

East Tennessee State University Investment Challenge Program

Period Ending 09/30/08

Tennessee Valley Authority

INVESTMENT CHALLENGE

TRADING IN FUTURES

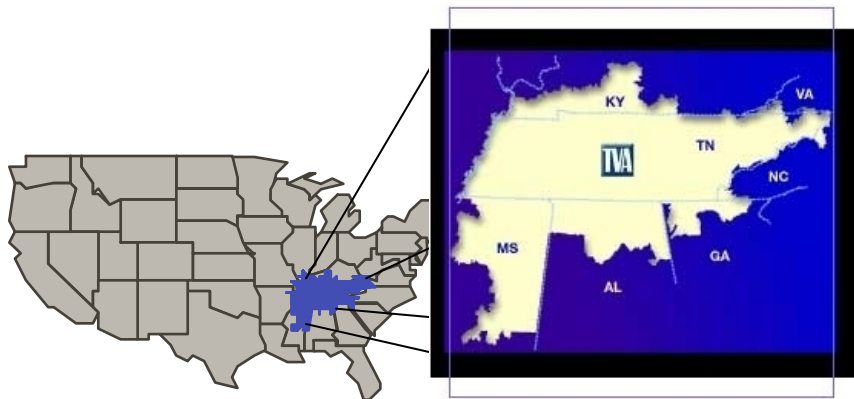
TVA Corporate Profile

- Largest public power provider in the United States.
- Agency and instrumentality of the U.S. government.
- Financially self-supporting - TVA receives no taxpayer funding for either its power or stewardship activities.
- Created in 1933 by an act of Congress - charged with providing navigation, flood control, agricultural and industrial development, and electric power generation.

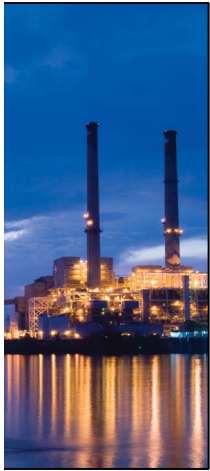


The TVA Power Service Area

- 175 billion kWh in 2007 power sales
- 33,482 MW all-time TVA peak power demand (August 16, 2007)
- 80,000 square-mile service area, spanning parts of seven states
- 16,000 circuit miles of transmission lines
- 158 distributor customers
- 8.7 million service area population



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TVA Power System Resources

- 11 fossil plants (59 units)
- 3 nuclear plants (6 units)
- 29 hydroelectric plants (109 units)
- 1 pumped-storage plant (4 units)
- 8 combustion turbine (CT) facilities (83 units)
- 9 diesel generation units
- 3,504 megawatts under power purchase agreements*

Net Power System Generation

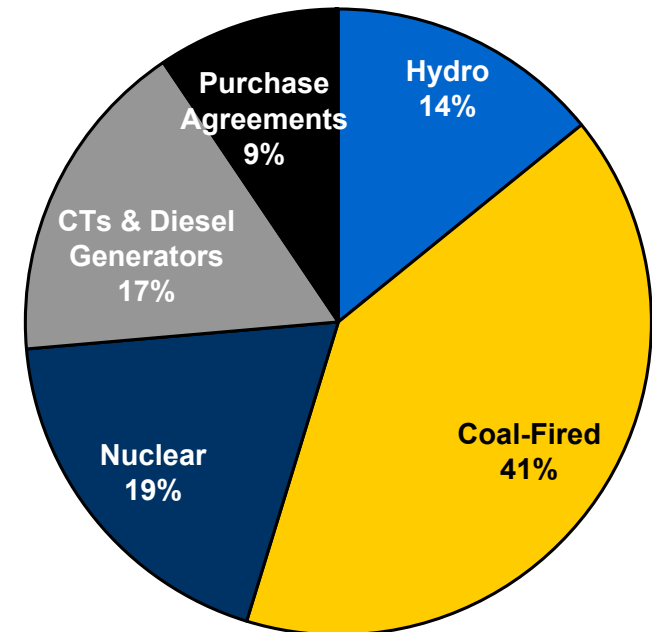
For the years ended September 30 (in billions of kWh)

	2007	2006	2005
Hydroelectric	9.0	10.0	15.7
Fossil	100.2	99.6	98.4
Nuclear	46.4	45.3	45.2
Other	0.7	0.6	0.6
	156.4	155.5	159.9

*Net winter dependable capacity

As of September 30, 2007

Power System Capacity*



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TVA Financial Highlights

As of, or for the years ended, September 30 (\$ millions)



Revenues, By Source

	2007	2006	2005
Municipal & Cooperative Industries Directly Served	\$ 7,774	\$ 7,859	\$ 6,539
Federal Agencies & Other	1,221	1,065	961
Other Revenues	112	116	181
	137	135	101
	\$ 9,244	\$ 9,175	\$ 7,782

Financial Summary

	2007	2006	2005
Total operating revenues	\$ 9,244	\$ 9,175	\$ 7,782
Tax equivalents	(452)	(376)	(365)
Total operating expenses	(7,723)	(7,582)	(6,503)
Interest expense, net	(1,184)	(1,215)	(1,261)
Net income	\$ 383	\$ 329	\$ 85
Total assets	33,902	34,520	34,473
Cash flow from operations	1,763	2,014	1,462
Construction expenditures	(1,306)	(1,399)	(1,339)



TVA 2007 Quick Facts

- Nation's largest public power provider
- 12,013 employees
- 175 billion kWh total power sales
- 156 billion kWh total system generation
- 36,914 MW system capacity (winter net dependable)
- 35,542 MW system capacity (summer net dependable)
- Stewardship of the nation's fifth-largest river system
- 800 miles of commercially navigable waterways
- 49 dams for integrated river management
- 650,000 surface acres of water
- 293,000 acres of reservoir land managed for multiple benefits
- 8.7 million service area population

As of September 30, 2007

TVA Nuclear Decommissioning Trust Liability

- TVA has six licensed nuclear units that will require decommissioning. The plants and their current license expiration dates are as follows:
 - *Sequoyah Unit 1 – 2020*
 - *Sequoyah Unit 2 – 2021*
 - *Browns Ferry Unit 1 – 2033*
 - *Browns Ferry Unit 2 – 2034*
 - *Watts Bar Unit 1 – 2035*
 - *Browns Ferry Unit 3 – 2036*
- The NRC requires the calculation of an estimated decommissioning cost. The licensee can choose to use a formula provided by the NRC or conduct a site specific study to calculate these costs.

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NDT Funding Requirement

- The investment objective of the NDT is to provide sufficient funds to decommission TVA's nuclear units while minimizing any potential negative cash impact to TVA.



- In 1999, TVA's Board approved a real rate of return of 5% for projected earnings on NDT assets.

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NDT Asset Allocation

- The most important part of the investment process is asset allocation. The investment of assets in various market asset classes explains a majority of future returns.
- The asset allocation process takes into account the expected returns, risks, and correlations of a number of different asset classes. The most efficient mix of assets can be calculated through a mean variance optimization. This optimization displays the maximum return achievable for a given level of risk.

Asset Class Assumptions for Optimization

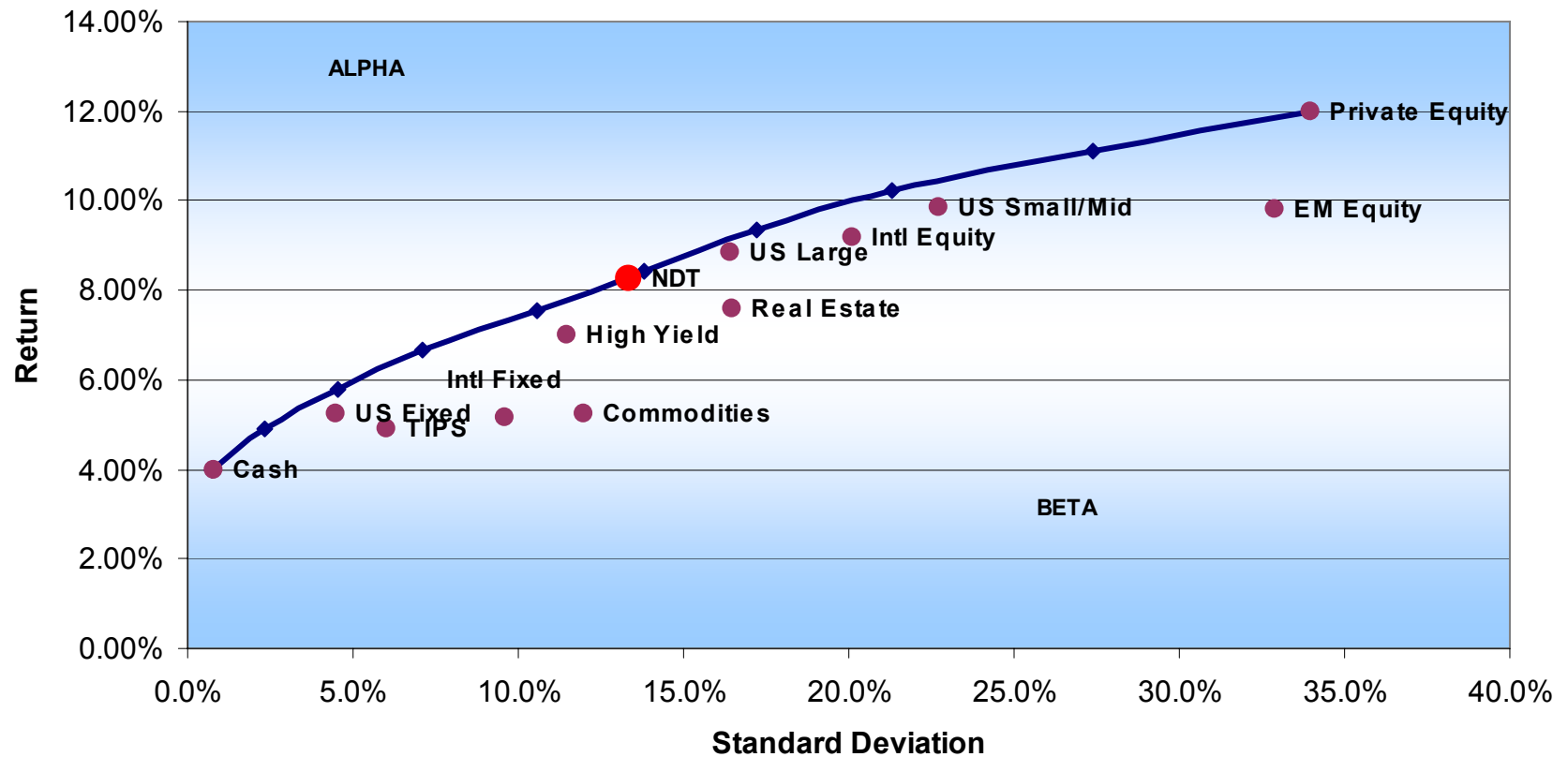
	Cash	US Fixed	EM Equity	High Yield	Intl Equity	Intl Fixed	Private Equity	Real Estate	TIPS	US Large	US Small/Mid	Commodities
Expected Return	4.00%	5.25%	9.80%	7.00%	9.20%	5.15%	12.00%	7.60%	4.90%	8.85%	9.85%	5.25%
Expected Risk	0.80%	4.50%	32.90%	11.50%	20.10%	9.60%	34.00%	16.50%	6.00%	16.40%	22.70%	12.00%
Correlations												
Cash	1.00											
US Fixed	0.30	1.00										
EM Equity	-0.15	0.10	1.00									
High Yield	0.07	0.29	0.30	1.00								
Intl Equity	-0.25	0.15	0.45	0.55	1.00							
Intl Fixed	-0.05	0.32	-0.02	0.10	0.21	1.00						
Private Equity	0.07	0.15	0.56	0.47	0.64	0.10	1.00					
Real Estate	-0.06	0.17	0.35	0.55	0.47	0.03	0.44	1.00				
TIPS	0.29	0.40	-0.14	0.15	-0.10	0.11	-0.03	0.00	1.00			
US Large	-0.10	0.21	0.50	0.65	0.70	-0.01	0.68	0.54	-0.04	1.00		
US Small/Mid	-0.15	0.14	0.44	0.59	0.63	-0.06	0.62	0.47	-0.05	0.84	1.00	
Commodities	0.25	0.10	0.05	0.15	0.10	0.05	0.05	0.20	0.20	0.00	0.00	1.00

Expected Returns, Risks, and Correlations Provided by Callan Associates

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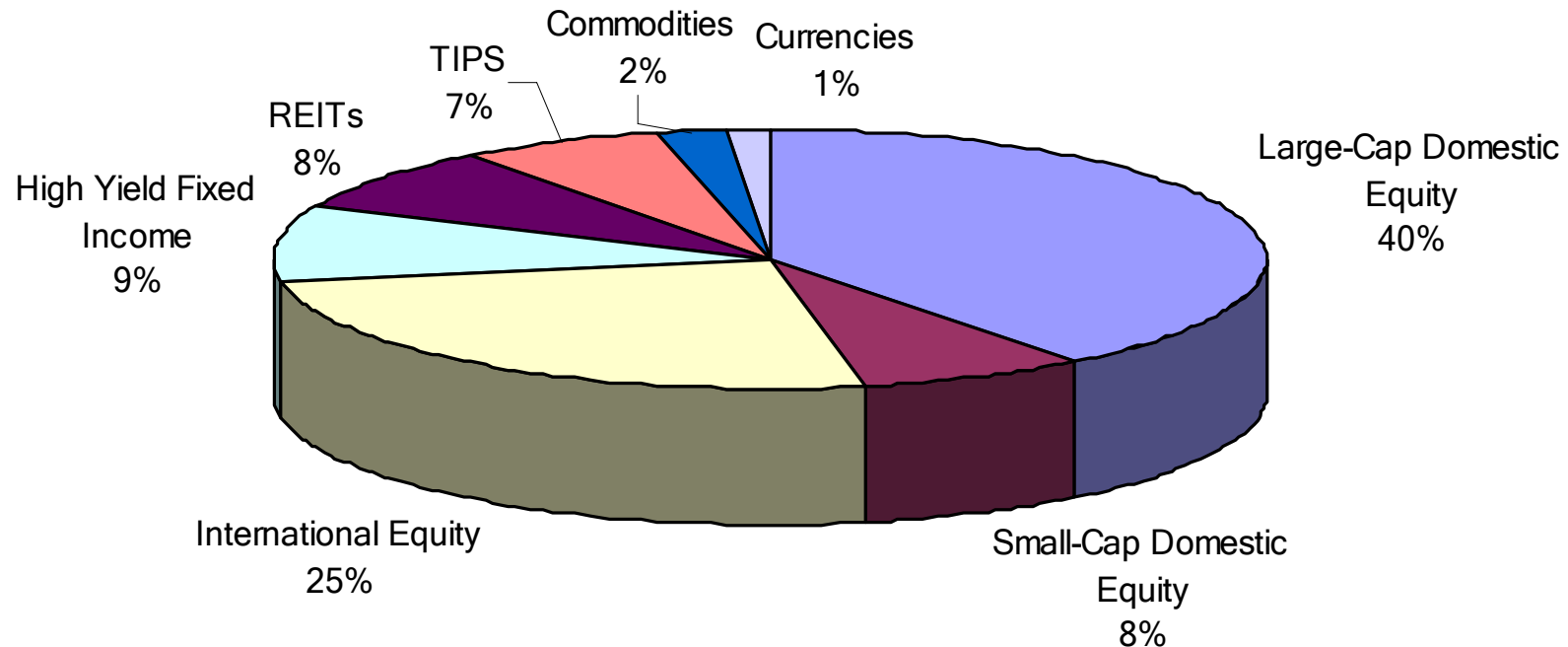
NDT Asset Allocation

Unconstrained Efficient Frontier with Asset Classes



NDT Asset Allocation

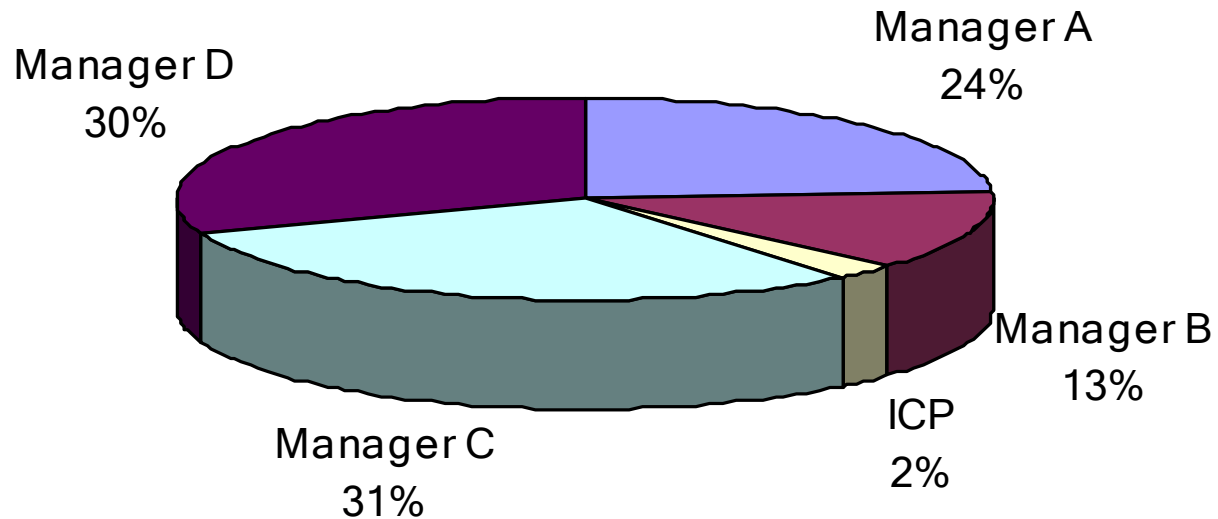
NDT Asset Class Weights



Unconstrained Efficient Frontier with NDT Fund (Beta Only)

- The NDT's portfolio with an expected beta return of 8.27% and risk of 13.34% plots close to the unconstrained efficient frontier.

NDT Large-Cap Domestic Equity Allocation



- **The Investment Challenge Program currently has about \$8 million in assets under management.**

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ICP Participating Universities

Public Universities

- Alabama A&M University
- Austin Peay State University
- East Tennessee State University
- Middle Tennessee State University
- Mississippi State University
- Mississippi University for Women
- Murray State University
- Tennessee State University
- Tennessee Technological University
- University of Alabama at Huntsville
- University of Kentucky
- University of Memphis
- University of Mississippi
- University of North Alabama
- University of Tennessee at Chattanooga

Public Universities Cont.

- University of Tennessee at Martin
- Western Carolina University
- Western Kentucky University

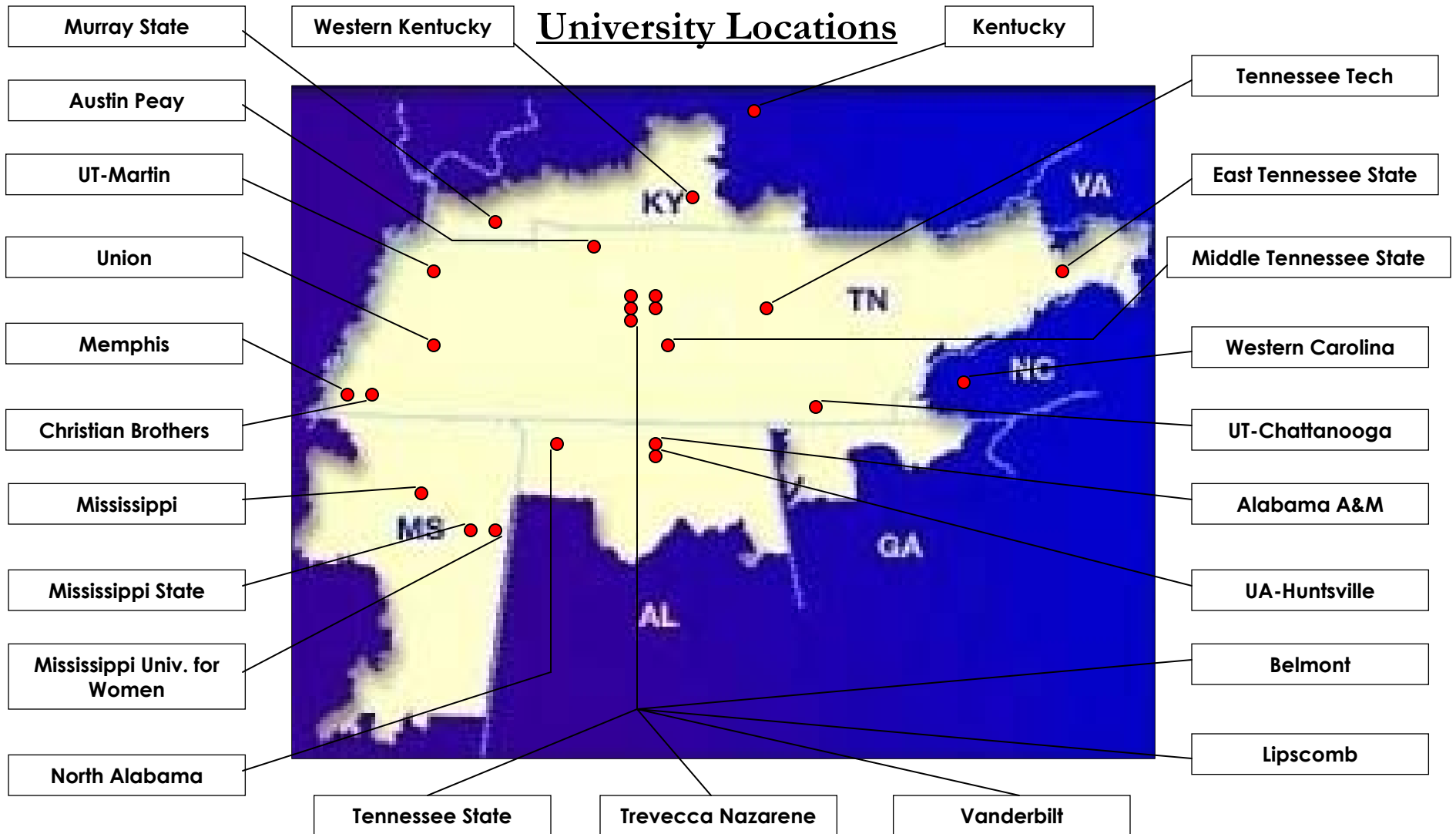
Private Universities

- Belmont University
- Christian Brothers University
- Lipscomb University
- Trevecca Nazarene University
- Union University
- Vanderbilt University

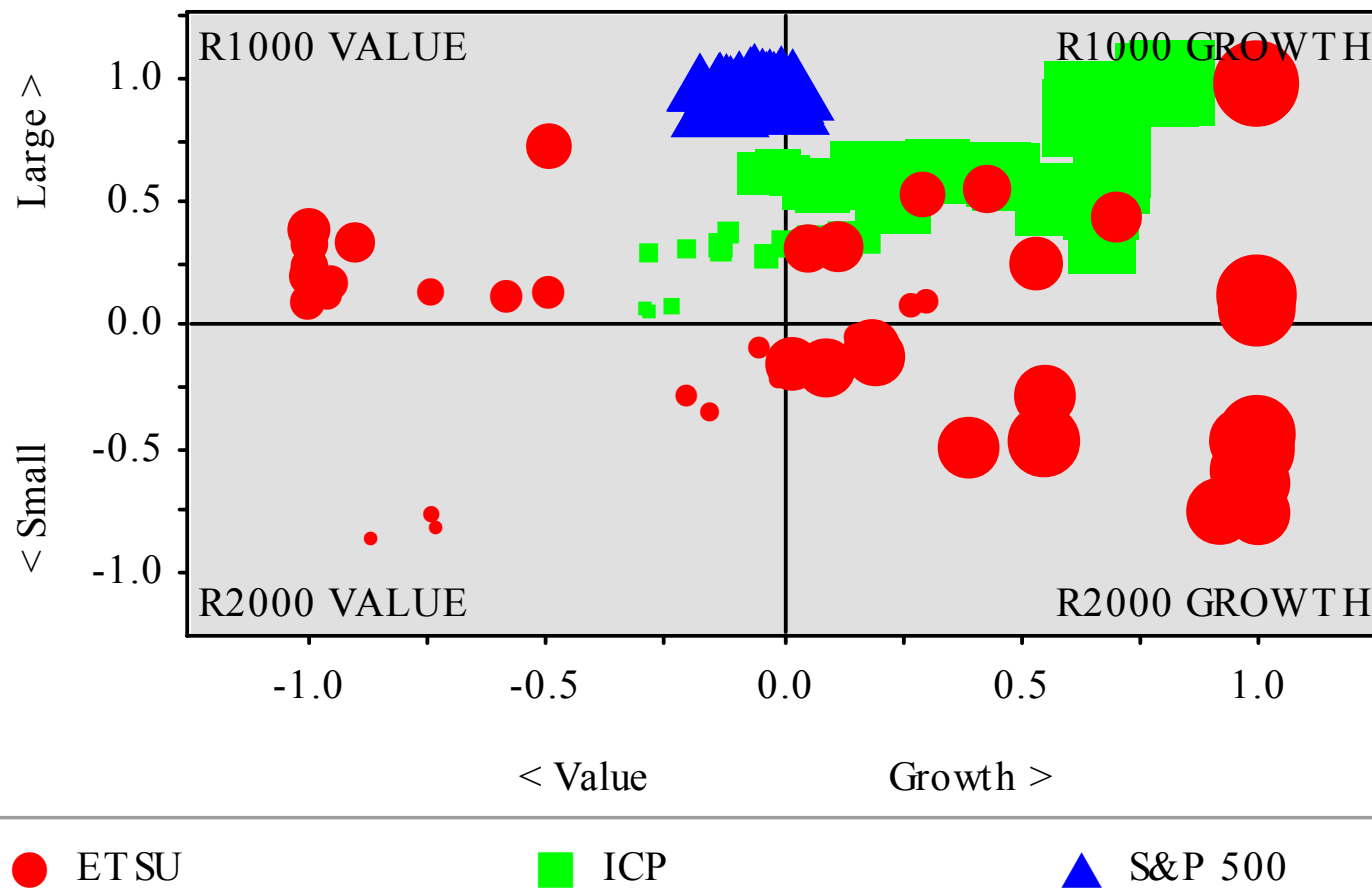
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ETSU Investment Style Scorecard (5 Yr)



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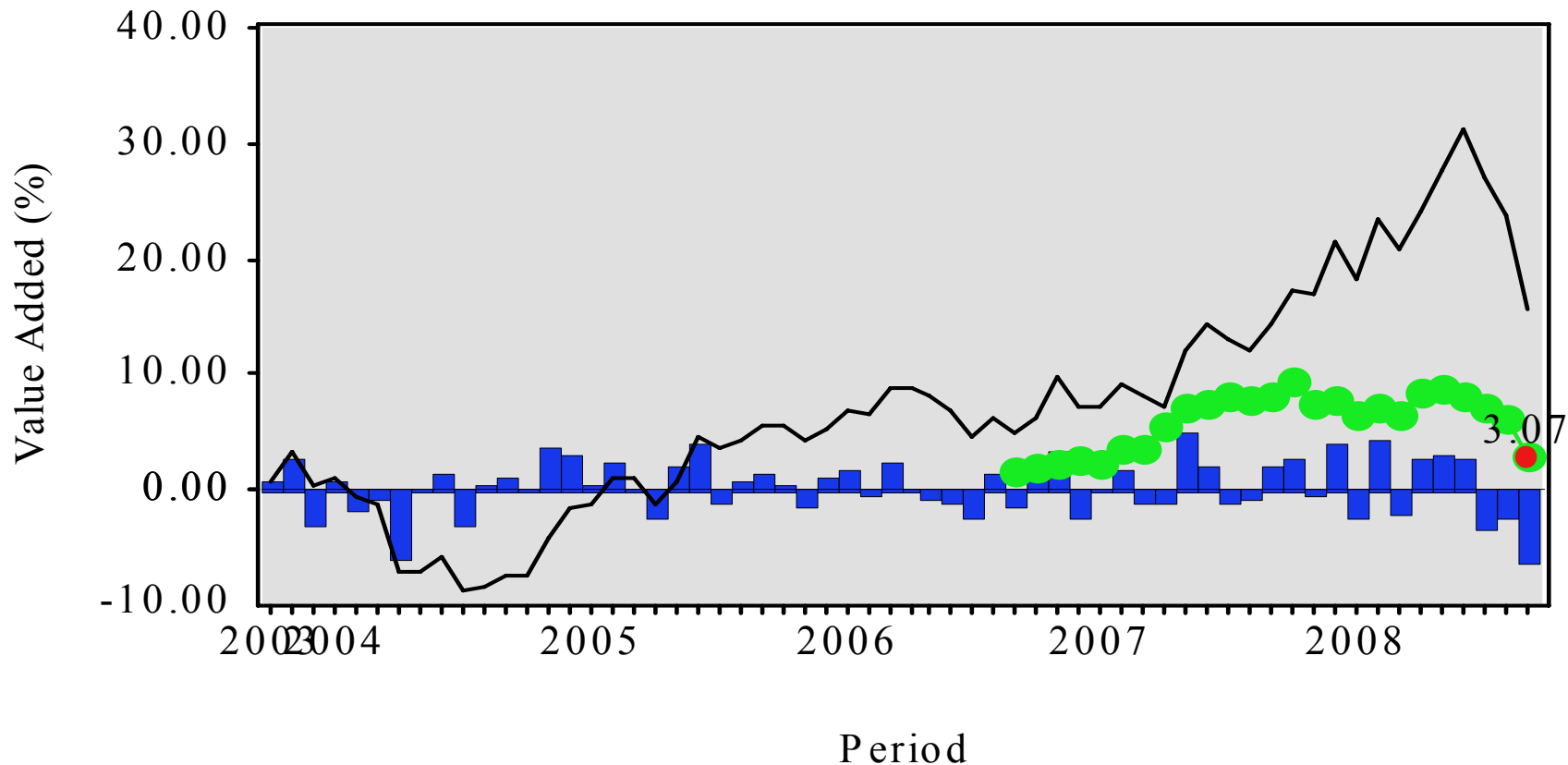
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ETSU Historical Performance (5 Yr)

	ETSU		ICP		S&P 500	
	Return	StdDev	Return	StdDev	Return	Std Dev
CUMULATIVE PERIODS						
Current Month	-15.09	---	-11.51	---	- 8.91	---
Last Three Months	-19.36	---	-12.89	---	- 8.37	---
Current Quarter	-19.36	---	-12.89	---	- 8.37	---
Previous Quarter	5.55	---	- 0.27	---	- 2.73	---
Year To Date	-23.23	---	-21.86	---	-19.29	---
199801 - 200809	20.94	6.15	---	---	43.32	4.31
ANNUALIZED PERIODS						
1 Year	-21.13	21.03	-22.66	16.37	-21.98	14.13
2 Years	0.06	18.18	- 4.54	14.12	- 4.68	12.79
3 Years	3.28	15.60	- 0.15	12.52	0.22	11.23
4 Years	8.99	15.05	3.64	12.17	3.10	10.57
5 Years	8.24	14.71	5.92	11.71	5.17	10.26
199801 - 200809	1.78	21.31	---	---	3.40	14.93
CALENDAR YEARS						
2007	19.39	3.54	9.79	2.69	5.49	2.67
2006	17.96	2.72	12.94	2.10	15.79	1.56
2005	12.26	2.86	6.55	2.78	4.91	2.19
2004	8.77	4.24	16.03	2.69	10.88	2.02
2003	31.07	3.24	29.69	2.97	28.68	3.15

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ETSU Value Added Performance (5 Yr)



Annualized since 10-2003

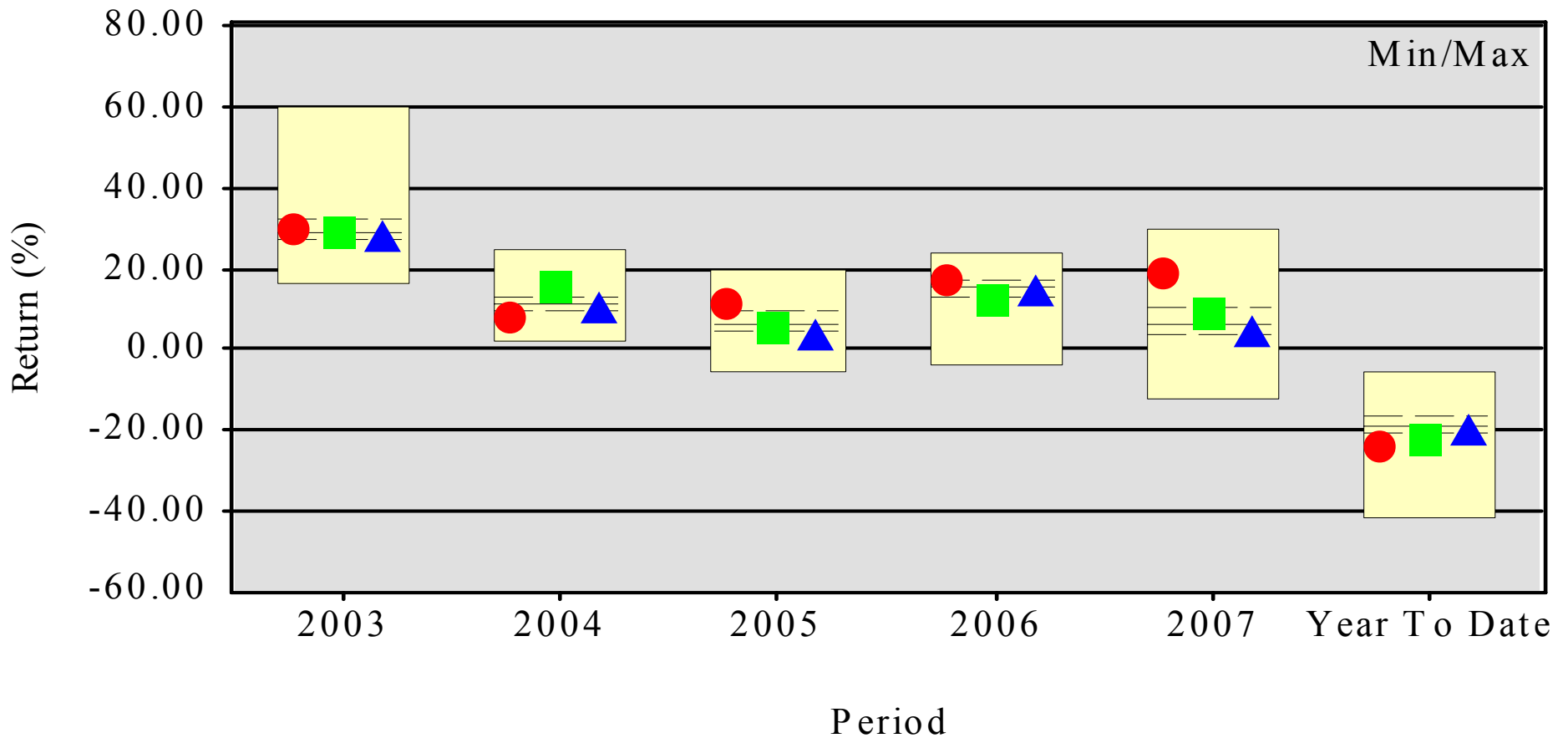
Cumulative Value Added

Annualized Value Added

Value Added

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ETSU Investment Manager Universe Ranking



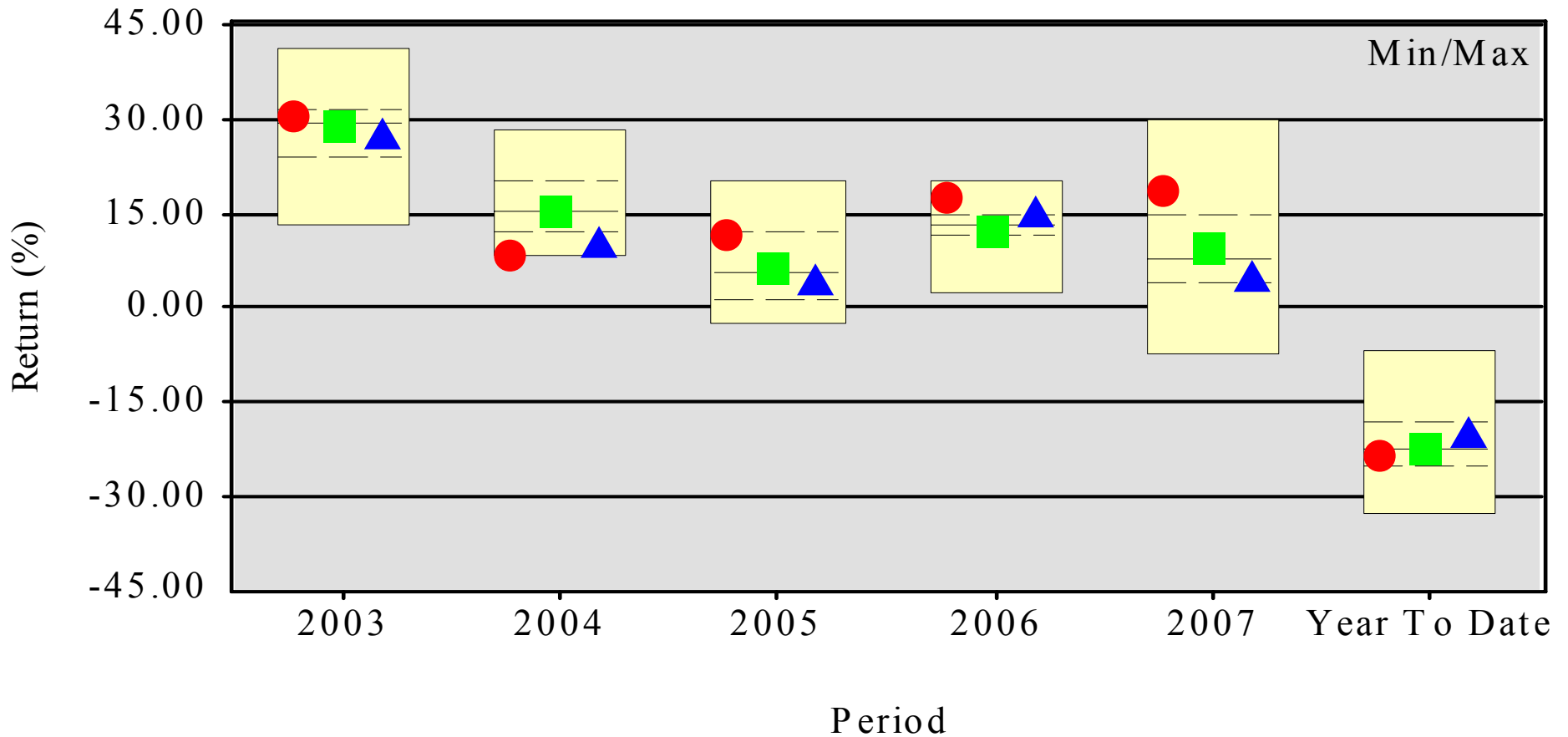
● ETSU

■ ICP

▲ S&P 500

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ETSU ICP Universe Ranking

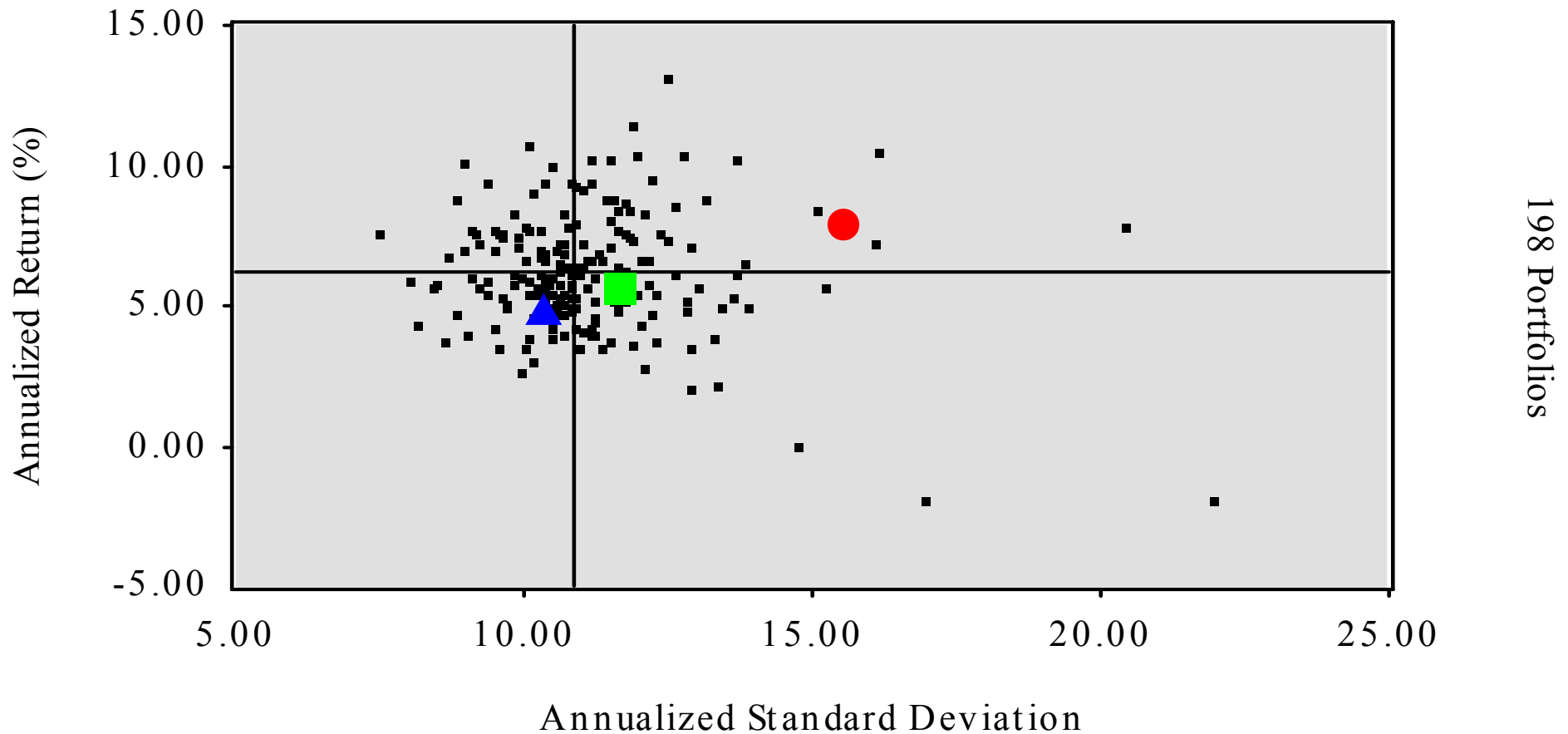


● ETSU

■ ICP

▲ S&P 500

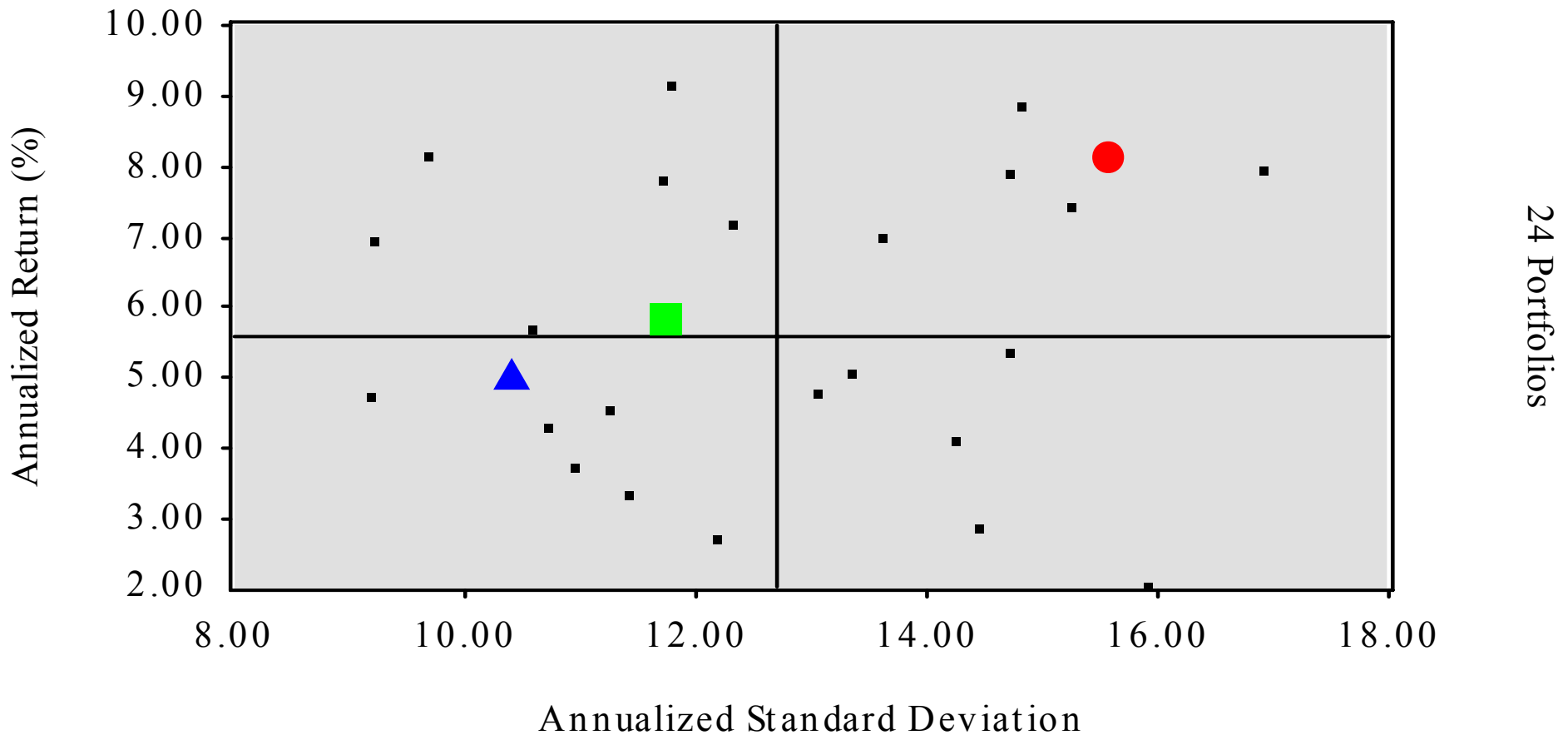
ETSU Investment Manager Universe Plot (5 Yr)



● ETSU ■ ICP ▲ S&P 500

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ETSU ICP Universe Plot (5 Yr)



● ETSU ■ ICP ▲ S&P 500