

Global Equity Education Workshop

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Workshop Objectives

- Communicate
 - Public equity market characteristics
 - Investment alternatives
 - Asset class beliefs
 - Asset class investment approach
- Describe asset class implementation model
 - Capital allocation
 - Strategy sourcing
 - Portfolio management and trading
- Dialogue and affirmation of asset class beliefs

Role of Global Equity Within CalPERS

Growth: Public Equities

The role of equities is total return oriented and to capture the equity risk premium, defined as the excess return over risk free government bonds, by means of ownership risk in companies and exposure to corporate earnings growth. The major driver is appreciation, with some cash yield.

– CalPERS Asset Liability Management Workshop (2010)

Board-approved target allocation of 49 percent, with a range from 42 percent to 56 percent.

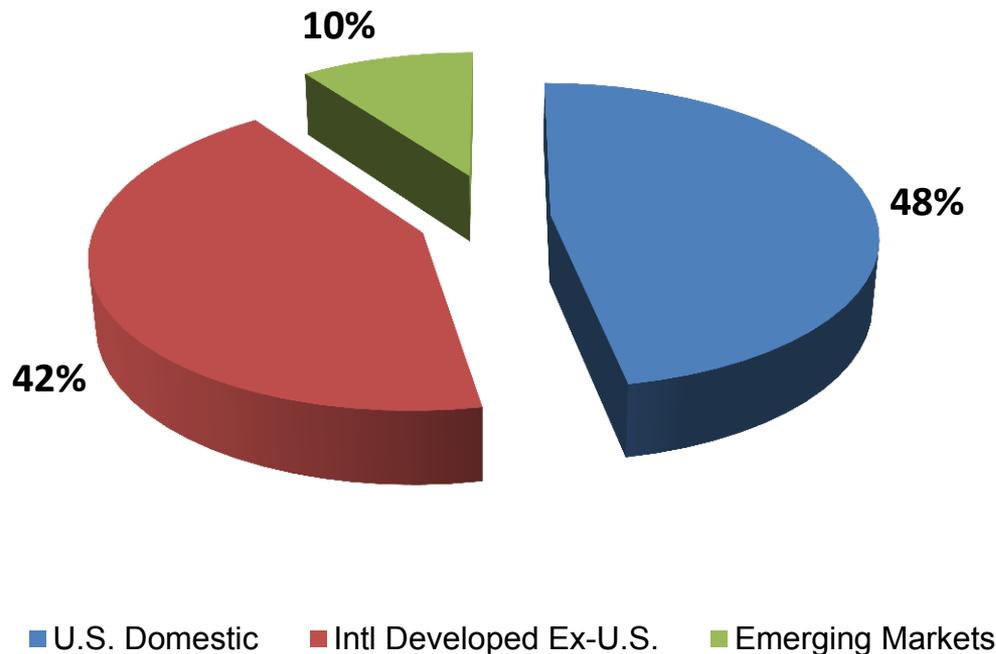
Underlying Assertions

- Global capitalization weighted benchmark is the appropriate opportunity set
- Focus on the total asset class portfolio is the best way to meet fiduciary responsibility
- Active strategy deployment should focus on:
 - Each strategy's role in the overall portfolio
 - Leverage access to actionable intellectual capital
 - Seek adequate performance versus appropriate benchmarks
- Amount of active risk taken should reflect the level of confidence in the capital allocation process to contribute to overall asset class results

Market Opportunity Set

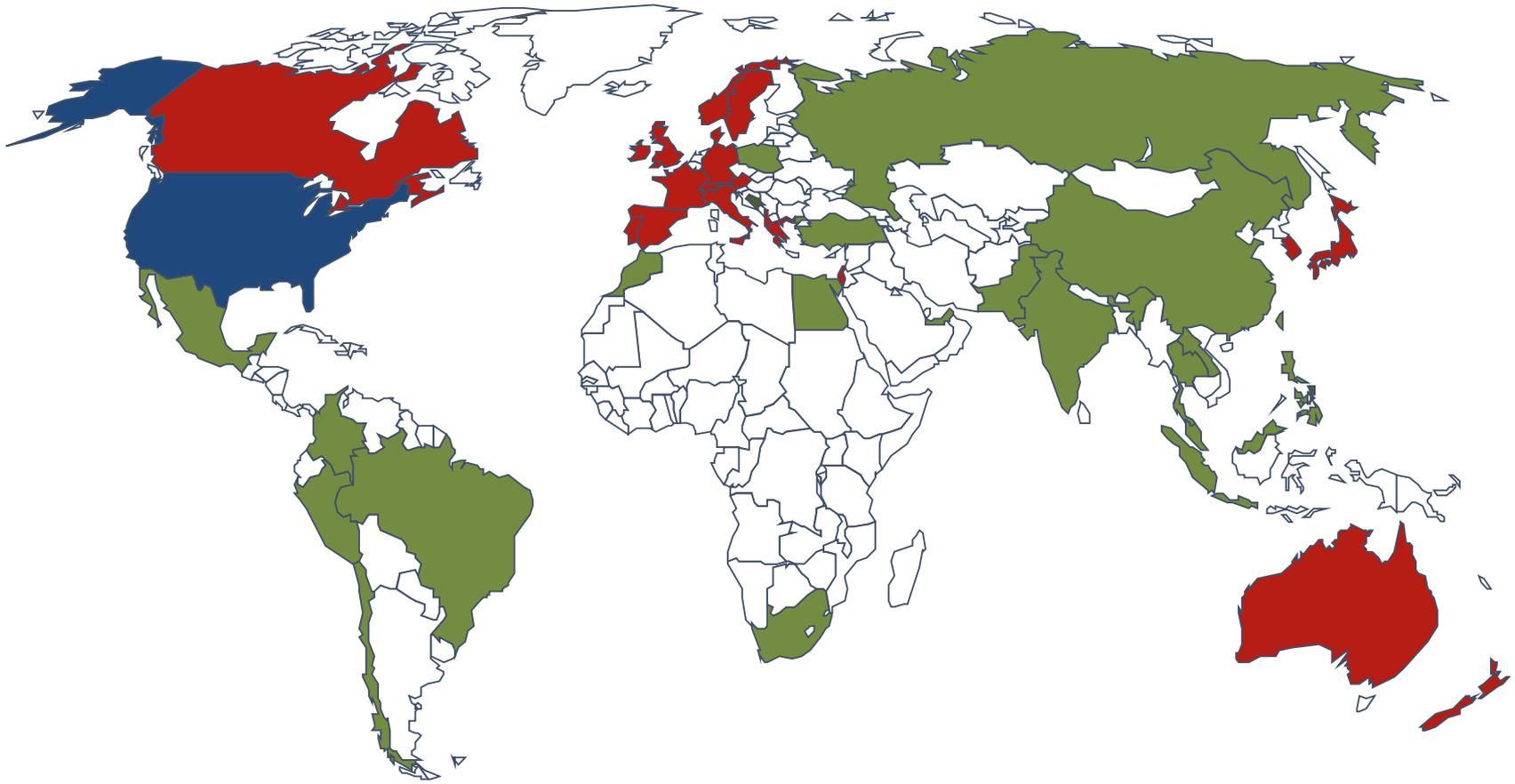
Custom FTSE All-World, All Capitalization Benchmark June 30, 2012

Market Segments



- International > 50%
- Full market capitalization coverage
- CalPERS customization
 - Excludes tobacco
 - Iran / Sudan restrictions
 - Emerging Markets principles

Geographic Representation of Global Equity Exposure

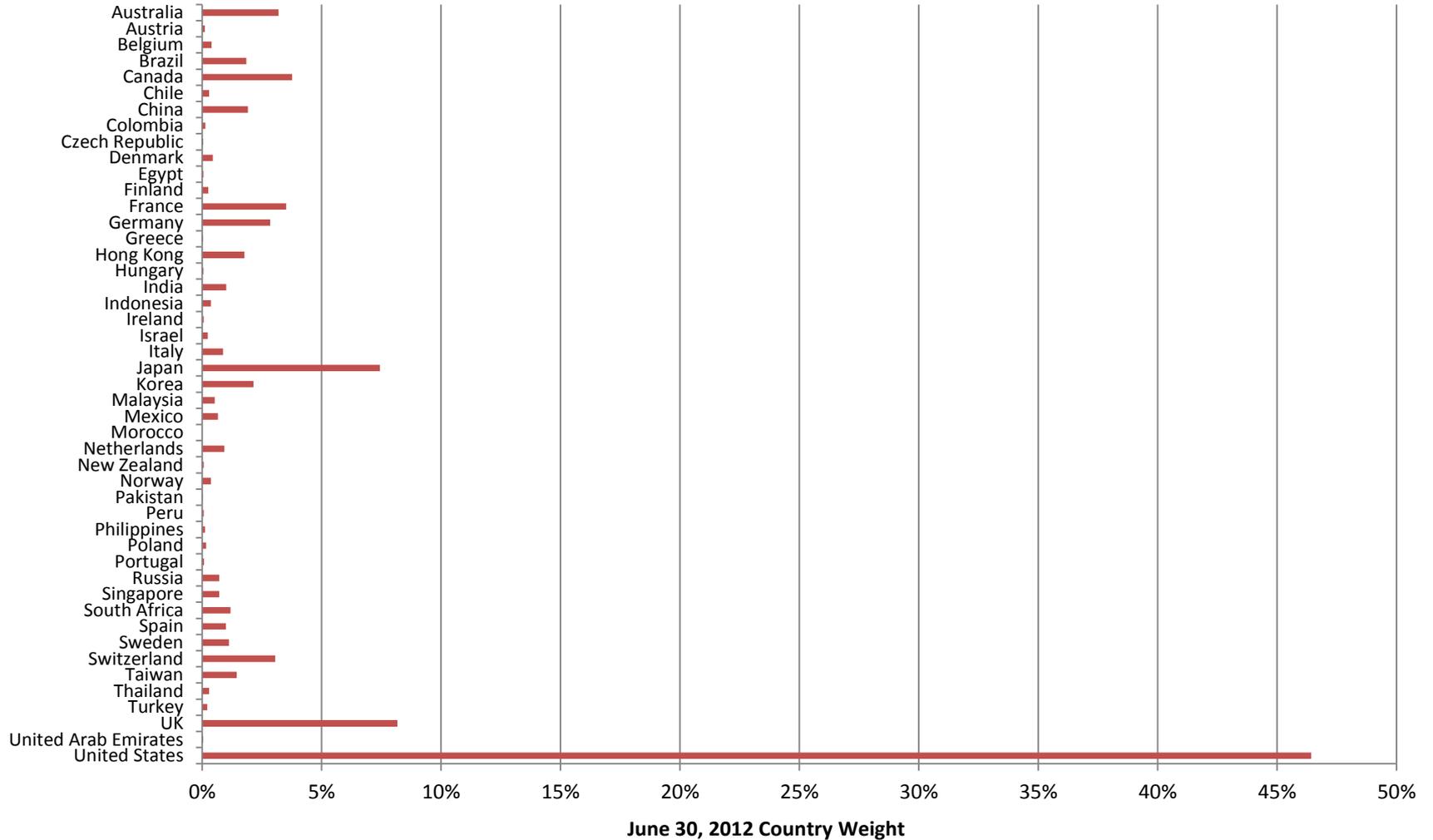


FTSE All-World Country Inclusion Criteria

- Required Criteria
 - Foreign direct equity ownership allowed
 - Availability of accurate and timely data
 - No significant exchange controls blocking timely repatriation of capital or dividends
 - Demonstrated interest by foreign investors
 - Adequate liquidity

- Classification Criteria (Developed, Advanced Emerging, Secondary Emerging)
 - Per capita gross national income
 - Total market capitalization
 - Breadth and depth of market
 - Any foreign investor restrictions
 - Free flow of foreign exchange
 - Reliable and transparent price discovery
 - Efficient market infrastructure (trading, reporting, settlement)
 - Oversight by an independent regulator

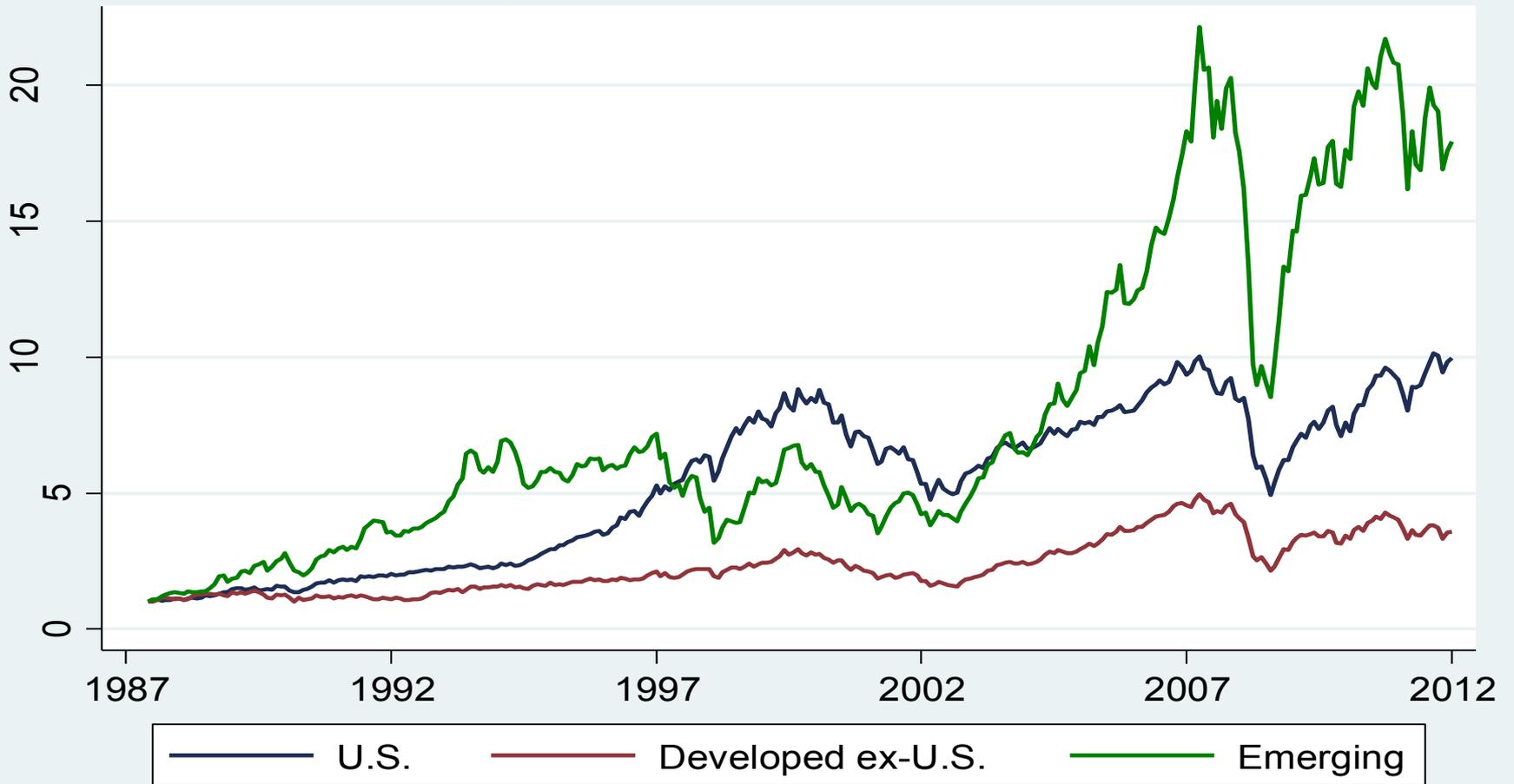
Custom FTSE All-World, All Capitalization



Regional Characteristics

Region	Yield	Price / Earnings	Price / Book Value	Price / Cash Earnings	Price / Sales	Return on Equity
Domestic U.S.	2.17%	14.1	2.2	7.7	1.3	16.0
International Developed	2.85%	13.5	1.7	7.0	1.0	12.9
Emerging Markets	3.40%	11.1	1.7	7.9	1.2	16.0

Equity Market Cumulative Returns



Dec.1987 - Jul.2012

Source: MSCI

Equity Market Annualized Three-year Returns



Dec.1990 - Jul.2012

Source: MSCI

Correlations vs. U.S. Equity Returns

Dec. 1989 - Jul. 2012



— Developed Market ex-U.S. — Emerging Markets

Source: MSCI rolling 24 month correlations of monthly returns

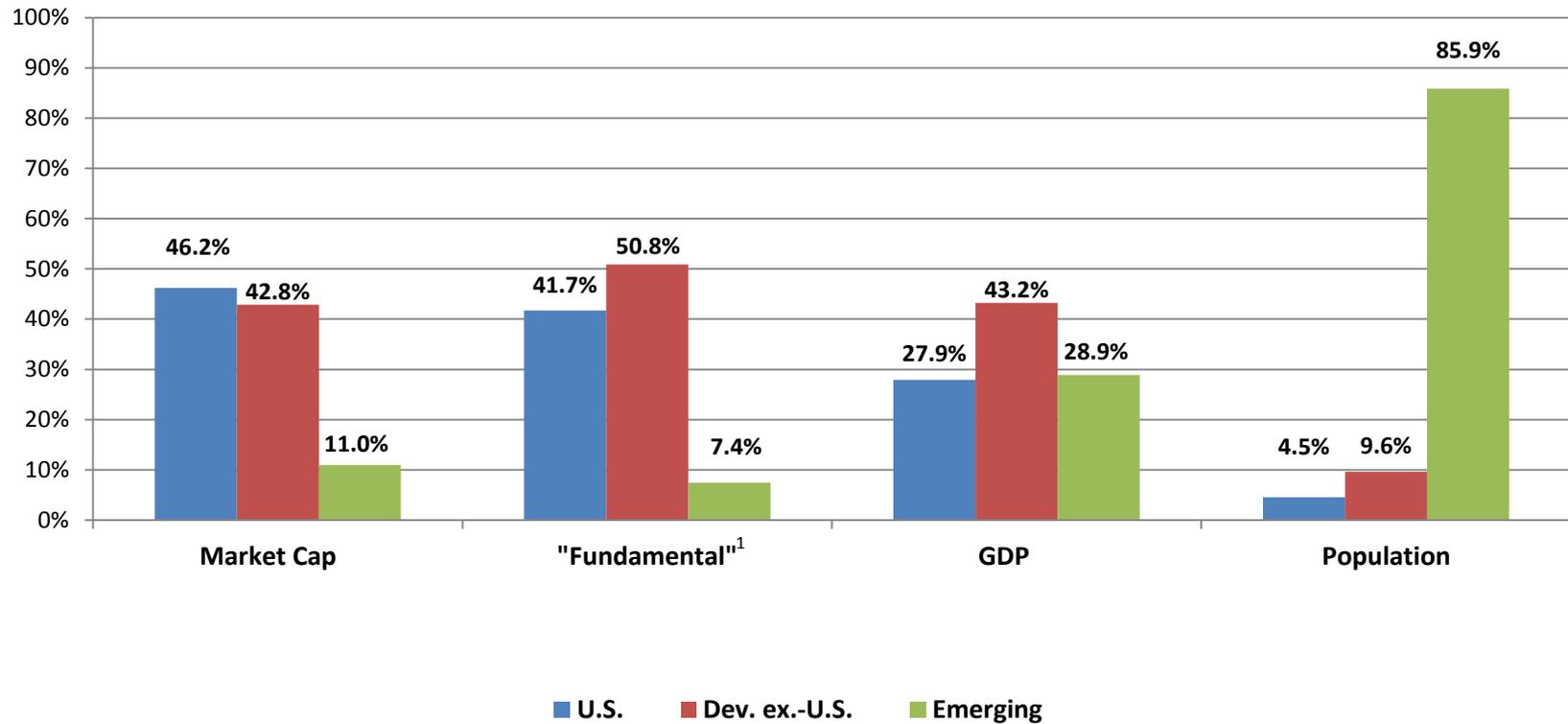
FTSE Regional Returns – Annual Fiscal Years

Region	2006	2007	2008	2009	2010	2011	2012	Total Period
Domestic U.S.	9.5%	20.3%	-12.0%	-26.8%	15.7%	32.0%	3.2%	33.8%
International Developed	27.5%	28.4%	-8.2%	-30.6%	7.8%	31.9%	-14.1%	27.4%
Emerging Markets	33.0%	46.9%	2.5%	-27.4%	25.1%	25.9%	-16.0	92.4%

- Wide dispersion both cross sectional and through time
- Standard deviation: Domestic 20.0%; Developed 24.4%; Emerging 27.4%
- Very difficult to forecast absolute and relative returns

Representation Metrics

Public Equity Regional Weights



¹Equal weight: sales, cash flows, dividends and book value.

Equity Investment Alternatives

- Market reality
 - Market capitalization represents aggregate investor exposure and returns
 - Excess returns, mathematically, are a zero sum game

- Active management
 - Exposure different than market in general (represented by cap-weighted index)
 - Requirements
 - Market inefficiencies exist
 - Ability to identify inefficiencies and determine an appropriate strategy
 - Method to consistently exploit inefficiencies through a risk-controlled process
 - Ability to timely identify opportunities, then deploy capital to value added strategies
 - Expected excess return of active management is greater than increased cost

Equity Investment Alternatives

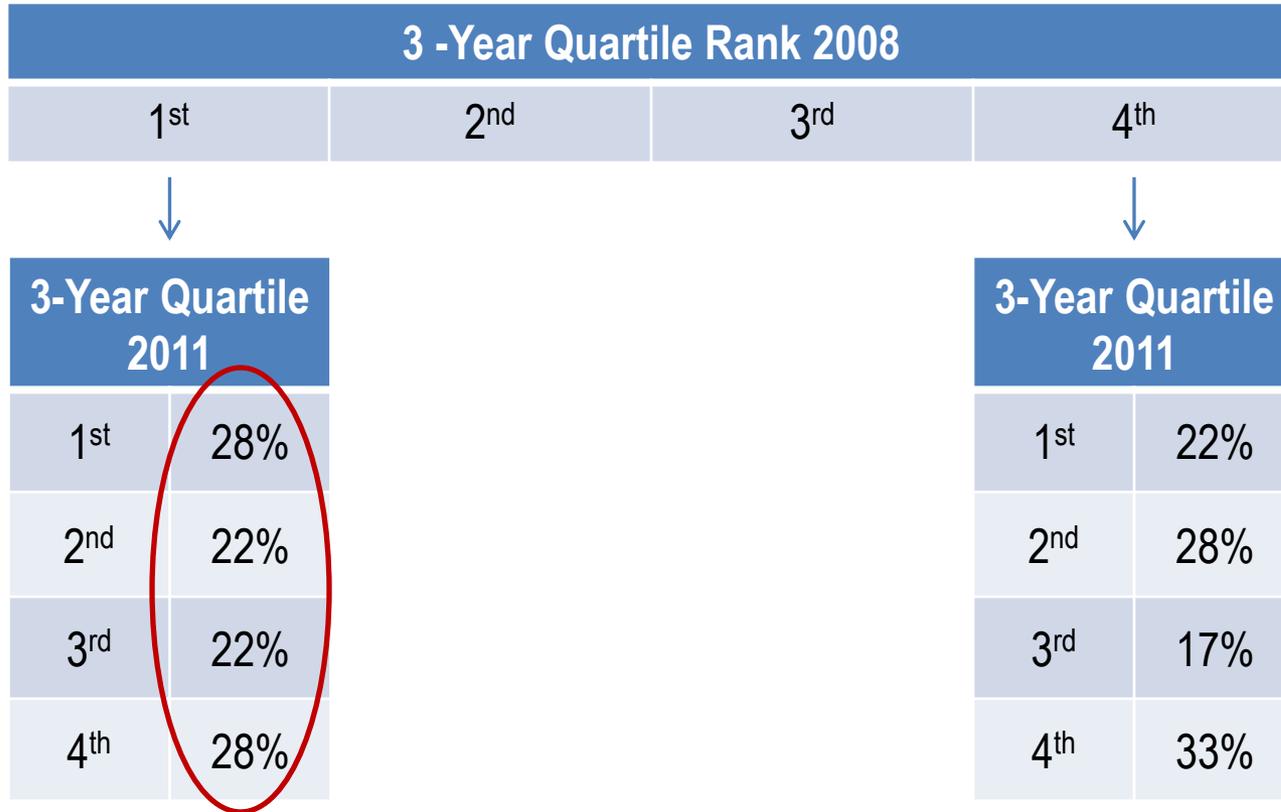
- Active management (continued)
 - Excess return and alpha levers (tactical and strategic)
 - Security selection
 - Factor exposure
 - Leverage
 - Out of benchmark exposure
 - Market timing
 - Substitution
 - Not all excess returns constitute “alpha”
 - Examples: leverage, out of benchmark, factor exposure
 - Only want to pay for true alpha and proprietary insights

Active Management Consistency – Domestic Large Core²



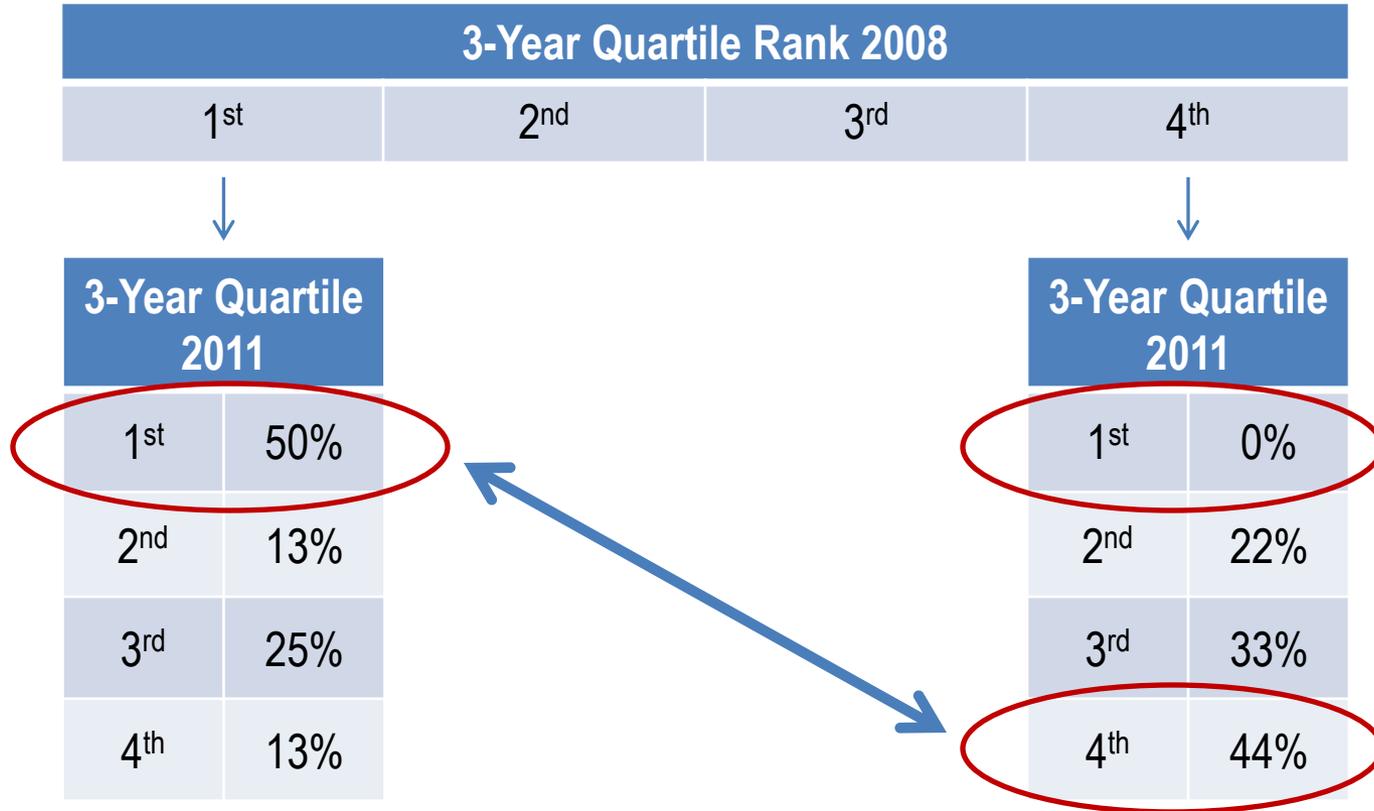
2011: Index Rank 37%; Average Excess Return -0.57%; Average Information Ratio -0.18

Active Management Consistency – Non-U.S. Equity²



2011: Index Rank 71%; Average Excess Return 1.79%; Average Information Ratio 0.39

Active Management Consistency – Emerging Markets²



2011: Index Rank 588; Average Excess Return 1.29%; Average Information Ratio 0.15

Equity Investment Alternatives

- Replication strategies
 - Can be active or index
 - Active replication – systematic or structured exposure different than overall market
 - Examples: fundamental, minimum volatility
 - Index – mirror the market or a market proxy

- Conditions impacting selection of implementation strategy
 - Size of exposure
 - Interaction effect among strategies
 - Other asset class roles (overall risk exposures)

- Combining index and active – current structure
 - Reflects constraints and uncertainty
 - Size of overall allocation: 48% of Plan (\$112.7B)
 - Historical results in manager selection
 - Private equity as active management in growth exposure category

Global Equity Capital Deployment Characteristics

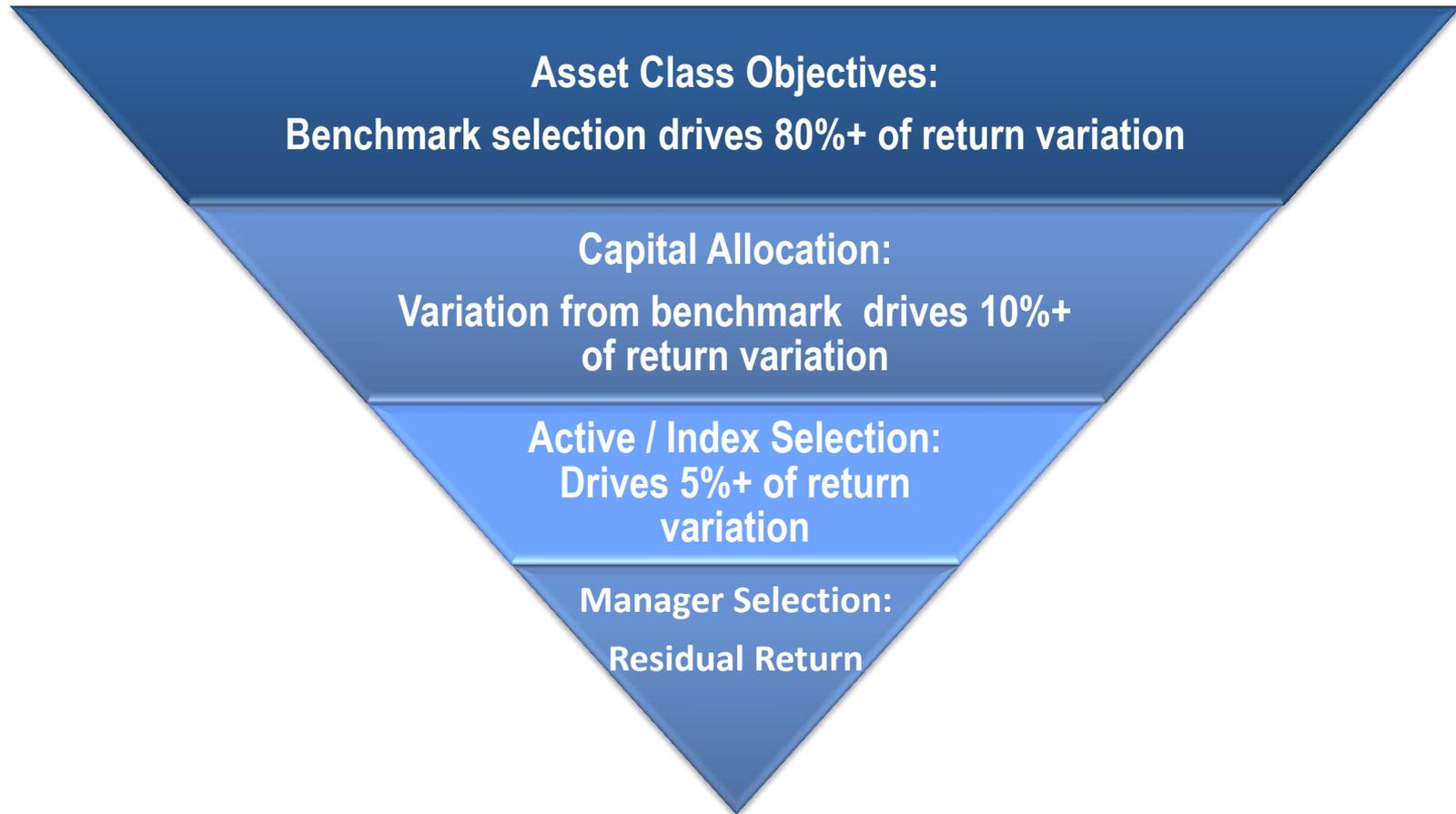
	Domestic U.S.		Developed Markets		Emerging Markets		Total	
Approach	\$	%	\$	%	\$	%	\$	%
Index (Internal)	\$ 39.3	72%	\$ 35.3	75%	\$ 4.9	44%	\$ 79.5	72%
Active Replication (Internal)	\$ 4.0	7%	\$ 3.5	7%	\$ 1.4	12%	\$ 8.9	7%
Active (Internal)	\$ 3.5	7%	\$ 0.5	1%	\$ 0.8	7%	\$ 4.8	7%
Active (External)	\$ 7.6	14%	\$ 7.8	17%	\$ 4.1	37%	\$ 19.5	14%
Total	\$ 54.4	100%	\$ 47.1	100%	\$ 11.1	100%	\$112.7	100%
Asset Class Percent	48%		42%		10%		100%	

Asset Class Implementation

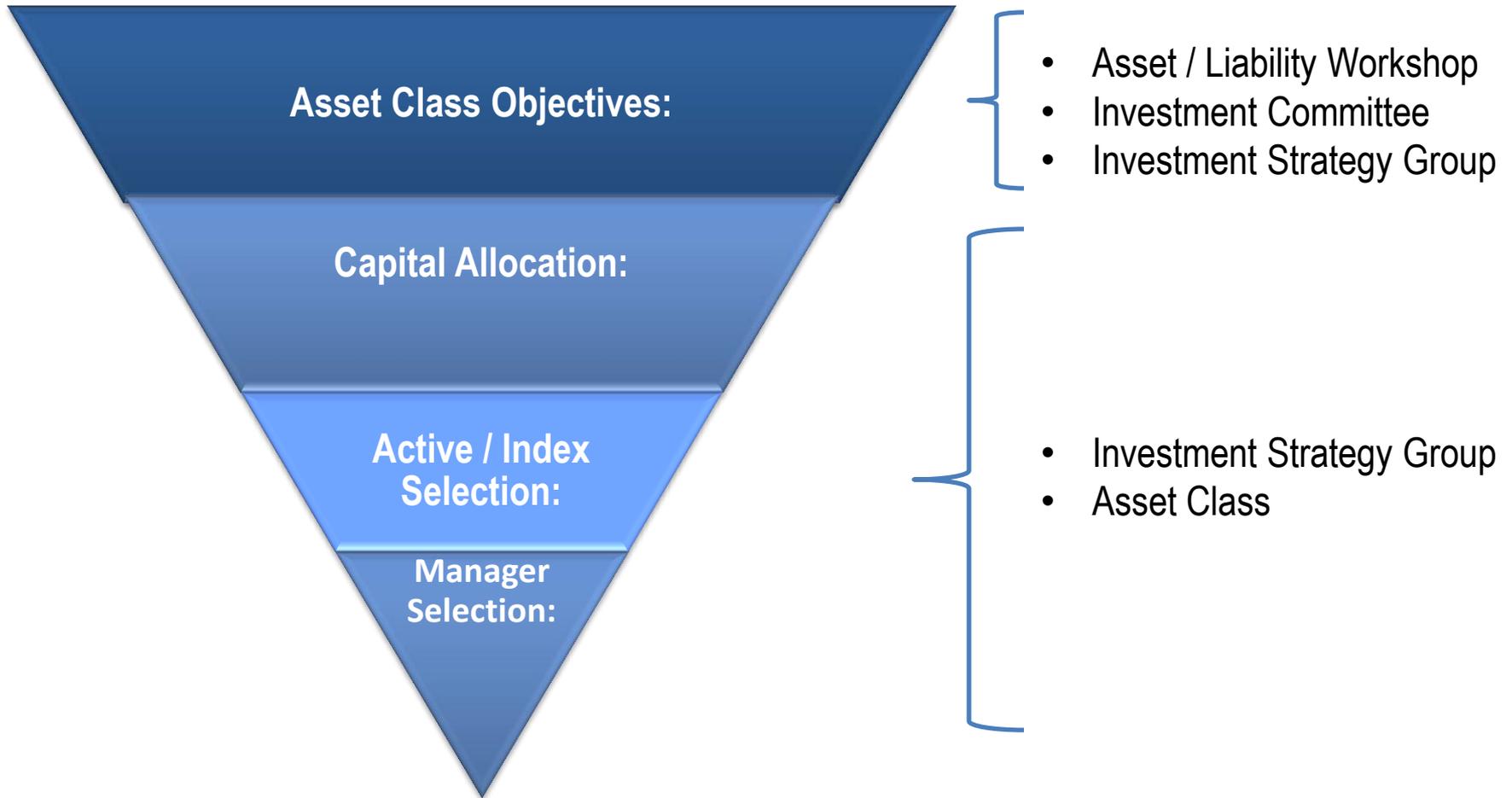
Global Equity – Link to Investment Beliefs

- Strategic asset allocation is the dominant determinant of return and risk
 - Delivery of equity beta is the primary mission of Global Equity
- A return premium is required to take on risk
 - Capture of equity risk premium
- Long-term investment horizon is an advantage
 - Ride out short-term volatility
 - Both in the beta and alpha
 - Liquidity provision (securities lending, synthetic equity, etc.)
- Costs matter because they reduce returns
 - Internal management cost advantage
 - Fee structures intended to pay for alpha but not for beta (aspirational)
 - Low cost, both absolute and relative to peers

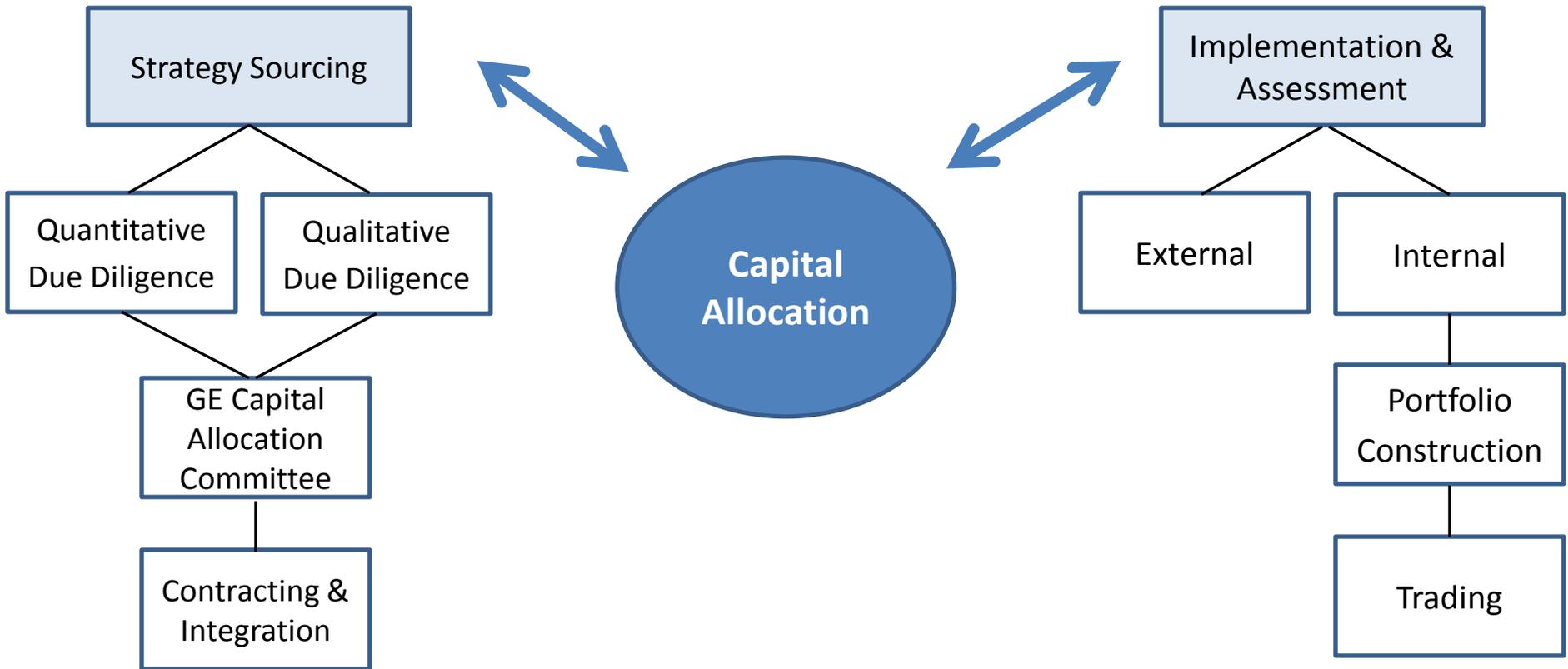
Total Asset Class Focus³



Total Asset Class Focus



Global Equity Business Activities

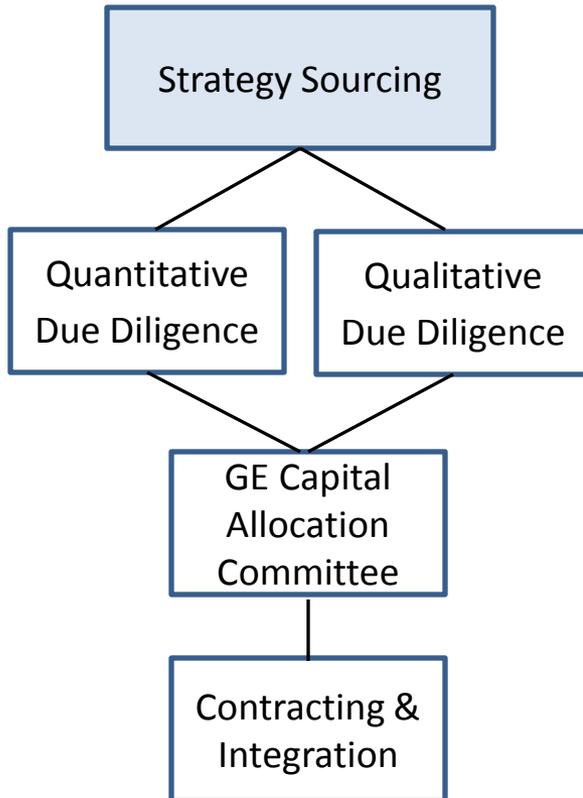


Global Equity Business Activities



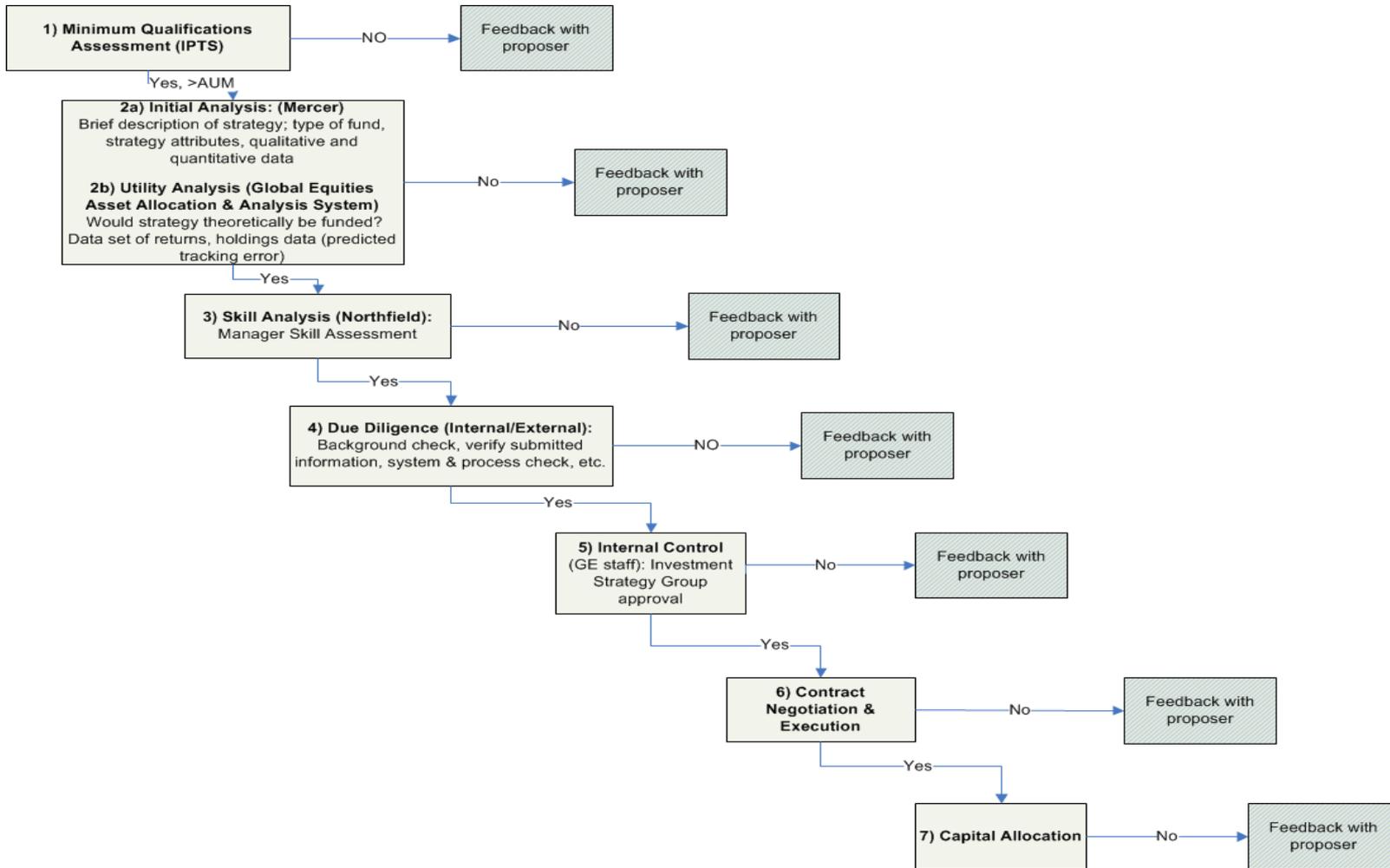
- Global Equity Allocation System Demonstration

Global Equity Business Activities

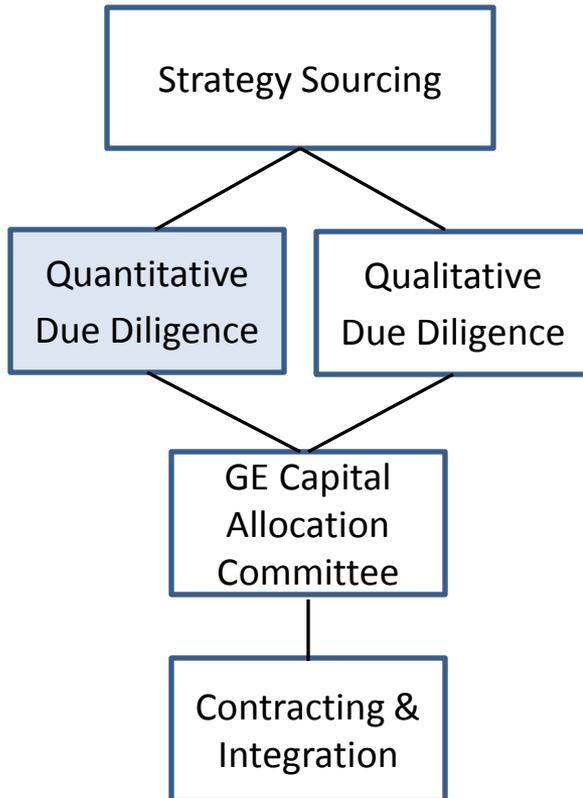


- Based on research and opportunities awareness
 - Investment Proposal Tracking System (IPTS)
 - Manager Development Program (MDP) advisors
 - Building a bench

Strategy Sourcing Process

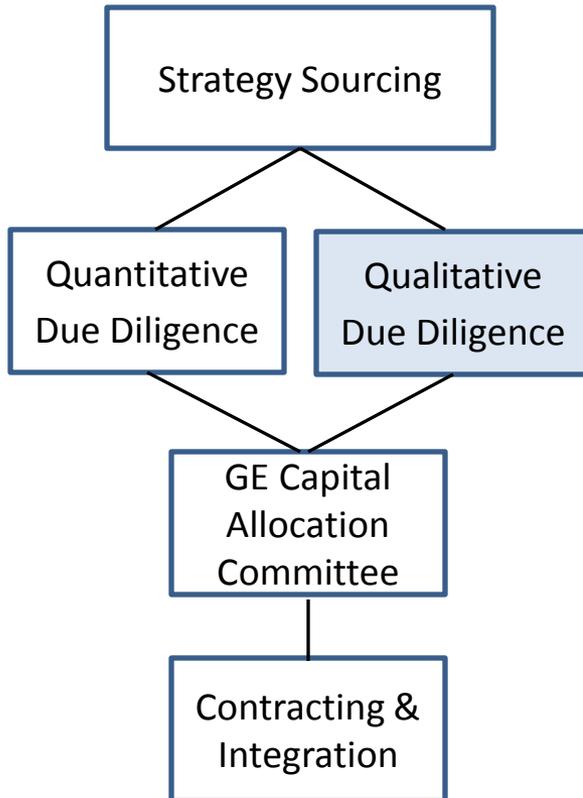


Global Equity Business Activities



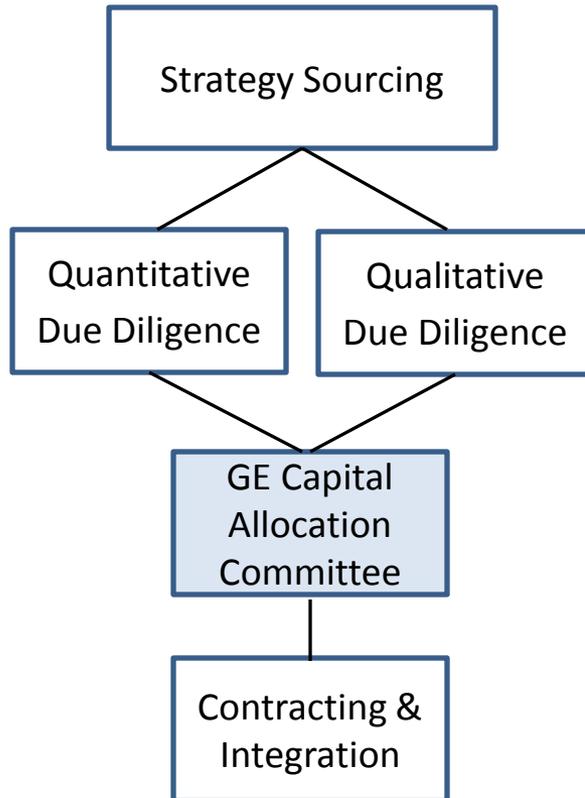
- Understand and decompose sources of exposure, return and risk
- Assessing fit within overall portfolio
- Determining appropriate benchmark

Global Equity Business Activities



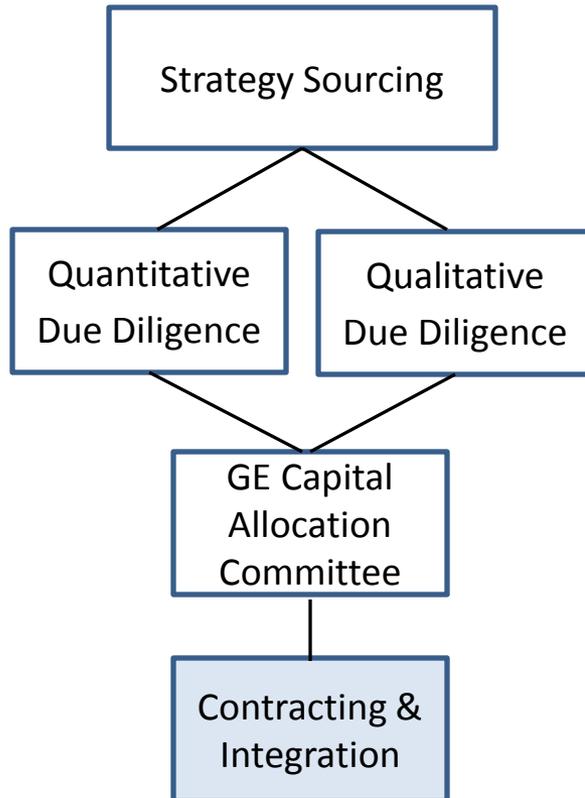
- Assessment of process, team and infrastructure
- Assessing appropriate measures of success
- Identifying role in the overall portfolio

Global Equity Business Activities



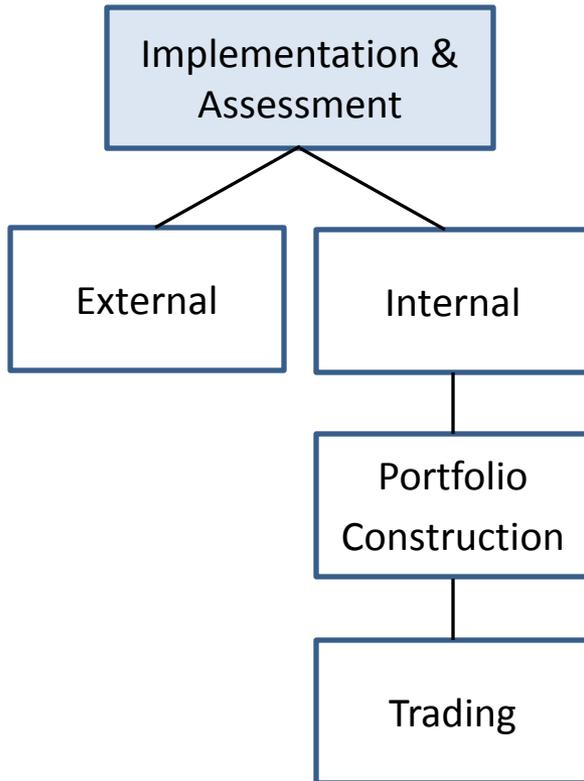
- Objective review and affirmation
- Constructive debate
- Decision-making

Global Equity Business Activities



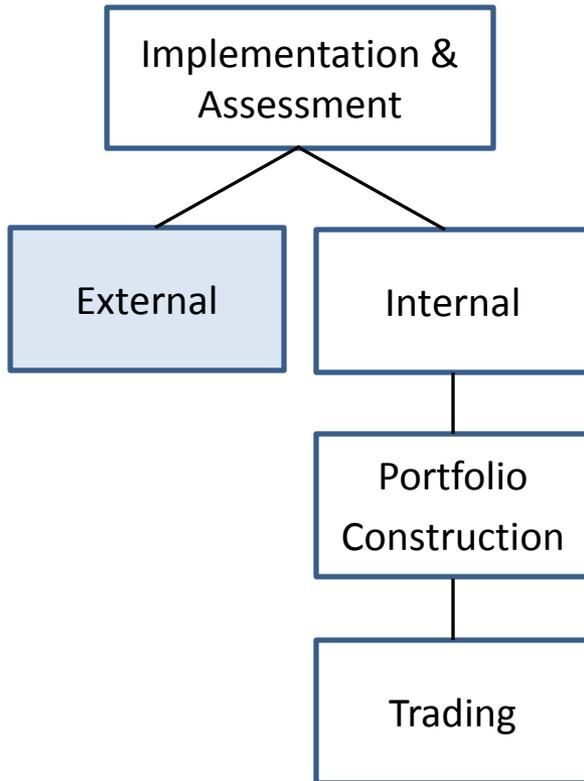
- Alignment of interest
 - Benchmarks
 - Fees
 - Restrictions
 - Other value added (intellectual capital inputs)

Global Equity Business Activities



- Analysis and attribution reporting by strategy (including quantitative review)
- Qualitative monitoring (philosophy, process, people, performance)
- Providing inputs for capital allocation decisions
- Clearly defining and monitoring each strategy's role in the portfolio

Global Equity Business Activities



- Confirm strategy role in overall portfolio
- Establish review protocol
- Access intangibles such as intellectual inputs into policy decisions

Strategy Review Information

As of Date: 6/30/2012



Manager 'A'

Investment Mandate: Emerging Markets Equity

Benchmark: CalPERS FTSE All Emerging

Style: Deep Value - Fundamental

Fee Structure: *Base:* 10bps; *Normal/Performance:* 60bps; *Maximum:* 120bps; *Required Excess Return:* 2.00%

Last Onsite Visit: Spring 2011

CalPERS Market Value: \$0.7 B

AUM: Firm: \$100+B; \$6+ B in EM

Inception Date: 2002

Staff Conviction: 3 (*Scale 0-5, 0 = low; 5 = high*)

Allocation Activity (6 mo.): None

Value Attribute

Deep, experienced research team with an extensive fundamental analysis approach to security selection. All portfolio management team members have research backgrounds, which add an additional layer of analysis and depth. The strategy's cyclical tilt provides diversification among the defensive-oriented emerging market strategies in the global equity portfolio. Manager has a deep value focus, looking for highly undervalued stocks with low price/book and price/earnings.

Staff Analysis

Recent underperformance due to the portfolio's underweight to defensive sectors, which outperformed for most of 2011 and YTD 2012. The most challenging environment for the manager is an environment of high risk aversion. Over the last year there has been a large sell-off of risk as macro concerns dominate investor sentiment. Risk analysis confirms manager's value focus – above average value score with no significant growth tilt. The portfolio will tend to exhibit high tracking error due to lack of explicit constraints. Portfolio positioning is a result of bottom up security selection, but country allocations are monitored to control risk. Fears of a Euro-area collapse and faltering global growth continue to overhang Emerging Markets. The move to safety has created a value opportunity in cyclical, high-beta stocks. They also plan to take advantage of market turbulence to increase exposures to their highest-conviction research ideas.

Primary Contact:

Location: New York, NY

Investment Professionals: *Portfolio Manager: Head of Research Emerging Markets:*

Investment Process

The manager's Investment Policy Group determines what combination of securities and countries will deliver the highest expected risk-adjusted return. The stock selection process is based on the use of proprietary quantitative tools to rank stocks, and detailed analyst research to select stocks for the portfolio.

Strategy Review Information

As of Date: 6/30/2012

Portfolio Characteristics

	Realized (Portfolio / Bmark)	Expected Range
Number of Holdings	83	70-90
Weighted Average Market Cap	33.8 / 28.3	< benchmark
Tracking Error	4.48	7-9%
Dividend Yield	4.10 / 1.66	> benchmark
Price/Earnings	6.3 / 11.4	< benchmark
Annual Turnover	78.38%	30-40%

Performance

	FYTD	CYTD	2011	2010	2009	2008	Since Inc.
Portfolio	(22.10)	3.47	(26.02)	16.20	104.40	(57.93)	14.82
Benchmark	(15.99)	3.36	(19.39)	19.74	82.60	(52.95)	14.49
Excess Return	(6.11)	0.11	(6.63)	(3.54)	21.80	(4.98)	0.33

Returns are net of fees

Excess Return Chart – Cumulative Since Inception and Rolling 3-Year



Strategy Review Information

As of Date: 6/30/2012

CalPERS Manager Assessment Form Q2 2012

1. Special Questions of the Quarter

- a. Do you believe that your current benchmark is the best representation of your investment process? If not, what would be?
- b. What is your firm's analysis of the Euro Zone crisis? Identify risks and opportunities related to this macro event.
- c. Please relate the outcome of the Greece election and the Spanish bond auctions to portfolio positioning and strategy. **Alternate question for US strategies:** How is your portfolio positioning anticipating the upcoming presidential election, fiscal cliff, and looming debt ceiling debate?

2. Organization

- a. Provide a current investment and business organizational chart highlighting any changes since the last quarter.
- b. Explain reasons for departures, and detail experience and applicable skills of new hires.
- c. Discuss any changes to the organization that impact (e.g. legal matters, legislative/regulatory compliance, etc.) the fund or ownership structure.

3. Update on Fund

- a. Current assets under management – firm total in this strategy? Also, what are the number of clients and CalPERS' rank?
- b. Describe increases or decreases in the size of the Fund. Are changes attributable to market moves, redemptions, or subscriptions?

4. Performance Specifics to Q2 2012 and One Year Out

- a. Detail the long-term / near-term attributes of the strategy that contributed to / detracted from performance.
- b. Identify possible unrewarded volatility and risk in specific factors, sectors, or countries?
- c. Near-term market outlook (3 – 6 months) – Do you expect that market conditions will reward / penalize this strategy? Why/Why not?
- d. Provide a detailed 12-month market and economic forecast, including expected percent over/under performance, for the following regions:
 - i. US
 - ii. International – Developed
 - iii. Emerging Market
- e. What portfolio rebalancing (sector or country) is being implemented in anticipation of the future conditions presented above?

5. Internal Control Specific to Q2 2012 and Near-Term

- a. How do you identify and mitigate risk and volatility in the portfolio?
- b. Describe your most recent internal control review?
- c. Are derivatives used in the portfolio? If so, what is the purpose?

6. Activist Funds - To the extent relevant (and not confidential), address the following topics for each investment in a Portfolio Company acquired, held or sold during the reporting period:

- a. The original investment thesis and the type of changes sought by the Fund to unlock value, by security.
- b. Changes in investment thesis and/or engagement strategy?
- c. The original and current time frame for achieving the investment goals.
- d. How is the Fund engaged with each portfolio company?

Strategy Review Information

As of Date: 6/30/2012

- e. Progress to date (positive/negative), including responses from management, the board and the market.
- f. Whether the Fund is collaborating with other investors and its impact.

7. Advisory Board

- a. Discuss any GP/LP advisory board items.

8. Exhibits:

Portfolio Statistics*

Strategy Name	Quarter	1-yr	3-yr	5-yr	ITD	Tracking Error
Fund						Std. dev. of the differences between the portfolio returns and the benchmark portfolio returns
Benchmark						
Net Excess return						
Portfolio Statistics	Quarter	1-yr	3-yr	5-yr	ITD	
Standard Deviation						
Information Ratio						
Skew	n/a					
Kurtosis	n/a					

*gross performance

Provide a bar graph illustrating rolling three-year excess returns for the past 5 years, by quarter.

Portfolio Attribution

Please provide performance attribution for the reporting quarter by benchmark industry sector, and by benchmark country (if non-US portfolio).

Strategy Review Information

As of Date: 6/30/2012

CalPERS Manager Assessment Form Q2 2012

Examples of select questions and the reply from Manager 'A':

3. Update on Fund

a. Current assets under management – firm total in this strategy? Also, what are the number of clients and CalPERS' rank?

As of June 30, 2012, there were \$6,324 million assets invested in the Emerging Markets Value strategy across 23 accounts. CalPERS account ranked 2nd.

b. Describe increases or decreases in the size of the Fund. Are changes attributable to market moves, redemptions, or subscriptions?

During the second quarter of 2012, we gained \$68 million across 1 account in the Emerging Markets Value strategy, and lost \$49 million from existing commingled or mutual funds. Client losses are a function of a number of factors both within and outside our control. These reasons may include: asset reallocation, changes in client risk profile, performance, asset consolidation, and mergers and acquisitions.

4. Performance Specifics to Q2 2012 and One Year Out

a. Detail the long-term / near-term attributes of the strategy that contributed to / detracted from performance.

After a brief rebound earlier this year, emerging-market stocks lost ground in the second quarter amid another wave of risk aversion. The cheapest stocks among them fell more steeply than the index as a whole. With its value focus and modest cyclical tilt, our portfolio underperformed for the quarter and the first six months of 2012. Much of this underperformance arose from growing worries about the faltering Brazilian economy (Banco do Brasil, Petrobras, Rossi Residencial and Brookfield Homes were major detractors). Global growth fears hurt energy holdings Gazprom and Sinopec, and technology holdings Advanced Semiconductor Engineering and Wistron. These deficits were partly offset by owning outperforming industrial-commodity producer KGHM and not owning sector laggards, as well as by a rebound in our Turkish bank holdings. With many of the biggest detractors in the portfolio trading at or near 10-year lows we continue to expect these names to deliver strong upside on any easing in market tensions.

Strategy Review Information

As of Date: 6/30/2012

Quarterly Staff Write-up:

Manager 'A'

As of June 30, 2012

AUM: \$718,747,947

Cash at 2.46%. 12 mo turnover was 78% within the permitted range of 70 - 140%. Names in the portfolio were 83 with a guideline range of 70-90.

Performance – Under-performed for the quarter by -268bps.

The portfolio lagged the benchmark for Q2, and year-to-date. They are slightly above the benchmark Since Inception. Slowing growth in Brazil and China hurt financial, energy and home builders. Stock selection in industrial commodities and a rebound in Turkish banks partly offset the deficit.

Sector – Resources were down 9%, Financials were down 8.3%, Cyclical were down 5.8% and manager was overweight in these sectors, which hurt performance. Defensive sectors were up 1.6% and slightly helped performance. The performance was hurt by being lower cap than the benchmark.

Country – Being overweight Russia, Turkey and Brazil hurt performance. An underweight to Mexico hurt performance.

Stock – Sunac China Holdings (construction and housing) added 32bps, Vanguard International (tech) added 28 bps, and Itau Unibanco added 19bps. Detractors were Banco do Brasil – 78bps, Gazprom -63bps and Rossi Residencial (construction and housing) – 58bps.

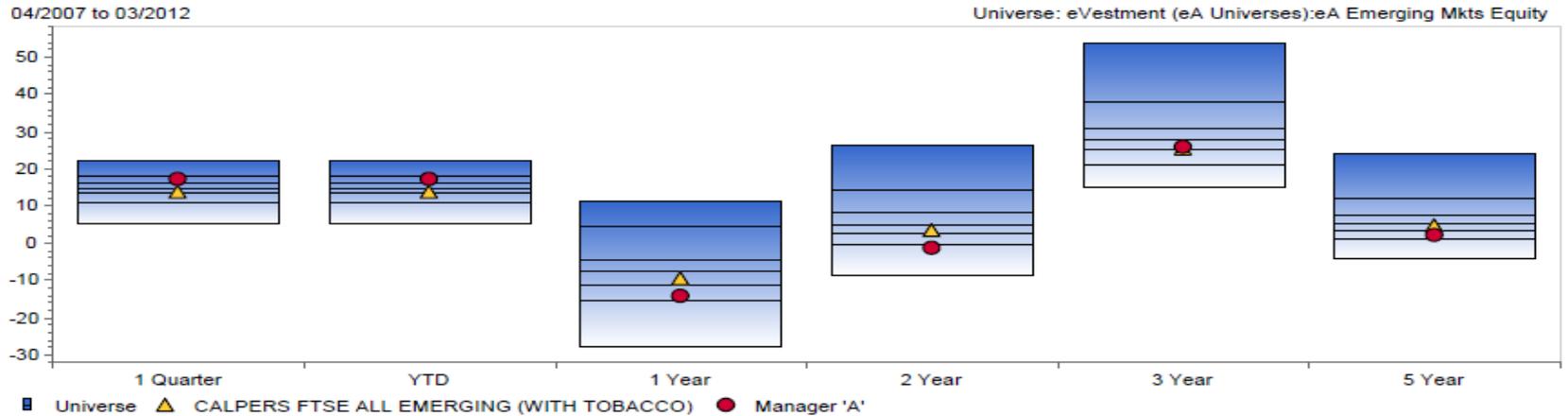
Portfolio Commentary – The market hit energy hard in Q2. The stock price of Petrobras is lower than in 2006, prior to the announcement of the reserves found pre-salt. There is up-side potential. Another Brazil stock, Banco do Brazil is government owned. It has been less liked by the market than private banks. However, the 5 year record out-performed private, peer banks. They were hurt by the government demand to lower lending rates, but they really never had to hurt their loan book. All of the names held have good financial and balance sheet numbers. They expect the fundamental analysis to pay off.

Fears of a Euro-area collapse and faltering global growth continue to overhang Emerging Markets. The biggest Emerging Market economies are slowing. But they could have stimulus which leads to uncertainty. The move to safety has created a value opportunity in cyclical, high-beta stocks. The research team will continue monitor controversies for opportunity and risks. They also plan to take advantage of market turbulence to increase exposures to their highest-conviction research ideas.

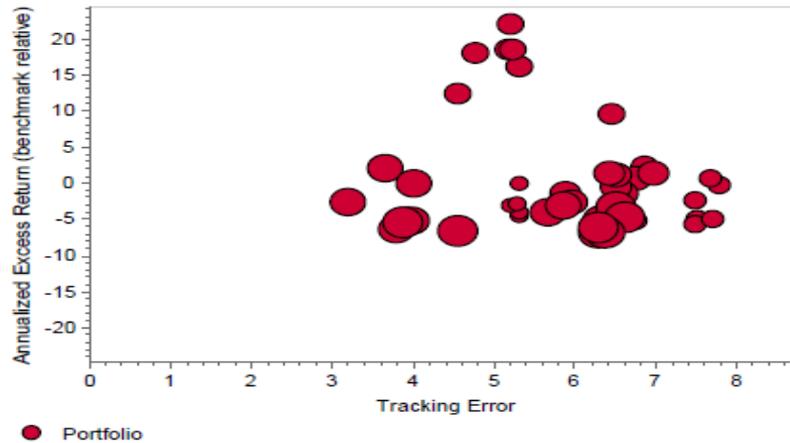
Manager 'A'	Month End 6/30/12	Quarter End 6/30/12
Return	3.73	-11.79
Benchmark	3.95	-9.11
Excess	-0.22	-2.68

Strategy Review and Information

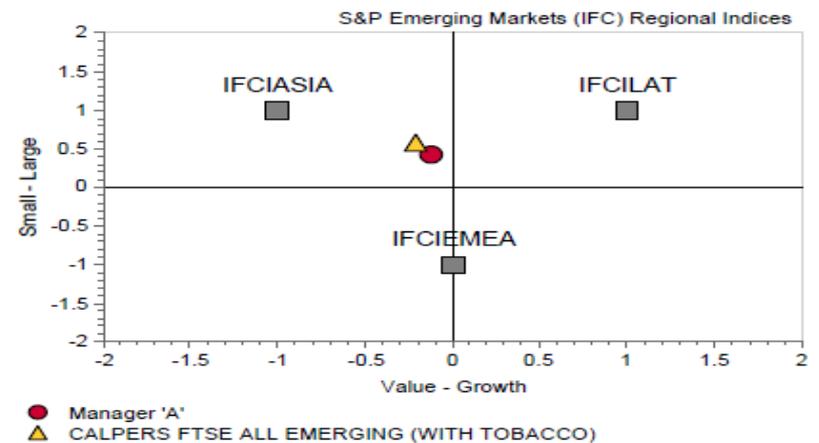
Peer Comparison Chart



Excess Return vs. Track Error Chart



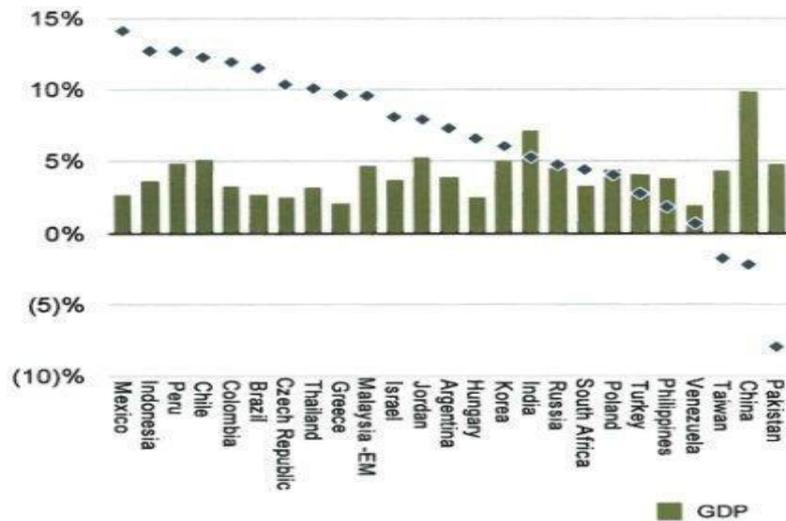
Style 4-Corner Chart



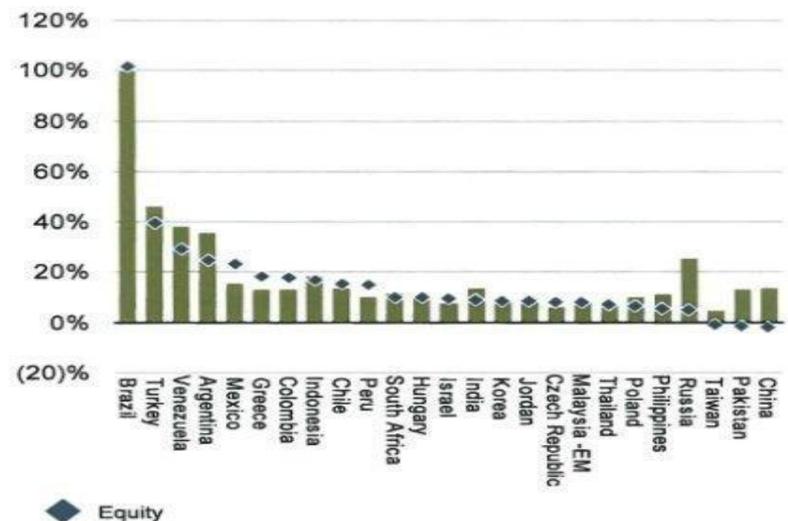
Proprietary Intellectual Input

Real GDP Forecasts Are Not a Sufficient Basis for Investment Decisions

Stock Market Returns vs. Real Economic Growth: USD



Stock Market Returns vs. Nominal Economic Growth: Local Currencies

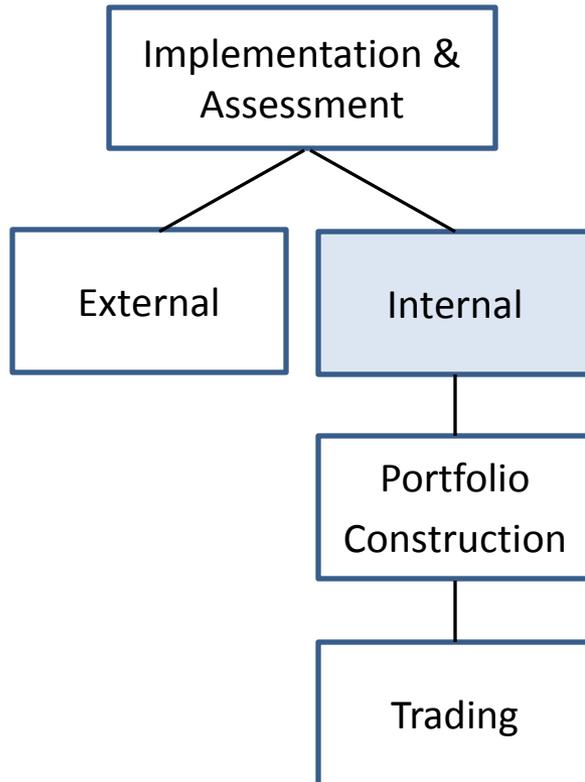


Historical analysis and current forecasts do not guarantee future results
 Annualized returns are calculated 1990–2011 (or subset thereof if data is incomplete)
 Source: Factset, MSCI, IMF
 As of 31 December 2011

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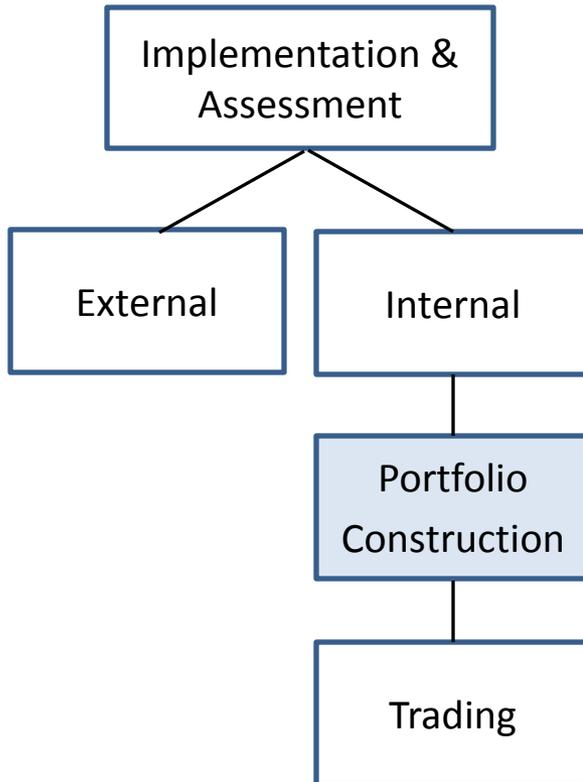
Emerging Markets Allocation

Global Equity Business Activities



- Managing exposure changes
- Executing transitions (Plan-level and within Global Equity portfolio)
- Managing underlying portfolio exposures

Global Equity Business Activities



- Assess portfolio weights vs. desired weights
- Assess potential alpha sources
- Generate security-level trades

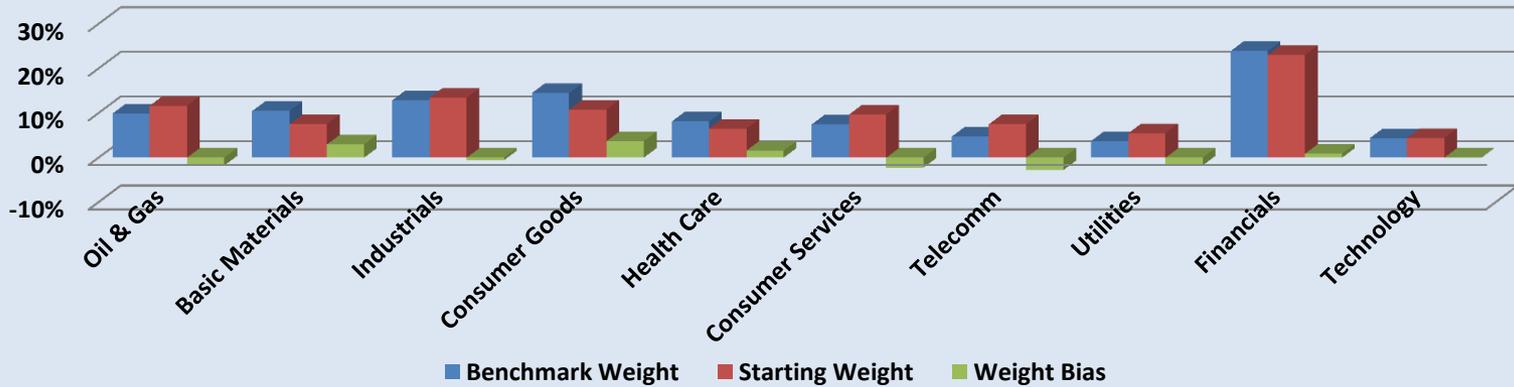
Portfolio Construction

Intl Index Portfolio August 22, 2012		
Pre Trade Analysis	\$ Current	bps
NAV (adjusted through today)	\$ 3,938,532,024	
MV Securities (adjusted through today)	\$ 3,911,209,639	
Total Cash	\$ 27,322,385	69.4
Equitized Cash	\$ 25,901,560	65.8
Unequitized Cash	\$ 1,420,825	3.61
Spendable Cash Pool	\$ 13,508,105	34.30
	<u>nav</u>	<u>mvs</u>
Beginning NAV	\$3,938,532,024	\$ 3,913,999,216
<i>Adj NAV</i>	\$ 3,938,532,024	
Beginning MV of Securities	\$ 3,913,999,216	
<i>Adj MV of Securities</i>	\$ 3,911,209,639	
Beginning Spendable Cash	\$ 13,508,105	
<i>Adj Spendable Cash</i>	\$ 13,508,105	
Reported Value of Futures	\$ 25,901,560	
<i>Adj Value of Futures</i>	\$ 25,901,560	
	\$ -	
Equity Trade	\$ -	
Trade Analysis		
Post-Trade Unequitized Cash Exposure	\$ 1,420,825	3.6
Post Trade Analysis		
Adjusted NAV	\$ 3,938,532,024	
MV Securities (adjusted through today)	\$ 3,911,209,639	
Total Cash	\$ 27,322,385	69.4
Equitized Cash	\$ 25,901,560	65.8
Unequitized Cash	\$ 1,420,825	3.61
Spendable Cash Pool	\$ 13,508,105	34.30

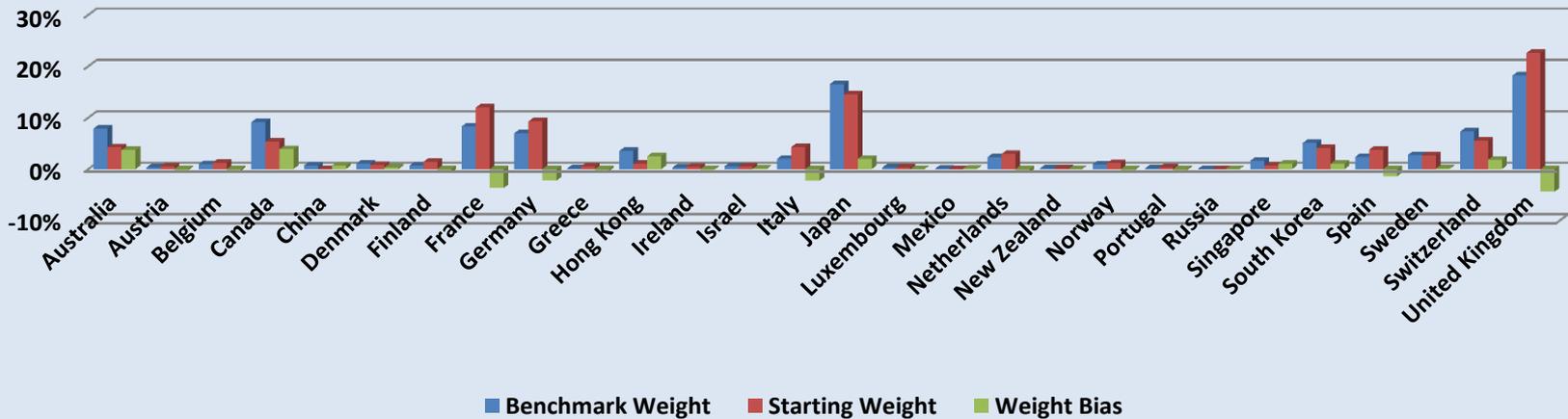
Characteristics		
8/21/2012		
Barra Global Long-Term Model (GEM2L)		
U.S. Dollar		
		MODEL_OMS
	Data	Available
Pre Trade		
Stock Specific Risk	0.42	100.00%
Factor Risk	7.93	100.00%
Total Risk	8.35	100.00%
Predicted Tracking Error	2.89	--
Absolute Risk	23.76	--
Predicted Beta	1.08	100.00%
R-squared	0.99	--
Post Trade		
Stock Specific Risk	0.42	100.00%
Factor Risk	7.93	100.00%
Total Risk	8.35	100.00%
Predicted Tracking Error	2.89	--
Absolute Risk	23.76	--
Predicted Beta	1.08	100.00%
R-squared	0.99	--
Holdings Data As Of		
MODEL_OMS - OMS 8/21/2012		
FTSE Custom Developed World x US & Tobacco 8/21/2012		
Risk Model As Of		
Barra Global Long-Term Model (GEM2L) 8/01/2012		

Portfolio Construction

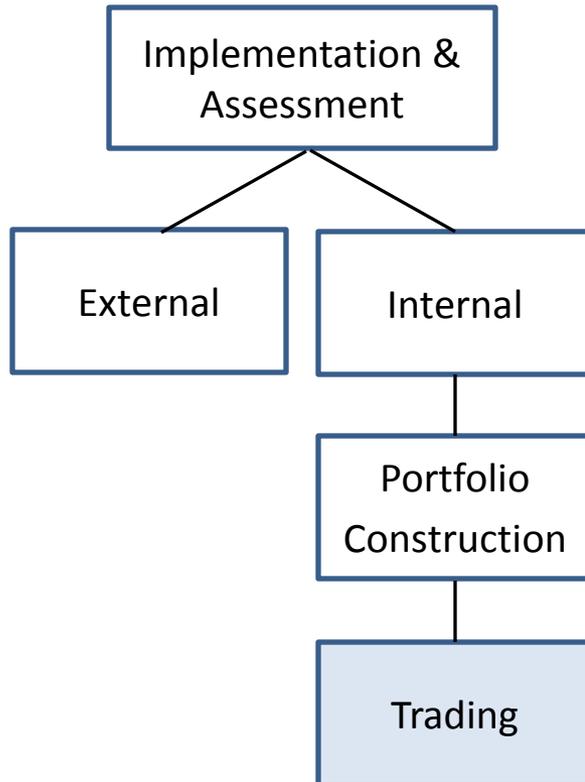
Industry Analysis



Country Analysis



Global Equity Business Activities



- Broker evaluation, selection and allocation
- Determine appropriate execution mechanism
- Execute trades

Trade Management

File Edit Inbex Outbox Blotter Analysis Tools Options Window Help

ANALYSIS Main Blotter Single Stock View Portfolio Trading View

Navigator (0) Inbex [08/22 08:59:42] 0 / 0 Requests Default

Blotter [08/22 08:59:45] 1866 / 1866 Tickets PERFORMANCE SLICE (CaLPERS)

Count	%Comp	Side	Ord Qty	Trd Qty	Avg Prc	Resid	Exp Qty	BM: Arrival	Rzld bp: Arrival	UnRzld bp: Arrival	Ttl bp: Arrival	BM: VWAP	Rzld
1	100%	BUY	22	22	117,500.00	0	0					118,319.559	
1	100%	BUY	1,240	1,240	1,240.175,000	0	0					17,164.4469	
1	100%	BUY	370	370	10,850.0000	0	0					10,795.9765	
1	100%	BUY	294	294	94,900.0000	0	0					94,512.021	
1	100%	BUY	1,419	1,419	8,050.0000	0	0					7,435.6947	
1,866	99%	BUY	13,066,835	12,817,488	269,347	269,347				-4	-46	-7	

Blotter [08/22 08:59:44] 1866 / 1866 Tickets CASH SUMMARY - ORDER (CaLPERS)

Count	Side	%Comp (Val)	Ord Qty	Trd Qty	Residual Shares	Exp Qty	% Val B	Avg Prc	Ord Val Base
1,866	BUY	99%	13,066,835	12,817,488	269,347	269,347	100.00	149,5424	26,240,876

Blotter [08/22 08:59:45] 1866 / 1866 Tickets

Id	Symbol	Side	Order Qty	Limit	% Complete	Traded Qty
1,120,818,005,780,460	K01130	BUY	22	0.00	100%	22
1,120,818,005,780,461	K05440	BUY	1,240	0.00	100%	1,240
1,120,818,005,780,463	K12510	BUY	370	0.00	100%	370
1,120,818,005,780,463	K11070	BUY	294	0.00	100%	294
1,120,818,005,780,464	K39530	BUY	1,419	0.00	100%	1,419
1,120,818,005,780,465	K04690	BUY	68	0.00	100%	68

Blotter [08/22 08:59:43] 1697 / 1866 Tickets Presentation

Broker	Boqey	Acct	Description	Symbol	Side	Trd Qty	Resid	Stat	% Adv20	B Size	Bid	Sprd	Ask	A Size	Last	VWAP
ML	MOC	SWJW	COAL OF AFRICA ORD	GVM.I	BUY	113,503	216,024	LIVE	288.91%	30,075	0.38	0.04	0.42	10,000	0.405	0.396
ML	MOC	SWJW	INNERGEX RENEWABLE E...	INE.C	BUY	34,200	4,100	LIVE	63.94%	100	10.93	0.02	10.95	500	10.95	10.906
ML	MOC	SWJW	SUNDANCE RESOURCES E...	SDLI	BUY	0	49,223	LIVE	2.27%							
ML	MOC	SWJW	DESKI KOGYO ORD	J6706	BUY	2,000	0	DONE	2.22%	5,000	331.00	3.00	334.00	2,000	333.00	333.8773
ML	MOC	SWJW	NISSIN(WHS) ORD	J9066	BUY	1,000	0	DONE	2.49%	2,000	216.00	1.000	219.00	1,000	219.00	215.4412
ML	MOC	SWJW	JPN PULP & PAP ORD	J8032	BUY	1,000	0	DONE	2.35%	1,000	280.00	2.00	282.00	1,000	281.00	279.5294
ML	MOC	SWJW	BURE EQUITY ORD	BURE.I	BUY	2,798	0	DONE	1.94%	0	0.00	0.00	0.00	0	23.90	
ML	MOC	SWJW	SENSHUKAI ORD	J8165	BUY	600	0	DONE	2.59%	200	507.00	2.00	509.00	600	509.00	506.7083
ML	MOC	SWJW	UKC HOLDINGS ORD	J3156	BUY	200	0	DONE	2.09%	100	1,026.00	7.00	1,033.00	200	1,032.8222	
ML	MOC	SWJW	IMPERIAL METALS ORD	III.C	BUY	1,300	0	DONE	2.84%	2,300	9.50	0.02	9.52	600	9.52	9.4997
ML	MOC	SWJW	MINGFA GROUP ORD	H0846	BUY	21,000	0	DONE	2.13%	44,000	2.03	0.02	2.05	29,000	2.04	2.0604
ML	MOC	SWJW	SPORTS DIRECT INTERNAT...	SPD.L	BUY	5,356	0	DONE	2.46%	2,936	300.60	1.60	302.20	3,620	300.70	299.4922
ML	MOC	SWJW	REX MINERALS ORD	RXM.I	BUY	3,171	0	DONE	1.87%	29,279	0.715	0.015	0.73	2,555	0.72	0.7355
ML	MOC	SWJW	ENTERPRISE INNS ORD	ETIL	BUY	8,529	0	DONE	1.91%	3,000	56.00	0.25	56.25	690	56.00	56.5689
ML	MOC	SWJW	ROC OIL COMPANY ORD	ROCA.I	BUY	22,484	0	DONE	2.49%	66,325	0.31	0.01	0.32	110,000	0.31	0.3193
ML	MOC	SWJW	GOLDEN STAR ORD	GSC.C	BUY	4,300	0	DONE	3.88%	36,900	1.32	0.01	1.33	2,000	1.33	1.3434
ML	MOC	SWJW	YOKOGAWA BRDG HD...	J5911	BUY	1,000	0	DONE	2.05%	1,000	590.00	3.00	593.00	10,000	592.00	586.8182
ML	MOC	SWJW	MEISEI INDU ORD	J1976	BUY	1,000	0	DONE	2.43%	2,000	214.00	2.00	216.00	1,000	217.00	213.45
ML	MOC	SWJW	HISCOX ORD	HXL	BUY	6,575	0	DONE	2.12%	5,214	453.40	0.70	454.10	550	453.40	455.1112
ML	MOC	SWJW	MEDICA ORD	MDCA.I	BUY	804	0	DONE	3.17%	100	13.11	0.03	13.14	54	13.14	13.0911
ML	MOC	SWJW	ASCOPIAVE ORD	ASCL.I	BUY	1,136	0	DONE	1.49%	350	1.136	0.064	1.20	6,000	1.15	1.1455
ML	MOC	SWJW	TOEI ORD	J9605	BUY	2,000	0	DONE	2.36%	7,000	382.00	4.00	386.00	1,000	385.00	384.8049
ML	MOC	SWJW	KELLER GROUP ORD	KLRL	BUY	1,076	0	DONE	1.17%	29	499.75	4.25	504.00	200	500.00	497.6963
						12,714,340	269,347									

Outbox [08/22 08:59:43] 10 / 10 Orders OUTBOX - Presentation*

Ticker	Status	Traded Qty	Average Price	Traded Value	Mkt Exposed	Traded Qty	%Volume	%Volume	% Completed In Session	%Volume (Se...)	Residual
SDL AU	LIVE	0	0.00	0	49,223	0			0%		49,223
CZA AU	LIVE	0	0.4051	0	216,024	113,503	59%	59%	0%		216,024
INE CN	LIVE	9,236	10.9224	100,888	4,100	34,200	87%	24%	23%		4,100
ZEL SM	DONE	1,153	1.3409	1,538	0	3,731	9%	0%	30%		2%
TIR SAM	DONE	1,187	1.7104	2,030	0	2,223	4%	0%	4%		2%
		12,910	3.1829	181,599	269,347	1,70,013	56%		2%		269,347

Filler Graph

Relative to Index

Global Equity Business Activities

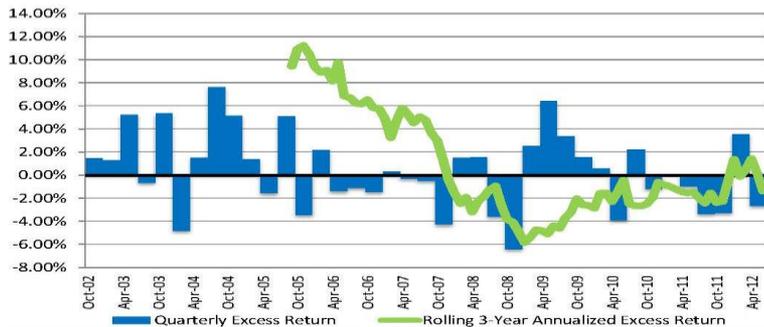


- Global Equity Capital Allocation Committee
- Portfolio view
- Balancing return and risk
- Multi-dimensional risk exposure analysis
- Consider portfolio trade-offs and opportunistic pair trades

Return / Risk Dashboard

STRATEGY SNAPSHOT - Manager A

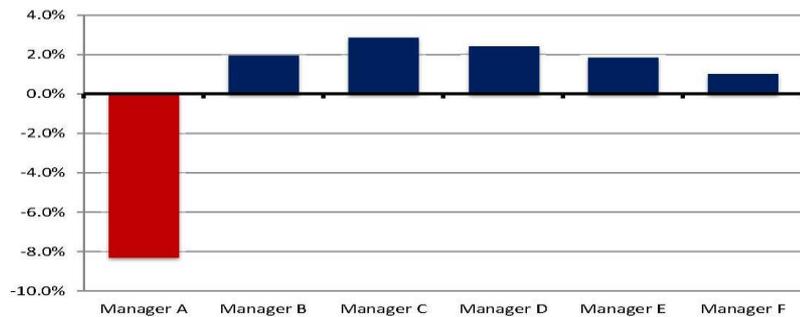
PERFORMANCE



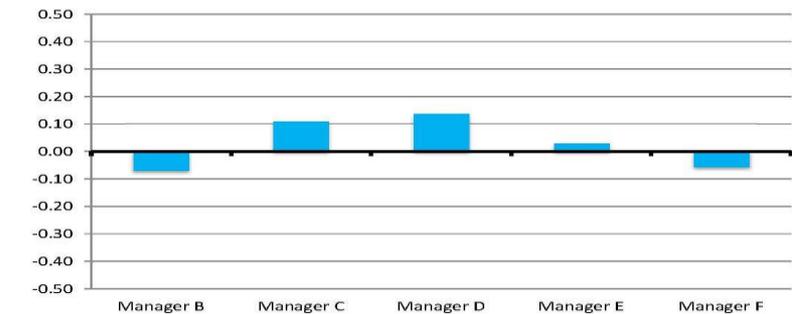
STYLE ANALYSIS



SECTOR ANALYSIS - Defensive Sectors Overweight / Underweight



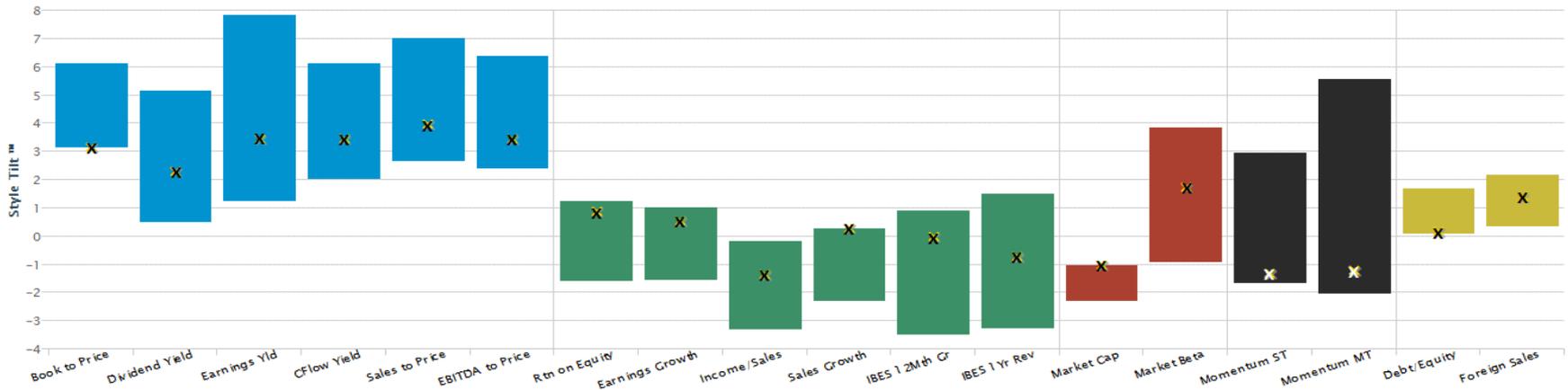
CORRELATIONS - Excess Returns



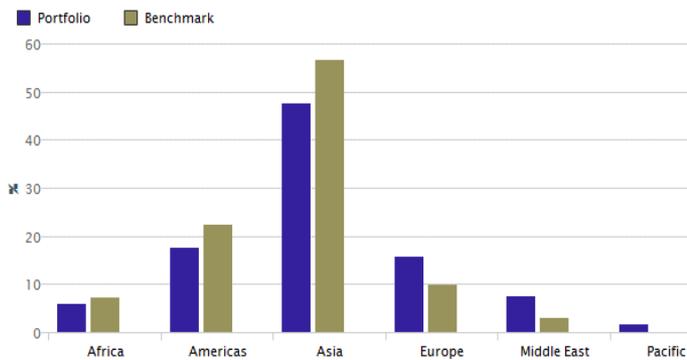
Risk Attributes

STYLE SKYLINES / HISTORY / RANGE

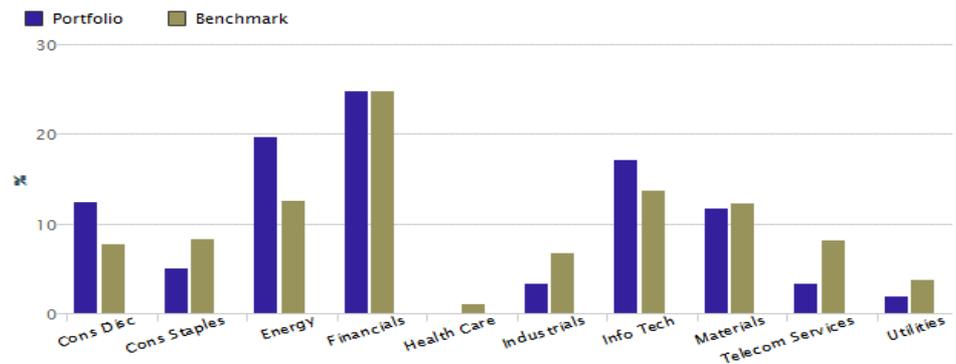
STYLE SKYLINE RANGE



REGION DISTRIBUTION



SECTOR DISTRIBUTION



Conclusion

Initial Assertions:

- Global capitalization weighted benchmark → appropriate
- Total asset class portfolio → best place to add value
- Active management deployment → managing roles, risk and proprietary insights
- Total Global Equity risk budget → intelligent but humble risk-taking