ARKANSAS TEACHER RETIREMENT SYSTEM BOARD OF TRUSTEES

Minutes December 5, 2005

The Arkansas Teacher Retirement System Board of Trustees met for a regular meeting on Monday, December 5, 2005, in the Board Room of the ATRS Building at 1400 West Third Street in Little Rock, Arkansas.

Members of the Board Present:

John Fortenberry, Chair Robin Nichols, Vice Chair Monty Betts Winfred Clardy Hazel Coleman Lawrence Colston Charles Dyer Dr. Paul Fair Beverly Leming Linda Parsons Ellen Terry

Others Present:

Mike Wickline, Democrat Gazette Betty and Jim McGuire Steve Cummings, Ennis Knupp Nathan Zinn, Ennis Knupp Betty and Jim McGuire Steve Cummings, Ennis Knupp Nathan Zinn, Ennis Knupp P. J. Kelly, Ennis Knupp George Ochs, J.P. Morgan Douglas Lawrence, J.P. Morgan Robert M. Parise, Jr., J.P. Morgan Jay B. Davis, Principal Global Investors Tuba Malinowski, Principal Global Investors Dennis Martin, RREEF America III Doug Sturiale, REEF America III Steve Wilde, UBS Global Asset Management Bruno Bertocci, UBS Global Asset Management Cheryl M. Duckworth, Wellington Management Alexander G. Grant, Wellington Management

Members of the Board Absent:

Robert H. "Bunny" Adcock, Jr. Dr. T. Kenneth James Gus Wingfield Jim Wood

Staff Present:

David Malone, Executive Direct
Julie Cabe, Deputy Director
Jo Ann Stewart, MPA
Wayne Greathouse, Deputy Director/
Finance
Gail Bolden, Assoc. Director/Operations
Phillip McNeill, Assoc. Director/Fiscal
Affairs
Christa Clark, Attorney Specialist
Donna Bumgardner, Investments
Hugh Roberts, Investments

Others Present:

J. Gregory Garrett, Capital Guardian Michael E. Nyeholt, Capital Guardian

I. Call to Order

Chair John Fortenberry called the meeting to order at 10:00 a.m. with a quorum present.

II. Interviews with Value-Added Open-End Commingled Real Estate Funds Mangers

As part of the revision of the ATRS real estate investment program, the Board approved earlier in 2005 investments in two open-end core strategy commingled funds, Prudential PRISA I and UBS RESA, and to date a total allocation of \$80 million to each company. As a next step in realigning the program, Ennis Knupp recommended hiring a value-added open-end commingled real estate funds manager. Representatives from three such funds were present to be interviewed. They were: George Ochs, Douglas Lawrence, and Robert M. Parise, Jr. on behalf of J.P. Morgan Asset Management; Jay B. Davis and Tuba Malinowski on behalf of Principal Global Investors; and Dennis Martin, Doug Sturiale, on behalf of RREEF America III.

Following the presentations the Board recessed at 11:28 a.m., to attend the annual Board/staff holiday luncheon. The meeting reconvened at 12:55 p.m.

III. Selection of Value-Added Open-End Commingled Real Estate Funds Manager

Following a discussion of the presentations, Ms. Parsons moved adoption of **Resolution No. 2005-36** (copy attached) to hire J. P. Morgan Asset Management and to authorize the Executive Director to enter into a contract with J. P. Morgan Asset Management to serve as a value-added open-end commingled real estate funds manager. Ms. Parsons amended her motion to add to the resolution a provision authorizing the Executive Director to allocate 0.5% of 1% of the System's real estate allocation to J. P. Morgan Asset Management, Ms. Coleman seconded, and the motion passed unanimously.

IV. Consultant's Report - Ennis Knupp

Mr. Cummings and Mr. Kelly reviewed three memos previously submitted to the Board regarding: *TCW Update (November 15, 2005 – copy attached)*, *Domestic Equity Structure (November 28, 2005 – copy attached)*, *The Basics of Shorting (November 28, 2005 – copy attached)*, and also distributed the Preliminary Performance Update for the period ending October 31, 2005.

V. Ennis Knupp Report on Trust Company of the West (TCW)

Previously Ennis Knupp recommended retaining TCW, but due to recent changes in the personnel involved in the day-to-day management of the System's account, Mr. Kelly stated that Ennis Knupp now recommended replacing TCW as a small cap growth stock manager. Lawrence Colston moved approval to dismiss TCW, Ellen Terry seconded, and the Board unanimously approved the motion.

Mr. Kelly reviewed the memo regarding domestic equity structure, noting the termination of Alliance large cap growth and TCW small cap growth portfolios. Ms. Parsons moved approval to shift the funds from TCW into a Russell 2000 Fund at State Street Global Advisors, transitioning to that Fund, and the preparation by Ennis Knupp of a study of large cap growth and small-medium growth managers for the replacement of Alliance and TCW, Robin Nichols seconded, and the motion passed unanimously.

Mr. Fortenberry called a recess at 2:21 p.m. and the meeting resumed at 2:27 p.m.

VI. Manager Reports

- 1. UBS Global Asset Management, Steve Wilde and Bruno Bertocci
- 2. Wellington Management, Cheryl M. Duckworth and Alexander G. Grant
- 3. Capital Guardian, J. Gregory Garrett and Michael E. Nyeholt

Mr. Malone distributed an updated Alternative Investment Summary as of June 30, 2005. The System started using Credit Suisse in June with a new method of dealing with alternative investments, and during the transition some of the data on alternative investments was not reported. The new report gives a better picture of alternative investments. He also distributed a revised copy of the Ennis Knupp Third Quarter 2005 Performance Report and stated that the asset allocation for Prudential Real Estate PRISA had been incorrectly reported as of September 30. The revised report shows the correct figure of \$80,000,000 in the CORE Pool.

Mr. Malone and Mr. Kelly discussed the memo regarding shorting. Ennis Knupp does not recommend the introduction of short selling into any ATRS manager mandates. If the Trustees want to explore this option, it will be put on the agenda of a future Investment Committee meeting.

VII. Adjournment

The meeting adjourned at 3:4	at 3:43 p.m.			
JoAnn Stewart, Recorder	David Malone, Executive Director			
John Fortenberry, Board Chair	Date Approved			

ARKANSAS TEACHER RETIREMENT SYSTEM 1400 West Third Street Little Rock, Arkansas 72201

RESOLUTION No. 2005-36

WHEREAS, the Board of Trustees of the Arkansas Teacher Retirement System desires to restructure its real estate holdings; and

WHEREAS, the Board recognizes the need for a Value-Added Open-End Commingled Real Estate Funds Manager.

NOW, THEREFORE, BE IT RESOLVED that after interviews by staff and the Board, the Board approves the hiring of JP Morgan Asset Management.

BE IT FURTHER RESOLVED that the Executive Director be, and hereby is, authorized by the Board of Trustees of the Arkansas Teacher Retirement System to allocate to J. P. Morgan Asset Management 0.5% of 1% of the System's Real Estate allocation.

BE IT FURTHER RESOLVED that the Executive Director be, and hereby is, authorized by the Board of Trustees of the Arkansas Teacher Retirement System to enter into a contract with JP Morgan Asset Management to serve as a Value-Added Open-End Commingled Real Estate Funds Manager.

Adopted this 5th day of December, 2005

JOHN FORTENBERRY, Chair

Arkansas Teacher Retirement System

ENNISKNUPP

MEMORANDUM

To:

Trustees and Staff of the

Arkansas Teacher Retirement System

From: P.J. Kelly, CFA

Steve Cummings, CFA

Jack Liu, CFA

Date:

November 15, 2005

Re:

TCW Update

TCW recently announced that Doug Foreman and Chris Ainley, the lead managers on the ATRS small cap growth portfolio, will no longer be involved in the day to day management of the account. Doug Foreman will remain at TCW acting as an advisor to the team and a client/consultant liaison, and Chris Ainley will leave the firm effective December 31, 2005 to spend more time with his family. Husam N. Nazar has been promoted to senior portfolio manager of the small cap growth team. The other three team members, R. Brendt Stallings, Mike Olson, and Patrick Wong will also remain on the growth strategies team.

Chris Ainley and Daug Foreman joined TCW from Putnam in the mid 1990s where they managed similar small cap growth strategies. In our opinion, both are adept stock pickers and were integral to the management of the small cap growth team. Given the loss of the two most senior and experienced professionals of this team, we no longer have a high degree of confidence in this manager's ability to improve performance going forward. We continue to recommend ATRS maintain exposure to small cap growth stocks in the portfolio, but no longer feel TCW is the best means by which to achieve this exposure.

We propose the following options to maintain exposure to this area of the market:

- 1. Conduct a search for an appropriate replacement. Because aggressive small cap growth stocks have been out of favor for an extended period, many firms have suffered poor performance and organization difficulties as has TCW. Finding a strong replacement, that is still accepting new assets, will be challenging.
- 2. Use the closest manager in style to TCW for this allocation (ING Small Cap Growth).

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vox 312 715 1700 fax 312 715 1952 www.ennisknupp.com 3. Use a passive small cap growth index fund.

We will conduct a U.S. equity structure review for the upcoming December 5, 2005 Board meeting. This analysis will assist the Trustees in the decision as to where and how to invest the TCW assets should this firm be terminated. This review will also address other issues in the U.S. equity portfolio such as whether or not to keep a passive allocation to large cap growth stocks (Russell 1000 Growth Index Fund) or if the Fund should invest these assets with an active manager.

We look forward to discussing these recommendations.

ENNISKNUPP

MEMORANDUM

To: Trustees and Staff of the

Arkansas Teachers' Retirement System

From: Patrick J. Kelly, CFA

Stephen Cummings, CFA

Date: November 28, 2005

Re: Domestic Equity Structure

Introduction

It is the policy of the Arkansas Teacher Retirement System (ATRS) to structure the domestic equity portfolio similar to the broad equity market. Such a structure mitigates risk versus the market from sources other than the bets intended by the investment advisors hired to manage the underlying portfolios. In other words, we attempt to minimize biases from style (growth and value) and capitalization (small, mid, and large) from dominating the relative performance of the portfolio. The major reasons are the performance of the different styles can be dramatically different from year to year, are difficult to predict, are likely to be similar over the long-run but can have a significant impact on total fund performance. When a domestic equity structure is dominated by one style, the unsavory scenario of manager level outperformance but aggregate equity portfolio underperformance becomes more likely. Risk in the portfolio can come from two general sources as we will quantify and discuss in this memo:

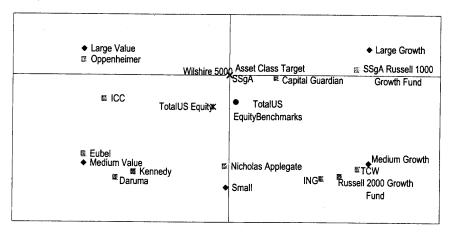
- Structural "Misfit" Risk. This occurs when the aggregate structure of the managers is biased towards
 one style. An example might be if a Fund utilized all large cap growth managers or was heavily
 weighted towards one particular style.
- Manager Specific Risk. This risk results from the manager's portfolio being different from their benchmark. An example would be if a manager were benchmarked to the S&P 500, but held no stocks that are constituents in this Index, or if the manager took other very large bets versus the penchmark.

Given the manager changes that have occurred in the past year, namely the termination of the Alliance large cap growth portfolio, and the pending decision to terminate the TCW small cap growth portfolio, we find this is a good opportunity to review the structure of the portfolio versus the broad market. We accomplish this by using a combination of benchmark risk analysis along with style analysis.

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Effective Style Map



◆ Style Indexes

Managers ▲ Asset Class Target × Wilshire 5000 × TotalUS Equity ● TotalUS EquityBenchmarks

The style map shows the U.S. equity component has a bias towards small cap and value-oriented stocks. We can use benchmark risk analysis to help determine the sources of this bias. Our recommendation is to maintain style neutrality at the aggregate level, because the styles have tended to perform dramatically different from year-to-year and no style tends to dominate for an extended period. The attached table to the memo demonstrates this point.

Benchmark Risk Analysis

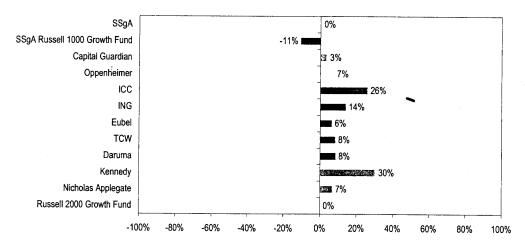
	Current Allocation %	Benchmark Risk	Attribution		Total
			Manager Specific	Misfit	Attribution
SSgA Wilshire 5000	21.3%	0.1%	0.3%	0.0%	0.3%
Russell 1000 Growth	14.0	0.0	0.0	-10.8	-10.8
Capital Guardian	5.4	9.5	7.6	-4.1	3.5
Oppenheimer	9.2	5.4	5.8	1.6	7.3
ICC	12.6	9.5	29.3	-3.5	25.8
ING Aeltus	5.4	6.2	-0.3	14.2	13.9
EBS	5.3	11.3	-0.4	6.6	6.2
TCW	2.9	16.3	0.7	7.6	8.2
Daruma	3.4	6.9	-0.6	8.9	8.4
Kennedy	10.4	6.3	3.0	27.4	30.4
Nicholas Applegate	10.1	4.5	6.0	0.8	6.8
Total Domestic Equity	100.0%	3.1%	51%	49%	100.0%

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Annualized Benchmark Risk – This number represents the likely range of relative performance versus the benchmark. For the total domestic equity component, the benchmark is the broad market as represented by the Wilshire 5000 Index. For the individual managers, the benchmark risk is measured against their style specific benchmark. This number can specifically be interpreted as the performance of the domestic equity component will likely be within +/- 3.1% annualized, two-thirds of the time (this is one standard deviation in a normal distribution). So if the Wilshire 5000 Index return is 10%, we would expect the return to range from 7 to 13% in any given year, a majority of years. Using an individual manager as an example, if the return of the Russell Mid Cap Value Index were 10% in a given year, we would expect EBS's return to fall in the range of -1.3 to 21.3% (+/- 11.3%).

Attribution – The risk attribution shown above is broken down into the two risk factors – manager specific and misfit. These two figures are additive to the total attribution. The manager specific attribution is derived from the risk or "bets" the manager is taking against its given benchmark. The "misfit" attribution is derived from a mismatch between the aggregated manager benchmarks and the broad market. Because the overall bias of the domestic equity component is towards small cap and value stocks, managers with this style tend to contribute more to the misfit risk (EBS and Kennedy are the largest).

Total Contribution to Active Risk



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Interpreting the results

Looking at the total attribution, we see that the two largest contributors to risk are Kennedy (30.4%) and ICC (25.8%). This means that over half of the relative performance of the total domestic equity component is reliant upon the performance of these two managers. Looking at the break-down of the attribution, we can see where the individual managers' risk is derived. For ICC, we see it is all from bets taken against the benchmark, whereas Kennedy's risk comes from misfit. The reason for this is ICC's benchmark is the Russell 1000 Index, which is a large cap style neutral benchmark. If ICC characteristics were more similar to its benchmark, it would actually have risk reducing properties (3.3% reduction). An allocation to a large cap portfolio, like the Russell 1000, complements the total U.S. equity component well because the overall portfolio is biased towards small cap stocks. Because the bets ICC takes relative to its benchmark are so large, and these bets have largely been towards small and value oriented stocks in the past, it actually increases the risk of the overall portfolio. This is not necessarily a bad thing, in fact, this is entirely consistent with the investment style of ICC and is one of the reasons why it has added value over time.

Kennedy's benchmark is the Russell 2000 Value Index, which is a small cap value index. Because Kennedy has the largest allocation to small cap value stocks, and the total component is biased towards that area, it drives up the risk of the portfolio.

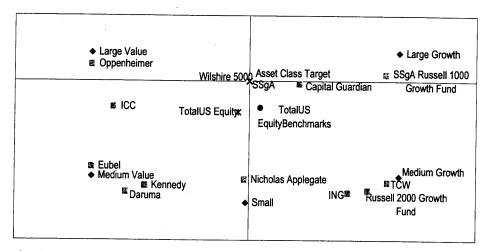
The ideal structure is one where misfit risk is minimized, and manager specific risk is maximized. The main reason being that misfit risk is largely derived from the allocation decisions of the Trustees – which managers to use and how much to allocate to those managers. If the domestic equity component has a structure that is largely neutral to the market, then the managers' decisions will drive the risk. To help move closer to such a structure and reduce the risk of the portfolio, we recommend transferring \$100 million from both ICC and Kennedy to the SSgA Wilshire 5000 Index Fund.

Benchmark Risk Analysis - Post Transfers

	Revised	Benchmark Risk	Attribution		Total
	Allocation %		Manager Specific	Misfit	Attribution
SSgA Wilshire 5000	26.4%	0.1%	0.4%	0.0%	0.4%
Russell 1000 Growth	14.0	0.0	0.0	-10.4	-10.4
Capital Guardian	5.4	9.5	8.7	-4.0	4.7
Oppenheimer	9.2	5.4	6.5	0.5	7.0
ICC	10.1	9.5	25.2	-3.3	21.9
ING Aeltus	5.3	6.2	-0.4	17.2	16.8
EBS	5.4	11.3	-1.2	7.5	6.3
TCW	2.9	16.3	1.8	9.1	10.9
Daruma	3.4	6.9	-0.4	9.7	9.3
Kennedy	7.9	6.3	2.4	22.4	24.9
Nicholas Applegate	10.1	4.5	7.1	1.3	8.3
Total Domestic Equity	100.0%	2.7%	50.0%	50.0%	100.0%

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Effective Style Map



◆ Style Indexes

Managers

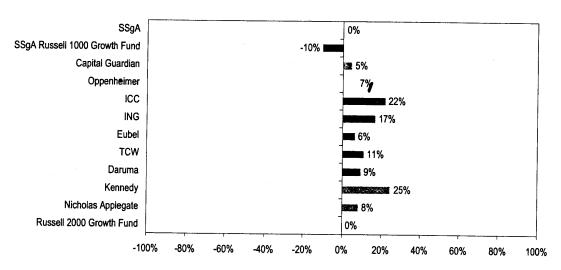
Asset Class Target

Wilshire 5000

TotalUS Equity

TotalUS

Total Contribution to Active Risk



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As shown in the previous exhibits, this move decreases the benchmark risk from 3.1% to 2.7% and reduces the reliance upon Kennedy and ICC. Because moving these assets to the SSgA Wilshire 5000 Index Fund impact the mix between active and passive, we explore this in the next section.

Active vs. Passive Mix in Domestic Stocks

	Current Percentage	Target	Range
Active	64.7%	70%	50 – 90%
Passive	35.3%	30%	10 - 50%
Wilshire 5000	21.3%		
Russell 1000 Growth	14.0%		
Total	100%	100%	

ATRS currently uses two passive investment funds. One is benchmarked to the Wilshire 5000 Index, to gain broad market exposure, and the other is benchmarked to the Russell 1000 Growth Index, to gain style specific exposure to large cap growth stocks. The large cap growth allocation has been used as a "parking space" for the former Alliance Capital portfolio.

With the decision as to whether to retain TCW before the Board, it may make sense to use another style specific benchmark for the TCW assets if the decision is to terminate.

While style specific passive investments can be a valuable tool for balancing the style exposure of a portfolio, lowering risk, lowering cost, or acting as a temporary parking spot for terminated managers, they are not the ideal vehicle for passive investments for the following reasons:

- The size of the allocation falls upon the Trustees. In such an arrangement, there is no active manager
 to make various bets versus the benchmark.
- Style specific index funds are not as diversified as the broad market.
- Style specific index funds are rebalanced periodically, creating additional turnover in the portfolio.

Therefore, we offer the following alternatives:

- 1) Identify active large cap and small cap growth managers to replace the Alliance and TCW portfolios, or
- Continue to use style specific benchmarks to balance the portfolio's style exposure, but reduce the total level of active management

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Summary

We recommend transferring \$100 million from both the ICC and Kennedy portfolios to the SSgA Wilshire 5000 Index Fund to reduce the style bias of the U.S. equity structure and lower the risk of the portfolio. We also offer the following options as to how to invest the legacy Alliance portfolio and potentially the TCW small cap growth portfolio:

- 1) Conduct active manager searches for large cap and small cap growth managers, or
- 2) Continue to use style specific index funds to balance the portfolio and reduce the overall level of active management

We look forward to discussing these recommendations.

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MEMORANDUM

To: Trustees and Staff of the

Arkansas Teacher Retirement System

From: Jack Liu, CFA

P.J. Kelly, CFA

Steve Cummings, CFA

Date: November 28, 2005

Re: The Basics of Shorting

Summary

Most investors purchase stocks or securities with the hopes that the price will rise and that profits will be made going "long." Short selling, which has become more popular over the years, allows investors to profit from securities that fall in value. This strategy has proliferated with the growing presence of hedge funds in particular; however, an increasing number of traditional long-only investment managers have considered relaxing their restrictions to allow for the shorting of securities. This memorandum discusses the basics of shorting and the risks that accompany the strategy. We will also discuss the appropriateness of this technique for institutional investors and whether it is consistent with the goals of Arkansas Teachers' Retirement System (ATRS).

The Basics

Short sellers intend on profiting when stock prices decline by selling a stock they do not own and then purchasing it back at a lower price in the future. The process by which this happens is slightly more complicated than if one was to just go long. When an investor sells a stock short, he/ she would borrow shares from a broker and sell them to the buyer in exchange for proceeds. The investor would wait until the stock price drops to some level and then buy the shares back to return to the broker and pocketing the difference. For example, if one believes ABC Corporation's stock price is too high at \$100, he/she may borrow 100 shares from the broker and sell those shares short at \$100. If the stock falls to \$70, that person may decide to buy back those 100 shares, return them to the broker, and profit \$3,000 (100 shares x \$30) from the transaction. For simplicity sake, in this example we assume no transaction costs.

Part of the whole process involves a margin account when borrowing shares from the broker. In addition to the broker charging interest on the loan, the loaning broker requires that a portion of the loaned security's value be placed in a safe place. This is called collateral, and the amount of collateral required varies by broker, security type, length of loan period and credit-worthiness of the borrower. If the value of the loaned security rises, additional collateral may be required. This is called a "margin call".

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Ennis Knupp + Associates 10 South Riverside Plaza, Suite 1600 Chicago, Illinois 60606-3709 vox 312 715 1700 fax 312 715 1952 www.ennisknupp.com The securities exchanges impose some unique rules on short-selling to preserve an orderly market. Specifically, some smaller and/or lower-priced stocks may not be sold short. Regulators also prohibit a short sale unless the last trade on the security saw an increase in its price (uptick rule) to avoid a continuous slide in a security's price.

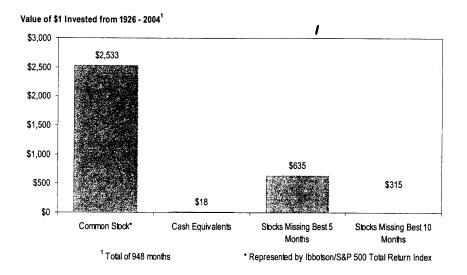
The Risks

Short selling is risky for several reasons. First of all, losses are potentially unlimited if the stock rises. Even though a stock's perpetual rise in price is unlikely, losses can amount to more than the initial investment. Conversely, gains are limited to 100% if a stock goes to \$0.

Second, a margin account, or borrowed money, is involved with short selling and, therefore, requires setting up the funds and administering inflows and outflows from a collateral account.

Another risk associated with shorting securities comes from a "short squeeze" event where a significant number of short sellers try to cover their positions at the same time, boosting the stock price even further. This event has the potential to increase the stock price substantially, creating losses in a relatively short period of time.

One reason some managers short stocks is to express in their portfolios a negative outlook on the stock market generally. Referred to as market timing, this practice introduces the potential to be out of the stock market during strong performing months. The chart below illustrates the risk of getting a bet like that wrong.



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Institutional Practice

Traditional asset managers are starting to seek a relaxation of their guidelines in long-only strategies. Some feel that their clients will benefit from the manager's ability to act on stocks they feel are undervalued and those that are overvalued. A greater number of institutional investors are open to learning more about this approach¹ and some may employ managers who use it. Clearly, the ATRS Board would need to be very comfortable with the skill of a manager to provide them this flexibility.

Although the practice of shorting has garnered much attention, primarily due to the popularity of hedge funds, it is rarely found outside these vehicles. Endowments and foundations are heavy users of hedge funds, many of which involve short selling. We are not aware of many institutional investors doing short selling in any other fashion.

Recommendation

We do not support the introduction of short selling into any ATRS manager mandates. If the trustees wish to allow any manager a greater opportunity to act on a generally negative market outlook, we suggest doing so by permitting them a greater allocation to cash.

¹ Source: Pensions & Investments, November 14, 2005