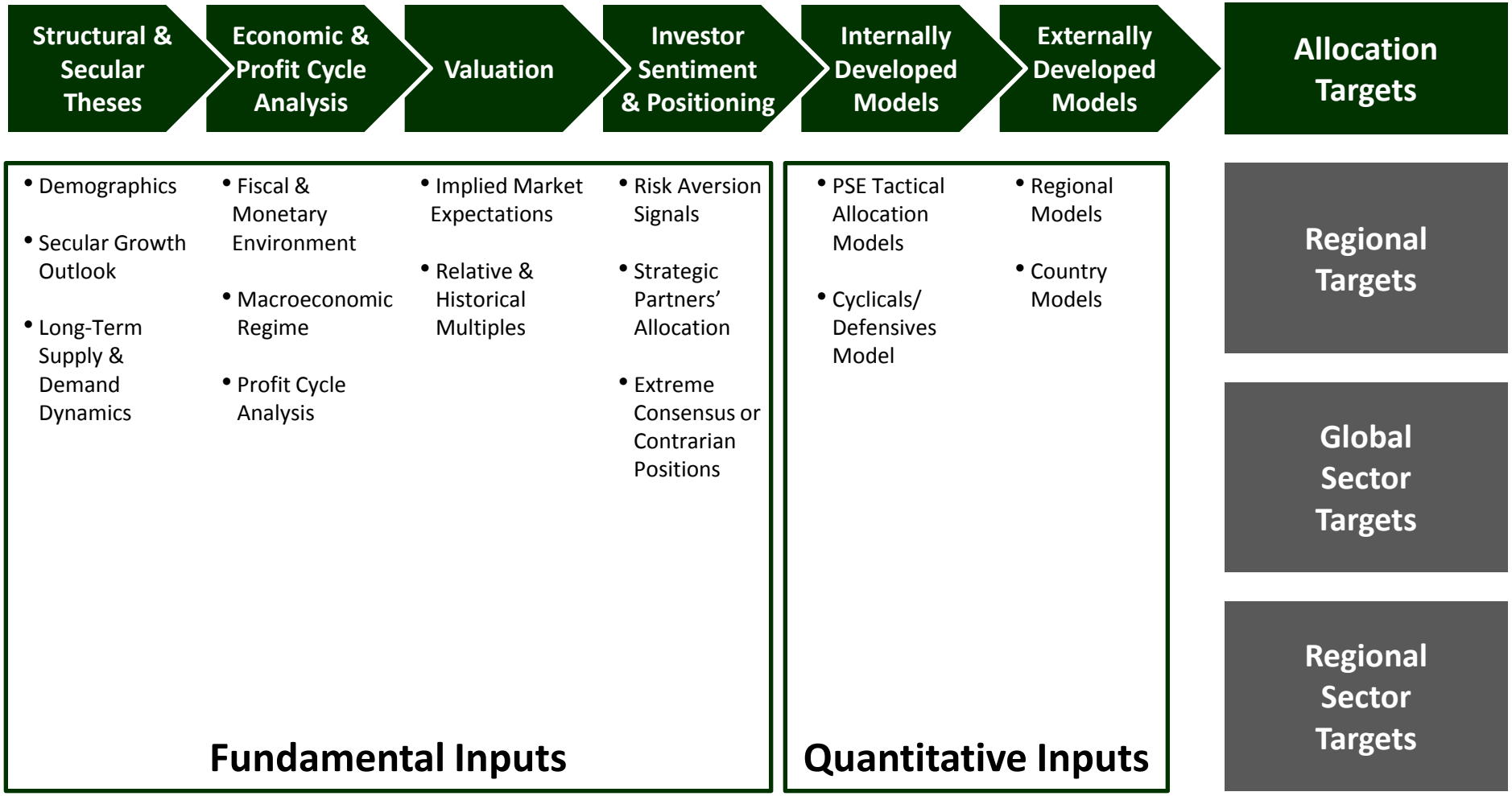
↓

Portfolio

Portfolio Maintenance

Reporting ⟷ **Risk Management** ⟷ **Performance Attribution**

Top-Down Allocation



Bottom-Up Security Selection

Investable Universe

- MSCI All-Country Index
- Non-Index Names

Quant-Screened Universe

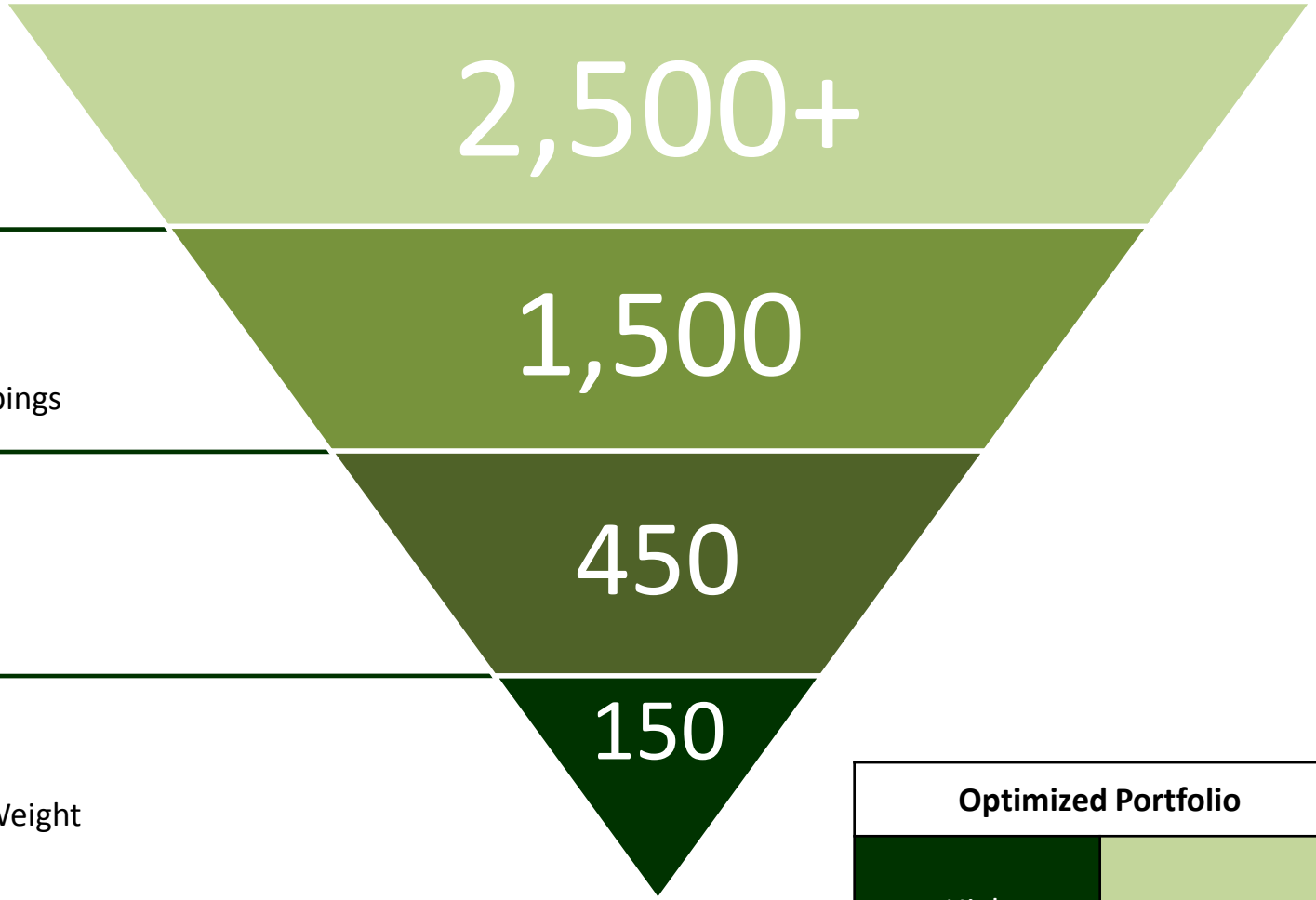
- Customized Screen
- Dynamic Factor Model
- 8 – 10 Diversified Factor Groupings

Fundamental Research List

- Liquidity
- Industry Dynamics
- Valuation

High Conviction Stocks

- High Conviction Overweights
- Roughly 40% of the Portfolio Weight



Optimized Portfolio	
High Conviction 150	Risk Control 650

World's Largest Global Active Equity Mutual Funds

As of December 31, 2011

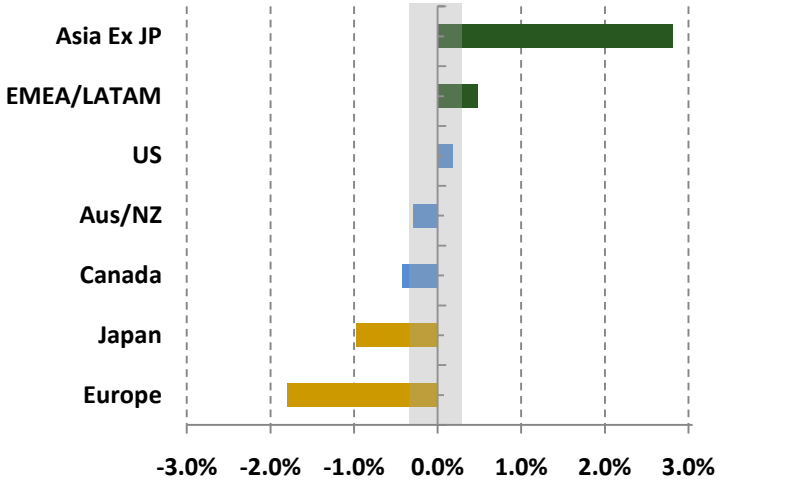
		($ in billions)
1	American Funds - Capital World Growth and Income Fund	66,592
2	American Funds - New Perspective Fund	39,229
3	First Eagle - Global Fund	26,563
4	**TRS - GBI Flagship Portfolio**	**18,283**
5	American Funds - SmallCap World Fund	17,518
6	Thornburg - Investment Income Builder	9,728
7	IVA - Worldwide Fund	9,303
8	Oppenheimer - Global Fund	8,063
9	American Funds - New Economy	6,718
10	Manning & Napier - World Opportunities Fund	6,003

Source: Bloomberg

GBI Flagship Positioning

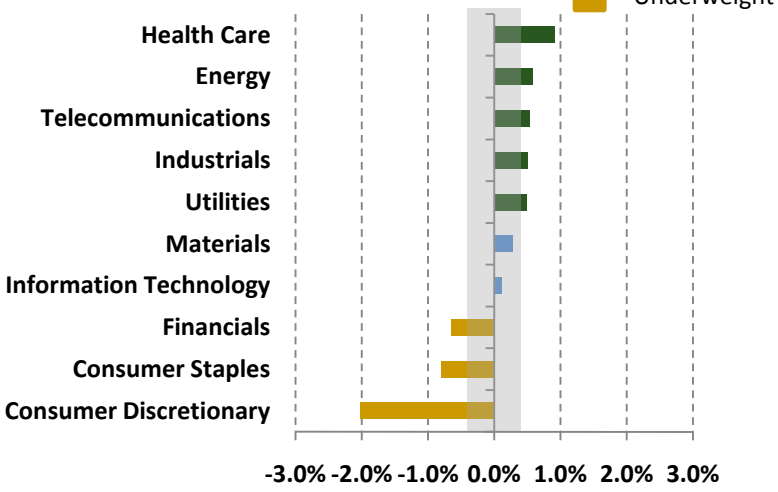
Region Allocation

Regions	GBI Flagship %	MSCI %	Over/Under Weight %
Asia Ex Japan	11.9	9.1	2.8
Emea & Lat Am	5.9	5.4	0.5
United States	46.2	46.0	0.2
Australia/New Zealand	2.9	3.2	-0.3
Canada	4.1	4.5	-0.4
Japan	7.0	8.0	-1.0
Europe	22.0	23.8	-1.8



Sector Allocation

Sectors	GBI Flagship %	MSCI %	Over/Under Weight %
Health Care	10.2	9.3	0.9
Energy	12.7	12.1	0.6
Telecommunication Services	5.4	4.9	0.5
Industrials	11.0	10.5	0.5
Utilities	4.4	3.9	0.5
Materials	8.3	8.0	0.3
Information Technology	12.3	12.2	0.1
Financials	17.9	18.5	-0.6
Consumer Staples	9.9	10.7	-0.8
Consumer Discretionary	8.0	10.0	-2.0



Range +/- 3%

GBI Flagship Positioning

Top Ten Holdings

Company	Market Value ($ in millions)	GBI Flagship %	Benchmark %	Difference
Apple, Inc.	300.6	1.7	1.5	0.2
Exxon Mobil Corp.	286.2	1.6	1.6	0.0
Royal Dutch Shell Plc	181.7	1.0	0.9	0.1
Chevron Corp.	176.3	1.0	0.8	0.2
International Business Machines Corp.	160.9	0.9	0.9	0.0
AT&T Inc.	152.2	0.8	0.7	0.1
Pfizer Inc.	144.9	0.8	0.7	0.1
General Electric Co.	141.9	0.8	0.7	0.1
Nestle SA	141.5	0.8	0.7	0.1
Google Inc.	138.0	0.8	0.6	0.2
Total	$1,824.2	10.2	9.1	1.1

GBI Flagship Positioning

Overweights

Company	Market Value ($ in millions)	Over Weight %
China Construction Bank Corp.	95.9	0.4
CVS Caremark Corp.	101.7	0.3
Lowe's Cos., Inc.	84.5	0.3
Aetna, Inc.	67.5	0.3
UnitedHealth Group, Inc.	92.7	0.3
Altria Group, Inc.	95.1	0.3
PG&E Corp.	60.6	0.3
Centrica Plc	64.1	0.3
Medco Health Solutions, Inc.	61.7	0.3
Gilead Sciences, Inc.	68.1	0.3
Total	$791.9	3.1

Underweights

Company	Market Value ($ in millions)	Under Weight %
McDonald's Corp.	0.9	-0.4
The Home Depot, Inc.	0.0	-0.3
Bristol-Myers Squibb Co.	1.8	-0.2
GlaxoSmithKline PLC	43.2	-0.2
U.S. Bancorp	0.0	-0.2
ENI S.p.A.	0.7	-0.2
UBS AG	0.0	-0.2
Abbott Laboratories	32.0	-0.2
Eli Lilly & Co.	1.6	-0.2
Daimler Ag	0.5	-0.2
Total	$80.7	-2.3

GBI Flagship Characteristics

As of December 31, 2011

	Portfolio Characteristics	GBI Flagship	MSCI
	Market Capitalization	$68.6B	$64.8B
Valuation Metrics	Price/Earnings - Trailing	11.8x	12.1x
	Price/Earnings - Forward	11.0x	11.4x
	Price/Book	2.0x	2.0x
	Dividend Yield	2.6%	2.4%
Quality Metrics	Estimated 3-5 Year EPS Growth	10.7%	10.7%
	Return on Equity	18.8%	18.6%
	Long-Term Debt/Capital	30.3%	31.2%
Risk Metric	Beta	1.01	1.00

Cross-Division Collaboration

- Assisted in co-investments
  - Valuation and industry analysis in 16 investment opportunities
- Provided global industry analysis
- Participated in investment task force
  - Europe
  - Hard assets
  - Residential housing
- Hosted investment symposia
  - U.S. Financials
  - Global Energy
  - Emerging Market Consumer
- Participated in renewal projects
- Developed tactical equity-oriented portfolios
  - Gold – launched 10/1/2009
  - High Quality – launched 7/1/2011
  - Global Natural Resources – under development
  - REITs – under development

IPM Accomplishments and Priorities

2011 Accomplishments

- Achieved 4th year of outperformance
- Enhanced valuation platform
- Launched IPM newsletter, "View from the 13th Floor," as a periodical
- Adopted short-term risk model
- Initiated external manager signal testing project
- Launched High Quality R&D portfolio
- Established advisory platform

2012 Super Set Priorities

- Integrate exposures with PSE models
- Enhance communication of GBI's investment philosophy, approach, framework, and goals
- Complete a review of factors, including relative exposure to high quality, value, small cap, and momentum
- Implement practical methods for utilizing stock and country level information from the TRS external structure

Conclusion

- Consistent outperformance
- Strong, stable leadership and experienced team
- Culture of cross-divisional collaboration

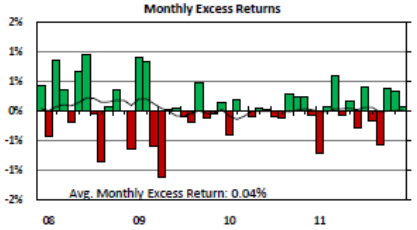
GBI Flagship STAR Report

Statistical Tracking And Reporting (STAR) System

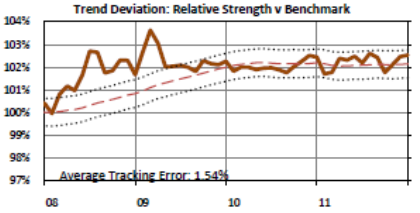
GBI Flagship vs. MS ACWI FREE (NET)

Monthly Data from 12/07 to 12/11

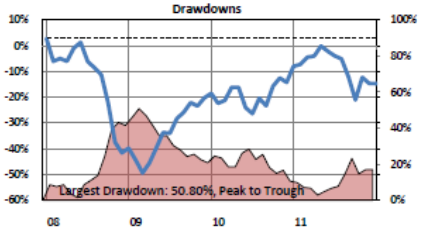
Monthly Excess Returns



Trend Deviation: Relative Strength v Benchmark



Drawdowns



Valuation Model: Undervalued (5) - Upward Trend

Overall Performance (Since Inception 12/19/07)

Cumulative Performance:

Portfolio	(14.73%)	Periods	49
Benchmark	(16.84%)	R-Squared	99.6%
Excess Return	2.11%	Tracking Error	1.5%

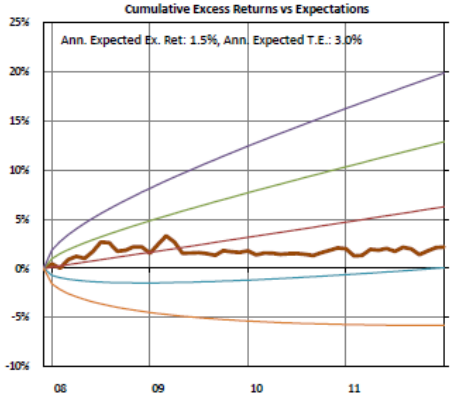
Annualized Performance:

	Portfolio	B'mark	Diff	Ex. Ret.	Risk Free
Return	(3.83%)	(4.41%)	0.59%	0.53%	0.59%
St. Dev.	22.65%	22.96%	(0.31%)	1.54%	0.28%
Best Month	11.10%	11.80%	(0.71%)	0.95%	0.38%
Worst Month	(19.46%)	(19.82%)	0.36%	(1.12%)	(0.01%)
Best 12 Mths	55.64%	58.12%			
Worst 12 Mths	(46.77%)	(48.21%)			
Up Capture	80.4%	80.51%			
Down Capture	(47.43%)	(48.08%)			

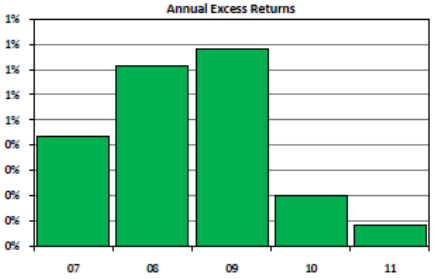
Risk-Adjusted Performance Summary:

Info. Ratio	0.38	Sharpe	(0.19)	Hit Rt Up	45.8%
M2 Premium	(3.89%)	Treynor	(0.04)	Hit Rt Dn	60.0%
Beta	0.98	Sortino	0.34	Hit Rt Tot	53.1%
Jensen's alpha	0.51%				

Cumulative Excess Returns vs Expectations



Annual Excess Returns



Performance by Period (Inception: 12/19/07)

Period	Portfolio	B'mark	VFB	T.E.	I.R.
3-month	8.00%	7.18%	0.81%		
YTD	(7.26%)	(7.35%)	0.09%		
1-year	(7.26%)	(7.35%)	0.09%	1.39%	0.06
2-year	2.31%	2.17%	0.14%	1.08%	0.13
3-year	12.33%	12.01%	0.32%	1.40%	0.23
5-year	N/A	N/A	N/A	N/A	N/A
10-year	N/A	N/A	N/A	N/A	N/A
Inception	(3.83%)	(4.41%)	0.59%	1.54%	0.38

Performance by Year:

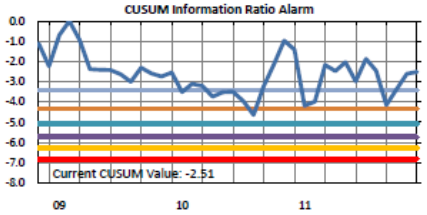
	Year	Portfolio	B'mark	Excess
Start Date:	2007	2.82%	2.39%	0.43%
12/19/07	2008	(41.49%)	(42.21%)	0.72%
	2009	35.41%	34.63%	0.78%
End Date:	2010	12.87%	12.67%	0.20%
12/31/11	2011	(7.26%)	(7.35%)	0.09%

Statistical Tracking And Reporting (STAR) System

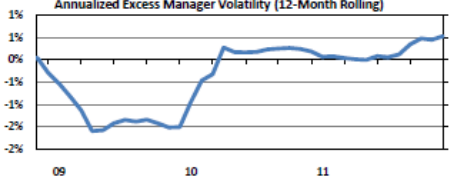
GBI Flagship vs. MS ACWI FREE (NET)

Monthly Data from 12/07 to 12/11

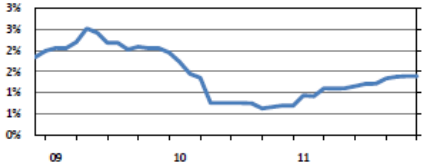
CUSUM Information Ratio Alarm



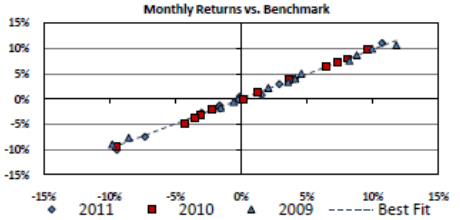
Annualized Excess Manager Volatility (12-Month Rolling)



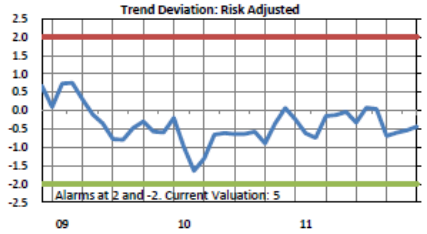
Annualized Tracking Error (12-Month Rolling)



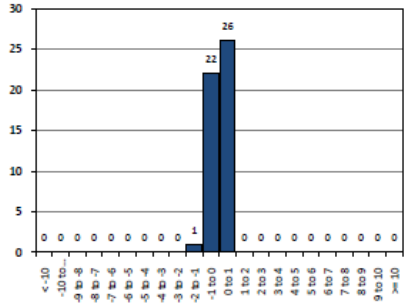
Monthly Returns vs. Benchmark



Trend Deviation: Risk Adjusted



Distribution of Excess Returns



Hit Rate Analysis:

	Periods	Hit Rate	Avg. Ex. Ret.
Benchmark Up	24	45.8%	(0.01%)
Benchmark Down	25	60.0%	0.10%
All Periods	49	53.1%	0.04%

Hit Rate During Various Environments:

Value/ Growth	Value Outperf.	Neutral	Growth Outperf.
Periods	14	22	13
Hit Rate	21.4%	50.0%	92.3%
Avg Ex Ret	(0.29%)	0.02%	0.45%

Sm Value/ Sm Growth	Value Outperf.	Neutral	Growth Outperf.
Periods	11	27	11
Hit Rate	36.4%	48.1%	81.8%
Avg Ex Ret	(0.17%)	(0.05%)	0.49%

Equity Size	Large Outperf.	Neutral	Small Outperf.
Periods	10	22	17
Hit Rate	30.0%	63.6%	52.9%
Avg Ex Ret	(0.05%)	0.08%	0.05%

US/ Intl Stocks	US Outperf.	Neutral	Intl. Outperf.
Periods	19	17	13
Hit Rate	52.6%	70.6%	30.8%
Avg Ex Ret	(0.08%)	0.28%	(0.08%)

Stocks/ Bonds	Stocks Outperf.	Neutral	Bonds Outperf.
Periods	21	6	22
Hit Rate	47.6%	66.7%	54.5%
Avg Ex Ret	(0.02%)	0.03%	0.11%

Core/ High Yield	Core Outperf.	Neutral	High Yield Outperf.
Periods	13	14	22
Hit Rate	53.8%	57.1%	50.0%
Avg Ex Ret	0.16%	0.04%	(0.02%)

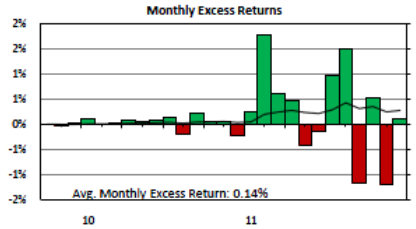
US/ Intl Bonds	US Outperf.	Neutral	Global Outperf.
Periods	15	19	15
Hit Rate	60.0%	52.6%	46.7%
Avg Ex Ret	0.06%	0.04%	0.03%

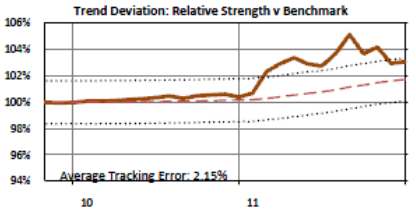
GBI Gold Fund STAR Report

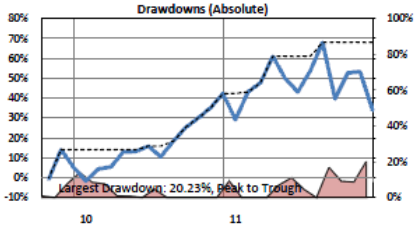
Statistical Tracking And Reporting (STAR) System

Gold Fund vs. Gold Fund Benchmark

Monthly Data from 10/09 to 12/11







Valuation Model: Overvalued (6) - Downward Trend

Overall Performance (Since Inception 10/31/09)

Cumulative Performance:

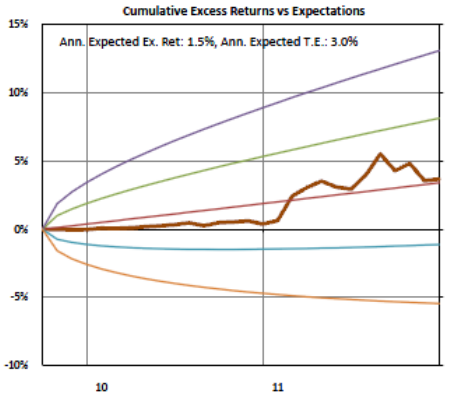
Portfolio	34.03%	Periods	27
Benchmark	30.03%	R-Squared	99.5%
Excess Return	4.00%	Tracking Error	2.2%

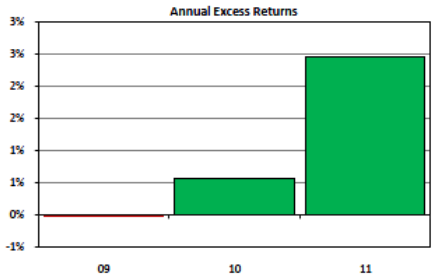
Annualized Performance:

	Portfolio	B'mark	Diff	Ex. Ret.	Risk Free
Return	13.90%	12.38%	1.52%	1.62%	0.10%
St. Dev.	26.95%	25.93%	1.02%	2.15%	0.02%
Best Month	15.00%	15.03%	(0.04%)	1.79%	0.02%
Worst Month	(16.88%)	(15.71%)	(1.17%)	(1.21%)	(0.01%)
Best 12 Mths	42.49%	38.08%			
Worst 12 Mths	(5.82%)	(8.27%)			
Up Capture	98.9%	93.23%			
Down Capture	(62.66%)	(61.99%)			

Risk-Adjusted Performance Summary:

Info. Ratio	0.71	Sharpe	0.51	Hit Rt Up	72.2%
M2 Premium	13.38%	Treynor	0.13	Hit Rt Dn	55.6%
Beta	1.04	Sortino	0.30	Hit Rt Tot	66.7%
Jensen's alpha	1.07%				





Performance by Period (Inception: 10/31/09)

Period	Portfolio	B'mark	VFB	T.E.	I.R.
3-month	(4.04%)	(3.46%)	(0.57%)		
YTD	(5.82%)	(8.27%)	2.45%		
1-year	(5.82%)	(8.27%)	2.45%	3.21%	0.76
2-year	12.88%	11.17%	1.71%	2.28%	0.75
3-year	N/A	N/A	N/A	N/A	N/A
5-year	N/A	N/A	N/A	N/A	N/A
10-year	N/A	N/A	N/A	N/A	N/A
Inception	13.90%	12.38%	1.52%	2.15%	0.71

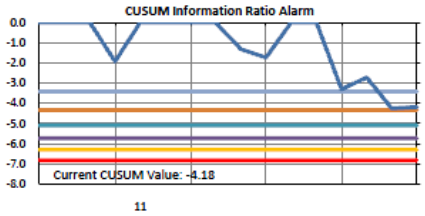
Performance by Year:

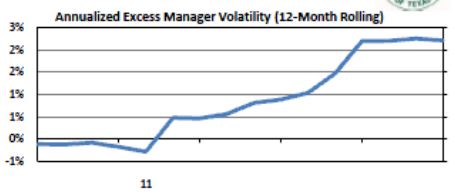
	Year	Portfolio	B'mark	Excess
Start Date:	2009	5.19%	5.21%	(0.03%)
10/31/09	2010	35.30%	34.73%	0.57%
	2011	(5.82%)	(8.27%)	2.45%
End Date:				
12/31/11				

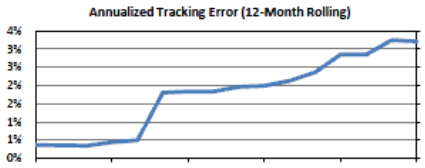
Statistical Tracking And Reporting (STAR) System

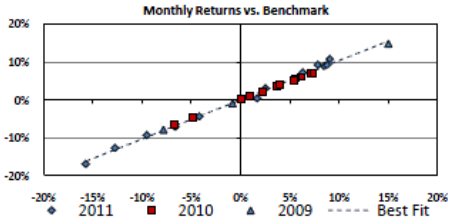
Gold Fund vs. Gold Fund Benchmark

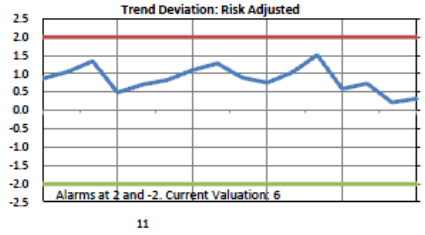
Monthly Data from 10/09 to 12/11

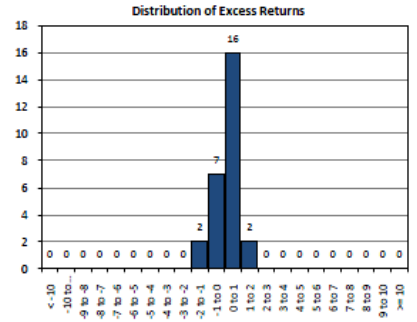












Hit Rate Analysis:

	Periods	Hit Rate	Avg. Ex. Ret.
Benchmark Up	18	72.2%	0.27%
Benchmark Down	9	55.6%	(0.13%)
All Periods	27	66.7%	0.14%

Hit Rate During Various Environments:

Value/ Growth	Value Outperf.	Neutral	Growth Outperf.
Periods	5	15	7
Hit Rate	60.0%	66.7%	71.4%
Avg Ex Ret	(0.18%)	0.18%	0.26%
Sm Value/ Sm Growth	**Value Outperf.**	**Neutral**	**Growth Outperf.**
Periods	1	21	5
Hit Rate	100.0%	61.9%	80.0%
Avg Ex Ret	0.11%	0.10%	0.28%
Equity Size	**Large Outperf.**	**Neutral**	**Small Outperf.**
Periods	5	14	8
Hit Rate	40.0%	64.3%	87.5%
Avg Ex Ret	0.11%	0.16%	0.11%
US/ Intl Stocks	**US Outperf.**	**Neutral**	**Intl. Outperf.**
Periods	12	10	5
Hit Rate	58.3%	80.0%	60.0%
Avg Ex Ret	(0.06%)	0.41%	0.05%

Stocks/ Bonds	Stocks Outperf.	Neutral	Bonds Outperf.
Periods	13	3	11
Hit Rate	76.9%	100.0%	45.5%
Avg Ex Ret	0.25%	0.26%	(0.04%)
Core/ High Yield	**Core Outperf.**	**Neutral**	**High Yield Outperf.**
Periods	5	10	12
Hit Rate	40.0%	60.0%	83.3%
Avg Ex Ret	(0.21%)	0.17%	0.25%
US/ Intl Bonds	**US Outperf.**	**Neutral**	**Global Outperf.**
Periods	9	11	7
Hit Rate	66.7%	63.6%	71.4%
Avg Ex Ret	(0.27%)	0.45%	0.16%

Internal Passive Management

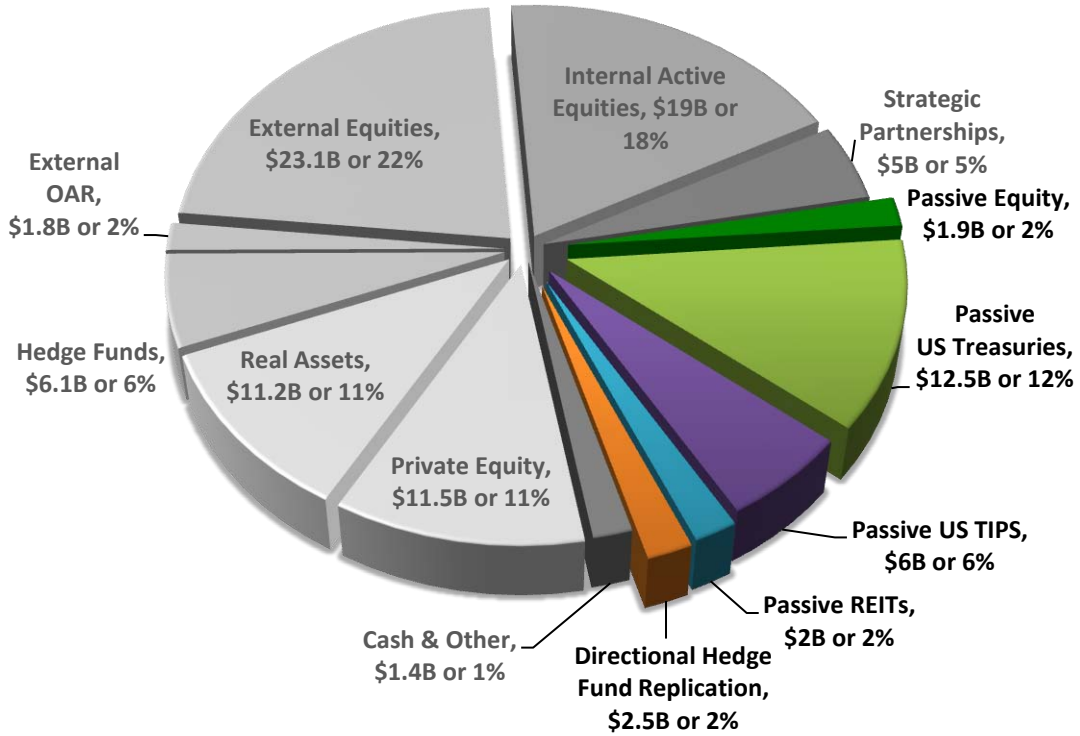
Mohan Balachandran, Director of PSE and
Bernie Bozzelli, Senior Director of Trading

Overview of Internal Passive Management

As of December 31, 2011

- Approximately $25 billion without cash, or 24% of the Trust, is invested in Internal Passive Portfolios
- These portfolios perform the following functions:
  - Low cost and low tracking error market exposure
  - Helps with the monthly rebalance to the Trust Strategic Asset Allocation

Total Passive 23.9%*



* Calculation does not include 1.4% cash managed in STIF by SSGA

Passive Team

Mohan Balachandran, PhD
Director

Mohan joined TRS in 2008 and co-heads the PSE group. He earned a BS from Indian Institute of Technology, an MS and PhD in Physics from Brown University.

Bernie Bozzelli, CFA
Senior Director of Trading

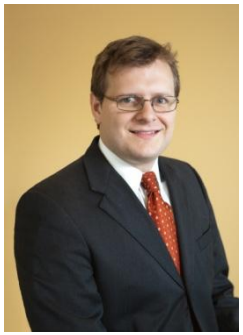
Bernie has been trading at TRS since 1997 and is responsible for overseeing the day to day operations of the TRS Trading desk, He is a CFA charterholder and earned an MPA from the University of Texas.

Tim Jones, PhD
Senior Investment Manager

Tim joined TRS as an intern while working on his PhD in Economics at University of Texas In addition to TAA duties, he manages the QVF fund.

Steve Peterson, MBA
US Equity and Fixed Income Trader

Steve has 17 years of experience as an institutional equity trader. Before joining TRS, he spent 12 years on the sell side mostly as a NASDAQ market trader. Steve oversees the Transition Management function. He earned an MBA from California Lutheran University.



Matt Talbert, PhD
Senior Associate

With a BA from Trinity University, MS and PhD from University of Texas in Economics, Matt is responsible for Commodity and TAA trading as well as risk management strategies.

Komson Silapachai, BBA
US Equity, LATAM, Canada and Fixed Income Trader

Komson joined TRS in 2007 as an Analyst with the Strategic Research and Risk Management Group. He later joined Trading in 2009. He earned a BA from Texas A&M University.

Portfolio Composition

As of December 31, 2011

- Passive Securities portfolios consist of single stocks
- In addition, the Trust invests in Exchange Traded Funds (ETFs) and Derivatives including Total Return Swaps and Futures

	Total TRS Invested ($B)	Passive Securities ($B)	ETF	Derivatives ($B)		Percent of Exposure to Asset Class	Description of Strategy
				SWAP	Futures		
Large Cap	16.3				-1.3*	-8.0	
Large Cap Core	1.5						
Small Cap	2.0			0.7		35.0	Total Return Swap
EAFE+Canada	16.0		2.4			15.0	MSCI iShares
Emerging Markets	10.4						
Total Equity	46.2	0.0	2.4	0.7	-1.3	3.9	
Directional Hedge Funds	5.2	1.2		0.4	0.9	48.1	
Total Private Equity	11.5						
Long Treasury	12.4	11.8			0.7	100.0	
Stable Value Hedge Fund	3.4						
Total Cash	2.1						
Other Absolute Return-Credit	2.2						
Total Stable Value	20.1	11.8	0.0	0.0	0.7	62.2	
TIPS	6.5	6.0				92.3	
Total Real Assets	11.2						
REITS	2.1	2.0				95.2	
Commodities	1.2			0.1		4.2	Enhanced GSCI SWAPS
Total Real Return	21.0	8.0	0.0	0.1	0.0	38.3	
Total	104.0	21.0	2.4	1.2	0.3	23.9	

* Large Cap short position was taken off Jan – Feb 2012 as USLC allocation in External Public sleeve reduced

Passive Securities Portfolios

2011 Performance

Passive and Overlay Portfolios*	Market Value ($ in billion)	Returns (%)	2011 Index Return (%)	2011 Excess Return (%)
Long Treasuries	12.5	30.1	29.9	0.2
US TIPS Passive	6.0	13.7	13.5	0.2
REITs	2.0	8.9	8.7	0.3
Total	**$20.5**			

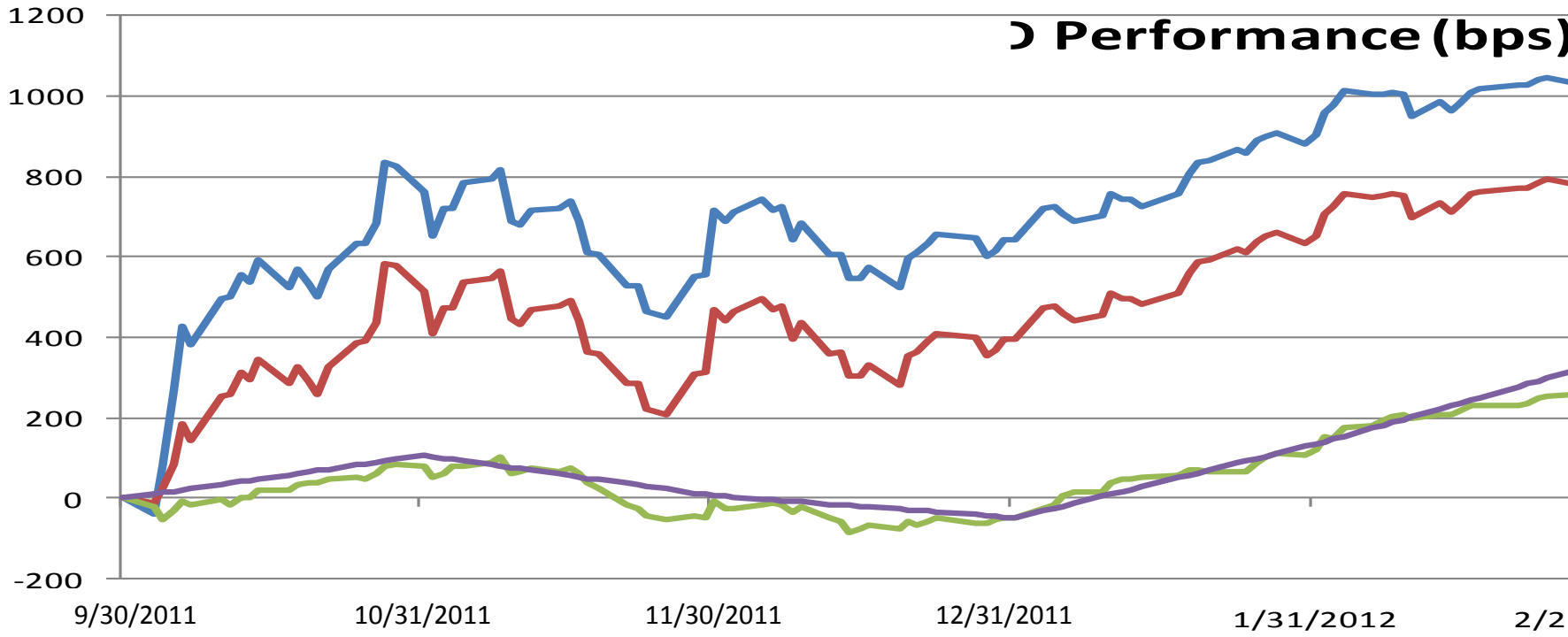
*Only portfolios with a full year history are shown; totals will not match previous slide

Source: State Street Bank

Hedge Fund Replication Strategy

- On October 1, 2011, the TRS policy allocation to hedge funds increased from 4% to 9%. The policy shift caused a large underweight to hedge funds. To mitigate the impact on the Trust's active risk the PSE group initiated a passive directional hedge fund replication
- This portfolio is constructed with the sole purpose of minimizing tracking error to the directional hedge fund benchmark (HFRI Fund of Funds Composite)
- Numerous academic works in the area of Hedge Fund replication have established that hedge funds gain much of their return from systematic risk exposures to capital markets
- The TRS replication process measures and replicates these exposures
- The model estimates weights on investable market factors using a rolling window regression. The objective is to track gross index returns
- Model improvements have been and continue to be made based on collaboration with researchers at AQR and Credit Suisse

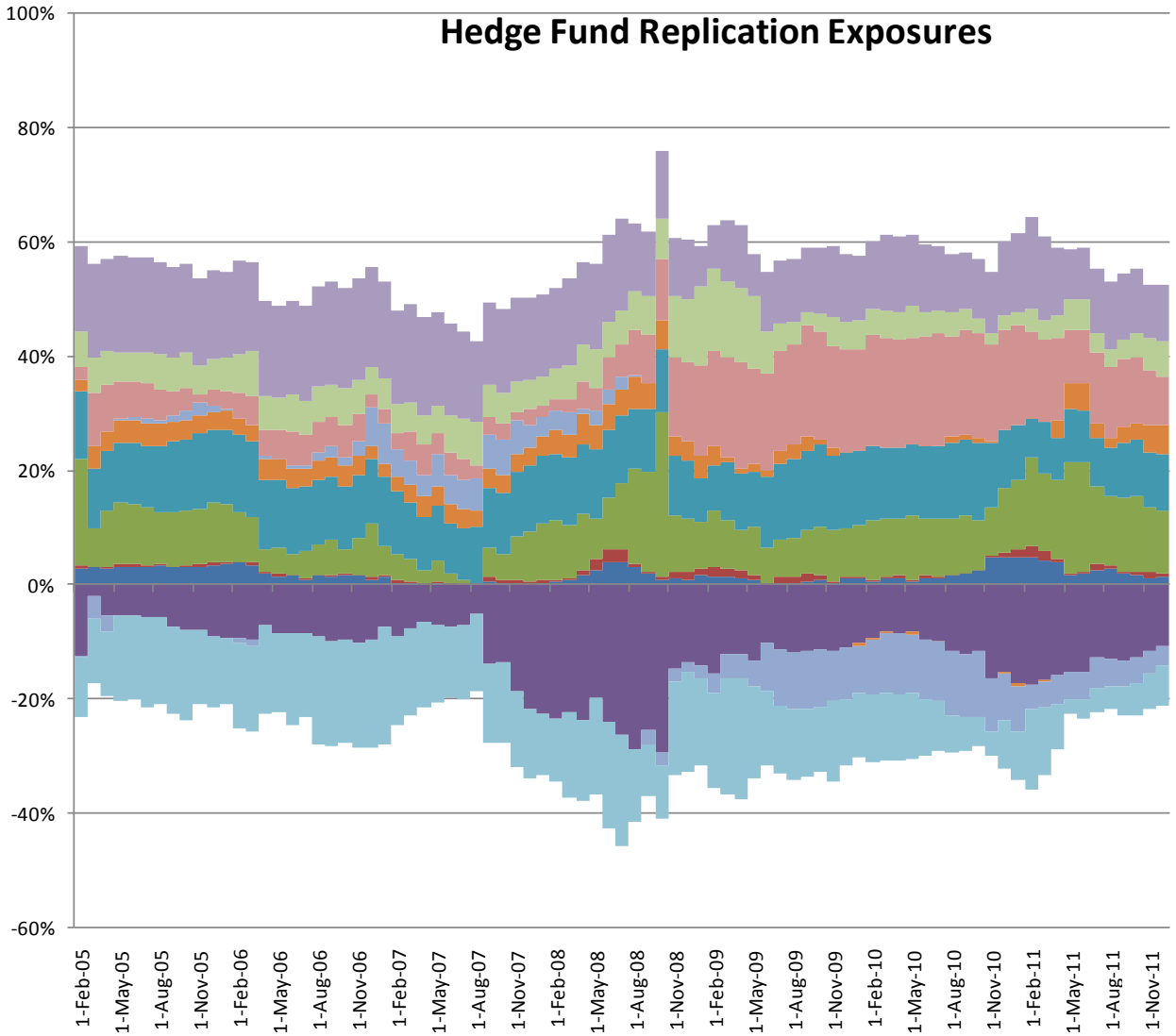
Replication ITD Performance (bps)



Directional Hedge Fund Replication Performance

	Replication (%)	Benchmark (%)	Excess (%)
ITD	10.4	2.9	7.4
October 2011	7.6	1.1	6.5
November 2011	-0.4	-1.0	0.6
December 2011	-0.7	-0.6	-0.1

Historical Factor Exposures



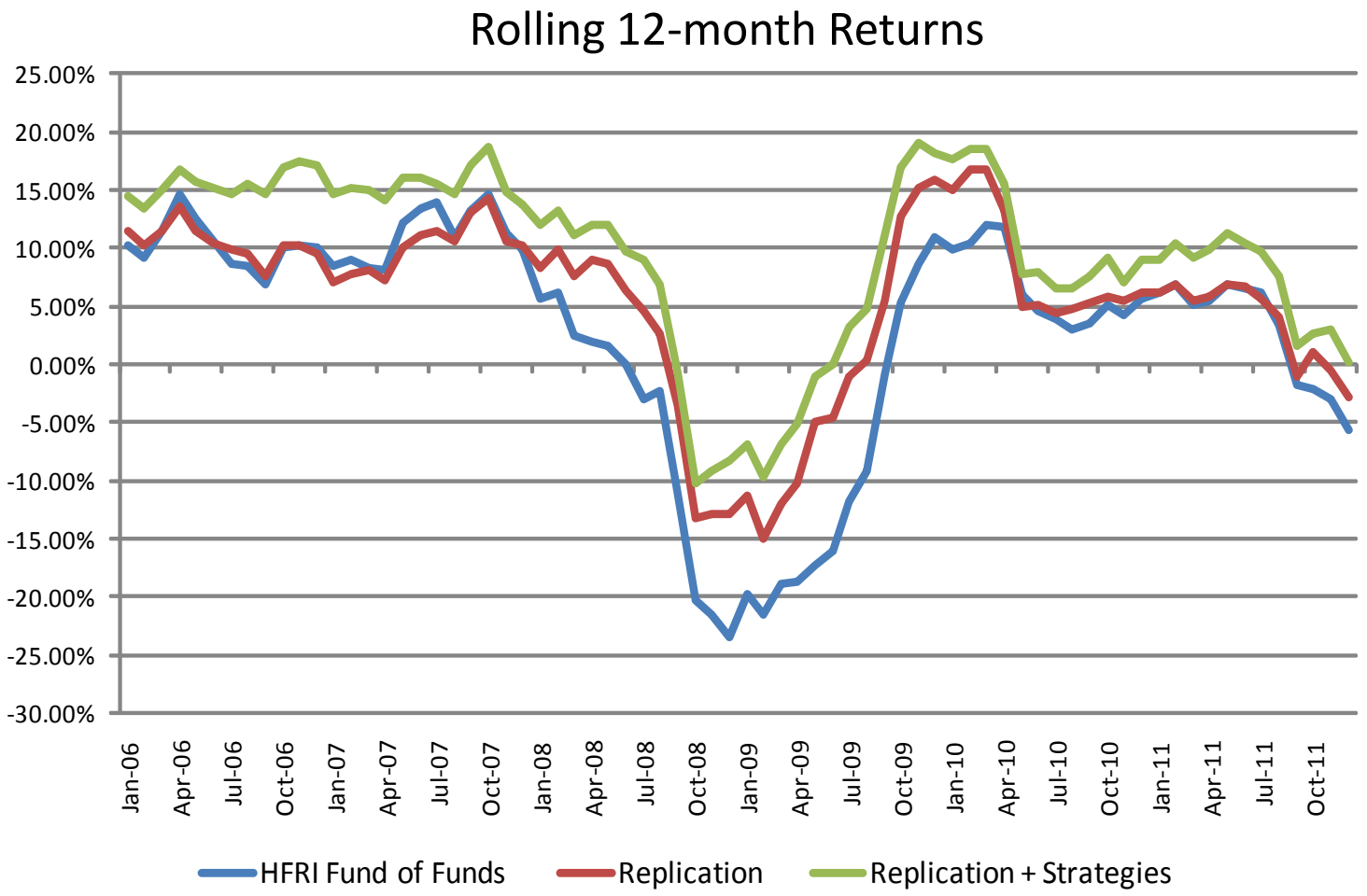
Longs

- Russell 2000
- S&P/TSX 60
- FTSE 100
- Nikkei 225
- MSCI Emerging Markets
- TIPs 10yr
- GSCI
- GSCI Precious Metals

Shorts

- S&P 500
- EuroStoxx 50
- US 10yr

Model Performance

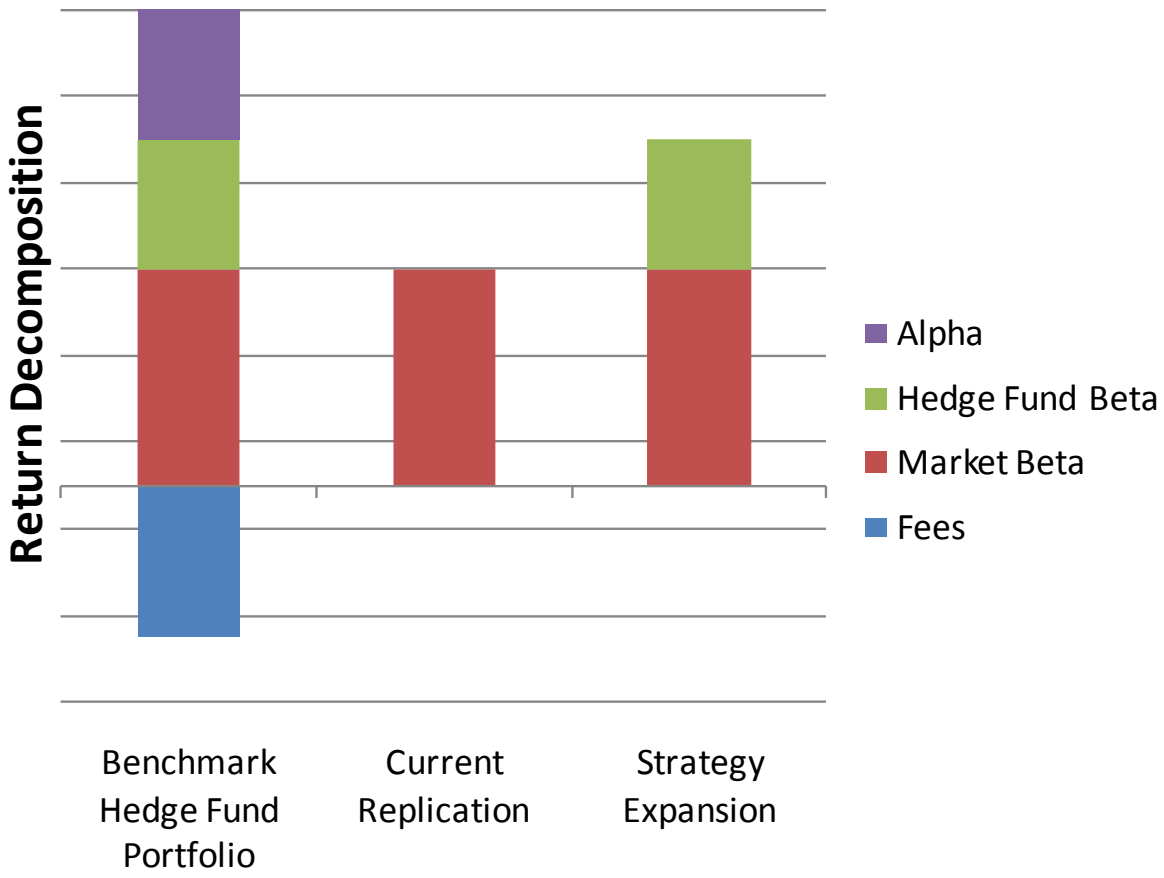


Directional: HFRI Fund of Funds Composite Index

	Tracking Error vs. Index	Correlation w/Index	Return	Volatility
Index			2.2%	6.3%
Replication	3.2%	0.86	5.1%	6.2%
Replication + Strategy Expansion*	2.9%	0.90	8.9%	6.0%

*Under development

Strategy Expansion



- The current replication is able to replicate hedge fund exposures to capital markets
- The planned expansion widens the set of available instruments to include liquid, investable strategies that will be combined with the equity replication to minimize tracking error to the index
- This combines our "top down" approach to replicating the benchmark with a "bottom up" approach of passively investing in common hedge fund strategies that AQR employs in their hedge fund replication process

Conclusion

- Steady performance with low cost and low tracking error
- Ensure that the Trust stays close to its Strategic Asset Allocation
- Compliment other internal portfolios
- Continue developing Hedge Fund Replication Program

Trade Management Group (TMG)

Bernie Bozzelli
Senior Director of Trading

Trading Responsibilities

Trading

- Trades globally across multiple asset classes including equities, futures, forwards, options, treasuries, TIPS, and foreign exchange
- Manages a global network of 42 brokerage firms
- Key variables that contribute to trading include volatility, liquidity, and market structure
- Outperformed the median equity trading desk by 3bps in 2011, retaining $15.5 million of TRS alpha. TRS Trading placed in the first or second quartile in each of the past 4 years
- Trades across instruments totaled $256.3 billion for 2011 (Futures and forwards monthly/quarterly roll process is biggest contributor)

Passive Portfolio Management

- Passive Management
  - Long Treasuries – $12.5 billion
  - US TIPS – $6.0 billion
  - US REITs - $2.0 billion
  - LCG, LCV, and SC when needed
- Benchmark indices are fully replicated in the portfolio in real-time to achieve tight tracking error and in-line performance

Implementation Advisory

- Collaborates across the division to provide implementation solutions
- Examples include assessing the market impact of a trade, transition management between external managers, and a short-term technical model to aid in the timing of execution

Trading Team

Bernie Bozzelli, CFA
Senior Director of Trading

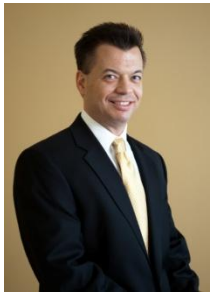
Bernie has been trading at TRS since 1997 and is responsible for overseeing the day to day operations of the TRS Trading desk, He is a CFA charterholder and earned an MPA from the University of Texas.

Jaime Llano, MBA
US Equity, Futures and Currency Trader

Jaime joined TRS in 2005. Prior to that, he worked for Cargill Inc. in Global Financial Markets for six years. He earned a Finance degree from The University of Texas and an MBA from St. Edwards University.

Scott Moore, MBA
Global Equity Trader-Asia

Scott has 22 years of institutional trading experience. He has worked for ERS and USAA. He earned an MBA from Thunderbird University.



Steve Peterson, MBA
US Equity and Fixed Income Trader

Steve has 17 years of experience as an institutional equity trader. Before joining TRS, he spent 12 years on the sell side mostly as a NASDAQ market trader. Steve oversees the Transition Management function. He earned an MBA from California Lutheran University.

Demetrius Pope, BBA
Global Equity Trader-Europe

Demetrius has 12 years of experience as an institutional trader. Before joining TRS, he worked for ERS where he did International, ADR, Domestic, currency and transition trading. He earned a BBA from Sam Houston State University.

Komson Silapachai, BBA
US Equity, LATAM, Canada and Fixed Income Trader

Komson joined TRS in 2007 as an Analyst with the Strategic Research and Risk Management Group. He later joined Trading in 2009. He earned a BA from Texas A&M University.

Jared Morris, MS Finance
US Equity and Futures Trader

Jared joined TRS in 2011 and has 5 years of trading experience. He earned a Masters Degree in Finance and a BBA from Texas A&M University.

Pat Barker
Trading Analyst

Pat has over 20 years experience with Teacher Retirement System of Texas Investment Accounting and the Investment Management Division including Fixed Income and Derivatives Analyst, recently transitioning to Trading Analyst.

Portfolio Strategy and Execution

Global Trading Desk Structure

Equity Index Portfolio Management
- Large Cap Value/Growth
- Small Cap
- EAFE + CAD
- REITs

Derivatives
- Futures TAA Overlay
- Futures QVF
- Hedge Fund Replication
- FX Trading

Fixed Income Portfolio Management
- Treasuries
- TIPS
- Expertise in multiple fixed income sectors

External Public
- Global Transition Management
- Evaluation of external trading
- FX Trading

Internal Public Markets
- GBI Flagship
- GBI Precious Metals
- Quant – Pre-Trade Analysis
- FX Trading

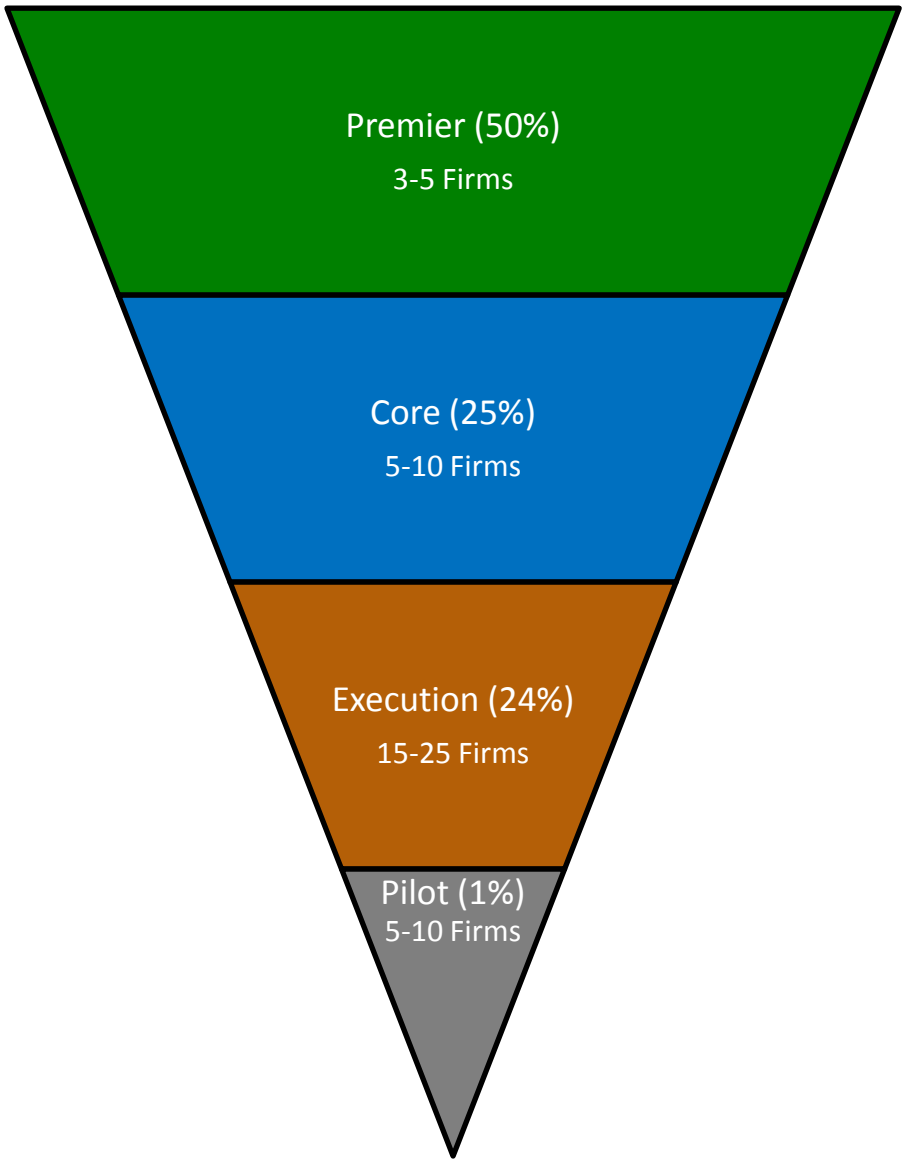
Other
- Ad-hoc project support
- FX Trading and Expertise
- Specialized in technical analysis
- Strong networks in multiple products

Major Initiatives

Since IMC Presentation on April 2011

- Replaced Total Return Swaps with Futures and Forwards
- Changes to the Trading Network
  - Proficiency across asset classes and products
  - Reduced overall number of firms
    - 4 Additions
    - 8 Deletions
    - 4 Promotions
- Full Integration with PSE
  - Now responsible for all Fixed Income trading
  - Collaboration with Passive Management
- Two Additions to the Trading Team
  - Trader and Trading Analyst

Trading Partner Network



4 Firms
- ❑ Deliver focused and high capacity relationships globally and across all asset classes
- ❑ Highly integrated with TRS trading, risk management, administrative systems, etc.
- ❑ Leading providers of investment services – TRS is a preferred client, receiving the highest level of service available

6 Firms
- ❑ Well established firms with overall world class global services capabilities
- ❑ World renowned for research and technology
- ❑ Best-of-breed product process development

25 Firms
- ❑ Includes firms who have a specialty in finding liquidity for hard-to-trade names or firms who have a niche in electronic trading
- ❑ Firms who have a core competency of trading internationally in particular regions are also included

7 Firms
- ❑ All newly approved firms doing business with TRS

Broker Review

Selection and Monitoring

Phase 1- Certification Process for New Firms

Procedures for New Firms
- *Broker Qualifications Questionnaire*
- *Minimum Standard Requirements*
- *6 to 12 Month Process*

Evaluation Period
- *Identify Valued Services*
- *TCA review*
- *Recommendations*
- *Category Fit*

Annual Review
- *Adds/Deletions*
- *Promotions/Demotions*
- *Qualitative Review*
- *On-Site Visit*

Certification Process
- *Senior Management Review*

If acceptable, then …

Phase 2- Broker added to Pilot Program

Pilot Program
- *Pilot brokers evaluated quarterly using same criteria as all TRS brokers*

Quarterly Review Process
- *Trader vote*
- *Transaction cost analysis*
- *Guidelines established*
- *Quarterly report card to each broker*

Two Year Process
- *Pilot brokers have up to 2 year evaluation process to qualify for advancement to execution category*

Completion of Pilot Program
- *Advance to execution /core category or remove from broker list*
- *Broker has opportunity to advance based on performance after 1 year*

How Effective Has Equity Trading Been?

	2008	2009	2010	2011
TRS Quartile Placement	1st	1st	1st	2nd
Total Trading Cost (market impact + commission/fees)	-38 bps	-35 bps	-38 bps	-40 bps
TRS Performance vs. Benchmark	9 bps	33 bps	14 bps	2 bps
Median Desk Performance vs. Benchmark	-11 bps	-9 bps	-4 bps	-1 bps
1st Quartile Desk Performance vs. Benchmark	-1 bps	1 bps	4 bps	3 bps
TRS vs. Median Desk	20 bps	43 bps	19 bps	3 bps
TRS vs. 1st Quartile Desk	10 bps	32 bps	10 bps	-1 bps
TRS vs. Median Desk ($ in Millions)	$73.9	$150.0	$52.9	$15.5

*Source: ITG/Plexus **

- Total trading cost for 2011 includes $131 million in market impact and $33 million in commissions and fees
- How is trading measured?
  - Every order is measured versus the order arrival price and adjusted by ITG/Plexus' Post Trade Ace benchmark in order to account for current market conditions
  - TMG's benchmark-adjusted performance is then compared to the benchmark-adjusted performance of its peers. It has consistently outperformed the peer median and has achieved 1st or 2nd quartile performance for the past four years
- How is it monitored?
  - Trade performance is monitored on a daily, weekly, monthly, quarterly, and annual basis
  - Performance is analyzed by broker, trader, strategy, venue, and region

**ITG/Plexus is the leading independent transaction cost provider. Their client base entails the largest peer universe compared to their competitors*

Volume Analysis

As of December 31, 2011

	2011 Volumes in Millions (As of December 31, 2011)					
	Equities	Fixed Income	Foreign Exchange	Futures	2011 Total	2010 Total
Premier Total	**$ 22,679**	**$ 9,022**	**$ 23,934**	**$ 69,795**	**$ 125,429**	**$ 32,211**
Barclays	$ 5,750	$ 3,014	$ 3,682	-	$ 12,446	$ 12,239
Credit Suisse	$ 4,871	$ 1,739	-	$ 18,517	$ 25,127	$ 4,974
JPMorgan	$ 5,790	$ 367	$ 16,109	$ 1,424	$ 23,691	$ 7,899
Morgan Stanley	$ 6,268	$ 3,902	$ 4,142	$ 49,854	$ 64,165	$ 7,099
Core Total	**$ 9,197**	**$ 9,629**	**$ 22,092**	**$ 72,644**	**$ 113,563**	**$ 22,381**
Citigroup	$ 2,864	$ 2,725	$ 11,046	-	$ 16,636	$ 3,547
Deutsche Bank	$ 2,082	$ 174	$ 921	$ 1,424	$ 4,601	$ 1,180
Goldman Sachs	$ 2,075	$ 2,734	$ 4,603	$ 15,668	$ 25,080	$ 8,495
Bank of America	$ 1,059	$ 1,585	-	$ 55,551	$ 58,195	$ 3,238
UBS	$ 229	$ 2,411	$ 5,523	-	$ 8,164	$ 4,414
Weeden & Co	$ 888	-	-	-	$ 888	$ 1,508
Execution Total	**$ 7,812**	**$ 8,050**	**-**	**-**	**$ 15,862**	**$ 15,892**
Pilot Total	**$ 1,480**	**$ -**	**-**	**-**	**$ 1,480**	**$ 1,011**
2011 Total Trading	**$ 41,167**	**$ 26,702**	**$ 46,026**	**$ 142,439**	**$ 256,334**	
2010 Total Trading	**$ 44,100**	**$ 16,592**	**$ 5,461**	**$ 5,341**	**$ 71,495**	**$ 71,495**

Commissions ($ in Millions)

Calendar Year	Equities	Fixed Income[1]	Foreign Exchange[1]	Futures	Total
2011	$ 13.9	$ 4.0	$ 6.9	$ 5.5	$ 30.3
2010	$ 16.2	$ 2.5	$ 0.8	$ 0.2	$ 19.6

Prior to 2008
Cash Securities
- Higher Commissions
- Less Flexibility

2008 – 2010
Total Return Swaps
- Implicit Commissions
- Less Transparency

2011 – Present
Futures & Forwards
- Lower Commissions
- Superior Liquidity
- More Transparency
- Improve Counterparty Risk
- Flexibility

[1]*Commissions in Fixed Income and Foreign Exchange are assumed to be 1.5 basis points of the total notional*

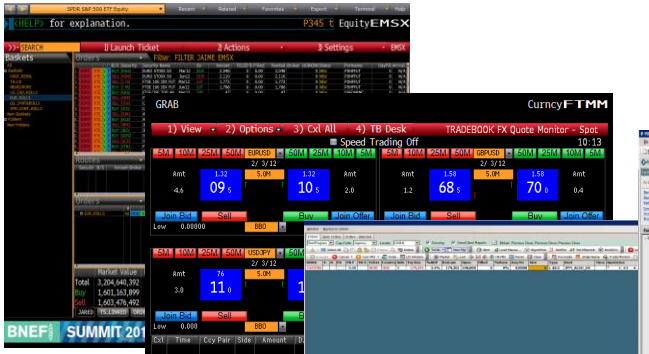
Increase in Futures and Foreign Exchange Trading in 2011

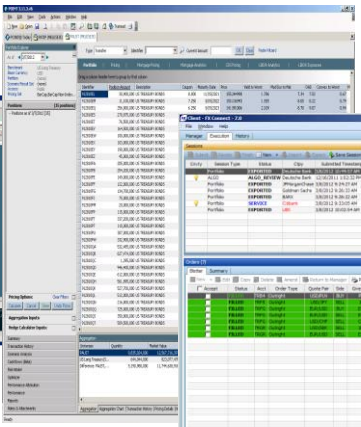
- Why?
  - Replacing total return swaps by implementing tactical asset allocation via futures and forwards
  - Reducing trading cost (lower commissions and less market impact)
    - Very liquid
    - Efficient market structure
  - Improving counterparty risk with futures
  - Increasing flexibility
  - Improving transparency
- Industry Standard
  - Wide use among US Public Pension Funds
  - Futures Clearing Merchant (FCM) and executing broker relationships
  - Bloomberg Execution Management System
- Internal Controls
  - Embedded controls in Bloomberg Execution Management System
  - Segregation of duties
  - Operational oversight
  - Multiple audits – No issues

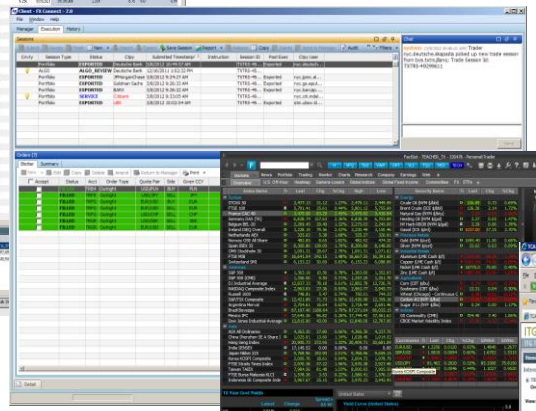
Systems & Technology

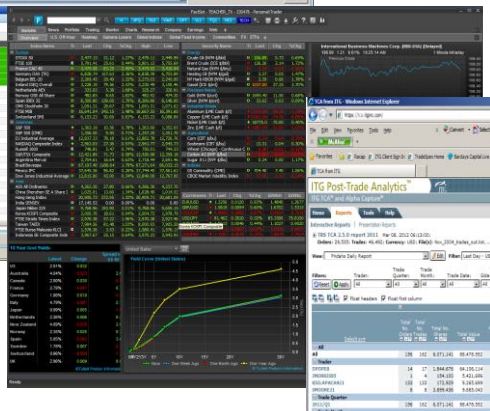
External

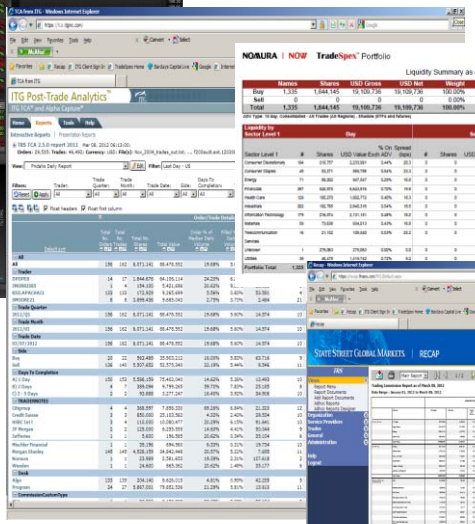
- Bloomberg EMSX
- Bloomberg Tradebook
- ITG Triton
- Barclay's Point
- FX Connect
- Factset
- ITG TCA
- Nomura TradeSpex
- State Street Broker Recap





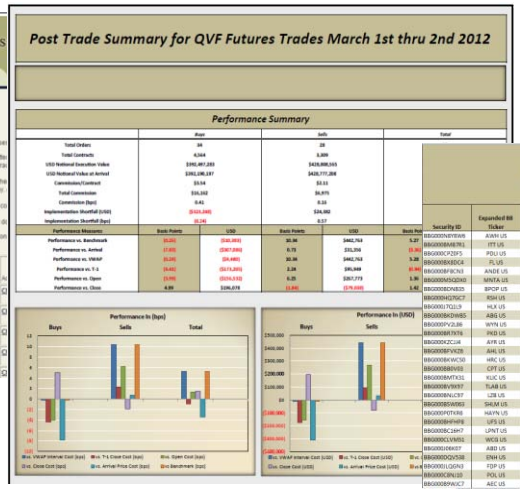


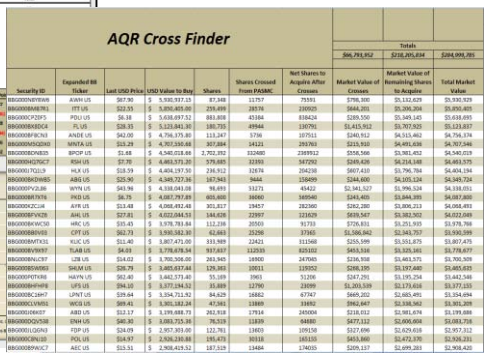




Internal

- Web Portal
- Futures Post-Trade TCA
- Transition





Top Themes Going Forward

For Institutional Trading Desks

- Expertise Across Asset Classes and Products
  - Continue enhancing skill sets related to derivative trading
  - Implementation Advisory
  - Market Information Hub
  - Establish Best Practices for each asset class and product
  - Trade strategy development
- Electronic Trading
  - Efficient access to liquidity/smart router
  - Futures, Foreign Exchange and Fixed Income
  - Next generation of algorithms
- Closing Thoughts
  - 2011 – Increase in volume and responsibilities with improved processes and technology
  - 2012 - Continue to build expertise and adapt to changing market conditions

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