Arizona State Retirement System Board

International Equity Manager Review

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April 15, 2005

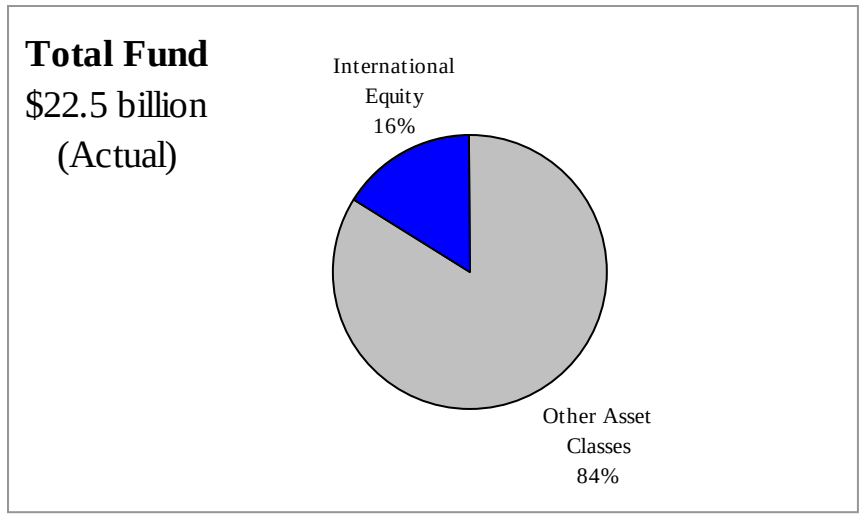
Presentation Topics

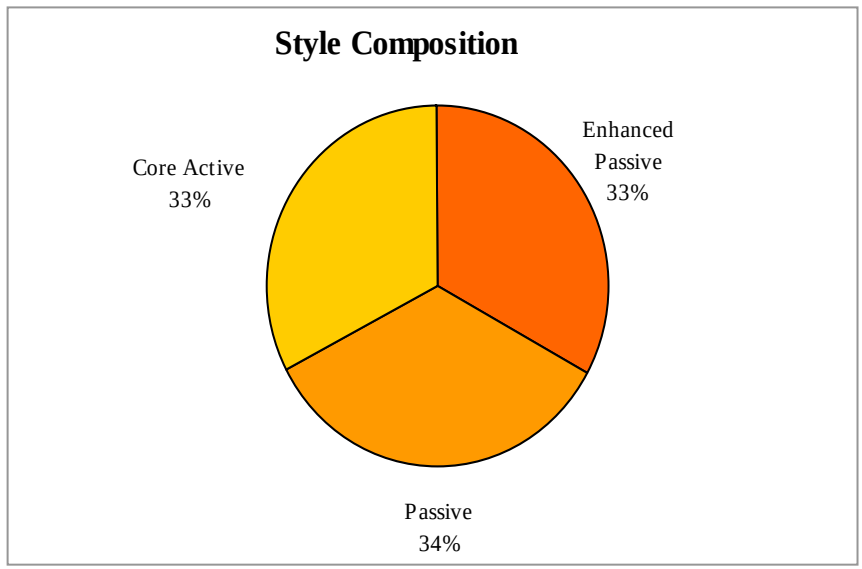
- International Equity Manager Reviews (aggregate)
  - Asset Class Snapshot
  - Mandates Overview
  - Excess Returns
  - Value Added
  - ASRS International Equity Composite vs. MSCI EAFE Index

- International Equity Manager Reviews (individual)
  - Performance Analysis
  - Attribution Analysis
  - Style Factors
  - Organizational Issues
  - Assessment

International Equity Assets
December 31, 2004

- Market Value: $3.6b
- Active Style Composition:
  - Core: 100%
  - Growth 0%*
  - Value: 0%*
- Portfolios:
  - 1 Passive
  - 1 Enhanced Passive
  - 1 Active
- Average Fee: 17 bps
- Passive Target: 30% ±20%





*ASRS is currently in the process of reviewing the International Equity asset class. Modifications to include active growth & value allocations, other.

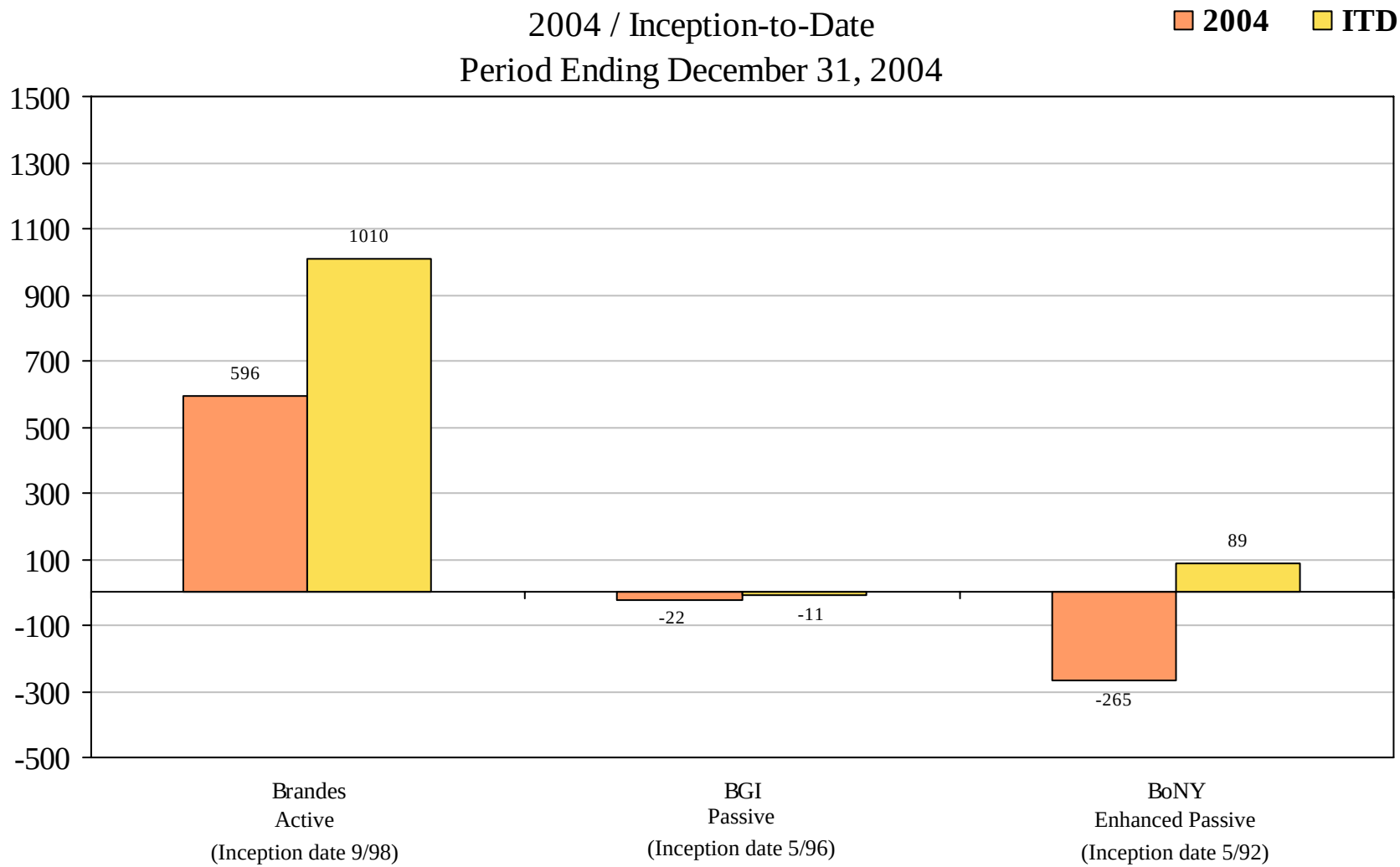
International Equity Manager Mandates

Manager	Benchmark	Inception	Fee (bp)	Expected Alpha (bp)	Portfolio Assets ($mil)[1]	Strategy Assets ($mil)[1]
Active						
Brandes	EAFE	09/30/98	37	250	$1,195.5	$42,500
Passive/Enhanced						
BoNY	EAFE	05/31/92	9	50	$1,198.1	$3,000
BGI (Transition)	EAFE	12/17/04	5	0	$1,239.9	n/a
BGI	EAFE	05/31/96	5	0	$3.8	$259,500

[1] As of December 31, 2004

Excess Returns*

Current International Equity Managers

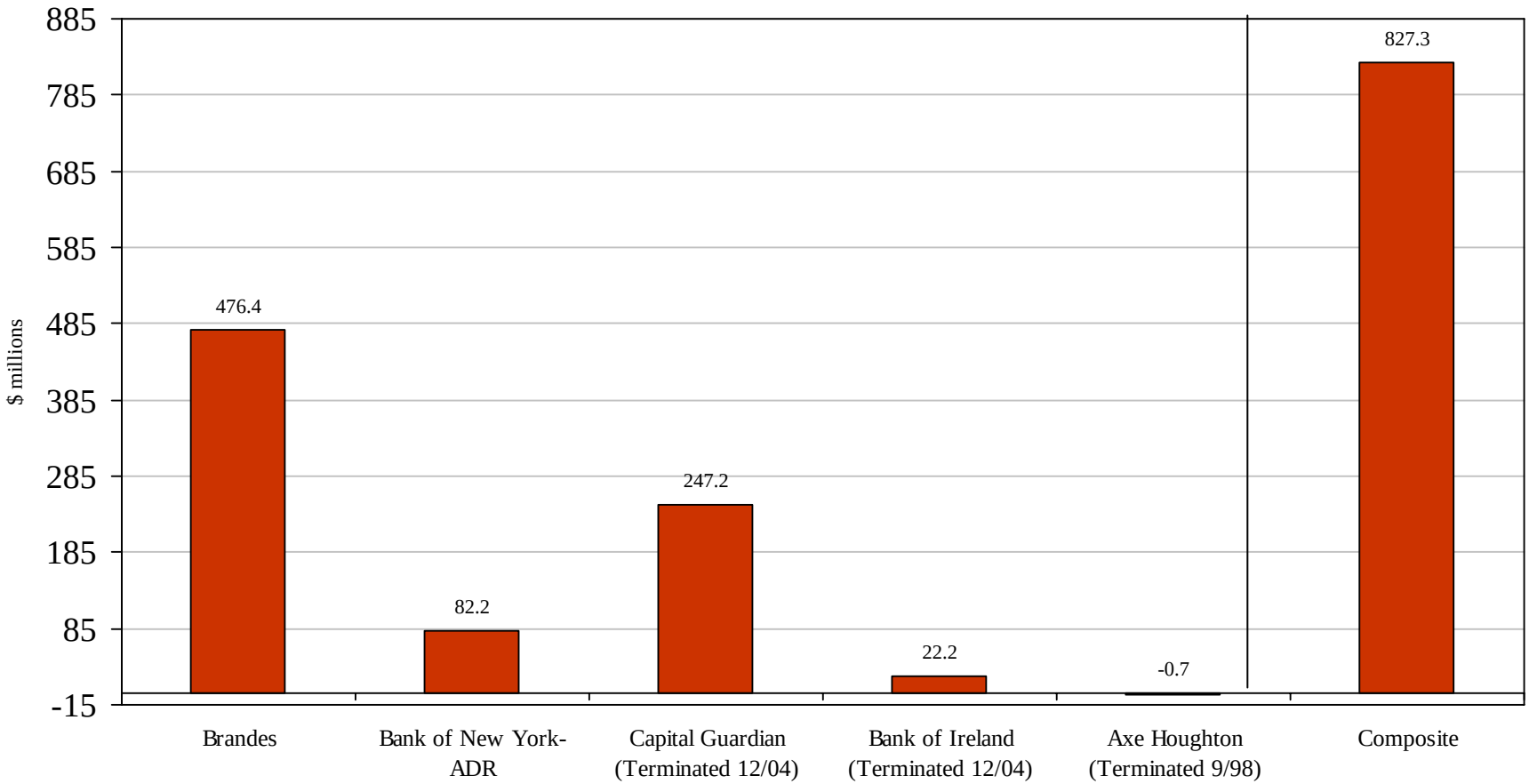


* Annualized excess returns net of fees.

Value Added

International Equity Asset Class

December 31, 1996 to December 31, 2004

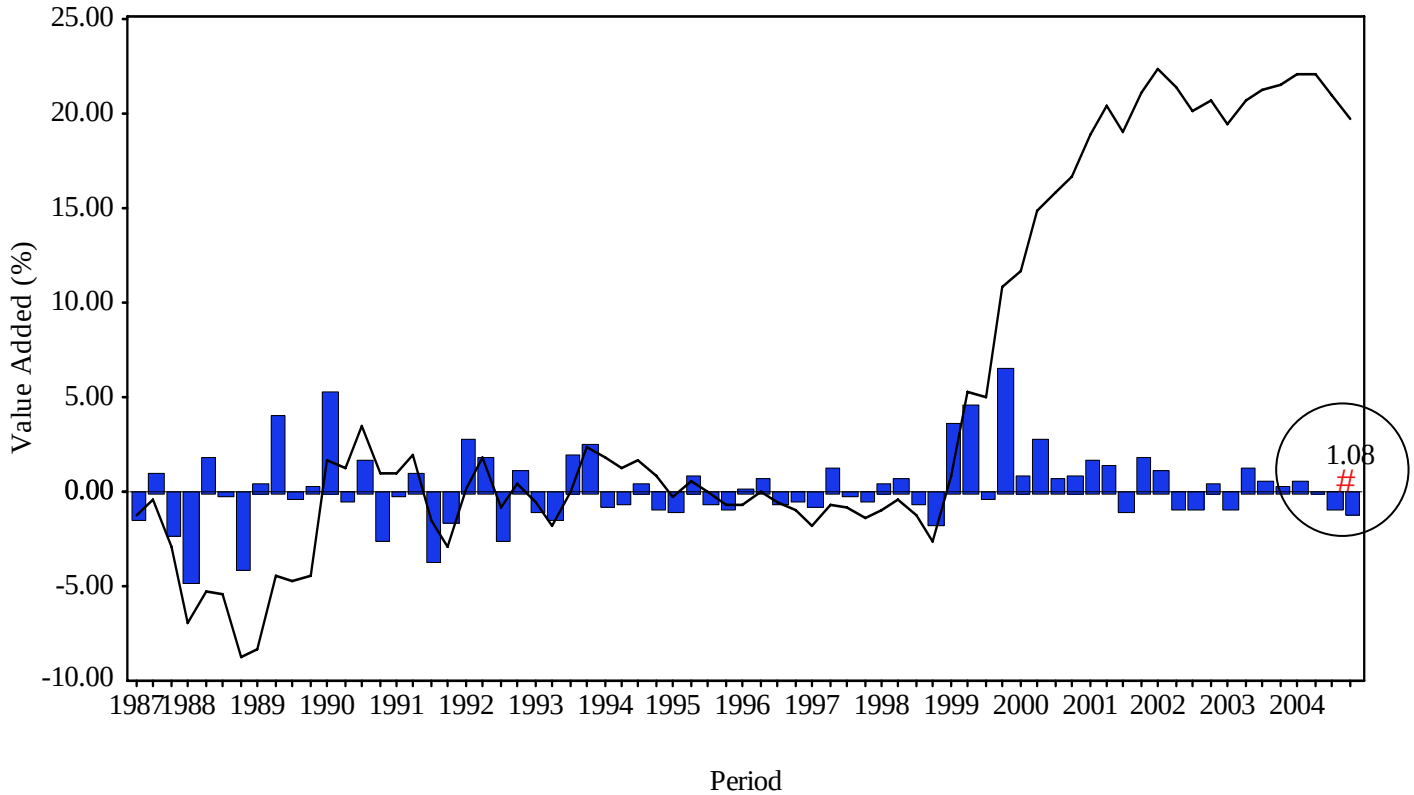


Composite represents the total of the individual managers.

International Equity Manager Composite

Value Added Relative to MSCI EAFE

April 1987* to December 2004



Annualized since 4-1987 | Cumulative Value Added | Value Added

Quarterly Returns

Market Proxy: MSCI EAFE

*Composite Inception date

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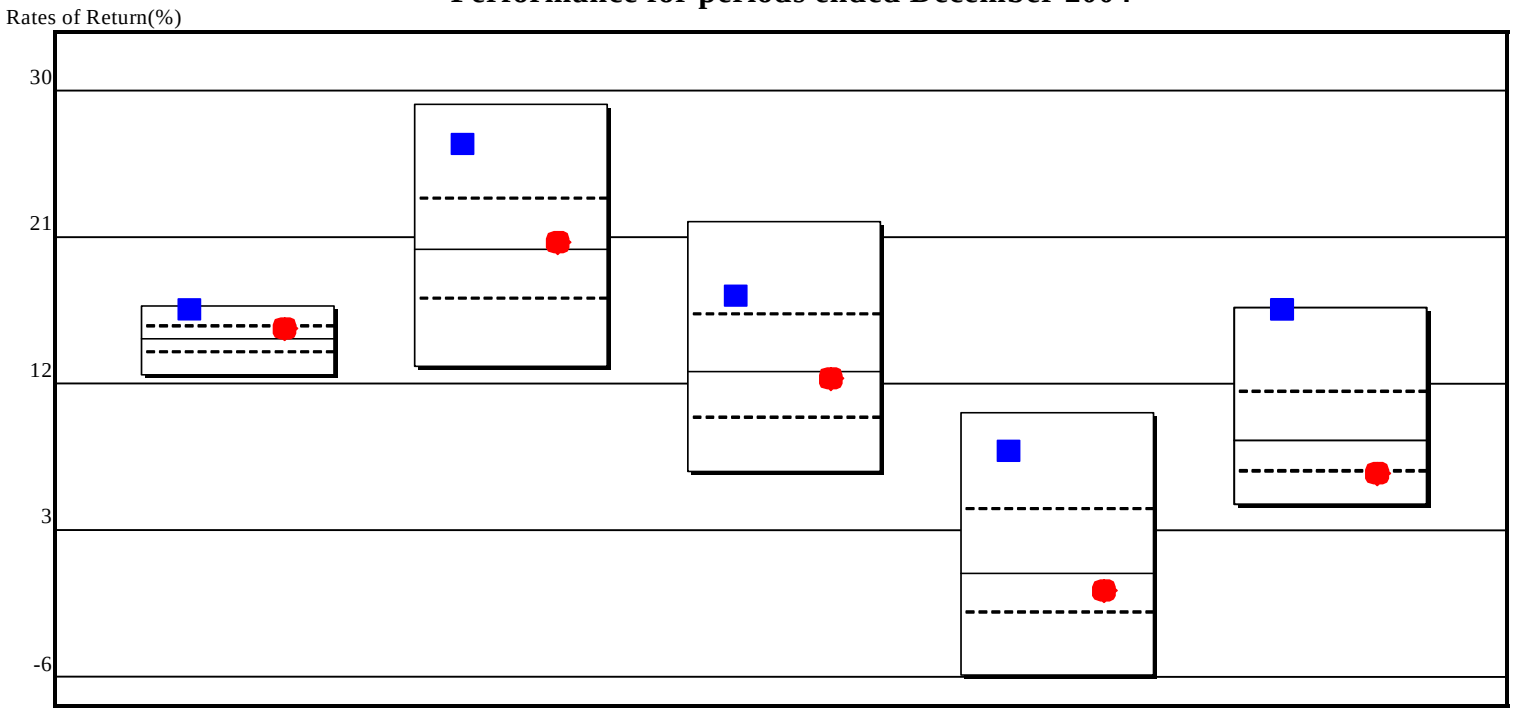
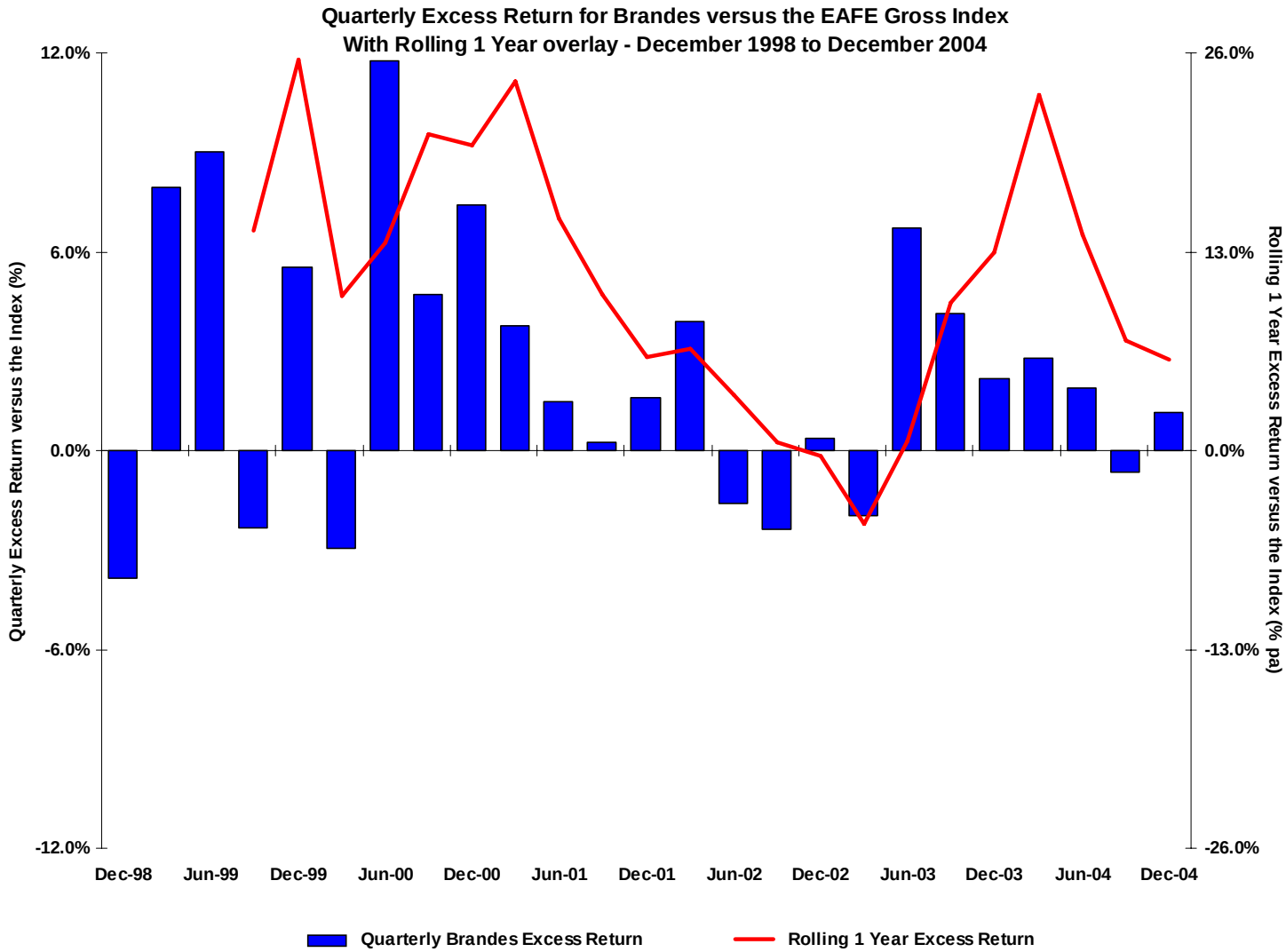
Brandes

Comparison with the Mercer International Equity Universe
Performance for periods ended December 2004



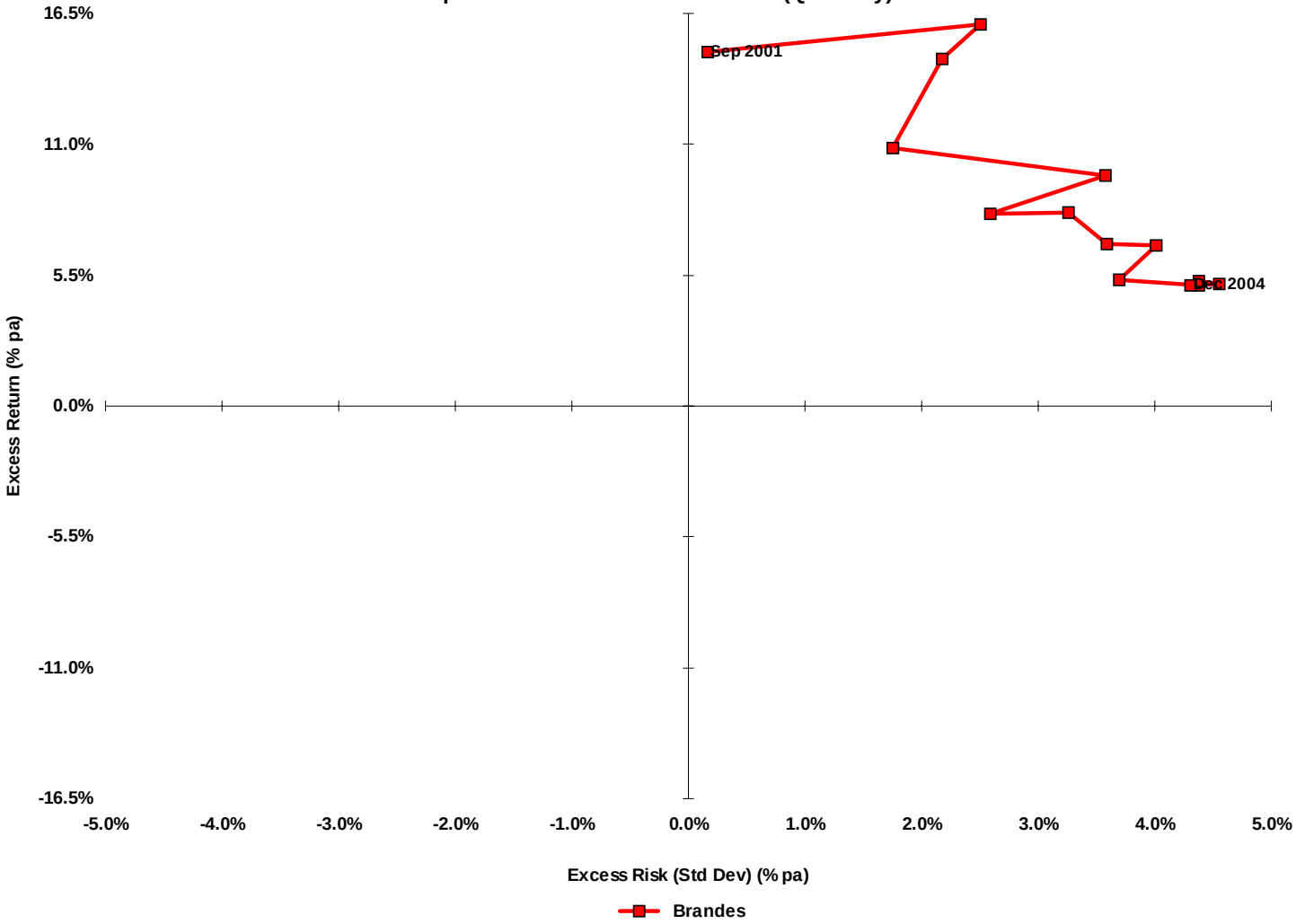
	1 Quarter (%)	1 Year (%)	3 Years (%pa)	5 Years (%pa)	Inception (9/30/98)
Brandes	16.5 *(6)*	26.7 *(9)*	17.4 *(18)*	7.8 *(13)*	16.5 *(5)*
EAFE Gross	15.4	20.7	12.3	-0.8	6.4
5th Percentile	16.7	29.1	21.9	10.2	16.6
Upper Quartile	15.4	23.2	16.1	4.2	11.4
Median	14.7	20.2	12.7	0.3	8.4
Lower Quartile	13.9	17.1	9.8	-2.1	6.6
95th Percentile	12.4	13.0	6.5	-5.9	4.5
Number of Funds	226	217	204	174	154

Brandes


Quarterly Excess Return for Brandes versus the EAFE Gross Index
With Rolling 1 Year overlay - December 1998 to December 2004
12.0%
6.0%
0.0%
-6.0%
-12.0%
26.0%
13.0%
0.0%
-13.0%
-26.0%
Quarterly Excess Return versus the Index (%)
Rolling 1 Year Excess Return versus the Index (% pa)
Dec-98
Jun-99
Dec-99
Jun-00
Dec-00
Jun-01
Dec-01
Jun-02
Dec-02
Jun-03
Dec-03
Jun-04
Dec-04
Quarterly Brandes Excess Return
Rolling 1 Year Excess Return

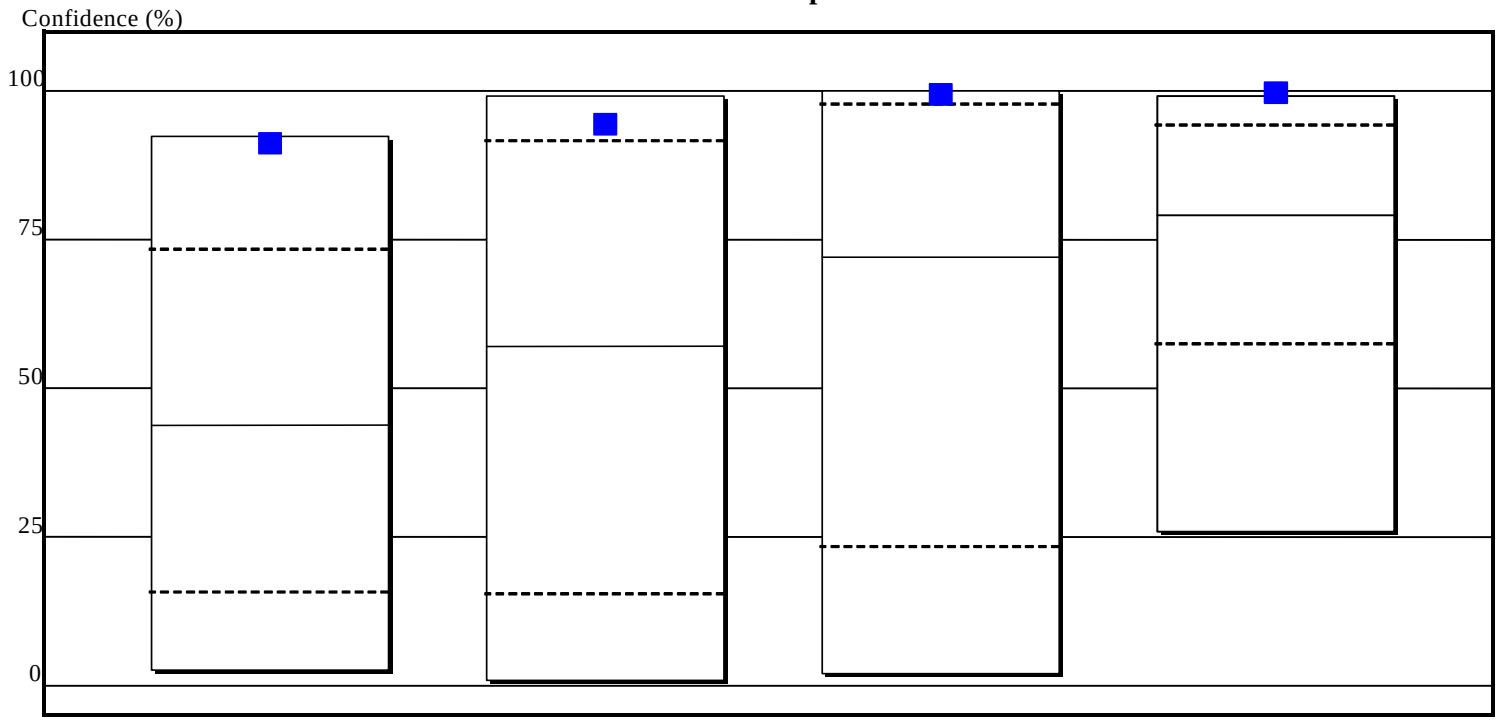
Brandes

Rolling 3 Year Risk / Return versus the EAFE Gross Index
September 2001 to December 2004 (Quarterly)



Brandes

Comparison with the Mercer International Equity Universe
Confidence of Value Added for periods ended December 2004



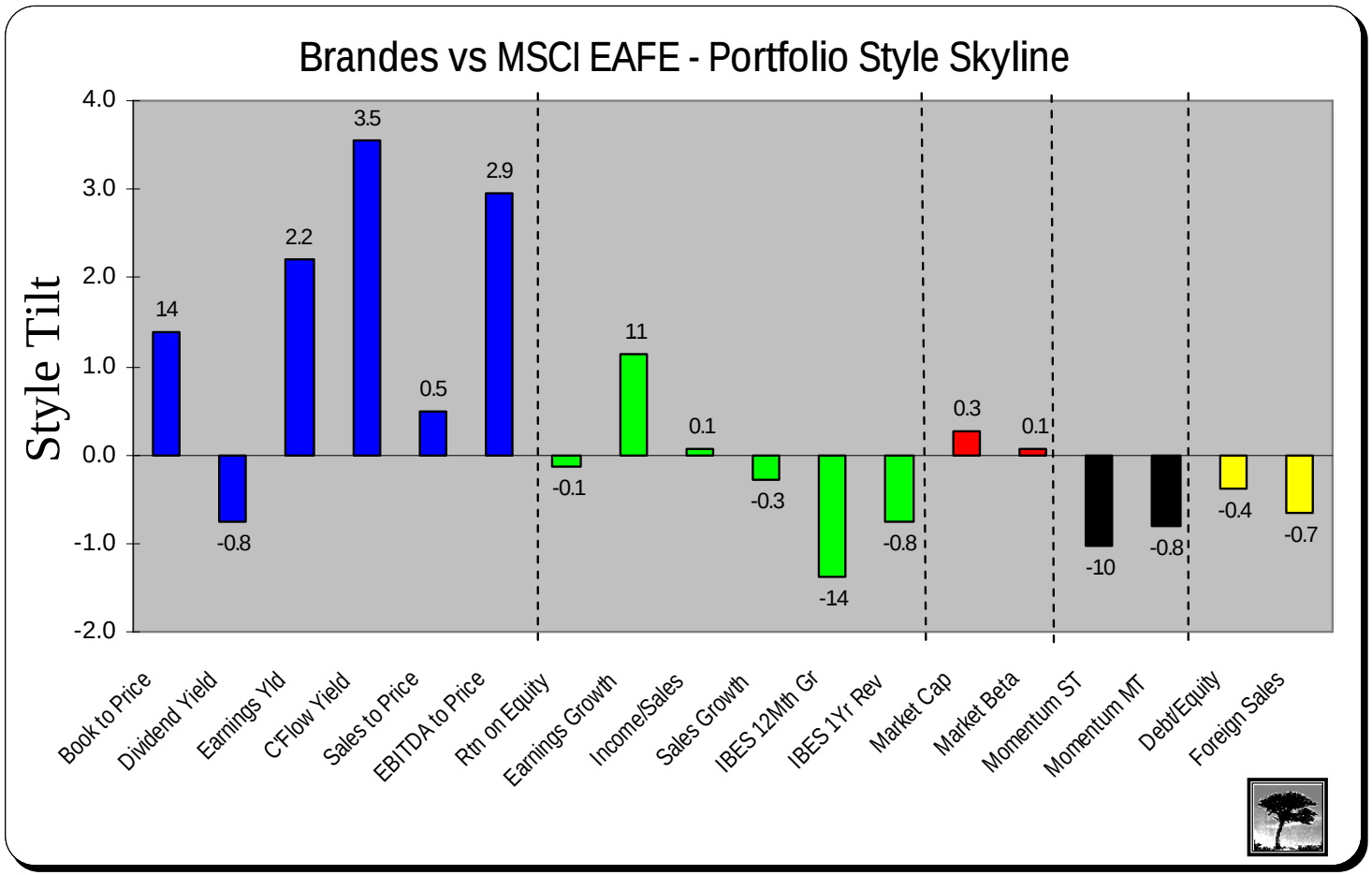
	1 Year	3 Years	5 Years	Inception (9/30/98)
Brandes	91.2 *(6)*	94.4 *(19)*	99.4 *(16)*	99.7 *(1)*
5th Percentile	92.3	99.0	99.9	98.9
Upper Quartile	73.1	91.2	97.6	94.0
Median	43.8	56.9	71.9	79.0
Lower Quartile	15.5	15.1	23.1	57.2
95th Percentile	2.5	0.6	1.9	25.6
Number of Funds	217	204	174	154

Brandes
Performance Attribution
(As of 12/31/04)

	Quarter %	1 Year %	3 Year %	5 Year %	Inception %*
Country Weightings	0.0	0.5	3.7	3.3	3.5
Stock Selection	1.1	5.8	4.3	6.8	8.0
Currency	0.0	0.6	-2.1	-0.7	-0.8
Fees	-0.1	-0.4	-0.4	-0.4	-0.4
Other	0.1	-0.5	-0.4	-0.4	-0.2
Total Value Added	**1.1**	**6.0**	**5.1**	**8.6**	**10.1**

*9/30/98

(As of 12/31/04)



Style Factors

Brandes Investment Partners Organizational Issues

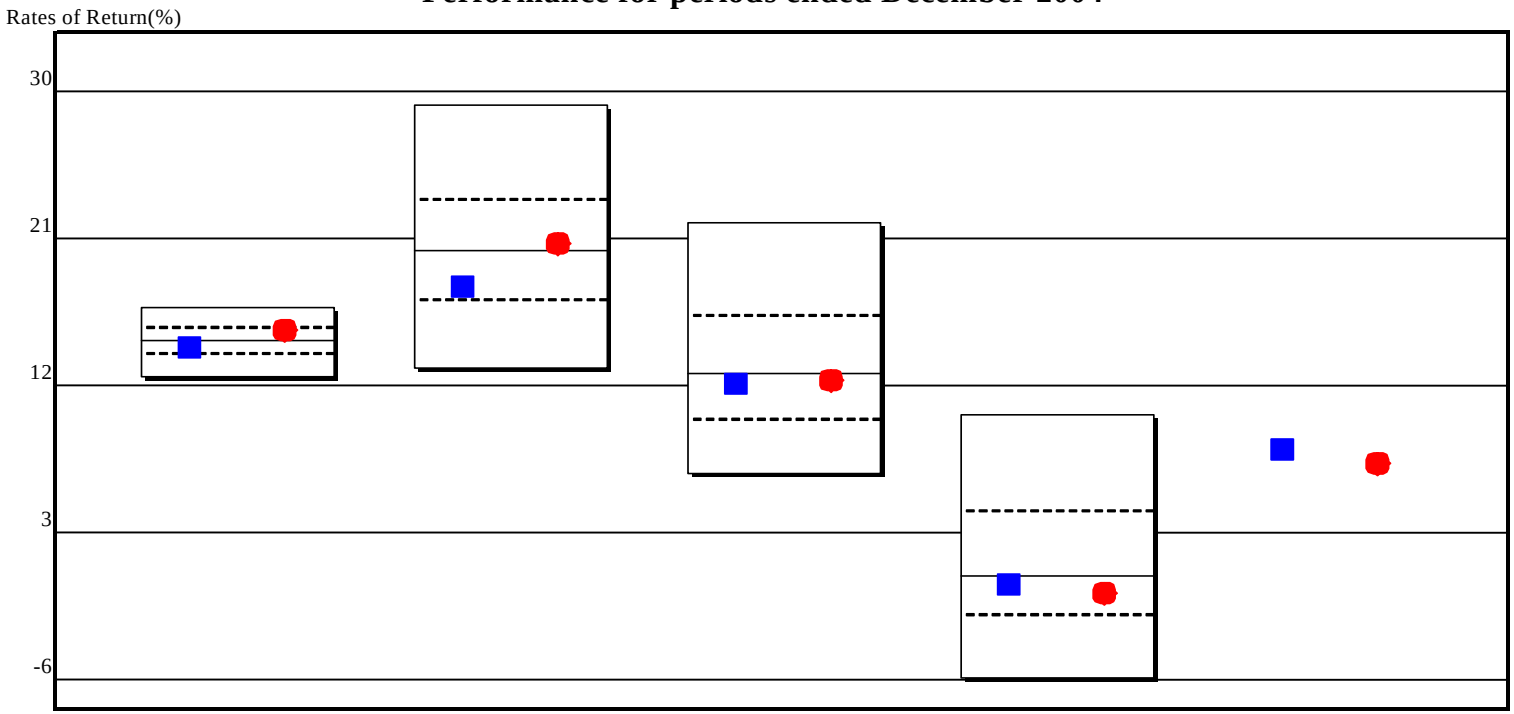
- No organization concerns at this time.

Assessment

- Brandes outperformed its benchmark and placed in the top quartile of the universe for all periods evaluated.
- Mercer rates this product A- (above average probability of outperformance).

BNY Asset Management EAFE

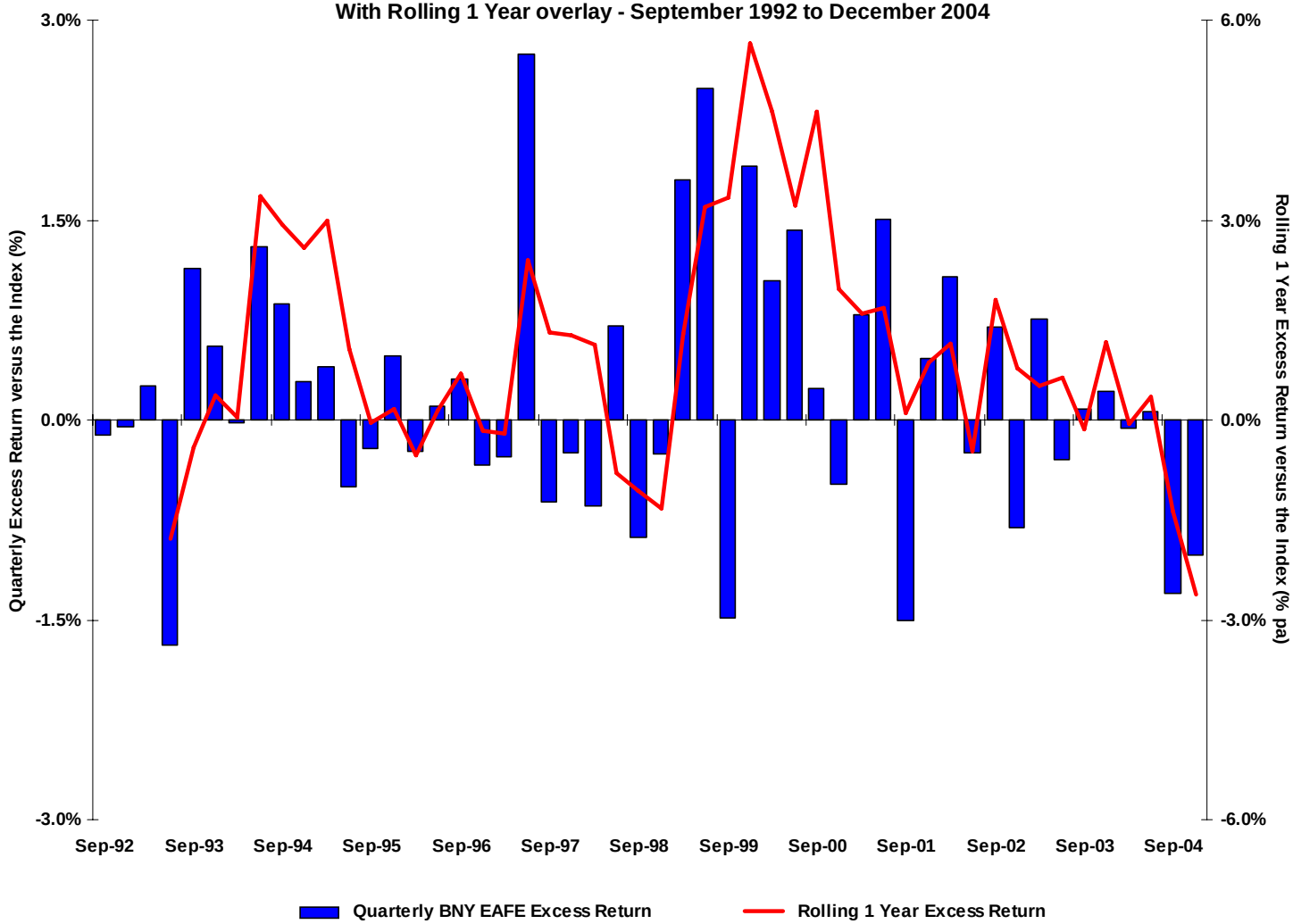
Comparison with the Mercer International Equity Universe
Performance for periods ended December 2004



	1 Quarter (%)	1 Year (%)	3 Years (%pa)	5 Years (%pa)	Inception (5/31/92)
BNY EAFE	14.4 *(64)*	18.1 *(70)*	12.1 *(57)*	-0.2 *(53)*	8.0
EAFE Gross	15.4	20.7	12.3	-0.8	7.2
5th Percentile	16.7	29.1	21.9	10.2	
Upper Quartile	15.4	23.2	16.1	4.2	
Median	14.7	20.2	12.7	0.3	
Lower Quartile	13.9	17.1	9.8	-2.1	
95th Percentile	12.4	13.0	6.5	-5.9	
Number of Funds	226	217	204	174	

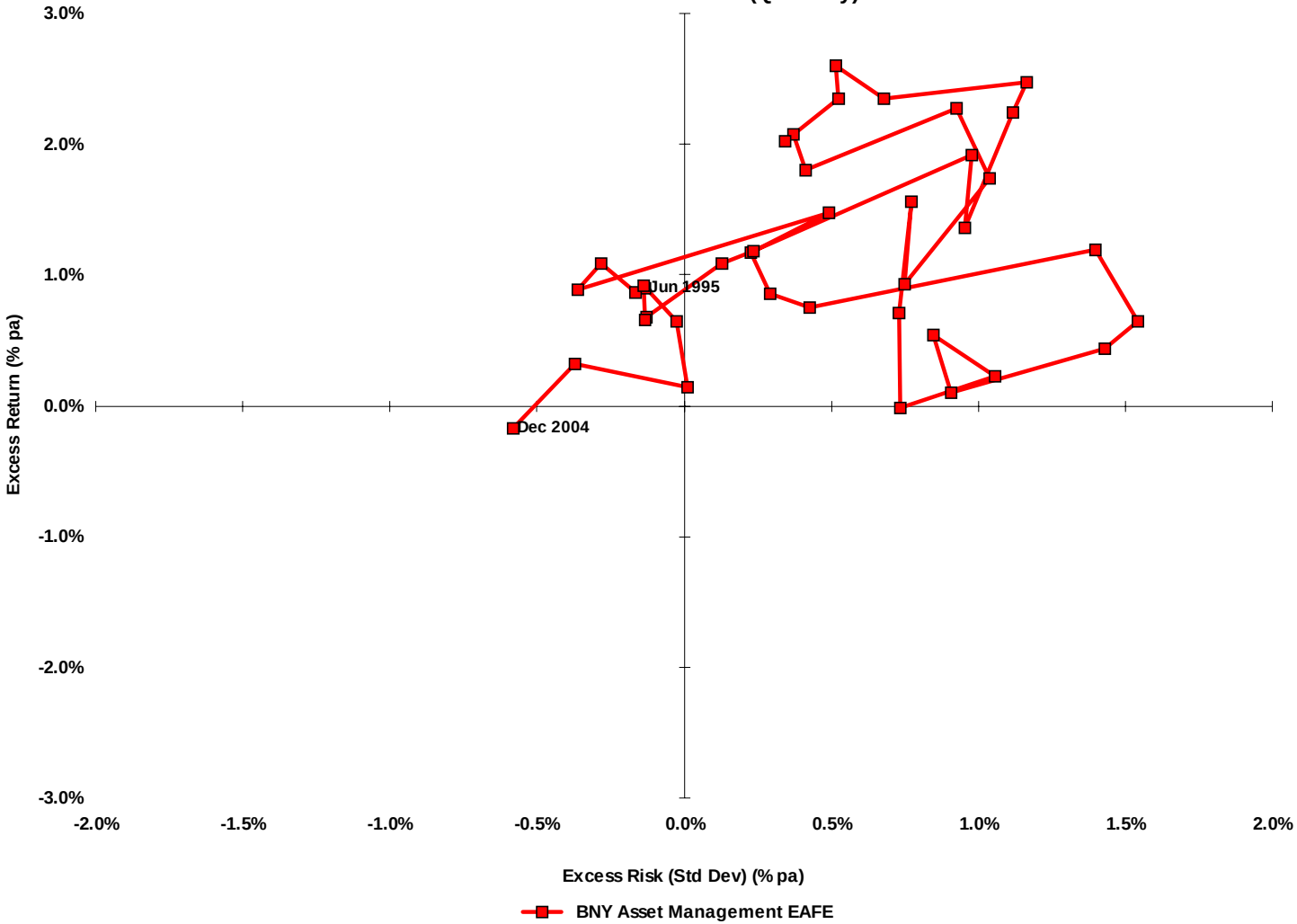
BNY Asset Management EAFE

Quarterly Excess Return for BNY EAFE versus the EAFE Gross Index
With Rolling 1 Year overlay - September 1992 to December 2004



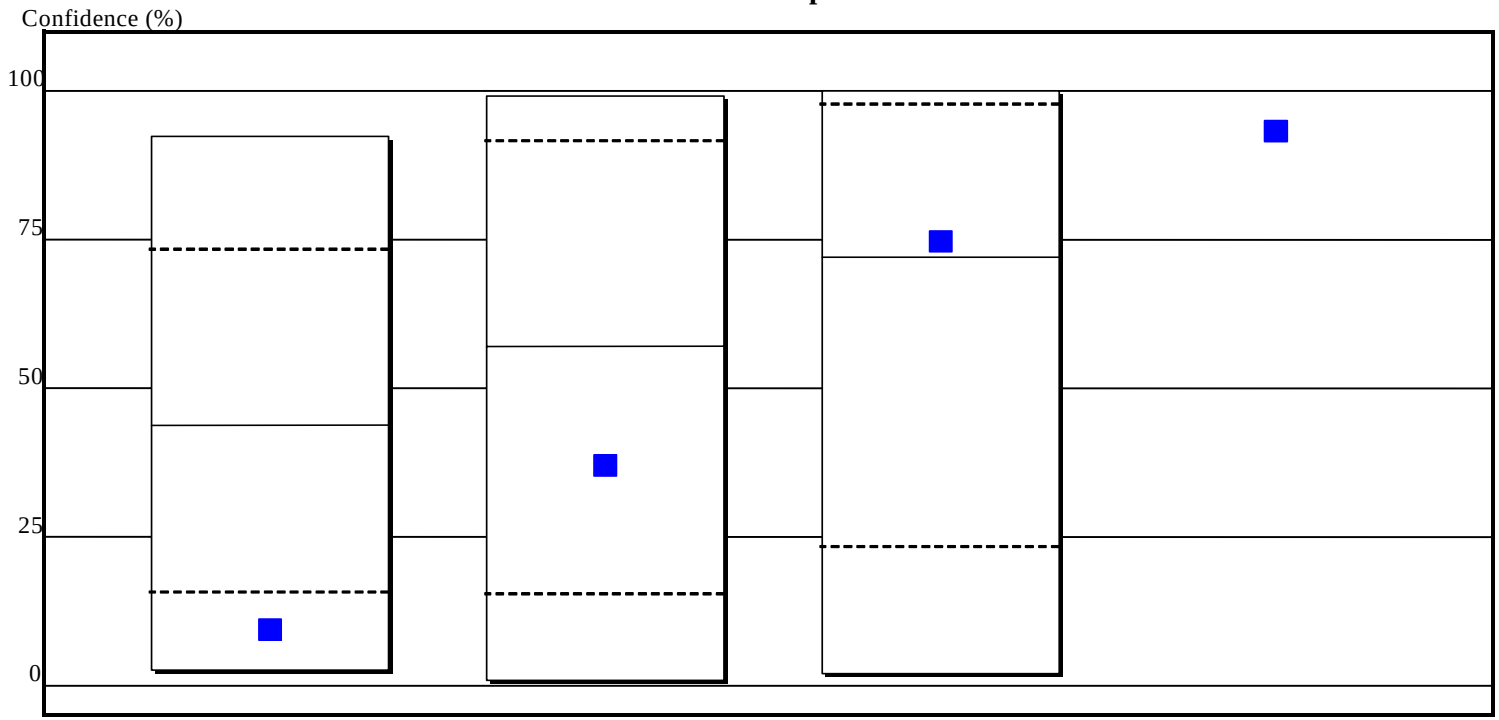
BNY Asset Management EAFE

Rolling 3 Year Risk / Return versus the EAFE Gross Index
June 1995 to December 2004 (Quarterly)



BNY Asset Management EAFE

Comparison with the Mercer International Equity Universe
Confidence of Value Added for periods ended December 2004



	1 Year	3 Years	5 Years	Inception (5/31/92)
BNY EAFE	9.4 *(85)*	37.1 *(60)*	74.7 *(48)*	93.3
5th Percentile	92.3	99.0	99.9	
Upper Quartile	73.1	91.2	97.6	
Median	43.8	56.9	71.9	
Lower Quartile	15.5	15.1	23.1	
95th Percentile	2.5	0.6	1.9	
Number of Funds	217	204	174	

BoNY
Performance Attribution
(As of 12/31/04)

	Quarter %	**1 Year %**	**3 Year %**	**5 Year %**	**Inception %***
Country Weightings	0.0	0.0	0.0	0.0	0.0
Stock Selection	-1.0	-2.5	0.0	0.7	1.0
Hedging	0.0	0.0	0.0	0.0	0.0
Fees (%)	0.0	0.0	-0.1	-0.1	-0.1
Other	0.0	-0.1	-0.1	0.0	0.0
Total Value Added	**-1.0**	**-2.6**	**-0.2**	**0.6**	**0.9**

*5/31/92

Bank of New York
Organizational Issues

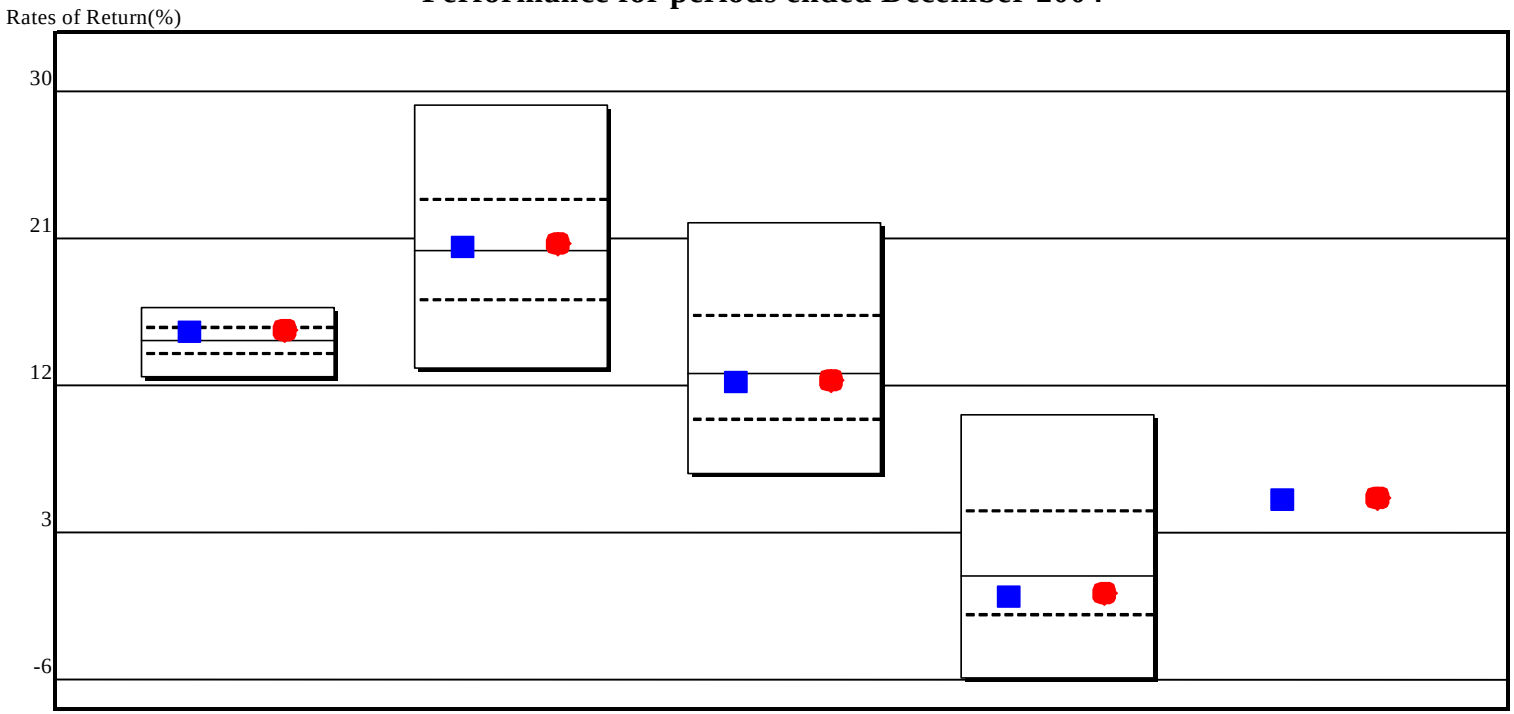
- No organization concerns at this time.

Assessment

- Bank of New York underperformed its benchmark for all periods evaluated except 5 years and since inception.
- Mercer does not rate this product.

Barclays Global Inv EAFE

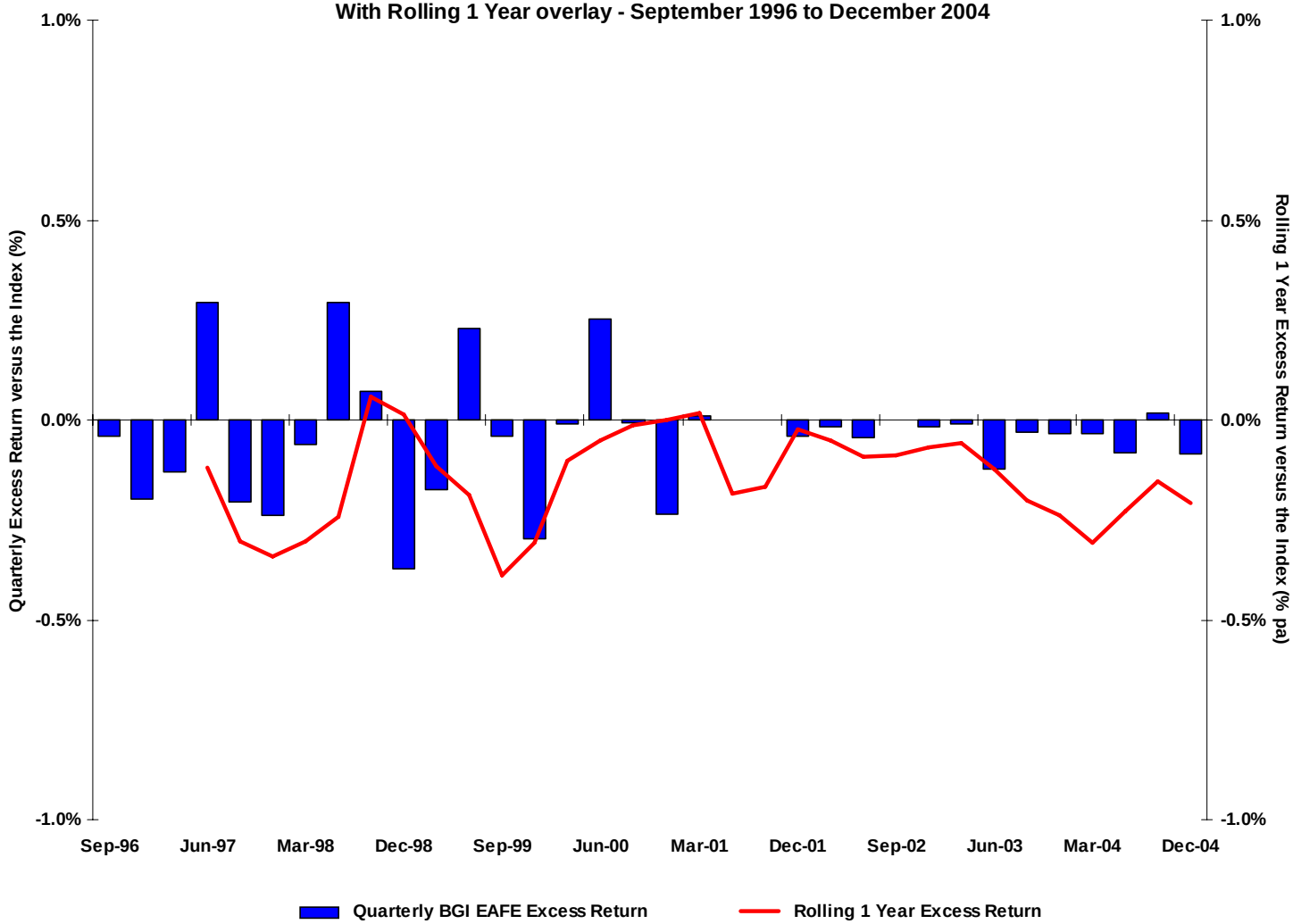
Comparison with the Mercer International Equity Universe
Performance for periods ended December 2004



	1 Quarter (%)	1 Year (%)	3 Years (%pa)	5 Years (%pa)	Inception (5/31/96)
BGI EAFE	15.3 *(31)*	20.5 *(48)*	12.1 *(57)*	-0.9 *(62)*	5.0
EAFE Gross	15.4	20.7	12.3	-0.8	5.1
5th Percentile	16.7	29.1	21.9	10.2	
Upper Quartile	15.4	23.2	16.1	4.2	
Median	14.7	20.2	12.7	0.3	
Lower Quartile	13.9	17.1	9.8	-2.1	
95th Percentile	12.4	13.0	6.5	-5.9	
Number of Funds	226	217	204	174	

Barclays Global Inv EAFE

Quarterly Excess Return for BGI EAFE versus the EAFE Gross Index
With Rolling 1 Year overlay - September 1996 to December 2004



BGI
Performance Attribution
(As of 12/31/04)

	Quarter	**1 Year**	**3 Year**	**5 Year**	**Inception***
Sector Selection	0.0	0.0	0.0	0.0	0.0
Stock Selection	0.0	0.0	0.0	0.0	0.0
Other**	-0.07	-0.17	-0.08	0.0	-0.06
Fees	-0.01	-0.05	-0.05	-0.05	-0.05
Total Value Added	**-0.08**	**-0.22**	**-0.13**	**-0.05**	**-0.11**

* 5/31/96

** Negative performance primarily a result of MSCI EAFE-Gross index construction methodology, which approximates the maximum possible dividend reinvestment.

Barclays Global Investors Organizational Issues

- No organization concerns at this time.

Assessment

- BGI has tracked its benchmark closely for all periods.
- Mercer does not rate this product.

Mercer Ratings Scale

A, A- = Above average probability of outperformance

B+, B, B- = Average probability of outperformance

C = Below average probability of outperformance

N = Not rated

What Do the Ratings Mean?

- Mercer's view on prospective future performance relative to benchmark over the medium term (3 to 5 yrs)
- Relative to risk of underperforming benchmark
- May or may not be in keeping with past performance