MINNESOTA STATE BOARD OF INVESTMENT MEETING
March 15, 1990
&
INVESTMENT ADVISORY COUNCIL MEETING
March 14, 1990

AGENDA
STATE BOARD OF INVESTMENT
MEETING

Thursday, March 15, 1990
8:00 A.M.
Governor's Reception Room
State Capitol
Saint Paul

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1.	Approval of Minutes of January 10, 1990 Meeting	
2.	Report from the Executive Director (H. Bicker)	
	A. Quarterly Investment Review (Oct. 1 - Dec. 31, 1989)	A
	B. Portfolio Statistics (Dec. 31, 1989)	B
	C. Administrative Report	C
	1. Reports on Budget and Travel	
	2. Report on SBI Client Conference	
	3. Update on 1990 Legislative Session	
3.	Report from the Task Force on Manager Retention	D
	A. Status Report	
4.	Reports from Investment Advisory Council Committees (J. Yeomans)	
	A. Equity Manager Committee	E
	1. Review of Active Equity Misfit	
	2. Review of Active Manager Performance	
	3. Renewal of Contracts (Concord, Franklin, Rosenberg and Sasco)	
	4. Recommendation from the Small Cap Manager Search Committee	
	B. Fixed Income Manager Committee	F
	1. Report on Rebalancing in the Post Fund	
	2. Review of Enhanced Index Manager Performance	
	3. Review of Active Manager Performance	
	4. Renewal of Contract with BEA	
	5. Approval of Private Placement Guidelines	
	C. Alternative Investment Committee	G
	1. Report on Fund Manager Annual Reviews	
	2. Report on Sale of Resource Investment (Apache II)	
	3. Report on Use of Consultants	
	4. Approval of Venture Capital Commitment (Pathfinder III)	
5.	Report from the Task Force on South Africa	H
	A. Status Report on Implementation of the Board's Resolution	

MEMBERS OF THE BOARD:
GOVERNOR RUDY PERPICH
STATE AUDITOR ARNE H CARLSON
STATE TREASURER MICHAEL A McGRATH
SECRETARY OF STATE JOAN ANDERSON GROWE
ATTORNEY GENERAL HUBERT H HUMPHREY III

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
Room 105, MEA Building
55 Sherburne Avenue
St Paul, MN 55155
Tel (612) 296-3328
FAX. (612) 296-9572

MINUTES

STATE BOARD OF INVESTMENT

January 10, 1990

The State Board of Investment (SBI) met on Wednesday, January 10, 1990, in Room 15 of the State Capitol at 8:30 A.M. Secretary of State Joan Anderson Growe chaired the meeting. State Treasurer Michael A. McGrath and State Auditor Arne H. Carlson were present. Governor Rudy Perpich and Attorney General Hubert H. Humphrey III were absent.

The minutes of the October 4, 1989 meeting were approved.

EXECUTIVE DIRECTOR'S INVESTMENT REPORT

Howard Bicker, Executive Director, reported on fund performance for the quarter ended September 30, 1989. He referred Board members to the Quarterly Report on Objectives in the meeting materials, which showed returns for the Basic Retirement Funds, the Post Retirement Fund, and the funded status of the retirement systems in aggregate. Mr. Bicker reported that for the quarter ended September 1989, the Basic Retirement Funds increased in value by 7%, with the increase due primarily to common stock appreciation. Mr. Bicker reported that during July and August 1989, $300 million in the Basic Retirement Funds was moved from equities to bonds in order to rebalance back to the Funds' long term asset mix. He stated that staff undertook an additional rebalancing in October and moved $150 million from the stock market to the bond market. He stated that the rebalancing reduced a remaining overweighting in stocks and raised a limited amount of cash. Mr. Bicker stated that the total rate of return for the Basic Retirement Funds for the quarter was 7.0% compared to the composite index of 6.4% and the return for the quarter for the total fund excluding alternative investments was 7.9% compared to the return of the median balanced fund of 5.4%. Mr. Bicker stated that both the common stock segment and the bond segment outperformed the market during the quarter.

Mr. Bicker reported that the Post Retirement Fund increased in value by 2.2% during the quarter, and that there were no significant changes in the Fund's asset mix. Mr. Bicker stated that excess investment earnings in the Post Fund generated a 4.0% benefit increase for retirees effective January 1, 1990. He stated that the five year annualized benefit increase was 7.3%. He reported that the stock segment slightly underperformed the benchmark for the quarter but outperformed it for the year.

Mr. Bicker then referred Board members to the portfolio statistics and stated that as of September 30, 1989, the Board managed assets totalling $15.4 billion.

EXECUTIVE DIRECTOR'S ADMINISTRATIVE REPORT

Mr. Bicker referred Board members to the budget and travel reports in the meeting materials. He stated that the Board seminar originally scheduled for November was postponed. He stated that staff will attempt to reschedule the seminar after the 1990 Legislative Session. Mr. Bicker reported that the annual SBI Client Conference is tentatively scheduled for late February, and that staff are working with Board deputies to set an agenda and finalize plans. Mr. Bicker called attention to an error in the September 1990 SBI and IAC meeting dates reported in the meeting materials, and stated that a revised schedule with the correct dates was distributed. He reported that the Board's 1989 Annual Report has been distributed. He then stated that the SBI received a clean audit opinion for fiscal year 1989 from the Office of the Legislative Auditor.

Mr. Bicker reported that a 4.04% benefit increase effective January 1, 1990 was provided to retirees from Post Retirement Fund earnings. He stated that he continues to have discussions with retiree groups and the retirement funds concerning a possible change in the Post Fund benefit increase formula. He added that a joint meeting of the retirement systems is scheduled for February 1, 1990. He stated that he has been invited to speak at the meeting about the Post Fund and prospective changes and that he will report back to the Board at a subsequent meeting.

Mr. Bicker then stated that the Board approved his FY 1990 Work Plan, and that a status report for the first half of the year is included with the quarterly report. In addition, Mr. Bicker provided a status report on Police and Fire Fund consolidation. He stated that in 1987 the Legislature enacted a law allowing paid police and fire funds to voluntarily merge with the statewide PERA Police and Fire Fund. He stated that three funds merged in 1987 and 1988 and that effective January 1, 1990, eight additional local plans merged with the statewide plan. He stated that one other local plan may consolidate on March 31, 1990. Mr. Bicker added that approximately 30 paid police and fire retirement organizations in the state remain independent and have not merged with the statewide plan.

He then stated that staff reported at the last meeting that $300 million had been moved from stocks to bonds to rebalance the Basic Retirement Funds back to its long term asset class targets. He stated that as the market continued to move up, staff undertook a further rebalancing October 1, 1989 by moving an additional $150 million from stocks to bonds.

SBI ADMINISTRATIVE COMMITTEE REPORT

Mr. McGrath reported that the SBI Administrative Committee did not meet during the quarter. He stated that a discussion of the composition and continuation of the Administrative Committee was laid over from the October 1989 Board meeting. He stated that he recommends that the Board continue the Committee and that the Committee meet as needed on the call of the Chair. Ms. Growe stated that the recommendation is a continuation of current policy and requires no motion.

REPORT FROM THE TASK FORCE ON MANAGER RETENTION

Ms. Judy Mares stated that she chaired the Task Force on Manager Retention. She stated that the other members of the Task Force were Jim Eckmann, Dayton Hudson; Debbie Veverka, Honeywell; Jan Yeomans, 3M; and Jim Hacking, PERA. She referred members to a handout provided at the meeting (See Exhibit A). She reported that the Task Force cites several reasons for utilizing active management. She stated that active management offers the potential to earn returns in excess of the market. She stated that active management provides protection in down markets, and observed that history suggests that active management outperforms passive management in down markets. She then stated that staff now has greater experience and knowledge and more sophisticated analytical tools necessary to find those managers who have the capacity to outperform the market. She stated that because the Task Force cannot predict with certainty future market conditions, the members recommend a mix of active management and passive management to diversify the portfolio. She added that the Task Force believes that employing passive management for the entire equity portfolio would be unusual and imprudent.

Ms. Mares then listed several disadvantages with respect to employing active managers. She stated that above market returns are uncertain and are not realized in a steady, easy pace. She stated that hiring and evaluating managers requires significant amounts of staff resources. She said it is unclear whether individual firms can continue to manage larger and larger portfolios. She observed that this may hinder the SBI's ability to place a large proportion of its assets under active management. Finally, she stated that costs are higher for active management. She observed that active management fees and transaction costs are large on an absolute level but the fees as a percent of the total portfolio are low. She added that the SBI's use of performance based fees lowers management fees. In conclusion, she stated that the members of the Task Force have a strong belief that active management will earn more than market average returns but said that no one can predict exactly when active equity management will again outperform passive management.

Mr. Carlson observed that while the Task Force indicated that active management returns have historically exceeded passive management returns, the numbers reported for the Board indicate the opposite. Mr. Carlson stated that he wanted to examine numbers that show how much money the Board did not earn because of the underperformance of the active managers relative to an index fund. He questioned the appropriateness of having half the equity allocation passively managed and half actively managed with the result being the performance of one is a drag on the other. He also questioned whether the addition of a completeness fund would create an equity program that simply duplicates the market rather than sets a target that exceeds the market. Mr. Carlson stated that he understood the Task Force was reluctant to relinquish active management, but that he wanted to be sure that the decision is based on an objective, unbiased review of the issue.

Ms. Mares stated that the Task Force's expectation is that a commitment to a diversified program with active and passive management will best provide the chance to outperform the market. She stated that the Task Force agrees that there will be periods in which it is difficult for active managers to outperform passive managers. She stated that the Task Force also believes that there will be periods of time in which active managers outperform passive managers. She stated that the Task Force and other members of the IAC cannot predict for the Board when that period of time will occur. She then stated that because they cannot predict with certainty, the Task Force recommends that the Board not invest 100 percent actively or 100 percent passively. She stated that the Task Force wishes to maintain the potential for earning a better than market return while avoiding a more aggressive position than they can confidently recommend.

Mr. Carlson then stated that the current long term allocation to stocks in the Basic Funds was a wise decision for the Board. However, he stated he believed that the current mix of active and passive management with the addition of a completeness fund indicates that the Board's strategy is to duplicate rather than beat the market. Ms. Mares said that she disagreed with that assessment. She stated that it is her understanding that the components of the active investment program should give a risk profile that looks like the market but that active management provides the opportunity for returns greater than the market.

In response to a comment by Mr. Carlson regarding manager benchmarks, Ms. Growe stated that one of the goals of the Task Force was to examine the method the Board uses to evaluate managers. She stated that the IAC had a lively discussion about the issue at its meeting January 9, 1990, and the Task Force decided that before they can address the manager retention issue they must address the active versus passive issue. Ms. Mares affirmed that the Task Force intends to provide a complete review of the manager retention policy as the second phase of its analysis.

Mr. McGrath moved that the Board reaffirm its current policy that up to one half of the stock and bond segments in the Basic Funds be actively managed. Mr. Carlson said that he would prefer to delay voting on the motion until the Task Force reports on the manager retention policy. In response to a question from Mr. McGrath, Ms. Mares stated that it would be helpful to the Task Force to have clear support from the Board concerning the use of active management. In response to a question from Ms. Growe, Mr. McGrath revised his motion and moved that the State Board support the use of active management. The motion was adopted.

INVESTMENT ADVISORY COUNCIL COMMITTEE REPORTS
ASSET ALLOCATION COMMITTEE

Ms. Yeomans stated that the Asset Allocation Committee met to review the ten percent allocation to real estate in the Basic Retirement Funds. She stated that the Committee reviewed the SBI's two underlying reasons for investing in real estate, i.e., to act as an inflation hedge and to diversify the portfolio. She stated that the Committee concluded that both objectives had been met by the real estate investments currently in place. She stated that the Committee discussed the long term and short term prospects for the real estate market and concluded that while the ten percent long term allocation was appropriate, the SBI should not commit additional resources to real estate simply to reach the ten percent target. She stated that the Committee recommends that the Board reaffirm its long term policy that ten percent of the assets of the Basic Funds be invested in real estate but that in the near term new investments should be made on a selective basis.

In response to a question from Mr. Carlson, Ms. Yeomans stated that the Wilshire real estate index by which the Board's real estate returns are measured is probably the best index available, but it is not an exact performance standard. She stated the Committee realizes that an index is a guideline and does not represent a precise measurement process. In response to another question from Mr. Carlson, Ms. Yeomans stated that she believed an appropriate time period by which to evaluate real estate is 10 to 15 years. She further stated that few parties have that much experience with real estate, which is one of the reasons there is a low comfort level with any of the available indices.

Mr. Carlson moved the Committee recommendation. Mr. McGrath seconded. The motion was approved.

EQUITY MANAGER COMMITTEE

Ms. Yeomans reported that the Equity Manager Committee reviewed the active managers and discussed an in-depth analysis of BMI Capital that was prepared by staff. She reported that the Committee agreed with a staff recommendation to terminate BMI. First, she stated that the firm's performance has been marginal. Under the Board's current policy, she said BMI should be placed on probation for quantitative reasons, the second time in two years such action was necessary. Second, she stated that a key portfolio manager was removed from the account without adequate explanation. She stated that because of these reasons staff and the Committee lack confidence in the firm's ability to perform in the future. She stated that the Committee recommends that the Board terminate BMI and place the approximately $60 million portfolio in the index fund. She urged the Board not to interpret this recommendation as a move away from active management. She said that the IAC sees attractive opportunities in active management especially in the small growth stock segment of the market.

After some discussion, Mr. Carlson moved that the Board terminate BMI and place the BMI portfolio with another small capitalization stock manager. In response to a question from Ms. Growe, Mr. Bicker stated that staff reviews potential managers on an ongoing basis. He stated that it was staff's recommendation to place the BMI portfolio in the index fund because staff believed it was premature to bring in a new manager while the Board was debating the issue of using active or passive management. In response to a question from Mr. Carlson, Mr. Bicker stated that a new manager could be selected and hired within three months. Mr. McGrath questioned whether the motion should include a specific amount to be transferred to a newly hired manager. In response to a request from Ms. Growe, Mr. Carlson restated his motion and moved that BMI be terminated, that the BMI portfolio be transferred to the index fund, that staff begin a search process for a new manager with a style similar to that of BMI, and that the new manager be funded out of the index fund in an amount to be determined. Mr. Carlson stated that the issue of active or passive management will always be before the Board. Mr. McGrath stated that he believed the active management policy ought not be subjected to continued review. After a call for a vote by Ms. Growe, the motion was approved.

Ms. Growe then stated that she believes that after attending Administrative Committee meetings and IAC meetings that staff and the IAC have been unclear whether the Board supported active management. She stated that the Board has been concerned about performance, has reviewed the issue, and now has provided direction to staff and IAC to move forward with the policy.

FIXED INCOME MANAGER COMMITTEE

Ms. Yeomans stated that the Fixed Income Manager Committee had only information items for the Board. She stated that the Committee reviewed the active and passive managers and found no cause for action. She reported that a new guaranteed investment contract for the Supplemental Investment Fund account was awarded to John Hancock Mutual Life at a rate of 8.40 percent or 59 basis points over the prevailing three year Treasury note rate. She then reported on staff plans to use flexible repurchase agreements in managing the short term cash accounts.

ALTERNATIVE INVESTMENT COMMITTEE

Ms. Yeomans stated that the Alternative Investment Committee had several information items and one item requiring Board action. She stated that annual review sessions were held with seven existing managers. Staff and the Committee were pleased with five, were reserving judgment on one because it is too early to properly evaluate performance, and was somewhat dissatisfied with DSV, a venture capital firm. The Committee concluded that staff should negotiate with DSV concerning the return of its uninvested cash. She then reported on the progress of several action items from the October 1989 Board meeting. She stated that a schedule for the withdrawal from the Prudential real estate fund had been agreed upon; that negotiations on fees for an investment in Matrix Venture Capital Partnership III were proceeding; and that negotiations on the sale of the 1985 Apache acquisition notes had not been concluded.

Ms. Yeomans then stated that the Committee recommends that the Board make an additional resource investment with First Reserve, one of the Board's oil and gas fund managers. Mr. Carlson moved approval of the Committee recommendation. Mr. McGrath seconded. The motion was adopted.

The meeting was adjourned at 9:55 A.M.

Respectfully submitted,

Howard Bicker

Howard J. Bicker
Executive Director

Attachment (Exhibit A)

EXHIBIT A

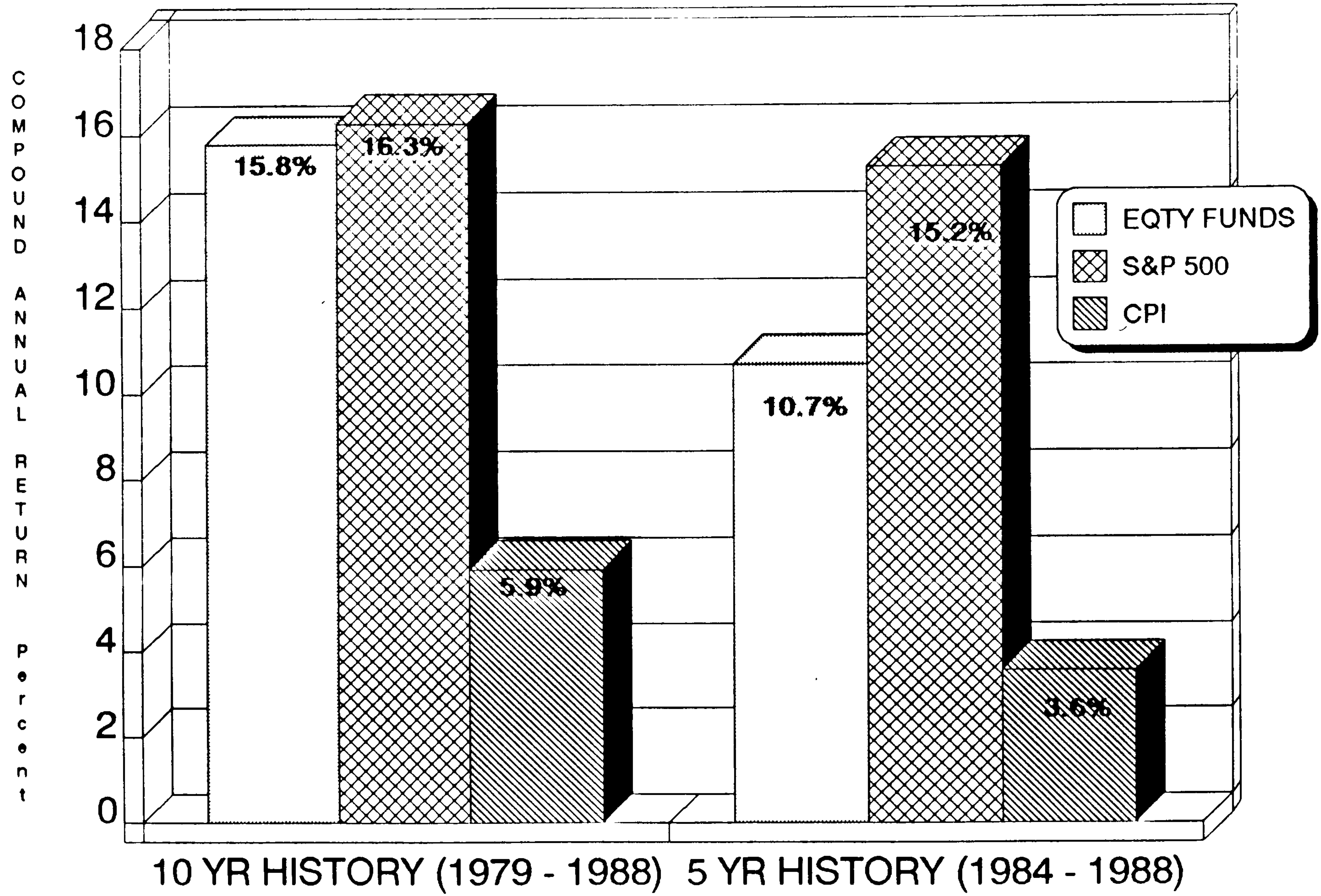
Active Equity Management Affirmative

- Higher Portfolio Return Potential
- Protection in Down Markets
- Experience and Knowledge
- Diversification
- 100% Passive - Out of Mainstream

Active Equity Management
Negative

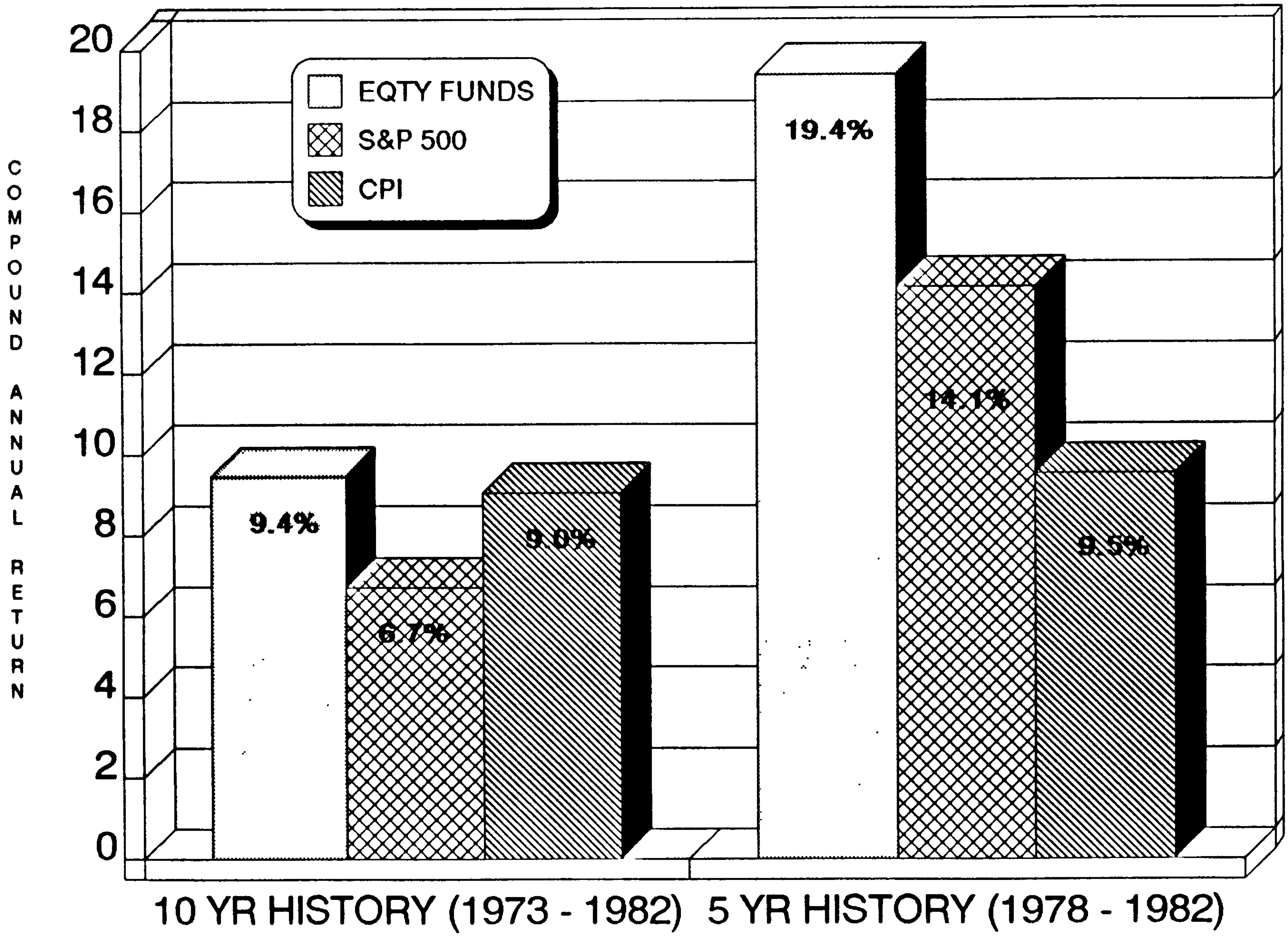
- Additional Uncertainty
- Use of SBI Resources
- Size
- Management Fees (???)
- Transaction Costs (???)

1989



SOURCE LIPPER

1983



SOURCE: LIPPER

AGENDA
INVESTMENT ADVISORY COUNCIL
MEETING

Wednesday, March 14, 1990
2:00 P.M.
MEA Building - Conference Rooms "A" & "B"
Saint Paul

		TAB
1.	Approval of Minutes of January 9, 1990 Meeting	
2.	Report from the Executive Director (H. Bicker)	
	A. Quarterly Investment Review (Oct. 1 - Dec. 31, 1989)	A
	B. Portfolio Statistics (Dec. 31, 1989)	B
	C. Administrative Report	C
	1. Reports on Budget and Travel	
	2. Report on SBI Client Conference	
	3. Update on 1990 Legislative Session	
3.	Report from the Task Force on Manager Retention (J. Mares)	D
	A. Status Report	
4.	Reports from Investment Advisory Council Committees	
	A. Equity Manager Committee (J. Eckmann)	E
	1. Review of Active Equity Misfit	
	2. Review of Active Manager Performance	
	3. Renewal of Contracts (Concord, Franklin, Rosenberg and Sasco)	
	4. Recommendation from the Small Cap Manager Search Committee	
	B. Fixed Income Manager Committee (J. Hacking)	F
	1. Report on Rebalancing in the Post Fund	
	2. Review of Enhanced Index Manager Performance	
	3. Review of Active Manager Performance	
	4. Renewal of Contract with BEA	
	5. Approval of Private Placement Guidelines	
	C. Alternative Investment Committee (K. Gudorf)	G
	1. Report on Fund Manager Annual Reviews	
	2. Report on Sale of Resource Investment (Apache II)	
	3. Report on Use of Consultants	
	4. Approval of Venture Capital Commitment (Pathfinder III)	

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
Room 105, MEA Building
55 Sherburne Avenue
St Paul, MN 55155
Tel (612) 296-3328
FAX (612) 296-9572

MINUTES

INVESTMENT ADVISORY COUNCIL

January 9, 1990

The Investment Advisory Council met on Tuesday, January 9, 1990, at 2:00 P.M. in the MEA Building, Saint Paul, Minnesota.

MEMBERS PRESENT: Harry Adams; John Bohan; Jim Eckmann; Elton Erdahl; Jim Hacking; Peter Hutchinson; Judy Mares; Gary Norstrem; Joe Rukavina; Ray Vecellio; and Jan Yeomans.

MEMBERS ABSENT: Paul Groschen; Ken Gudorf; Vern Jackels; David Jeffery; Malcolm McDonald; and Debbie Veverka.

SBI STAFF: Howard Bicker; Beth Lehman; Jim Heidelberg; Doug Gorence; Roger Henry; Harriet Balian; and Linda Nadeau.

OTHERS ATTENDING: Christie Eller; John Gardner; Joan Anderson Growe; Arvin Herman; Michael McGrath; Jake Manahan; Mike Ousdigian; Tom Richards, Richards & Tierney; Peter Sausen; Conrad Stroh, AFL/CIO; Ed Stuart, REAM; Elaine Voss; and Bob Whitaker.

Ms. Yeomans moved approval of the minutes of the October 3, 1989 meeting. Judy Mares seconded. The motion passed.

Mr. Bicker introduced Peter Hutchinson, the new Commissioner of Finance and member of the IAC.

EXECUTIVE DIRECTOR'S INVESTMENT REPORT

Howard Bicker, Executive Director, reported on fund performance compared to stated objectives for the quarter ended September 30, 1989. He referred members to the Quarterly Report on Objectives in the meeting materials, which showed returns for the Basic and Post Funds as well as the funded status of the retirement systems in aggregate. Mr. Bicker reported that for the quarter ended September 1989, the Basic Retirement Funds increased in value by 7%, with the increase due primarily to common stock appreciation. Mr. Bicker reported that during the quarter $300 million in the Basic Retirement Funds was moved from equity to bonds in order to rebalance back to the Funds' long term asset mix. He stated that staff undertook an additional rebalancing of assets in October 1989 and moved additional assets from the stock market to the bond market to reduce a remaining overweighting in stocks and raise a limited amount of cash. Mr. Bicker stated that the total rate of return for the Basic Retirement Funds for the quarter was 7%, compared to the composite index of 6.4%. He stated that the return for the total fund excluding alternative investments was 7.9% versus the median balanced fund of 5.4%. Mr. Bicker stated that the common stock segment outperformed the market 10.5% versus 10.1% during the quarter, and the bond segment outperformed the market 1.2% versus 1.0%.

Mr. Bicker reported that the Post Retirement Fund increased by 2.2% in value during the quarter, and there were no significant changes in the asset mix. Mr. Bicker stated that excess investment earnings in the Post Fund generated a 4.0% benefit increase for retirees effective January 1, 1990. He stated that the five year annualized benefit increase was 7.3%. He reported that the stock segment slightly underperformed its benchmark for the quarter but outperformed it for the year.

Mr. Bicker then referred members to the portfolio statistics and stated that as of September 30, 1989, the Board managed assets totalling $15.4 billion.

EXECUTIVE DIRECTOR'S ADMINISTRATIVE REPORT

Mr. Bicker referred the members to the budget and travel reports in the meeting materials. He stated that the Board seminar originally scheduled for November was postponed. He stated that staff will attempt to reschedule the seminar after the 1990 Legislative Session. Mr. Bicker reported that the annual SBI Client Conference is tentatively scheduled for late February, and that members will be notified of the time and place of the conference. Mr. Bicker then called attention to the schedule of meeting dates for 1990 for the SBI and IAC. He reported that the meeting materials contained an error in the September meeting dates and that a revised schedule with the correct dates was distributed. He reported that the Board's 1989 Annual Report has been distributed and said that the SBI received a clean audit opinion for fiscal 1989 from the Office of the Legislative Auditor.

He reported that a 4.04% benefit increase effective January 1, 1990, was provided to retirees from Post Retirement Fund earnings. He stated that he continues to have discussions with retiree groups and the retirement funds concerning a possible change in the Post Fund benefit increase formula. He stated that the Board will not support changes unless the retiree groups and retirement system boards concur. He added that a joint meeting of the retirement systems is scheduled for February 1, 1990. He stated that he has been invited to speak at the meeting about the Post Fund and prospective changes and that he will report back to the IAC and Board.

Mr. Bicker said that a status report on his FY 1990 Work Plan for the first half of the year is included with the quarterly report. Mr. Bicker also provided a status report on police and fire fund consolidation. He stated that in 1987 the Legislature enacted a law allowing paid police and fire funds to voluntarily merge with the statewide PERA Police and Fire Fund. He stated that three funds merged in 1987 and 1988. He then stated that effective January 1, 1990, eight additional local plans merged with the statewide plan. He stated that one other local plan may consolidate on March 31, 1990. He then stated that staff reported at the last meeting that $300 million had been moved from stocks to bonds to rebalance the Basic Retirement Funds back to its long term asset class targets. He stated that as the market continued to move up, staff undertook a further rebalancing October 1, 1989 by moving an additional $150 million from stocks to bonds.

SBI ADMINISTRATIVE COMMITTEE REPORT

Ms Yeomans recognized Mr. McGrath as Chair of the Administrative Committee. Mr. McGrath stated that a discussion of the future of the Administrative Committee was laid over from the Board's October 1989 meeting until the January 1990 meeting. He stated that he will recommend that the Board retain the Committee in its present form to meet at the call of the chair.

REPORT FROM THE TASK FORCE ON MANAGER RETENTION

Ms. Mares stated that she chaired the Task Force and other members were Jan Yeomans, Jim Eckmann, Debbie Veverka, and Jim Hacking. She stated that the Task Force considered the positive and negative case for active management. She referred members to materials which were distributed. She reported that the Task Force cites several reasons for utilizing active management. She stated that active management offers the potential to earn returns in excess of the market. She stated that active management provides protection in down markets, and observed that history suggests active management outperforms passive management in markets. She said that staff now has greater experience and knowledge and more sophisticated analytical tools necessary to find those managers who have the capacity to outperform the market. She stated that because the Task Force cannot predict with certainty future market conditions, the members recommend a mix of active management and passive management to diversify the portfolio. She added that the Task Force believes that employing passive management for the entire equity portfolio would be unusual and imprudent. In response to a question from Ms. Growe, Ms. Mares stated that the California PERS Fund is moving toward passive management. Mr. Bicker stated that the California fund plans to invest about 80 percent of its equities passively. He added that because the California fund is several times larger than the SBI, the size of its active management component is still very large.

Ms. Mares then listed the essential reasons against employing active managers. She stated that the above market returns are uncertain and are not realized in a steady, easy pace. She stated that hiring and evaluating managers requires significant amounts of staff resources. She then stated that there is some uncertainty that a large public fund can find a full complement of large managers to handle a complete active management program. Finally, she stated that costs are higher for active management. She observed that management fees and transaction costs are large on an absolute level, but the fees as a percent of the total portfolio are low. She added that the SBI's use of performance based fees lowers management fees.

Ms. Mares then stated that Tom Richards, Richards & Tierney, would display information showing the returns of active and passive management as they looked in 1983 when the Board made the initial decision to hire active managers. Mr. Richards stated that during the five year period, 1984 through 1988, passive management returns greatly exceeded active management returns. He explained that the most recent five years was a period of rising markets with relatively lower inflation. He then stated that in 1983 when the Board made the decision to hire external active managers, active management returns exceeded passive management returns for prior 5 and 10 year periods. He stated that this earlier period was characterized by volatile markets and relatively higher inflation.

In response to a question from Ms. Growe, Ms. Mares stated that no one is able to predict with certainty that the future environment will be different than the current period. Mr. Richards stated that in his opinion the Board should be cautious about making a decision to invest all equities passively because the results of the next several years could be like the 1978 to 1982 period in which active managers outperformed passive managers. Mr. Norstrem stated that he believed the Board ought to maintain a balance between active and passive to avoid the mistakes of being invested either all passively or all actively. Mr. Bicker then stated that if the SBI had its present analytical resources in 1982, the Board would not have hired the same group of managers. He stated that for the Board to invest all its equities under passive management would be an extreme position and said that the Task Force's proposal is similar to strategies employed by other funds.

Mr. Bohan stated that he believed if the Board bases its decision on the immediate past it most likely will be wrong because the future is likely to be different. Ms. Mares stated that she believed that the Board should not reduce its active component now because there appear to be enough clues that active management returns relative to passive management will improve. In response to a question from Ms. Yeomans, Mr. Richards stated that the length of a market cycle is difficult to specify. He stated that he believed the period 1983 to 1989 was materially different from the market of the 1970's. He stated however, that we cannot be certain of what will happen in the 1990's, so the Task Force recommends that the Board diversify by having some passive and some active management.

Ms. Growe then asked the IAC as a group how much agreement there is concerning the Task Force position. Mr. Hacking said he believes the IAC ought to recommend that the Board maintain an opportunity to achieve above market returns by employing active management. Mr. Eckmann stated that while his fund is almost all actively managed, a fund the size of the Basic Funds must hedge by adding a passive component to active management.

Mr. Norstrem moved to adopt the Task Force recommendation. Mr. Bohan seconded. The motion was adopted.

INVESTMENT ADVISORY COUNCIL COMMITTEE REPORTS

ASSET ALLOCATION COMMITTEE

Ms. Yeomans reported that the Asset Allocation Committee met to review the allocation to real estate within the Basic Funds. She stated the Committee reviewed the two basic reasons for using real estate in the portfolio and concluded that the Board's real estate investments were providing a hedge against inflation and diversifying the portfolio by dampening the volatility of returns. She stated that the Committee discussed the appropriateness of the long term target of 10 percent and discussed the near term prospects for real estate. She referred members to an attachment to the Committee report in the meeting materials that showed that the Board's current allocation to real estate was within the range of what other funds were doing. She stated that the Committee concluded that the Board should retain the long term target of ten percent, but that future investments should be made selectively in specialty funds in order to enhance returns. Ms. Mares moved adoption of the Committee recommendation. Mr. Eckmann seconded. The motion was adopted.

EQUITY MANAGER COMMITTEE

Mr. Bicker reported that staff held a successful roundtable discussion on December 13, 1989 with four equity managers of different styles and outlooks. He stated that staff looks forward to providing similar opportunities for the Board and IAC in the future with respect to other asset classes.

Ms. Mares reported that the Committee reviewed the active managers and performed a special review of BMI Capital. She stated that the Committee recommends that the Board terminate BMI. She cited two reasons for the decision. She stated that the firm's performance was below its benchmark and would be placed on probation for the second time in two years under the Board's current policy. She stated that a key member in charge of the portfolio was removed without explanation. She stated that staff and the Committee concluded they had lost confidence in the firm's abilities.

Ms. Mares then stated that Committee members believed a reduction in exposure to small capitalization stocks, which is BMI's style, is not appropriate at this time. She stated that the Committee concluded that BMI's portfolio should be placed in the index fund but that staff should continue looking for active managers to replace BMI. Ms. Mares added that an evaluation of the total equity portfolio was suggested but was put aside while the Board dealt with the issue of passive and active management. Mr. Rukavina moved approval of the Committee's recommendation. Mr. Hacking seconded. The motion was approved.

FIXED INCOME COMMITTEE

Mr. Norstrem reported that the Fixed Income Committee reviewed the active managers and concluded that the managers' overall performance was close to market returns and exceeded the benchmarks. He stated that the semi-passive managers were performing within expectations. He then reported that the Guaranteed Investment Contract for the Supplemental Investment Fund account was successfully bid. He stated that the three year GIC contract was awarded to John Hancock Mutual Life Insurance Company at an annualized rate of 8.40 percent, which was 59 basis points over prevailing three year Treasury notes. Mr. Norstrem then reported on staff plans to use flexible repurchase agreements in the short term cash pools. He stated that the flex repos will help staff meet cash flow needs. He concluded by stating that the Committee had no items requiring Board action.

ALTERNATIVE INVESTMENT COMMITTEE

Mr. Bohan reported that staff and the Committee held annual review sessions with seven managers. He stated that the Committee concluded that five were performing reasonably well, that it was too early to conclude whether one was performing adequately, and that the Committee was less satisfied with DSV, a venture capital manager. He stated that DSV held more cash than it invested and that the Committee agreed staff would pursue having the cash returned.

Mr. Bohan then stated that there were progress reports on several action items from the October 1989 Board meeting. He stated that staff had accepted a withdrawal schedule for the withdrawal from the Prudential real estate fund. In response to Mr. Bohan's question concerning the approved investment with Matrix, Mr. Bicker stated that staff is still negotiating with the firm to lower fees. In response to Mr. Bohan's question concerning the sale of Apache 1985 acquisition notes, Mr. Bicker stated that the investor group was close to successfully closing the negotiations. Mr. Bohan then stated that the Committee had one action item which was a $20 million investment with First Reserve, an oil and gas manager. Mr. Bohan stated that given the SBI invests in oil and gas, he believes AMGO IV is a good investment and he is impressed with the people. In response to a question from Mr. Norstrem, Mr. Bicker stated that Mr. Gudorf, Chair of the Committee, is a strong advocate of oil and gas as an appropriate investment. Mr. Bicker stated he believed Mr. Gudorf would give First Reserve his strong support. Mr. Erdahl moved approval of the Committee recommendation. Mr. Rukavina seconded. The motion was adopted.

The meeting adjourned at 3:20 P.M.

Respectfully submitted,

Howard J. Bicker

Howard J. Bicker
Executive Director

Tab A

QUARTERLY REPORT ON OBJECTIVES

BASIC RETIREMENT FUNDS	Status as of December 31, 1989
Market Value	**$6.9 billion**
Total Return (Annualized)	
■ Real (10 years) 3 to 5 percentage points over inflation	13.4% (nominal) 8.3 percentage points over
■ Relative (5 years) for the Total Fund Above composite index return	15.5% (nominal) .1 percentage points below
■ Relative (5 years) for Stocks, Bonds and Cash Above median fund return	16.5% (nominal) 0.9 percentage points above
Liquidity	
■ Minimal cash	1.7% of total fund

POST RETIREMENT FUND	Status as of December 31, 1989
Market Value	**$5.2 billion**
Realized Earnings	$384 million in FY 1989
■ Above 8% per year	9% in FY 1989
Liquidity	
■ Minimal cash	2.7% of total fund

FUNDING (Basic + Post Funds)*	Status as of June 30, 1989
Achieve full funding by 2020	
■ Actuarial accrued liability	$12.9 billion
■ Actuarial value of assets	$9.4 billion
■ Percent funded	73%

* TRA, MSRS, PERA General Plans only. Based on FY89 valuation by State's actuary. Includes impact of legislation passed during the 1989 Legislative Session.

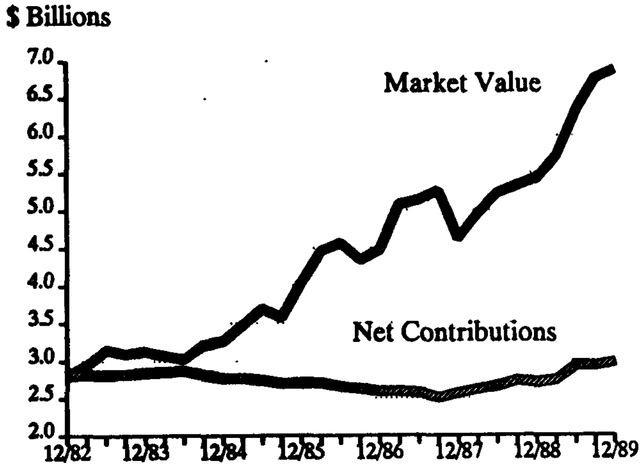
The executive summary highlights the asset mix, performance standards and investment results for the Basic Retirement Funds and the Post Retirement Fund. Additional detail on these funds as well as information on other funds managed by the Board can be found in the body of the Quarterly Investment Report.

EXECUTIVE SUMMARY

Basic Retirement Funds

Asset Growth

The market value of the Basic Funds increased 1.7% during fourth quarter of 1989. The increase was due primarily to fixed income appreciation and contributions.



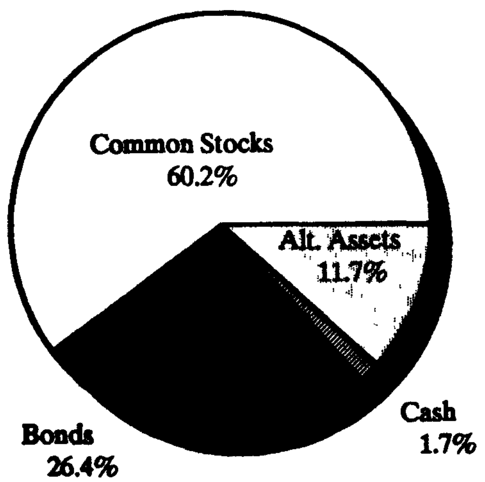
Asset Growth During Fourth Quarter 1989 (Millions)

Beginning Value	$6,763
Net Contributions	48
Investment Return	64
Ending Value	$6,875

Asset Mix

The asset mix of the Basic Funds is chosen to maximize long term rate of return. This requires a large commitment to common stocks. Other asset classes are used to limit short-run return volatility and to diversify portfolio holdings.

During the quarter, $150 million of equity assets were reallocated to bonds and cash to rebalance the asset mix back towards the long term policy. The rebalancing was necessary because of large stock appreciation gains during 1989.



Actual Asset Mix
12/31/89

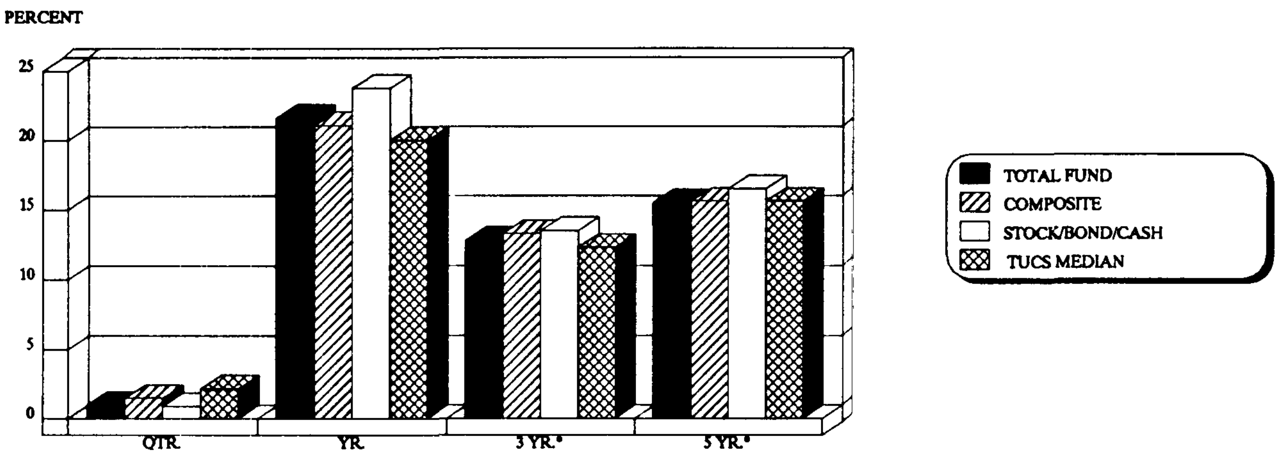
	Policy Asset Mix	Actual Mix 12/31/89	Actual Market Value (Millions)
Stocks	60.0%	60.2%	$4,140
Bonds	24.0	26.4	1,814
Alternative Assets	15.0	11.7	805
Unallocated Cash	1.0	1.7	115
	100.0%	100.0%	$6,875

Basic Funds (Con't.)

Total Fund Performance

Both the total fund and total fund without alternative assets trailed the return on the median fund and the composite index for the quarter but exceeded them for the year.

Given its large commitment to common stocks, the Basic Funds can be expected to outperform other balanced pension portfolios during periods of positive stock performance and underperform during periods of negative stock performance.



Period Ending 12/31/89

			*(Annualized)	
	Qtr.	Yr.	3 Yr.	5 Yr.
Total Fund	**1.0%**	**21.6%**	**12.8%**	**15.5%**
Composite Index **	1.5	21.1	13.3	15.6
Stocks, Bonds and Cash Only	**0.9**	**23.8**	**13.5**	**16.5**
TUCS Median Balanced Fund***	2.2	20.0	12.3	15.6

** Composite Index is weighted in a manner that reflects the policy asset mix of the Basic Funds.
*** Trust Universe Comparison Service (TUCS) includes returns of over 800 public and private tax-exempt investors

Stock Segment Performance

The Basic Funds' common stock segment trailed the performance of its target for the latest quarter and year. Details on individual manager stock performance can be found on page 7 of the report.

			(Annualized)	
	Qtr.	Yr.	3 Yr.	5 Yr.
Stock Segment	-0.2%	28.4%	15.4%	18.4%
Wilshire 5000	0.6	29.2	15.9	19.1

Bond Segment Performance

The bond segment of the Basic Funds trailed the performance of its target for the latest quarter and year. Details on individual bond manager performance can be found on page 8 of the report.

			(Annualized)	
	Qtr.	Yr.	3 Yr.	5 Yr.
Bond Segment	3.5%	13.9%	8.2%	12.1%
Salomon Broad Index	3.7	14.4	8.2	12.4

EXECUTIVE SUMMARY

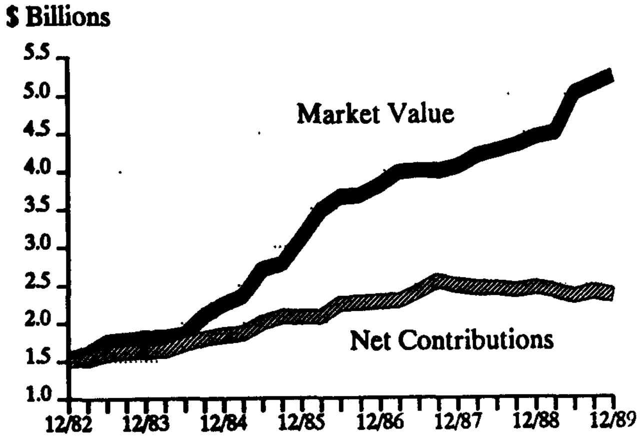
Post Retirement Fund

Asset Growth

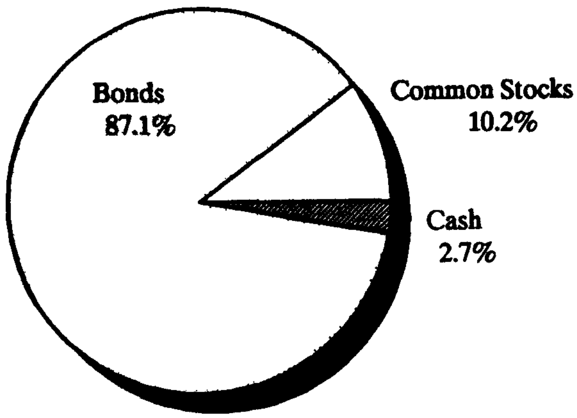
The market value of the Post Fund increased by 2.3% during fourth quarter 1989.

Asset Growth During Fourth Quarter 1989 (Millions)

Beginning Value	$5,123
Net Contributions	-50
Investment Return	167
Ending Value	$5,238



Asset Mix



Actual Asset Mix 12/31/89

The asset mix of the Post Retirement fund is chosen to create a sizable, steady stream of income sufficient to pay currently promised benefits. This income stream is created by a large commitment to bonds, primarily through a dedicated bond portfolio. Assets not committed to bonds are invested in cash equivalents or common stocks.

During the quarter there were no significant changes to the asset mix.

	Actual Market Value (Millions)	Asset Mix 12/31/89
Common Stocks	$536	10.2%
Bonds	4,563	87.1
Unallocated Cash	139	2.7
	$5,238	100.0%

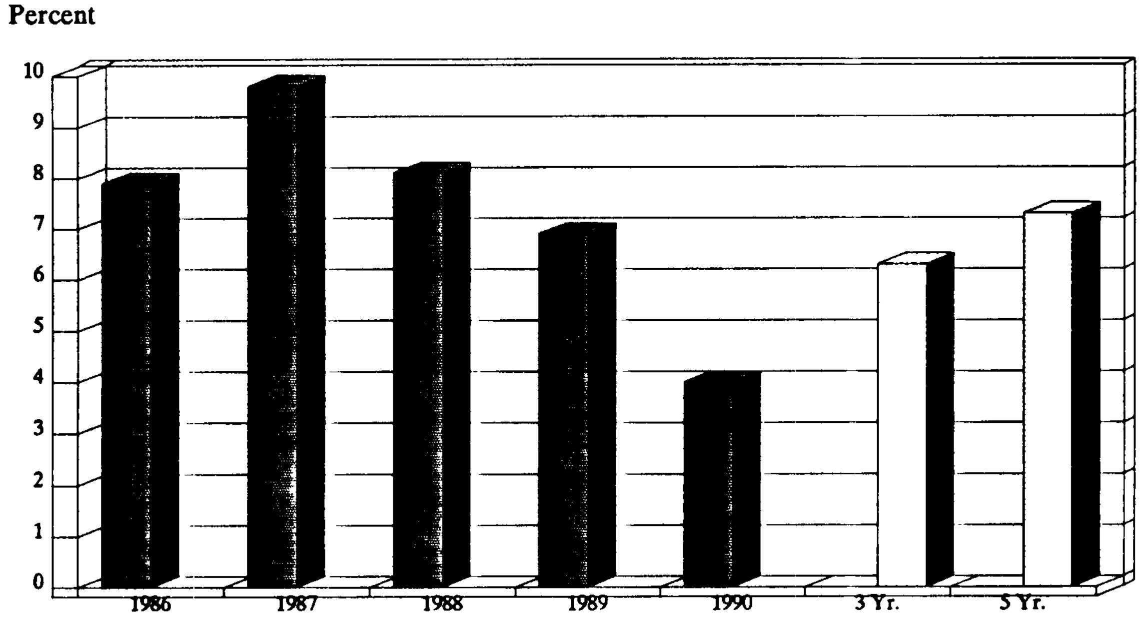
Post Fund (Con't.)

Total Fund Performance

Assets committed to the dedicated bond portfolio ensure that all existing promised benefits will be paid to current retirees. Excess investment earnings on Post Fund assets are used to finance permanent lifetime benefit increases for retirees.

Benefit increases are based upon earnings during a fiscal year and are effective at the start of the following calendar year. Benefit increases generated for the last five years are shown below.

Benefit Increases



Calendar Year

	1986	1987	1988	1989	1990	3 Yrs. (Annualized)	5 Yrs. (Annualized)
Benefit Increases	7.9%	9.8%	8.1%	6.9%	4.0%	6.3%	7.3%

Benefit increases are intended to compensate, to some degree, for the effect of inflation.

As measured by the Consumer Price Index (CPI), inflation increased by 3.7% on an annualized basis over the last five years (calendar 1985-1989).

Stock Segment Performance

The stock segment of the Post Fund trailed its benchmark for the latest quarter and year.

Period Ending 12/31/89

	Qtr.	Yr.	3 Yr. (Annualized)	5 Yr. (Annualized)
Stock Segment	-3.8%	27.2%	14.7%	14.9%
Post Fund Benchmark	1.2	30.4	N.A.	N.A.

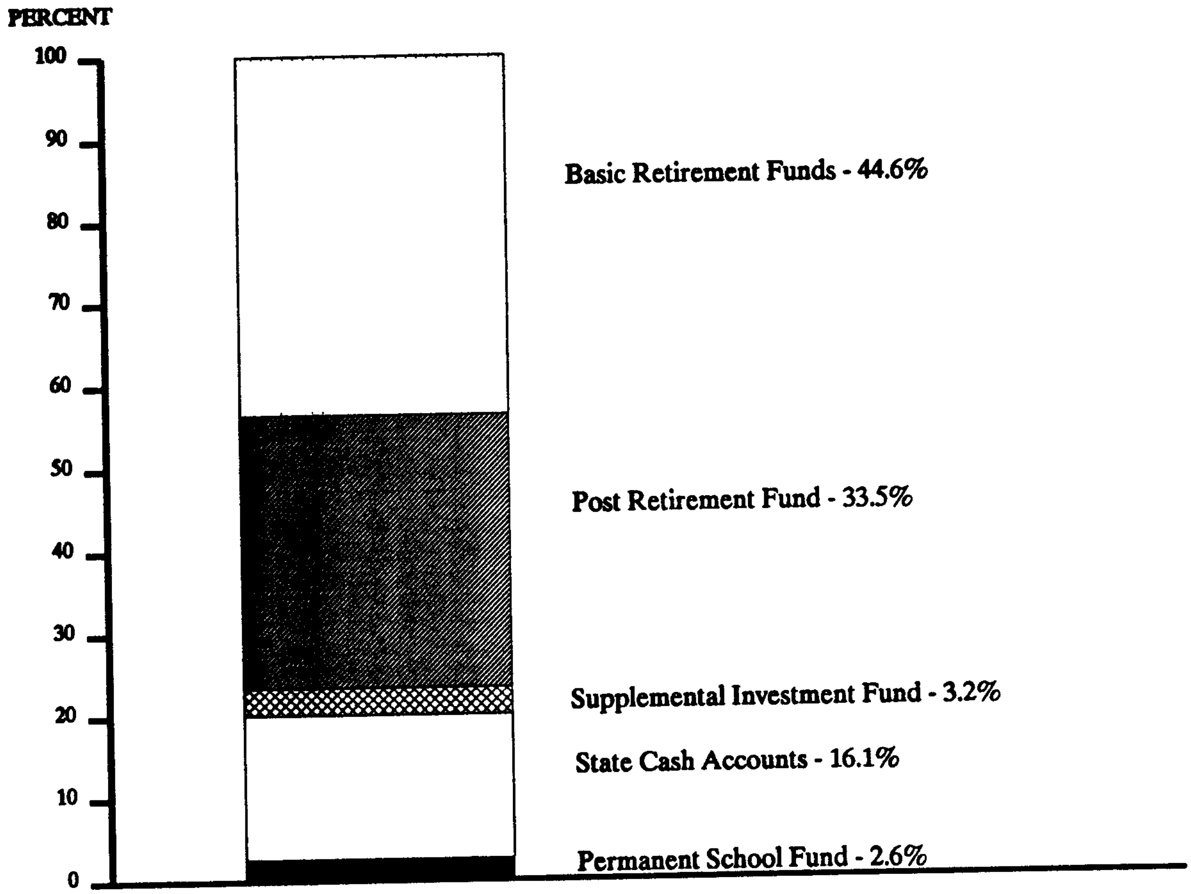
Bond Segment Performance

At the close of the quarter, the dedicated bond portfolio had a current yield of 7.69% and average duration of 7.99 years. The market value of the dedicated bond portfolio was $4.5 billion at the end of the quarter.

The dedicated bond portfolio is designed such that cash inflows from portfolio income and principal payments match required cash outflows to retirees. Thus, total return is not a relevant performance measure for the portfolio. Nevertheless, the bond segment provided a 4.1% return for the quarter and a 17.2% return for the year. This is consistent with the design of the dedicated bond portfolio.

EXECUTIVE SUMMARY

Funds Under Management



	12/31/89 Market Value (Billions)
Basic Retirement Funds	$6.9
Post Retirement Fund	5.2
Supplemental Investment Fund	0.5
State Cash Accounts	2.5
Permanent School Fund	0.4
Total	$15.5

Tab B

MINNESOTA STATE BOARD

OF INVESTMENT

QUARTERLY INVESTMENT REPORT

Fourth Quarter 1989

(October 1, 1989 - December 31, 1989)

Table of Contents

FINANCIAL MARKETS REVIEW

STOCK MARKET

Overall, stock prices were flat for the fourth quarter. The market received both good and bad news that caused many participants to stay out of the market until a clearer trend becomes apparent. The positive news was that the Federal Reserve eased interest rates reducing the possibility of a recession. The negative news was that corporate profits were down and the proposed reduction in the capital gains tax did not occur. In addition, several previous leveraged buyout deals are having financial difficulties which has caused a slowdown in any potential future buyouts. Overall, the Wilshire 5000 stock index provided a total return of 0.6% during the quarter and had a 29.2% return for the latest year.

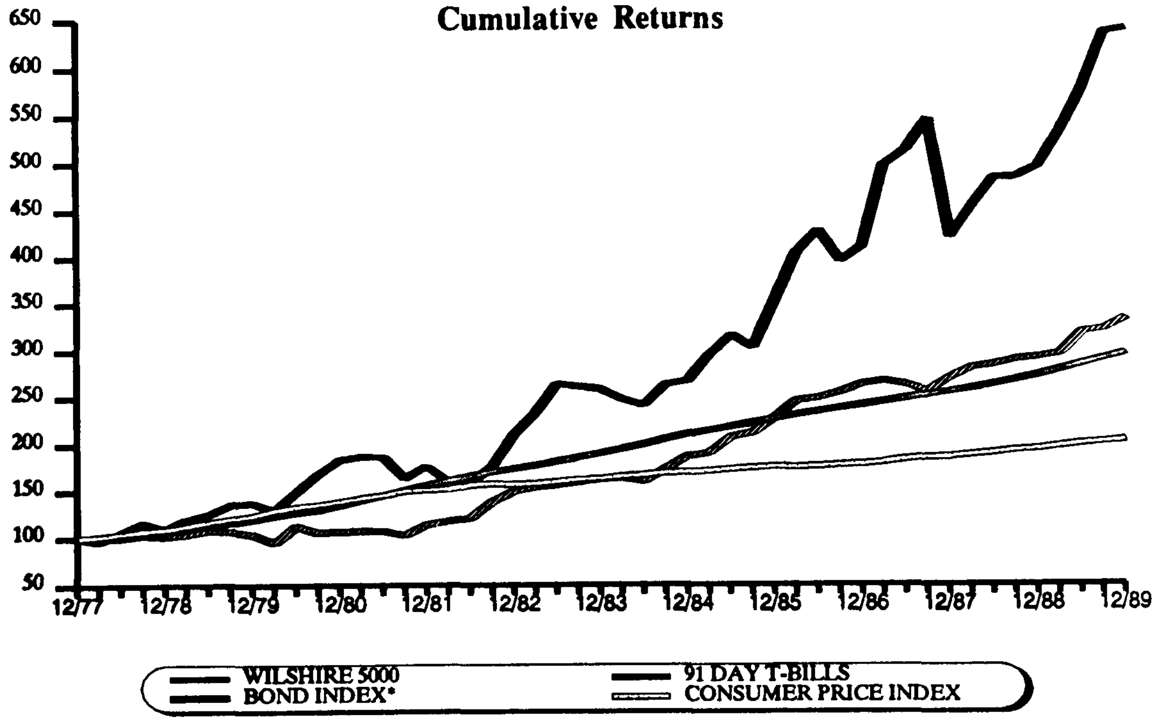
There was a wide disparity in the price performance of different sectors during the quarter. Energy was the best performing sector with a return of 10.8%. The worst performing sector was the consumer durables sector with a return of -8.5%.

BOND MARKET

Bond prices were substantially higher for the fourth quarter. The Federal Reserve eased credit on the banking system, effectively reducing their cost of business. Anticipation of lower interest rates drove bond prices higher.

Overall, the Salomon Brothers Broad Investment Grade (BIG) Index gained 3.7% for the quarter and had a 14.4% return for the latest year. Mortgage securities were the best performing sector with a gain of 4.0% and corporate issues provided the lowest return of 3.1%.

PERFORMANCE OF CAPITAL MARKETS



* Merrill Lynch Master Index through 12/79; Salomon Broad Investment Grade Bond Index thereafter

FINANCIAL MARKETS REVIEW

REAL ESTATE

Currently, the real estate market faces oversupply and slow demand. These factors are most apparent in second tier office properties, small shopping centers and properties located in the Southwest. The stronger sectors of the real estate market include warehouse and distribution facilities and larger retail centers. Current supply/demand forecasts extrapolate these trends through 1990.

VENTURE CAPITAL

There continues to be a heavy flow of venture capital offerings. However, these funds are taking longer to raise less money than in the past.

A combination of factors has contributed to the decline in funding levels. First, funds initiated within the last five years have provided somewhat disappointing returns to date. Second, strong performance from stocks and bonds has made venture capital returns less competitive. Finally, funding has been influenced by the conditions of the public market, which has not been receptive to new issues.

RESOURCE FUNDS

West Texas Intermediate oil ended the quarter at $21.80 per barrell despite increased OPEC production. Increased demand and an accelerating decline in U.S. crude production has kept the price at this level. With increased demand and slowing production, the U.S. oil import dependency is rising. Imports supplied 44% of first-half 1989 demand vs. 40% in the same 1988 period. Experts expect demand to slow causing price declines if OPEC continues to increase production.

BASIC RETIREMENT FUNDS

Investment Objectives

The Basic Retirement Funds are composed of the retirement assets for currently working participants in the statewide retirement funds.

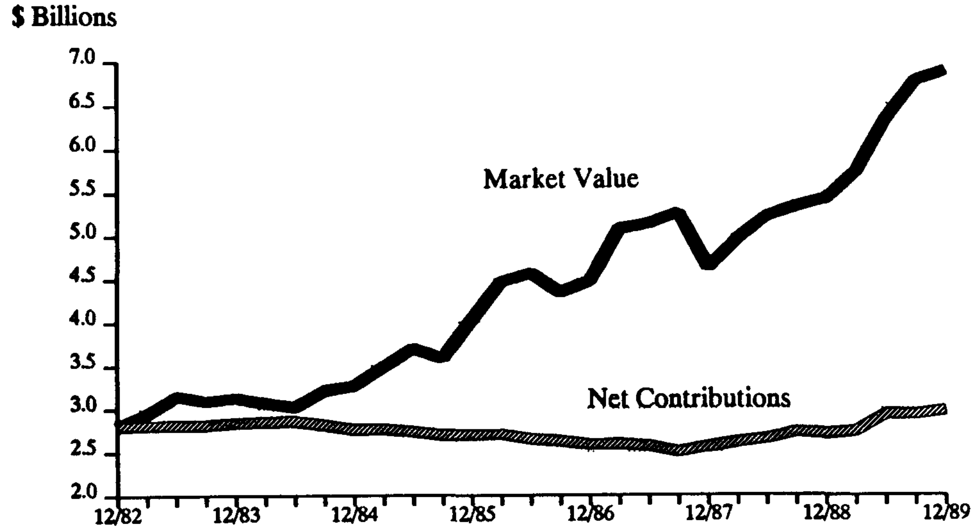
Based upon the Basic Funds' adequate funding levels and participant demographics, its investment time horizon is quite long. This extended time horizon permits the Board to take an aggressive, high expected return investment policy which incorporates a sizable equity component.

The Board has established three return objectives for the Basic Funds:

- The total fund should provide real rates of return that are 3-5 percentage points greater than the rate of inflation over moving 10 year periods.
- Stocks, bonds and cash should outperform the median fund from a universe of public and private funds with a balanced asset mix over moving 5 year periods.
- The total fund should outperform a composite index weighted in a manner that reflects the long term asset allocation of the Basic Funds over moving 5 year periods.

Asset Growth

The market value of the Basic Retirement Funds' assets increased 1.7% during the fourth quarter of 1989. The increase was due primarily to contributions and bond appreciation. Alternative assets also had a positive return. However, equities produced a slightly negative return for the quarter.



In Millions

	12/84	12/85	12/86	12/87	12/88	3/89	6/89	9/89	12/89
Beginning Value	$3,129	$3,265	$4,030	$4,474	$4,628	$5,420	$5,727	$6,325	$6,763
Net Contributions	-78	-62	-113	-26	146	32	195	-6	48
Investment Return	214	827	557	180	646	275	403	444	64
Ending Value	$3,265	$4,030	$4,474	$4,628	$5,420	$5,727	$6,325	$6,763	$6,875

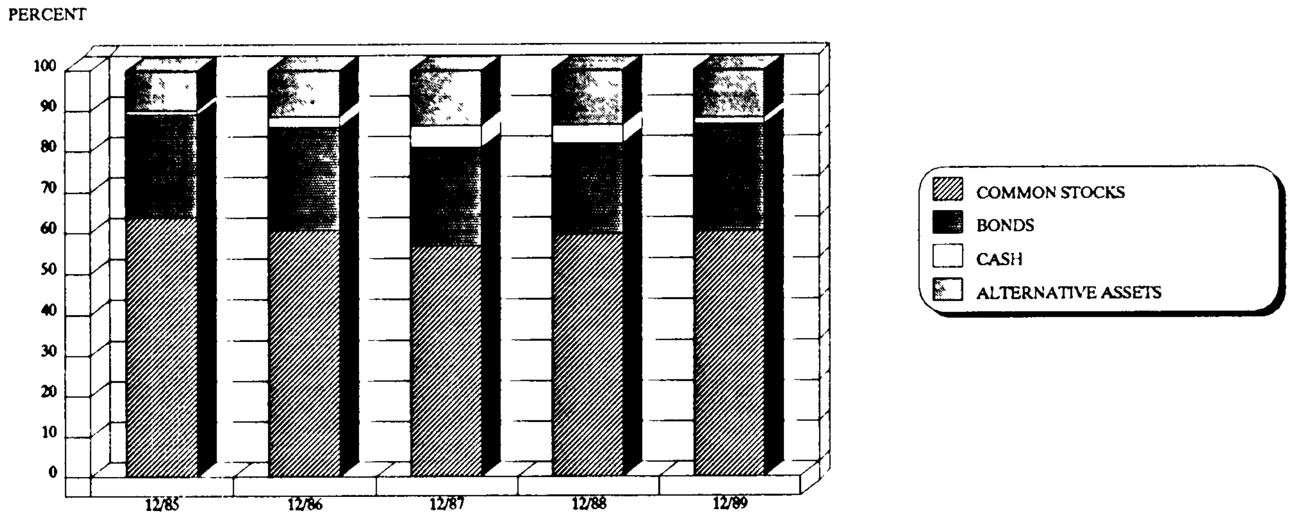
BASIC RETIREMENT FUNDS

Asset Mix

Based on the Basic Funds' investment objectives and the expected long-run performance of the capital markets, the Board has adopted the following long term policy asset allocation for the Basic Funds:

Common Stocks	60.0%
Bonds	24.0
Real Estate	10.0
Venture Capital	2.5
Resource Funds	2.5
Unallocated Cash	1.0

During the quarter, $150 million of stock assets were reallocated to bonds and cash to rebalance the asset mix back towards the long term policy. The rebalancing was necessary because of large stock appreciation gains during 1989.



	Last Five Years				Latest Qtrs.			
	12/85	12/86	12/87	12/88	3/89	6/89	9/89	12/89
Stocks	63.8%	60.6%	56.7%	59.5%	61.0%	65.7%	63.5%	60.2%
Bonds	25.3	25.3	24.2	22.4	21.4	20.8	24.1	26.4
Real Estate	7.2	8.3	9.5	9.0	8.7	7.9	7.5	7.5
Venture Capital	1.3	1.8	2.8	3.1	3.0	2.9	2.9	2.8
Resource Funds	1.3	1.4	1.4	1.5	1.6	1.5	1.4	1.4
Unallocated Cash	1.1	2.6	5.4	4.5	4.3	1.2	0.6	1.7
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

BASIC RETIREMENT FUNDS

Total Fund Performance vs. Standards

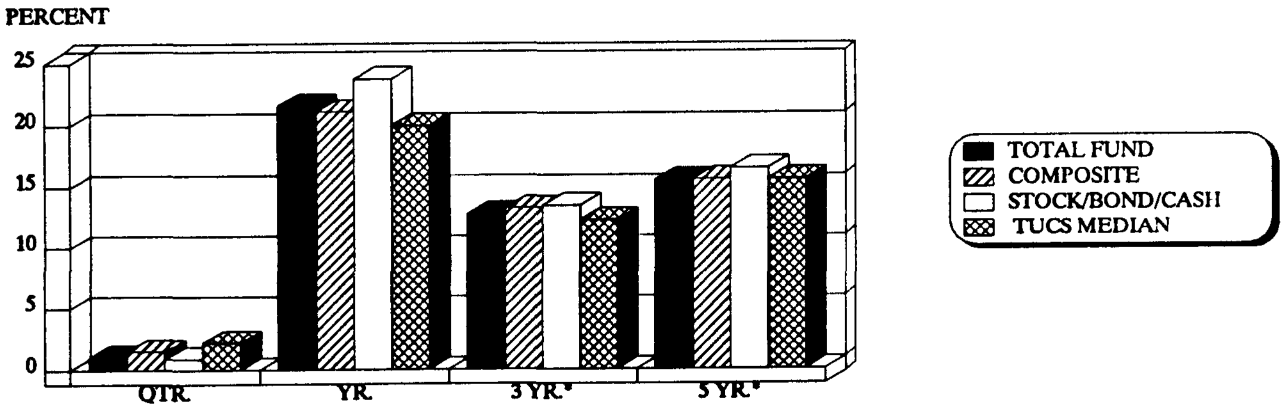
The Basic Funds' long-term rate of return performance is evaluated relative to two specific benchmarks:

- **Composite Index.** The returns provided by the total portfolio are expected to exceed those derived from a composite of market indices, weighted in the same proportion as the Basic Funds' policy asset allocation. As of 7/1/89, the composite index is weighted: 60% Wilshire 5000 Stock Index, 24% Salomon Broad Bond Index, 10% Real Estate Funds, 2.5% Venture Capital Funds, 2.5% Resource Funds, and 1% 91 Day T-Bills.

- **Median Tax-Exempt Fund.** Stock, bond and cash assets are expected to outperform the median return produced by a representative sample of other public and private tax-exempt balanced funds. The sample universe used by the Board is the Wilshire Associates Trust Universe Comparison Service (TUCS).

The long term asset allocation of the Basic Funds is based on the superior performance of common stocks over the history of the capital markets. The asset mix is designed to add value to the Basic Funds' over their long-term investment time horizon. In the short-run, the Basic Funds can be expected to outperform the median balanced portfolio during periods of positive relative stock performance and underperform during periods of negative stock performance.

The Basic Funds total portfolio trailed its composite index for the latest quarter but exceeded it for the latest year. Because of the Basic Funds sizable stock allocation and relatively good performance of the stock market, the Basic Funds' exceeded the median balanced fund for the year. Excluding alternative assets, the Basic Funds ranked in the lowest quarter (77th percentile) of the TUCS universe for the quarter. However, it ranked in the top quarter (22nd percentile) for the latest year and the top third (31st percentile) for the last five years.



	Qtr.	Yr.	3 Yr.	5 Yr.
		Period Ending 12/31/89	***(Annualized)**	
Total Fund	**1.0%**	**21.6%**	**12.8%**	**15.5%**
Composite Index	1.5	21.1	13.3	15.6
Stocks, Bonds and Cash Only	**0.9**	**23.8**	**13.5**	**16.5**
TUCS Median Balanced Fund	2.2	20.0	12.3	15.6

BASIC RETIREMENT FUNDS

Segment Performance vs. Standards

Stock Segment

The Basic Funds' common stock segment trailed its performance target for the latest quarter and year.

	Qtr.	Yr.	Annualized 3 Yrs.	Annualized 5 Yrs.
Stock Segment	-0.2%	28.4%	15.4%	18.4%
Wilshire 5000	0.6	29.2	15.9	19.1

Bond Segment

The bond segment of the Basic Funds trailed the performance of its target for the latest quarter and year.

	Qtr.	Yr.	Annualized 3 Yrs.	Annualized 5 Yrs.
Bond Segment	3.5%	13.9%	8.2%	12.1%
Salomon Bond Index	3.7	14.4	8.2	12.4

Real Estate Segment

The real estate segment of the Basic Funds trailed its target for the latest quarter but exceeded its target for the latest year.

The Wilshire Real Estate Index contains returns of 30 commingled funds. The index does not include returns from funds that are less than 3 years old or are not fully invested.

	Qtr.	Yr.	Annualized 3 Yrs.	Annualized 5 Yrs.
Real Estate Segment	1.8%	6.6%	7.3%	7.6%
Real Estate Index	2.0	6.3	7.3	8.0
Inflation	0.9%	4.7%	4.5%	3.7%

Venture Capital and Resource Funds

Comprehensive data on returns provided by the resource and venture capital markets are not available at this time. Actual returns from these assets are shown in the table.

The SBI began its venture capital and resource programs in the mid-1980's. Current returns reflect the relative immaturity of the investments.

	Qtr.	Yr.	Annualized 3 Yrs.	Annualized 5 Yrs.
Venture Capital Segment	-0.1%	3.1%	11.8%	7.0%
Resource Fund Segment	0.0	0.4	8.1	1.0

BASIC RETIREMENT FUNDS

Stock Manager Performance vs. Benchmarks

Common stock manager returns are evaluated against the performance of customized indices constructed to represent the managers' specific investment approaches. These custom indices are commonly referred to as "benchmark portfolios." The benchmark portfolios take into account the equity market forces that at times favorably or unfavorably impact certain investment styles. Thus, benchmark portfolios are the appropriate targets against which to judge the managers' performances.

Manager performance relative to benchmarks is evaluated on a quarterly basis by the Equity Manager Committee of the Investment Advisory Council.

As a group, the active and passive common stock managers exceeded the performance of their aggregate benchmark for the latest quarter and year.

The performance of the individual active managers for the quarter was poor. Two out of the eleven managers exceeded their benchmark. A comprehensive analysis of the individual managers' performance is included in this quarter's Equity Manager Committee Report.

	Percent of Segment 12/31/89	Market Value 12/31/89 (Thousands)	Quarter Ending 12/31/89 Actual	Quarter Ending 12/31/89 Bmrk	Year Ending 12/31/89 Actual	Year Ending 12/31/89 Bmrk	(Annualized) Since 1/1/84 Actual	(Annualized) Since 1/1/84 Bmrk
Active Managers								
Alliance	9.7%	$401,196	0.3%	-3.6%	41.9%	23.5%	20.1%	12.9%
BMI	1.3	56,124	-3.2	-3.1	15.6	22.9	9.7	12.6
Concord	2.6	106,932	-2.5	-1.5				
Forstmann	4.7	194,196	-2.2	-1.0	18.7	20.4	14.6	12.9
Franklin	2.7	113,743	-2.5	-2.2				
IDS	4.2	172,490	-0.5	-0.3	33.9	25.5	16.8	15.9
IAI	2.2	92,114	0.2	0.9	28.7	26.0	14.9	16.1
Lieber & Co.	2.7	111,801	-3.9	-3.6	18.9	18.6	13.2	11.7
Rosenberg	2.8	114,471	-0.6	0.1				
Sasco	2.7	110,670	-1.8	-2.0				
Waddell & Reed	4.2	172,159	-2.7	-2.5	26.6	18.7	13.0	11.7
Aggregate Active	39.8%	$1,645,296	-1.4%		28.4%		14.4%	
Passive Manager								
Wilshire Associates	60.2%	$2,494,681	0.6%	0.6%	28.6%	29.0%	16.2%	16.2%
Aggregate Passive	60.2%	$2,494,681	0.6%		28.6%		16.2%	
Total Stock Segment	**100.0%**	**$4,139,977**	**-0.2%**	**-0.4%**	**28.4%**	**26.6%**	**15.6%**	**15.7%**
Wilshire 5000 Index			0.6%		29.2%		16.3%	

Notes: Total segment and aggregate active performance numbers include returns of any managers retained during the time periods shown but subsequently terminated by the Board.

Concord, Franklin, Rosenberg and Sasco were retained effective April 3, 1989.

BASIC RETIREMENT FUNDS

Bond Manager Performance vs. Benchmarks

Bond manager returns are evaluated against the performance of customized indices constructed to represent the managers' specific investment approaches. These custom indices are commonly referred to as "benchmark portfolios." The benchmark portfolios take into account the bond market forces that at times favorably or unfavorably impact certain investment styles. Thus, benchmark portfolios are the appropriate targets against which to judge the managers' performances.

Manager performance relative to benchmarks is evaluated on a quarterly basis by the Fixed Income Manager Committee of the Investment Advisory Council.

As a group, the active and passive bond managers trailed the performance of their aggregate benchmark for the latest quarter and year.

The performance of the individual managers for the quarter was poor. One exceeded the benchmark considerably while the others underperformed relative to their benchmark. A comprehensive analysis of the individual managers' performance is included in this quarter's Fixed Income Manager Committee Report.

	Percent of Segment 12/31/89	Market Value 12/31/89 (Thousands)	Quarter Ending 12/31/89 Actual	Quarter Ending 12/31/89 Bmrk	Year Ending 12/31/89 Actual	Year Ending 12/31/89 Bmrk	(Annualized) Since 7/1/84 Actual	(Annualized) Since 7/1/84 Bmrk
Active Managers								
IAI	6.0%	$109,693	4.3%	3.8%	16.4%	14.8%	14.6%	14.0%
Lehman	6.7	121,550	3.2	3.5	13.0	13.6	13.2	13.3
Miller Anderson	9.7	175,653	3.4	3.7	9.9	14.4	13.7	14.3
Morgan Stanley	6.4	116,700	3.3	3.6	13.2	13.6	13.3	13.8
Western Asset	15.0	272,261	3.5	3.6	15.8	14.1	15.6	14.0
Aggregate Active	43.8%	$795,857	3.5%		13.5%		14.0%	
Semi-Passive Managers								
Fidelity Management	28.1%	$508,951	3.6%	3.7%	14.3%	14.4%		
Lincoln Capital	28.1	509,167	3.4	3.7	14.0	14.4		
Aggregate Passive	56.2%	$1,018,118	3.5%		14.2%			
Total Bond Segment	**100.0%**	**$1,813,975**	**3.5%**	**3.7%**	**13.9%**	**14.3%**	**13.6%**	**13.9%**
Salomon Broad Index			3.7%		14.4%		14.3%	

Notes: Total segment and aggregate active performance numbers include returns of any managers retained during the time periods shown but subsequently terminated by the Board.

The semi-passive managers were retained effective July 1, 1988.

POST RETIREMENT FUND

Investment Objectives

The Post Retirement Investment Fund contains the pension assets of retired public employees covered by statewide retirement plans.

Upon the employees' retirement, sums of money sufficient to finance fixed monthly annuities are transferred from accumulation pools in the Basic Funds to the Post Fund. In order to support promised benefits, the Post Fund must "earn" at least 5% on its invested assets each year. If the Post Fund exceeds this earnings rate, excess earnings are used to finance permanent benefit increases for eligible retirees.

Unrealized capital gains (or losses) are excluded from the statutory definition of earnings. For this reason the Post Fund is not designed to maximize long-term total rates of return.

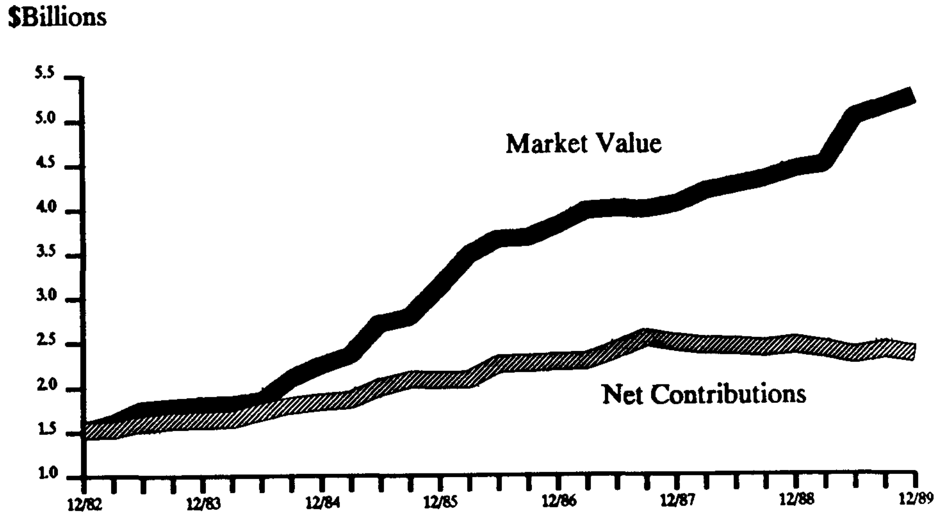
The Board has established two earnings objectives for the Post Fund:

- generate 5% realized earnings to maintain current benefits.
- generate at least 3% additional realized earnings to provide benefit increases.

The Post Fund is not oriented toward maximizing long-term total rate of return. Rather, the SBI attempts to generate a high, consistent stream of earnings for the Post Fund that will maintain current benefits, as well as produce benefit increases over time.

Asset Growth

The market value of the Post Fund increased by 2.3% during the fourth quarter of 1989. Asset growth was achieved through bond appreciation since net withdrawals were $50 million for the quarter.



In Millions

	12/84	12/85	12/86	12/87	12/88	3/89	6/89	9/89	12/89
Beginning Value	$1,803	$2,246	$3,107	$3,808	$4,047	$4,434	$4,484	$5,014	$5,123
Net Contributions	201	239	199	207	-27	-50	66	59	-50
Investment Return	242	622	502	32	414	100	464	50	167
Ending Value	$2,246	$3,107	$3,808	$4,047	$4,434	$4,484	$5,014	$5,123	$5,238

POST RETIREMENT FUND

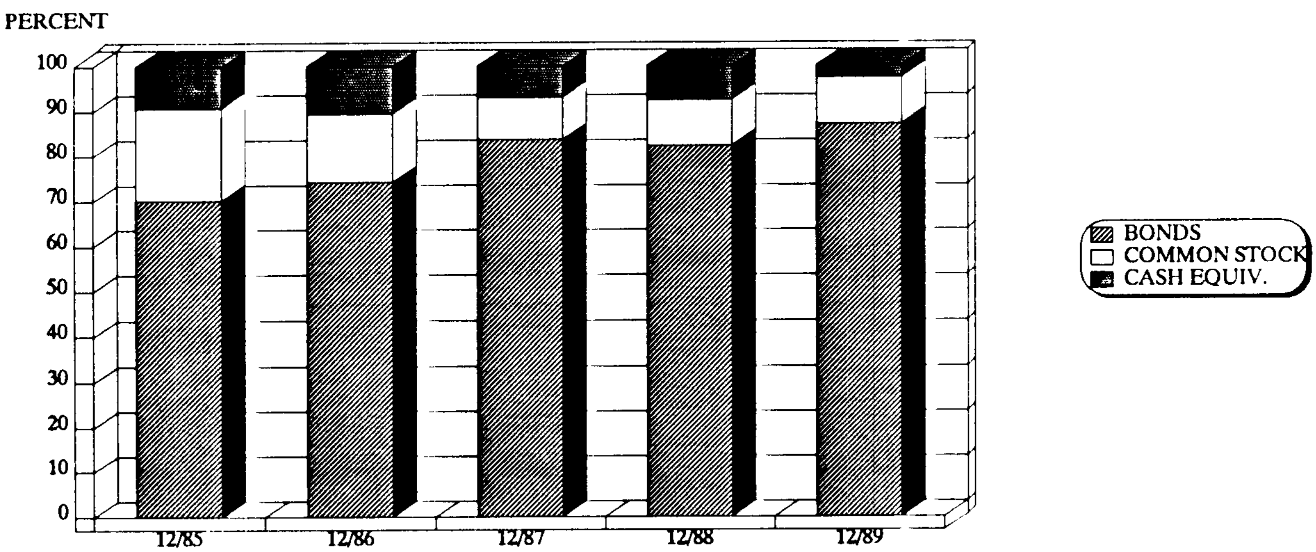
Asset Mix

The Board has designed the asset mix of the Post Fund to generate the sizable stable earnings stream necessary to finance monthly payments to retirees.

The SBI invests the majority of the Post Fund's assets in a dedicated bond portfolio. A dedicated bond portfolio is a collection of various maturity, high-quality bonds which generate cash flows from income and principal payments that match a specific stream of liabilities.

Assets not committed to the dedicated bond portfolio generally are invested in common stocks and cash equivalents.

During the quarter there were no significant changes to the asset mix.



	Last Five Years				Latest Qtrs.			
	12/85	**12/86**	**12/87**	**12/88**	**3/89**	**6/89**	**9/89**	**12/89**
Bonds	70.2%	74.2%	83.7%	82.3%	87.5%	86.9%	86.6%	87.1%
Stocks	20.5	15.1	9.3	10.1	10.7	10.5	10.9	10.2
Unallocated Cash	9.3	10.7	7.0	7.6	1.8	2.6	2.5	2.7
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

POST RETIREMENT FUND

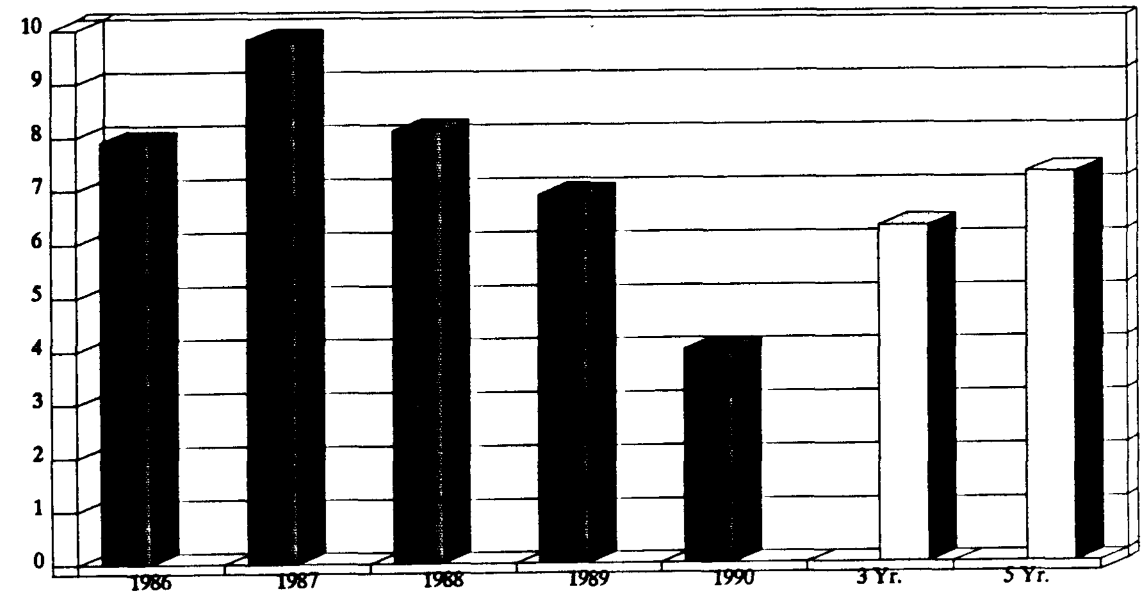
Total Fund Performance

The ability of the Post Fund to maintain current benefit levels and provide future benefit increases depends upon its earnings. State statutes define earnings for the Post Fund as interest and dividend income as well as realized equity and fixed income capital gains (or losses). Unrealized capital gains (or losses) have no direct impact on the benefits paid out to retirees. Unrealized capital gains (or losses) are excluded from defined earnings in order to make benefit payments largely insensitive to near-term fluctuations in the capital markets.

Assets committed to the dedicated bond portfolio ensure that all existing promised benefits will be paid to current retirees. Excess investment earnings on the Post Fund assets are used to finance permanent lifetime benefit increases for retirees.

Benefit increases are based upon earnings during a fiscal year and are effective at the start of the following calendar year. Benefit increases generated over the last five years are shown below.

Benefit Increases



Calendar Year

	1986	1987	1988	1989	1990	(Annualized) 3 Yrs.	5 Yrs.
Benefit Increases	7.9%	9.8%	8.1%	6.9%	4.0%	6.3%	7.3%

Benefit increases are intended to compensate, to some degree, for the effect of inflation.

As measured by the Consumer Price Index (CPI), inflation increased by 3.7% on an annualized basis over the last five years (calendar 1985-1989).

POST RETIREMENT FUND

Segment Performance

Stock Segment Performance

The stock segment of the Post Fund trailed its benchmark for the latest quarter and year.

	Period Ending 12/31/89		(Annualized)	
	Qtr.	Yr.	3 Yrs.	5 Yrs.
Stock Segment	-3.8%	27.2%	14.7%	14.9%
Post Fund Benchmark	1.2	30.4	N.A.	N.A.

Bond Segment Performance

The composition of the Post Retirement Investment Fund's dedicated bond portfolio remained essentially unchanged during the fourth quarter.

The Post Fund's bond portfolio provided a 4.1% total rate of return for the quarter and a 17.2% return for the year. This performance is consistent with the bond portfolio's design. The Post Fund's dedicated bond portfolio is structured so that portfolio income and maturities match the Fund's liability stream. As a result, the duration of the dedicated bond portfolio exceeds that of the bond market. Consequently, on a total return basis, the portfolio can be expected to underperform the bond market in down periods and outperform the market in up periods.

Dedicated Bond Portfolio Statistics
12/31/89

Value at Market	$ 4,474,134,547
Value at Cost	4,048,210,793
Average Coupon	5.78%
Current Yield	7.69
Yield to Maturity	8.50
Current Yield at Cost	8.50
Time to Maturity	16.02 Years
Average Duration	7.99 Years
Average Quality Rating	AAA
Number of Issues	425

SUPPLEMENTAL INVESTMENT FUND

The Minnesota Supplemental Investment Fund is a multi-purpose investment program that offers a range of investment options to state and local public employees. The different participating groups use the Fund for a variety of purposes:

- It functions as the investment manager for all assets of the Unclassified Employees Retirement Plan.
- It acts as the investment manager for all assets of the supplemental retirement programs for state university and community college teachers and for Hennepin County Employees.
- It is one investment vehicle offered to public employees as part of the state's Deferred Compensation Plan.
- It serves as an external money manager for a portion of some local police and firefighter retirement plans.

A wide diversity of investment goals exists among the Fund's participants. In order to meet those needs, the Fund has been structured much like a "family of mutual funds." Participants may allocate their investments among one or more accounts that are appropriate for their needs, within the statutory requirements and rules established by the participating organizations. Participation in the Fund is accomplished through the purchase or sale of shares in each account.

The investment returns shown in this report are calculated using a time-weighted rate of return formula. These returns may differ slightly from calculations based on share values, due to the movement of cash flows in and out of the accounts.

On December 31, 1989 the market value of the entire fund was $463 million.

Investment Options

Income Share Account - an actively managed, balanced portfolio utilizing both common stocks and bonds.

Growth Share Account - an actively managed, all common stock portfolio.

Common Stock Index Account - a passively managed, all common stock portfolio designed to track the performance of the entire stock market.

Bond Market Account - an actively managed, all bond portfolio.

Money Market Account - a portfolio utilizing short term, liquid debt securities.

Guaranteed Return Account - an option utilizing guaranteed investment contracts (GIC's), which offer a fixed rate of return for a specified period of time.

SUPPLEMENTAL INVESTMENT FUND

Income Share Account

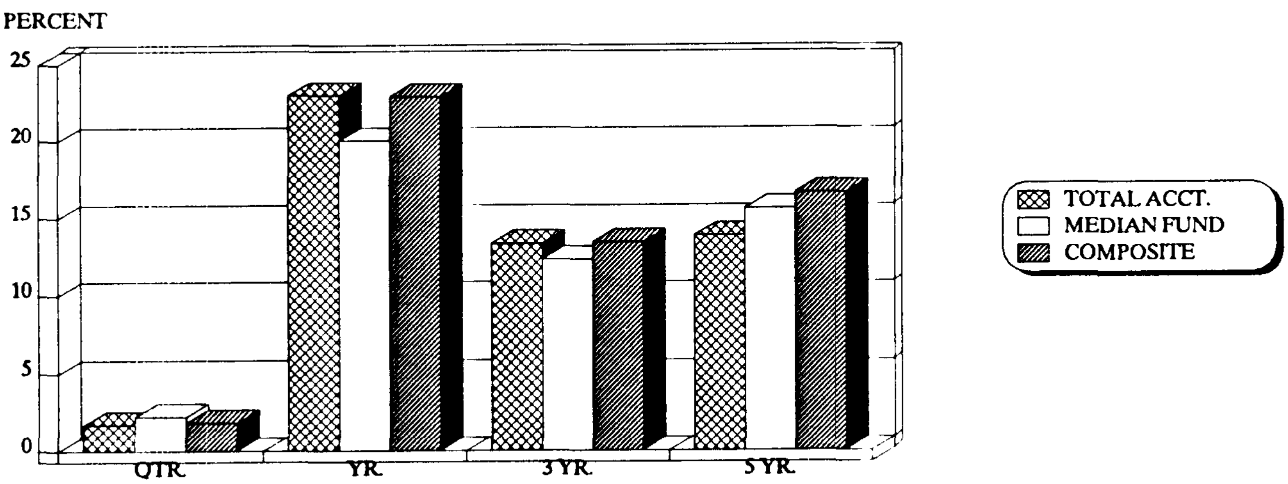
Investment Objective
The primary investment objective of the Income Share Account is similar to that of the Basic Retirement Funds. The Account seeks to maximize long-term real rates of return, while limiting short-run portfolio return volatility.

Asset Mix
The Income Share Account is invested in a balanced portfolio of common stocks and fixed income securities. Common stocks provide the potential for significant capital appreciation, while bonds act as a deflation hedge and provide portfolio diversification.

	Target	Actual
Stocks	60.0%	58.8%
Bonds	35.0	32.7
Unallocated Cash	5.0	8.5
	100.0%	100.0%

Investment Management
The Account combines internal and external management. Internal investment staff manage the entire fixed income segment. Currently, the entire stock segment is managed by Wilshire Associates as part of a passively managed index fund designed to track the Wilshire 5000. Prior to April, 1988, a significant portion of the stock segment was actively managed.

Market Value
On December 31, 1989 the market value of the Income Share Account was $240 million.



Period Ending 12/31/89

	Qtr.	Yr.	Annualized 3 Yr.	Annualized 5 Yr.
Total Account	1.7%	23.0%	13.3%	13.8%
Median Fund*	2.2	20.0	12.3	15.6
Composite**	1.8	22.9	13.4	16.6
Equity Segment	0.6	28.5	15.5	15.2
Wilshire 5000	0.6	29.2	15.9	19.1
Bond Segment	3.5	14.2	9.2	12.0
Salomon Bond Index	3.7	14.4	8.2	12.4

* TUCS Median Balanced Portfolio

** 60/35/5 Wilshire 5000/Salomon Broad Bond Index/T-Bills Composite

SUPPLEMENTAL INVESTMENT FUND

Growth Share Account

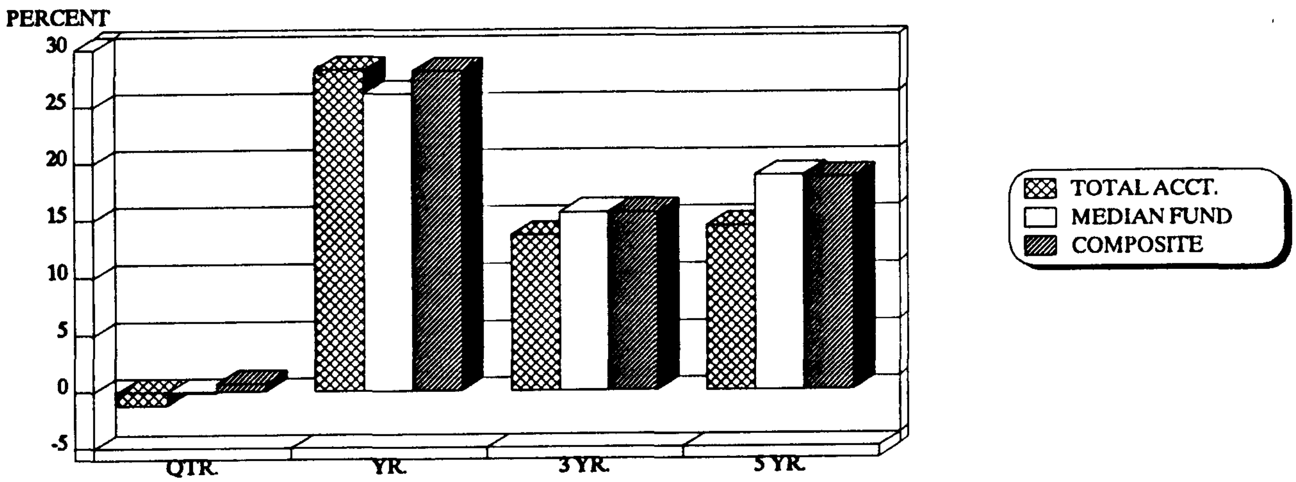
Investment Objective
The Growth Share Account's investment objective is to generate above-average returns from capital appreciation on common stocks.

Asset Mix
The Growth Share Account is invested almost entirely in common stocks. Generally, the small cash equivalents component represents the normal cash reserves held by the Account as a result of net contributions not yet allocated to stocks.

	Target	Actual
Stocks	95.0%	98.6%
Unallocated Cash	5.0	1.4
	100.0%	100.0%

Investment Management
Currently, the entire Account is managed by the same group of active external stock managers utilized by the Basic Retirement Funds. (See page 7 for performance results for these managers.) Prior to April, 1988, other active managers controlled a substantial portion of the account.

Market Value
On December 31, 1989 the market value of the Growth Share Account was $75 million.



Period Ending 12/31/89

	Qtr.	Yr.	Annualized 3 Yr.	Annualized 5 Yr.
Total Account	-1.2%	28.2%	13.6%	14.4%
Median Fund*	-0.1	26.1	15.6	18.8
Composite**	0.7	28.1	15.6	18.6
Equity Segment	-1.4	28.3	13.7	15.1
Wilshire 5000	0.6	29.2	15.9	19.1

* TUCS Median Managed Equity Portfolio

** 95/5 Wilshire 5000/T-Bills Composite

SUPPLEMENTAL INVESTMENT FUND

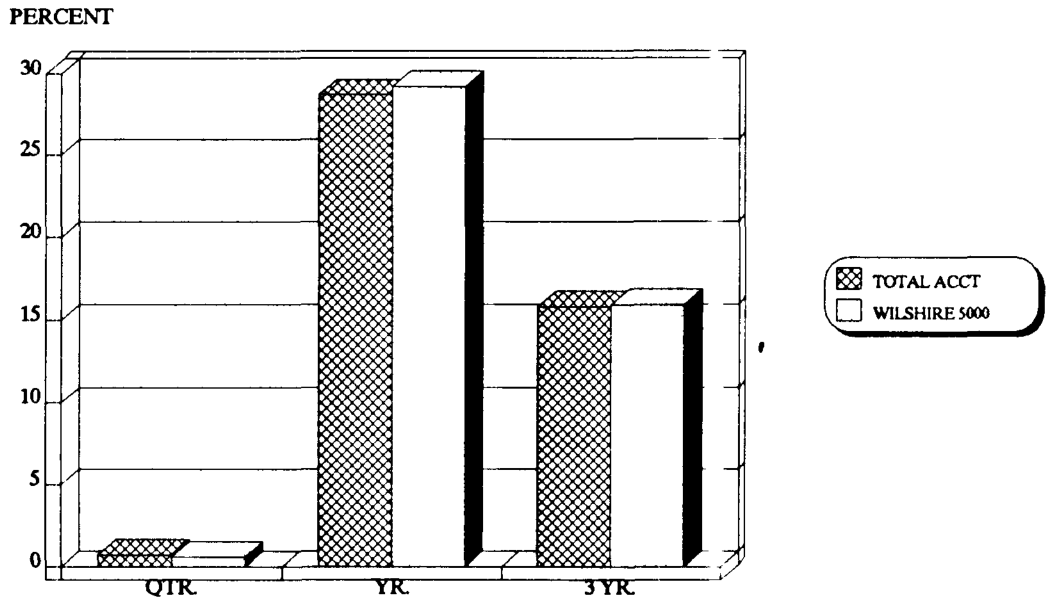
Common Stock Index Account

Investment Objective and Asset Mix
The investment objective of the Common Stock Index Account is to generate returns that match those of the common stock market. The Account is designed to track the performance of the Wilshire 5000, a broad-based equity market indicator.

The Account is invested 100% in common stocks.

Investment Management
The entire Account is managed by Wilshire Associates as part of a passively managed index fund.

Market Value
On December 31, 1989 the market value of the Common Stock Index Account was $7 million.



Period Ending 12/31/89

	Qtr.	Yr.	3 Yrs. Annualized	Since Inception Annualized*
Total Account	0.7%	28.7%	15.8%	14.6%
Wilshire 5000	0.6	29.2	15.9	14.5

* The Common Stock Index Account was added to the Supplemental Fund in July 1986.

SUPPLEMENTAL INVESTMENT FUND

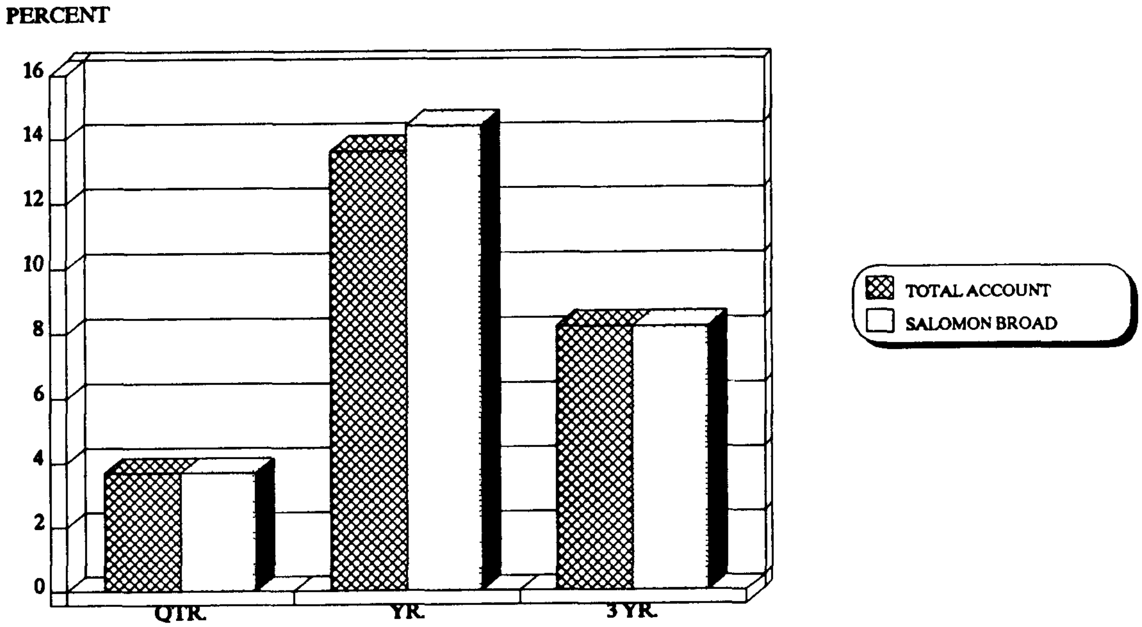
Bond Market Account

Investment Objective
The investment objective of the Bond Market Account is to earn a high rate of return by investing in fixed income securities.

Asset Mix
The Bond Market Account invests primarily in high-quality, government and corporate bonds that have intermediate to long-term maturities, usually 3 to 20 years.

Investment Management
The entire Account is managed by the same group of active external bond managers utilized by the Basic Retirement Funds. (See page 8 for performance results for these managers.)

Market Value
On December 31, 1989 the market value of the Bond Market Account was $5 million.



Period Ending 12/31/89

	Qtr.	Yr.	3 Yrs. Annualized	Since Inception Annualized*
Total Account	3.7%	13.6%	8.2%	9.3%
Salomon Broad	3.7	14.4	8.2	8.7

* The Bond Market Account was added to the Supplemental Fund in July 1986.

SUPPLEMENTAL INVESTMENT FUND

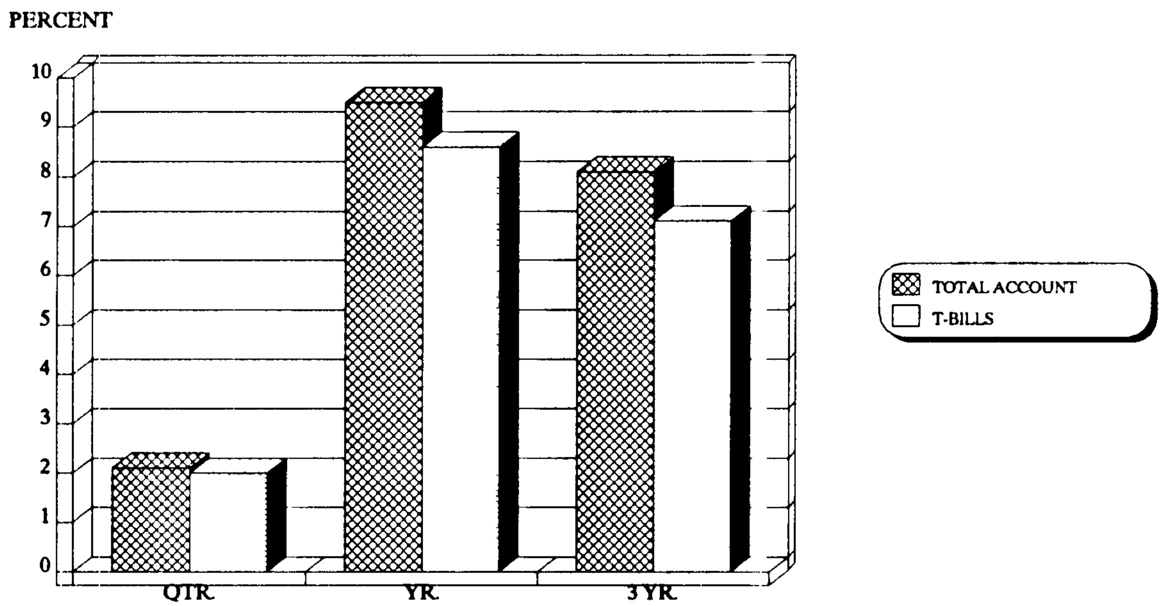
Money Market Account

Investment Objective
The investment objective of the Money Market Account is to purchase short-term, liquid fixed income investments that pay interest at rates competitive with those available in the money markets.

Assset Mix
The Money Market Account is invested entirely in high quality short-term investments such as U.S. Treasury Bills, bank certificates of deposit, repurchase agreements, and high grade commercial paper. The average maturity of these investments is 30 to 60 days.

Investment Management
The Money Market Account is managed solely by State Street Bank and Trust Company. State Street manages a major portion of the Board's cash reserves.

Market Value
On December 31, 1989 the market value of the Money Market Account was $79 million.



Period Ending 12/31/89

	Qtr.	Yr.	3 Yrs. Annualized	Since Inception Annualized*
Total Account	2.2%	9.6%	8.1%	7.9%
91 Day T-Bills	2.0	8.6	7.1	7.0

* The Money Market Account was added to the Supplemental Fund in July 1986.

SUPPLEMENTAL INVESTMENT FUND

Guaranteed Return Account

Investment Objectives
The investment objectives of the Guaranteed Return Account are to protect investors from any loss of their original investment and to provide a fixed rate of return over a three year period.

Asset Mix
The Guaranteed Return Account is invested in guaranteed investment contracts (GIC's) offered by major U.S. insurance companies and banks.

Investment Management
Annually, the Board accepts bids from banks and insurance companies that meet the financial quality criteria defined by State statute. Generally, the insurance company or bank offering the highest three year GIC interest rate is awarded the contract. That interest rate is then offered to participants who make contributions to the Guaranteed Return Account over the following twelve months.

Market Value
On December 31, 1989 the market value of the Guaranteed Return Account was $57 million.

Contract Period	Annual Effective Interest Rate	Manager
Nov. 1, 1987 - Oct. 31, 1990	8.45%	Principal Mutual Life
Nov. 1, 1988 - Oct. 31, 1991	9.01%	Mutual of America
Nov. 1, 1989 - Oct. 31, 1992	8.40%	John Hancock

PERMANENT SCHOOL FUND

Investment Objectives
The SBI invests the Permanent School Fund to produce a high, consistent level of income that will assist in offsetting state expenditures on school aids.

The Permanent School fund's investment objectives are influenced by the restrictive legal provisions under which its investments must be managed. These provisions require that the Permanent School Fund's principal remain inviolate. Further, any net realized equity and fixed income capital gains must be added to principal. Moreover, if the Permanent School Fund realizes net capital losses, these losses must be offset against interest and dividend income before such income can be distributed. Finally, all interest and dividend income must be distributed in the year in which it is earned.

These legal provisions limit the investment time horizon over which the Permanent School Fund is managed. Long-run growth in its assets is difficult to achieve without seriously reducing current spendable income and exposing the spendable income stream to unacceptable volatility. The SBI, therefore, invests the Permanent School Fund's assets to produce the maximum amount of current income, within the constraint of maintaining adequate portfolio quality.

Asset Mix
The asset mix of the Permanent School Fund was essentially unchanged during the fourth quarter. The Permanent School fund continues to hold only fixed income securities. Under current legal limitations, common stocks are not appropriate vehicles for the Fund.

	Target	Actual
Bonds	95.0%	96.2%
Unallocated Cash	5.0	3.8
Total	100.0%	100.0%

Investment Management
The entire fund is managed by the SBI investment staff.

Asset Growth
The market value of the Permanent School Fund's assets decreased 1.2% during the fourth quarter. The decrease in assets was due to withdrawals of $19.3 million.

	Asset Growth During Fourth Quarter 1989 (Millions)
Beginning Value	$389.0
Net Contributions	-19.3
Investment Return	14.8
Ending Value	$384.5

Bond Segment Performance
The composition of the Permanent School Fund's bond portfolio was essentially unchanged during the quarter. The bond portfolio is structured with a laddered distribution of maturities to minimize the Fund's exposure to re-investment rate risk. At the quarter's-end, the portfolio had a current yield of 8.74%, an average life of 7.43 years, and a AAA quality rating. The portfolio remains concentrated in Treasury and Agency issues and has a significant mortgage component as well.

Bond Portfolio Statistics
12/31/89

Value at Market	$363,317,728
Value at Cost	343,437,998
Average Coupon	9.02%
Current Yield	8.74
Yield to Maturity	8.57
Current Yield at Cost	9.25
Time to Maturity	15.43 Years
Average Duration	7.43 Years
Average Quality Rating	AAA
Number of Issues	132

STATE CASH ACCOUNTS

Description
State Cash Accounts represent the cash balances in more than 200 separate ccounts that flow through the Minnesota State Treasury. These accounts range in size from $5,000 to over $400 million.

Most accounts are invested by SBI staff through two short-term pooled funds:

- **Trust Fund Pool** contains the cash balances of retirement-related accounts managed internally and cash balances in the Permanent School Fund.

- **Treasurer's Cash Pool** contains the cash balances of special or dedicated accounts necessary for the operation of certain State agencies and the balance of the Invested Treasurer's Cash.

In addition, each State of Minnesota bond sale requires two additional pools; one for bond proceeds and one for the debt reserve transfer.

Because of special legal restrictions, a small number of cash accounts cannot be commingled. These accounts are invested separately.

Investment Objectives

- **Safety of Principal.** To preserve capital.

- **Competitive Rate of Return.** To provide a high level of current income.

- **Liquidity.** To meet cash needs without the forced sale of securities at a loss.

Asset Mix
The SBI maximizes current income while preserving capital by investing all cash accounts in high quality, liquid short term investments. These include U.S. Treasury and Agency issues, repurchase agreements, bankers acceptances, commercial paper, and certificates of deposit.

Investment Management
All state cash accounts are managed by the SBI investment staff. As noted above, most of the assets of the cash accounts are invested through two large commingled investment pools.

Performance
Both the Trust Fund Pool and the Treasurer's Cash Pool outperformed their target for the latest quarter and year.

	Period Ending 12/31/89 Market Value (Millions)	Qtr.	Yr.
Treasurer's Cash Pool	$2,077	2.2%	9.2%
Trust Fund Cash Pool	173	2.1	9.1
91-Day T-Bills		2.0	8.6

Tab C

PORTFOLIO STATISTICS

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
NET CASH FLOW AVAILABLE FOR INVESTMENT

For period of
October 1, 1989 - December 31, 1989

Teachers Retirement Fund	$ 39,000,000.00
Public Employees Retirement Fund	-0-
State Employees Retirement Fund	4,990,000.00
Public Employees Police & Fire	-0-
Highway Patrol Retirement Fund	(1,141,000.00)
Judges Retirement Fund	1,690,000.00
Public Emp. P & F Consolidated	3,127,201.67
Correctional Employees Retirement Fund	317,000.00
Post Retirement Fund	(50,382,529.32)
Supplemental Retirement Fund - Income	436,042.20
Supplemental Retirement Fund - Growth	(5,328,721.93)
Supplemental Retirement Fund - Money Market	(544,431.92)
Supplemental Retirement Fund - Index	1,205,661.18
Supplemental Retirement Fund - Bond Mkt.	1,374,577.60
Supplemental Retirement Fund - Guaranteed	5,692,365.47
Total Retirement Funds Net Cash Flow	$ 436,164.95
Permanent School Fund	393,672.39
Total Net Cash Flow	$ 829,837.34

STATE OF MINNESOTA

STATE BOARD OF INVESTMENT

COMPOSITION OF STATE INVESTMENT PORTFOLIOS BY TYPE OF INVESTMENT

MARKET VALUE DECEMBER 31, 1989

(in 000's)

	CASH AND SHORT TERM SECURITIES	BONDS INTERNAL	BONDS EXTERNAL	STOCKS INTERNAL	STOCKS EXTERNAL	ALTERNATIVE ASSETS	TOTAL
BASIC RETIREMENT FUNDS:							
TEACHERS RETIREMENT FUND	$ 64,976	$ -0-	$ 832,105	$ -0-	$1,917,607	$375,029	$ 3,189,717
	2.04%		26.09%		60.12%	11.75%	100%
PUBLIC EMPLOYEES RETIRE. FUND	31,918	-0-	406,925	-0-	937,643	183,381	1,559,867
	2.05%		26.09%		60.11%	11.75%	100%
STATE EMPLOYEES RETIRE. FUND	27,960	-0-	356,456	-0-	821,351	160,637	1,366,404
	2.05%		26.09%		60.11%	11.75%	100%
PUBLIC EMP. POLICE & FIRE FUND	11,742	-0-	149,694	-0-	344,927	67,460	573,823
	2.05%		26.09%		60.11%	11.75%	100%
HIGHWAY PATROL RETIRE. FUND	2,087	-0-	26,607	-0-	61,309	11,991	101,994
	2.05%		26.09%		60.11%	11.75%	100%
JUDGES RETIREMENT FUND	1	-0-	1,939	-0-	4,211	874	7,025
	.01%		27.60%		59.95%	12.44%	100%
PUBLIC EMP. P.F. CONSOLIDATED	3,362	-0-	23,008	-0-	13,200	1,345	40,915
	8.22%		56.23%		32.26%	3.29%	100%
CORRECTIONAL EMPLOYEES RETIREMENT	1,630	-0-	17,241	-0-	39,727	7,770	66,368
	2.46%		25.98%		59.86%	11.70%	100%
POST RETIREMENT FUND	139,090	4,562,854	-0-	535,738	-0-	-0-	5,237,682
	2.66%	87.12%		10.22%			100%
MINNESOTA SUPPLEMENTAL FUNDS:							
INCOME SHARE ACCOUNT	20,403	78,619	-0-	-0-	141,540	-0-	240,562
	8.48%	32.68%			58.84%		100%
GROWTH SHARE ACCOUNT	1,010	-0-	-0-	-0-	73,772	-0-	74,782
	1.35%				98.65%		100%
MONEY MARKET ACCOUNT	78,848	-0-	-0-	-0-	-0-	-0-	78,848
	100%						100%
COMMON STOCK INDEX ACCOUNT	-0-	-0-	-0-	-0-	6,615	-0-	6,615
					100%		100%
BOND MARKET ACCOUNT	-0-	-0-	5,316	-0-	-0-	-0-	5,316
			100%				100%
GUARANTEED RETURN ACCOUNT	-0-	-0-	57,226	-0-	-0-	-0-	57,226
			100%				100%

	CASH AND SHORT TERM SECURITIES	BONDS INTERNAL	BONDS EXTERNAL	STOCKS INTERNAL	STOCKS EXTERNAL	ALTERNATIVE ASSETS	TOTAL
TOTAL RETIREMENT FUNDS	$ 383,027	$4,641,473	$1,876,517	$535,738	$ 4,361,902	$808,487	$12,607,144
	3.04%	36.82%	14.88%	4.25%	34.60%	6.41%	100%
PERMANENT SCHOOL FUND	14,484	370,008	-0-	-0-	-0-	-0-	384,492
	3.77%	96.23%					100%
TREASURERS CASH	2,077,615	-0-	-0-	-0-	-0-	-0-	2,077,615
	100%						100%
HOUSING FINANCE AGENCY	178,220	-0-	-0-	-0-	-0-	-0-	178,220
	100%						100%
MINNESOTA DEBT SERVICE FUND	26,327	-0-	-0-	-0-	-0-	-0-	26,327
	100%						100%
MISCELLANEOUS ACCOUNTS	230,357	-0-	-0-	-0-	-0-	-0-	230,357
	100%						100%
GRAND TOTAL	$2,910,030	$5,011,481	$1,876,517	$535,738	$4,361,902	$808,487	$15,504,155
	18.77%	32.32%	12.10	3.46%	28.13%	5.22%	100%

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

TRANSACTION AND ASSET SUMMARY
RETIREMENT FUNDS

	Net Transactions				Asset Summary (at market)			
	Bonds (000,000)	Stocks (000,000)	Total	Cash Flow	Short-term % of Fund	Bonds % of Fund	Equity % of Fund	Total (000,000) (at market)
September 1986	14	(67)	(53)	(48)	4.9	47.0	48.1	8490
October	4	(117)	(113)	10	6.2	46.5	47.3	8724
November	(17)	(3)	(20)	40	6.8	46.0	47.2	8864
December	(51)	44	(7)	12	7.0	46.0	47.0	8772
January 1987	34	21	42	15	6.2	44.4	49.4	9283
February	120	(9)	111	50	5.4	44.4	50.2	9576
March	76	(15)	61	18	4.9	44.5	50.6	9614
April	100	(7)	93	4	4.1	45.0	50.9	9383
May	3	(136)	(133)	33	5.9	44.6	49.5	9403
June	(42)	(22)	(64)	141	7.8	42.6	49.6	9706
July	283	(119)	164	52	6.4	44.9	48.7	10028
August	181	(14)	167	40	5.2	44.7	50.1	10020
September	50	10	60	59	5.3	44.5	50.2	9850
October	(12)	(37)	(49)	20	6.5	50.1	43.4	9077
November	9	(10)	(1)	69	7.4	51.1	41.5	8890
December	(3)	34	31	0	6.8	50.1	43.1	9180
January 1988	(5)	118	113	57	5.9	50.0	44.1	9572
February	102	1	103	47	5.2	49.8	45.0	9841
March	25	(10)	15	6	5.2	49.8	45.0	9686
April	(9)	16	7	11	5.2	49.1	45.7	9667
May	(2)	(2)	(4)	41	5.7	48.3	46.0	9633
June	(3)	18	15	75	6.1	47.5	46.4	10045
July	91	(5)	86	56	5.8	48.1	46.1	10003
August	(3)	14	11	55	6.3	48.2	45.5	9920
September	(7)	(3)	(10)	19	6.4	48.0	45.6	10208
October	(7)	0	(7)	(27)	6.2	48.2	45.6	10329
November	129	1	130	88	5.8	48.6	45.6	10217
December	(1)	2	1	83	6.5	47.8	45.7	10414
January 1989	88	(10)	78	3	5.6	47.7	46.7	10760
February	60	18	78	38	5.3	47.9	46.8	10633
March	150	5	155	12	3.9	48.8	47.3	10783
April	(16)	188	172	16	2.3	48.1	49.6	11113
May	(2)	4	2	43	2.6	47.6	49.8	11461
June	119	10	129	119	2.5	49.2	48.3	11768
July	121	(100)	21	44	2.6	49.0	48.4	12287
August	275	(205)	70	51	2.4	49.8	47.8	12311
September	47	11	58	32	2.2	50.2	47.6	12344
October	113	(154)	(41)	8	2.6	52.5	44.9	12342
November	45	0	45	78	2.8	52.1	45.1	12494

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Room 105, MEA Building
55 Sherburne Avenue
St Paul, MN 55155
Tel. (612) 296-3328
FAX. (612) 296-9572

March 7, 1990

TO: Members, State Board of Investment
Members, Investment Advisory Council

FROM: Howard Bicker

RE: Executive Director's Administrative Report

1) Budget Report

A budget-to-actual report for the SBI's FY 1990 administrative budget is included as Attachment A. It covers expenditures through February 28, 1990.

2) Travel Report

A summary of SBI travel expenditures for November 16, 1989-February 15, 1990 is included as Attachment B.

3) SBI Client Conference

The annual investment conference for SBI clientele was held on February 27, 1990 at the Minnesota Club. Approximately 85 individuals registered and 74 people attended.

4) Legislative Update

The 1990 Legislative Session began on February 12, 1990. To date, only a small number of bills on pension matters have been introduced. A status report on bills of interest to the SBI is attached. This report is updated weekly and sent to the Board designees.

ATTACHMENT A

STATE BOARD OF INVESTMENT
FISCAL YEAR 1990 ADMINISTRATIVE BUDGET REPORT
GENERAL FUND APPROPRIATION
FISCAL YEAR TO-DATE THROUGH FEBRUARY 28,1990

ITEM	FISCAL YEAR 1990 BUDGET	FISCAL YEAR 1990 EXPENDITURES
PERSONAL SERVICES		
CLASSIFIED EMPLOYEES	$ 263,080	$ 147,613
UNCLASSIFIED EMPLOYEES	1,094,000	685,743
PART-TIME EMPLOYEES	0	605
SEVERENCE PAY	0	0
MISCELLANEOUS PAYROLL	0	333
SUBTOTAL	**$ 1,357,080**	**$ 834,294**
EXPENSES & CONTRACTUAL SERVICES		
RENTS & LEASES	92,000	61,755
REPAIRS/ALTERATIONS/MAINTENANCE	8,000	5,132
PRINTING & BINDING	16,500	13,844
PROFESSIONAL/TECHNICAL SERVICES	10,000	2,255
DATA PROCESSING & SYSTEM SERVIC	162,000	94,500
PURCHASED SERVICES	20,000	17,829
SUBTOTAL	**$ 308,500**	**$ 195,315**
MISCELLANEOUS OPERATING EXPENSES		
COMMUNICATIONS	18,000	11,500
TRAVEL, IN-STATE	1,000	2,040
TRAVEL, OUT-STATE	34,000	17,764
FEES & OTHER FIXED CHARGES	7,000	3,630
SUBTOTAL	**$ 60,000**	**$ 34,934**
SUPPLIES/MATERIALS/PARTS	**15,000**	**13,355**
CAPITAL EQUIPMENT	**17,000**	**3,295**
TOTAL GENERAL FUND	**$ 1,757,580**	**$ 1,081,193**

ATTACHMENT B

STATE BOARD OF INVESTMENT

Travel Summary by Date
November 16, 1989 - February 15, 1990

Purpose	Name(s)	Destination and Date	Total Cost
Consultant Meeting Richards & Tierney	D. Gorence	Chicago 1/17-19	$ 701.31
Staff Education "Economically Targeted Investing" sponsored by the Institute for Fiduciary Education	H. Bicker B. Lehman	Santa Barbara 1/22-24	$1,488.96
Manager Search **Active Stock Managers** Geo Capital, Quest, TCW, Wellington **Short Selling Research** Bear Stearns, D.M. Knott, Kynikos Assoc., Frank Russell Shearson Lehman, Tiger Ltd.	D. Gorence M. Menssen	Boston New York 2/5-9	$2,673.56
Staff Education "Profitable Strategies for Trading" sponsored by the Investment Management Institute	M. Edwards	New York 2/6-8	$ 587.00
Staff Education "Institute for Venture Capital and LBO Funds" sponsored by the National Assoc. of Small Business Investment Corporation	J. Lukens	Dallas 2/6-8	$2,178.00
Board Member Travel "Market Volatility" sponsored by the Institutional Investor	E. Voss	Los Angeles 2/7-8	$ 924.00

ATTACHMENT C

BILLS OF INTEREST TO THE MINNESOTA STATE BOARD OF INVESTMENT
1990 LEGISLATIVE SESSION
Includes Action Through 3/5/90

DESCRIPTION OF BILL	HF/SF #	AUTHOR	CURRENT STATUS
Dedicating Certain Revenue to the Environmental Trust Fund;	HF 479	Munger	Passed by Envir. & Natural Resources; Referred to Appropriations, Health & Human Services Division
Calls for Constitutional dedication of certain revenues to the Environmental Trust Fund, which the SBI will be investing	SF 2321		Hearing scheduled 3/7 in Senate Envir. & Natural Resources Committee
Annual Maximum Municipal Contribution for Consolidating Local Plans;	SF 2003	D. Moe	Hearing scheduled at Pension Commission 3/7/90
Sets a maximum annual contribution a city would make in order to consolidate a local police or fire fund.			
Annual Maximum Municipal Contribution for Consolidating Local Plans (Not a companion)	HF 2279	Simoneau	Hearing scheduled at Pension Commission 3/7/90
Pension Technical Changes	HF 2199	R. Johnson	Referred to Gov't. Operations
Repeals Variable Annuity language in Chapter 11A	SF 2128	Solon	
Revisors Bill	HF 2220	Milbert	Referred to Judiciary Committee
Repeals Variable Annuity language in Chapter 11A	SF 2072	Cohen	
Requiring Regular Reporting of Rate of Return Results	HF 2103	Reding	Passed Governmental Operations with amendments
Applies to local pension funds	SF 2105	D. Moe	Referred to Governmental Operations
Linked Deposit Bill would authorize SBI to purchase certificates	HF 718	C. Nelson	In 1989 referred to Ag Committee; no hearing scheduled in 1990
of deposit from eligible financial institutions throughout the state	SF 87	Dahl	In 1989 Ag Committee amended and passed; Gov't. Operations passed 4/14, referred to Finance; no hearing scheduled in 1990
*technically bill is still alive from 1989 session			
Transferring Workers Comp Assigned Risk Assets to SBI for investment	HF 2489	Simoneau	Referred to Governmental Operations

Tab D

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
Room 105, MEA Building
55 Sherburne Avenue
St Paul, MN 55155
Tel (612) 296-3328
FAX. (612) 296-9572

March 7, 1990

TO: Members, State Board of Investment
Members, Investment Advisory Committee

FROM: Task Force on Manager Retention

RE: Status Report

At the Board's request, the IAC formed an ad hoc Task Force to examine two issues relating to active managers:

- o Use of active and passive management strategies with stocks and bonds in the Basic Retirement Funds.
- o Review and application of the Board's Manager Continuation Policy.

Membership of the Task Force on Manager Retention is:

Judy Mares, Chair
Jim Eckmann, Dayton-Hudson
Jim Hacking, PERA
Debbie Veverka, Honeywell
Jan Yeomans, 3M

At its meeting on January 10, 1990, the Board reviewed the Task Force's findings and recommendation on the first issue and reaffirmed its policy that both active and passive management be used in the stock and bond segments of the Basic Retirement Funds.

The Task Force met twice during the quarter to discuss the Board's Manager Continuation Policy. While the Task Force is close to agreement on potential changes to the Manager Continuation Policy, it is not prepared to make specific recommendations at this time.

The Task Force will continue its review during the current quarter and plans to present its final report at the Board's meeting in June 1990.

Tab E

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
Room 105, MEA Building
55 Sherburne Avenue
St Paul, MN 55155
Tel (612) 296-3328
FAX (612) 296-9572

March 7, 1990

TO: Members, State Board of Investment
Members, Investment Advisory Committee

FROM: Equity Manager Committee

RE: Committee Report

The IAC Equity Manager Committee met on March 5, 1990, to review the following agenda:

- o Review of Equity Program Misfit
- o Review of Active Manager Performance
- o Approval of Contract Renewals for Concord, Franklin, Rosenberg and Sasco
- o Recommendation from the Small Cap Manager Search Committee

INFORMATION ITEMS:

1) Review of Equity Program Misfit

The Committee reviewed information prepared by staff and Richards & Tierney concerning the existing misfit in the current active manager program. "Misfit" is the difference between the aggregate benchmarks of the active managers and the asset class target, i.e. the Wilshire 5000.

The active stock manager group has shown a significant misfit versus the market in three major areas:

- o persistent over-exposure to small capitalization stocks
- o persistent over-exposure to growth oriented stocks

- o persistent under-exposure to yield oriented stocks

The active manager group has held the bias toward small, growth oriented stocks during a prolonged period when this segment has underperformed significantly. This is the primary reason why the SBI's benchmarks, individually and in aggregate, have underperformed the broad market.

The Equity Manager Committee believes that the Board can take one of three basic courses of action with respect to the existing misfit:

- o It can make an explicit choice to leave the misfit in place indefinately. This amounts to a decision, or "bet", that small growth stocks will outperform the market in the future.
- o It can take action to reduce the misfit by adding or subtracting managers, reallocating assets among managers, establishing a completeness fund, or slightly altering the characteristics of the index fund.
- o It can leave the current bias toward small growth stocks in place for the time being and then take action to reduce the misfit at some point in the future.

The staff, Richards & Tierney and the Committee will explore the impact of each of these alternatives during the next quarter. Recommendations will be presented to the full IAC and the Board in June 1990.

2) Review of Active Manager Performance

As a group, the active managers underperformanced their aggregate benchmark for the quarter but outperformed the aggregate benchmark by 5.7 percentage points for the latest year. The current group of active managers nearly matched the performance of the Wilshire 5000 for the six year period since January 1984 (16.2% annualized for the current active managers vs. 16.3% annualized for the Wilshire 5000).

ACTION ITEMS:

1) Renewal of Contracts

On April 1, 1989, four new managers were retained: Concord, Franklin, Rosenberg and Sasco. During the nine months since they were added to the manager group, Franklin, Rosenberg and Sasco have outperformed their benchmarks by 2-5 percentage points. Concord has underperformed its benchmark. While it is too early to draw conclusions from this data alone, staff remains confident with each manager's ability and investment approach and recommends that all four contracts be renewed.

RECOMMENDATION:

The Committee recommends that the SBI authorize the executive director, with assistance from SBI's legal counsel, to negotiate and execute contract extensions with Concord Capital Management, Franklin Portfolio Associates, Rosenberg Institutional Equity management and Sasco Capital for a period of one year.

2) Report from the Small Cap Manager Search Committee

At its meeting in January 1990, the Board terminated BMI Capital, a manager specializing in small capitalization stocks, and directed the staff to convene a search committee to identify an alternative small cap manager.

The Search Committee reviewed 23 firms and selected GeoCapital Management as its recommended candidate. A full report from the Search Committee is attached.

RECOMMENDATION:

The Equity Committee concurs with the findings of the Search Committee and recommends that the SBI authorize the executive director, with assistance from SBI's legal counsel, to negotiate and execute a contract with GeoCapital Management. The Committee recommends that GeoCapital receive an initial portfolio of $60 million in assets from the index fund.

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
Room 105, MEA Building
55 Sherburne Avenue
St Paul, MN 55155
Tel (612) 296-3328
FAX (612) 296-9572

March 5, 1990

TO: Members, Equity Manager Committee

FROM: Small Cap Equity Manager Search Committee

RE: Search Committee Report

At its meeting on January 10, 1990, the Board terminated BMI Capital, an active equity manager specializing in small capitalization stocks. The Board also directed staff to convene a search committee to identify and recommend a replacement small cap manager for consideration by the Board at its next meeting.

The members of the Search Committee are:

Peter Sausen, Chair	Judith Mares
James Eckmann	Deborah Veverka
Christie Eller	Elaine Voss
Richard Helgeson	Jan Yeomans
John Manahan	

For purposes of the search process, "small capitalization" was defined as a manager who focuses on companies with market capitalizations (total shares times current price) of $500 million or less. Staff identified potential candidates from the following sources:

- o Staff files generated by on-going meetings with prospective managers.
- o IAC members and other pension plan sponsors.
- o Richards & Tierney, the Board's Consultant.

Firms with $100 million or less in total assets under management were not considered. The SBI's account (often $100 million or more) should comprise less than 50% of the firm's assets under management.

SELECTION CRITERIA

The Search Committee reviewed screening questionnaires from 23 firms (see attached list and questionnaire form). Four (4) finalists were selected for interviews based on the Committee's review of both qualitative and quantitative factors. The factors emphasized by the Committee were:

- The firm maintains a sufficiently diversified portfolio of small cap stocks.
- The firm is not overly dependent on outside vendors for research or investment ideas.
- The firm does not use market-timing as part of its investment approach.
- The firm's small cap performance track record is attributable to the current manager or team and compares favorably with the Russell 2000, a small cap market index.
- The firm has capacity to absorb additional assets ($50 - 100 million) and has set appropriate limits on its overall growth in assets/accounts.
- The firm is considered favorably by other clients and has experience with managing money for large institutional investors.
- The firm uses, or is willing to implement, customized benchmarks and performance based fees.

FINALIST INTERVIEWS

The Committee interviewed the following firms on February 21, 1990 at SBI offices:

- GeoCapital Corporation
- IDS Spectrum Growth
- Quest Advisory Corporation
- Wellington Small Cap Non-Technology

In addition to the information obtained through the interviews, the Committee considered each firm's response to a detailed questionnaire covering all aspects of the manager's operation and investment approach (see attached copy of the detailed questionnaire form).

This qualitative information was supplemented by an analysis of the firm's actual performance. Staff requested that each finalist provide monthly portfolios for a representative account with a history of at least five years. After appropriate adjustments were made to reflect management fees, staff calculated investment returns for each firm. These returns were analyzed relative to the Russell 2000 index.

GeoCapital and Wellington both emerged as strong candidates based on the qualitative and quantitative input. The two firms specialize in somewhat different areas of the market.

- o GeoCapital incorporates both growth and value elements in its investment approach. The firm holds fairly concentrated portfolios (40-60 issues). It buys stocks with an average market capitalization of $400 million. GeoCapital is an independent money management firm with two portfolio managers, Irwin Leiber and Barry Fingerhut.

- o Wellington Non-Technology uses primarily a growth orientation. It holds a more diversified portfolio (200 or more issues) with an average market capitalization of $100 million. Wellington Non-Technology is part of a very large money management firm. The portfolio manager for this style is Binkley Shorts.

<u>RECOMMENDATION:</u>

The Committee had considerable difficulty in choosing one firm over the other. While both firms meet all the criteria listed above, the Committee selected GeoCapital for recommendation to the Board.

Small Cap Manager Candidates

FIRM	LOCATION
Amerinda U. S. Advisors	Larkspur, California
Cadence Capital Mgmt. Corp.	Boston, Massachusetts
Eagle Asset Management, Inc.	St. Petersburg, Florida
Friess Associates, Inc.	Greenville, Delaware
GeoCapital Corporation	New York, New York
Husic Capital Management	San Francisco, California
IDS Advisory Group	Minneapolis, Minnesota
Johnson, Valliant & Mink, Inc.	Baltimore, Maryland
Monetta Financial Services, Inc.	Chicago, Illinois
Morgan Grenfell Capital Mgmt.	New York, New York
Nicholas-Applegate Capital Mgmt.	San Diego, California
Peregrine Capital Management	Minneapolis, Minnesota
Pinnacle Associates, Inc.	New York, New York
Quest Advisory Corporation	New York, New York
Sit Investment Associates	Minneapolis, Minnesota
S-Squared Technology Corp.	New York, New York
Thomson Horstmann & Bryant, Inc.	Saddle Brook, New Jersey
T. Rowe Price	Baltimore, Maryland
Trust Company of the West	Los Angeles, California
Wall Street Associates	La Jolla, California
Wasatch Advisors, Inc.	Salt Lake City, Utah
Wellington Management Company	Boston, Massachusetts
Wilke Capital Management, Inc.	Minneapolis, Minnesota

SCREENING QUESTIONNAIRE

MINNESOTA STATE BOARD OF INVESTMENT
EXTERNAL COMMON STOCK MANAGER PROGRAM

PROSPECTIVE MANAGER QUESTIONNAIRE

1. Please provide a brief description of your firm's investment approach and categorize your investment approach (i.e. value, growth, sector rotational) if appropriate.

2. To what degree does your firm raise cash over a market cycle?

3. What is the average annual turnover for your equity portfolios?

4. For performance evaluation and investment strategy purposes, does your firm utilize any customized common stock performance benchmarks that differ in some way from the broad market indices?

5. How many equity-only accounts does your firm have under management? What is the current market value of these accounts in aggregate?

6. Who are your five largest tax-exempt equity-only clients? What is the current dollar size of each of these accounts?

7. What is the average account load for your equity portfolio managers in terms of total equity accounts managed.

8. Does your firm have a growth plan in place that specifies the maximum number of clients and/or assets under management? If so, what is the firm's current status?

9. If not included in marketing materials, please provide biographies of your firm's key common stock investment personnel.

DETAILED QUESTIONNAIRE

STATE OF MINNESOTA

EQUITY INVESTMENT MANAGER INFORMATION

I. BACKGROUND DATA

1. Date of Interview with Selection Committee: ____________

2. Name of Firm: ____________

3. Address: ____________
____

4. Telephone: ____________

5. Contact: ____________

6. Date Business Commenced: ____________

7. Affiliation with other firms (i.e., parent management companies, insurance companies, brokerage firms, investment banking firms, or other entities):

8. Ownership:

9. Is the firm registered as an investment advisor under the Investment Advisors Act of 1940; a bank, as defined in the act; an insurance company qualified to act in such capacity under the laws of Minnesota and one other state?

II. ORGANIZATION/STAFF

A. Professional Staff

1. Number of Investment Department Personnel: ______

2. Number of portfolio Managers: ______

3. Number of Full-time Security Analysts: ______

4. Number of Economists: ______

5. Number of in-house traders: ______

6. Number of portfolio managers and investment analysts added in:

   the past three years ______

   the past year ______

7. Number of portfolio managers and investment analysts which have left the firm in:

   past three years ______

   their initiative ______

   firm's initiative ______

   the past year ______

   their initiative ______

   firm's initiative ______

8. Elaboration on answers to questions #6 and #7.

9. **Experience of investment personnel:**

	NUMBER OF YEARS		
	Average	Low	High
Portfolio Managers	_____	_____	_____
Investment Analysts	_____	_____	_____

10. **Average dollars under management per portfolio manager:** _______________

11. **Average number of accounts per portfolio manager:** _______________

12. **Limit on number of accounts per portfolio manager:** _______________

13. **Approximate allocation of portfolio manager's time (%):**

    Investment Research _______________

    Portfolio Management _______________

    Administration _______________

    Marketing _______________

14. **Please provide biographical data on key investment personnel, including education and work experience.**

15. **Describe the firm's financial incentives for portfolio managers and investment analysts.**

16. Identify the member(s) of the firm who would be directly responsible for managing the SBI's account.

17. How many accounts and total dollars does the individual(s) listed above currently manage?

B. Assets/Client Relationships

1. For accounts under management as of December 31, 1989 provide the following information:

Accounts	Number	Assets ($ millions) Total	Stocks	Bonds	Other	Percent of Total Assets Fully Discretionary
Total						
Tax Exempt						

2. Account breakdown by number of accounts:

	Tax-exempt funds 12/31/89	12/31/88	12/31/87	12/31/86	12/31/85
Under $10 million					
$10-$25 "					
$25-$50 "					
$50-$100 "					
Over $100 "					
TOTAL					
TOTAL (in $)					

Largest Account (in $) ____________

Smallest Account (in $) ____________

3. Describe any limitations the firm currently imposes or plans to impose regarding:

   (a) Number of Client Relationships

   (b) Total Assets under Management

   (c) Maximum account size

   (d) Minimum account size

4. List the names, and the dollar amount of the firm's five largest equity tax-exempt accounts:

5. Provide the names and sizes of all tax-exempt accounts that the firm lost during the years 1984 - 1989.

6. Please attach the firm's standard management fee schedule.

7. Does the firm utilize performance-based fees for any of its current clients? If yes, please provide a description of the performance-based fee arrangement. If no, would you consider a performance-based fee arrangement?

8. Describe the firm's experience with managing the money of public funds and other large institutional clients.

C. Financial Viability and Ethics

1. Describe the firm's financial position.

2. Provide a copy of the firm's most recent audited financial statement.

3. Describe any censure by the SEC or any litigation pending against the firm.

4. Is the firm aware of any potential conflicts of interest in managing the SBI's assets?

5. Provide a copy of the firm's Form ADV.

6. Does the firm maintain written policies and guidelines to assure compliance with governing securities laws and regulations?

III. INVESTMENT APPROACH

A. Investment Philosophy

1. Describe in broad terms the firm's overall investment management philosophy.

2. What portfolio characteristics does the firm seek with regard to residual and systematic risk and industry diversification?

3. For performance evaluation and investment strategy purposes, does your firm utilize any customized common stock performance benchmarks (normal portfolio) that differ in some way from the broad market indices?

4. If the answer to question #3 above is "yes", please provide a description of the current benchmark construction process.

5. If the answer to question #3 above is "no", would your firm be willing to construct a customized benchmark portfolio?

B. Investment Management Process

1. Describe the firm's management style with respect to asset allocation.

2. Describe the portfolio's allocation to cash during the past five years.

	High	Low	Average
%			

3. Describe the firm's process for formulating, implementing, and controlling equity investment strategy. In particular, discuss the subjects of economic analysis, market timing, and stock selection.

Equity Research Process

4. What are the firm's principle research and information sources?

5. Does the firm have expertise in any particular group of equities?

6. Describe the size of the firm's research staff and their experience levels.

Trading

7. Give a description of the firm's trading operation regarding:

   a) staff size, experience, scope of responsibilities, and allocation of commissions.

   b) trading techniques and venues

8. What is the average annual level of portfolio turnover experienced during the past five years?

9. To what extent is the firm willing to allocate the commission dollars generated in the management of the SBI's assets to the SBI for its research purposes?

C. Communication

1. How does the firm communicate with clients?

   a) Format and frequency

   b) Who in the organization would handle contact with the SBI?

   c) Will the firm's account manager be available for periodic presentations and joint manager meetings?

d) Please provide an example of a client/manager presentation.

D. Miscellaneous

1. Assuming the firm's managers have read the SBI's investment guidelines (i.e., restrictions concerning allowable investments and target risk-return parameters), can they work under them?

2. Assuming that the SBI's account is one of the larger that the firm will manage, does the firm anticipate any problems in absorbing the SBI's assets with respect to investment process, philosophy etc.?

3. Will the SBI's account be managed on a separate basis? If not, explain.

4. Does the firm have a preference as to the method of funding its SBI account out of the SBI's current holdings?

5. Are there situations in which you recommend using stock index futures? If so, in what manner?

7. **Describe the information processing capabilities (databases, software and hardware) supporting the firm's investment operation.**

8. **What does the firm perceive its weakness(es) to be, if any, in its organization and/or investment approach.**

ACTIVE EQUITY MANAGERS

Value of Active Management Reports

Fourth Quarter 1989

Common stock manager returns are evaluated against the performance of customized indices constructed to represent the managers' specific investment approaches. These custom indices are commonly referred to as "benchmark portfolios." The benchmark portfolios take into account the equity market forces that at times favorably or unfavorably impact certain investment styles. Thus, benchmark portfolios are the appropriate bogeys against which to judge the managers' performance.

Manager performance relative to benchmarks is evaluated on a quarterly basis by the Equity Manager Committee of the Investment Advisory Council.

Staff Recommendations
Staff recommends the following actions concerning manager status:

- Renew contracts for Concord, Franklin, Rosenberg, and Sasco.

Managers	Market Value 12/31/89 (Thousands)	Quarter Ending 12/31/89 Actual	Bmrk	Year Ending 12/31/89 Actual	Bmrk	Annualized Five Years Ending 12/31/89 Actual	Bmrk	Annualized Since 1/1/84 Actual	Bmrk
Alliance	$419,185	0.3%	-3.6%	41.9%	23.5%	24.8%	15.4%	20.1%	12.9%
BMI	58,640	-3.2	-3.1	15.6	22.9	13.6	16.5	9.7	12.6
Concord	111,726	-2.5	-1.5						
Forstmann	202,904	-2.2	-1.0	18.7	20.4	17.8	14.7	14.6	12.9
Franklin	118,843	-2.5	-2.2						
IDS	180,224	-0.5	-0.3	33.9	25.5	19.1	18.6	16.8	15.9
IAI	96,244	0.2	0.9	28.7	26.0	16.4	18.8	14.9	16.1
Lieber & Co.	116,814	-3.9	-3.6	18.9	18.6	15.7	14.8	13.2	11.7
Rosenberg	119,604	-0.6	0.1						
Sasco	115,005	-1.8	-2.0						
Waddell & Reed	179,878	-2.7	-2.5	26.6	18.7	16.0	14.8	13.0	11.7
Aggregate Active*		-1.4	-2.0	28.4	22.7	17.1	16.4	16.2	14.1
Wilshire 5000		0.6%		29.2%		19.1%		16.3%	

* Historical performance reflects composite of current managers only.

ALLIANCE CAPITAL MANAGEMENT

PORTFOLIO MANAGER: Jack Koltes

ASSETS UNDER MANAGEMENT: $419,184,711

INVESTMENT PHILOSOPHY

Alliance searches for companies likely to experience high rates of earnings growth, on either a cyclical or secular basis. Alliance has invested in a wide range of growth opportunities from small, emerging growth to large, cyclically sensitive companies. There is no clear distinction on the part of the firm as to an emphasis on one particular type of growth company over another. However, the firm's decision-making process appears to be much more oriented toward macroeconomic considerations than is the case with most other growth managers. Accordingly, cyclical earnings prospects, rather than secular, appear to play a larger role in terms of stock selection. Alliance is not an active market timer, rarely raising cash above minimal levels.

QUALITATIVE EVALUATION

(Reported By Exception)

The firm's exceptional strengths are:

- Highly successful and experienced professionals.
- Organizational continuity and strong leadership.
- Well-acquainted with needs of large clients.
- Investment style consistently and successfully applied over a variety of market environments.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 1/1/84 Annualized
Alliance Capital Actual	0.3%	41.9%	20.1%
Alliance Capital Benchmark	-3.6	23.5	12.9

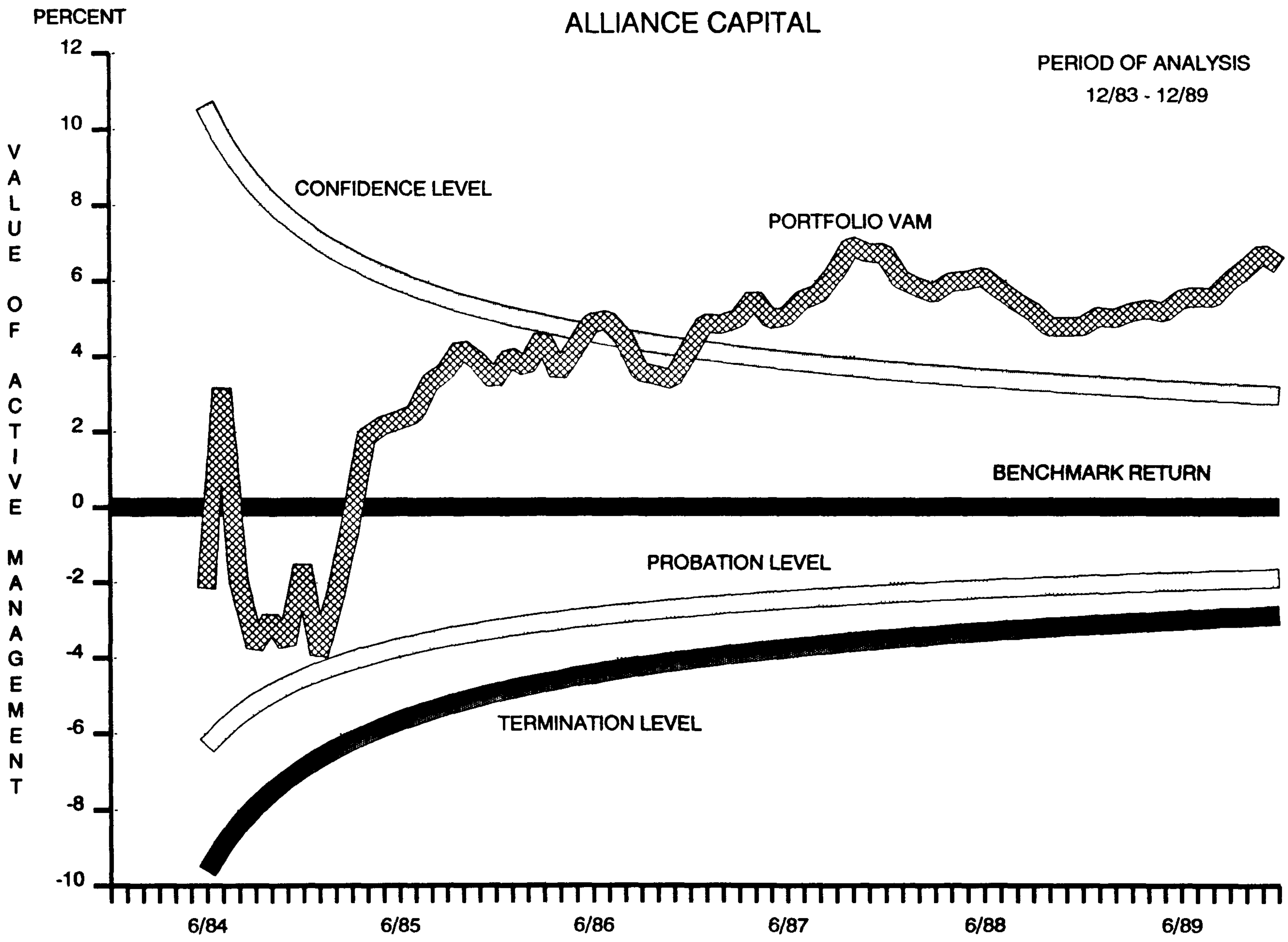
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT REPORT

ALLIANCE CAPITAL



BMI CAPITAL MANAGEMENT

PORTFOLIO MANAGER: Frank Houghton, James Awad

ASSETS UNDER MANAGEMENT: $58,640,177

INVESTMENT PHILOSOPHY

BMI's investment approach focuses on companies expected to exhibit strong sustained earnings gains. BMI attempts to identify two types of "growth" companies: first, misperceived companies that are in the process of undergoing dynamic changes that will cause them to produce materially higher earnings over the near-term; and, second, small-to-medium sized companies that exhibit the potential for rapid future earnings growth. The weighting of the two types of growth companies within the firm's portfolio will vary over time depending upon economic and financial conditions. Generally, however, the misperceived companies will make up the majority of the portfolio. On the other hand, the smaller high growth companies tend to dominate the portfolio's risk characteristics. The firm concentrates almost exclusively on stock selection, only rarely raising cash to significant levels.

QUALITATIVE EVALUATION

(Reported By Exception)

The previous evaluations noted the following concern:

- Lack of clearly identifiable leadership.

Staff received a letter from the manager dated 11/10/89 indicating a change in the firm's structure.

The firm's exceptional strengths are:

- Extensive securities research process.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 1/1/84 Annualized
BMI Capital Actual	-3.2%	15.6%	9.7%
BMI Capital Benchmark	-3.1	22.9	12.6

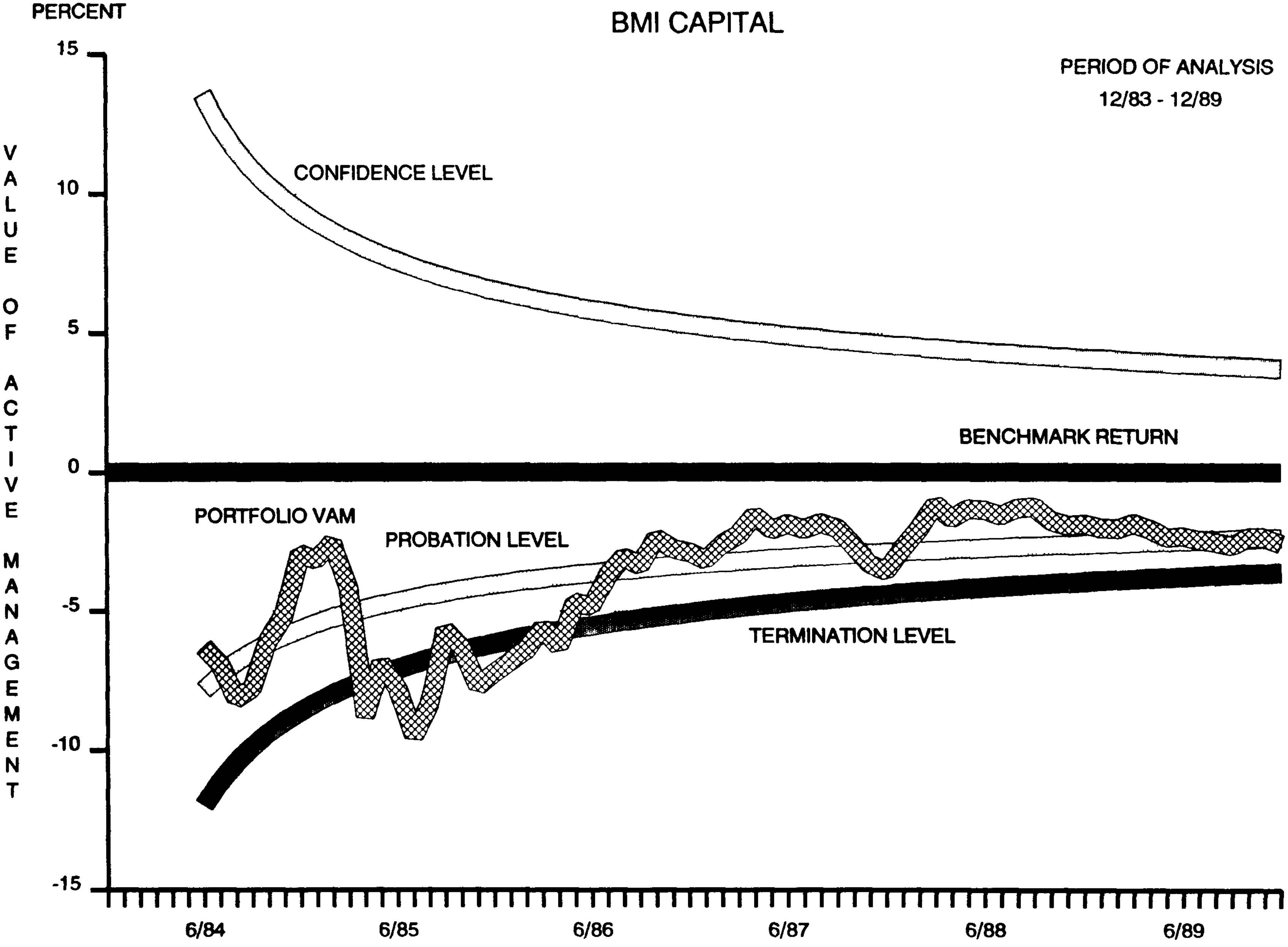
(See Value of Active Management graph below)

COMMENTS

The manager was terminated effective February 1, 1990.

VALUE OF ACTIVE MANAGEMENT REPORT

BMI CAPITAL



FORSTMANN LEFF ASSOCIATES

PORTFOLIO MANAGER: Joel Leff

ASSETS UNDER MANAGEMENT: $202,903,629

INVESTMENT PHILOSOPHY

Forstmann Leff is a classic example of a "rotational" manager. The firm focuses almost exclusively on asset mix and sector weighting decisions. Based upon its macroeconomic outlook, the firm will move aggressively into and out of asset classes and equity sectors over the course of a market cycle. The firm tends to purchase liquid, large capitalization stocks. Forstmann Leff will make sizable market timing moves at any point during a market cycle.

QUALITATIVE EVALUATION

(Reported By Exception)

Current concerns are:

- Relatively high turnover among firm's professionals.

This issue, while not serious, remains outstanding.

The firm's exceptional strengths are:

- Highly successful and experienced professionals.
- Investment style consistently and successfully applied over a variety of market environments.
- Well-acquainted with needs of large clients.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 1/1/84 Annualized
Forstmann-Leff Actual	-2.2%	18.7%	14.6%
Forstmann-Leff Benchmark	-1.0	20.4	12.9

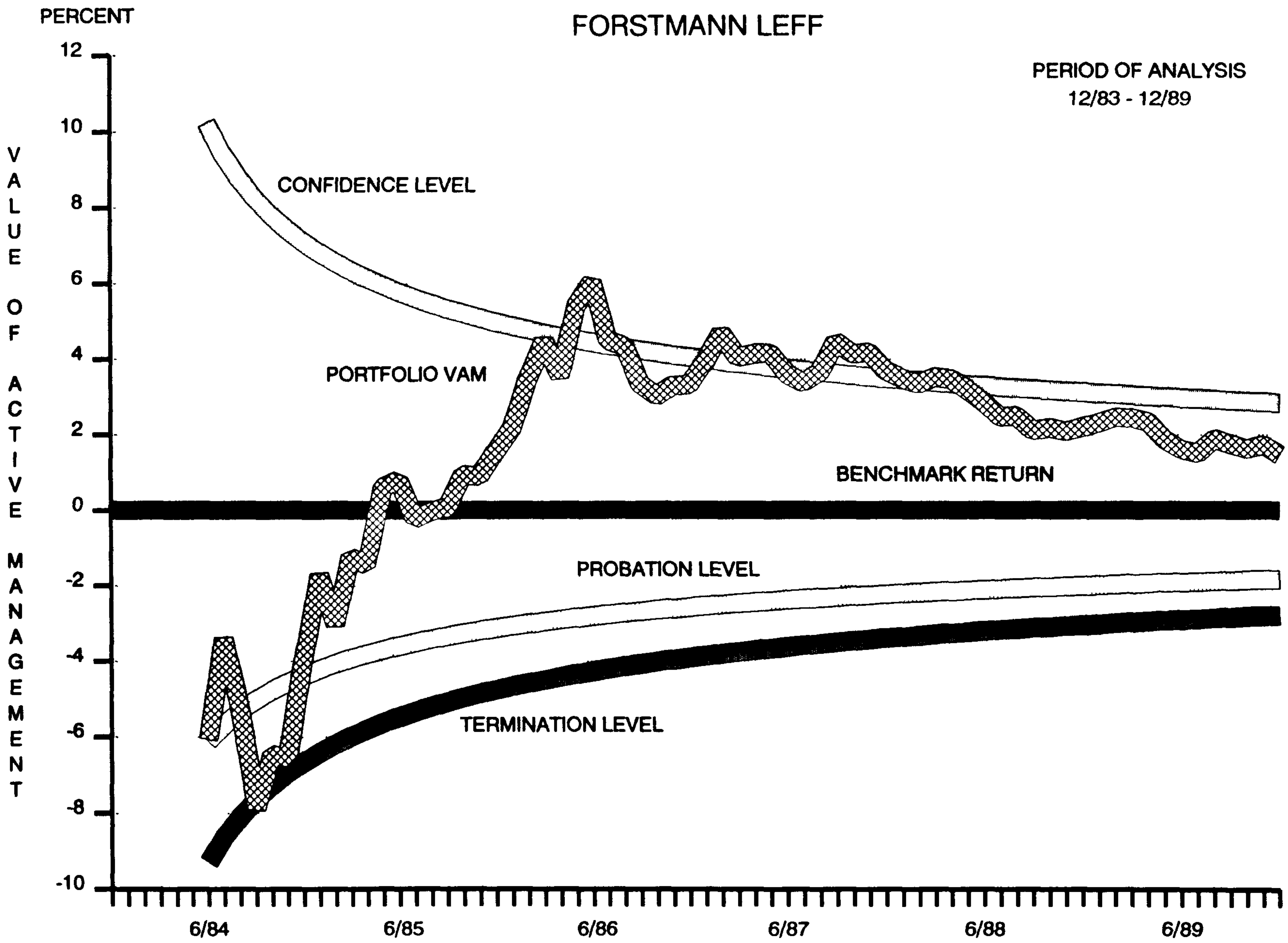
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT REPORT

FORSTMANN LEFF



IDS ADVISORY

PORTFOLIO MANAGER: Mitzi Malevich

ASSETS UNDER MANAGEMENT: $180,224,395

INVESTMENT PHILOSOPHY

IDS employs a "rotational" style of management, shifting among industry sectors based upon its outlook for the economy and the financial markets. The firm emphasizes primarily sector weighting decisions. Moderate market timing is also used. Over a market cycle IDS will invest in a wide range of industries. It tends to buy liquid, large capitalization stocks. While IDS will make occasional significant asset mix shifts over a market cycle, the firm is a less aggressive market timer than most rotational managers.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 1/1/84 Annualized
IDS Advisory Actual	-0.5%	33.9%	16.8%
IDS Advisory Benchmark	-0.3%	25.5	15.9

(See Value of Active Management graph below)

QUALITATIVE EVALUATION

(Reported By Exception)

Current concerns are:

- Growth plan not in place.
- Account load for portfolio managers is large.

These items, while not serious, should continue to be monitored.

The firm's exceptional strengths are:

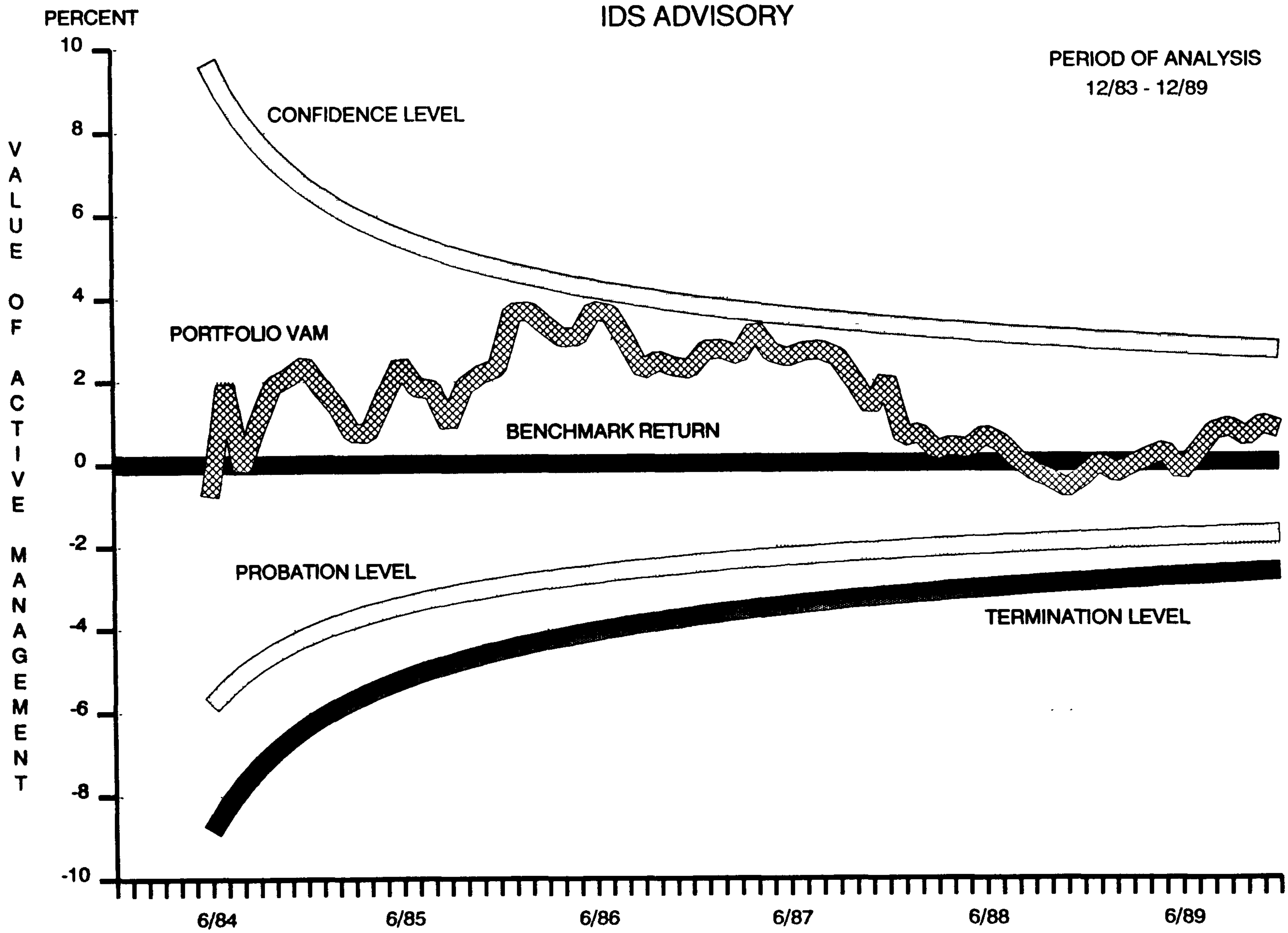
- Investment style consistently and successfully applied over a variety of market environments.

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT REPORT

IDS ADVISORY



INVESTMENT ADVISERS

PORTFOLIO MANAGER: Charles Webster

ASSETS UNDER MANAGEMENT: $96,244,438

INVESTMENT PHILOSOPHY

Investment Advisers is a "rotational" manager. Its macroeconomic forecasts drive its investment decision-making. The firm emphasizes market timing and sector weighting decisions. Investment Advisers will invest in a wide range of industries over a market cycle. It tends to hold liquid, medium to large capitalization stocks. The firm is an active market timer, willing to make gradual but significant asset mix shifts over a market cycle.

QUALITATIVE EVALUATION

(Reported By Exception)

Curren[illegible] cerns are:

- [illegible]th plan not in place.
- Lack of familiarity with needs of large institutional clients.

The items, while not serious, should continue to be monitored.

The firm's exceptional strengths are:

- Investment style consistently applied over a variety of market environments.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 1/1/84 Annualized
IAI Actual	0.2%	28.7%	14.9%
IAI Benchmark	0.9	26.0	16.1

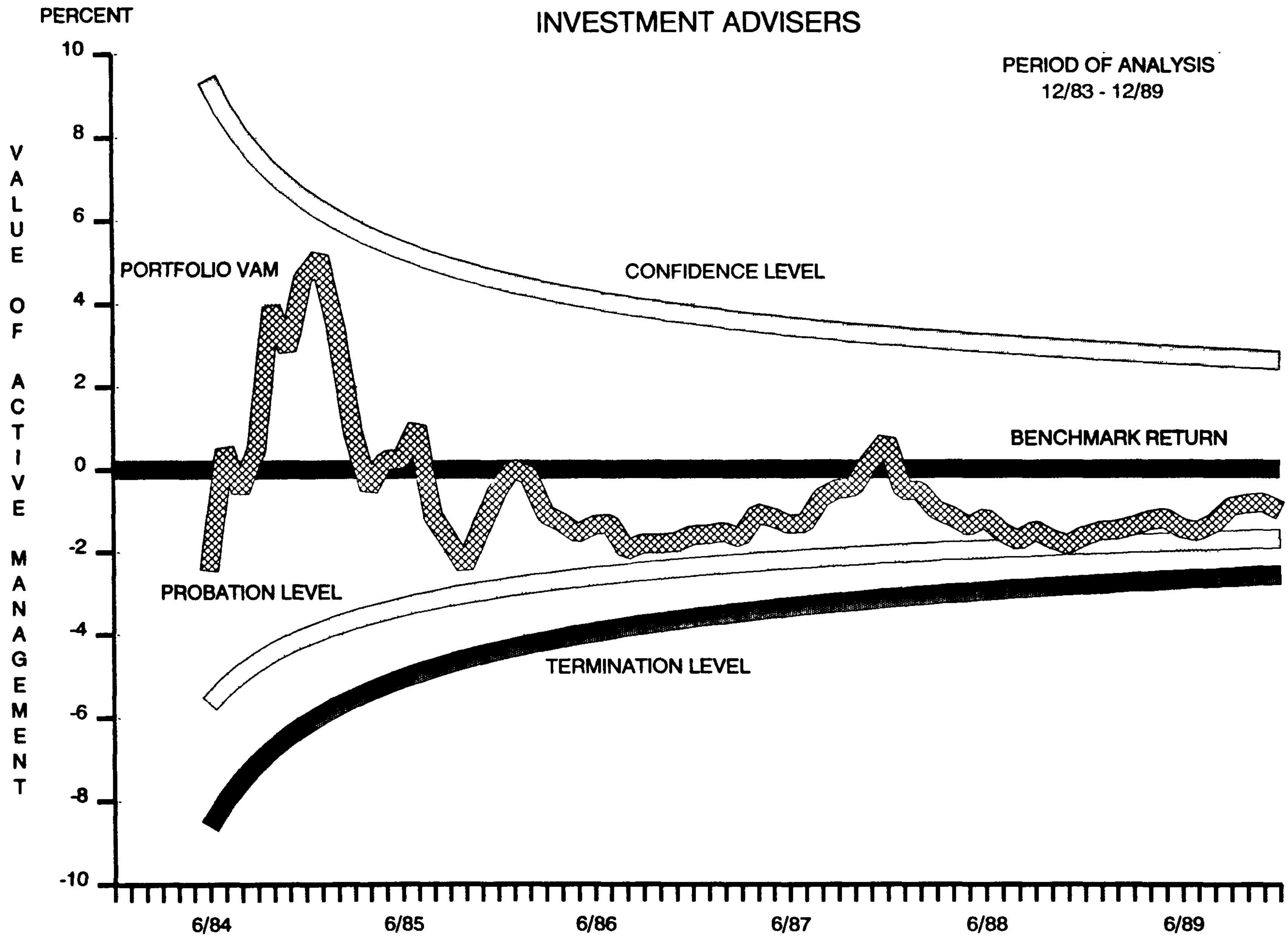
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required at this time. Staff will conduct an in-depth review of this manager during the quarter.

VALUE OF ACTIVE MANAGEMENT REPORT

INVESTMENT ADVISERS



LIEBER & COMPANY

PORTFOLIO MANAGER: Stephen Lieber, Nola Falcone

ASSETS UNDER MANAGEMENT: $116,814,085

INVESTMENT PHILOSOPHY

Lieber and Co. seeks to identify investment concepts that are either currently profitable, or likely to become so in the near future, yet whose prospects are not reflected in the stock prices of the companies associated with the concepts. The investment concepts upon which the firm focuses are related to both macroeconomic trends and specific product developments within particular industries or companies. Stocks purchased by Lieber tend to be those of well-managed, high growth and high return on equity, small-to-medium sized companies. The stocks may be undervalued due to the failure of investors to recognize fully either the value of new products or a successful turnaround situation. Particularly attractive to Lieber are small-to-medium size takeover candidates. The firm generally is fully invested, with any cash positions the result of a lack of attractive investment concepts.

QUALITATIVE EVALUATION

(Reported by Exception)

Current concerns are:

- Firm is unfamiliar with needs of large clients.

This item, while not serious, warrants additional monitoring.

The firm's exceptional strengths are:

- Organizational continuity and strong leadership.
- Attractive, unique investment approach.
- Investment style consistently and successfully applied over a variety of market environments.
- Extensive securities research process.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 1/1/84 Annualized
Lieber & Co. Actual	-3.9%	18.9%	13.2%
Lieber & Co. Benchmark	-3.6	18.6	11.7

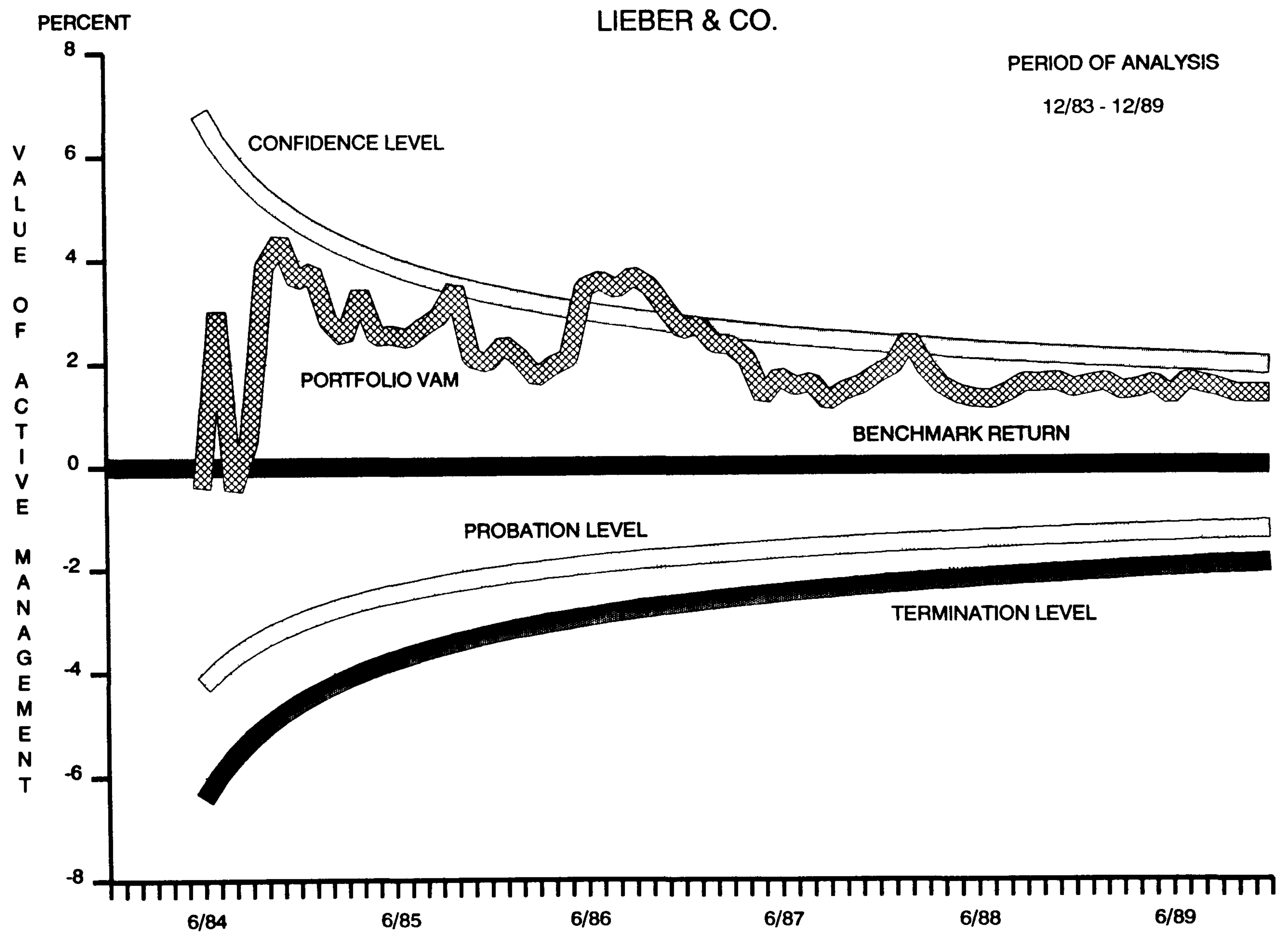
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT REPORT

LIEBER & CO.



WADDELL & REED

PORTFOLIO MANAGER: Henry Herrman

ASSETS UNDER MANAGEMENT: $179,878,477

INVESTMENT PHILOSOPHY

Waddell & Reed focuses its attention primarily on smaller capitalization growth stocks, although the firm has been very eclectic in its choice of stocks in recent years. However, the firm has demonstrated a willingness to make significant bets against this investment approach for extended periods of time. The firm is an active market timer and will raise cash to extreme levels at various points in the market cycle.

QUALITATIVE EVALUATION

(Reported By Exception)

The firm's exceptional strengths are:

- Highly successful and experienced professionals.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 1/1/84 Annualized
Waddell & Reed Actual	-2.7%	26.6%	13.0%
Waddell & Reed Benchmark	-2.5	18.7	11.7

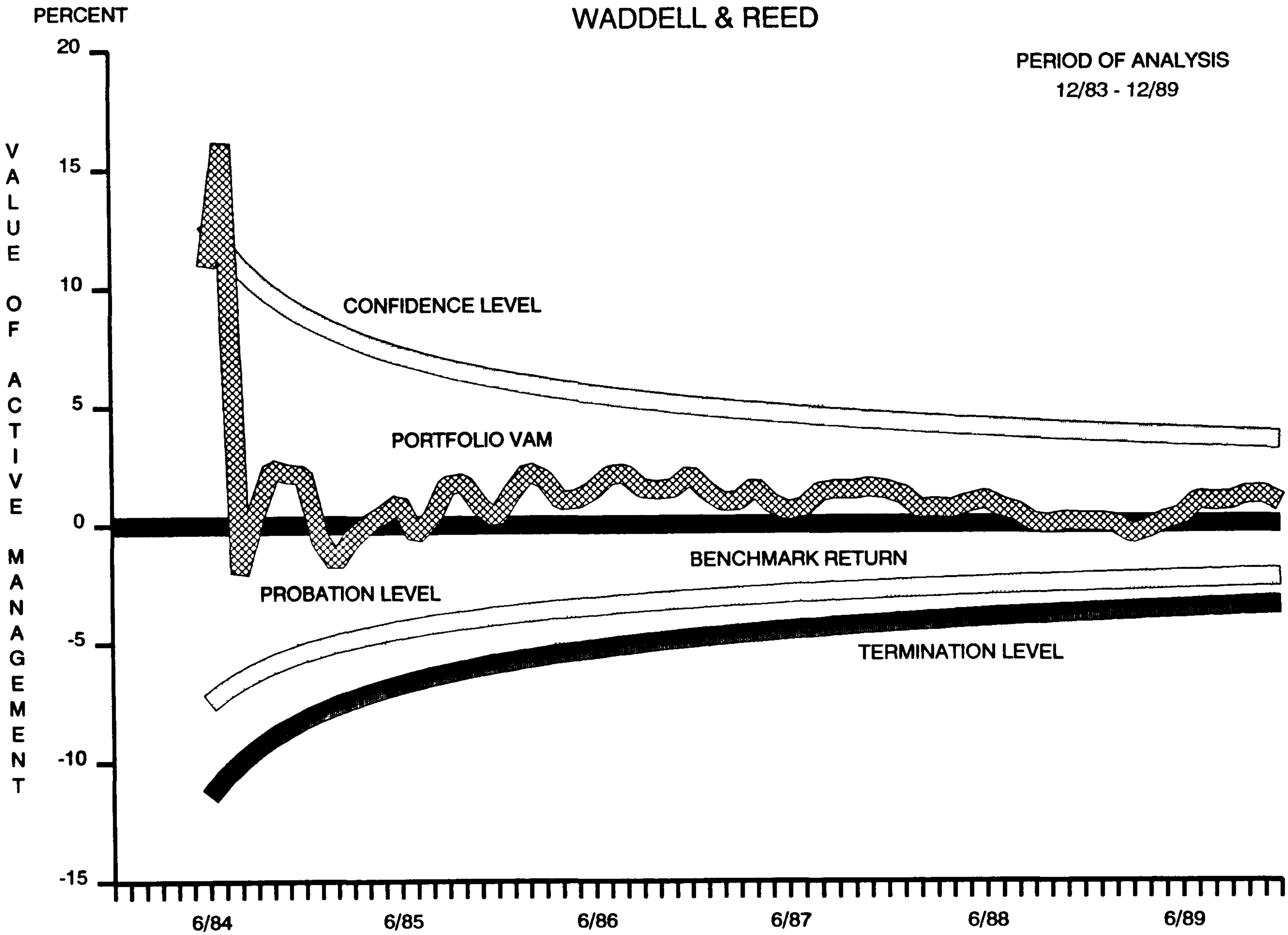
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT REPORT

WADDELL & REED



CONCORD CAPITAL MANAGEMENT

PORTFOLIO MANAGER: Bob Boldt

ASSETS UNDER MANAGEMENT: $111,726,451

INVESTMENT PHILOSOPHY

Concord is an opportunistic theme investor that does not limit itself to any particular group of stocks, avoiding preconceptions about where value currently lies. Concord believes that the marketplace is generally efficient but that there exist isolated opportunities. These opportunities are due to biases inherent in the traditional approaches that the majority of the investment profession uses to search for investment opportunities. Concord's non-traditional approach allows them to discover these opportunities early and to capture the total appreciation of the undervalued stocks. Concord's goal is to remain as fully invested as possible, therefore, they rarely raise cash above a minimal level.

QUALITATIVE EVALUATION

(Reported By Exception)

The firm's exceptional strengths are:

- Highly successful and experienced professionals.
- Investment style consistently and successfully applied over a variety of market environments.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 4/1/89 Cumulative
Concord Capital Actual	-2.5%	N/A	12.1%
Concord Capital Benchmark	-1.5	N/A	16.6

STAFF RECOMMENDATIONS

Renew annual contract for period beginning 4/1/90. While performance has lagged the benchmark during the first nine months, it is too early to draw conclusions. Staff remains confident with the manager's ability and investment approach.

FRANKLIN PORTFOLIO ASSOCIATES

PORTFOLIO MANAGER: John Nagorniak

ASSETS UNDER MANAGEMENT: $118,842,855

INVESTMENT PHILOSOPHY

The firm's investment decisions are quantitatively driven and controlled. The firm believes that consistent application of integrated multiple valuation models produces superior investment results. The firm's stock selection model is a composite model comprised of thirty (30) valuation measures each of which falls into one of the following groups: fundamental momentum, relative value, future cash flow, and economic cycle analysis. The firm believes that a multi-dimensional approach to stock selection provides greater consistency than reliance on a limited number of valuation criteria. The firm attributes its value-added to its stock picking ability. Franklin's portfolio management process focuses on buying and selling the right stock rather than attempting to time the market or pick the right sector or industry groups. The firm will always remain fully invested.

QUALITATIVE EVALUATION

(Reported by Exception)

The firm's exceptional strengths are:

- Familiar with the needs of large institutional clients.
- Firm's investment approach has been consistently applied over a number of market cycles.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 4/1/89 Cumulative
Franklin Actual	-2.5%	N/A	19.3%
Franklin Benchmark	-2.2	N/A	13.9

STAFF RECOMMENDATIONS

Renew annual contract for period beginning 4/1/90.

ROSENBERG INSTITUTIONAL EQUITY MANAGEMENT

PORTFOLIO MANAGER: Ken Reid

ASSETS UNDER MANAGEMENT: $119,603,773

INVESTMENT PHILOSOPHY

Rosenberg Institutional Equity Management believes the market is inefficient in the relative valuation of individual companies within groups of similar companies. Rosenberg uses quantitative techniques to identify and purchase undervalued stocks. The firm's valuation system, as embodied in several computer programs, analyzes accounting data on over 3,500 companies. Unlike traditional analysis which assigns an entire company to one industry, Rosenberg compares each company's separate business segments with similar business operations of other companies. These separate valuations are then integrated into a single valuation for the total company. The difference between Rosenberg's valuation and the current market price is the expected profit opportunity. Stocks with large positive profit opportunity are candidates for purchase. The firm does not strive to outperform its benchmark by timing the market or by "betting" on factors. The firm will always remain fully invested.

QUALITATIVE EVALUATION

(Reported by Exception)

The firms's exceptional strengths are:

- Attractive, unique investment approach.
- Highly successful and strong leadership.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 4/1/89 Cumulative
Rosenberg Actual	-0.6%	N/A	20.0%
Rosenberg Benchmark	0.1	N/A	18.7

STAFF RECOMMENDATIONS

Renew annual contract for period beginning 4/1/90.

SASCO CAPITAL INC.

PORTFOLIO MANAGER: Bruce Bottomley

ASSETS UNDER MANAGEMENT: $115,005,244

INVESTMENT PHILOSOPHY

Sasco is a long term investor that concentrates exclusively on stock selection. Sasco looks for companies that are selling at a discount to both their asset value and future earnings power. Sasco analyzes a corporation's individual business segments and invests in those that are undergoing major fundamental and structural change to increase their value. Sasco does not attempt to time the market. The firm strives to remain fully invested at all times.

QUALITATIVE EVALUATION

(Reported By Exception)

The firm's exceptional strengths are:

- Investment style consistently and successfully applied over a variety of market environments.
- Attractive, unique investment approach.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 4/1/89 Cumulative
Sasco Capital Actual	-1.8%	N/A	15.5%
Sasco Capital Benchmark	-2.0	N/A	12.9

STAFF RECOMMENDATIONS

Renew annual contract for period beginning 4/1/90.

Tab F

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
Room 105, MEA Building
55 Sherburne Avenue
St Paul, MN 55155
Tel (612) 296-3328
FAX (612) 296-9572

March 7, 1990

TO: Members, State Board of Investment
Members, Investment Advisory Council

FROM: Fixed Income Manager Committee

SUBJECT: Committee Report

The IAC Fixed Income Manager Committee met on February 15, 1990 to review the following agenda:

- o Review of Dedicated Bond Portfolio Rebalancing
- o Review of Enhanced Index Manager Performance
- o Review of Active Manager Performance
- o Renewal of Contract with BEA Associates
- o Approval of Private Placement Guidelines

INFORMATION ITEMS:

1) Dedicated Bond Portfolio Rebalancing

The SBI staff received new actuarial data for the Post Retirement Fund in January 1990. Staff reviewed this data with Bankers Trust, the SBI's dedicated bond portfolio software vendor, to analyze the cash-match characteristics of the existing dedicated bond portfolio. Because new contributions were invested at yields of at least 8% throughout the year only minor purchases and sales were necessary to rebalance the total portfolio. The result of these transactions is that the cash-match dedicated bond portfolio will completely cover projected liabilities and will fund a benefit increase of 3% annually.

2) **Enhanced Index Management Review**

Both Fidelity Management and Lincoln Capital reported performance results below the Salomon Broad Investment Grade (BIG) Index for the latest quarter. The chart below presents a quarterly summary of performance.

Period	Fidelity	Lincoln	Total	Salomon BIG Index
3Q 1988	1.76%	1.86%	1.81%	1.95%
4Q	.96	1.16	1.06	.76
1Q 1989	1.30%	1.22%	1.26%	1.20%
2Q	7.63	7.54	7.59	7.95
3Q	1.15	1.27	1.21	1.03
4Q	3.64	3.45	3.55	3.69
Last Year	14.30%	14.03%	14.17%	14.44%
Since Inception (annualized)	11.32	11.36	11.34	11.37

Staff is satisfied with the investment results of the enhanced index managers since inception on July 1, 1988. Given the transaction costs associated with the two major fundings as well as the negative impact of unseasoned mortgage pricing, these results are in line with expectations.

ACTION ITEMS:

1) **Review of Active Managers**

The Committee reviewed the performance reports for the active bond managers. A copy of the value of active management (VAM) report for each manager is at the end of this tab section.

The active manager group nearly matched their benchmark return for the quarter (3.5% actual vs. 3.6% benchmark), and underperformed the benchmark for the past year (13.5% actual vs. 14.1% benchmark). Since January 1984, the current active manager group has outperformed the aggregate benchmark (14.3% annualized actual vs. 13.9% annualized aggregate benchmark).

The principal reason for the shortfall relative to the benchmark in the past year was Miller Anderson's performance. Staff believes the reported underperformance is due, in part, to pricing problems with specific securities within the portfolio.

Staff noted that Morgan Stanley's performance continues to trail its benchmark. Staff intends to conduct an in-depth performance review of Morgan Stanley Asset Management and will report its findings at the next meeting of the Committee.

The Board placed Lehman Ark on probation for qualitative reasons at its September 1989 meeting due to a change in ownership at the firm. The SBI's Manager Continuation Policy requires probation under this circumstance due to the risk of significant change in personnel or investment approach. After monitoring developments at Lehman for the past six months carefully, staff concludes that the ownership change has not altered the investment approach of the firm.

RECOMMENDATION:

The Committee recommends that the Board remove Lehman Ark from probation for qualitative reasons.

No other action regarding the active manager group is required at this time.

2) **Renewal of Contract with BEA**

The Board retained BEA Associates in April 1987 to manage a cash enhancement program in the Post Retirement Fund. The firm uses a variety of low risk index futures and options strategies to achieve higher rates of return than available in short term investment funds. The strategies used by BEA include hedged puts, market spreads, and box spreads. The use of these futures and options strategies does not entail significant principal risk, but rather tries to capture small volatility premiums and spread mispricings.

Since inception, BEA has provided an annualized return of 9.4%, 1.4 percentage points above its benchmark. More information on BEA's performance is included in Attachment A. SBI staff is satisfied with the incremental return generated by BEA in its cash enhancement portfolio and believes that BEA provides an excellent resource on option market strategies.

RECOMMENDATION:

The Committee recommends that the SBI authorize the executive director, with assistance from SBI's legal counsel, to negotiate and execute a contract extension with BEA Associates for a period of one year.

3) **Approval of Private Placement Investment Guidelines**

The Committee reviewed a staff report on the use of private placements in the SBI's internally managed fixed income portfolios. The report contains background on the private placement market, regulatory changes, surveys on participation by other state and insurance funds, and SBI investment criteria. The report's conclusions were:

- Anticipated regulatory changes will diminish the investment spread opportunity of private placements relative to other corporate bonds. In the future, these changes will make private placements less advantageous for institutional investors such as the SBI.

- Despite the above, private placement securities will continue to offer attractive investment features and remain appropriate for several of the SBI's internally managed portfolios.

- SBI investment guidelines should focus on investment grade private placement securities with appropriate size constraints.

A copy of the report is included as Attachment B.

RECOMMENDATION:

The Committee recommends that the Board adopt the staff report on private placement securities and that the guidelines presented in the report govern private placement purchases in the internally managed fixed income portfolios.

ATTACHMENT A

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Room 105, MEA Building
55 Sherburne Avenue
St Paul, MN 55155
Tel (612) 296-3328
FAX (612) 296-9572

February 15, 1990

TO: Members, IAC Fixed Income Manager Committee

FROM: Mark Edwards

SUBJECT: Review of BEA Contract

I. INVESTMENT APPROACH

In April 1987, BEA Associates was retained to manage a $100 million cash enhancement program utilizing low risk index futures and options strategies. The purpose of the program was to improve the rate of return earned on cash equivalents in the Post Retirement Fund and to provide the SBI with a practical introduction to the derivatives market.

Of the $120 million under management at BEA in April 1989, $100 million was in short-term money market instruments. These securities provided both return stability and necessary collateral for derivatives positions. Because the $100 million represented a 2% additional cash position for the Fund, it was decided that BEA's funding would be reduced. The dollar amount actually used for arbitrage strategies was $20 million, so funding was reduced to that amount. Collateral was changed from cash positions to pledges of bonds held at State Street Bank, the SBI's master custodian.

The strategies used by BEA are:

- Hedged Puts
- Market Spreads
- Box Spreads

Hedged puts involve the simultaneous purchase/sale of market index options offset by the sale/purchase of market index futures. The choice to buy either options or futures is determined by market volatility. If volatility is likely to drop, option values will decay relative to futures. Conversely, if volatility is likely to increase, option values will increase relative to futures.

Market spreads capture mispricings between market indices of differing characteristics or with different expirations. Again, the strategy calls for the simultaneous purchase and sale of two similar contracts. A variation of this strategy involves the purchase/sale of a specific stock (or other cash instruments) offset by a sale/purchase of an option for that specific security.

Box spreads are the simultaneous purchase and sale of multiple index options. They provide liquidity to options dealers for a specified time horizon at a rate above similar horizon money market rates.

Each strategy has minimal principal risk; however, there does exist the risk that mispricings or volatilities do not adjust as assumed, resulting in returns below the Short-Term Investment Fund (STIF) benchmark.

II. PERFORMANCE

	QUARTER ENDING			9 MO. ENDING	CUMMULATIVE SINCE INCEPTION
	6/30/89	9/30/89	12/31/89	12/31/89	4/1/87
Port.Value ($ 000)	$21,805	$22,246	$23,401		
BEA Return	2.00%	2.02%	5.19%	9.46%	28.05%
(STIF) Return	2.31	2.18	2.11	6.75	23.46
Contribution to Return:					
Hedged Puts	(.48)%	(.20)%	3.03%	2.47%	
Mkt. Spread	--	--	(.05)	(.05)	
Box Spreads	2.48	2.22	2.21	7.04	
Total	2.00%	2.02%	5.19%	9.46%	

III. ANALYSIS

For the 9 months ending December 31, 1989, the BEA cash enhancement fund returned 271 basis points over its benchmark. Of this amount, 96 basis points was added through cash management and short term option loans (box spreads to capture broker loan rates), and the remaining 175 basis points came from active strategies, primarily hedged put "volatility" spreads. Since inception, the cash enhancement program has added 459 basis points of additional performance versus the State Street STIF.

Short-term arbitrage strategies are designed to capture mispricing due to implied volatility deviances. For the 6 months ended September 30, volatilities had shrunk to their lowest levels of the decade. Consequently, BEA as well as other disciplined hedge managers suffered relative losses due to bets against lower volatilities. However, "long volatility" strategies that benefited from increasing market volatility provided BEA with significant returns following the October, 1989, market drop. Subsequent strategies designed to capture gains by selling volatility during the period following the crash were implemented to provide additional returns. At this point, BEA has unwound its long volatility positions, and continues to profit from short volatility strategies.

IV. RECOMMENDATIONS

Staff recommends that BEA Associates' contract be renewed for next year.

ATTACHMENT B

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
Room 105, MEA Building
55 Sherburne Avenue
St Paul, MN 55155
Tel (612) 296-3328
FAX (612) 296-9572

February 14, 1990

To: Members, Fixed Income Committee
From: SBI Staff
Subject: Corporate Private Placement Investment Guidelines

EXECUTIVE SUMMARY

The private placement market has grown substantially during the past decade. Private placement securities offer several advantages over regular corporate securities. Higher yields, attractive covenant features, call protection, and mandatory sinking fund provisions are some of the reasons institutional investors have used private placement securities on a wider scale.

This staff report covers the following topics; (1) private placement market background, (2) regulatory changes, (3) surveys on state and insurance company participation in private placements, (4) investment issues, and (5) SBI investment criteria.

Based on the preceeding analysis, SBI staff conclusions are as follows:

Anticipated regulatory changes will diminish the investment spread opportunity of private placements relative to other corporates. In the future, this will make private placements less advantageous for institutional investors such as the SBI.

Despite the above, private placement securities will continue to offer attractive investment features and remain appropriate for several of the SBI's internally managed portfolios.

SBI investment criteria should focus on investment grade private securities with appropriate size constraints.

PRIVATE PLACEMENT INDUSTRY BACKGROUND

Traditionally corporations have used private placements because they offered firms a more economical and rapid source of corporate funding. For many years, the private placement corporate bond market was dominated by a small number of dealers and the major insurance companies. The advent of the high yield market and the influx of new investors has dramatically changed this pattern in the industry. The growing popularity of this segment of the market owes its strength to the unique characteristics as well as the regulatory environment for these instruments.

Bond investors like private placements because they can buy issues which have modestly higher yields and investment features not typically found in regular corporate bonds:

* Covenant features in privates often give enhanced protection to the bondholder in the event of corporate restructuring.

* Call protections can protect the bond holder against early redemption or compensate the holder through make-whole provisions.

* Investors can tailor cash flow characteristics through mandatory sinking fund provisions.

These features help explain the rapid development of the private placement market. The chart below shows the growth in new issues during the past decade.

PRIVATE PLACEMENT ISSUE VOLUME

YEAR	ISSUES	AMOUNT(MILS)
1980	967	$15,871
1981	1051	18,373
1982	1153	23,625
1983	1522	34,620
1984	1680	50,410
1985	2043	67,138
1986	2344	116,296
1987	2947	139,683
1988	2755	164,813

Source: IDD Information Services/Goldman Sachs

REGULATORY CHANGES

The growing activity of private placement transactions has expanded beyond the traditional straight debt financings that were the mainstays of this market. As the volume of offerings has increased and the range of institutional buyers has expanded, the pressure for regulatory change has heightened. The most important proposed change to the private placement market is an amendment to the Securities Act of 1933. Adoption of proposed Rule 144a would change Section 4(2) dealing with "transactions by an issuer not involved in a public auction." Previously, private securities were restricted from resale for a period of two years and subsequent transactions limited to qualified institutional investors.[1]

Proposed Rule 144a would liberalize regulations to allow any institutional investor with plan assets of $50 million to purchase private placements in the secondary market. This change would greatly enhance liquidity in private placement securities and would bring additional investors into the private placement market. The ultimate effect of the rule change would be to diminish further the distinction between privates and traditional fixed income securities. The consequences of this blurring would be a reduction in spreads traditionally associated with privates.

USE OF PRIVATE PLACEMENTS BY OTHER INVESTORS

SBI staff surveyed several states and insurance companies to ascertain what programs these institutions had in the area of private placement securities. Among the state funds contacted were California Teachers (CalSTRS), California Public Employees (CalPERS), Michigan, New York, and Wisconsin. New York and CalPERS both are in the process of liquidating private placement portfolios to shift investment emphasis elsewhere. Both funds cited insufficient liquidity for funds of their size as a major concern. CalPERS, Michigan , and Wisconsin all have on-going private placement programs with portfolios of at least

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[1]A "qualified institutional buyer" is defined as (i) any "institutional buyer" that has total assets in excess of $50,000,000 ; (ii) any investment adviser registered under the Investment Act of 1940 that has combined assets and assets under management in excess of $50,000,000; (iii) any investment company registered under the Investment Company Act of 1940 that is a part of a "family of investment companies" with aggregate total assets in excess of $50,000,000; or (iv) any entity all of the equity owners of which are qualified institutional buyers.

$1 billion dollars each. These programs had several similarities. Each focuses on:

* investment grade securities
* spread premiums of at least 25 basis points over corporates with 50 basis points as a working objective
* participating rather than lead roles

Each fund devotes considerable staff time to the area. California uses one portfolio manager and several credit analysts, Michigan has four investment professionals involved in private placements, and Wisconsin has a five person investment staff. These organizations use a combination of internal and external legal assistance in reviewing private placement documentation.

Wisconsin has the most active in-state investment program. CalPERS and Michigan have chosen to curtail activity in the past year due to fewer attractive new private offerings. They have focused new investments in other areas such as venture capital and leveraged buy-out funds.

SBI staff also surveyed five insurance companies: Allstate, Central Life, Metropolitan Life, Minnesota Mutual, and Principal Financial. All five organizations have active private placement programs. The size of the private portfolios range from $200 million to $16 billion. While most companies concentrate on investment grade securities one firm does use selected B rated bonds. These companies express a preference to be the lead investor, but are willing to participate in deals if the transaction is of sufficient size. Minimum spread expectations are 100 to 200 basis points off comparable maturity Treasury securities,

As a group, the insurance companies think that the impact of regulatory and market changes over the past few years has broadened the universe of private placement investors and enhanced liquidity in the market. Several firms express concern that the influx of new participants had narrowed spreads and made attractive deals more difficult to locate. A majority think that the quality and quantity of financial data has deteriorated, making it more difficult to analyze prospective financings.

INVESTMENT ISSUES

The investment issues surrounding privates are their legality, market viability, and fund applicability.

Minnesota Statutes Section 11A.24 defines what constitutes a legal investment for the SBI. Subdivision 3 specifies corporate bond investment criteria for investment grade issues. These bonds must be payable in dollars and be rated among the top four quality categories by a nationally recognized rating agency. Subdivision 6(a)5 permits the use of debt obligations not subject to Subdivision 3. Since private placement securities fall under one of the two subdivisions, the SBI can use the entire spectrum of private placement bonds.

Market viability requires suitable investment characteristics and sufficient market volume. To recap, the higher yield, attractive covenant features, flexible cash flow characteristics, broad universe of issues and increasing pool of institutional investors combine to give privates attractive investment characteristics. The large volume increase in new issue business and the prospect that proposed Rule 144A will pass suggest that liquidity in private placements will not be an issue. The combination of attractive investment characteristics and sufficient liquidity makes privates a viable investment vehicle for the SBI.

Fund applicability merits individual attention. The debt securities in the Post Retirement Fund are in a large cash match dedicated bond portfolio with minimal annual portfolio turnover. Under existing statutes, the Post Fund's principal investment objective is to deliver a high and stable stream of income. Private placement securities represent suitable investments for this fund due to the higher yield as well as the call protection features cited above. The large size of the Post Fund, however, dictates that investments in private placements should focus on only the larger issues to ensure the best liquidity possible in the event trading is required.

The Permanent School Fund is a medium sized account whose principal investment objectives are yield maximization and principal preservation. Since all income is distributed for school aid payments, developing higher yield is most desirable. Given the low turnover nature of this fund, private placement securities represent ideal instruments to enhance yields. Given the conservative nature of the fund regarding risk, however, investments should concentrate in the higher quality segments of the market.

The last internal account, the bond segment of the Income Share Account in the Supplemental Investment Fund, is a smaller portfolio where the goal is to maximize the total return. Capital appreciation potential assumes a more important role for this portfolio relative to the other funds. Nevertheless, private placements offer attractive opportunities because the smaller fund size permits positions that can be handled in the secondary markets without undue transaction cost impact. The major drawback to private placement securities in a total return account is the potential for inaccurate pricing to affect total return numbers during the holding period.

SBI INVESTMENT CRITERIA

It is important to have definitive investment criteria so that investments can be monitored for compliance with investment objectives and guidelines. These criteria are also useful in notifying private placement dealers about the SBI's investment parameters. The SBI investment criteria cover the following topics: issue size, sector preferences, quality guidelines, participation preferences, minimum and maximum investment levels.

ISSUE SIZE

Setting a minimum issue size which permits use in all SBI accounts best uses available staff resources. The SBI minimum size for national issues is $50 million. Issues of this size are distributed over a larger geographical area and have more buyers. If the SEC adopts Rule 144A, this issue size minimum will help ensure better liquidity in the secondary market. This size corresponds with the SBI's minimum standard for public corporate bond purchases. In the case of a Minnesota issue, the minimum size is $10 million to allow greater flexibility.

SECTOR PREFERENCES

All sectors are considered but greater caution is taken in sectors with additional risk. For example, the increasing pace of technological change merits closer scrutiny of industrial issues which may be subject to technological obsolescence. Similarly, industries with above average event risk potential are avoided unless adequate safeguards in indentures are available.

QUALITY GUIDELINES

The SBI only invests in investment grade securities. The issuing corporation must have a credit rating among the top four categories by a nationally recognized rating organization. The higher quality ratings not only provide protection to principal, they favorably impact liquidity in the secondary market. Given the risk tolerance of the SBI portfolios, high yield or below investment grade privates are not appropriate.

In a situation where no credit rating exists or where the credit rating of the issuing corporation is among the lower investment grade levels, the SBI may seek credit enhancement. If an issue is credit enhanced, there are minimum quality requirements of the enhancer. If it is an insurance company, it must be rated within the top two rating quality categories by Best's Insurance Rating Service. If it is a bank's letter of credit, the bank must be rated in the highest quality category by a nationally recognized rating agency.

PARTICIPATION PREFERENCES

For national market offerings, our maximum participation rate in a private pool is 25%. The SBI's current public corporate maximum purchase size guideline is 20%. The higher level for privates reflects the smaller nature of these offerings. For Minnesota issues, our maximum participation rate is 50% of the offering.

MINIMUM AND MAXIMUM POSITION SIZE

Given the additional staff time associated with the review of private placement documents, the SBI has established purchase guidelines. The table below specifies the minimum and maximum purchase levels for internally managed SBI bond portfolios.

PRIVATE PLACEMENT PURCHASE GUIDELINES

	POST	PERMANENT SCHOOL	INCOME
ISSUE MIN.			
% of Port.	.2%	.5%	.5%
$(000's)	$10,000	$1,750	$500
ISSUE MAX.			
% of Port.	.4%	1.0%	1.0%
$(000's)	$20,000	$3,500	$1,000
CATEGORY MAXIMUM			
% of Port.	5.0%	25.0%	10.0%
$(000's)	$225,000	$87,500	$10,000
CURRENT POSITION			
% of Port.	1.3%	2.6%	0%
$(000's) PAR	$78,365	$8,968	$0

UTILIZATION OUTLOOK

The SBI staff believes that private placement securities offer distinct advantages over regular corporate fixed income securities. The SBI has used private placement securities in its portfolios since the 1970's. The current environment for privates sends conflicting signals, however. While the influx of new investors and the bigger universe of private placement issues has expanded market potential, expected returns have diminished from those available in the past. Strong demand from institutional buyers has narrowed spreads to low levels. SBI staff is concerned that narrow spreads in an uncertain economic environment diminish the appeal of these securities. While the SBI will monitor the new issue market to review investment opportunities, staff concludes that new private placement investments should provide wider spreads than currently available.

ACTIVE BOND MANAGERS

Value of Active Management Reports

Fourth Quarter 1989

Fixed income manager returns are evaluated against the performance of customized indices constructed to represent the managers' specific investment approaches. These custom indices are commonly referred to as "benchmark portfolios." The benchmark portfolios factor in bond market influences that at times favorably or unfavorably impact certain investment styles. Thus, benchmark portfolios are the appropriate standards against which to judge the managers' performance.

Manager performance relative to benchmarks is evaluated on a quarterly basis by the Fixed Income Manager Committee of the Investment Advisory Council.

Staff Recommendations
Staff recommends the following actions concerning manager status:

- Remove probationary status on Lehman Ark for qualitative reasons.
- Conduct an in-depth performance review on Morgan Stanley Asset Management.

Managers	Market Value 12/31/89 (Thousands)	Quarter Ending 12/31/89 Actual	Bmrk	Year Ending 12/31/89 Actual	Bmrk	Annualized Five Years Ending 12/31/89 Actual	Bmrk	Annualized Since 7/1/84 Actual	Bmrk
IAI	$110,426	4.3%	3.8%	16.4%	14.8%	11.8%	12.2%	14.6%	14.0%
Lehman Ark	122,360	3.2	3.5	13.0	13.6	11.3	11.5	13.2	13.3
Miller Anderson	176,826	3.4	3.7	9.9	14.4	12.4	12.3	13.7	14.3
Morgan Stanley	117,480	3.3	3.6	13.2	13.6	11.8	11.8	13.3	13.8
Western Asset	274,080	3.5	3.6	15.8	14.1	13.5	12.2	15.6	14.0
Aggregate Active*		3.5	3.6	13.5	14.1	12.4	12.0	14.3	13.9
Salomon Broad Investment Grade Index		3.7%		14.4%		12.3%		14.3%	

* Historical performance reflects composite of current managers only.

INVESTMENT ADVISERS

PORTFOLIO MANAGER: Larry Hill **ASSETS UNDER MANAGEMENT: $110,425,536**

INVESTMENT PHILOSOPHY

Investment Advisers is a traditional top down bond manager. The firm's approach is oriented toward correct identification of the economy's position in the credit cycle. This analysis leads the firm to its interest rate forecast and maturity decisions, from which the firm derives most of its value-added. Investment Advisers is an active asset allocator, willing to make rapid, significant moves between cash and long maturity investments over the course of an interest rate cycle. Quality, sector and issue selection are secondary decisions. Quality and sector choices are made through yield spread analyses consistent with the interest rate forecasts. Individual security selection receives very limited emphasis, focusing largely on specific bond characteristics such as call provisions.

QUALITATIVE EVALUATION

(Reported By Exception)

The current evaluation notes the following:

- After review for the past year, the benchmark adopted at the December 1988 meeting is appropriate and will no longer be cited as an on-going concern.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 6/30/84 Annualized
IAI Actual	4.3%	16.4%	14.6%
IAI Benchmark	3.8	14.8	14.0

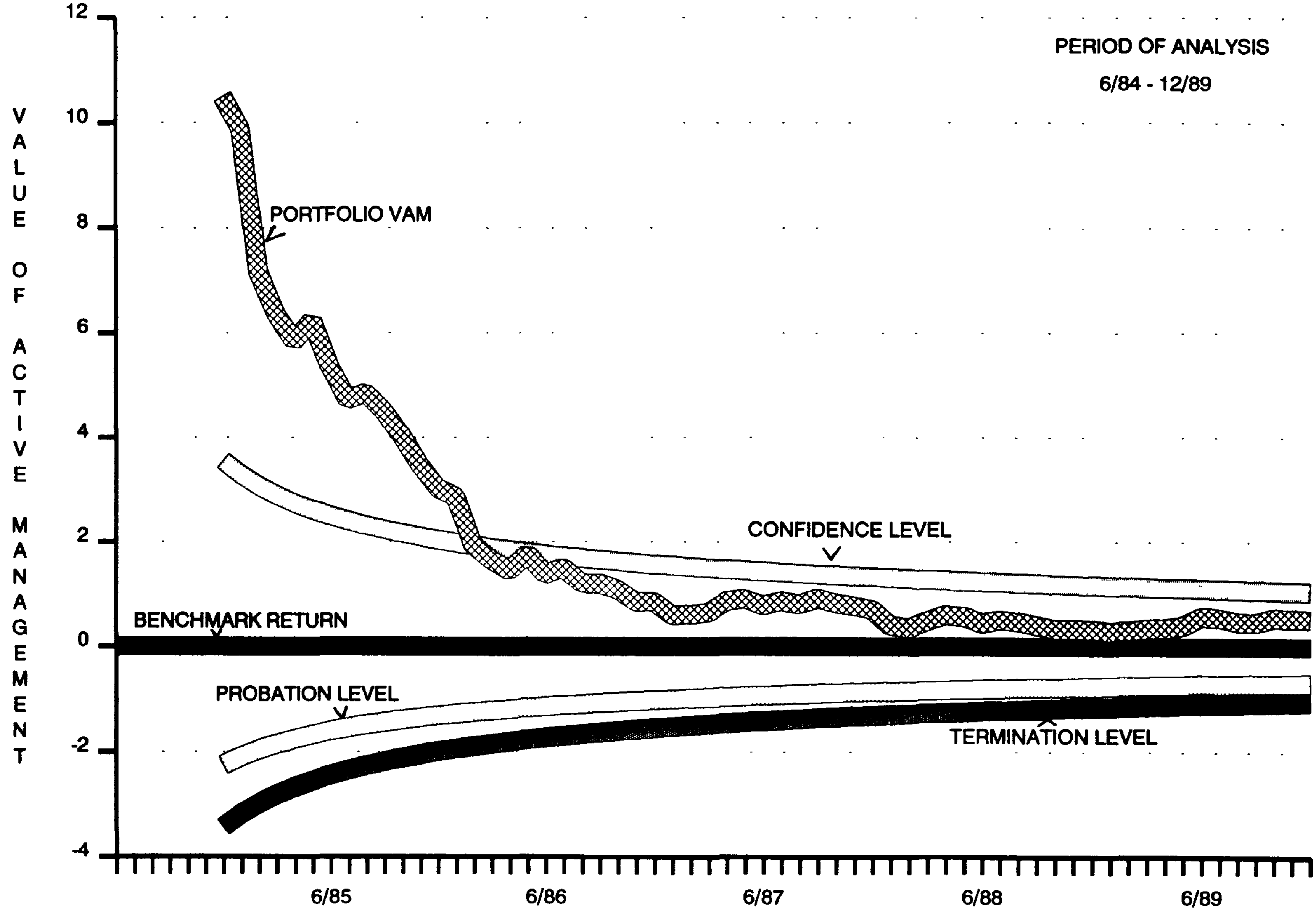
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT REPORT

INVESTMENT ADVISERS



LEHMAN ARK MANAGEMENT

PORTFOLIO MANAGER: Kevin Hurley

ASSETS UNDER MANAGEMENT: $122,359,676

INVESTMENT PHILOSOPHY

Lehman's primary emphasis is on forecasting cyclical interest rate trends and positioning its portfolios in terms of maturity, quality and sectors, in response to its interest rate forecast. However, the firm avoids significant, rapidly changing interest rate bets. Instead, it prefers to shift portfolio interest rate sensitivity gradually over a market cycle, avoiding extreme positions in either long or short maturities. Individual bond selection is based on a quantitative valuation approach and the firm's internally-conducted credit analysis. High quality (A or better) undervalued issues are selected consistent with the desired maturity, quality and sector composition of the portfolios.

QUALITATIVE EVALUATION

(Reported By Exception)

The current evaluation notes the following concern:

- Lehman Ark Management employees initiated a management leveraged buy out of the institutional money management division. Shearson Lehman will maintain a 20% ownership in the new firm.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 6/30/84 Annualized
Lehman Actual	3.2%	13.0%	13.2%
Lehman Benchmark	3.5	13.6	13.3

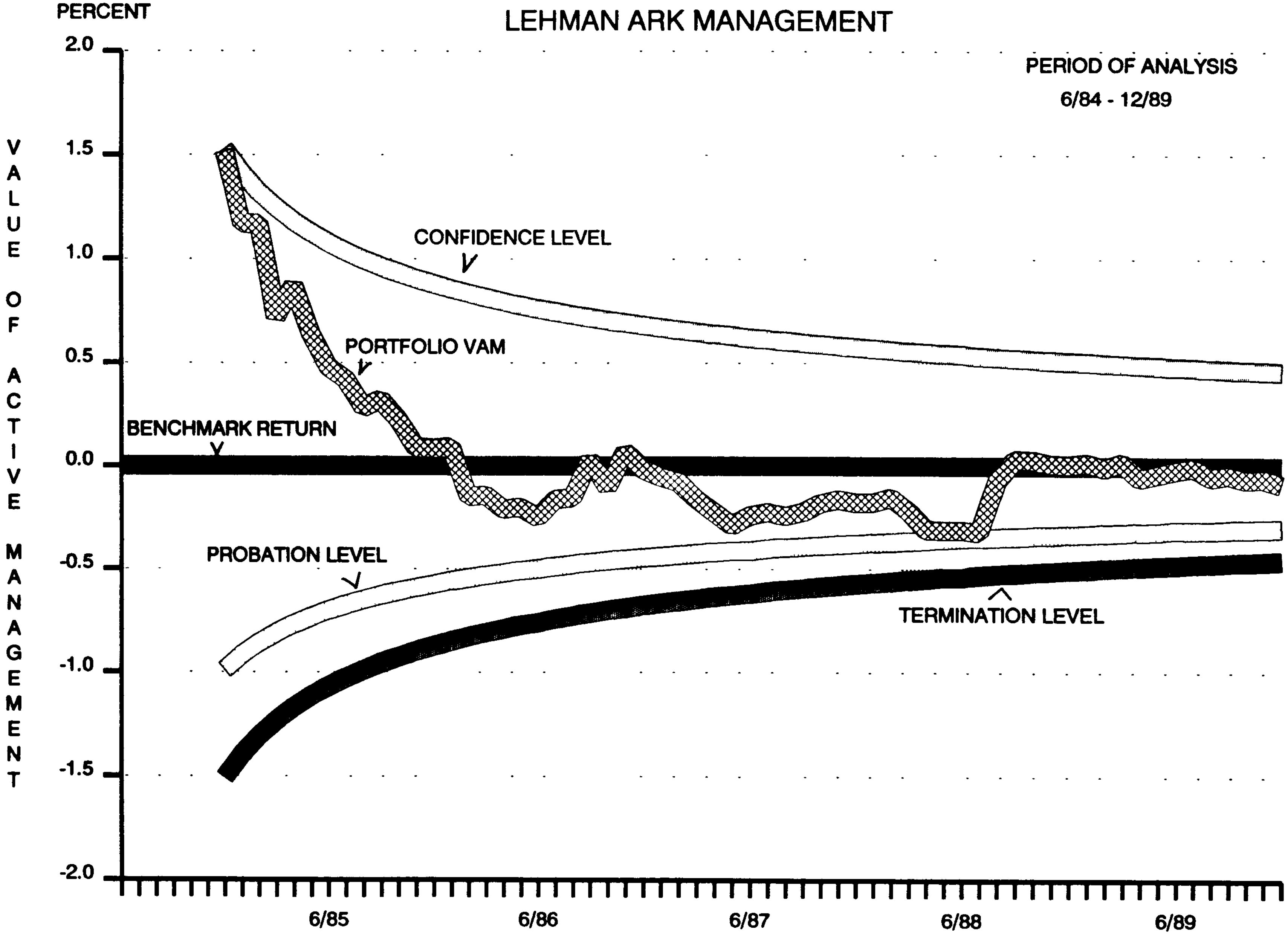
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

Remove probationary status for qualitative reasons. A six month review supports the conclusion of continuity in SBI portfolio management.

VALUE OF ACTIVE MANAGEMENT REPORT

LEHMAN ARK MANAGEMENT



MILLER ANDERSON

PORTFOLIO MANAGER: Tom Bennet — **ASSETS UNDER MANAGEMENT: $176,825,846**

INVESTMENT PHILOSOPHY

Miller Anderson focuses its investments in misunderstood or under-researched classes of securities. Over the years this approach has led the firm to emphasize mortgage-backed and specialized corporate securities in its portfolios. Based on its economic and interest rate outlook, the firm establishes a desired maturity level for its portfolios. This decision is instituted primarily through the selection of specific types of securities and cash levels that are consistent with the portfolio's desired maturity. However, such moves are made gradually over an interest rate cycle and extremely high cash positions are never taken. Total portfolio maturity is always kept within an intermediate three-to-seven year duration band. Unlike other firms that also invest in mortgage securities, Miller Anderson intensively researches and, even in some cases manages, the mortgage pools in which it invests.

QUALITATIVE EVALUATION

(Reported By Exception)

The firm's exceptional strengths continue to be:

- Highly successful and experienced professionals.
- Extensive securities research process.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 6/30/84 Annualized
Miller Actual	3.4%	9.9%	13.7%
Miller Benchmark	3.7	14.4	14.3

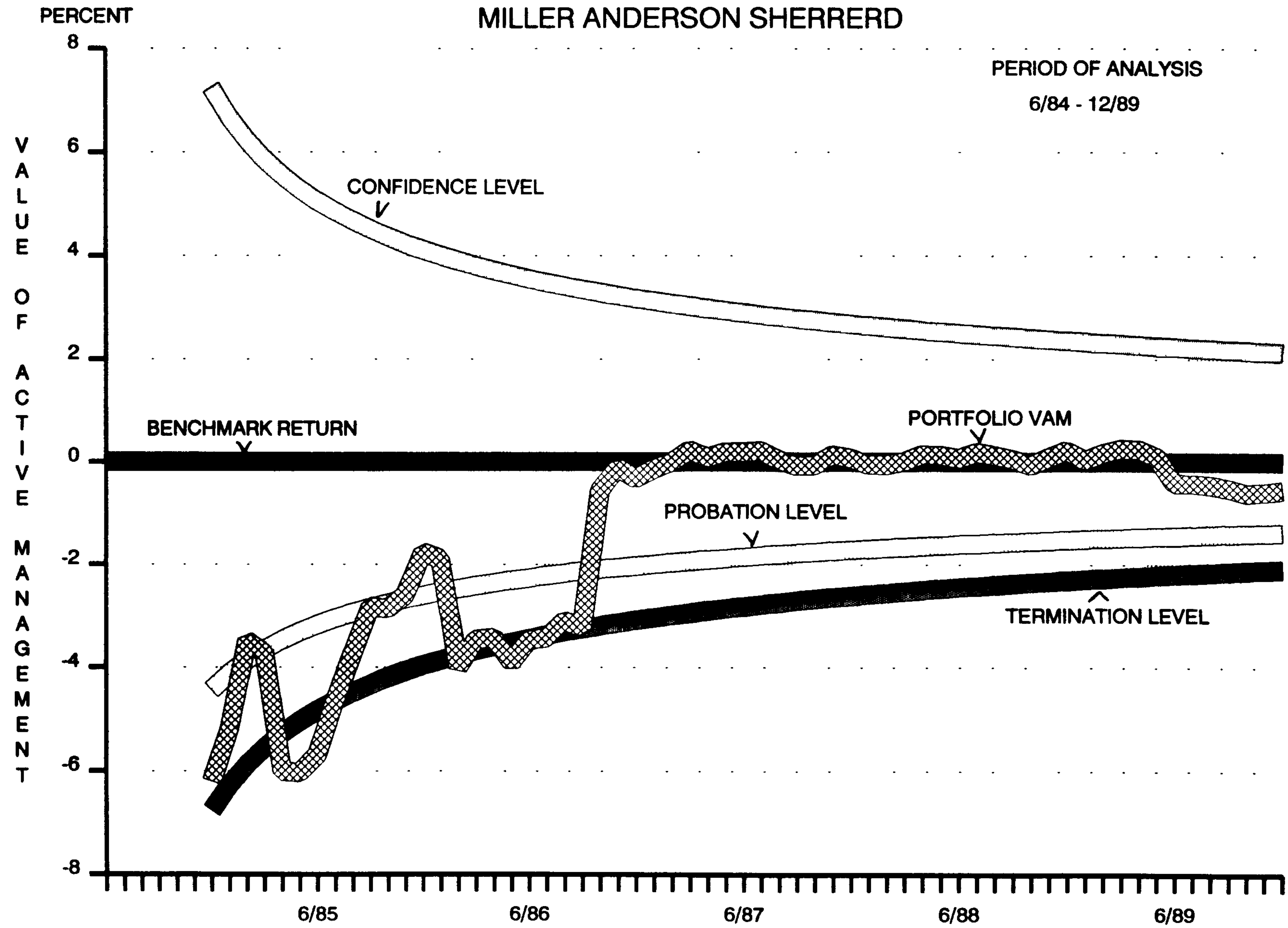
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT REPORT

MILLER ANDERSON SHERRERD



MORGAN STANLEY

PORTFOLIO MANAGER: Geoffrey Gettman

ASSETS UNDER MANAGEMENT: $117,479,613

INVESTMENT PHILOSOPHY

Morgan Stanley takes a very conservative approach to fixed income investing, emphasizing the preservation of capital through the generation of consistent real returns. This philosophy has led the firm to maintain a vast majority of its portfolio in short to intermediate maturity, high quality (A or better) securities. Large positions in maturities longer than ten years are held only as temporary trading opportunities. These positions are increased or reduced gradually as the firm's expectations of the cyclical level of interest rates changes. Issue selection is of secondary importance to maturity decisions. Rather, given its maturity decisions, the firm prefers to make sizable investments in specific areas of the market where it believes persistent misvaluations are present.

QUALITATIVE EVALUATION

(Reported By Exception)

The current evaluation notes the following:

- After review for the past year, the benchmark adopted at the December 1988 meeting is appropriate and will no longer be cited as an on-going concern.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 6/30/84 Annualized
Morgan Actual	3.3%	13.2%	13.3%
Morgan Benchmark	3.6	13.6	13.8

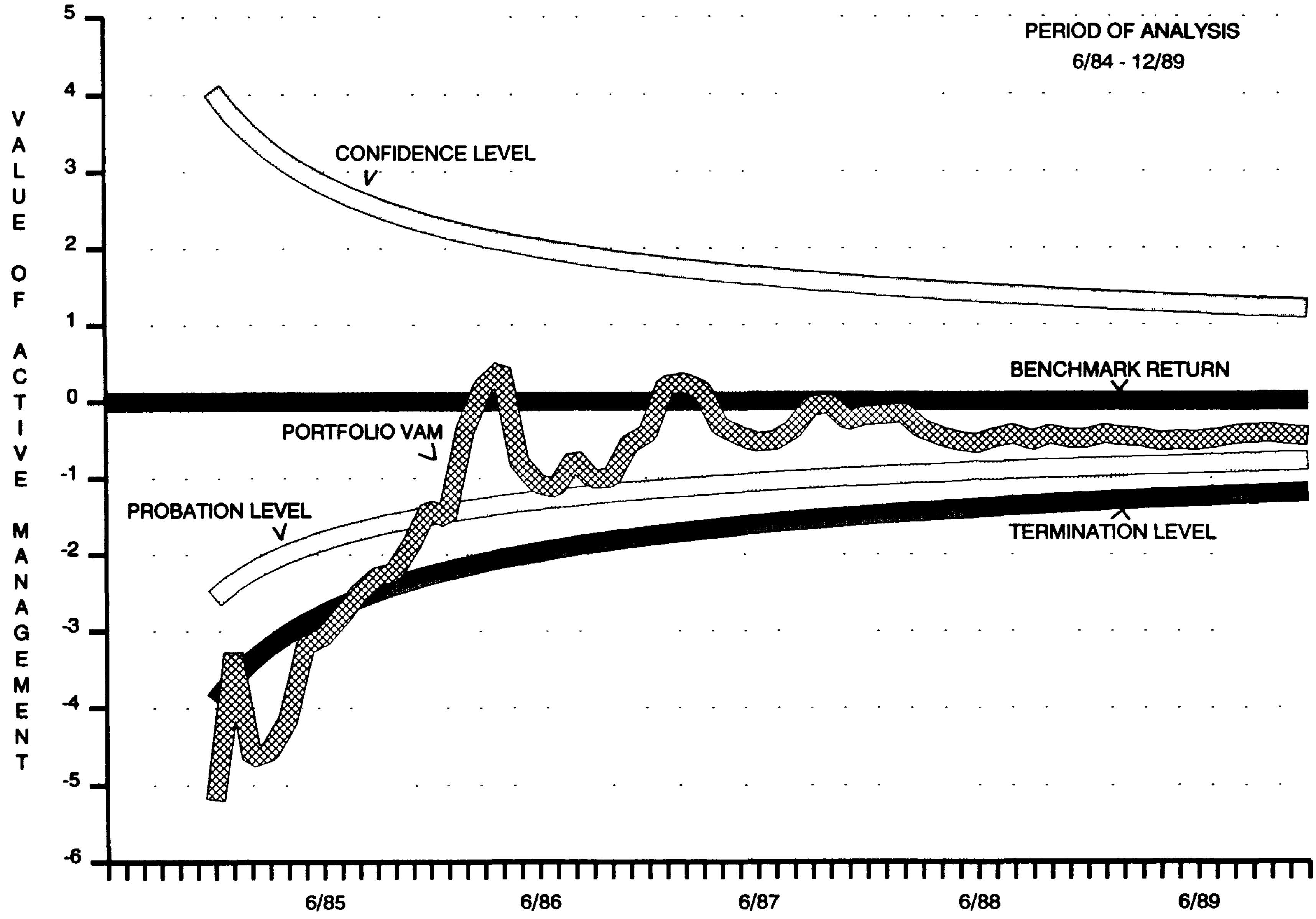
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required at this time. Due to continuing underperformance of the benchmark returns, staff recommends an in-depth review of Morgan Stanley's performance.

VALUE OF ACTIVE MANAGEMENT REPORT

MORGAN STANLEY



WESTERN ASSET MANAGEMENT

PORTFOLIO MANAGER: Edgar Robie, Jr.

ASSETS UNDER MANAGEMENT: $274,079,625

INVESTMENT PHILOSOPHY

Western recognizes the importance of interest rates changes on fixed income portfolio returns. However, the firm believes that successful interest rate forecasting, particularly short-run forecasting, is extremely difficult to accomplish consistently. Thus, the firm attempts to keep portfolio maturity in a narrow band near that of the market, making only relatively small, gradual shifts over an interest rate cycle. It prefers to add value primarily through appropriate sector decisions. Based on its economic analysis, Western will significantly overweight particular sectors, shifting these weights as economic expectations warrant. Issue selection, like maturity decisions, are of secondary importance to the firm.

QUALITATIVE EVALUATION

(Reported By Exception)

The firm's exceptional strengths continue to be:

- Highly successful and experienced professionals.
- Extensive research and understanding in the application of normal portfolios to bond management.

QUANTITATIVE EVALUATION

Performance Relative to Benchmark

	Latest Quarter	Latest Year	Since 6/30/84 Annualized
Western Actual	3.5%	15.8%	15.6%
Western Benchmark	3.6	14.1	14.0

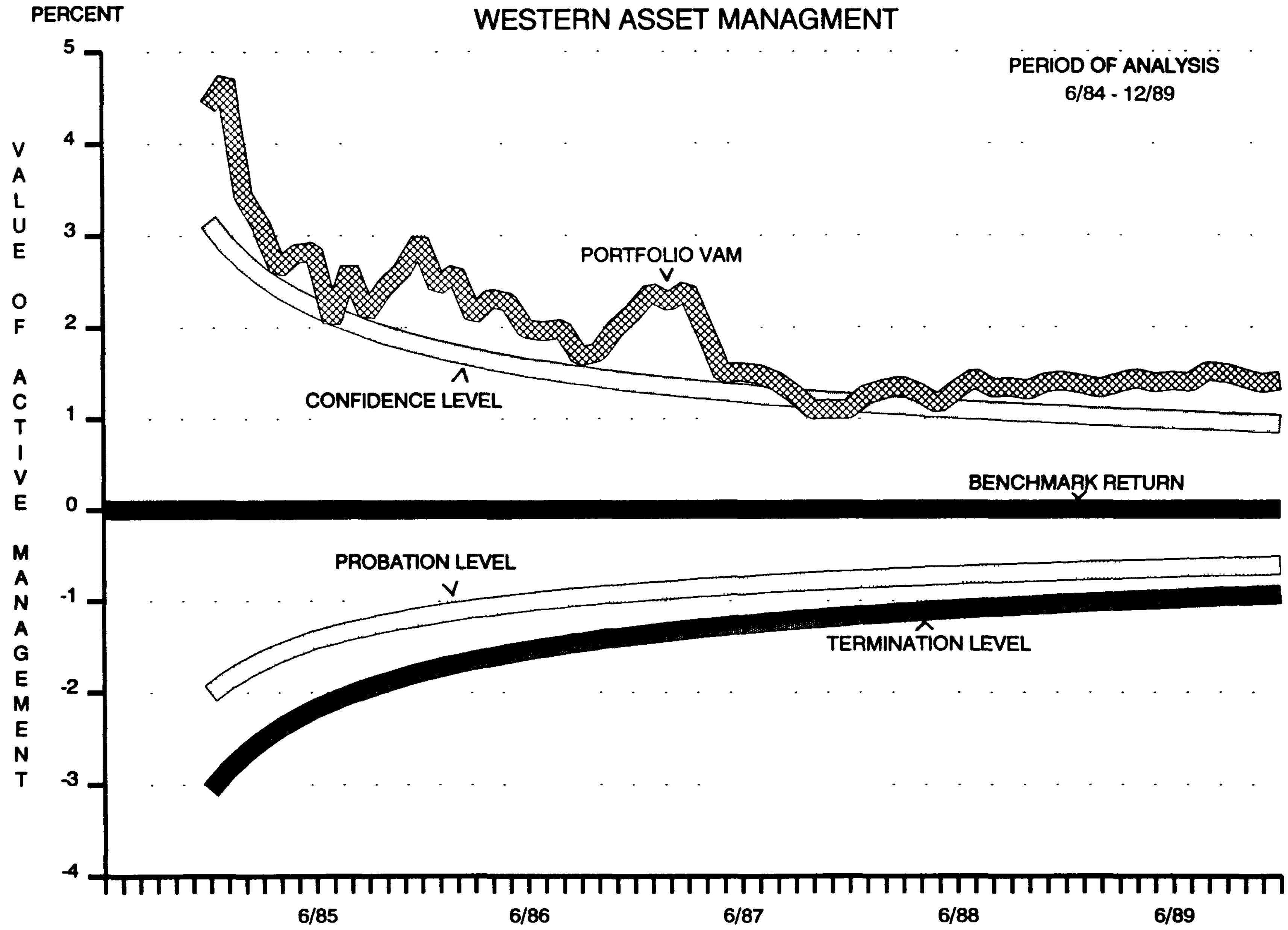
(See Value of Active Management graph below)

STAFF RECOMMENDATIONS

No action required.

VALUE OF ACTIVE MANAGEMENT REPORT

WESTERN ASSET MANAGMENT



Tab G

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
Room 105, MEA Building
55 Sherburne Avenue
St Paul, MN 55155
Tel (612) 296-3328
FAX. (612) 296-9572

March 7, 1990

TO: Members, State Board of Investment
Members, Investment Advisory Council

FROM: Alternative Investment Committee

SUBJECT: Committee Report

The Alternative Investment Committee met during the quarter to review the following information and action items:

- o Review of current strategy
- o Results of annual review sessions with existing managers
- o Results of Apache II investment sale.
- o Report on use of consultants for Alternative Investments
- o Investment in Pathfinder III, a new venture capital investment manager.

A summary of Committee discussion and recommendations on these items follows.

INFORMATION ITEMS:

1) Review of Current Strategy

To increase overall portfolio diversification, 15% of the Basic Retirement Funds is allocated to alternative investments. Alternative investments include real estate, venture capital and resource investments where Minnesota State Board of Investment (SBI) participation is limited to commingled funds or other pooled vehicles. A chart summarizing the Board's current commitments is attached (see Attachment A).

The real estate investment strategy calls for the establishment and maintenance of a broadly diversified real estate portfolio comprised of investments that provide overall diversification by property type and location. The main component of this portfolio consists of investments in diversified open-end and closed-end commingled funds. The remaining portion of the portfolio can include investments in less diversified, more focused (specialty) commingled funds. Currently, the SBI has committed $385 million to twelve commingled real estate funds.

The venture capital investment strategy is to establish and maintain a broadly diversified venture capital portfolio comprised of investments that provide diversification by industry type, stage of corporate development and location. To date, the SBI has committed to fourteen commingled venture capital funds for a total commitment of $309 million.

The strategy for resource investment requires that investment be made in resource investment vehicles that are specifically designed for institutional investors to provide an inflation hedge and additional diversification. Individual resource investments will include proved producing oil and gas properties, royalties and other investments that are diversified geographically and by type. Currently, the SBI has committed $130 million to eight commingled oil and gas funds.

2) Results of Annual Review Sessions with Existing Managers

During January 1990, the Alternative Investment Committee and staff conducted annual review sessions with several of the SBI's existing alternative investment managers:

Venture Capital: Norwest, Summit and First Century
Resource Funds: Morgan Oil and Gas

Summaries of the review sessions are included as Attachments B,C,D,E to this Committee Report.

Generally, the meetings went well and produced no major surprises.

Summit, Morgan and Norwest are conforming to their originally stated investment strategies. Staff and the Alternative Investment Committee have been satisfied with the performance and operations of Summit and Morgan and would consider new investments with these managers, when appropriate.

The Committee and staff, however, have been less satisfied with the performance of Norwest. Norwest has suffered from the poor performance of computer hardware companies, an area where Norwest has many investments. The Committee would not consider a new investment with Norwest at this time.

First century has deviated somewhat from their originally stated investment strategy by pursuing a broader range of investments outside of their traditional focus on early stage computer-related investments. The Committee and staff have been satisfied with First Century's broadened strategies, operation and performance to date. Additional investments with First Century will be considered, when appropriate.

3) Results of The Apache II Investment Sale

On January 31, 1990, the SBI and six other investors in the Apache II Acquisition Notes sold their investment interests to Apache. The price received by the SBI and the other investors was successfully negotiated to be approximately 15% above Apache's original purchase offer. The Committee, staff and the SBI's oil and gas consultant, Gene Graham, are satisfied with the outcome of the negotiations with Apache and subsequent sale of the SBI's investment interest. What follows is a brief summary of the SBI's investment in the Apache II Acquisition Notes:

ORIGINAL INVESTORS:	IBM, Central Life, ELCA Board of Pensions, Lutheran Brotherhood, Minneapolis Employees Retirement Fund, Teachers Insurance and Annuity Association, Wisconsin Investment Board and the SBI.
INCEPTION DATE:	August 20, 1985
SBI'S INVESTMENT:	$23,000,000
CASH DISTRIBUTIONS:	$18,003,511
INTERNAL RATE OF RETURN:	-7.5%

4) <u>Specialized Consultants For Alternative Investments</u>

The Fiscal Year 1990 Management Plan included a project to consider and recommend, if appropriate, use of existing or new specialized consultants for alternative investments. An outline of the Committee's conclusions follow:

- Resource (Oil & Gas)

  Currently, the SBI has retained an oil and gas consultant, Gene Graham of the Sterling Group. To date, the Committee and staff have been satisfied with Ms. Graham's performance under the contract and expects to recommend that the SBI continue this relationship.

- Venture Capital

  Currently, the SBI does not retain a venture capital consultant. The SBI staff has many contacts in the venture capital community which can provide information as needed. In addition, the SBI has an investment with First Chicago, one of the largest venture capital consulting firms in the country. The Committee and staff do not believe it is necessary to contract with a consultant at this time.

- Real Estate

  Currently, the SBI does not retain an on-going real estate consultant. A major real estate project review was completed by Laventhol & Horwath in 1989. The findings of this comprehensive project were used to establish future investment strategy in the real estate area. The Committee and staff feel that an additional real estate consulting arrangement, at this time, would be an unnecessary expense.

In summary, the Committee and staff believe that a specialized consultant remains appropriate for the resource area but is unnecessary for venture capital and real estate at this time. The need for consultants will be reviewed periodically to insure appropriate resources are maintained.

ACTION ITEM:

1) Investment With Pathfinder Ventures, A New Venture Capital Manager

Pathfinder Venture Partners, a venture capital group based in Minneapolis, MN is seeking investors in Pathfinder Fund III, a new $55 million fund. Pathfinder Fund III is a follow-on fund to the $53 million Pathfinder Fund II formed in 1984 and the $20 million Fund I formed in 1980. As in the two previous funds, Fund III will be structured as a limited partnership and will focus on medical and technology investments concentrated in Minnesota and California.

More information on Pathfinder Fund III is included as Attachment F.

The Committee and staff believe a commitment to Pathfinder III is appropriate. However, they are concerned that key members of the partnership remain in place throughout the investment phase of the partnership. As a result, the Committee concludes that the SBI's participation be made contingent upon the retention of the current individuals specified as general and special limited partners.

RECOMMENDATION:

The Committee recommends that the SBI authorize the executive director, with assistance from the SBI's legal counsel, to negotiate and execute a contract with Pathfinder Venture Partners, for a commitment of up to $5 million in the Pathfinder Ventures III Limited Partnership. Further, the Committee recommends that the commitment stipulate that the SBI have the option to withdraw any unfunded commitment if any of the general or special limited partners terminates its relationship with Pathfinder Venture Partners.

Attachment A
Summary of Alternative Investments
Fourth Quarter 1989

	Inception Date	Commit. (Millions)	Funded Commit. (Millions)	Mkt. Value Of Funded Commit. (Millions)	Cash Distr. (Millions)	Unfunded Commit. (Millions)	IRR	Measurement Period
Aetna	4/82	$40.0	$40.0	$62.2	$0.0	$0.0	7.6%	7.2 Yrs.
Equitable	10/81	40.0	40.0	74.3	0.0	0.0	9.6	7.8
Heitman I	8/84	20.0	20.0	21.5	8.9	0.0	11.6	4.9
Heitman II	11/85	30.0	30.0	35.0	6.7	0.0	11.4	3.6
Heitman III	1/87	20.0	20.0	20.6	2.2	0.0	7.9	2.4
Prudential	9/81	40.0	40.0	69.1	0.0	0.0	7.9	7.8
RREEF	9/84	75.0	75.0	79.0	11.4	0.0	5.8	5.2
State Street III	9/85	20.0	20.0	26.1	0.0	0.0	7.6	3.8
State Street IV	9/86	15.0	15.0	16.9	0.0	0.0	4.7	2.8
State Street V	12/87	15.0	15.0	16.3	0.0	0.0	7.1	1.5
TCW III	8/85	40.0	40.0	46.4	8.8	0.0	9.8	3.9
TCW V	11/86	30.0	30.0	33.8	1.8	0.0	9.8	2.7
Real Estate Totals		**$385.0**	**$385.0**	**$501.3**	**$39.8**	**$0.0**		
Allied	9/85	$5.0	$5.0	$5.1	$0.8	$0.0	7.9%	3.8 Yrs.
DSV	4/85	10.0	10.0	11.5	0.0	0.0	4.0	4.2
First Century	12/84	10.0	6.5	6.2	2.0	3.5	9.6	5.1
First Chicago	5/88	5.0	2.5	2.5	0.1	2.5	11.8	1.3
Golder Thoma	10/87	14.0	4.9	4.6	0.0	9.1	-12.2	1.7
Inman/Bowman	6/85	7.5	4.5	3.6	0.0	3.0	-7.4	4.1
KKR I, II, & III	6/84	190.0	143.7	147.2	63.0	46.3	24.3	5.3
Matrix	8/85	10.0	10.0	11.1	0.0	0.0	4.9	3.9
Norwest	1/84	10.0	10.0	7.5	2.5	0.0	-0.1	6.0
Summit I	12/84	10.0	10.0	9.8	3.7	0.0	9.4	5.0
Summit II	5/88	30.0	7.5	7.0	0.0	22.5	-7.0	1.5
Superior	6/86	6.6	3.3	3.2	0.0	3.3	-1.6	3.0
T. Rowe Price	11/87	0.9	0.9	0.6	0.4	0.0	34.4	1.6
Venture Capital Totals		**$309.0**	**$218.8**	**$220.0**	**$72.4**	**$90.2**		
AMGO I	9/81	$15.0	$15.0	$4.8	$3.0	$0.0	-10.3%	7.8 Yrs.
AMGO II	2/83	7.0	7.0	6.0	1.6	0.0	1.9	6.4
AMGO IV	7/88	12.3	6.6	6.8	0.1	5.7	8.2	1.0
Apache I	5/84	3.0	1.6	1.6	0.6	1.4	18.6	5.1
Apache II	8/85	23.0	23.0	0.0	18.0	0.0	-7.5	4.5
Apache III	12/86	30.0	30.0	20.0	17.0	0.0	11.2	2.5
Morgan O&G	8/88	15.0	8.4	9.	0.0	6.6	12.0	1.4
British Pet.	2/89	25.0	25.0	28.0	2.7	0	24.0	1.0
Resource Totals		**$130.3**	**$116.5**	**$76.5**	**$41.9**	**$13.8**		
GRAND TOTALS		**$824.3**	**$720.4**	**$797.7**	**$154.0**	**$104.0**		

Notes: Figures are updated after each manager's annual review session.
IRR indicates internal rate of return.
Totals may not add due to rounding.

ATTACHMENT B

ANNUAL REVIEW SUMMARY
SUMMIT PARTNERS
January 25, 1990

MANAGER REPRESENTATIVES: Roe Stamps, Lawrence Lepard

SBI ASSETS UNDER MANAGEMENT:

Summit Ventures I	$10,000,000
Summit Ventures II	7,500,000
TOTAL	$17,500,000

BACKGROUND AND DESCRIPTION: Summit Ventures I and II were formed by the managing general partners of Stamps, Woodsum & Company, and Shearson/American Express. Stamps and Woodsum focus on profitable, expansion stage firms that have not received any venture backing. Most investments are in high-tech firms. Investments are diversified by location and industry type. Summit has offices in Boston, Atlanta, and Southern California. Summit I and II have ten year terms.

QUALITATIVE EVALUATION:

In 1989, Summit Ventures I invested $9 million in 12 new companies and made $3.75 million of follow-on investments in 14 companies. Summit Ventures II made 14 new investments totalling $12.9 million. The investment pattern of Summit Ventures II closely resembles that of Summit Ventures I with 82% of investments in later stage companies and 56% in technology related areas.

During the last year, Summit Partners expanded their staff and hired one new vice president and five associates. In the first half of 1990, Summit plans to take several portfolio companies public despite lackluster conditions in the initial public offering market.

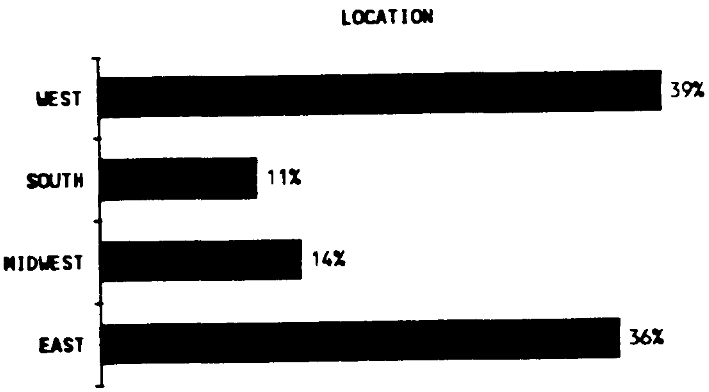
In the future, Summit Partners plans to continue their current investment strategy. They will look for deals where they are lead and first professional investor, owners of senior securities, and directors on the board. They will invest primarily in later stage companies that have businesses in computer related technology, communications, or environmental services.

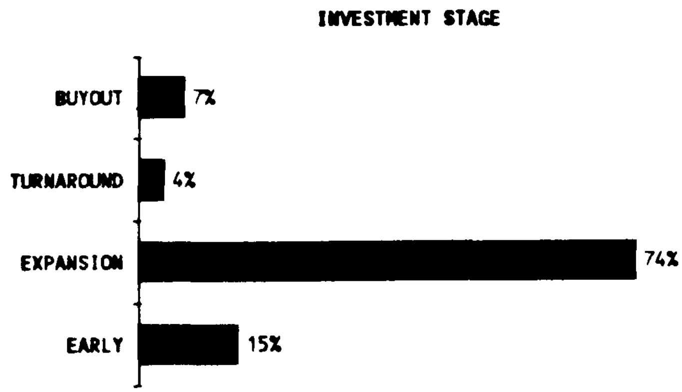
ATTACHMENT B (con't)

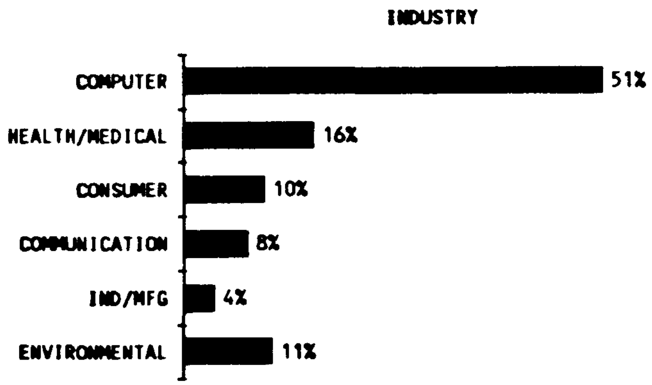
QUANTITATIVE EVALUATION

	SUMMIT I	SUMMIT II
COMMITMENT:	$10,000,000	$30,000,000
FUNDED COMMITMENT:	$10,000,000	$ 7,500,000
MARKET VALUE OF FUNDED COMMITMENT:	$ 9,827,611	$ 6,995,966
CASH DISTRIBUTIONS:	$ 3,692,401	-0-
INCEPTION DATE(S):	Dec. 1984	May 1988
WEIGHTED AVERAGE INTERNAL RATE OF RETURN (IRR): (annualized, since inception)	9.4%	-7.0%

DIVERSIFICATION PROFILE (% OF COST)







STAFF COMMENTS AND RECOMMENDATIONS:

The Alternative Investment Committee and staff have been satisfied with Summit's operation and performance to date. Additional investments with Summit will be considered, when appropriate.

ATTACHMENT C

ANNUAL REVIEW SUMMARY
NORWEST VENTURE PARTNERS
January 22, 1990

MANAGER REPRESENTATIVES: Daniel J. Haggerty

SBI ASSETS UNDER MANAGEMENT: $10,000,000

BACKGROUND AND DESCRIPTION: Norwest Venture Capital Management, a wholly owned subsidiary of Norwest Corp., is the general partner and manager of the partnership. Norwest Venture Partners focuses on high technology companies in the early stages of corporate development. However, the portfolio also includes investments in expansion stage firms and is diversified by the location and industry type. Norwest Venture Management has offices in Minneapolis, Phoenix, Portland, and Boston. Northwest Venture Partners I was formed in January 1984 and has a term of ten years.

QUALITATIVE EVALUATION:

Norwest is fully invested and will use the fund's remaining cash assets as a reserve for follow-on investments.

Norwest expects that the fund will generate a rate of return less than 10% and are disappointed in its performance. Returns have been hampered by the poor performance of computer hardware companies, an area where Norwest has many investments.

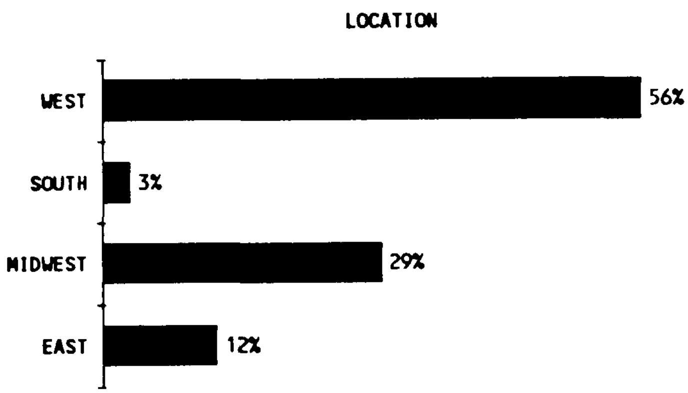
Norwest has raised a second venture capital investment fund through Norwest Corp., their parent company. They do not anticipate raising additional funds from other investors.

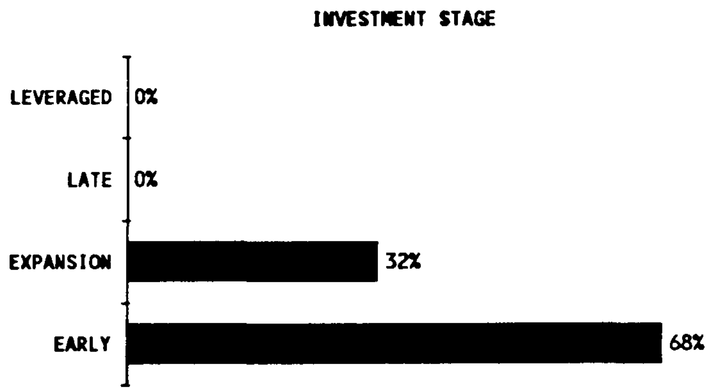
ATTACHMENT C (con't)

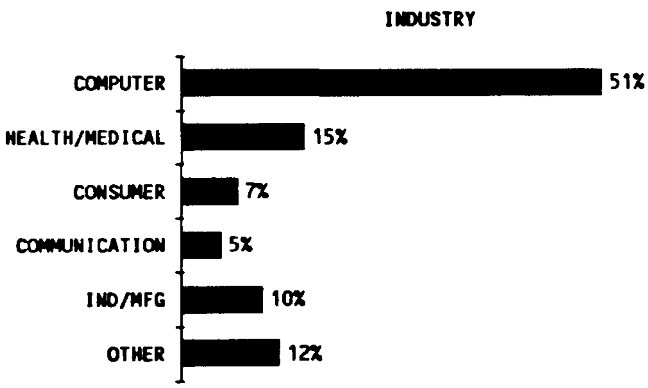
QUANTITATIVE EVALUATION

COMMITMENT:	$10,000,000
FUNDED COMMITMENT:	$10,000,000
MARKET VALUE OF FUNDED COMMITMENT:	$ 7,476,422
CASH DISTRIBUTIONS:	$ 2,466,686
INCEPTION DATE(S):	Jan. 1984
WEIGHTED AVERAGE INTERNAL RATE OF RETURN (IRR): (annualized, since inception)	-0.1%

DIVERSIFICATION PROFILE (% OF COST)







STAFF COMMENTS AND RECOMMENDATIONS:

The Alternative Investment Committee and staff are not satisfied with Norwest's operation and performance to date.

ATTACHMENT D

ANNUAL REVIEW SUMMARY
FIRST CENTURY PARTNERSHIP
January 24, 1990

MANAGER REPRESENTATIVES: Lisa Roumell, Michael Meyers

SBI ASSETS UNDER MANAGEMENT: $6,500,000

BACKGROUND AND DESCRIPTION: First Century III was formed in December, 1984 and has a term of ten years. Smith Barney Venture Corp., a subsidiary of Smith Barney Harris Upham and Company is the general partner and manager of the partnership. Smith Barney Venture has offices in New York and San Francisco. This is the third fund formed by the firm since 1972. The partnership invests primarily in early stage, high technology companies that are diversified by location and industry group.

QUALITATIVE EVALUATION:

First Century accelerated their investment pace in 1989, adding ten companies to their portfolio. They expect to keep up this investment pace and be fully invested by the end of 1990.

After it began investing the partnership funds, First Century has changed investment strategy, concentrating less on early stage computer related investments and more on less technology driven areas such as retailing and health care. In 1989, only three of their ten new investments were in computer related companies.

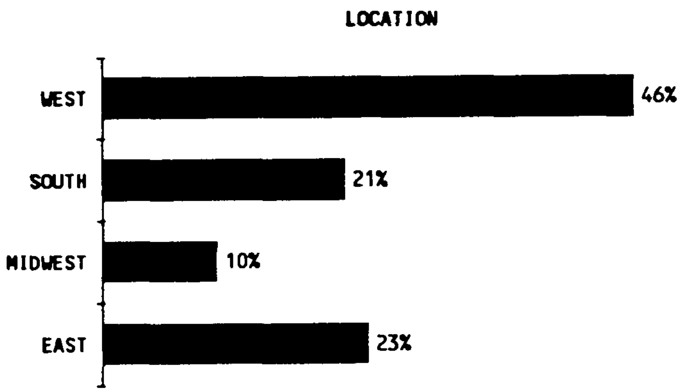
This strategy shift occurred because First Century feels there are fewer high-tech start-ups to choose from and many fall outside their risk/return preferences. However, First Century will continue making occasional seed investments in computer hardware companies and will try to do more high-tech deals on the East Coast.

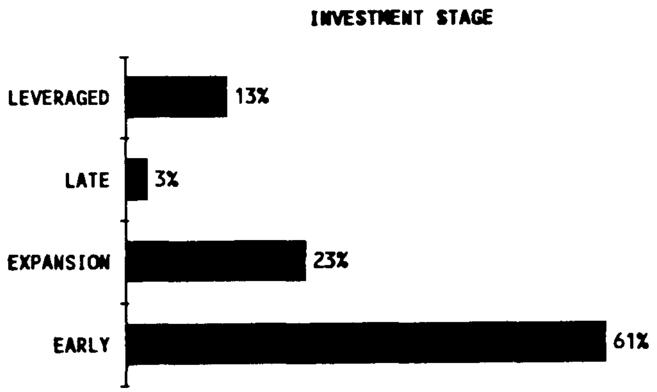
ATTACHMENT D (con't)

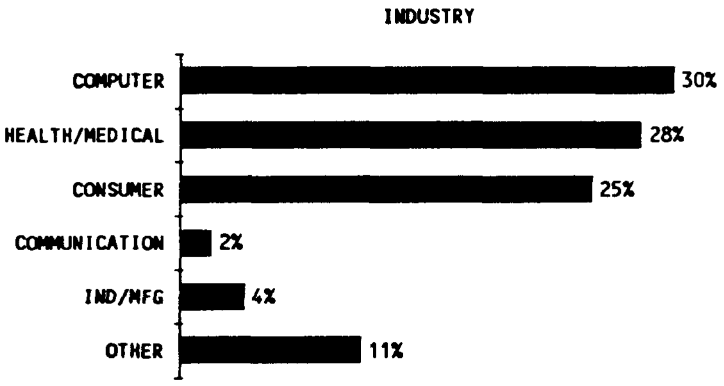
QUANTITATIVE EVALUATION

COMMITMENT:	$10,000,000
FUNDED COMMITMENT:	$6,500,000
MARKET VALUE OF FUNDED COMMITMENT:	$6,246,704
CASH DISTRIBUTIONS:	$1,992,072
INCEPTION DATE(S):	Dec. 1984
WEIGHTED AVERAGE INTERNAL RATE OF RETURN (IRR): (annualized, since inception)	9.6%

DIVERSIFICATION PROFILE (% OF COST)







STAFF COMMENTS AND RECOMMENDATIONS:

The Alternative Investment Committee and staff have been satisfied with First Century's operation and performance to date. Additional investments with First Century will be considered, when appropriate.

ATTACHMENT E

ANNUAL REVIEW SUMMARY
J.P. MORGAN, PETROLEUM FUND II
January 23, 1990

MANAGER REPRESENTATIVES: Bill Walker

SBI ASSETS UNDER MANAGEMENT: $8,400,000

BACKGROUND AND DESCRIPTION: Petroleum Fund II is managed by the Morgan Petroleum Group, a division of Morgan Guaranty Trust Company and headquartered in Houston, Texas. Three professional staff members manage the investment activities of the Petroleum group.

The Fund's strategy is to have a diversified portfolio with investments ranging in size from $5 million to $20 million. The fund will invest in producing properties, development and exploration drilling, secondary or tertiary recovery projects, construction of gas gathering systems and natural gas liquid plants, and royalty or mineral interests.

Most investments will be overriding royalties carved out of a leasehold interest. The overriding royalty interest is payable from gross revenues, but measured by a percentage of net lease operating income (gross revenues less certain operating costs).

QUALITATIVE EVALUATION:

The fund has made six investments. Most of these investments were in the $10 million to $20 million range. However, there is increasing competition for properties in this price range so Morgan has started evaluating smaller investments. They believe higher returns and increased opportunities are available with $3 - $6 million investments. When the market may be less efficient or competing buyers may be less aggressive. They expect 20% to 30% of the fund will be invested in transactions this size.

Subject to further research, Morgan is also considering creating "synthetic" reserves purchases using a private placement of long-term forward options contracts. They may create an investment which gives the portfolio attributes identical to a long-lived production purchase at a comparable return.

ATTACHMENT E (con't)

QUANTITATIVE EVALUATION

COMMITMENT:	$15,000,000
FUNDED COMMITMENT:	$ 8,400,000
MARKET VALUE OF FUNDED COMMITMENT:	$ 9,265,665
CASH DISTRIBUTIONS:	$ -0-
INCEPTION DATE(S):	May 1988
WEIGHTED AVERAGE INTERNAL RATE OF RETURN (IRR): (annualized, since inception)	12.0%

DIVERSIFICATION PROFILE

	INVESTMENT	TYPE	% OF COST
1.	Petrocorp - Austin Properties	Gas	11
2.	British Petroleum - Prudhoe Bay	Oil	29
3.	Laredo Ranch Royalties	Gas	20
4.	Kaiser Francis - Wyoming	Gas	16
5.	Petrocorp - TMC Properties	Gas	17
6.	Twin Montana - Conley Field	Oil	7

STAFF COMMENTS AND RECOMMENDATIONS:

The Alternative Investment Committee and staff have been satisfied with J.P. Morgan's operation and performance to date. Additional investments with J.P. Morgan will be considered, when appropriate.

ATTACHMENT F

NEW VENTURE CAPITAL MANAGER PROFILE

I. BACKGROUND DATA

FUND MANAGER:	Pathfinder Ventures
NAME OF FUND:	Pathfinder III
TYPE OF FUND:	$55 Million Limited Partnership
INTERVIEW DATE:	August 29, 1989
REPRESENTING MANAGER:	Norm Dann, Gary Stoltz, Andy Greenshields
MANAGER CONTACT:	Brian Johnson
ADDRESS:	One Corporate Center 7300 Metro Boulevard, Suite 585 Minneapolis, MN 55435
TELEPHONE:	(612) 835-1121

II. ORGANIZATION AND STAFF

The Fund is organized as a limited partnership and will be managed by the Pathfinder group. This is the third of three venture capital limited partnerships organized by Pathfinder since 1980. The three founding general partners, Norman Dann, Andrew Grenshields, and Gary Stoltz, have worked together since founding Pathfinder in 1980. The other partners have joined since 1980. They include Jack K. Ahrens, Marvin Bookin, Gene Fischer, Brian Johnson, and Todd Johnson. These partners have various levels of experience that include operating and financial experience in venture, computer and medical areas. For Pathfinder Fund III, Marv Bookin and Norman Dann are special Limited Partners of the General Partner. They are committed half-time to Pathfinder III, although they have no other business interests.

III. INVESTMENT STRATEGY

Pathfinder will invest mainly in start-up or developmental companies in the Midwest and West. The portfolio will be diversified with investments expected to be:

- o 50 percent medical/pharmaceutical, 30 percent computer/data communication, and the rest in related high-technology companies.

- o 75 percent start-up or developmental.

- o 40 percent in the Upper Midwest and 30 percent on the West Coast.

Pathfinder has shifted their investment focus from computer to medical. In the first fund, they invested 50 percent of their money in computer related areas and 30 percent in medical. This shift occurred because:

- o Their greatest returns have been in the medical area.
- o The money needed for follow-on investments in computer companies has proved to be prohibitive in many cases.
- o There is a high concentration of medical companies in the Upper Midwest and California where their offices are located.

IV. INVESTMENT PERFORMANCE

Pathfinder I was formed in 1980 and has invested $19,671,114 in a total of 24 companies, follow-on investments were made. These investments represent a value of $51,852,375. The net compounded annual rate of return to Limited Partners since the date of Pathfinder I's formation has been 25.9%.

It is too early to determine the ultimate performance of Fund II since it was formed in April, 1984 and is half way through its expected term. However, Pathfinder II has invested $36,244,940 in 27 companies. In 18 of these companies, follow-on investments were made. These investments represent a value of $31,626,210. The net compounded annual rate of return to Limited Partners since the date of Pathfinder II's formation has been -5.78%.

V. INVESTMENT AGREEMENT

Term

Approximately 10.5 years with up to three extensions of one year each. The Fund may be terminated earlier with the approval of the General Partner and the holders of 67 percent of Pathfinder III.

Management Fee

The fee will be 2.5 percent of the first $40 million in committed capital and 2 percent of additional committed capital until 1997 when the fee will decline 10% per year. Committed capital on which the fee is calculated will be reduced by the cost basis of distributions, writeoffs, etc.

ATTACHMENT F (con't)

Allocation of Income, Gains, Losses and Expenses

Net income from temporary money market investments will be allocated to the Partners according to their Capital Contributions (defined as the total amount of capital committed to the Partnership). Until the aggregate of all profits, gains and losses are a positive number, all profits, gains and losses will be allocated pro rata to all Partners according to their Capital Contributions, except that losses in excess of Capital Contributions will be allocated to the General Partner. When the aggregate of all profits, gains and losses are a positive number, 20 percent of such positive balance will be allocated to the General Partner and the remainder to the Partners in accordance with their Capital Contributions. Gains and losses include both realized and unrealized amounts.

COMMITMENTS AS OF 2/28/90

Metropolitan Life	$ 3,000,000
Minnesota Mutual	2,000,000
Steve Schwan	2,000,000
J.F. Shea	1,000,000
Franklin Life	1,000,000
Sequoia Venture Partnership	1,000,000
Venncap Venture Partnership	2,000,000
IAI Ventures	1,000,000
Dr. John Kapoor	1,500,000
Pathfinder Ventures	550,000
Total	$15,050,000

Tab H

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
Room 105, MEA Building
55 Sherburne Avenue
St Paul, MN 55155
Tel (612) 296-3328
FAX (612) 296-9572

March 7, 1990

TO: Members, State Board of Investment

FROM: Task Force on South Africa

RE: Status Report

The Task Force on South Africa met on March 6, 1990, to review progress on implementing the Board's resolution on South Africa.

The members of the Task Force are:

Peter Sausen, Chair	Governor's Designee
Richard Helgeson	Auditor's Designee
John Manahan	Treasurer's Designee
Elaine Voss	Secretary of State's Designee
Jack Tunheim	Attorney General's Designee
Elton Erdahl	Retirement System Representative
Rick Scott	Public Employee Representative

A full report from the Task Force will be distributed at the Board's meeting on March 15, 1990.