

**MINNESOTA STATE BOARD
OF INVESTMENT
MEETING
September 16, 1993
&
INVESTMENT ADVISORY
COUNCIL MEETING
September 15, 1993**

**AGENDA
STATE BOARD OF INVESTMENT
MEETING**

**Thursday, September 16, 1993
8:30 A.M. - Room 125
State Capitol - Saint Paul**

TAB

- 1. Approval of Minutes of June 2, 1993**
- 2. Report from the Executive Director (H. Bicker)**
 - A. Quarterly Investment Review (April 1-June 30, 1993) **A**
 - B. Portfolio Statistics (June 30, 1993) **B**
 - C. Administrative Report **C**
 1. Budget Report
 2. Travel Report
- 3. Report from the Master Custodian Review Committee (P. Sausen) **D****
- 4. Report from the International Manager Search Committee (P. Sausen) **E****
- 5. Status of the Executive Director's FY93 Performance Evaluation (P. Sausen)**
- 6. Reports from the Investment Advisory Council (J. Yeomans)**
 - A. Asset Allocation and Stock and Bond Manager Committees-Joint Report **F****
 1. Review of Constraints on Fund Performance
 2. Review of Manager Continuation Policy
 - B. Asset Allocation Committee **G****
 1. Update on Post Fund Asset Allocation Transition
 2. Recommendation on Total Fund Objectives
 - C. Stock and Bond Manager Committee **H****
 1. Update on Manager Allocations for July 1, 1993
 2. Review of Manager Performance
 3. Recommendation to Terminate Contract with Lieber & Co.
 4. Recommendation to Renew Contract with State Street Global Advisors
 5. Recommendation to Authorize Global Bond Investments
 - D. Alternative Investment Committee **I****
 1. Results of Annual Review Sessions
 2. Status of First Reserve
 3. Recommendation to Approve Commitment to a Venture Capital Manager (Blackstone)
 4. Recommendation to Approve Committee to a Real Estate Manager (Zell/Merrill Lynch)
- 7. Report from the Task Force on Divestment (P. Sausen) **J****

STATE BOARD OF INVESTMENT

Minutes State Board of Investment June 2, 1993

The State Board of Investment (SBI) met at 9:00 A.M. on Wednesday, June 2, 1993 in Room 125, State Capitol, St. Paul, Minnesota. Governor Arne H. Carlson, Chair; Secretary of State Joan Anderson Growe; State Treasurer Michael A. McGrath; State Auditor Mark B. Dayton and Attorney General Hubert H. Humphrey III were present.

Mr. Carlson called the meeting to order and the minutes of the March 11, 1993 meeting were approved.

Executive Director's Report

Mr. Bicker, Executive Director, referred Board members to Tab A of the meeting materials. He stated that the Basic Funds had exceeded the inflation rate over the last ten years (Basics Total Fund 12.4% vs. Inflation 3.9%), outperformed the composite index over the five year period (Basics Total Fund 12.8% vs. Composite 12.2%), and outperformed the median fund over the five year period (Basics-Excluding Alternative Assets 13.6% vs. Median Fund 12.2%). Mr. Bicker stated that the Basic Funds' market value increased by 6.4% for the quarter ending March 31, 1993. He noted that at the end of the quarter 6.8% of the Basic Funds were invested in international stocks and that as of June 1, 1993 the Basic Funds had reached the 10% international target. He reported that the Basic Funds had outperformed the composite index for the quarter (Basic Total Fund 4.5% vs. Composite 4.2%) and median fund for the quarter (Basics-Excluding Alternative Assets 5.0% vs. Median 4.2%). He stated that the domestic stock segment outperformed its target for the quarter (Basic domestic stocks 4.4% vs. Wilshire 5000 Adjusted 4.3%) and that the domestic bond segment outperformed its target for the quarter (Basic domestic bonds 4.6% vs. Salomon BIG Index 4.2%). He stated that the international stock segment had slightly underperformed for the quarter (Basic int'l. stocks 11.9% vs. EAFE 12.0%) and since inception (Basic int'l. stocks 7.6% vs. EAFE 7.7%). He added that he feels these returns are very good considering the costs that are related to entering the international markets. He said that State Street Bank had done an excellent job in taking advantage of "crossing" opportunities to reduce transaction costs.

Mr. Bicker directed members to the Post Retirement Fund summary and reported that the Fund had increased in value by 4.1%. He stated that as of March 31, 1993 the fund was over 40% invested in stocks and that the fund was at the 50% allocation target as of June 1, 1993. He reported that the total fund had underperformed its composite index for the quarter (Post Total Fund 4.4% vs. Composite 4.7%). Mr. Bicker stated that the stock segment is still in a transition phase and had underperformed for the quarter (Post stocks 4.0% vs. S&P 500 4.3%). He added that the bond segment had matched its benchmark for the latest quarter (Post bonds 4.7% vs. Shearson Index 4.7%).

Mr. Bicker reported that the Assigned Risk Plan has grown to a market value of \$400 million which is approximately double the size of the portfolio transferred to the SBI in

May 1991. He said the fund outperformed its composite index for the quarter (Total Fund 3.1% vs. Composite 2.6%). He noted that the stock and bond segments both outperformed for the quarter (Equity segment -0.5% vs. Benchmark -0.6%) and (Bond segment 3.8% vs. Benchmark 3.2%). Mr. Bicker stated that as of March 31, 1993 the SBI was responsible for over \$21 billion in assets.

Executive Director's Administrative Report

Mr. Bicker referred members to Tab C of the meeting materials for updates on the budget and travel. He stated that the SBI's administrative bill for the 1993 Legislative Session had been signed into law. He stated that the SBI's administrative budget request was increased \$100,000.00 for the biennium for the purpose of retaining deferred compensation consultants. He added that this expense will be entirely billed back to the funds involved. He reported that new legislation requires that expenses paid for SBI members and staff by firms that do business with the SBI be disclosed

Mr. Bicker stated that as mentioned above, the SBI has responsibility for evaluating and selecting vendors for the State's Deferred Compensation Plan, The 403(b) Program and Individual Retirement Account Plan (IRAP). He stated that he is recommending that the SBI authorize the creation of a Deferred Compensation Review Committee to solicit proposals for consulting services to assist the SBI in carrying out these responsibilities. Mr. Dayton moved approval of the recommendation, as stated in the Committee Report. Mr. Humphrey seconded the motion. The motion passed.

Administrative Committee Report

Mr. McGrath reported that the Committee met on May 21, 1993 and reviewed two items which do not require action by the Board at this time. First, he said a request for proposals for master custody services was drafted by staff, approved by the Committee, and announced in the State Register. He stated that responses will be due on June 25, 1993 and that a Master Custodian Review Committee will review the responses and make a recommendation to the SBI at its September 1993 meeting. Second, he said eight insurance companies have agreed to sign contracts to provide 403(b) tax sheltered annuities to school district employees statewide. He noted that a ninth company (Mutual of America) was also approved by the SBI but that the firm declined to sign the contract because the company objected to paying the cost assessed to each firm as is required by law.

Mr. McGrath reported on the Executive Director's FY94 Workplan, stating that it follows the same category order found in the Executive Director's position description. He moved approval of the Committee's recommendation, as stated in the Committee Report, to approve the workplan and use it as a basis for the Executive Director's FY94 performance evaluation. The motion passed.

Mr. McGrath stated that the Committee had reviewed and approved the FY94 administrative budget plan and he moved approval of the Committee's recommendation, as stated in the Committee Report, to accept the plan. The motion passed.

Mr. McGrath stated that the Committee had approved the Fiduciary Education Plan and he moved approval of the Committee's recommendation to accept the plan as stated in the Committee Report. In response to questions from Mr. Carlson, Mr. McGrath explained that \$2,000 is allocated to each Board member to cover continuing education expenses. The motion passed.

Mr. McGrath stated that the Committee had discussed and approved the Executive Director's FY93 evaluation process and he moved that the SBI adopt the process outlined in the Committee's recommendation. The motion passed. (After the meeting, Mr. Dayton asked to be recorded as a "no" vote).

Manager Search Committee

Mr. Sausen reported that the Committee had met during the quarter, interviewing three firms as potential semi-passive bond managers: Lincoln Capital, Goldman Sachs and T. Rowe Price. He stated that the Committee was recommending that Lincoln Capital and Goldman Sachs be retained as semi-passive bond managers. Mr. Humphrey moved approval of the Committee's recommendation, as stated in the Committee Report. Ms. Growe seconded the motion. In response to a question from Mr. Dayton, Mr. Bicker stated that the personnel issues at Goldman Sachs had been resolved. The motion passed.

Asset Allocation and Stock and Bond Manager Committee

Ms. Yeomans reported that during the quarter the Asset Allocation and Stock and Bond Manager Committees had held a joint meeting to discuss revisions to the total fund objectives and reporting format for the Basic and Post Retirement Funds due to significant changes in the long-term asset allocation targets of the Post Fund. She stated that both Committees are recommending the adoption of the new objectives and reporting format, as outlined in the Committee Report.

In response to a question from Mr. Dayton, Ms. Yeomans stated that the IAC had discussed whether the median fund was an appropriate objective given the differing long-term investment policies among funds. She said that since the SBI's investment policy is moderate then the returns should be expected to also be moderate. Mr. Bicker stated that a number of restrictions, including those that prohibit the purchase of unrated fixed income securities, reduces the amount of flexibility the SBI has in comparison to other funds. In response to a question from Mr. Dayton Mr. Bicker stated that the SBI had outperformed the median by 1.4% during the last five year period. Mr. Dayton acknowledged Mr. Bicker's statement, but stated that returns have been both above and below the median on a quarter-to-quarter basis since he has been a Board member. Mr. Dayton stated that the SBI should set a higher objective and have a definitive discussion as to what it is that prevents the SBI from reaching a higher goal. He said that through this discussion the Board could analyze the impact of the various investment restrictions on performance and decide which restrictions they want to support or lift going forward.

He said he believed that the current goals consign the SBI to mediocrity. Ms. Growe commented that in previous discussions various IAC and Board members were uncomfortable with having an increased level of volatility in order to achieve a higher rate of return. Mr. Bicker confirmed that high returns and high volatility go hand-in-hand and he stated that the goal of outperforming the median fund over the long-term is a winning approach.

Mr. Carlson observed that Mr. Dayton's comments reminded him of his own statements about the SBI ten years ago. He stated that he feels the SBI is creating a system which is designed to equalize the market. He said he believed that this is an expensive approach and he questioned whether all the funds should be managed passively. He asked Ms. Yeomans if more information could be obtained showing how the larger private corporate funds in the Twin Cities are performing. He said the SBI had systematically built its funds to equal the norm and then seems surprised when it does equal the norm.

Mr. Carlson asked that an informal discussion on this topic be included in the agenda for the September 1993 meeting. Mr. Dayton concurred with Mr. Carlson's observation. Mr. Bicker stated that while this discussion would involve a number of issues, he would be more than willing to have that discussion. Mr. Carlson reiterated his request to compare the SBI's program to some of the private sector funds to find out if the SBI's goals are too low or too high. He added that the fund beneficiaries have been getting good returns recently and that he felt that there had been tremendous growth and improvement in the overall fund. He said he was doubtful that the Board would choose to take on a lot of additional risk. Mr. Humphrey stated that the SBI is in the middle of a lot of significant changes right now. He said that he is interested in this review, but he cautioned that since the SBI manages public funds, it has to operate differently than a private fund.

Mr. Dayton moved for a postponement of the Committee's recommendation regarding total fund objectives. Ms. Growe seconded the motion. The motion passed.

Ms. Yeomans reported that the second item discussed by the joint Committee is the Manager Continuation Policy. She stated that the IAC is requesting that the Board postpone taking action on the policy until further evaluation takes place. Mr. Bicker stated that staff will be distributing a memo during the next quarter requesting written comments from Board and IAC members on the policy.

Stock and Bond Manager Committee

Ms. Yeomans stated that after a satisfactory meeting with the new portfolio manager for Fidelity Management Trust, the Committee is recommending that Fidelity be removed from probation status. Mr. Humphrey moved approval of the Committee's recommendation, as stated in the Committee Report. Mr. McGrath seconded the motion. The motion passed.

Ms. Yeomans reported that the Committee had completed the annual review of the external stock and bond manager guidelines. She stated that the Committee is

recommending that the Board adopt the contract guidelines, as outlined in the Committee Report, for the domestic stock and bond managers and the active country/passive stock international managers. She added that the IAC is requesting that the SBI postpone taking action on the guidelines involving the fully active international stock managers until further discussion takes place.

In response to a question from Mr. Carlson, Mr. Bicker confirmed that the guidelines cover eligible markets and Mr. Carlson voiced his concern about the impact of the SBI making moral decisions on its fiduciary responsibility. He said he felt the SBI's country guidelines for international investing were an unacceptable deterrence. Mr. Bicker stated that the eligible market decision was approved at a previous Board meeting and that the current recommendation involves a separate issue of the contract guidelines. Mr. Dayton moved approval of the Committee's recommendation for the domestic stock and bond managers and the active country/passive stock international manager guidelines. Ms. Grove seconded the motion. The motion passed. (Mr. Carlson asked to be recorded as a "no" vote.)

Ms. Yeomans reported that the Committee is recommending that 3 year contracts be renewed for the active stock managers, active and semi-passive bond managers, and the Assigned Risk Plan listed in the Committee Report. She added that the recommendation includes contract renewals for two active stock managers whose performance will continue to be scrutinized, and she reminded members that all the contracts have a 30 day termination clause. Mr. Dayton stated his concern about Forstmann-Leff and Lieber's performance and asked how the SBI is going to proceed with these managers. Ms. Yeomans stated that staff will continue to monitor those managers closely, looking for any catalyst on the horizon that could turn their performance around. She added that the process used will be determined by what is decided on the Manager Continuation Policy. Mr. Dayton stated that he feels signing a 3 year contract renewal will appear to be a vote of confidence to the manager. Mr. Bicker stated that the managers will be made aware of the seriousness of the discussions that took place at the Board and IAC meetings. He added that renewing the contract and having the ability to use the escape clause would be more cost efficient than prematurely terminating a manager. Ms. Grove noted that she had attended the IAC meeting and had heard a suggestion that managers such as Lieber could be put through the interview process again and be compared against other potential managers and she stated she thought that idea had merit. Ms. Yeomans confirmed the discussion and stated that this suggestion was proposed as an element of the SBI's Manager Continuation Policy. Mr. McGrath moved approval of the Committee's recommendation to renew manager contracts, as stated in the Committee Report. Mr. Humphrey seconded the motion. The motion passed. (After the meeting, Mr. Dayton asked to be recorded as a "no" vote.) Mr. Bicker noted that the contract for Ark Asset Management will be allowed to expire due to manager underperformance and that the contract for BEA Associates will be allowed to expire since they will be under a new contract as a bond manager for the SBI.

Ms. Yeomans reviewed the manager allocations to be effective July 1, 1993, as outlined in the Committee Report and Mr. Bicker noted that these allocations had been presented at the March 1993 Board meeting and he asked the Board to reaffirm the allocation levels. Mr. McGrath moved approval of the Committee's allocation recommendation, as stated in the Committee Report. Ms. Growe seconded the motion. The motion passed. (After the meeting, Mr. Dayton asked to be recorded as a "no" vote.)

Ms. Yeomans reported that the list of active international stock manager candidates had been narrowed from approximately 50 firms to 10 finalists. She stated that the Committee is recommending that the Board authorize a Search Committee to interview the 10 firms. In response to questions from Mr. Carlson, Mr. Emkin stated that there are a large number of managers who would be happy to manage the SBI's assets despite the Board's restrictions. In response to a question from Ms. Growe, Mr. Emkin said that in his experience managers have been willing to state in writing that they do not believe restrictions will adversely affect the portfolio. Mr. Dayton requested that the impact of the SBI's investment restrictions on the international portfolio also be discussed at the September 1993 meeting. Mr. Bicker agreed. In response to questions from Mr. McGrath, Mr. Emkin stated that he believes all 10 candidates are excellent managers. Mr. McGrath moved approval of the Committee's recommendation to authorize a search committee, as stated in the Committee Report. Ms. Growe seconded the motion. The motion passed.

Ms. Yeomans reviewed the proposed modifications to the short term investment guidelines to allow a small percentage of the assets to be invested in dollar denominated securities issued by foreign corporations and governments. Mr. McGrath moved approval of the Committee's recommendation, as stated in the Committee Report. Mr. Humphrey seconded the motion. The motion passed.

Alternative Investment Committee

Ms. Yeomans updated Board members on changes in the General Partner of Great Northern Capital Partners, L.P. since the investment had been approved by the Board at the March 1993 meeting. She stated that Mr. Rothmeier and several of his associates had left Investment Advisers, Inc. (IAI) to form a separate legal entity outside of IAI. She stated that the Committee is recommending that the Board proceed with the investment, providing the fund can raise \$100 million. In response to questions from Ms. Growe, Mr. Bicker stated that staff was not required to bring this investment back for reaffirmation by the Board. He noted that Mr. Dayton had previously requested that staff review the situation. He added that establishing a minimum commitment level was not unusual and had been done with the fund raised by Irwin Jacobs. He said that the SBI has not signed an agreement with Great Northern since the fund has not closed yet. He said that the \$100 million minimum was an amendment to the motion passed by the IAC at its meeting the previous day and that the amendment was not reflected in the Committee Report which was prepared before the IAC met. Mr. Dayton stated that he would support the recommendation if the SBI would consider a lower figure. Mr. Bicker and Ms. Yeomans clarified that recommendation means that the SBI would either invest \$0 if Great Northern

fails to raise \$100 million or \$20 million if it raises \$100 million or more. Mr. McGrath moved approval of the Committee's recommendation, as amended by the IAC. Mr. Carlson seconded the motion. The motion passed. (Mr. Humphrey and Mr. Dayton asked to be recorded as voting to "abstain".)

Task Force on Divestment

Mr. Sausen distributed a report from the Task Force (see Attachment A) and said that the Task Force had met and reviewed the existing South Africa resolution. He stated that Namibia, which was previously controlled by South Africa, had achieved independence from South Africa in 1990. He reported that the Task Force is recommending that the SBI adopt the amended and restated resolution which deletes references to Namibia and makes other changes, as outlined in the Task Force Report. Mr. McGrath moved approval of the recommendation, as stated in the Committee Report. Mr. Humphrey seconded the motion. The motion passed. Mr. Humphrey moved approval of the Task Force's recommendation to adopt a resolution to continue the existing Task Force in Divestment. Ms. Grove seconded the motion. The motion passed.

The meeting adjourned at 9:45 A.M.

Respectfully submitted,



Howard J. Bicker
Executive Director

**AMENDED AND RESTATED
RESOLUTION OF THE
MINNESOTA STATE BOARD OF INVESTMENT**

**Regarding South Africa
June 2, 1993**

WHEREAS, the policy of Apartheid as maintained by the present government of the Republic of South Africa is not only morally repugnant to all who believe in the inherent rights of individual freedom and equal treatment under the law and has resulted in the systematic enslavement and subjugation of the non-white majority of South Africa but casts doubt on the safety and stability of investment in companies doing business with, operating in, or making loans to the Republic of South Africa.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. No monies held and invested by the Minnesota State Board of Investment (SBI) in its actively managed stock portfolios shall remain invested in or hereinafter be invested in the stocks of:
 - (a) any foreign or United States company or any subsidiary or affiliate thereof doing business or operating in the Republic of South Africa, or
 - (b) any bank or financial institution which makes loans to the Republic of South Africa or a governmental enterprise thereof, or other loans deemed by the SBI to directly support Apartheid, subject to and in accordance with the provisions hereinafter set forth.
2. Foreign and United States companies, and subsidiaries and affiliates thereof covered by section 1 shall be identified:
 - (a) by reference to the most recent annual report of the American Consulate General of Johannesburg, entitled "American Firms, Subdivisions and Affiliates - South Africa," or
 - (b) through correspondence with the United Nation's Center on Transnational Corporations, or
 - (c) through information available through The Investor Responsibility Research Center, or
 - (d) by other procedures satisfactory to the SBI.

3. Banks or financial institutions covered by Section 1 shall be identified:
 - (a) from the records of the Interfaith Center on Corporate Responsibility and the Investor Responsibility Research Center, or
 - (b) from affidavits of such institutions, or
 - (c) by other procedures satisfactory to the SBI.
4. The divestiture required by section 1 shall be completed not later than June 1, 1993. In the event a manager holds stock now covered by section 1, or which was not covered by section 1 of this resolution at the time of its initial purchase but subsequently is covered by section 1, the managers shall be so notified and shall proceed in accordance with section 6 (c) and (d) in an effort to meet the SBI's goal of divestment of such stock by June 1, 1995, or, if the stock is acquired after June 1, 1993, 2 years after the date the stock became subject to section 1 of this resolution. Notwithstanding anything contained herein to the contrary, if during the process of divestiture, the SBI determines that completion of divestiture not later than June 1, 1993, would be inconsistent with the SBI's fiduciary obligations, then the SBI shall authorize an extension of time within which to complete divestiture. The SBI shall periodically evaluate the situation in the Republic of South Africa and determine whether the divestiture program shall be accelerated, decelerated or otherwise modified, including whether, as a result of lack of improvement in conditions in those countries, or for other reasons, it is necessary to seek complete divestiture of the securities covered by this resolution.
5. During implementation of this resolution, the SBI shall hereafter direct its active stock managers to neither invest funds in the stocks of i) foreign and United States companies and subsidiaries and affiliates thereof of ii) banks or financial institutions both of which are described in sections one, two and three of this resolution nor reinvest funds in the stocks of such entities following the divestment or sale thereof unless:
 - (a) SBI staff or other persons and entities charged with the day-to-day investment of funds entrusted to the SBI conclude that other available investment alternatives are not as sound from a fiduciary point of view, or
 - (b) the SBI concludes that the failure to invest or reinvest in such entities would be inconsistent with the SBI's fiduciary obligations, or
 - (c) the entities meet the standards set forth in section 7 of the resolution.
6. The process of divestiture of and limiting new investments in stocks held in the SBI's actively managed stock portfolios will be conducted consistent with fiscal prudence and so as to minimize financial market disturbance. On June 1, 1993 and monthly thereafter, the SBI shall notify its active stock managers of the implementation of this resolution. The active stock managers shall be directed as follows:

- (a) To discontinue purchases of stock covered by section 1 of this resolution unless failure to so invest would be a breach of the active stock manager's fiduciary duty to the SBI.
 - (b) In the event such manager finds it is necessary to purchase any of the stocks covered by section 1 of this resolution in fulfillment of its fiduciary obligations, the active stock manager must send a letter certifying the reasons for the purchase to the SBI.
 - (c) Active managers are not automatically required to sell any stock held which is covered by section 1 of the resolution solely to achieve divestiture.
 - (d) All decisions to sell stock should be made by the SBI's active stock managers only for economic or financial reasons in the normal course of business.
7. Notwithstanding the foregoing, the SBI may authorize the holding by the SBI's active stock managers of investments covered by this resolution in companies engaging in corporate political, social, and economic activities, in addition to compliance with the Statement of Principals (formerly known as the Sullivan Principals), as amended from time to time, or a similar corporate policy, that are deemed by the SBI to be of substantial assistance to efforts to eliminate Apartheid.

Evidence to the SBI of such corporate political, social and economic activities, which must go beyond workplace reform and include steps taken in substantial opposition to Apartheid, shall include the following:

- (a) actions to persuade the government of the Republic of South Africa to eliminate Apartheid including tangible opposition to the system of pass laws, influx controls and other fundamental building blocks of Apartheid;
- (b) absence of participation and investment in the bantustan/homelands;
- (c) formal recognition of and collective bargaining with black trade unions that are independent of government control;
- (d) providing specific training and upgrading programs at the work-place and increasing the number of non-whites in technical, skilled, professional and management positions, including positions in which non-whites supervise whites;
- (e) payment of a reasonable, livable wage to all employees;
- (f) substantial expenditures to raise the level of education and skills of the non-white majority population, including the provision of schooling for workers and children in the community;

- (g) substantial expenditures to provide decent, affordable, permanent housing units to workers and their families on a non-discriminatory basis; and
- (h) substantial expenditures to provide health and medical services to workers and their families on a non-discriminatory basis.

To be substantial, a company's expenditures should represent a proportion of profit after taxes or of revenue that is among the highest proportions spent by all United States companies in South Africa and that is significantly more than the proportion spent by the company in other countries.

8. In furtherance of the principles set forth in the resolution the SBI shall, pursuant to procedure set forth in this resolution, seek out and persuade other shareholders to act in a concerted manner to change corporate political, social and economic activities in the Republic of South Africa. The SBI, in conjunction with its staff, shall act in these and other ways to persuade corporations to continually improve their corporate political, social and economic activities in the Republic of South Africa consistent with the resolution; and from the date of this resolution, vote the shares held "For" all management or stockholder proposals consistent with this section
9. During implementation of this amended and re-stated resolution, the SBI may direct its staff to write to the companies and institutions identified in sections 2 and 3 to inform them of the adoption of this resolution and its provisions, to give them notice of the actions they should take in order to avoid divestiture, and to provide them an opportunity to describe any actions they may be taking to work for peaceful fundamental change in the Republic of South Africa.
10. The SBI shall seek appropriate financial and legal advice concerning the divestiture program set forth for consideration in this resolution.
11. To advise and assist in implementation of this resolution, the SBI hereby authorizes the formation of an Advisory Task Force on Divestment composed of a representative selected by each member of the SBI and at least one representative from the Minnesota corporate community, one representative from a Minnesota public employee labor group and one representative from a public employee retirement group
12. To assist in implementation of this resolution, the SBI authorizes its Executive Director to obtain professional or technical services from the Interfaith Center on Corporate Responsibility, the Investor Responsibility Research Center or other available resources.

13. This resolution shall take effect immediately.

Amended and Restated this 2nd day of June, 1993.

Joan A. Lowe
Secretary of State

**RESOLUTION OF THE
MINNESOTA STATE BOARD OF INVESTMENT**

**Continuing the Task Force on Divestment
June 2, 1993**

WHEREAS, the Minnesota State Board of Investment ("MSBI") has previously authorized the formation of an Advisory Task Force on Divestment; and


WHEREAS, pursuant to Minn. Stat. Sec. 15.059, subd. 6, advisory task forces expire two years after the first members are appointed and the appointing authority is permitted to create another task force to continue the work of a task force which has expired; and

WHEREAS, the MSBI desires to continue the work of the Advisory Task Force on Divestment.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The MSBI hereby authorizes the formation and continuation of the Task Force on Divestment composed of a representative selected by each member of the MSBI and at least one representative from the Minnesota corporate community (currently P. Jay Kiedrowski, Executive Vice President, Norwest Bank), one representative from a Minnesota public employee labor group (currently Bernard L. Brommer, President, Minnesota AFL-CIO) and one representative from a public employee retirement group (currently Gary Austin, Executive Director, Teachers Retirement Association).
2. The task force is charged with monitoring implementation of the resolution of the MSBI on South Africa, as amended and restated, and to advise the MSBI of its recommended response to any change in the status of apartheid policies of the Republic of South Africa.
3. This resolution shall take affect immediately.

Dated this 2nd day of June, 1993.


Secretary of State

**AGENDA
INVESTMENT ADVISORY COUNCIL
MEETING**

**Wednesday, September 15, 1993
2:00 P.M. - SBI Conference Room
Room 105, MEA Building - Saint Paul**

TAB

- 1. Approval of Minutes of June 1, 1993**
- 2. Report from the Executive Director (H. Bicker)**
 - A. Quarterly Investment Review (April 1-June 30, 1993) **A**
 - B. Portfolio Statistics (June 30, 1993) **B**
 - C. Administrative Report **C**
 1. Budget Report
 2. Travel Report
- 3. Report from the Master Custodian Review Committee (P. Sausen) **D****
- 4. Report from the International Manager Search Committee (P. Sausen) **E****
- 5. Status Report on the Executive Director's FY93 Performance Evaluation (P. Sausen)**
- 6. Reports from the Investment Advisory Council**
 - A. Asset Allocation and Stock and Bond Manager Committees-Joint Report **F****
 1. Review of Constraints on Fund Performance
 2. Review of Manager Continuation Policy
 - B. Asset Allocation Committee (J. Bohan) **G****
 1. Update on Post Fund Asset Allocation Transition
 2. Recommendation on Total Fund Objectives
 - C. Stock and Bond Manager Committee (D. Bergstrom) **H****
 1. Update on Manager Allocations for July 1, 1993
 2. Review of Manager Performance
 3. Recommendation to Terminate Contract with Lieber & Co.
 4. Recommendation to Renew Contract with State Street Global Advisors
 5. Recommendation to Authorize Global Bond Investments
 - D. Alternative Investment Committee **I****
 1. Results of Annual Review Sessions
 2. Status of First Reserve
 3. Recommendation to Approve Commitment to a Venture Capital Manager (Blackstone)
 4. Recommendation to Approve Committee to a Real Estate Manager (Zell/Merrill Lynch)
- 7. Report from the Task Force on Divestment (P. Sausen) **J****

STATE BOARD OF INVESTMENT

Minutes Investment Advisory Council Meeting June 1, 1993

The Investment Advisory Council met on Wednesday, June 1, 1993 at 2:00 P.M. in the State State Board of Investment (SBI) Conference Room, 55 Sherburne Avenue, St. Paul, Minnesota.

MEMBERS PRESENT: Gary Austin; David Bergstrom; John Bohan; Jim Eckmann; Ken Gudorf; Laurie Hacking; David Jeffery; Keith Johnson; Peter Kiedrowski; Han Chin Liu; Malcolm McDonald; Gary Norstrom; Michael Troutman; Deborah Veverka and Jan Yeomans.

MEMBERS ABSENT: John Gunyou and Barbara Schnoor.

SBI STAFF: Howard Bicker; Beth Lehman; Jim Heidelberg; Deborah Griebenow; Charlene Olson; Linda Nadeau.

OTHERS ATTENDING: Allan Emkin, Pension Consulting Alliance; Tom Richards, Richards & Tierney; Ann Posey, Richards & Tierney; Secretary of State Joan Anderson Growe; Judy Hunt, Public Employees Retirement Association; O.M. (Mike) Ousdigian; Robert Whitaker; John Manahan; Christie Eller; Lisa Rotenberg; Peter Sausen; and Elaine Voss.

Ms. Yeomans called the meeting to order and the minutes of the March 10, 1993 meeting were approved.

Executive Director's Report

Mr. Bicker, Executive Director, referred Board members to Tab A of the meeting materials. He stated that the Basic Funds had exceeded the inflation rate over the last ten years (Basics Total Fund 12.4% vs. Inflation 3.9%), outperformed the composite index over the five year period (Basics Total Fund 12.8% vs. Composite 12.2%), and outperformed the median fund over the five year period (Basics-Excluding Alternative Assets 13.6% vs. Median Fund 12.2%). Mr. Bicker stated that the Basic Funds' market value increased by 6.4% for the quarter ending March 31, 1993 due to strong stock and bond performance and a large contribution. He noted that at the end of the quarter 6.8% of the Basic Funds were invested in international stocks and that as of June 1, 1993 the Basic Funds had reached the 10% international target. He reported that the Basic Funds had outperformed the composite index for the quarter (Basic Total Fund 4.5% vs. Composite 4.2%) and median fund for the quarter (Basics-Excluding Alternative Assets 5.0% vs. Median 4.2%). He stated that the domestic stock segment outperformed its

target for the quarter (Basic domestic stocks 4.4% vs. Wilshire 5000 Adjusted 4.3%) and that the domestic bond segment outperformed its target for the quarter (Basic domestic bonds 4.6% vs. Salomon BIG Index 4.2%). He stated that the international stock segment had slightly underperformed for the quarter (Basic int'l. stocks 11.9% vs. EAFE 12.0%) and since inception (Basic int'l stocks 7.6% vs. EAFE 7.7%). He added that he feels these returns are good considering the costs that are related to entering the international markets.

Mr. Bicker directed members to the Post Retirement Fund summary and reported that the Fund had increased in value by 4.1%. He stated that as of March 31, 1993 the fund was over 40% invested in stocks and that the fund was at the 50% allocation target as of June 1, 1993. He reported that the total fund had underperformed its composite index for the quarter (Post Total Fund 4.4% vs. Composite 4.7%). Mr. Bicker stated that the stock segment is still in a transition phase and had underperformed for the quarter (Post stocks 4.0% vs. S&P 500 4.3%). He added that the bond segment had matched its benchmark for the latest quarter (Post bonds 4.7% vs. Shearson Index 4.7%)

Mr. Bicker reported that the Assigned Risk Plan has grown to a market value of \$400 million and had outperformed its composite index for the quarter (Total Fund 3.1% vs. Composite 2.6%) He noted that both the stock and bond segments had outperformed for the quarter (Equity segment -0.5% vs. Benchmark -0.6%) and (Bond segment 3.8% vs. Benchmark 3.2%). Mr. Bicker stated that as of March 31, 1993 the SBI was responsible for over \$21 billion in assets.

Executive Director's Administrative Report

Mr. Bicker referred members to Tab C of the meeting materials for updates on the budget, travel and the 1993 Legislative Session. He reported that the SBI's administrative bill was passed, and that the IAC is now a permanent advisory board. He stated that the SBI's administrative budget was increased by \$100,000.00 over the biennium to retain consultants the deferred compensation review. He also noted a new disclosure requirement that was passed during the legislative session. Mr. Bicker stated that the September IAC meeting has been changed to September 15, 1993, with the Board meeting on September 16, 1993. He added that the December meeting date is problematic and that staff will notify members when a meeting date is confirmed. He concluded his report by stating that staff is recommending to the Board that the SBI authorize a Deferred Compensation Review Committee. In response to a question from Ms. Veverka, Mr. Bicker stated that the large negative cash flow in the Supplemental Fund was due to a police and fire fund consolidation in the Public Employees Police and Fire Fund.

Stock and Bond Manager Committee

Ms. Yeomans noted that the order of the agenda would be changed to accommodate a scheduling conflict, and that the Stock and Bond Manager Committee Report would be presented first

Mr. Eckmann referred members to Tab G of the meeting materials and reviewed the information items in the report. He reported that an in-depth review of Forstmann Leff had taken place during the quarter and he summarized the qualitative and quantitative strengths and weaknesses of the firm. He stated that staff and the Committee are recommending that Forstmann continue to be retained as an equity manager.

Mr. Eckmann reported that an annual review of BEA Associates has also been completed during the quarter and that BEA has performed well since being retained as a cash enhancement manager for the Post Fund in 1987. He explained that due to the new asset allocation and management structure strategy adopted for the Post Fund, staff and the committee are recommending that BEA's current contract be allowed to expire and that they be allowed to use the same enhancement strategies in the bond portfolio they have been hired to manage starting July 1, 1993.

Mr. Eckmann stated that an annual review was also completed of Voyager Asset Management, the manager for the Assigned Risk Plan. He reported that their performance has been good and he stated that staff and the Committee are recommending that Voyager continue to manage the Assigned Risk Plan.

Mr. Eckmann stated that the first action item involves Fidelity Management Trust, a manager who was placed on probation in March 1993 due to the departure of a key member of their investment staff. He said that staff and the Committee had met with the several members of the portfolio management team and the new head of the fixed income group. He reported that based on this meeting, the Committee is recommending that the SBI remove Fidelity Management Trust from probation status.

Ms. Yeomans suggested that members discuss the four managers Mr. Eckmann had reported on prior to voting on the recommendation regarding Fidelity Management Trust. She referred members to the data on Forstmann Leff and stated that she wondered if the manager was experiencing a deteriorating trend in performance. Ms. Veverka stated that she is familiar with Forstmann as a manager and that it is typical for their returns to be volatile due to their style of management. Mr. McDonald, Ms. Yeomans and Mr. Bohan expressed their concern about the manager's performance and discussed what it would take for the manager to get back to meeting the Board's performance objectives. Ms. Veverka stated that Forstmann is not the same type of manager as Alliance, for example, and that she felt it is important for members to accept that fact. She stated that Forstmann employs a sector rotation style of management and market timing and has had a good record with stock selection. She added that she does not feel now is a good time to terminate them unless the SBI decides it cannot accept the manager's more erratic returns. Mr. Bicker stated that staff has just recently mandated that Forstmann reduce its benchmark cash level, to encourage the firm to focus on stock selection, which staff agrees is the firm's strength. Mr. Bergstrom stated he would like to see an evaluation process that could be implemented sooner for firms who have deteriorating performance trends. Ms. Veverka stated that in her opinion, Forstmann should be evaluated again in a year to see if there is any improvement in their stock selection strategy. Ms. Yeomans

said she appreciated Ms. Veverka's comment because Ms. Veverka had personal knowledge of the firm. Ms. Yeomans stated that while staff does a thorough job on in-depth manager reviews, she feels its not the same as being able to personally direct questions to a manager. She suggested that managers with poor performance could be re-evaluated using the same criteria used in manager searches and she noted that this process had been used previously with one or two of the SBI's equity managers

In response to a question from Ms. Hacking, Ms. Yeomans noted that when the firms would be evaluated again would depend on what is decided regarding the Manager Continuation Policy. In response to a question from Mr. Bergstrom, Ms. Lehman stated that all contracts have a 30 day escape clause and that all the managers are quite aware how quickly their contracts can be terminated. Mr. Troutman stated that he is a member of the Stock and Bond Committee and that he supports the recommendation to continue the contract with Forstmann Leff. He added that he is satisfied with the review done to date on the firm. Mr. McDonald requested that the minutes reflect the IAC's concern and that the Committee update the IAC on the underperforming managers at the next meeting. Mr. Richards stated that other clients of Richards & Tierney using Forstmann as a manager would agree with the comments Ms. Veverka made regarding the firm. In response to a question form Mr. Bohan, Ms. Lehman stated that the higher staff turnover at Forstmann has been primarily in the entry level analyst area and she stressed that strong leadership remains in place at the top management level of the firm

Ms. Yeomans requested discussion regarding BEA Associates, Voyager Asset Management and Fidelity Management Trust. In response to questions from Ms. Veverka, Mr. Bicker stated that BEA will include a futures strategy for the new fixed income portfolio they will manage and that the 3-7 year duration band is consistent for all the active bond managers. Mr. McDonald moved approval of the Committee's recommendation to remove Fidelity Asset Management from probation status. Mr. Johnson seconded the motion. The motion passed.

Mr. Eckmann reported that the Committee had completed an annual review of the manager contract guidelines. He stated that several technical changes are being recommended for the domestic active stock and bond managers and that new contract guidelines were being recommended for the active/passive and fully active international stock managers. He referred members to specific pages of the meeting materials for more detailed information. He stated that the Committee is recommending approval of all the contract guidelines included in the meeting materials.

Mr. Bohan stated that he has a problem with the performance benchmark being recommended for the active international managers and he added that he would like to present a proposal to change it. Mr. Bicker suggested that it might be more appropriate to discuss this topic at the next IAC meeting, after the Task Force on Divestment has addressed the restrictions issue. Ms. Yeomans stated that she felt it is important to at least raise the issue now and to have the discussion reflected in the minutes. Mr. Bohan referred members to p. 63 of Tab G and stated that his proposed change to the benchmark

is to delete the last sentence pertaining to securities affected by the SBI's policy on South Africa. In response to a question from Ms. Veverka, Mr. Bicker stated that the South Africa restrictions do not apply to the passively managed portfolios and therefore do not affect active country/passive stock managers. Mr. Bicker stated that Mr. Bohan's proposal would require Board approval since the proposed guidelines effect the position paper on international investing which has already been adopted by the Board.

Mr. Bohan stated that he believes this issue should be resolved before interviewing active manager candidates during the summer. Ms. Lehman stated that the issue of investment restrictions was addressed in the position paper on international investing. She noted that a study cited in the position paper showed that the diversification benefits of international investing were not significantly impaired by the introduction of the South Africa restrictions but that restrictions caused returns to be somewhat more volatile over the near term. In response to questions from Ms. Veverka, Ms. Lehman stated that this issue will be addressed with firms during the manager search process. Ms. Veverka noted that she feels the restrictions should be lifted, however, she believes that if they are going to remain in place, the managers should be given a benchmark that is the most representative of the manager's investable universe. Mr. Emkin stated that many public funds have similar constraints and that they have not experienced significant problems. He said that Germany and Switzerland are the two countries that are affected most by the restrictions, but that cumulatively they represent a relatively small percent of the EAFE Index.

Ms. Yeomans summarized what she believes are the three alternative actions the IAC can take: 1) to consider the recommendation as written, 2) to consider substituting an EAFE investable index as the benchmark, or 3) to postpone approving the guidelines until after the Task Force on Divestment has considered the restriction issue. Mr. Eckmann moved that the contract guidelines for the domestic active stock and bond managers and the active country/passive stock international stock managers be approved as outlined in the Committee Report. He added that any action on the guidelines for the active international stock managers should come after the Task Force on Divestment has provided the IAC with additional information. Mr. McDonald seconded the motion. The motion, as stated above, passed.

Mr. Eckmann stated that the Committee is recommending that the SBI renew manager contracts for all the managers listed in the Committee Report. He noted that the recommendation is for 3 year contract extensions with the standard 30 day termination clause in order to ease the administrative burden of annual contract renewals. Mr. Norstrom moved approval of the Committee's recommendation, as stated in the Committee Report. Mr. Troutman seconded the motion. Mr. Bergstrom stated his concern with Lieber's performance, noting that it is more of a constant downward trend than Forstmann's performance. Mr. Bicker noted that Lieber had outperformed during the last quarter. Mr. Bergstrom offered an amendment which would approve all contracts listed, excluding Lieber & Co. Mr. Norstrom accepted Mr. Bergstrom's amendment. The motion, as amended passed. Mr. Norstrom then moved approval of Lieber's contract, with Mr. Troutman seconding the motion. Mr. Bergstrom made a motion to extend Lieber's

contract for one year and to have the manager make a formal presentation to explain their performance. Mr. McDonald seconded the motion. It was noted that a motion was already on the floor prior to Mr. Bergstrom's motion. Mr. Norstrom stated that he would prefer to keep all the managers on a 3 year contract for consistency purposes. He noted that the SBI could still request that Lieber make a presentation and that staff could still complete an in-depth review and he asked for support of his original motion. The motion passed.

Mr. Bergstrom made a motion that staff complete an in-depth review of Lieber during the next quarter and that Lieber be called in to make a presentation to the Committee. Mr. McDonald seconded the motion. Mr. Troutman stated that he is not opposed to reviewing Lieber, however he noted that there will likely always be a small group of managers who are underperforming due to their varying management styles and he cautioned against allocating too much of staff and the IAC's time to this type of analysis rather than concentrating on other important policy issues. The motion passed.

Mr. Eckmann reviewed the manager allocation ranges for July 1, 1993 and stated that the Committee approves of the ranges outlined in the Committee Report. Mr. Troutman moved approval of the Committee's recommendation, as stated in the Committee Report. Mr. Eckmann seconded the motion. The motion passed.

Mr. Eckmann then left the meeting and Mr. Troutman gave the remaining portion of the committee report. Mr. Troutman reported that approximately 50 candidates had been considered for the international active manager search that 10 firms that were being recommended for interviews. He noted that staff and the Committee both feel that it is critical to examine the mix of management styles in this manager search. Mr. McDonald moved approval of the Committee recommendation to proceed with the search as stated in the Committee Report. Mr. Johnson seconded the motion. Ms. Veverka stated that she was concerned about how much of a candidate's performance could be impacted by a firm's exposure in Japan. She said she hoped the search committee would look at returns ex-Japan so that the SBI would not hire someone whose only decision was to get the Japan call right. She pointed out that the issue may be completely irrelevant going forward. Mr. Emkin stated that several factors were analyzed such as the amount of value added for each firm from stock selection.

A discussion followed regarding the screening criterion that focused on managers that had produced at least 6% annualized over EAFE for the last five years. Ms. Lehman noted that the screen was used because the IAC had previously expressed a desire to focus on managers showing higher returns. Mr. Troutman noted that he feels it is more important to focus on whether a manager has the ability to identify value going forward than it is to analyze past performance. Mr. Bicker stated that if the SBI can't tolerate small amounts of underperformance over certain periods of time, it may not be appropriate to continue with interviewing the international managers since international investing typically experiences greater volatility in returns than domestic investing. In response to questions from Mr. McDonald, Ms. Lehman and Mr. Emkin both stated that they felt comfortable

with the list of managers being recommended. Mr. Emkin noted that there were two managers on the list that he had been unfamiliar with, so he met with both firms and was now comfortable recommending them also. Mr. Bicker stated that some firms that had been recommended by members of the IAC were excellent firms, however several of them were not taking on additional funds at this time. The motion made earlier by Mr. McDonald passed.

Mr. Troutman discussed the proposed modifications to the short-term investment guidelines and moved approval of the committee's recommendation, as stated in the Committee Report. Mr. Norstrom seconded the motion. In response to a question from Ms. Veverka, Mr. Bicker stated that these modifications would probably result in increased quality and reduce volatility in the short-term portfolio. The motion passed.

In response to a question from Ms. Yeomans, Mr. Bicker confirmed that Tab D did not require any IAC action so Ms. Yeomans referred members to Tab E.

Manager Search Committee

Mr. Sausen reported that the Manager Search Committee had conducted a semi-passive bond manager search and that three firms had been interviewed: Lincoln Capital, Goldman Sachs and T. Rowe Price. He moved approval of the Committee's recommendation to retain Lincoln and Goldman Sachs, as stated in the Committee Report. Mr. McDonald seconded the motion. In response to a question from Ms. Yeomans, Mr. Sausen and Mr. Bicker explained that Lincoln's prior underperformance was due to their management style, which did not include investing in lower grade (BBB) corporate bonds and because of bond pricing differences. Mr. Bicker stated that both issues had been resolved to staff and the Committee's satisfaction. The motion passed.

Asset Allocation Committee and Stock and Bond Manager Committee

Mr. Bohan summarized the total fund objectives for the Basic, Post and Combined Funds and the proposed report format, as outlined in the Committee Report. He moved that the Committee's recommendation be approved and Mr. Kiedrowski seconded the motion. Ms. Veverka stated that she opposed the motion because she does not believe the median fund is a relevant benchmark to use for performance comparisons. She stated that if the median fund reference could not be deleted entirely, she could support the motion if the footnote was included that describes how the median fund differs from the Combined Funds. Mr. Troutman voiced support of Ms. Veverka's suggestion. Ms. Veverka restated her suggestion as a motion which was seconded by Mr. McDonald. Mr. Bohan stated that he feels its important to become more familiar with the new reporting format before making any further changes that could complicate understanding the report. Mr. Troutman restated his support for the motion to footnote the median fund and he suggested that Richards & Tierney could assist in performance attribution to help determine the impact the managers are having on the fund. The Veverka motion passed.

Mr. Bohan described the proposed revisions to the Manager Continuation Policy, as outlined in the Committee Report and stated that the Stock and Bond Manager Committee

and the Asset Allocation Committee had jointly approved the proposed changes and are making a joint recommendation for their adoption. Mr. Bergstrom stated that he believes that the rolling five year confidence interval is an improvement over the current cumulative VAM. However, he stated that he is concerned that the in-depth review process should be started sooner than when a manager's performance drops below the warning level and that the SBI should be more aggressive in its actions with such a company. Mr. Richards cautioned that while it might be appropriate to analyze returns over shorter time frames, the lower band of the confidence interval should be viewed as a warning line for a review or rehiring decision and not a termination line. He added that in contrast to other clients Richards & Tierney works with, the SBI has less tolerance with respect to manager returns and that he feels it would be a disservice to the fund to end up with an accelerated hiring and firing process. Ms. Veverka suggested that the Committee could become more proactive in choosing which firms should be reviewed and in what order. She said she believed this type of review was better done by the Committee than the full IAC. Mr. Richards urged that past performance be considered a very small component in predicting what is going to happen in the future. He said he felt it was important to maintain continual monitoring of qualitative factors and cautioned against focusing exclusively on returns. Mr. Bergstrom acknowledged that he is not an investment professional but he feels that a review should be triggered earlier and that the policy should be changed

Mr. Troutman spoke in favor of the guidelines but noted that he is nervous about the stated confidence interval levels as it pertains to the international managers. Mr. Emkin cautioned that as Mr. Bicker had stated earlier, if the SBI tightens up the return requirements, it could result in changing the way firms manage the funds.

Ms. Hacking stated that she would also prefer to see the policy address a quicker review of performance that falls below the benchmark. She said there ought to be opportunities to bring a manager in and more aggressively question them as to the justification for their underperformance. Ms. Veverka commented that other things should trigger a review and said she feels the SBI's concentrates too much on performance numbers. Mr. Bohan said he did not believe the IAC could find a mechanical way to make judgmental decisions. Mr. Bohan referred to the VAM reports and the attribution summary in the investment commentaries. He said that he feels there is quite a bit of detailed information already included in the meeting materials that is not being used by the IAC. He encouraged members to support the proposed policy recommendation. Mr. Bergstrom asked if action should be postponed on the policy changes. Mr. Troutman said he would urge action now since two Committees have looked at the policy and it incorporates some positive changes. He said he expected further improvements over time. Ms. Hacking said she would vote against adoption now because she felt the policy needs more work.

Mr. Bicker stated that this was an important issue and that he would prefer not to make a decision now since there are such divided opinions. He suggested that the issue be laid over for further review. Mr. McDonald made a motion to that effect which was seconded by Ms. Veverka. The motion passed.

Alternative Investment Committee

Ms. Veverka reported that annual reviews had been completed on First Century, a private equity manager and TCW, a real estate manager. She added that there were no major issues or surprises involving these two managers.

Ms. Veverka stated that the SBI had received an update on the status of the lawsuit against First Reserve. She said that the judge had issued a preliminary letter to First Reserve reducing the jury's award from \$63 million to less than \$10 million. She stated that this preliminary letter is non-binding, with its purpose being to facilitate settlement discussions.

Ms. Veverka stated that the Committee is recommending that the investment in Great Northern Capital Partners be reaffirmed due to the disassociation of the group from Investment Advisers Inc. She reported that the Committee felt that this change wouldn't significantly impact the firm's ability to put together deals. Ms. Yeomans stated that she would accept Ms. Veverka's request for reaffirmation as a motion and the motion was seconded by Mr. McDonald. Mr. Bohan stated that he has some concerns regarding the investment and that he intended to vote against the motion. In response to a question from Mr. Troutman, Ms. Veverka said she will abstain from voting since Mr. Rothmeier sits on Honeywell's Board, but she added that other members of the Committee and staff all support the recommendation. Mr. Bicker noted that staff had previously recommended to the Committee that the SBI's commitment be dependent on the fund raising a minimum of \$100 million, but that the Committee had not supported that recommendation. Mr. Norstrom stated that he approves of the \$100 million requirement and Ms. Veverka stated that she would accept the minimum requirement as a friendly amendment to the Committee report. The motion, as amended, passed. (Ms. Veverka was noted as an abstention.)

In response to a question from Mr. Troutman, Ms. Vevkera stated that staff is examining ways to capitalize on the turmoil in the real estate market.

Ms. Yeomans introduced Ann Posey, a new member of Richards & Tierney's consulting firm, who will be working with the SBI.

The meeting adjourned at 4:35 P.M.

Respectfully submitted,



Howard J. Bicker
Executive Director

Tab A

ACTUARIAL VALUATIONS

MSRS, TRA, PERA General Plans
June 30, 1992

	Active (Basics)	Retired (Post)	Total (Basics & Post)
Liability Measures			
1. Current and Future Benefit Obligation	\$14.7 billion	\$5.7 billion	\$20.4 billion
2. Accrued Liabilities	10.5	5.7	16.2
Asset Measures			
3. Current and Future Actuarial Value	\$14.0 billion	\$5.7 billion	\$19.7 billion
4. Current Actuarial Value	7.2	5.7	12.9
Funding Ratios			
Future Obligations vs. Future Assets (3 ÷ 1)	95%	100%	97%
Accrued Liabilities vs. Current Actuarial Value (4 ÷ 2)	69%	100%	80%*

* Ratio most frequently used by the Legislature and Retirement Systems.

The funding ratio required by Governmental Standard Accounting Board Statement No. 5 compares Cost Value of assets to the Current Benefit Obligation. This calculation provides funded ratios of 79% for the Basics, 100% for the Post and 87% for the Total, respectively.

Notes:

1. Present value of projected benefits that will be due to all current participants.
2. Liabilities attributed to past service calculated using entry age normal cost method.
3. Present value of future statutory contributions plus current actuarial value.
4. Same as required reserves for Post. Cost plus one-third of the difference between cost and market value for Basics.

Actuarial Assumptions:

Salary Growth: 6.5%

Interest//Discount Rate: 8.5% Basics, 5.0% Post

Full Funding Target Date: 2020

RETURN OBJECTIVES
Basic Retirement Funds**\$9.7 Billion Market Value**

	Period Ending 6/30/93 Actual	Compared to Objectives
Total Return		
Total Fund over 10 years Exceed inflation by 3-5 percentage points	11.9%	8.1 percentage points above
Total Fund over 5 years Exceed composite market Index	12.3%	0.6 percentage points above
Stocks, Bonds, Cash over 5 years Exceed median fund	13.0%	1.1 percentage points above

Post Retirement Fund**\$8.3 Billion Market Value**

Realized Earnings	Actual	Benefit Increase Provided
Earnings over 1 year (Fiscal Year 1992)	9.6%	4.6% effective Jan. 1, 1993
Earnings over 5 years (Fiscal Years 1988-1992)	10.0%	5.0% annualized

The executive summary highlights the asset mix, performance standards and investment results for the Basic Retirement Funds, the Post Retirement Fund and the Assigned Risk Plan.

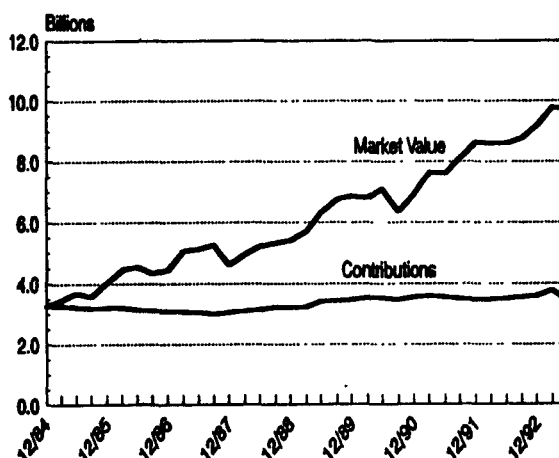
Additional detail on these funds as well as information on other funds managed by the Board can be found in the body of the Quarterly Investment Report.

EXECUTIVE SUMMARY Basic Retirement Funds

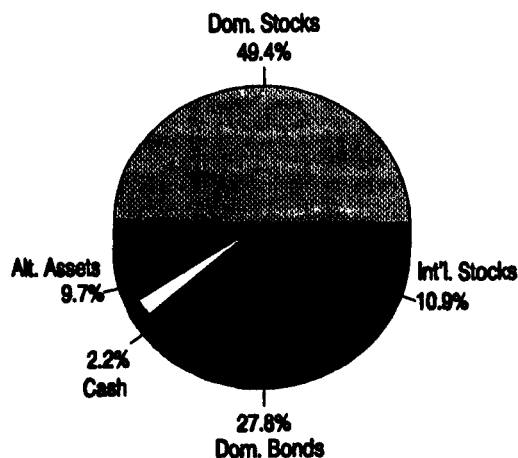
Asset Growth

The market value of the Basic Funds decreased 0.6% during the second quarter of 1993. The decrease resulted from negative net contributions.

Asset Growth During Second Quarter 1993 (Millions)	
Beginning Value	\$9,780
Net Contributions	-295
Investment Return	238
Ending Value	\$9,723



Asset Mix



Actual Asset Mix
6/30/93

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.

The actual asset mix changed from the prior quarter, resulting from the reallocation from domestic stocks to international stocks and positive returns from stocks and bonds.

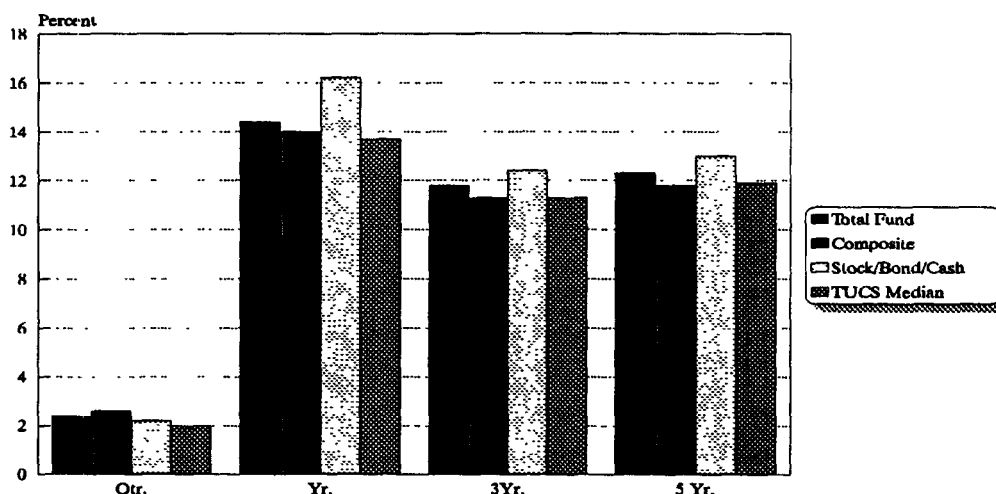
	Policy Asset Mix	Actual Mix 6/30/93	Actual Market Value (Millions)
Domestic Stocks	50.0%	49.4%	\$4,804
Int'l. Stocks	10.0	10.9	1,060
Domestic Bonds	24.0	27.8	2,706
Alternative Assets	15.0	9.7	943
Unallocated Cash	1.0	2.2	210
	100.0%	100.0%	\$9,723

Basic Funds (Con't.)

Total Fund Performance

The total fund including alternative assets trailed the market composite for the quarter but exceeded it for the latest year. The total fund excluding alternative assets exceeded the median fund for the quarter and year.

Given its large commitment to common stocks, the Basic Funds can be expected to outperform other balanced pension portfolios during periods when stocks perform better than other asset classes and underperform when returns are lower than other asset classes.



Period Ending 6/30/93

	Qtr.	Yr.	Annualized	
			3 Yr.	5 Yr.
Total Fund	2.4%	14.4%	11.8%	12.3%
Composite Index*	2.6	14.0	11.3	11.8
Stocks, Bonds and Cash Only	2.2	16.2	12.4	13.0
TUCS Median Fund**	2.0	13.7	11.3	11.9

* Composite Index is weighted in a manner that reflects the policy asset mix of the Basic Funds. The index has been adjusted to reflect the liquor and tobacco restrictions on stocks through 3/31/93.

** Median Master Trust from the Trust Universe Comparison Service (TUCS).

Domestic Stocks

	Qtr.	Yr.	(Annualized)	
			3 Yr.	5 Yr.
Stock Segment	0.6%	16.2%	11.6%	13.1%
Wilshire 5000*	0.7	16.0	12.0	13.4

Domestic Bonds

	Qtr.	Yr.	(Annualized)	
			3 Yr.	5 Yr.
Bond Segment	3.3%	13.3%	13.0%	11.7%
Salomon Broad Index	2.8	12.0	12.3	11.4

International Stocks

	Qtr.	Since
		10/1/92
Int'l. Stocks	8.4%	16.7%
EAFE	10.1	18.5

*Adjusted for liquor and tobacco restrictions through 3/31/93

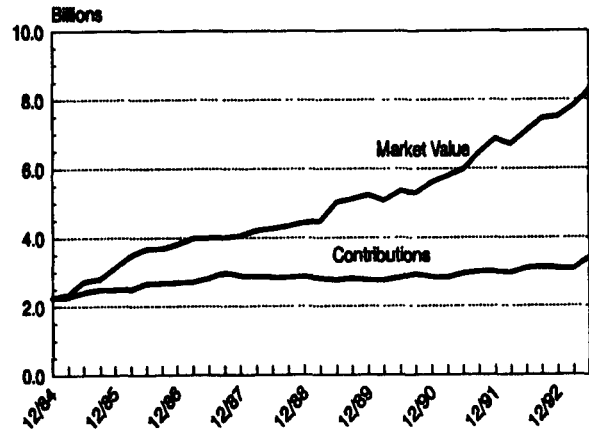
EXECUTIVE SUMMARY
Post Retirement Fund

Asset Growth

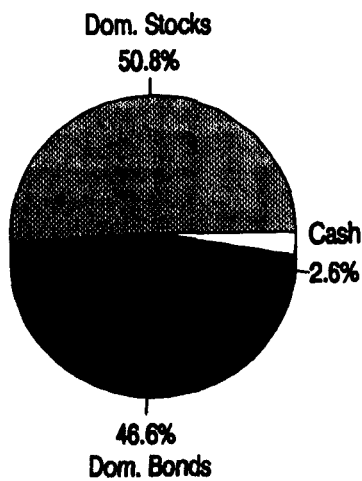
The market value of the Post Fund increased by 5.7% during the second quarter of 1993. Assets increased due to positive stock and bond returns and a large contribution.

Asset Growth
During Second Quarter 1993
(Millions)

Beginning Value	\$7,804
Net Contributions	314
Investment Return	133
Ending Value	8,251



Asset Mix



Actual Asset Mix
6/30/93

The SBI has adopted a new long-term asset allocation strategy for the Post Fund effective beginning in fiscal year 1993. The new policy reflects the new post retirement benefit increase formula recently enacted by the Legislature. Throughout fiscal year 1993, the actual asset mix of the Post Fund moved toward the policy targets shown below.

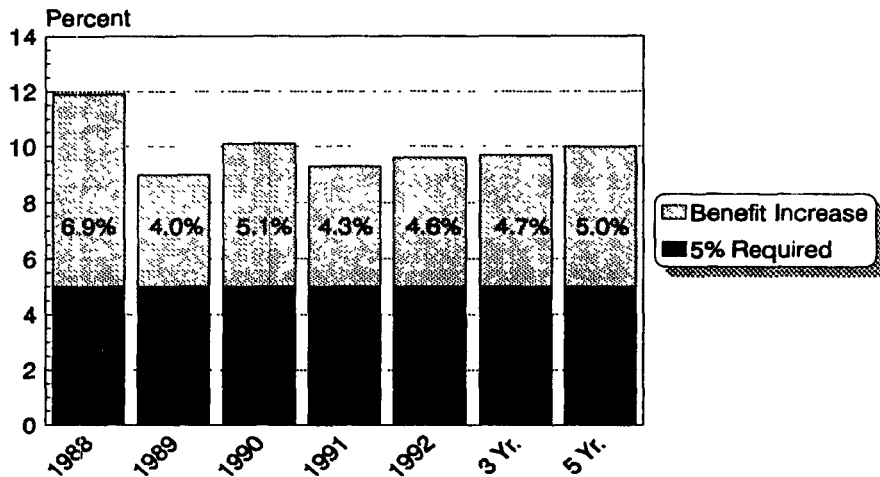
	Policy Asset Mix	Actual Mix 6/30/93	Actual Market Value (Millions)
Domestic Stocks	50.0%	50.8%	\$4,191
Domestic Bonds	47.0	46.6	3,843
Unallocated Cash	3.0	2.6	217
	100.0%	100.0%	\$8,251

Post Fund (Con't.)

Total Fund Performance for Fiscal Years 1988 - 1992

Through fiscal year 1992 benefit increases were based upon realized earnings during a fiscal year and were effective at the start of the following calendar year.

(Starting in fiscal year 1993 benefit increases will be based on total return.) Benefit increases generated for the last five years are shown below.



	1988	1989	1990	1991	1992	(Annualized)	
						3 Yrs.	5 Yrs.
Realized Earnings*	11.9%	9.0%	10.1%	9.3%	9.6%	9.7%	10.0%
Benefit Increase**	6.9	4.0	5.1	4.3	4.6	4.7	5.0
Inflation	3.9	5.2	4.7	4.7	3.1	4.2	4.3

* Interest, dividends and net realized capital gains.

** Payable starting January 1, of the following calendar year.

Total Fund Performance Beginning Fiscal Year 1993

The total fund trailed its composite index for the latest quarter and year.

	Qtr.	Since 7/1/92
Total Fund	1.7%	12.4%
Composite Index	1.9	13.1

Stock Segment Performance

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

	Qtr.	Since 7/1/92
Stock Segment	0.5%	10.5%
S&P 500	0.5	13.6

Bond Segment Performance

The bond segment of the Post Fund trailed its target for the latest quarter and exceeded the target for the year.

	Qtr.	Since 7/1/92
Bond Segment	2.9%	13.6%
Shearson Index	3.0	13.2

Assigned Risk Plan

Investment Objective

The Assigned Risk Plan has two investment objectives: to minimize the mismatch between assets and liabilities and to provide sufficient liquidity for the payment of on-going claims and operating expenses.

Asset Mix

The Assigned Risk Plan is invested in a balanced portfolio of common stocks and bonds. The actual asset mix will fluctuate in response to changes in the Plan's liability stream.

	6/30/93 Target	6/30/93 Actual
Stocks	15.0%	14.3%
Bonds	85.0	84.1
Unallocated Cash	0.0	1.6
Total	100.0%	100.0%

Investment Management

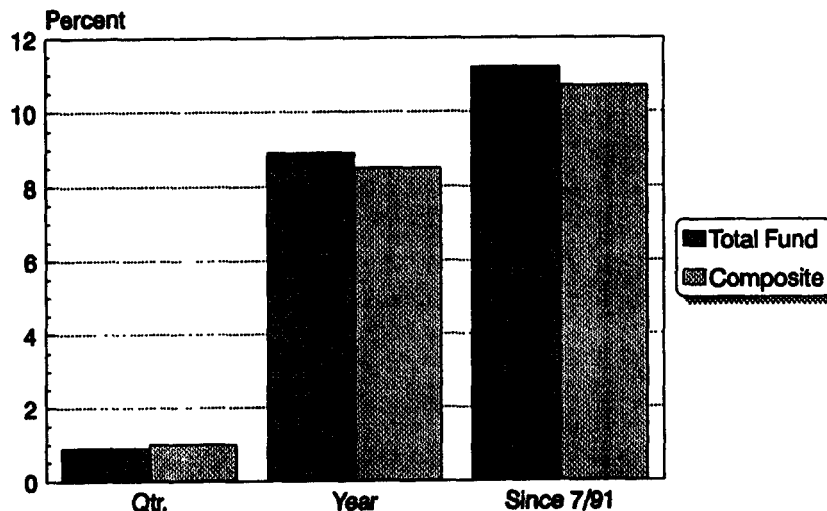
The entire fund is managed externally by Voyager Asset Management. The portfolio was transferred from the Department of Commerce to the SBI on May 1, 1991.

Performance Benchmarks

A custom benchmark has been established for the fixed income portfolio. It reflects the duration of the liability stream and the long-term sector allocation of Voyager Asset Management. The equity benchmark is a custom benchmark consisting of A or greater rated S&P 500 stocks less utilities and restricted stocks. The total fund benchmark is a combination of the fixed income and equity benchmarks, weighted according to the asset allocation target.

Market Value

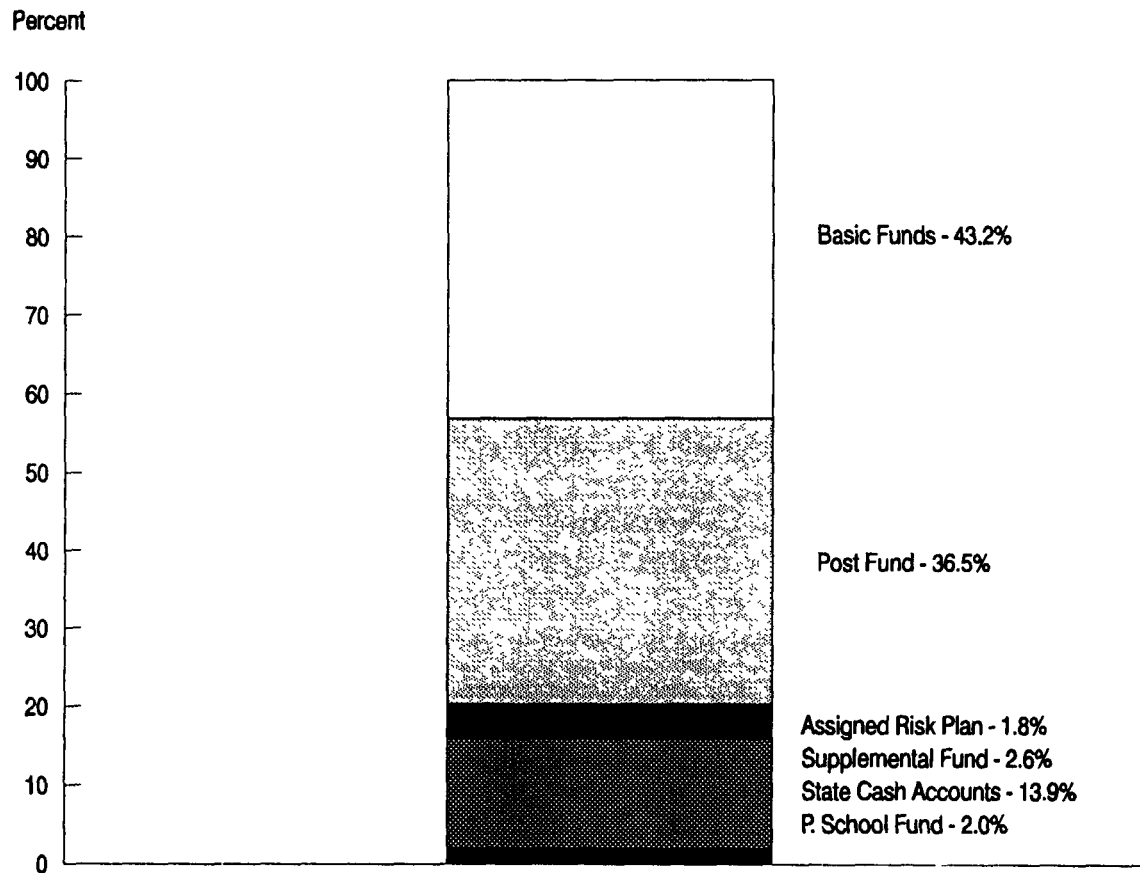
On June 30, 1993 the market value of the Assigned Risk Plan was \$402 million.



Period Ending 6/30/93

	Qtr.	Yr.	Since 7/1/91
Total Fund	0.9%	8.9%	11.2%
Composite Index	1.0	8.5	10.7
Equity Segment	-5.4	6.0	8.9
Benchmark	-3.9	5.9	9.5
Bond Segment	2.1	9.6	11.9
Benchmark	1.8	8.9	10.8

EXECUTIVE SUMMARY
Funds Under Management



6/30/93
Market Value
(Billions)

Basic Retirement Funds	\$9.7
Post Retirement Fund	8.3
Assigned Risk Plan	0.4
Supplemental Investment Fund	0.6
State Cash Accounts	3.1
Permanent School Fund	0.5
Total	\$22.6

MINNESOTA STATE BOARD OF INVESTMENT

QUARTERLY INVESTMENT REPORT

Second Quarter 1993

(April 1, 1993 — June 30, 1993)

Table of Contents

	Page
Capital Market Indices	2
Financial Markets Review	3
Basic Retirement Funds	5
Fund Objectives	
Asset Growth	
Total Fund Performance vs. Standards	
Segment Performance vs. Standards	
Post Retirement Fund	9
Fund Objectives	
Asset Growth	
Asset Mix	
Total Fund Performance	
Assigned Risk Plan	13
Supplemental Investment Fund	14
Fund Description	
Income Share Account	
Growth Share Account	
Common Stock Index Account	
Bond Market Account	
Money Market Account	
Fixed Return Account	
Permanent School Fund	21
State Cash Accounts	22

VARIOUS CAPITAL MARKET INDICES

	Period Ending 6/30/93				
	Qtr.	Yr.	3 Yr.	5 Yr.	10 Yr.
Domestic Equity					
Wilshire 5000	0.8%	16.1%	12.3%	13.8%	13.3%
Dow Jones Industrials	3.1	9.2	10.4	14.3	15.6
S&P 500	0.5	13.6	11.4	14.2	14.3
Russell 2000	2.2	26.0	13.5	11.2	8.7
Domestic Fixed Income					
Salomon BIG	2.8	12.0	12.3	11.4	12.0
Shearson Gov't./Corp.	3.0	13.2	12.5	11.4	11.8
90 Day U.S. Treasury Bills	0.8	3.2	4.9	6.3	7.1
International					
EAFE*	10.1	20.3	1.9	3.6	17.7
Salomon Non U.S. Gov't. Bond	2.9	9.7	15.3	10.0	14.4
Inflation Measure					
Consumer Price Index (CPI)	0.5	3.0	3.6	4.1	3.8

* Morgan Stanley Capital International Index of Europe, Australia and the Far East

FINANCIAL MARKETS REVIEW

DOMESTIC STOCKS

The stock market posted a modest increase for the quarter overall. Strong performance in the capital goods and consumer durable sectors caused large capitalization value stocks to do well. Also, good performance in the technology sector generated positive returns for small capitalization stocks. The consumer non-durable sector again was the worst performing sector. The quarterly results reflect both the market's appreciation due to declining interest rates, and declines due to uncertainty about the final outcome of Washington's budget and health reform proposals.

The Wilshire 5000 provided a 0.8% return for the quarter. Performance among the different Wilshire Style Indexes for the quarter are shown below:

Large Value	2.0%
Small Value	-0.7
Large Growth	-3.4
Small Growth	3.6

The Wilshire 5000 increased 16.1% during the latest year.

DOMESTIC BONDS

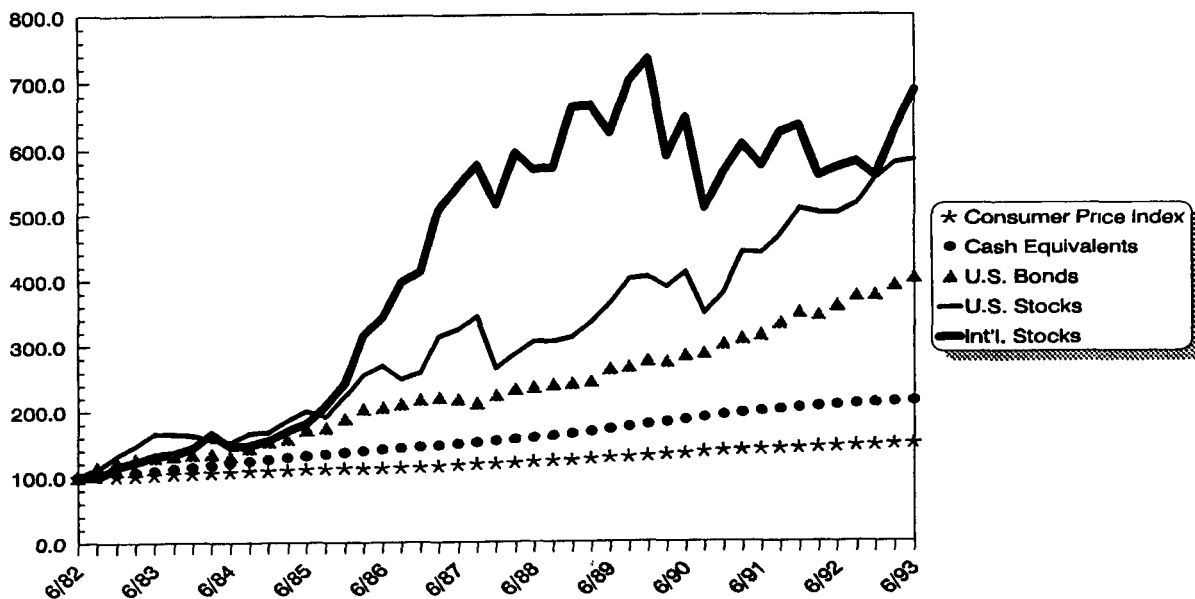
Bonds generated high returns this quarter as Treasury yields declined. The decline was fairly uniform across the yield curve with five year yields declining by 0.20% and long yields falling 0.29%. Continued sluggish economic growth and low inflation caused falling interest rates. Mortgage prepayments continued with the declining interest rates causing poor mortgage sector returns when compared to treasuries and corporates.

Overall, the Salomon Brothers Broad Investment Grade (BIG) Index increased 2.8% for the quarter. The Salomon BIG sector returns for the quarter were:

Treasury/Agency	3.0%
Corporates	3.2
Mortgages	2.1

The Salomon BIG increased 12.0% for the latest year.

PERFORMANCE OF CAPITAL MARKETS
Cumulative Returns



Indices used are: Morgan Stanley's Index of Europe, Australia and the Far East (EAFE); Wilshire 5000 Index; Salomon Broad Investment Grade (BIG) Bond Index; 91 Day Treasury Bills; and the Consumer Price Index.

FINANCIAL MARKETS REVIEW**INTERNATIONAL STOCKS**

In aggregate, the international stock markets (as measured by the EAFE index) provided a return of 10.1% for the quarter. As shown below, performance varied widely among the major markets.

Japan	19.3%
United Kingdom	2.6
Germany	-4.9
France	-5.4

The EAFE index increased by 20.3% during the latest year. The index is compiled by Morgan Stanley Capital International. It is an index of 18 markets located in Europe, Australia and the Far East (EAFE). The major markets listed above comprise about 75% of the value of international markets.

REAL ESTATE

The real estate market still faces capital shortages, oversupply and slow demand. Many real estate portfolios have experienced significant writedowns over the last year, reflecting the weak real estate markets. Longer term, lower interest rates and a significant decline in construction activity are both favorable developments for the real estate market.

VENTURE CAPITAL

According to the *Venture Capital Journal*, after shrinking by an average of 25% a year for four years, new venture capital raised in 1992 more than doubled over 1991. In 1991, \$1.27 billion was raised by 30 firms. In 1992, \$2.55 billion was raised by 41 firms.

RESOURCE FUNDS

Currently, spot prices of West Texas Intermediate oil are \$18.53 per barrel. This compares to \$21.50 per barrel a year ago.

Spot prices of natural gas are approximately \$2.42 per MCF (thousand cubic feet) compared to \$1.72 per MCF a year ago.

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.

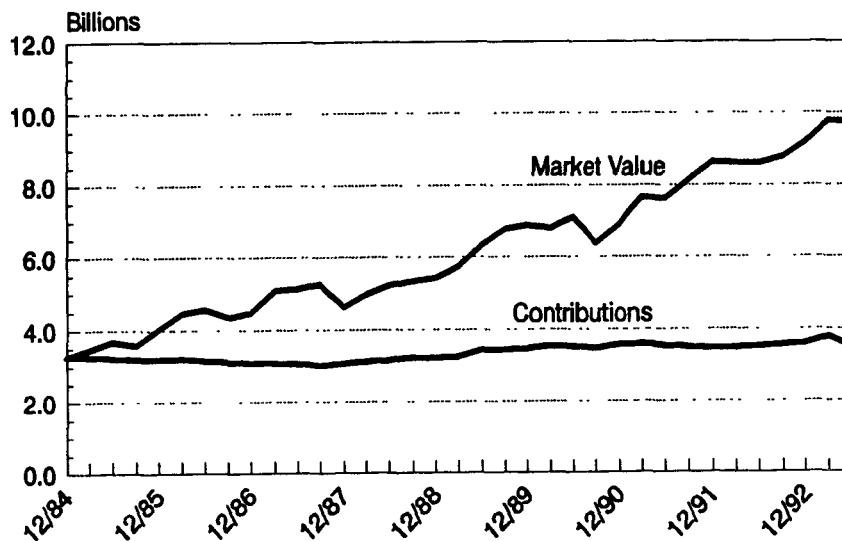
The Board has established three return objectives for the Basic Funds:

1. 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.
2. 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.
3. 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 decreased 0.6% during the second quarter of 1993.

The decrease resulted from negative net contributions.



	In Millions						
	12/88	12/89	12/90	12/91	12/92	3/93	6/93
Beginning Value	\$4,628	\$5,420	\$6,875	\$6,919	\$8,639	\$9,191	\$9,780
Net Contributions	146	269	91	-92	-34	172	-295
Investment Return	646	1,186	-47	1,812	586	417	238
Ending Value	\$5,420	\$6,875	\$6,919	\$8,639	\$9,191	\$9,780	\$9,723

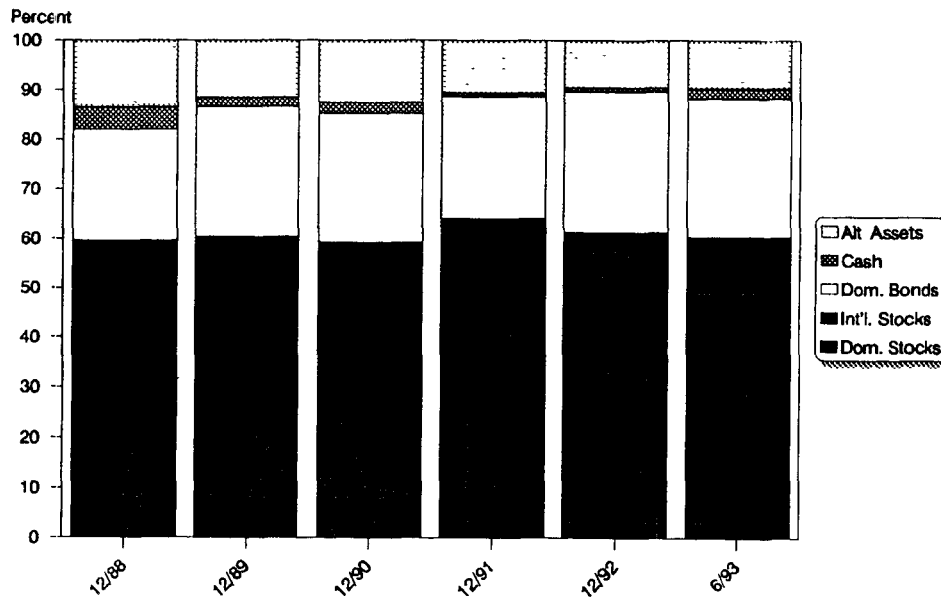
BASIC RETIREMENT FUNDS
Asset Mix

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:

The actual asset mix changed from the prior quarter, resulting from the reallocation from domestic stocks to international stocks.

Domestic Stocks	50.0%
Int'l. Stocks	10.0
Domestic Bonds	24.0
Alternative Assets*	15.0
Unallocated Cash	1.0

*Alternative assets include real estate, venture capital and resource funds.



	Last Five Years					Latest Qtr.	
	12/88	12/89	12/90	12/91	12/92	3/93	6/93
Domestic Stocks	59.5%	60.2%	59.1%	63.9%	57.9%	54.2%	49.4%
Int'l. Stocks	0.0	0.0	0.0	0.0	3.2	6.8	10.9
Domestic Bonds	22.4	26.4	26.2	24.7	28.5	28.5	27.8
Real Estate	9.0	7.5	7.0	4.8	4.2	3.9	4.0
Venture Capital	3.1	2.8	4.2	4.7	4.2	4.1	4.6
Resource Funds	1.5	1.4	1.5	1.1	1.2	1.1	1.1
Unallocated Cash	4.5	1.7	2.0	0.8	0.8	1.4	2.2
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

BASIC RETIREMENT FUNDS Total Fund Performance vs. Standards

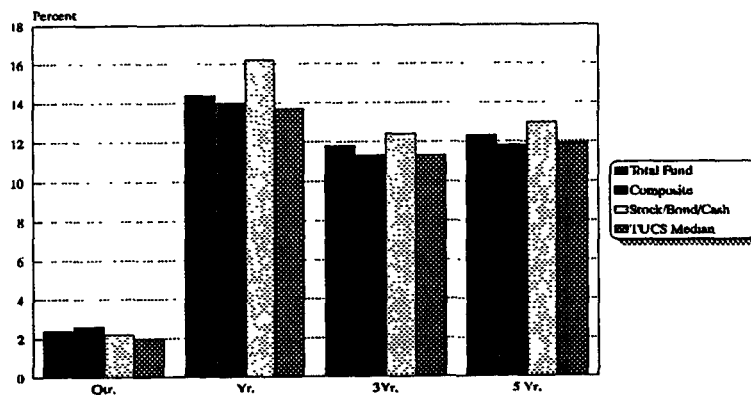
The Basic Funds' long-term rate of return performance is evaluated relative to two specific benchmarks:

1. **Composite Index.** The returns provided by the total portfolio are expected to exceed those derived from a composite of market indices, weighted in a manner that reflects the long-term asset allocation of the Funds. Alternative asset and bond weights are reset each quarter to reflect the amount of unfunded commitments in the alternative asset classes. As of 6/30/93, the composite index is weighted: 50.0% Wilshire 5000 Adjusted, 10.0% Morgan Stanley EAFE, 29.0% Salomon BIG, 4.5% Wilshire Real Estate Index, 4.5% Venture Capital Funds, 1.0% Resource Funds, and 1.0% 91 Day T-Bills.

2. **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 pension funds. The sample universe used by the Board is the Master Trust portion of 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 in which stocks outperform other asset classes and, conversely, to underperform the median fund when stocks underperform other assets.

The Basic Funds total portfolio underperformed its composite index for the latest quarter but exceeded the index for the year. The Basic Funds ranked at the top third (33rd percentile) of the TUCS universe for the quarter. In addition, it ranked near the top third for the latest year (38th percentile) and for the last five years (35th percentile).



Period Ending 6/30/93

	Qtr.	Yr.	*(Annualized)	
			3 Yr.	5 Yr.
Total Fund	2.4%	14.4%	11.8%	12.3%
Composite Index**	2.6	14.0	11.3	11.8
Stocks, Bonds and Cash Only	2.2	16.2	12.4	13.0
TUCS Median Fund	2.0	13.7	11.3	11.9

**Adjusted to reflect the SBI's restrictions on liquor and tobacco stocks through 3/31/93.

BASIC RETIREMENT FUNDS

Segment Performance vs. Standards

Domestic Stocks

Target: Wilshire 5000 Adjusted*

Expectation: If half of the segment is actively managed and half is passively managed, the entire segment is expected to exceed the target by +.20-.45% annualized, over time.

	Annualized			
	Qtr.	Yr.	3 Yrs.	5 Yrs.
Domestic Stocks	0.6%	16.2%	11.6%	13.1%
Wilshire 5000*	0.7	16.0	12.0	13.4

*Adjusted for liquor and tobacco restrictions through 3/31/93.

International Stocks

Target: EAFE

Expectation: The index fund is expected to track the target by +/- .20%, over time. Active managers are expected to add 1.0-1.5% annualized overtime. At the end of the quarter, approximately 20% of the segment was actively managed.

	Since	
	Qtr.	10/1/92
Int'l. Stocks	8.4%	16.7%
EAFE	10.1	18.5

Domestic Bonds

Target: Salomon Broad Investment Grade (BIG) Index

Expectation: If half of the segment is actively managed and half is managed semi-passively, the entire segment is expected to exceed the target by +.20-.35% annualized, over time.

	Annualized			
	Qtr.	Yr.	3 Yrs.	5 Yrs.
Domestic Bonds	3.3%	13.3%	13.0%	11.7%
Salomon BIG	2.8	12.0	12.3	11.4

Alternative Assets

Expectation: Real assets (primarily real estate and resource funds) are expected to exceed the rate of inflation by 3-5% annualized, over the life of the investment.

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

Expectation: Private equity investments (primarily venture capital) are expected to provide annualized returns at least 3% greater than historical public equity returns, over the life of the investment. This equates to an absolute return of approximately 13-14% annualized.

The SBI began its venture capital and resource programs in the mid-1980's. Some of the investments, therefore, are relatively immature and returns may not be indicative of future results.

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.

	Annualized			
	Qtr.	Yr.	3 Yrs.	5 Yrs.
Real Estate	0.5%	-5.8%	-6.8%	-1.5%
Real Estate Index	0.5	-6.2	-7.5	-2.6
Inflation	0.5	3.0	3.6	4.1
Venture Capital	9.5	1.1	22.7	18.5
Resource Fund	3.2	8.4	14.3	6.1

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 employee's 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.

Through fiscal year 1992, unrealized capital gains (or losses) were excluded from the statutory definition of earnings. For this reason the Post Fund previously was not designed to maximize long-term total rates of return.

Through fiscal year 1992, the Post Fund was not oriented toward maximizing long-term rate of return.

Rather, the SBI attempted to generate a high, consistent stream of earnings for the Post Fund that maintained current benefits, as well as produce benefit increases over time. Through fiscal year 1992, the Board established two earnings objectives for the Post Fund:

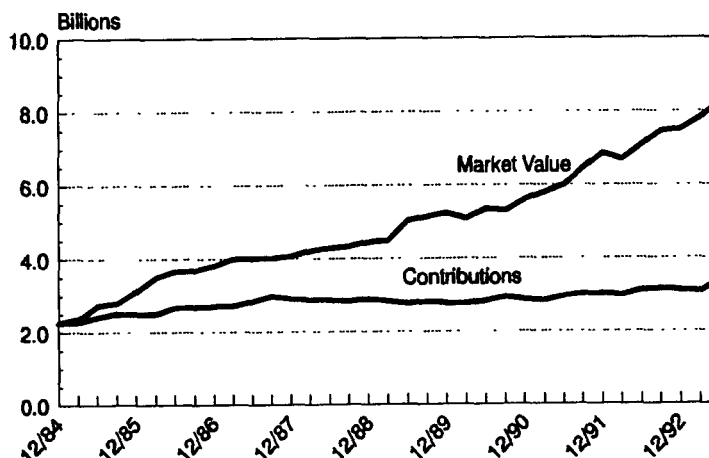
1. generate 5% realized earnings to maintain current benefits
2. generate at least 3% additional realized earnings to provide benefit increases

Beginning in fiscal year 1993, the post retirement benefit increase formula will be based on total return rather than realized earnings. As a result, the Board has adopted a new long-term asset allocation strategy for the Post Fund which incorporates a 50% commitment to common stocks. New investment objectives and performance standards will be developed to reflect the new asset allocation.

Asset Growth

The market value of the Post Retirement Fund increased by 5.7% during the second quarter of 1993. The

majority of the increase was due to positive net contributions.



	In Millions						
	12/88	12/89	12/90	12/91	12/92	3/93	6/93
Beginning Value	\$4,047	\$4,434	\$5,238	\$5,590	\$6,855	\$7,500	\$7,804
Net Contributions	-27	25	88	162	95	-26	314
Investment Return	414	779	264	1,103	550	330	133
Ending Value	\$4,434	\$5,238	\$5,590	\$6,855	\$7,500	\$7,804	\$8,251

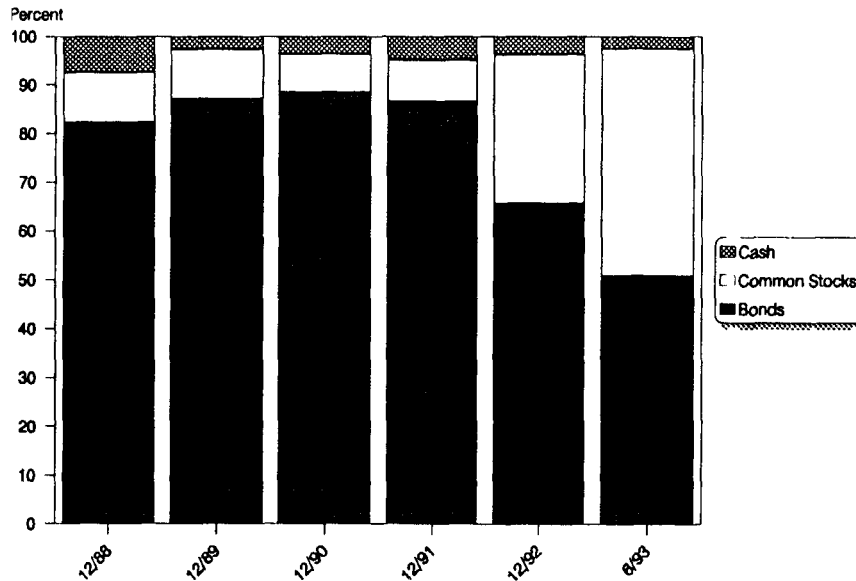
POST RETIREMENT FUND
Asset Mix

The Board adopted a new asset allocation strategy for the Post Fund effective for fiscal year 1993. The new policy targets reflect the new post retirement benefit increase formula recently enacted by the Legislature. Throughout fiscal year 1993, the actual asset mix of the Post Fund has moved toward the following long-term policy targets:

Stocks	50.0%
Bonds	47.0
Unallocated Cash	3.0
Total	100.0%

The large allocation to common stocks will allow the Fund to increase the long-term earning power of its assets and allow the Fund to focus on generating higher long-term total rates of return.

During the most recent quarter, the stock segment grew and the bond segment was reduced. These changes were part of the transition to the new asset allocation policy. By the end of the quarter, the Post Fund had reached its new asset allocation targets.



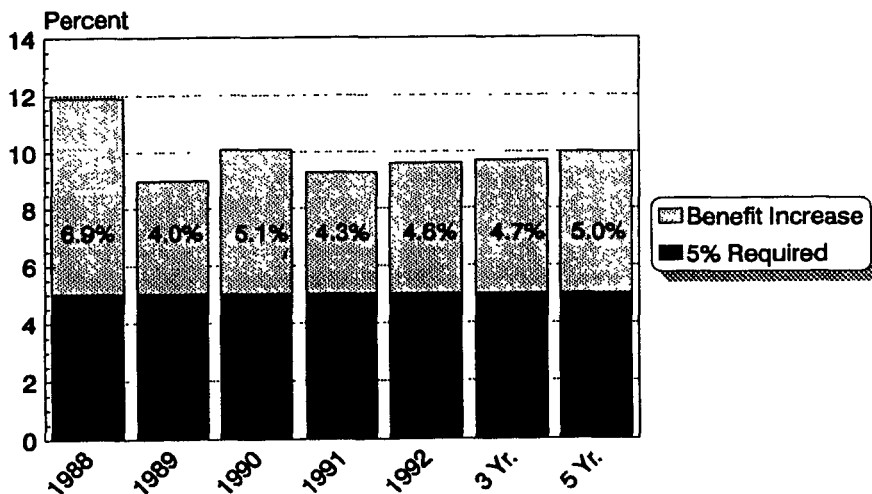
	Last Five years					Latest Qtr.	
	12/88	12/89	12/90	12/91	12/92	3/93	6/93
Bonds	82.3 %	87.1 %	88.5 %	80.0 %	65.6 %	56.8 %	50.8 %
Stocks	10.1	10.2	7.9	15.7	30.6	40.3	46.6
Unallocated Cash	7.6	2.7	3.6	5.0	3.8	2.9	2.6
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

POST RETIREMENT FUND
Fund Performance Through 6/30/92

Through fiscal year 1992, the ability of the Post Fund to maintain current benefit levels and provide future benefit increases depended upon its earnings. Previously, state statutes had defined 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) had no direct impact on the benefits paid out to retirees. Unrealized capital gains (or losses) were excluded from defined earnings in order to make benefit payments largely insensitive to near-term fluctuations in the capital markets.

Through fiscal year 1992 benefit increases were based upon earnings during a fiscal year and were effective at the start of the following calendar year. Benefit increases generated over the last five years are shown below.

Realized Earnings
Fiscal Years 1988-1992



	1988	1989	1990	1991	1992	(Annualized)	
						3 Yrs.	5 Yrs.
Realized Earnings*	11.9%	9.0%	10.1%	9.3%	9.6%	9.7%	10.0%
Benefit Increase**	6.9	4.0	5.1	4.3	4.6	4.7	5.0
Inflation	3.9	5.2	4.7	4.7	3.1	4.2	4.3

* Interest, dividends and net realized capital gains.

** Payable starting January 1 of the following calendar year.

POST RETIREMENT FUND
Fund Performance Since 7/1/92

Beginning fiscal year 1993, total rate of return is the relevant measure for performance. Actual returns for the

total fund and stock and bond segments are shown below along with appropriate market index comparisons.

Total Fund Performance

The total fund slightly trailed its composite index for the quarter. On 6/30/93 the composite was weighted:

Stocks 50.0%
 Bonds 50.0

Period Ending 6/30/93

	Qtr.	Since 7/1/92
Total Fund	1.7%	12.4%
Composite Index	1.9	13.1

The composite weighting changes each month to reflect the on-going transition from bonds to stocks. The weighting shown above reflects the actual asset mix of the total portfolio during June.

Stock Segment Performance

Stock segment performance relative to the S&P 500 is shown in the table. During the transition to the new asset allocation, this index will be the most representative market comparison for the stock portfolio.

Period Ending 6/30/93

	Qtr.	Since 7/1/92
Stock Segment	0.5%	10.5%
S&P 500	0.5	13.6

Bond Segment Performance

Bond segment performance relative to the Shearson Lehman Government Corporate Bond Index is shown in the table. During the transition, that index will be the most appropriate market comparison for the bond portfolio.

Period Ending 6/30/93

	Qtr	Since 7/1/92
Bond Segment	2.9%	13.6%
Shearson Index	3.0	13.2

ASSIGNED RISK PLAN

Investment Objective

The Assigned Risk Plan has two investment objectives: to minimize the mismatch between assets and liabilities and to provide sufficient liquidity for the payment of on-going claims and operating expenses.

Asset Mix

The Assigned Risk Plan is invested in a balanced portfolio of common stocks and bonds. The actual asset mix will fluctuate in response to changes in the Plan's liability stream.

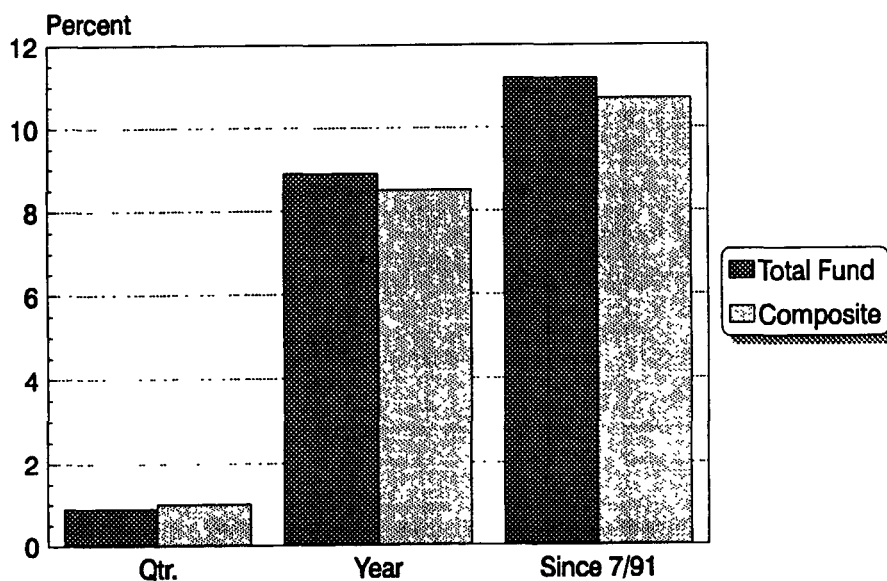
Investment Management

The entire fund is managed externally by Voyager Asset Management. The portfolio was transferred from the Department of Commerce to the SBI on May 1, 1991.

Market Value

On June 30, 1993 the market value of the Assigned Risk Plan was \$402 million.

	6/30/93 Target	6/30/93 Actual
Stocks	15.0%	14.3%
Bonds	85.0	84.1
Unallocated Cash	0.0	1.6
Total	100.0%	100.0%



Period Ending 6/30/93

	Qtr.	Yr.	Since 7/1/91
Total Account	0.9%	8.9%	11.2%
Composite	1.0	8.5	10.7
Equity Segment	-5.4	6.0	8.9
Benchmark	-3.9	5.9	9.5
Bond Segment	2.1	9.6	11.9
Benchmark	1.8	8.9	10.8

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:

1. It functions as the investment manager for all assets of the Unclassified Employees Retirement Plan and the Public Employees Defined Contribution Plan.
2. It acts as an investment manager for most assets of the supplemental retirement programs for state university and community college teachers and for Hennepin County employees.
3. It is one investment vehicle offered to public employees as part of the state's Deferred Compensation Plan.
4. 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 June 30, 1993 the market value of the entire fund was \$599 million.

Investment Options

Income Share Account - a 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.

Fixed Interest 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 bonds. Common stocks provide the potential for significant capital appreciation, while bonds act as a deflation hedge and provide portfolio diversification.

Investment Management

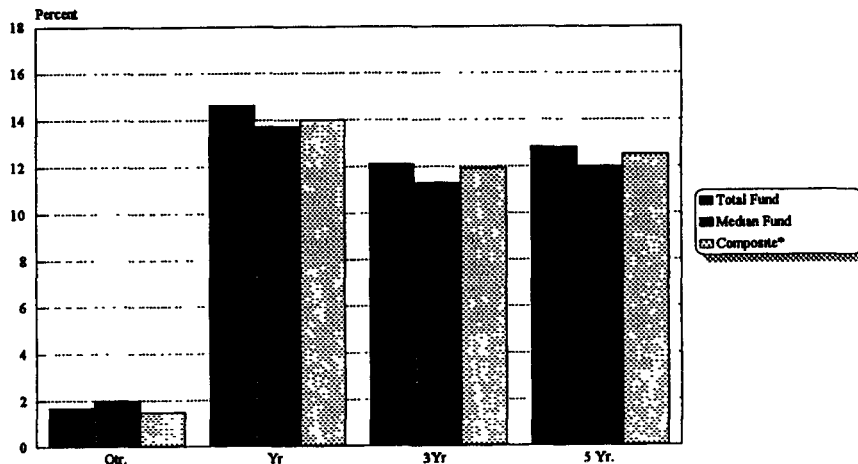
The Account combines internal and external management. Internal investment staff manage the entire fixed income segment. Through out the period shown below, the entire stock segment is managed by Wilshire Associates as part of a passively managed index fund designed to track the Wilshire 5000. Prior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

Market Value

On June 30, 1993 the market value of the Income Share Account was \$307 million.

	Target	Actual
Stocks	60.0%	62.2%
Bonds	35.0	30.9
Unallocated Cash	5.0	6.9
	100.0%	100.0%

Income Share Account



Period Ending 6/30/93

	Annualized			
	Qtr.	Yr.	3 Yr.	5 Yr.
Total Account	1.7%	14.6%	12.1%	12.8%
Median Fund*	2.0	13.7	11.3	11.9
Composite**	1.5	14.0	12.0	12.5
Equity Segment	1.0	16.5	12.3	13.7
Wilshire 5000***	0.7	16.0	12.0	13.4
Bond Segment	3.3	13.6	12.8	11.7
Salomon Bond Index	2.8	12.0	12.3	11.4

*TUCS Median Master Trust

**60% Wilshire 5000/35% Salomon Broad Bond Index/5% T-Bills Composite. Wilshire 5000 is adjusted to reflect liquor and tobacco restrictions through 3/31/93.

*** Adjusted for liquor and tobacco restrictions through 3/31/93.

**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.

Investment Management

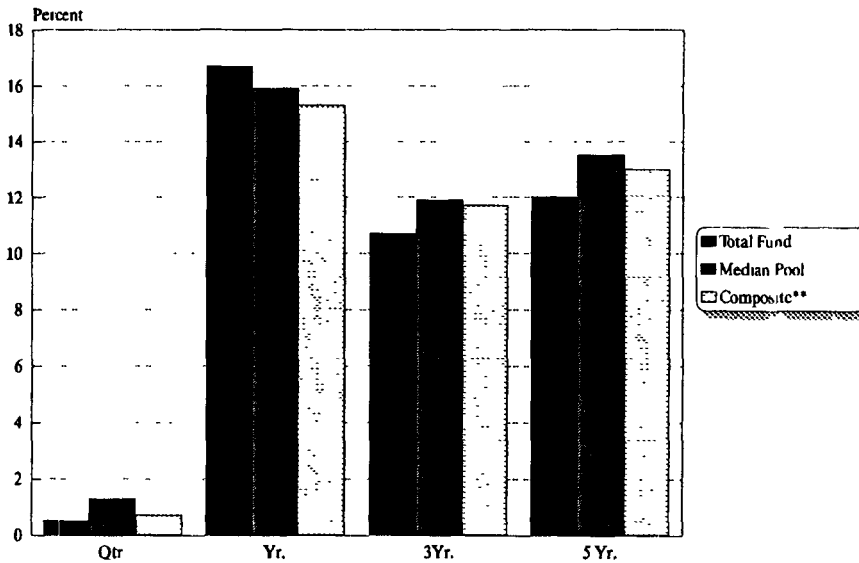
Through out the period shown below, the entire Account is managed by the same group of active external stock managers utilized by the Basic Retirement Funds. Prior to April 1988, other active managers controlled a substantial portion of the account.

Market Value

On June 30, 1993 the market value of the Growth Share Account was \$98 million.

	Target	Actual
Stocks	95.0%	91.8%
Unallocated Cash	5.0	8.2
	100.0%	100.0%

Growth Share Account



Period Ending 6/30/93

	Annualized			
	Qtr.	Yr.	3 Yr.	5 Yr.
Total Account	0.5%	16.7%	10.7%	12.0%
Median Pool*	1.3	15.9	11.9	13.5
Composite**	0.7	15.3	11.7	13.0

* TUCS Median Equity Pool

** 95% Wilshire 5000/5% T-Bills Composite. Wilshire 5000 is adjusted for liquor and tobacco restrictions through 3/31/93.

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 stock.

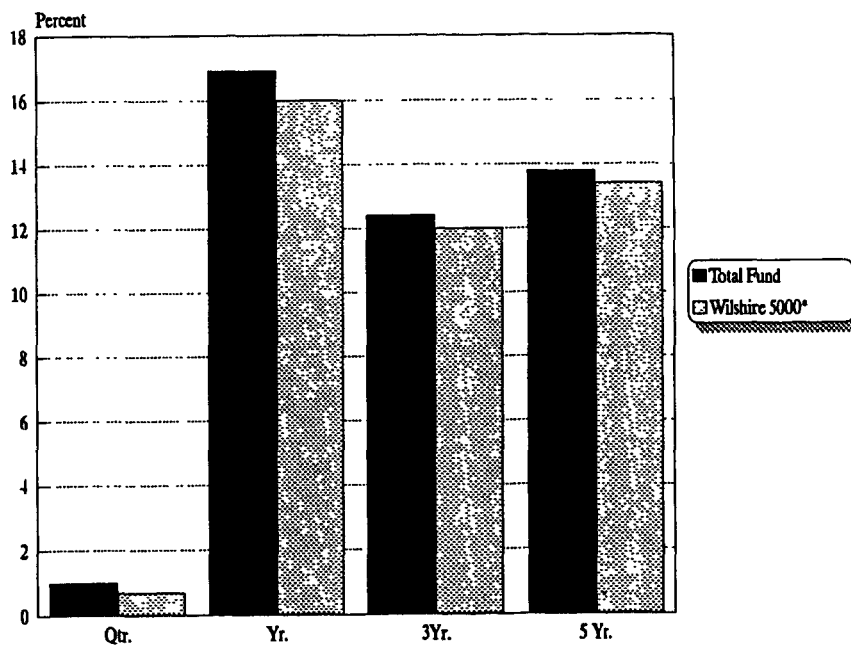
Investment Management

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

Market Value

On June 30, 1993 the market value of the Common Stock Index Account was \$36 million.

Common Stock Index Account



Period Ending 6/30/93

	Qtr.	Yr.	3 Yr.	5 Yr.
Total Account	1.0%	16.9%	12.4%	13.7%
Wilshire 5000*	0.7	16.0	12.0	13.4

*Adjusted for liquor and tobacco restrictions through 3/31/93.

SUPPLEMENTAL 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.

Investment Management

The entire Account is managed by the same group of active external bond managers utilized by the Basic Retirement Funds.

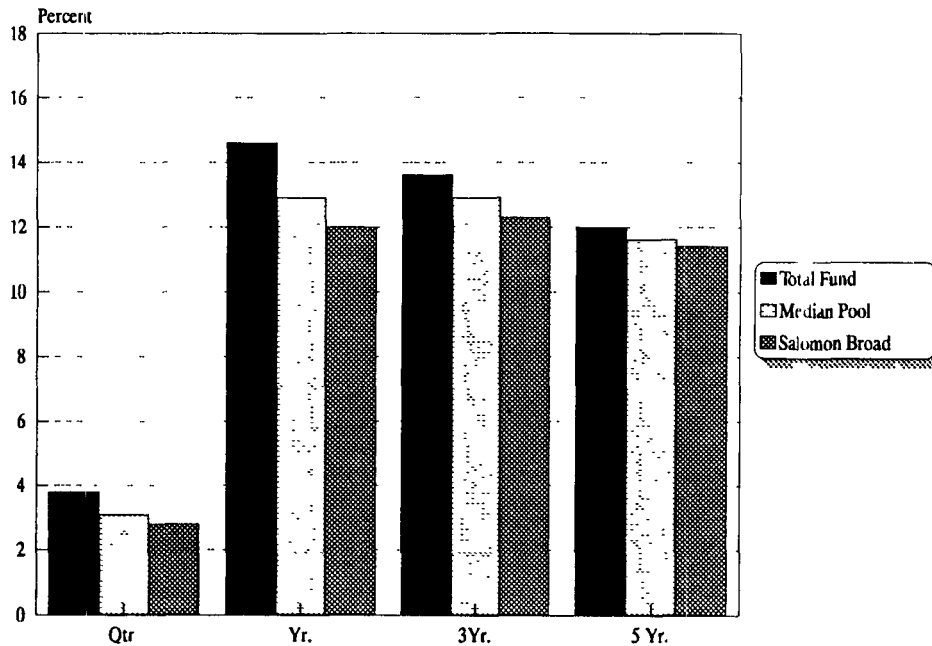
Asset Mix

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.

Market Value

On June 30, 1993 the market value of the Bond Market Account was \$19 million.

Bond Market Account



Period Ending 6/30/93
Annualized
Qtr. Yr. 3 Yr. 5 Yr.

Total Account	3.8%	14.6%	13.6%	12.0%
Median Pool*	3.1	12.9	12.9	11.6
Salomon BIG**	2.8	12.0	12.3	11.4

* TUCS Median Fixed Income Pool

** Salomon Broad Investment Grade Index

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.

Asset 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.

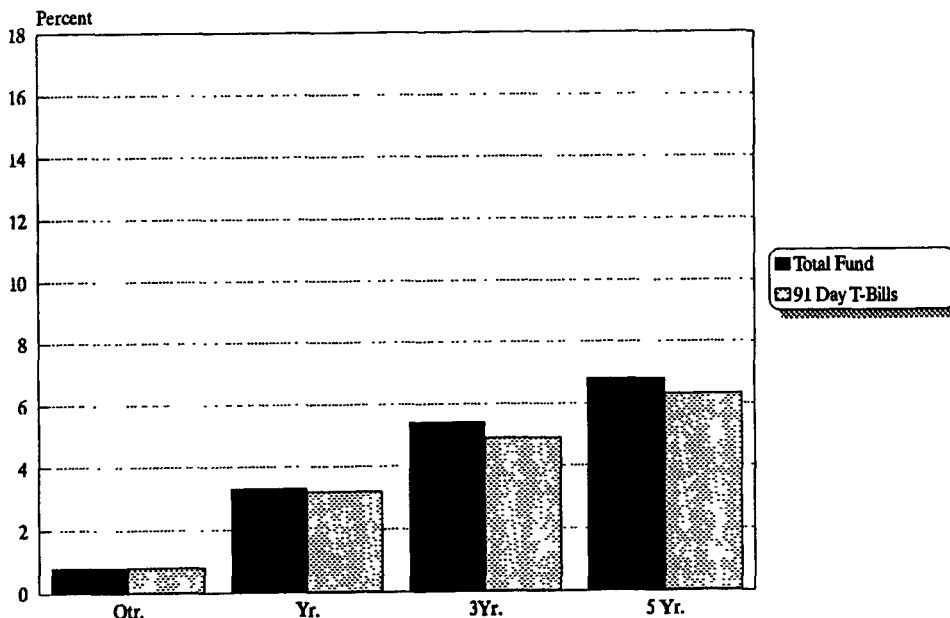
Investment Management

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 June 30, 1993 the market value of the Money Market Account was \$67 million.

Money Market Account



Period Ending 6/30/93

Annualized

Qtr. Yr. 3 Yr. 5 Yr.

Total Account	0.8%	3.4%	5.4%	6.8%
91 Day T-Bills	0.8	3.2	4.9	6.3

SUPPLEMENTAL INVESTMENT FUND

Fixed Interest Account

Investment Objectives

The investment objectives of the Fixed Interest 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 Fixed Interest 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 Fixed Interest Account over the following twelve months.

Market Value

On June 30, 1993 the market value of the Fixed Interest Account was \$71 million.

Contract Period	Annual Effective Interest Rate	Manager
Nov. 1, 1990-Oct. 31, 1993	8.765%	Mutual of America/Provident National (blended rate)
Nov. 1, 1991-Oct. 31, 1994	6.634%	Continental Assurance/Provident National (blended rate)
Nov. 1, 1992-Oct. 31, 1995	5.280%	Norwest Bank Minnesota

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 have been influenced by the 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 have limited 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, has invested 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 remained essentially unchanged for the quarter. The Permanent School fund continues to hold only fixed income securities.

	Target	Actual
Bonds	95.0%	94.3%
Unallocated Cash	5.0	5.7
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 increased 4.2% during the second quarter. Positive returns contributed to the increase.

Asset Growth
During Second Quarter 1993
(Millions)

Beginning Value	\$437.6
Net Contributions	2.2
Investment Return	16.2
Ending Value	\$456.1

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 7.54%, an average life of 7.76 years, and a AAA quality rating. The portfolio remains concentrated in Treasury and Agency issues with the remainder primarily distributed among mortgages, industrials and utilities.

Bond Portfolio Statistics
6/30/93

Value at Market	\$423,368,924
Value at Cost	357,783,350
Average Coupon	8.81%
Current Yield	7.54
Yield to Maturity	6.54
Current Yield at Cost	8.92
Time to Maturity	14.75 Years
Average Duration	7.76 Years
Average Quality Rating	AAA
Number of Issues	121

STATE CASH ACCOUNTS

Description

State Cash Accounts represent the cash balances in more than 200 separate accounts 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:

1. Trust Fund Pool contains the cash balances of retirement-related accounts managed internally and cash balances in the Permanent School Fund.
2. 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.

Period Ending 6/30/93

	Market Value (Millions)	Qtr.	Yr.	3 Yrs. Annualized
Treasurer's Cash Pool	\$2,707	1.1%	4.8%	6.7%
Trust Fund Cash Pool	49	0.9	5.2	6.1
Benchmark*		0.9	N.A.	N.A.
91-Day T-Bills		0.7	3.1	4.9

* 75% State Street Short Term Investment Fund/25% 1-3 Year Treasuries.

Tab B

PORTFOLIO STATISTICS

	PAGE
I. Composition of State Investment Portfolios 6/30/93	1
II. Cash Flow Available for Investment 3/31/93 - 6/30/93	3
III. Monthly Transactions and Asset Summary - Retirement Funds	4

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
Composition of State Investment Portfolios By Type of Investment
Market Value June 30, 1993
(in Millions)

	Cash And Short Term Securities	Bonds		Stocks		External Int'l.	Alternative Assets	Total
		Internal	External	Internal	External			
BASIC RETIREMENT FUNDS:								
Teachers Retirement Fund	\$59,198 1.40%	\$0	\$1,165,767 27.56%	\$0	\$2,099,202 49.63%	\$480,183 11.35%	\$425,306 10.06%	\$4,229,656 100%
Public Employees Retirement Fund	\$59,239 2.67%	\$0	\$625,399 28.22%	\$0	\$1,092,447 49.29%	\$232,734 10.50%	\$206,517 9.32%	\$2,216,336 100%
State Employees Retirement Fund	\$53,932 2.76%	\$0	\$550,126 28.19%	\$0	\$960,959 49.25%	\$204,722 10.49%	\$181,659 9.31%	\$1,951,398 100%
Public Employees Police & Fire Fund	\$26,124 2.86%	\$0	\$257,132 28.16%	\$0	\$449,158 49.20%	\$95,688 10.48%	\$84,908 9.30%	\$913,010 100%
Highway Patrol Retirement Fund	\$3,475 2.42%	\$0	\$40,725 28.29%	\$0	\$71,137 49.42%	\$15,155 10.53%	\$13,448 9.34%	\$143,940 100%
Judges Retirement Fund	\$516 6.75%	\$0	\$2,066 27.03%	\$0	\$3,609 47.22%	\$769 10.06%	\$683 8.94%	\$7,643 100%
Public Employees P. F. Consolidated	\$4,659 2.93%	\$0	\$36,270 22.80%	\$0	\$76,574 48.14%	\$20,393 12.82%	\$21,166 13.31%	\$159,062 100%
Correctional Employees Retirement	\$2,993 2.94%	\$0	\$28,613 28.14%	\$0	\$49,982 49.16%	\$10,648 10.47%	\$9,449 9.29%	\$101,685 100%
POST RETIREMENT FUND	\$216,892 2.63%	\$3,675,939 44.55%	\$167,045 2.02%	\$0	\$4,191,289 50.80%	\$0	\$0	\$8,251,165 100%

	Cash And Short Term Securities		Bonds		Stocks		External Int'l	Alternative Assets	Total
	Internal	External	Internal	External	Internal	External			
MINNESOTA SUPPLEMENTAL FUNDS:									
Income Share Account	\$21,076 6.86%	\$0	\$95,130 30.94%	\$0	\$0	\$191,206 62.20%	\$0	\$0	\$307,412 100%
Growth Share Account	\$8,041 8.20%	\$0	\$0	\$0	\$0	\$90,012 91.80%	\$0	\$0	\$98,053 100%
Money Market Account	\$66,563 100%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$66,563 100%
Common Stock Index Account	\$0	\$0	\$0	\$0	\$0	\$36,261 100%	\$0	\$0	\$36,261 100%
Bond Market Account	\$0	\$19,309 100%	\$0	\$0	\$0	\$0	\$0	\$0	\$19,309 100%
Fixed Interest Account	\$0	\$71,325 100%	\$0	\$0	\$0	\$0	\$0	\$0	\$71,325 100%
TOTAL RETIREMENT FUNDS	\$522,708 2.81%	\$3,771,069 20.30%	\$2,963,777 15.96%	\$0	\$9,311,836 50.14%	\$1,060,292 5.71%	\$943,136 5.08%	\$18,572,818 100%	
ASSIGNED RISK PLAN	\$6,495 1.61%	\$338,247 84.10%	\$0	\$57,471 14.29%	\$0	\$0	\$0	\$402,213 100%	
PERMANENT SCHOOL FUND	\$25,922 5.68%	\$430,168 94.32%	\$0	\$0	\$0	\$0	\$0	\$456,090 100%	
TREASURERS CASH	\$2,707,495 100%	\$0	\$0	\$0	\$0	\$0	\$0	\$2,707,495 100%	
HOUSING FINANCE AGENCY	\$93,862 48.94%	\$97,909 51.06%	\$0	\$0	\$0	\$0	\$0	\$191,771 100%	
MINNESOTA DEBT SERVICE FUND	\$4,584 15.88%	\$24,290 84.12%	\$0	\$0	\$0	\$0	\$0	\$28,874 100%	
MISCELLANEOUS ACCOUNTS	\$48,374 22.73%	\$164,418 77.27%	\$0	\$0	\$0	\$0	\$0	\$212,792 100%	
GRAND TOTAL	\$3,409,440 15.11%	\$4,826,101 21.38%	\$2,963,777 13.13%	\$57,471 0.25%	\$9,311,836 41.25%	\$1,060,292 4.70%	\$943,136 4.18%	\$22,572,053 100%	

**STATE OF MINNESOTA
STATE BOARD OF INVESTMENT**

**Net Cash Flow Available For Investment
April 1, 1993 - June 30, 1993**

Teachers Retirement Fund	(\$255,300,000.00)
Public Employees Retirement Fund	15,000,000.00
State Employees Retirement Fund	13,226,000.00
Public Employees Police & Fire	7,000,000.00
Highway Patrol Retirement Fund	(54,000.00)
Judges Retirement Fund	331,000.00
Public Employees P&F Consolidated	(75,474,832.76)
Correctional Employees Retirement Fund	871,000.00
Post Retirement Fund	314,564,996.70
Supplemental Retirement Fund - Income	(6,297,037.25)
Supplemental Retirement Fund - Growth	(316,758.84)
Supplemental Retirement Fund - Money Market	(1,588,563.33)
Supplemental Retirement Fund - Index	1,857,668.71
Supplemental Retirement Fund - Bond Market	529,427.47
Supplemental Retirement Fund - Fixed Interest	(467,166.08)
 Total Retirement Funds Net Cash Flow	 \$13,881,734.62
 Assigned Risk Plan	 \$6,713,847.00
 Permanent School Fund	 2,238,517.96
 Total Net Cash Flow	 \$22,834,099.58

**STATE OF MINNESOTA
STATE BOARD OF INVESTMENT**

**Transaction and Asset Summary
Retirement Funds**

	<u>Net Transactions</u>			<u>Asset Summary (at Market Value)</u>				Total Mkt. Value (Millions)
	Bonds (Millions)	Stocks (Millions)	Total (Millions)	Cash Flow (Millions)	Short-Term % of Fund	Bonds % of Fund	Equity % of Fund	
January 1990	-\$37	\$6	-\$31	\$85	3.9%	52.0%	44.1%	\$12,126
February	-12	115	103	48	3.4	51.1	45.5	12,232
March	-3	7	4	8	3.4	50.5	46.1	12,334
April	105	3	108	8	2.7	51.4	45.9	12,070
May	-6	27	21	52	2.8	50.0	47.2	12,721
June	23	-22	1	122	3.7	50.3	46.0	12,916
July	130	3	133	65	3.1	51.6	45.3	12,962
August	98	-38	60	53	3.2	53.3	43.5	12,293
September	61	-42	19	13	3.2	55.1	41.7	12,098
October	35	8	43	11	3.0	56.0	41.0	12,103
November	-58	61	3	106	3.7	54.2	42.1	12,652
December	-59	115	56	33	3.4	53.3	43.3	12,967
January 1991	6	-2	4	47	3.6	52.3	44.1	13,356
February	-6	11	5	60	3.9	50.6	45.5	13,790
March	82	1	83	6	3.3	50.8	45.9	13,961
April	-24	-9	-33	9	3.6	50.9	45.5	14,045
May	33	1	34	66	3.8	49.8	46.4	14,308
June	25	2	27	115	4.4	50.5	45.1	14,106
July	124	0	124	48	3.8	50.4	45.8	14,527
August	85	21	106	55	3.3	50.8	45.9	14,891
September	22	1	23	5	3.1	51.4	45.5	15,105
October	21	1	22	14	3.1	51.2	45.7	15,285
November	81	-48	33	64	3.3	52.3	44.3	15,083
December	-4	9	5	25	3.2	51.2	45.6	16,065
January 1992	-42	-3	-45	11	3.6	50.3	46.1	15,878
February	-19	0	-19	57	4.1	49.4	46.5	16,086
March	292	-300	-8	2	4.2	51.6	44.2	15,870
April	-6	2	-4	4	4.2	51.5	44.3	15,905
May	-13	5	-8	72	4.7	51.3	44.0	16,127
June	-22	0	-22	150	5.7	51.5	42.8	16,264
July	389	152	541	123	3.0	53.3	43.7	16,726
August	-149	151	2	-11	3.0	53.1	43.9	16,627
September	-200	200	0	-10	2.9	52.0	45.1	16,809
October	-282	282	0	10	2.9	49.8	47.3	16,771
November	-248	270	22	-9	2.7	47.5	49.8	17,057
December	-500	518	18	4	2.6	44.7	52.7	17,305
January 1993	-138	158	20	40	2.6	44.0	53.4	17,617
February	-253	266	13	2	2.6	42.9	54.5	17,811
March	-272	335	63	70	2.6	40.7	56.7	18,180
April	-412	423	11	8	2.6	38.9	58.5	18,101
May	-206	200	-6	1	2.5	37.2	60.3	18,387
June	-250	210	-40	15	2.8	36.3	60.9	18,573

Tab C

EXECUTIVE DIRECTOR'S ADMINISTRATIVE REPORT

DATE: September 7, 1993

TO: Members, State Board of Investment

FROM: Howard Bicker

1. Budget Reports

A final report on the SBI's administrative budget for FY93 is in **Attachment A**. The SBI ended the year with \$856 under budget. A report on the FY94 budget for period ending July 31, 1993 is in **Attachment B**.

2. Travel Report

A travel report for the period from April 15, 1993 to August 15, 1993 is included as **Attachment C**.

ATTACHMENT A

**STATE BOARD OF INVESTMENT
FISCAL YEAR 1993 ADMINISTRATIVE BUDGET REPORT
GENERAL FUND APPROPRIATION
FISCAL YEAR TOTAL**

ITEM	FISCAL YEAR 1993 BUDGET	FISCAL YEAR 1993 EXPENDITURES
PERSONAL SERVICES		
CLASSIFIED EMPLOYEES	\$ 286,000	\$ 314,534
UNCLASSIFIED EMPLOYEES	1,206,000	1,109,968
SEVERENCE PAYOFF	3,000	0
WORKERS COMPENSATION INSURANCE	0	0
MISCELLANEOUS PAYROLL	0	6,077
SUBTOTAL	\$ 1,495,000	\$ 1,430,579
EXPENSES & CONTRACTUAL SERVICES		
RENTS & LEASES	96,000	79,197
REPAIRS/ALTERATIONS/MAINTENANCE	9,000	9,124
BONDS AND INSURANCE	0	117
PRINTING & BINDING	20,000	15,547
PROFESSIONAL/TECHNICAL SERVICES	15,000	7,976
DATA PROCESSING & SYSTEM SERVICES	162,000	162,000
PURCHASED SERVICES	30,000	38,063
SUBTOTAL	\$ 332,000	\$ 312,024
MISCELLANEOUS OPERATING EXPENSES		
COMMUNICATIONS	25,000	25,972
TRAVEL, IN-STATE	3,000	436
TRAVEL, OUT-STATE	40,000	37,028
FEES & OTHER FIXED CHARGES	9,000	5,589
SUBTOTAL	\$ 77,000	\$ 69,025
SUPPLIES/MATERIALS/PARTS	29,700	59,327
CAPITAL EQUIPMENT	34,300	96,189
TOTAL GENERAL FUND	\$ 1,968,000	\$ 1,967,144

ATTACHMENT B

**STATE BOARD OF INVESTMENT
FISCAL YEAR 1994 ADMINISTRATIVE BUDGET REPORT
GENERAL FUND APPROPRIATION
FISCAL YEAR TO DATE THROUGH JULY 31, 1993**

ITEM	FISCAL YEAR 1994 BUDGET	FISCAL YEAR 1994 EXPENDITURES
PERSONAL SERVICES		
CLASSIFIED EMPLOYEES	\$ 323,000	\$ 11,171
UNCLASSIFIED EMPLOYEES	1,127,000	38,140
SEVERENCE PAYOFF	0	0
WORKERS COMPENSATION INSURANCE	0	0
MISCELLANEOUS PAYROLL	7,000	0
SUBTOTAL	\$ 1,457,000	\$ 49,311
EXPENSES & CONTRACTUAL SERVICES		
RENTS & LEASES	85,000	6,829
REPAIRS/ALTERATIONS/MAINTENANCE	9,000	0
BONDS AND INSURANCE	1,000	0
PRINTING & BINDING	18,000	0
PROFESSIONAL/TECHNICAL SERVICES	54,000	0
DATA PROCESSING & SYSTEM SERVICES	202,500	0
PURCHASED SERVICES	35,000	0
SUBTOTAL	\$ 404,500	\$ 6,829
MISCELLANEOUS OPERATING EXPENSES		
COMMUNICATIONS	27,000	1,006
TRAVEL, IN-STATE	2,000	0
TRAVEL, OUT-STATE	40,000	0
FEES & OTHER FIXED CHARGES	8,000	1,935
SUBTOTAL	\$ 77,000	\$ 2,941
SUPPLIES/MATERIALS/PARTS	39,500	0
CAPITAL EQUIPMENT	35,000	0
TOTAL GENERAL FUND	\$ 2,013,000	\$ 59,081

ATTACHMENT C

STATE BOARD OF INVESTMENT

**Travel Summary by Date
April 16, 1993 - August 15, 1993**

<u>Purpose</u>	<u>Name(s)</u>	<u>Destination and Date</u>	<u>Total Cost</u>
Manager Search International Active Mgrs. Alliance, Clay Finlay, Oeschle, Putnam, Lazard Scudder, BEA	J. Guckeen B. Lehman	New York Boston 4/12-14	\$2,637.23*
Manager Search International Active Mgrs. Barings, Walter Scott, Baillie Gifford, Martin Currie, Bank of Ireland, Hill Samuel, Rowe-Price, Marathon, J.P. Morgan, World Invest, UBS Phillips & Drew, IDS CIGNA	J. Guckeen B. Lehman	London Edinburgh Dublin 4/22 - 5/2	\$4,775.15
Board Member Travel Nat'l Assoc. of State Treasurers Midwest Region	M. McGrath	Chicago 5/12-16	\$997.71
Staff Conference Richards & Tierney Annual Client Conference	H. Bicker	Chicago 5/19	\$609.00
Manager Monitoring Venture Capital KKR Annual Investor Meeting	J. Griebenow	San Francisco 5/24-25	\$477.00

* Revised cost for travel previously reported in June 1993 Board folder.

<u>Purpose</u>	<u>Name(s)</u>	<u>Destination and Date</u>	<u>Total Cost</u>
Manager Monitoring Venture Capital Zell/Chilmark Annual Investor Meeting	J. Griebenow	Chicago 6/1-2	\$708.96
Board Member Travel Minnesota Social Investment Forum	E. Voss	Minneapolis 6/7	\$93.00
Staff Conference Minnesota Social Investment Forum	J. Heidelberg	Minneapolis 6/7	\$105.00
Board Member Travel J.P Morgan Public Funds Synposium	L. Rotenberg	New York 6/15-18	\$1,574.10
Board Member Travel J.P. Morgan Public Funds Symposium	E. Voss	New York 6/16-18	\$1,315.15
Manager Search Venture Capital Blackstone, Weiss Peck & Greer Manager Monitoring Resource Manager First Reserve Investor Meeting	M. Perry	New York 6/16-18	\$503.62
Board Member Travel Nat'l Assoc. of Public Pension Attorneys Annual Meeting	C. Eller	Portland OR 6/22-25	\$1,235.30

<u>Purpose</u>	<u>Name(s)</u>	<u>Destination and Date</u>	<u>Total Cost</u>
Manager Search International Active Mgr. Templeton	J. Guckeen B. Lehman	Ft. Lauderdale FL 6/28	\$2,063.00
Staff Conference Nat'l. Assoc of State Treasurers	H. Bicker	Coeur d'Alene Idaho 7/31 - 8/4	\$1,422.01

Tab D

COMMITTEE REPORT

DATE: September 7, 1993

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

FROM: **Master Custody Review Committee Report**

The SBI's contract with State Street Bank for master custody services expires on September 30, 1993. It is the SBI's practice to review the contract through a request for proposal (RFP) on at least a five year basis.

The RFP was announced in the State Register on May 24, 1993 with responses due by June 25, 1993. RFP's were sent to the eight largest master custody providers in the country as well as two local financial institutions. Responses were received from five vendors:

- Boston Safe Deposit and Trust Company Boston
- Citibank New York
- First Trust National Association St. Paul
- Norwest Bank Minnesota Minneapolis
- State Street Bank and Trust Company Boston

The five responses were evaluated by the Master Custody Review Committee on July 22, 1993 for adherence to RFP requirements, the perceived ability of the vendor to meet the need of the SBI for these services over the next five years, and the cost of the services proposed by the vendor.

A summary of the review process and the individual responses are attached.

CONCLUSION:

Based on its review of the RFP responses, the Committee concluded that State Street Bank and Trust should remain the SBI's custodian:

- **Services.** The Committee believes that State Street will continue to provide "state of the art" custodial services. The quality of its product and services equals or exceeds that of all other respondents.

- **Fees.** On a gross fee basis, State Street's fee proposal was the second lowest for the services required by the SBI. On a net fee basis, State Street will guarantee the SBI a zero net fee. This means that the SBI will be credited with securities lending income at least sufficient to cover all gross fees for the five year life of the contract. In addition, the proposed fee represents a substantially lower fee schedule than that contained in the current contract.
- **Securities Lending.** State Street will provide the SBI with a higher level of indemnification on its securities lending program than all other respondents.

RECOMMENDATION:

The Committee recommends that the SBI authorize the executive director, with assistance from SBI legal counsel, to negotiate and execute a contract with State Street Bank and Trust Company for master custodial services for a five year period ending September 30, 1998.

**MASTER CUSTODY REVIEW COMMITTEE
SUMMARY OF REVIEW PROCESS AND RESPONSES
May - July 1993**

The members of the Master Custody Review Committee were:

Peter Sausen, Chair	Governor's Designee
Christie Eller	State Attorney General's Designee
Jake Manahan	State Treasurer's Designee
Lisa Rotenberg	State Auditor's Designee
Elaine Voss	Secretary of State's Designee
Dave Bergstrom	Minnesota State Retirement System
Judy Hunt	Public Employees Retirement Association

The request for proposals (RFP) for master custody services was announced in the State Register on May 24, 1993 with responses due by June 25, 1993. In addition, RFP's were solicited from ten organizations:

- Bank of New York
- Bankers Trust Company
- * Boston Safe Deposit and Trust Company
- Chase Manhattan Bank
- * Citibank
- * First Trust National Association
- Mellon Bank
- The Northern Trust Company
- * Norwest Bank Minnesota
- * State Street Bank and Trust Company

- * Submitted response to the RFP

The Committee met on July 22, 1993 to discuss the responses. Their evaluation was based on three broad criteria:

- adherence to RFP requirements
- ability to provide all the services delineated in the RFP
- relative costs

The Committee compared the estimated fees for each responder by evaluating both gross fees and net fees:

- **Gross Fees.** Each responder based its gross fees on the size of the SBI account, projected number of transactions, projected number of holdings, projected number of

portfolios and the cost of other services provided by the bank. Gross fees varied widely due to the different methods of charging for custodial services.

- **Net Fees.** Income from securities lending activity is used to offset gross fees. Each responder provided a different estimate of its projected income. In most cases, the projected income was sufficient to completely offset the stated gross fee. In two cases, the proposals also guaranteed a zero net fee, i.e., the bank agreed to absorb any portion of the gross fee that was not completely offset by the SBI's share of lending income.

Boston Safe, Citibank and Norwest were eliminated from consideration due to the high gross fees in their proposals and the lack of any net fee guarantee. These three organizations also failed to provide adequate indemnification of their securities lending programs.

First Trust, although lowest in terms of stated gross fees, provided no indemnification of their securities lending program. In addition, the Committee concluded that the First Trust would not provide a level of service equal to that of the other remaining bidder, State Street Bank.

Based on its review of the RFP responses, the Committee recommended that State Street Bank and Trust should remain the SBI's custodian:

- **Services.** The Committee believes that State Street will continue to provide "state of the art" custodial services. The quality of its product and services equals or exceeds that of all other respondents.
- **Fees.** On a gross fee basis, State Street's fee proposal was the second lowest for the services required by the SBI. On a net fee basis, State Street will guarantee the SBI a zero net fee. This means that the SBI will be credited with securities lending income at least sufficient to cover all gross fees for the five year life of the contract. In addition, the proposed fee represents a substantially lower fee schedule in the current contract.
- **Securities Lending.** State Street will provide the SBI with a higher level of indemnification on its securities lending program than all other respondents.

A summary of the major features of each responder's proposal follows.

**Major Features
Master Custody Responses
1993**

BOSTON SAFE

Industry presence:	Major presence, both domestic and international. Appears fully qualified to provide all requested services. \$87 billion custody assets.
Accounting and reporting system:	Global and domestic fully integrated.
Accounting date:	Trade date, same as industry standard.
Service team:	Integrated domestic and global team. Dedicated group of 16 people.
Indemnification on securities lending:	Qualified. Broker default only.
Securities lending estimate:	\$7.7 million.
Gross fee:	\$3.2 million.
Gross fee ranking:	Third highest (middle) among the proposals.
Est. net fee after securities lending:	Lending income expected to offset fee. Estimated \$4.5 million net income to SBI.
Fee guarantee with lending:	No guarantee.

**Major Features
Master Custody Responses
1993**

CITIBANK

Industry presence:	Major presence, both domestic and international. Appears fully qualified to provide all requested services \$349 billion custody assets
Accounting and reporting system:	Global and domestic both use Citibank but systems are separate
Accounting date:	Trade date, same as industry standard.
Service team:	Separate domestic and global teams. Dedicated group of 12 people.
Indemnification on securities lending:	Qualified. Broker default only.
Securities lending estimate:	\$5.1 million.
Gross fee:	\$5.7 million.
Gross fee ranking:	Highest among the proposals.
Est. net fee after securities lending:	\$0.5 million. Estimated securities lending income is not sufficient to offset entire fee
Fee guarantee with lending:	No guarantee.

**Major Features
Master Custody Responses
1993**

FIRST TRUST

Industry presence:	Not a major presence. No in-house global capacity. \$154 billion for trust assets. Not all custody assets.
Accounting and reporting system:	Global and domestic use different systems. Domestic/First Trust. Global/Bankers Trust.
Accounting date:	Settlement date. (SBI requires trade date, which is industry standard.)
Service team:	Separate teams at two banks. Domestic/First Trust (3). Global/Bankers (?)
Indemnification for securities lending:	None.
Securities lending estimate:	\$6.4 million.
Gross fee:	\$0.6 million. Not clear that all costs are included in fee schedule.
Gross fee ranking:	Lowest among proposals.
Est. net fee with securities lending:	Lending income expected to offset fee. Estimate \$6.4 million net income to the SBI.
Fee guarantee with securities lending:	Fees waived.

Notes: First Trust was unable to meet the 3:00 p.m. deadline for submission on June 25, 1993. Copies of the response were not delivered until 5:30 p.m. that day. "Copier failure" was reason given.

The original fee proposal was incomplete. These summaries use a revised proposal that was received after the submission deadline.

**Major Features
Master Custody Responses
1993**

NORWEST

Industry presence:	Not a major presence. No global capacity in-house. \$122 billion trust assets. Not all custody assets.
Accounting and reporting system:	Global and domestic use different systems. Domestic/Norwest. Global/Morgan Stanley.
Accounting date:	Domestic/trade date Global/settlement date.
Service team:	Separate teams at two banks. Domestic/Norwest (5). Global/Morgan (?).
Indemnification on securities lending:	Qualified. Broker default only.
Securities lending estimate:	None provided.
Gross fee:	\$3.7 million.
Gross fee ranking:	Second highest among the proposals.
Est. net fee with securities lending:	None provided.
Fee guarantee with lending:	No guarantee.

**Major Features
Master Custody Responses
1993**

STATE STREET

Industry presence:	Major presence, both domestic and international. Appears fully qualified to provide all requested services. \$191 billion custody assets.
Accounting and reporting system:	Global and domestic under one system.
Accounting date:	Trade date accounting.
Service team:	Integrated domestic and global team. Dedicated group of 15 people.
Indemnification on securities lending:	Highest level among responders. Covers both broker and issuer default.
Securities lending estimate:	\$5.5 million.
Gross fee:	\$1.7 million.
Gross fee ranking:	Second lowest among the proposals.
Est. net fee with securities lending:	Lending income expected to offset fee. Estimated \$3.9 million net income to SBI.
Fee guarantee with securities lending:	Zero net fee guaranteed, regardless of actual securities lending revenue.

Notes: State Street is the SBI's current custodian. Experience under the current contract has been favorable. Staff believes that State Street has been responsive to the SBI's needs and concerns.

Above fee schedule represents a reduction from current contract.

Tab E

COMMITTEE REPORT

DATE: September 7, 1993

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

FROM: **International Stock Manager Search Committee**

During the last quarter, the International Stock Manager Search Committee conducted a search for active international stock managers. The members of the Committee were:

<i>Name</i>	<i>Representing</i>
Peter Sausen, Chair	Governor Carlson
Christie Eller	State Attorney General Humphrey
Jake Manahan	State Treasurer McGrath
Lisa Rotenberg	State Auditor Dayton
Elaine Voss	Secretary of State Growe
Ken Gudorf	Investment Advisory Council
Malcolm McDonald	Investment Advisory Council

The Committee interviewed ten (10) firms on July 20-21, 1993. All finalists had been approved by the SBI and IAC at their June 1993 meetings (see Stock and Bond Manager Committee report included in the June 1993 SBI/IAC meeting materials):

<i>Firm</i>	<i>Style</i>	<i>Orientation</i>
Baillie Gifford Overseas	Combination	Quality/Value
Bank of Ireland Asset Management	Primarily Bottom Up	Theme/Value
Hill Samuel Investment Advisers	Combination	Value
JP Morgan Investment Management	Combination	Value
Lazard Freres Asset Management	Primarily Bottom Up	Value
Marathon Asset Management	Primarily Bottom Up	Value
Rowe Price-Fleming	Combination	Growth
Scudder, Stevens & Clark	Combination	Theme/Value
Templeton Investment Counsel	Primarily Bottom Up	Value
Walter Scott & Partners	Primarily Bottom Up	Growth

Based on the interviews, questionnaire responses and supporting information gathered by staff and the SBI's consultants, Pension Consulting Alliance/InterSec and Richards &

Tierney, the Committee is recommending that four (4) firms be retained by the SBI at this time:

- Marathon Asset Management
- Rowe Price-Fleming International, Inc.
- Scudder, Stevens & Clark
- Templeton Investment Counsel

A brief profile and summary return history for each firm is attached.

Given the high quality of all the finalists, the Committee's decision was quite difficult. All members noted that an international index such EAFE index is not representative of any of the finalists' investment approaches, but more appropriate benchmarks are not available at this time. It was clear that the manager's decisions regarding Japan had an overwhelming impact on both actual returns and performance attribution analysis relative to EAFE. Since this one factor had a dominant affect on relative returns, it was difficult to assess the managers' overall capabilities based solely on historical returns. All parties involved in the search (Committee members, consultants and staff) pointed out that SBI's tolerance for return volatility will need to be much greater for international managers than it has been for domestic managers.

In order to build a balanced group of international managers for the SBI, the Committee elected to recommend two (2) firms that were primarily "bottom up" stock pickers and two (2) firms that use a combination of "bottom up" stock selection and "top down" country allocation in their investment approaches. This will complement the two (2) existing "top down" managers that use an active country/passive stock approach.

The addition of the new managers will raise the number of managers in the SBI's active international stock program to a total of six (6) firms. As shown below, the entire group should provide broad coverage of the international markets and will represent a variety of investment approaches:

Categorization of Current and Recommended Managers

	Value	Combination	Growth
Top Down	Brinson (1)		Barings (1)
Combination		Scudder (2)	Rowe Price (2)
Bottom Up	Marathon (2) Templeton (2)		

- (1) Current active country/passive stock manager
 (2) New manager recommended by the Search Committee

RECOMMENDATION:

The Committee recommends that the SBI authorize the executive director, with assistance from SBI legal counsel, to negotiate and execute contracts with the following firms for active international stock management:

Marathon Asset Management	London
Rowe Price-Fleming International, Inc.	London
Scudder, Stevens & Clark	New York, NY
Templeton Investment Counsel, Inc.	Fort Lauderdale, FL

Further, the Committee recommends that each firm receive approximately the same initial funding allocation.

Manager: *Marathon Asset Management*

General Style: Primarily Bottom-Up

Orientation: Value

Philosophy:

Marathon uses a blend of flexible, qualitative disciplines to construct portfolios which exhibit a value bias. Portfolios are constructed to outperform from the top down and bottom up. Style and emphasis will vary over time and by market, depending on Marathon's perception of lowest risk opportunity. Control and monitoring of the portfolio risk relative to the benchmark is an integral component of Marathon's structure and investment technique.

Portfolio Management:

Marathon's focus is on stock and industry selection rather than country allocation. Historically, their country divergence from the EAFE index has been small compared to other managers. They do take large sector bets relative to the index however.

Marathon evaluates sectors based on the long term capital cycle in order to find attractive industries. They believe the amount of competition determines industry profitability. They are attracted to industries where the level of competition is declining, and they will hold a sector position as long as the level of competition does not increase. Within these industries, they attempt to identify those companies that will survive industry competition.

On a stock selection level, Marathon focuses on managerial capabilities, return on reinvested cash flow and risk analysis. They use a management reinvestment matrix when analyzing companies. This matrix is a grid which plots a company's competitive position versus the attractiveness of their products. Each company's location on this grid corresponds to a reinvestment strategy. The strategies include such items as "invest and grow" or "manage for cash". They believe any firm will make money if its investment process is the same as the corresponding strategy from the grid. When Marathon analyzes companies, they determine if a company is following the appropriate strategy. They will invest in companies anywhere on the matrix.

Ownership:

Marathon was founded in 1986. There are three directors/partners. These three individuals own 55% of the firm. Sphere Investment Trust plc, a U.K.-based, publicly traded, closed end investment company, holds a passive 45% minority equity position.

ASSETS UNDER MANAGEMENT

Total Firm Assets:	\$656 million
Total International and Global Stock Assets:	\$656 million
Non-US Active Stock Assets (Tax-Exempt):	\$265 million
Number of Non-US Active Stock (Tax-Exempt) Accounts:	6

LARGEST ACCOUNTS

GTE Corporation	\$77.3 million
US Air Inc.	\$65.2 million
Pennsylvania Public School Employees	\$56.9 million

**Marathon London
Summary Returns
Information Provided in Questionnaire Response**

12 Month Period Ending 3/31	Actual*	EAFE**	Difference
1993	16.76%	11.60%	5.16%
1992	-1.24	-8.02	6.78
1991	-1.65	2.51	-4.16
1990	20.71	-11.56	32.27
1989	16.78	11.61	5.17
1988	10.59	16.52	-5.93
1987	N/A	60.83	N/A
1986	N/A	85.17	N/A
1985	N/A	2.06	N/A
1984	N/A	34.86	N/A

Period Ending 3/31/93	Actual*	EAFE**	Difference
Last 1 year	16.76%	11.60%	5.16%
Last 2 years	7.38	1.32	6.06
Last 3 years	4.28	1.71	2.57
Last 4 years	8.17	-1.78	9.95
Last 5 years	9.84	0.76	9.08
Last 6 years	9.96	3.23	6.73
Last 7 years	N/A	9.98	N/A
Last 8 years	N/A	17.38	N/A
Last 9 years	N/A	15.57	N/A
Last 10 years	N/A	17.37	N/A

* before fees

** EAFE "net taxes"

Manager: *Rowe Price-Fleming International, Inc.*

General Style: Combination Top-Down/Bottom-Up
Orientation: Growth

Philosophy:

The firm believes that world stock markets are segmented and valuation disparities exist between and within individual markets. It believes that active portfolio management can add value by identifying and exploiting the pricing inefficiencies which result and which endure over long periods of time. Finally, they believe growth is frequently under priced in world stock markets.

Portfolio Management:

Country weightings and individual stock selections are developed through the interplay between their macroeconomic view and the attractiveness of investment opportunities within each market. The investment process is comprised of four components, each of which is performed continuously. The first stage is a review of the economic outlook. The portfolio Management Team performs an on-going evaluation of key economic variables driving world stock markets. Key variables are interest rate trends and earnings momentum.

The next component is the review of the portfolio profile. The Portfolio Management Team performs an assessment of the country allocation, industry/sector breakdown and the currency profile. Portfolios tend to evolve gradually to reflect the long-term nature of pricing inefficiencies.

The third component is stock selection. This is driven by fundamental analysis. Rowe Price emphasizes companies with above-market earnings growth at reasonable valuations and which are consistent with their economic view. The individual portfolio managers are responsible for stock selection within their regional assignments. They also use growth/value screens appropriate to each market during this portion of the portfolio construction process. The stock selection process is what drives the country allocations.

The final component is monitoring and evaluation, which is done on a weekly basis. Rowe Price does performance analysis to determine the contribution to relative performance from country weightings, currency exposure and stock selection. They monitor strategic changes to the portfolio structure and adherence to client guidelines. They also look at the portfolio risk characteristics.

Ownership:

Rowe Price-Fleming International was incorporated and registered with the SEC in 1979. It has three parent organizations: T. Rowe Price of Baltimore owns 50%; Robert Fleming, a U.K.-based investment management firm owns 25%; and Jardine Fleming, a Hong Kong-based investment arm of Robert Fleming, owns approximately 25%.

ASSETS UNDER MANAGEMENT

Total Firm Assets:	\$8,370 million
Total International and Global Stock Assets:	\$7,143 million
Non-US Active Stock Assets (Tax-Exempt):	\$3,756 million
Number of Non-US Active Stock (Tax-Exempt) Accounts:	40

LARGEST ACCOUNTS*

State of Oregon	\$368 million
General Motors	\$317 million
GTE	\$198 million

* *The firm has \$3,600 million in mutual funds and commingled funds.*

Rowe Price-Fleming International, Inc.
Summary Returns
Information Provided in Questionnaire Response

12 Month Period Ending 3/31	Actual*	EAFE**	Difference
1993	7.74%	11.60%	-3.86%
1992	6.37	-8.02	14.39
1991	2.85	2.51	0.34
1990	16.07	-11.56	27.63
1989	13.55	11.61	1.94
1988	5.65	16.52	-10.87
1987	51.76	60.83	-9.07
1986	76.87	85.17	-8.30
1985	-8.10	2.06	-10.16
1984	32.88	34.86	-1.98

Period Ending 3/31/93	Actual*	EAFE**	Difference
Last 1 year	7.74%	11.60%	-3.86%
Last 2 years	7.05	1.32	5.73
Last 3 years	5.63	1.71	3.92
Last 4 years	8.15	-1.78	9.93
Last 5 years	9.21	0.76	8.45
Last 6 years	8.60	3.23	5.37
Last 7 years	13.92	9.98	3.94
Last 8 years	20.36	17.38	2.98
Last 9 years	16.81	15.57	1.24
Last 10 years	18.32	17.37	0.95

* before fees

** EAFE "net taxes"

Manager: *Scudder, Stevens & Clark*

General Style: Combination Top-Down/Bottom-Up
Orientation: Thematic/Value

Philosophy:

The firm believes that successful international investing requires knowledge of each country's economy, political situation and financial market. Continuous, thorough research of foreign markets and individual securities is essential. They also believe that since foreign markets do not move in step with each other, diversification and moving from areas of overvaluation to under valuation (both by country and industry) add value and reduce volatility.

Portfolio Management:

The investment process focuses on three areas: country analysis, global themes and unique situations. The global themes portion involves the identification and analysis of industries and sectors most likely to gain or lose during specific phases of a theme's cycle. Themes are identified through a group process. This process often involves discussion with management of relevant companies or other external sources.

Country analysis involves the assessment of regional and local market opportunities. They analyze 18 countries, according to five factors. These factors are: strategic factors, position in the world economic cycle, domestic cyclical indicators, internal stock market valuation and currency indicators. Each factor is given a positive, neutral or negative rating. An overall outlook is developed for each country and for groups of countries with similar economic profiles.

Unique situations is the bottom-up portion of the process. To identify individual companies with exceptional opportunities, they look for unique attributes such as growth potential or innovation.

The decision-making process involves taking ideas from the global themes, country allocation and unique situations and integrating them into the company universe. They perform security analysis on this universe, using their own internal research. They look for companies which have consistent or above average earnings, potential for dividend growth, strong financial ratios, above average return on capital, strong or improving balance sheets, superior management and conservative accounting practices, dominant position in growing industries and satisfactory marketability.

Ownership:

Scudder is a New York based firm which was founded in 1919. It is 100% owned by its employees.

ASSETS UNDER MANAGEMENT

Total Firm Assets:	\$82,307 million
Total International and Global Stock Assets:	\$5,506 million
Non-US Active Stock Assets (Tax-Exempt):	\$1,802 million
Number of Non-US Active Stock (Tax-Exempt) Accounts:	25

LARGEST ACCOUNTS

Public Pension	\$213 million
Public Pension	\$155 million
Public Pension	\$124 million

**Scudder
Summary Returns
Information Provided in Questionnaire Response**

12 Month Period Ending 3/31	Actual*	EAFE**	Difference
1993	11.15%	11.60%	-0.45%
1992	3.17	-8.02	11.19
1991	-1.03	2.51	-3.54
1990	22.03	-11.56	33.59
1989	12.97	11.61	1.36
1988	4.77	16.52	-11.75
1987	50.41	60.83	-10.92
1986	84.02	85.17	-1.15
1985	1.44	2.06	-0.62
1984	34.56	34.86	-0.30

Period Ending 3/31/93	Actual*	EAFE**	Difference
Last 1 year	11.15%	11.60%	-0.45%
Last 2 years	7.09	1.32	5.77
Last 3 years	4.31	1.71	2.60
Last 4 years	8.48	-1.78	10.26
Last 5 years	9.37	0.76	8.61
Last 6 years	8.59	3.23	5.36
Last 7 years	13.76	9.98	3.78
Last 8 years	20.81	17.38	3.43
Last 9 years	18.49	15.57	2.92
Last 10 years	20.00	17.37	2.63

* before fees

** EAFE "net taxes"

Manager: *Templeton Investment Counsel, Inc.*

General Style: Primarily Bottom-Up
Orientation: Value

Philosophy:

The firm's goal is to identify those companies selling at the greatest discount to future intrinsic value, which over time will produce the greatest share price with minimal risk. They take a long-term approach to investing, believing that on a long-term basis, markets are efficient and patience will reward those who have identified undervalued stocks. Historically, Templeton has taken very large "bets" relative to EAFE.

Portfolio Management:

Portfolios are structured completely from a stock selection orientation. The primary factor that they look at is a company's current price relative to its future or long term earnings potential or real book value, whichever is appropriate. The stock selection process begins with identifying undervalued securities. This initial work is performed through two sources: ideas from their worldwide network of research sources and screens of their proprietary global database. This initial work provides a list of potentially attractive stocks upon which further analysis is performed.

Once this preliminary list has been developed, the fundamental analysis is done by their analysts. The analysts' job is to distinguish a "cheap" stock from a "bargain". Analysts focus on those factors which may cause earnings and/or assets to increase over the next five years. A stock must also be "cheap" relative to itself historically, its industry globally, other names in its own market, and other names in the research database. The best ideas from the research database are then submitted for inclusion on the "Bargain List". The analysts/portfolio managers generate their stock recommendations, which are presented along with supporting information to their peers for consideration and inclusion on the bargain list. Each stock on the bargain list has an established buy limit and sell target. The bargain list is used to construct all their portfolios.

The normal concentration in a single stock ranges from 1% to 5%. All portfolios are similar and have the same underlying characteristics: low turnover, median variability, low risk, median market capitalization, and dissimilar country/sector weightings from the established indices. Country weightings for a portfolio are the residual of stock selection, as stocks are chosen from the bargain list at the designated price limits. Sector and industry weights are also a residual of stock selection.

Ownership:

Templeton, Galbraith, & Hansberger, LTD (Nassau) is the parent company of Templeton Investment Counsel (Ft. Lauderdale). There are additional research offices in Edinburgh, Toronto, Hong Kong, Melbourne and Singapore.

ASSETS UNDER MANAGEMENT

Total Firm Assets:	\$22,341 million
Total International and Global Stock Assets:	\$19,838 million
Non-US Active Stock Assets (Tax-Exempt):	\$1,787 million
Number of Non-US Active Stock (Tax-Exempt) Accounts:	24

LARGEST ACCOUNTS*

Separate Account	\$193.4 million
Separate Account	\$130.6 million
Separate Account	\$123.0 million

* *The firm has \$1,888.4 million in a mutual fund.*

**Templeton International
Summary Returns
Information Provided in Questionnaire Response**

12 Month Period Ending 3/31	Actual*	EAFE**	Difference
1993	6.80%	11.60%	-4.80%
1992	9.60	-8.02	17.62
1991	2.00	2.51	-0.51
1990	18.60	-11.56	30.16
1989	26.80	11.61	15.19
1988	9.20	16.52	-7.32
1987	43.30	60.83	-17.53
1986	62.30	85.17	-22.87
1985	-2.30	2.06	-4.36
1984	62.50	34.86	27.64

Period Ending 3/31/93	Actual*	EAFE**	Difference
Last 1 year	6.80%	11.60%	-4.80%
Last 2 years	8.20	1.32	6.88
Last 3 years	6.10	1.71	4.39
Last 4 years	9.10	-1.78	10.88
Last 5 years	12.40	0.76	11.64
Last 6 years	11.90	3.23	8.67
Last 7 years	15.90	9.98	5.92
Last 8 years	20.90	17.38	3.52
Last 9 years	18.10	15.57	2.53
Last 10 years	21.90	17.37	1 53

* before fees

** EAFE "net taxes"

Tab F

COMMITTEE REPORT

DATE: September 7, 1993

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

FROM: **Joint Committee**
Asset Allocation Committee
Stock and Bond Manager Committee

The Asset Allocation and Stock and Bond Manager Committees met jointly on August 12, 1993 to discuss two topics:

- Constraints on the performance of the Basic and Post Retirement Funds
- Revisions to the Manager Continuation Policy

Due to the importance of both items, all members of the Investment Advisory Council (IAC) were notified of the meeting. Twelve of the seventeen IAC members were able to attend and voted on the recommendations contained in this report. In addition, three Board members and four Board member designees attended the meeting and participated in the discussion.

The Asset Allocation Committee convened again on August 23, 1993 to finalize the recommendations on fund constraints that were discussed at the meeting on August 12, 1993.

FUND CONSTRAINTS

At the State Board of Investment (SBI) meeting on June 2, 1993, the Board tabled consideration of the Asset Allocation Committee's report concerning the adoption of total fund objectives for the Basic, Post and Combined Funds. Instead, the Board directed the Investment Advisory Council and staff to bring the information described below to the September 1993 meetings.

Summary of Discussion at the June 2, 1993 SBI Meeting

State Auditor Dayton stated that he believed that the Investment Advisory Council and SBI staff should layout the reasons why the funds should not be expected to achieve more than median fund performance. He said he was not satisfied that this issue has been explicitly addressed by the Board, IAC or staff to date. Governor Carlson also asked that information be presented which compares the performance of corporate pension plans with the performance of the SBI's portfolios. He said he was particularly interested in the

performance of pension funds represented on the IAC and other companies from the Twin Cities area.

After discussion, the Board agreed that staff and the IAC should specify the constraints on fund performance and discuss ramifications of sustaining, modifying or lifting those constraints. The Board's goal was to review this information at its September 1993 meeting and to affirm its current positions or adopt new policies.

The material prepared by staff for the August 12, 1993 meeting on this topic is attached. Staff provided its analysis and recommendations in each of five categories of constraints:

- statutory limits
- asset allocation policy
- active/passive mix
- investment restrictions
- operating environment

The recommendations of the Committees are contained in this committee report.

Summary of Findings and Conclusions

The Committees reviewed the performance of the Basic Funds versus the returns of other pension funds, both public and corporate. Overall, the SBI's returns compare very well to the funds that report to the Trust Universe Comparison Service (TUCS) for the period ending June 30, 1993:

- near top third over 3 years (38th percentile) including alternative assets
- near top third over 5 years (35th percentile) including alternative assets

It should be noted that the SBI reports returns *after* fees have been deducted while TUCS uses returns *before* fees. If the SBI's returns were reported before fees, the Basic Funds' universe rankings would be *higher* than those shown above.

While the SBI's recent returns compare favorably with other investors, Committees/staff concluded that the SBI can increase the *potential* for attaining higher returns *if* the Board is willing to take on higher risk/more volatility in returns. Committees/staff considered two avenues:

- **Employ a more aggressive asset allocation with a higher percentage of stock and alternative assets.** Since asset allocation determines 90% or more of an investor's returns, this is the most direct route to higher performance. Committees/staff suggest that the Board focus on policy changes in these areas if it wishes to increase long term returns.
- **Utilize a more aggressive asset management structure that relies more on active management than passive management.** Since asset management decisions (e.g.,

how much active vs. passive, which managers) provide 10% or less of a fund's return, policy changes in this area will have a much smaller impact on overall performance.

During the discussion, several Committee members underscored the large impact that the Board's asset allocation decision has on fund returns. Members noted that the Board/IAC spend a disproportionately large amount of time on asset management decisions (e.g., manager search, manager evaluation) that will have a relatively small impact on overall fund returns. They urge the Board/IAC to keep this relationship in mind in the future.

RECOMMENDATIONS ON FUND CONSTRAINTS

1. *Statutory Limits.* The SBI should seek legislation that will increase its flexibility in asset allocation decisions and have the potential to increase long term returns:

- a) **Re-establish authority to invest in unrated debt and below investment grade debt. The Committees recommend a statutory amendment that would allow up to 5% of a fund to be invested in these assets, provided certain limits are placed on the individual issues that could be purchased. Specifically, the statute should provide that the SBI may purchase no more than 50% of a single debt issue in these categories and no more than 25% of the outstanding debt of a given company. (This change is considerably more restrictive than the authority that the SBI had before 1992 when a bill proposed by the State Auditor eliminated all authority in this area. The previous statute allowed up to 35% of a portfolio in unrated debt or below investment grade debt and there were no limits on the amount of an individual issue that could be held.)**
- b) **Remove international securities from the 35% cap placed on alternative assets and delete all references to "US and Canadian" securities in the current statute. (This would put international investments under the same guidelines as domestic securities.)**

2. *Asset Allocation Policy.* The SBI should adopt the asset allocation targets for the Basic and Post Funds described in *Attachment A.*

The Committees recognize that the Board must make incremental changes to its asset allocation policy due to size of the assets under SBI's control and the lengthy decision making processes that are part of public fund management. As a result, the Committees believe that the following changes are appropriate over the next 1-2 years, based on risk/return considerations and on practical constraints of time and budget. The Committees expect that the additional changes recommended by staff in the attached materials should be actively considered by the Board/IAC within 2-4 years.

- ***International stocks.* The Asset Allocation Committee agrees with the staff recommendation to add a 10% allocation to international stocks in the Post Fund**

with a commensurate decrease in bonds. The 10% allocation to international stocks in the Basic Funds should not be raised at this time. (Members urge the Board to increase its allocation to international stocks in both funds in future years.)

- *Alternative assets.* The Asset Allocation Committee agrees with the staff recommendation to add a 5% allocation to yield oriented alternative investments in the Post Fund with a commensurate decrease in bonds. The 15% allocation to equity oriented alternative investments in the Basic Funds should not be raised at this time, but the alternative asset target should be defined as "market value" rather than "market value plus unfunded commitments." In order to cap the total potential exposure to alternative assets, the Committee recommends that no new commitments to alternative assets be made if the market value of current investments plus the unfunded commitments reaches 20% of the Basic Funds.
 - *Global bonds.* Staff recommended that the Board consider allocations to global bonds in both the Basic and Post Funds within 3-4 years. The Asset Allocation Committee strongly urges the SBI to move more rapidly in order to take advantage of the current differentials in interest rates around the world. The Committee recognizes the SBI's time constraints, but recommends that SBI staff be directed to develop an interim implementation plan for global bond investments without the consideration of a formal position paper and normal process used in manager searches. One option that should be considered is authorizing the SBI's current bond managers to invest a portion of their portfolios in non dollar bonds. This would allow a modest commitment to global investing without necessitating a new, timing consuming manager search process.
3. *Active/Passive Mix.* **The SBI should re-affirm its existing policies on active/passive mix (i.e., domestic stock segment at least half passive, domestic bond segment at least half semi-passive, international stock segment no more than half passive).** The half active/half passive approach used for stock and bond investments represents a good balance between the opposing risks and rewards of each approach:
- *Active management* provides the opportunity to add value. While the amount is relatively small compared to the returns that come from asset allocation, the dollar impact can still be significant for the total portfolio. However, active management increases the volatility of returns and the Board can never be certain that its active managers will in fact add value over time.
 - *Passive management* provides greater certainty of returns. While these returns will be more consistent than active management, transactions costs and management fees virtually assure that the passively managed portfolios will under perform the target index over time.

The structure also reflects the administrative realities of managing large sums of money. The Committees agree with staff's conclusion that the universe of active managers capable of handling accounts of \$200-800 million is somewhat limited. In addition, there are practical limits on the number of managers that can be monitored and evaluated effectively by the staff/IAC. The half active/half passive structure addresses these constraints on a practical level.

4. ***Investment Restrictions.*** The SBI should act in a timely manner to remove all investment restrictions, except those resulting from objective risk/return considerations or required by statute. (This is a re-affirmation of a motion made by the IAC in December 1992 on this issue.)
5. ***Operating Environment.*** No changes in the operating policies and procedures of the SBI are recommended at this time. The current structure has evolved over time in response to the needs expressed by the Board or demanded by the public nature its business. However, all parties must recognize that the SBI's process and procedures will be slower and more time consuming than the operations of a typical corporate pension plan structure. While the impact of this structure is difficult to quantify in terms of return, it will always be a constraint on the management of the funds under the control of the SBI.

MANAGER CONTINUATION POLICY

The Board's Manager Continuation Policy has been under discussion for some time. In June 1993, the full IAC tabled a staff proposal which had been endorsed by the Asset Allocation and Stock and Bond Manager Committees due to concerns raised by members of the Council. Further discussion on the policy has occurred during the last quarter, and the Committees are recommending a new proposal to the SBI/IAC in this committee report.

Qualitative Guidelines

There is general consensus that the qualitative guidelines in the current Manager Continuation Policy are appropriate and should not be modified at the present time.

Those guidelines state that certain events in a manager's organization or investment approach should place a firm "on probation" and dictate a prompt re-evaluation of the Board's relationship with the firm:

- change in the firm's ownership or important members of its management team
- change in the manager's investment style or philosophy
- inability to create or maintain an appropriate benchmark portfolio
- significant gain or loss of accounts over the previous year

A firm should remain on probation for qualitative reasons no longer than six months. The manager should be terminated if the issues are not resolved satisfactorily within that time.

Quantitative Guidelines

Reaching a consensus on the quantitative guidelines that should be used to evaluate manager performance has been much more difficult. A summary of current policy and recent proposals follows.

Summary of Current Policy:

The current policy focuses on performance relative to an agreed upon benchmark and uses a confidence interval to evaluate the value of active management (VAM). The confidence interval bands are calculated so that there is an 80% probability that a manager's return will fall within the bands and a 20% probability that it will fall outside the bands (10% above, 10% below). Performance that plots below the lower band mandates termination. Performance that is below the benchmark return over the most recent five years requires an in-depth written review by staff.

Summary of June 1993 Proposal:

The proposal discussed (but not accepted) at the June 1993 meeting of the IAC would have moved the focus from a cumulative time frame to the most recent five years. The confidence interval would continue to be calculated on a 80/20 basis. Performance that falls below the lower band of a five year rolling confidence interval would require an in-depth written review of the manager by staff and a formal re-interview by the Stock and Bond Manager Committee of the IAC. The end result would be a specific recommendation to continue or terminate a manager.

Alternatives Considered:

The Committees reviewed three additional alternatives: one that was prepared by a group of IAC members and the office of the State Auditor and two that were prepared by SBI staff. In response to concerns raised by some IAC members at the June 1993 meeting, each of the alternatives shortened the time frame (usually three years rather than five years) that would trigger a review. In some cases, the alternatives suggested narrowing the confidence intervals used in the VAM analysis. In addition, more focus was placed on performance that falls below a benchmark line over some period of time rather than on performance that falls below the lower band of the confidence interval. The three alternatives are described in the materials starting on page 2 of the background materials on this topic.

The Committees discussed each of the alternatives and combined elements from several proposals in making their recommendation. The final recommendation most closely follows the proposal labeled as "Alternative #2" in the attached materials. The Committees recommend using five year rolling periods (Alternative #2 suggested rolling three years) and drawing the confidence interval on an 80/20 basis (Alternative #2

suggested using narrower, 50/50 bands). The proposal recommended by the Committees is described more fully below.

Proposal Recommended by the Committees:

After reviewing all the alternatives presented for consideration, the Committee is recommending the following outline for the quantitative guidelines in the Manager Continuation Policy.

- **Quarterly commentaries from the managers to highlight active manager decisions and organizational changes.**

Each quarter, each manager will prepare a brief analysis (no more than 1 1/2 pages) of its own performance over the last quarter and year. This will include a description of active bets, the philosophy/outlook underlying those bets and explanation of what worked and did not work. In addition, the manager will highlight any significant ownership and personnel changes along with information about accounts gained and lost.

Staff comments (no more than 1/2 page) will be added which state whether the SBI staff/consultant attribution analysis confirms or disputes the manager's description of its active bets. Staff will also comment on the significance or insignificance of the organizational changes described by the manager.

The proposed format for this commentary is illustrated on page 9 of the background materials on the Manager Continuation Policy. The Committees recommend that this information be included in each quarterly Board folder for each active and semi-passive manager (domestic stock, domestic bond, international stock). This report will replace the one page "Investment Commentaries" that now appear in the Board folder each quarter.

The purpose of the new commentary is to convey more information about, *and directly from*, each manager to the IAC/SBI on a regular basis. It will summarize the analysis that staff already conducts on an on-going basis for each firm.

- **Rolling five year, 80/20 VAM graph to highlight performance concerns.**

Value of active management (VAM) graphs will be calculated on an 80/20 basis using rolling five year time periods for all active managers (domestic stock, domestic bond and international stock). The graph will plot performance relative to the agreed upon benchmark and *will include the performance history that led the SBI to retain the firm as well as the SBI's actual experience*. Graphs will not be produced for the first five years of a manager's tenure with the SBI. When produced, the graphs will include up to ten years of performance history. An example VAM report is illustrated on page 11 of the background materials on the Manager Continuation Policy.

Including a longer time period in the graph should put manager evaluation into a larger context and assist in distinguishing unusual, deteriorating performance from recurring patterns in an active manager's returns. The confidence interval will be wider or narrower depending on the level of active risk that a manager takes. As a result, the confidence interval will tailor the analysis to the manager's own investment approach and would establish/define expectations regarding a manager's return volatility over time.

- **Review by Stock and Bond Manager Committee required if performance plots below the benchmark line for one year.**

Any manager whose performance plots below the benchmark line on its VAM report for one year will be reviewed by the Stock and Bond Manager Committee during the following quarter. In each case, the Committee will review the last 4-8 quarterly commentaries from the manager and decide if further action is warranted at that time. The Committee may also request additional analysis by the SBI staff or consultant to assist in the review. The additional requests will be specified by the Committee so that the analysis can be tailored to the information needs of the Committee.

The review will result in a recommendation to watch performance closely over the next year, to meet with the manager to discuss the issue or to call for a formal re-interview of the manager. The Committee will need to re-affirm its findings if performance continues to lag the benchmark.

All recommendations will be reported to the full IAC. It is anticipated that the IAC and the Board will endorse the recommendations of the Stock and Bond Manager Committee since the Committee will have studied the issue most closely. However, the full IAC may choose to recommend another course of action by majority vote. Likewise, the Board may accept, reject or modify any recommendation from the Committee or the IAC.

- **Re-interview by special committee required if performance falls below the lower band for one year.**

Performance that plots below the lower band of the confidence interval of the VAM report will be considered a signal of serious under performance. If performance continues to plot below the lower band for one year, the manager would have to be formally re-interviewed using the process described below.

- **Re-interview process.**

Any re-interview, whether called for by the staff, the Stock and Bond Manager Committee, IAC or SBI, or required because performance falls below the lower band for one year, will be conducted by a special committee. The chair of the Stock and Bond Manager Committee will serve as the chair of the special committee. At least one other member of the Stock and Bond Manager Committee will serve on the committee along with at least three Board member designees. This will provide a committee of at least 5 members. The flexibility on membership is needed to assure that the re-interview can be conducted in a timely fashion.

The Committee will use the same process that is currently applied to hiring new managers. The performance analysis should compare the SBI's actual experience with the performance of the firm's account composite that complies with the new performance presentation standards of the Association for Investment Management and Research (AMIR). These are the returns that should be used in most marketing/search presentations. Any significant differences in performance between the composite and the SBI's actual returns should be explained.

- **Information to be included in the Board Folder.**

The Board folder material proposed for each manager and the information to be displayed on the entire manager pool/asset class segment is illustrated on page 12 of the background materials on the Manager Continuation Policy.

- **Other Reports to be prepared by Staff.**

Annual Benchmark Review. Staff will prepare an annual review of all domestic stock manager benchmarks. This written analysis will be presented to the Stock and Bond Manager Committee and will focus benchmark quality. Since benchmark quality is confirmed, in large part, by statistical tests, a statistical discussion should be included. Staff will include such discussions in appendices where possible and focus on the conclusions drawn from the statistical analysis in the cover memo/summary of the report. (A similar analysis for domestic bond managers and international stock managers is not necessary *at this time* since they use market indices rather than customized benchmarks for evaluation purposes.)

Reports on Manager/Staff Meetings. Staff will meet with each manager at least annually, either at SBI offices or at the manager's place of business. Any comments on the meetings will be incorporated into the "staff comment" section of the quarterly report from each manager described above.

In-Depth Reviews. Staff will prepare an in-depth review on a manager if a manager is placed on probation for qualitative reasons or if a manager is to be re-interviewed.

While the components of the review can be tailored for each manager, staff expects that such a review would include:

- *Organizational background.* Ownership, professional staff, account growth, staff turnover.
- *Investment approach.* Philosophy, prominent characteristics, perceived changes in approach over time.
- *Performance analysis.* Performance attribution relative to the benchmark, perceived trends in sources of value added/lost.

RECOMMENDATION

The Committees recommend that the SBI adopt the quantitative guidelines described above. Staff should be directed to formally revise the SBI's written Manager Continuation Policy accordingly.

ATTACHMENT A

RECOMMENDED ASSET ALLOCATION

	Basic Funds		Post Fund	
	<i>Curr. Policy</i>	<i>Next 1-2 Yrs.</i>	<i>Curr. Policy</i>	<i>Next 1-2 Yrs.</i>
Stocks	60	60	50	60
Domestic	50	50	50	50
International	10	10	--	10
Alternative assets	15 (1)	15 (2)	--	5 (3)
Real estate	7-8	7-8	--	--
Private equity	7-8	7-8	--	--
Yield oriented*	--	--	--	5*
Subtotal	<u>75</u>	<u>75</u>	<u>50</u>	<u>65</u>
Bonds	24	24	47	32
Domestic	24	(4)	47	(4)
Global**	--	(4)**	--	(4)**
Cash	1	1	3	3
Total	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>

Expected Return (5)

High (6)	22.40	22.48	20.34	21.14
Median	10.29	10.32	9.44	9.69
Low (6)	-1.82	-1.84	-1.46	-1.76

Standard Deviation	12.11	12.16	10.90	11.45
--------------------	-------	-------	-------	-------

* may not be possible without authority for unrated debt

** would exceed statutory limits if more than 10% was in non-dollar bonds

- (1) at market value plus unfunded commitments, focused on equity oriented vehicles
- (2) at market value, focused on *equity* oriented vehicles (e.g. equity real estate, private equity)
- (3) at market value, focused on *yield* oriented vehicles (e.g. mortgage real estate, business loan participations, income producing real assets such as timber)
- (4) should include global bonds as soon as possible
- (5) assumes 5.5% inflation
- (6) one standard deviation away from the median

**Background Materials
on
Fund Performance/Constraints**

		Page
	Introduction	1
Attachment A	Statutory Framework	5
Attachment B	Asset Allocation Policy	15
Attachment C	Management Structure (Active/Passive Mix)	23
Attachment D	Investment Restrictions	31
Attachment E	Operating Policies and Procedures	37

DATE: July 30, 1993

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

FROM: Howard Bicker
Beth Lehman

SUBJECT: Total Fund Performance/Constraints

At the State Board of Investment (SBI) meeting on June 2, 1993, the Board tabled consideration of the Asset Allocation Committee's report concerning the adoption of total fund objectives for the Basic, Post and Combined Funds. Instead, the Board directed the Investment Advisory Council (IAC) and staff to bring the information described below to the September 1993 meetings.

The Asset Allocation and Stock & Bond Manager Committees of the IAC are meeting on Aug. 12, 1993, from 8:30 a.m. to 12:00 noon in the SBI Conference room to discuss these issues. All members of the SBI and IAC have been notified of the meeting and are encouraged to participate in the discussion.

Summary of Discussion at the June 2, 1993 SBI Meeting

State Auditor Dayton stated that he believed that the Investment Advisory Council and SBI staff should layout the reasons why the funds should not be expected to achieve more than median fund performance. He said he was not satisfied that this issue has been explicitly addressed by the Board, IAC or staff to date. He asked that the staff and IAC fully explain the following statement that appeared in the most recent report of the Asset Allocation Committee (see Tab F page of the June 1993 Board folder for the full report):

"At the March 1993 meetings, the Asset Allocation Committee discussed whether or not the goal of exceeding the median fund in the TUCS is an appropriate objective. In the past, Board members have suggested higher goals (e.g. performance in the top third of all pension funds) and have asked what changes would need to be made to reach such a goal. The Committee stated that it believes the current objective to exceed the performance of the median fund over moving 5 year periods is an aggressive goal for the Funds given their current constraints. Members believe that higher rankings against other pension funds are not realistic given the historical asset allocation targets approved by the Board."

Governor Carlson also asked that information be presented which compares the performance of corporate pension plans with the performance of the SBI's portfolios. He

said he was particularly interested in the performance of pension funds represented on the IAC and other companies from the Twin Cities area.

After discussion, the Board agreed that staff and the IAC should specify the constraints referenced in the Asset Allocation Committee report and discuss ramifications of sustaining, modifying or lifting those constraints. The goal is for the Board to review this information at its September 1993 meeting and to affirm its current positions or adopt new policies.

Public vs. Corporate Pension Plan Performance

As noted above, members of the Board asked for comparisons of public and corporate pension plan performance. While SBI staff does not have access to the performance of individual plans, aggregate information is available through the Trust Universe Comparison Service (TUCS).

As shown below, the performance of the Basic Funds is well above the median of all funds and of corporate funds over the last 3 and 5 year periods. *It should be noted that TUCS reports returns before fees.* If the SBI's returns were reported before fees, the performance of the Basic Funds would be approximately 30 basis points (0.3%) *higher*:

Comparison of Total Fund Performance Periods Ending March 31, 1993

	1 Yr.	3 Yrs.	5 Yrs.
Basic Funds (after fees)			
total fund	12.2%	12.6%	12.8%
without alt. assets	14.8	13.5	13.6
TUCS Universe * (before fees)			
all funds: median	13.2%	12.2%	12.2%
top quartile	14.5	13.4	13.1
public only: median	13.7%	12.1%	11.8%
top quartile	14.7	13.5	13.0
corporate only: median	13.1%	12.1%	12.2%
top quartile	14.2	13.3	13.2

* The Master Trust portion of the Trust Universe Comparison Service (TUCS) includes returns from approximately 270 corporate pension plans, public pension plans and endowment funds.

Concerns About Universe Comparisons

While it is natural to want to know how the SBI's returns compare to other pension investors, universe data should be used with great care. There are several reasons why universe comparisons will provide an "apples to oranges" look at performance:

- **Differing Treatment of Fees.** As noted above, TUCS reports returns before fees while the SBI reports returns net of fees. This puts the SBI at considerable disadvantage in universe comparisons from the outset.
- **Differing Allocations.** Asset allocation will have a dominant effect on return. In March 1993, the allocation to stocks among the funds reported to TUCS ranged from 22% - 87%, a very wide range for meaningful comparison. In addition, it appears that many funds do not include alternative asset holdings in their reports to TUCS. This further distorts comparisons among funds.
- **Differing Goals/Liabilities.** Each pension fund structures its portfolio to meet its own liabilities and risk tolerance. This will result in different choices on asset mix. Since asset mix will largely determine investment results, a universe ranking is not relevant to a discussion of how well a plan sponsor is meeting its long term liabilities.

Types of Constraints

Several types of constraints influence the performance of the funds managed by the SBI. The Board can control, or at least influence, the factors in each category shown below. The attachments to this memo provide background information on each category. Where appropriate, they also address performance expectations relative to actual results:

		Page
Attachment A	Statutory Framework	5
Attachment B	Asset Allocation Policy	15
Attachment C	Management Structure (Active/Passive Mix)	23
Attachment D	Investment Restrictions	31
Attachment E	Operating Policies and Procedures	37

Dates of Last Policy Review

The information in the attachments covers a wide range of policies that have been adopted by the Board. For your reference, a listing of the SBI's major policies and the date of last review by the Board is shown below:

Policy/Issue

Statutory authority

Last Review

Reviewed annually before each legislative session. Last major change was removal of authority to purchase unrated debt and below investment grade debt in 1992.

Investment objectives for Basic and Post

Currently under discussion.
Previous reviews in Sept. 1991 for Basic, Jan. 1989 for Basic and Post.

Asset allocation for Basic Funds

Sept. 1991

Asset allocation for Post Fund

June 1992

Active/passive mix

June 1990

Use of benchmarks

June 1990

Use of tilted index fund to control style bias

June 1990

Return expectations by asset class

June 1992

Manager Continuation Policy

Currently under discussion.
Original policy adopted in March 1988.
Revised in June 1990.

Prohibition on liquor and tobacco stocks

March 1993. Lifted as of 4/1/93.

Prohibition on American Home Products

October 1979

Restrictions on South Africa-related stocks

June 1993. Impact with respect to international stocks was discussed in the position paper that was adopted in Sept. 1992.

Country guidelines for international stocks

Dec. 1992

ATTACHMENT A

STATUTORY FRAMEWORK

Corporate Plans: ERISA and Prudent Expert Standard

All corporate pension plans operate under the federal law contained in the Employee Retirement Income Security Act of 1974 (ERISA). ERISA states that all investments must be undertaken for the sole benefit of the beneficiaries of the plan and allows plan sponsors to undertake investments according to the "prudent expert" rule contained in section 404 (a)(1) of the act. ERISA requires the fiduciary to discharge his/her duties:

...with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent [person] acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims...

The focus of this standard is on the entire investment portfolio and total portfolio objectives. It does not specify any minimum or maximum percentage allocations to individual asset classes and does not address specific quality criteria regarding individual securities.

Minnesota and Other Public Plans: Prudent Person Standard and Legal List

Public funds do not operate under ERISA. Rather, most states have adopted statutes that allow their plans to operate under a "prudent person" standard. Minnesota has codified the following language in *Minnesota Statutes* section 356A.04. It states that a fiduciary:

... shall act in good faith and shall exercise that degree of judgment and care, under the circumstances then prevailing, that persons of prudence, discretion, and intelligence would exercise in the management of their own affairs, not for speculation, considering the probable safety of the plan capital as well as the probable investment return to be derived from the assets...

Many states, including Minnesota, further define the investment authority of public funds by enacting a "legal list" of authorized asset classes along with other constraints regarding the form of those investments. The SBI's legal list is contained in MS 11A.24 (Attached).

While Minnesota's legal list is quite broad, it does not allow the following investments that would be possible under either a prudent expert or prudent person standard:

- no more than 85% in equity (domestic common stocks plus alternative investments) in any one fund
- no more than 35% in alternative investments in any one fund. (Currently, real estate, venture capital, resource funds and international securities are defined as alternative investments in statute.)
- no authority to make direct investments in real estate, venture capital and resource funds (i.e., investments in these asset classes must be made through commingled funds or limited partnerships along with at least four other investors)
- no authority to invest in below investment grade debt (a.k.a., high yield debt or junk bonds)*
- no authority to invest in unrated debt*

* *Prior to 1992, these were included as alternative investments and allowed, subject to the 35% limit. A bill proposed by the State Auditor and passed by the 1992 Legislature removed the SBI's authority to invest in these securities.*

Comments on each of the existing statutory constraints follow:

1. **85% limit on equities.** Staff does not believe that the 85% limit on equities needs to be modified at the present time. The current statutory limit imposes no real constraint since it is unlikely that the Board would endorse, or that the staff would recommend, investments beyond this limit. Given the nature of the funds under its control, it is appropriate that at least 15% of a pension fund be invested in fixed income securities. However, staff does recommend that the definitions of certain securities included under this limit be modified.
2. **35% limit on alternative investments.** Staff believes that the 35% limit on alternative investments, as currently defined, will limit the Board's future asset

allocation decisions. The Basic Funds have a 25% allocation in this area now (15% real assets and private equity, 10% international stocks). While these assets present greater risk, they also afford the potential for higher return and provide additional diversification. Staff believes that the Board should increase its allocations to private equity and international stock. In addition, the SBI should consider allocations to other types of securities that are, or have been, statutorily defined as "alternative investments." This would include international bonds, unrated debt, high yield debt, timber, land and other resource based assets. Therefore, it is likely that the Board will consider allocations at or above the 35% level within the next 2-4 years. Either the list of assets included in the 35% cap should be changed or the cap itself will need to be raised.

3. **Direct investment authority for real estate, venture capital and resource investments.** "Direct investment" means that a plan sponsor would be the primary owner or investor rather than a limited partner or a commingled fund participant. At the present time, staff does not believe that it is necessary to change the current statutory constraints on the form of these investments. If they were not imposed by statute, staff would be likely to ask the Board to maintain the same restrictions as a matter of policy or as part of its due diligence considerations. Staff believes it would be inappropriate for the SBI to assume the general liability that would be implicit in direct investing. Further, it is unlikely that the SBI could maintain the expertise necessary to make and monitor such investments on an on-going basis.

4. **Authority to purchase unrated debt.** "Unrated debt" is issued by companies that choose not to obtain a rating from a nationally recognized rating agency such as Standard & Poor's or Moody's. Data provided by J.P. Morgan shows that unrated debt comprises approximately 40% of the total domestic debt market in 1992. (Total domestic fixed income: \$7.8 billion. Unrated debt: \$3.0 trillion.) Historically, unrated debt has carried a higher coupon/interest rate than comparable rated debt (J.P. Morgan data estimates 0.4-0.6% higher). This means additional return for no additional risk. Absolute prohibitions on this type of security do not allow the SBI to take advantage of this potential for increased return. In addition, this prohibition makes it impossible for the SBI to participate in some yield oriented investments such as private placement commercial mortgages and business loan participations. It also impacts the SBI's ability to participate in some in-state investments since those

deals are often structured as unrated debt rather than as limited partnerships or other types of equity investments.

5. **Authority to purchase below investment grade debt.** Any debt security rated below the top four category ratings (AAA, AA, A, BAA) is referred to as "below investment grade," "high yield," or "junk." While these securities carry more risk than investment grade debt, returns have been very attractive. The SBI loses the opportunity to participate in these increased returns under current statute:

Period Ending 3/31/93	1 yr.	3 yrs.	5 yrs.
Salomon Broad Investment Grade Index	13.4%	12.6%	11.0%
Salomon High Yield Index	16.2	18.4	12.1

Recommendations Regarding Statutory Constraints

In order to achieve maximum flexibility in its asset allocation decisions, the Board would need to seek legislation that removes references to the "legal list" and allows the SBI to undertake investments solely under the "prudent person" standard. Since this would be a significant departure from current practice and would be likely to confront significant legislative opposition, staff believes the Board should consider less dramatic alternatives if it desires to increase its investment flexibility.

Staff recommends that the SBI seek the following statutory amendments to increase its investment flexibility. These authorities will allow the Board additional opportunities to diversify the portfolio and have the potential to enhance returns over time:

- **Remove international securities from the 35% cap placed on alternative assets and delete all references to "US and Canadian" securities. This would put international investments under the same guidelines as domestic securities.**
- **Re-establish authority to invest in unrated debt as an alternative investment subject to the 35% cap (or add unrated debt to the list of authorized debt securities).**

- **Re-establish authority to invest in below investment grade debt subject to the 35% cap (or add below investment grade debt to the list of authorized debt securities).**

MINNESOTA STATUTES 11A.24

"Legal List"

11A.24 AUTHORIZED INVESTMENTS.

Subdivision 1. [SECURITIES GENERALLY.] The state board shall have the authority to purchase, sell, lend or exchange the following securities for funds or accounts specifically made subject to this section including puts and call options and future contracts traded on a contract market ~~designated and~~ regulated by a ~~federal~~ governmental agency or by a financial institution regulated by a governmental agency. These securities may be owned as units in commingled trusts that own the securities described in subdivisions 2 to 5.

Subd. 2. **Government obligations.** The state board may invest funds in governmental bonds, notes, bills, mortgages, and other evidences of indebtedness provided the issue is backed by the full faith and credit of the issuer or the issue is rated among the top four quality rating categories by a nationally recognized rating agency. The obligations in which the board may invest under this subdivision include guaranteed or insured issues of (a) the United States, its agencies, its instrumentalities, or organizations created and regulated by an act of Congress; (b) Canada and its provinces, provided the principal and interest is payable in United States dollars; (c) the states and their municipalities, political subdivisions, agencies or instrumentalities; (d) the International Bank for Reconstruction and Development, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, or any other United States Government sponsored organization of which the United States is a member, provided the principal and interest is payable in United States dollars.

Subd. 3. **Corporate obligations.** The state board may invest funds in bonds, notes, debentures, transportation equipment obligations, or any other longer term evidences of indebtedness issued or guaranteed by a corporation organized under the laws of the United States or any state thereof, or the Dominion of Canada or any province thereof if they conform to the following provisions:

(a) the principal and interest of obligations of corporations incorporated or organized under the laws of the Dominion of Canada or any province thereof shall be payable in United States dollars; and

(b) obligations shall be rated among the top four quality categories by a nationally recognized rating agency.

Subd. 4. [OTHER OBLIGATIONS.] (a) The state board may invest funds in bankers acceptances, certificates of deposit, deposit notes, commercial paper, mortgage participation certificates and pools, repurchase agreements and reverse repurchase agreements, guaranteed investment contracts, savings accounts, and guaranty fund certificates, surplus notes, or debentures of domestic mutual insurance companies if they conform to the following provisions:

(1) bankers acceptances and deposit notes of United States banks are limited to those issued by banks rated in the highest four quality categories by a nationally recognized rating agency;

(2) certificates of deposit are limited to those issued by (i) United States banks and savings institutions that are rated in the highest four quality categories by a nationally recognized rating agency, ~~that meet the collateral requirements established in section 9-0317~~ or whose certificates of deposit are fully insured by federal agencies; or (ii) credit unions in amounts up to the limit of insurance coverage provided by the National Credit Union Administration;

(3) commercial paper is limited to those issued by United States corporations or their Canadian subsidiaries and rated in the highest two quality categories by a nationally recognized rating agency;

(4) mortgage participation or pass through certificates evidencing interests in pools of first mortgages or trust deeds on improved real estate located in the United States where the loan to value ratio for each loan as calculated in accordance with section 61A.28, subdivision 3, does not exceed 80 percent for fully amortizable residential properties and in all other respects meets the requirements of section 61A.28, subdivision 3;

(5) collateral for repurchase agreements and reverse repurchase agreements is limited to letters of credit and securities authorized in this section;

(6) guaranteed investment contracts are limited to those issued by insurance companies or banks rated in the top four quality categories by a nationally recognized rating agency or to alternative guaranteed investment contracts where the underlying assets comply with the requirements of this section; and

(7) savings accounts are limited to those fully insured by federal agencies.

(b) Sections 16A.58 and 16B.06 do not apply to certificates of deposit and collateralization agreements executed by the state board under paragraph (a), clause (2).

(c) In addition to investments authorized by paragraph (a), clause (4), the state board may purchase from the Minnesota housing finance agency all or any part of a pool of residential mortgages, not in default, that has previously been financed by the issuance of bonds or notes of the agency. The state board may also enter into a commitment with the agency, at the time of any issue of bonds or notes, to purchase at a specified future date, not exceeding 12 years from the date of the issue, the amount of mortgage loans then outstanding and not in default that have been made or purchased from the proceeds of the bonds or notes. The state board may charge reasonable fees for any such commitment and may agree to purchase the mortgage loans at a price sufficient to produce a yield to the state board comparable, in its judgment, to the yield available on similar mortgage loans at the date of the bonds or notes. The state board may also enter into agreements with the agency for the investment of any portion of the funds of the agency. The agreement must cover the period of the investment, withdrawal privileges, and any guaranteed rate of return.

Subd. 5. Corporate stocks. The state board may invest funds in stocks or convertible issues of any corporation organized under the laws of the United States or the states thereof, the Dominion of Canada or its provinces, or any corporation listed on the New York Stock Exchange or the American Stock Exchange, if they conform to the following provisions:

(a) The aggregate value of corporate stock investments, as adjusted for realized profits and losses, shall not exceed 85 percent of the market or book value, whichever is less, of a fund, less the aggregate value of investments according to subdivision 6;

(b) Investments shall not exceed five percent of the total outstanding shares of any one corporation.

Subd. 6. Other investments. (a) In addition to the investments authorized in subdivisions 1 to 5, and subject to the provisions in paragraph (b), the state board may invest funds in:

(1) venture capital investment businesses through participation in limited partnerships and corporations;

(2) real estate ownership interests or loans secured by mortgages or deeds of trust through investment in limited partnerships, bank sponsored collective funds, trusts, and insurance company commingled accounts, including separate accounts;

(3) regional and mutual funds through bank sponsored collective funds and open-end investment companies registered under the Federal Investment Company Act of 1940;

(4) resource investments through limited partnerships, private placements and corporations; and

(5) international securities.

(b) The investments authorized in paragraph (a) must conform to the following provisions:

(1) the aggregate value of all investments made according to paragraph (a) may not exceed 35 percent of the market value of the fund for which the state board is investing;

(2) there must be at least four unrelated owners of the investment other than the state board for investments made under paragraph (a), clause (1), (2), (3), or (4);

(3) state board participation in an investment vehicle is limited to 20 percent thereof for investments made under paragraph (a), clause (1), (2), (3), or (4); and

(4) state board participation in a limited partnership does not include a general partnership interest or other interest involving general liability. The state board may not engage in any activity as a limited partner which creates general liability.

Subd. 7. Appropriation. There is annually appropriated to the state board, from the assets of the funds for which the state board invests pursuant to subdivision 6, clause (a), sums sufficient to pay the costs for the management of these funds by private management firms.

History: 1980 c 607 art 14 s 22; 1981 c 208 s 3-6,9; 1982 c 587 s 2; 1983 c 216 art 1 s 5; 1983 c 324 s 7-9; 1984 c 382 s 1; 1984 c 383 s 2,3; 1985 c 224 s 3-5; 1987 c 72 s 1; 1987 c 372 art 8 s 2-6; 1988 c 453 s 7,8; 1991 c 47 s 1; 1991 c 206 s 1; 1992 c 539 s 9; 1992 c 587 art 2 s 2; 1992 c 592 s 2

ATTACHMENT B

ASSET ALLOCATION POLICY

The Board determines the overall investment strategy for each fund through its long term asset allocation decision. This decision is the single largest determinant of a fund's return and overwhelms all other policy and implementation decisions. It also reflects the Board's tolerance for volatility/risk.

Current Asset Allocation Targets

The current long term asset allocation targets approved by the Board for the Basic and Post Funds are shown below. While the Board does not set specific targets for the Combined Funds, an aggregate target for the Combined Funds can be created using the market value of each fund. Because market values fluctuate, the "targets" for the Combined Funds will not be constant as they are for the Basic and the Post Funds.

	Basic Funds Long Term Target	Post Fund Long Term Target	Combined Funds Based on 3/31/93 Market Values
Domestic stocks	50%	50%	50.0%
International stocks	10%	--	5.6%
Alternative assets	15%	--	8.3%
Domestic bonds	24%	47%	34.2%
Cash	1%	3%	1.9%
Total	100%	100%	100.0%

The median allocation to stocks, bonds, cash and other asset classes of the Trust Universe Comparison Service (TUCS) universe on March 31, 1993 is shown below:

Median Allocation*	Stocks**	Bonds**	Cash
all funds	55.7%	32.4%	6.0%
public only	51.5	38.7	5.0
corporate only	58.4	30.5	6.1

* Median allocation to each asset class. Will not add to 100%.

** Includes both domestic and international.

This data suggest the following:

- The **Combined Funds** have an overall asset mix that is fairly close to the typical asset mix chosen for a pension plan. (*Stock allocation:* Combined Funds 55.6%; median for all funds 55.7%. *Bond allocation:* Combined Funds 34.2%, median for all funds 32.4%)
- The **Basic Funds** have a slightly higher allocation to stocks than is typical. (Basics 60%; median for all funds 55.7%; median for corporate funds 58.4%)
- The **Post Fund** has a lower allocation to stocks than is typical. (Post 50%; median for all funds 55.7%; median for corporate funds 58.4%)

Impact of Asset Allocation Decisions

The asset allocation chosen for a fund (the amount invested in stocks vs. bonds vs. other assets) will have a dominant effect on performance. Studies have shown that 90% or more of actual returns can be attributed solely to the asset mix of the portfolio. Asset management decisions (i.e. how much active vs passive, which active managers, what rebalancing guidelines) will be overwhelmed by the fundamental asset allocation decision.

The actual experience of the Basic Funds confirms this relationship:

Impact of Asset Allocation vs. Asset Management		
Basic Retirement Funds		
January 1, 1984-March 31, 1993		
(9.25 Years)		
	Millions	Annualized Return
Beginning Market Value		
January 1, 1984	\$3,129	
Net Contributions	279	
Asset Allocation	6,219	+12.7%
Asset Management	153	+ 0.2%
Ending Market Value		
March 31, 1993	\$9,780	12.9%

Source: Richards & Tierney

If the Basic Retirement Funds could have perfectly matched the index returns for stocks, bonds, etc., the SBI's asset allocation policy would have generated \$6.2 billion or 12.7% annualized over the last 9.25 years. Actual asset management generated an additional \$153 million and raised performance by 0.2%. The impact of various asset management decisions is shown below:

**Impact of Asset Management Decisions
Basic Retirement Funds
January 1, 1984- March 31, 1993
(9.25 Years)**

	Millions	
Misfit /Style Bias	\$-34	
Domestic stocks	-93	mostly small stock bias before tilted index
All other assets	+59	mostly from alternative assets
 Manager Contribution	 +50	
Domestic stock passive	-35	tracking error, manager transition costs
Domestic stock active	+25	value added to benchmarks
Domestic bond managers	+23	value added to benchmarks
Alternative assets	+37	value added to established targets
 Re balancing Activity	 +137	
 Total Asset Management	 \$153	

Source: Richards & Tierney

Future Asset Allocation Strategy

With the change in the retirement benefit increase formula, both the Basic and Post Funds are oriented toward generating high long term total rates of return. However, the two funds remain separate by statute and continue to have somewhat different time horizons. Further, the ability of the Post Fund to generate and sustain benefit increases needs to be considered in the asset allocation decision. As a result, asset allocation targets need to be considered for each fund.

Staff believes that the Board's current asset allocation targets for the **Basic Funds** are appropriate given their funded status and liability structure. Nonetheless, staff would encourage the Board to consider a more slightly more aggressive asset allocation for the Basic Funds in order to enhance the potential for higher long term rates of return. Higher

returns would enhance the funded status of the Basic Funds and reduce the need for additional contributions to maintain currently promised benefits. The Basic Funds must generate at least 8.5% annual returns, overtime, to meet actuarial return assumptions.

Staff believes that the **Post Fund** should have a more aggressive asset allocation than current policy in order to increase the likelihood that the fund will be able to generate sufficient returns to maintain promised benefits and finance benefit increases. The Post Fund must generate 8.5% annual returns in order to cover its actuarial assumption of (5%) as well as the promised inflation-based adjustment (up to 3.5% per year). If the Post Fund expects to generate additional investment-based increases, annual returns must be greater than 8.5%, over time. As a result, it can be argued that the Post Fund should be positioned to be more aggressive than the Basic Funds. Currently, the Post Fund has a lower exposure to equities and, therefore, has a more conservative asset allocation policy.

Staff believes the following changes will increase returns in each fund without a dramatic increase in risk/volatility of returns. Because allocation changes take time to implement effectively, staff proposes that the Board consider making changes in stages:

Increase allocation to international stocks

- Basics: keep allocation at 10% for next 1-2 years, increase to 20% in 3-4 years.
- Post: add 10% allocation in next 1-2 years and increase to 20% in 3-4 years.

Increase the allocation to alternative assets

- Define alternative asset target as market value, rather than market value plus unfunded commitments
- Basics: keep target at 15% and keep focus on equity vehicles.
- Post: add 5% allocation and focus on yield/debt oriented vehicles

Add global bonds and decrease the allocation to fixed income overall

- Keep focus on domestic bonds over the next 1-2 years. Allocate one half to global bonds within 3-4 years.
- Basics: keep allocation at 24% for next 1-2 years, reduce allocation to 19% in 3-4 years.
- Post: reduce allocation to from 47% to 32% over next 1-2 years, reduce to 22% in next 3-4 years.

Staff suggests that the Board consider the specific allocation changes for the Basic and Post Funds that are displayed in the following table:

	Basics			Post		
	<i>Curr. Policy</i>	<i>Next 1-2 Yrs.</i>	<i>Future Yrs.*</i>	<i>Curr. Policy</i>	<i>Next 1-2 Yrs.</i>	<i>Future Yrs.</i>
Stocks	60%	60%	65%	50%	60%	70%
Domestic	50	50	45	50	50	50
International	10	10	20	--	10	20
Alternative assets	15 (1)	15 (2)	15 (2)	--	5 (3)	5 (3)
Real estate	7-8	7-8	7-8	--	--	--
Private equity	7-8	7-8	7-8	--	--	--
Yield oriented**	--	--	--	--	5	5
Subtotal	<u>75%</u>	<u>75%</u>	<u>80%</u>	<u>50%</u>	<u>65%</u>	<u>75%</u>
Bonds	24	24	19	47	32	22
Domestic	24	24	9-10	47	32	11
Global	--	--	9-10	--	--	11
Cash	1	1	1	3	3	3
Total	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

Expected Return (4)

High (5)	22.4%	22.48%	23.14%	20.34%	21.14%	23.13%
Median	10.29	10.32	10.54	9.44	9.69	10.24
Low (5)	-1.82	-1.84	-2.06	-1.46	-1.76	-2.65
Standard Deviation	12.11	12.16	12.60	10.90	11.45	12.89

- (1) at market value plus unfunded commitments, focused on equity oriented vehicles
- (2) at market value, focused on *equity* oriented vehicles (e.g. equity real estate, private equity)
- (3) at market value, focused on *yield* oriented vehicles (e.g. mortgage real estate, business loan participations, income producing real assets such as timber)
- (4) assumes 5.5% inflation
- (5) one standard deviation away from the median

* Exceeds 35% cap on alternative investments.

** May not be possible without authority for unrated debt.

Assumptions Used to Calculate Expected Returns

The assumptions shown below are based primarily on the long term historical returns provided by the capital markets. Where historical returns are not available for a particular asset class, staff has extrapolated the assumptions based on those used by various consultants and money management firms.

Where possible, the same assumptions used in the analysis prepared for the September 1991 asset allocation review of the Basic Funds and the June 1992 asset allocation review of the Post Fund were used.

Asset Class	Nominal Return	Real Return**	Standard Deviation
Domestic stocks	11.0%	5.5%	18.0
International stocks	11.5	6.0	20.0
Domestic bonds	8.0	2.5	8.0
Global bonds	8.25	2.75	12.0
Real estate	8.5	3.0	9.0
Private equity	14.0	8.5	20.0
Yield oriented deals	9.5	4.0	12.0
Cash	6.0	0.5	3.0
Inflation	5.5	--	3.0

** real return = nominal return - inflation

Correlation Matrix

	US Stk.	Intl. Stk.	US Bnds.	Glob. Bnds.	Real Est.	Priv. Eqty.	Yld. Deals	Cash
US stocks	1.00							
Int'l stocks	0.60	1.00						
US bonds	0.35	0.20	1.00					
Global bonds	0.10	0.50	0.60	1.00				
Real estate	0.30	0.15	0.20	0.00	1.00			
Private eq.	0.50	0.15	0.15	0.00	0.20	1.00		
Yield deals	0.45	0.30	0.50	0.20	0.15	0.40	1.00	
Cash	-0.10	0.00	0.10	-0.10	0.20	0.00	0.20	1.00

Recommendations Concerning Asset Allocation

Staff recommends that the SBI adopt the proposed allocations for the Basic and Post Funds shown on the previous pages if it wishes to enhance the potential for higher rates of return over the long term. In doing so, the Board must recognize the following:

- ***The funds will be taking on a slightly higher level of risk. This means that returns may fluctuate somewhat more widely on a year to year basis than is likely under the current asset allocation. While the potential for higher long term returns justifies the additional risk, the funds will have "higher high's and lower low's" on a year to year basis.***
- ***The asset allocation of the Basic, Post and Combined Funds will be more aggressive than the "typical" pension fund included in universe comparisons. Over longer periods (10 years or more), this should result in higher returns than the typical fund. Over shorter periods (1, 3 or 5 years), returns could just as likely be bottom quartile as top quartile in universe rankings.***

ATTACHMENT C

MANAGEMENT STRUCTURE (Active/Passive Mix)

For most pension funds, the manner in which assets are managed will account for less than 10% of their return. Within this area, the decision regarding active/passive mix will have the greatest impact on overall returns.

Current Policy on Active/Passive Mix

The SBI has utilized both active and passive management since the mid 1980's. The current policy with respect to each asset class is shown below:

- domestic stocks at least half passive (indexed)
- domestic bonds at least half semi-passive (enhanced indexed)
- international stocks no more than half passive (indexed)
- alternative assets all active

The Board's decision to use passive or semi-passive management for a portion of the stock and bond segments is influenced by several factors:

- **Diversification.** Passive management assures exposure to all sectors of the market.
- **Certainty of Returns.** Returns from passive and semi-passive management will track the target index with a low margin of variation/volatility.
- **Efficiency.** It is possible to deploy larger amounts of money passively than actively.
- **Cost.** The management fees and transaction costs are lower for passive management than for active management.

Active/Passive Mix of Other Pension Funds

Passive management/indexing is a relatively new investment approach and was not widely used until the mid 1980's. Today, many plan sponsors index at least a portion of their stock and bond assets. The data shown below comes from a survey conducted by Greenwich Associates in 1992.

**Percent of Sponsors that Use Passive Management
for a Portion of their Funds**

Type of Plan/Fund	Domestic	Domestic	Int'l
	Stocks	Bonds	Stocks
Corporate Plans	40%	41%	15%
Public Plans	38	40	20
Corporate Plans > \$1 billion	74	78	35
Public Plans > \$1 billion	63	61	38

Source: Greenwich Associates

While many plans use passive management today, the amount of assets committed to passive management is considerably lower than that the amount managed actively. The information shown below is based on the aggregate asset mix of the plans included in the Greenwich Associates survey referenced above. It indicates that the SBI's relies on indexing to a much greater degree than other plan sponsors:

**Aggregate Active/Passive Mix
All Plans over \$500 million**

	Corporate Plans	Public Plans
Domestic Stocks		
Active	71%	65%
Passive	29	35
Domestic Bonds		
Active	73%	87%
Passive	27	13
International Stocks		
Active	76%	77%
Passive	24	23

Source: Greenwich Associates

Return Expectations for Stocks and Bonds

The goal of **passive management** is to track the benchmark/index closely. On a year to year basis, passive management returns will fluctuate above and below the target, usually by less than 50 b.p. on an annual basis. *Over time, passive management can be expected to under perform the target.* This is because all benchmark/index returns ignore the effect of transactions costs and management fees that are part of the actual portfolio management process.

The goal of **active management** is to add value to the agreed upon benchmark. Because active managers incur additional risk, returns can be expected to fluctuate above and below the benchmark by fairly wide margins, often by 500 basis points or more on an annual basis. *Over time, active managers are expected to add value to the benchmark net of all transactions costs and management fees. The amount of value added expected will vary by asset class.*

The Board has established the following return expectations for stocks and bonds given its existing active/passive mix policies:

Domestic Stocks

Asset Class Target: **Wilshire 5000***

<i>Structure</i>	<i>Allocation</i>	<i>Return Expectation**</i>
Active	Maximum 50%	+50 to +100 b.p.
Passive	Minimum 50%	-10 b.p.
Total Program		+20 to +45 b.p.

* adjusted for liquor and tobacco restrictions through 3/31/93

** annualized, relative to benchmark, net of all fees

Domestic Bonds

Asset Class Target: **Salomon Broad Investment Grade Index**

<i>Structure</i>	<i>Allocation</i>	<i>Return Expectation*</i>
Active	Maximum 50%	+25 to +50 b.p.
Semi-Passive	Minimum 50%	+15 to +25 b.p.
Total Program		+20 to +35 b.p.

* annualized, relative to benchmark, net of all fees

International StocksAsset Class Target: **EAFE***

<i>Structure</i>	<i>Allocation</i>	<i>Return Expectation**</i>
Active	Minimum 50%	+75 to +150 b.p.
Passive	Maximum 50%	-25 to +10 b.p.
Total Program		+25 to +75 b.p.

* adjusted for South Africa restrictions and re weighted, for fully active managers

** annualized, relative to benchmark, net of all fees

SBI Performance Compared to Other Pension Plans

The performance of the SBI's stock and bond managers compares favorably with the results experienced by other pension funds in the Trust Universe Comparison Service (TUCS). *It should be noted that TUCS reports returns before fees.* If the SBI's returns were reported before fees, the SBI's performance would be approximately 35-40 basis points (0.35% -0.40%) *higher* for stocks and approximately 15-20 basis points (0.15%-0.20%) *higher* for bonds:

Domestic Stocks
SBI Managers vs. Other Pension Funds
Period Ending 3/31/93
Annualized Return

	1 Yr.	3 Yrs.	5 Yrs.
SBI Stocks* (after fees)	14.8%	13.4%	14.5%
TUCS Equity Pools (before fees)			
top quartile	16.0%	14.9%	15.4%
median	14.1	13.5	14.6
bottom quartile	12.2	12.1	13.2
Wilshire 5000 Adjusted	15.1%	13.8%	14.7%
Wilshire 5000	15.1	14.0	15.1

* includes both active and passive managers

Domestic Bonds
SBI Managers vs. Other Pension Funds
Period Ending 3/31/93
Annualized Return

	1 Yr.	3 Yrs.	5 Yrs.
SBI Bonds* (after fees)	14.1%	13.1%	11.2%
TUCS Bond Pools (before fees)			
top quartile	15.5%	13.8%	11.7%
median	14.0	13.0	11.2
bottom quartile	13.0	12.3	10.7
Salomon BIG	13.4%	12.6%	11.0%

* includes both active and semi-passive managers

Return Expectations for Alternative Assets

Since indexing is not available for alternative assets at the present time, all alternative investments are actively managed. The return expectations established by the Board for alternative assets are shown below:

Private Equity (venture capital, buyout funds, re-structuring funds)

Asset Class Target: SBI Aggregate

Structure: Primarily limited partnerships and commingled funds

Return Expectation: +300 basis points over historical public equity returns to compensate for lack of liquidity. Measured over the life of the investment. (This is approximately 13% in nominal terms.)

Real Assets (real estate, resource investments)

<i>Asset Class Target:</i>	SBI Aggregate, including Wilshire Real Estate Index
<i>Structure:</i>	Primarily limited partnerships and commingled funds
<i>Return Expectation:</i>	+300 to +500 basis points over inflation rate. Measured over the life of the investment. (This is approximately 6-8% in nominal terms at the present time.)

In recent years, the SBI's **venture capital** investments have exceeded the Board's return expectation:

	Period Ending March 31, 1993	
	3 yrs.	5 yrs.
SBI venture capital	19.1%	17.0%
Historical public equity returns	10.0	10.0
Difference	+9.1	+7.0

Over the last 3 years, the SBI's **resource** (oil and gas) investments have exceeded the Board's return expectation. Over the last 5 years, those investments have exceeded inflation but have fallen short of the +3% to +5% expected return

	Period Ending March 31, 1993	
	3 yrs.	5 yrs.
SBI resource funds	12.3%	6.0%
Inflation	3.7	4.3
Difference	+8.6	+1.7

Due to the severe downturn in real estate values across the country, the SBI's **real estate** investments have not met the Board's long term return expectation, but have exceeded the returns of other real estate investors:

Period Ending March 31, 1993

	3 yrs.	5 yrs.
SBI real estate	-6.4%	-1.2%
Inflation	3.7	4.3
Wilshire Real Estate Index	-8.1	-2.9

Recommendations Concerning Management Structure

Staff does not recommend a change in the Board's mix of active and passive management at this time. The half passive/half active approach used for stock and bond investments represents a good balance between opposing risks and rewards of each approach:

- *Active management* provides the opportunity to add value. While the amount is relatively small compared to the returns that come from asset allocation, the dollar impact can still be significant for the total portfolio. However, active management increases the volatility of returns and the Board can never be certain that its active managers will in fact add value over time.
- *Passive management* provides greater certainty of returns. While these returns will be more consistent than active management, transactions costs and management fees virtually assure that the passively managed portfolios will under perform the target index over time.

The structure also reflects the administrative realities of managing large sums of money. The SBI has/will have the following assets committed to active management:

- domestic stocks: \$4.5 billion 15 firms \$200-600 million each
- domestic bonds: \$3.3 billion 7 firms \$250-800 million each
- international stocks: \$0.5 billion 6 firms \$ 75-150 million each

Staff believes that the universe of active managers capable of handling accounts of this magnitude is somewhat limited. In addition, there are limits on the number of managers that can be monitored and evaluated effectively by the staff/IAC. The half active/half passive structure addresses these constraints on a practical level.

ATTACHMENT D

INVESTMENT RESTRICTIONS

Over time, the Board has chosen to implement certain policies regarding stock investments that affect the range of investment choices available to all or some of the SBI's stock managers. Those policies are/were:

- prohibition on holding stock of liquor or tobacco companies (initiated prior to 1970, lifted effective April 1, 1993)
- prohibition on holding the stock of American Home Products due to its infant formula marketing practices (initiated in the late 1970's)
- restrictions on purchasing the stock of companies with direct investment in South Africa (initiated in 1986)
- guidelines on purchasing the stock of companies domiciled outside the US due to concerns about the violation of human rights and worker rights (initiated in 1993)

Liquor and Tobacco

Effective April 1, 1993, the Board lifted its prohibition on liquor and tobacco stocks. The policy had been in place prior to 1970 and prohibited both active and passive managers from holding the stock of any company that obtained more than 50% of its revenue from the sale of liquor and tobacco.

Removing the affected stock reduced the returns available from the Wilshire 5000 stock index by nearly 0.3% annualized for the twelve year period from 1980-1992. This impact was seen directly in the SBI's Wilshire 5000 index fund. The impact on the actively managed portion of the stock portfolio is more difficult to determine since active stock managers may or may not have chosen to include some of the securities in their portfolios if they had not been prohibited.

American Home Products

The Board has prohibited all active and passive managers from holding the stock of American Home Products (AHP) since the late 1970's due to concerns about its infant

formula marketing practices in third world countries. The last time the Board discussed this issue was October 1979.

From 1980-1992, the return of AHP stock was 19.3% annualized. The return of the Wilshire 5000 during the same period was 13.9% annualized. While AHP performed better than the Wilshire 5000, the impact of that superior performance was quite small because AHP is a very small percentage of the index.

As with the liquor and tobacco policy, the prohibition has directly impacted the SBI's index fund. The impact on the actively managed portion of the stock portfolio is more difficult to determine since active stock managers may or may not have chosen to include AHP in their portfolios if it had not been prohibited.

South Africa

The Board adopted its initial resolution concerning South Africa in October 1986. The policy has been implemented by "divestment through attrition" for actively managed stock portfolios since that time. Passively managed stock portfolios have not been affected by the policy. The last time the Board considered its resolution on South Africa was June 1993 when the resolution was amended to remove references to Namibia.

Unlike the policies referenced above, the South Africa resolution institutes investment restrictions rather than an explicit prohibition. Under the Board's resolution, active stock managers are directed to refrain from purchasing a restricted stock unless the manager believes it would be a breach of fiduciary responsibility not to do so.

The Board's policy impacts the range of investment opportunities available to active stock managers:

- Close to 90 companies domiciled in the US are on the restricted list at the present time. This represents about 10% percent of the market capitalization of the Russell 3000 (The Russell 3000 is a broad stock market index similar to the Wilshire 5000.) It should be noted the number of companies with direct investment in South Africa is beginning to increase after declining dramatically in the last half of the 1980's. As a result, the market capitalization affected by South Africa restrictions will likely increase in the future.

- More than 450 international companies (i.e. companies domiciled outside the US) are on the restricted list at the present time. This represents more than 30 percent of the market capitalization of the Morgan Stanley Capital International Index of Europe, Australia and the Far East (EAFE).

The performance impact of the Board's restriction policy is difficult to determine for several reasons. First, the Board has implemented its policy in phases and not all companies were affected during all stages. Second, an active manager may or may not have chosen to hold one or more of the securities if there had been no restrictions. Third, the policy is not an explicit prohibition since an active manager may choose to hold a restricted stock if it believes it would be a breach of fiduciary responsibility not to do so.

While they are not completely representative of the Board's policy, the performance of "South Africa Free" indices shows that explicit prohibitions on holding South Africa stocks would have produced lower returns over recent periods:

- The Russell 3000 returned 15.5% annualized for the five years ending 3/31/93. A "South Africa Free" Russell 3000 returned 15.3% annualized during the same period. (Difference: -0.2% annualized.)
- The EAFE index returned -0.8% annualized for the five years ending 3/31/93. A "South Africa Free" EAFE index returned -2.7% annualized during the same period. (Difference -1.9% annualized.)

Country Guidelines for International Investments

In December 1992, the Board adopted country guidelines recommended by the International Investing Guidelines Task Force in response to concerns about worker rights and human rights.

Like the South Africa policy, the international guidelines apply to the SBI's actively managed stock portfolios. The guidelines can be summarized as follows:

- **Group I.** Active stock managers are not restricted regarding the countries included in Group I since these countries have strong worker and human rights protections and there is little concern that economic and social disruptions may occur which would have an adverse effect on their financial markets.

- **Group II** Active stock managers may invest in the Group II markets if the manager believes that it would be a breach of fiduciary responsibility not to do so. Since violations of worker and human rights continue to occur in these countries, there is some concern that economic and social disruptions may occur, having an adverse effect on the financial markets. If a manager chooses to invest in one or more of these markets, the manager must notify the SBI in writing.
- **Group III.** Active stock managers may invest in Group III markets if the manager believes that it would be a breach of fiduciary responsibility not to do so. Since these countries lack basic human and worker rights, the potential exists for economic, political and social unrest that could adversely affect the stability of those markets. If a manager chooses to invest in one or more of these markets, the manager must appear at a meeting of the SBI to present its reasons for the decision to do so.

The list of countries in each group is shown below:

Group I	Group II	Group III
Australia	Argentina	China
Austria	Brazil	Indonesia
Belgium	Chile	Kuwait
Canada	Colombia	Nigeria
Czechoslovakia	Egypt	Pakistan
Denmark	India	South Africa
Finland	Israel	USSR/former Soviet Union
France	Jamaica	Yugoslavia
Germany	Korea, Rep. of	
Greece	Malaysia	
Hong Kong	Mexico	
Italy	Philippines	
Ireland	Taiwan	
Japan	Thailand	
Luxembourg	Trinidad & Tobago	
Netherlands	Turkey	
New Zealand	Venezuela	
Norway		
Poland		
Portugal		
Singapore		
Spain		
Sweden		
Switzerland		
United Kingdom		
Uruguay		

Recommendations Concerning Investment Restrictions

At the March 1993 meeting of the SBI, the Investment Advisory Council reported the following motion:

Consistent with our fiduciary responsibility to plan beneficiaries, taxpayers and the State of Minnesota, the Investment Advisory [Council] recommends that the State Board of Investment act in a timely manner to remove all investment restrictions, except those resulting from objective risk/return considerations or required by statute, on the investment of employee benefit assets for which the Board has fiduciary responsibility. Further, the IAC recommends that no such new restrictions should be undertaken.

ATTACHMENT E

OPERATING POLICIES AND PROCEDURES

The SBI's decision-making framework is considerably more complex than that employed by corporate pension plans. The diagrams on the following pages attempt to illustrate that point.

The public nature of the business conducted by the SBI necessitates involvement from a wider range of stakeholders and interested parties than would be considered at most corporate pension plans. No staff proposal is brought before the Board for action without the review and recommendation of at least one committee or task force. More often, multiple layers of review are involved.

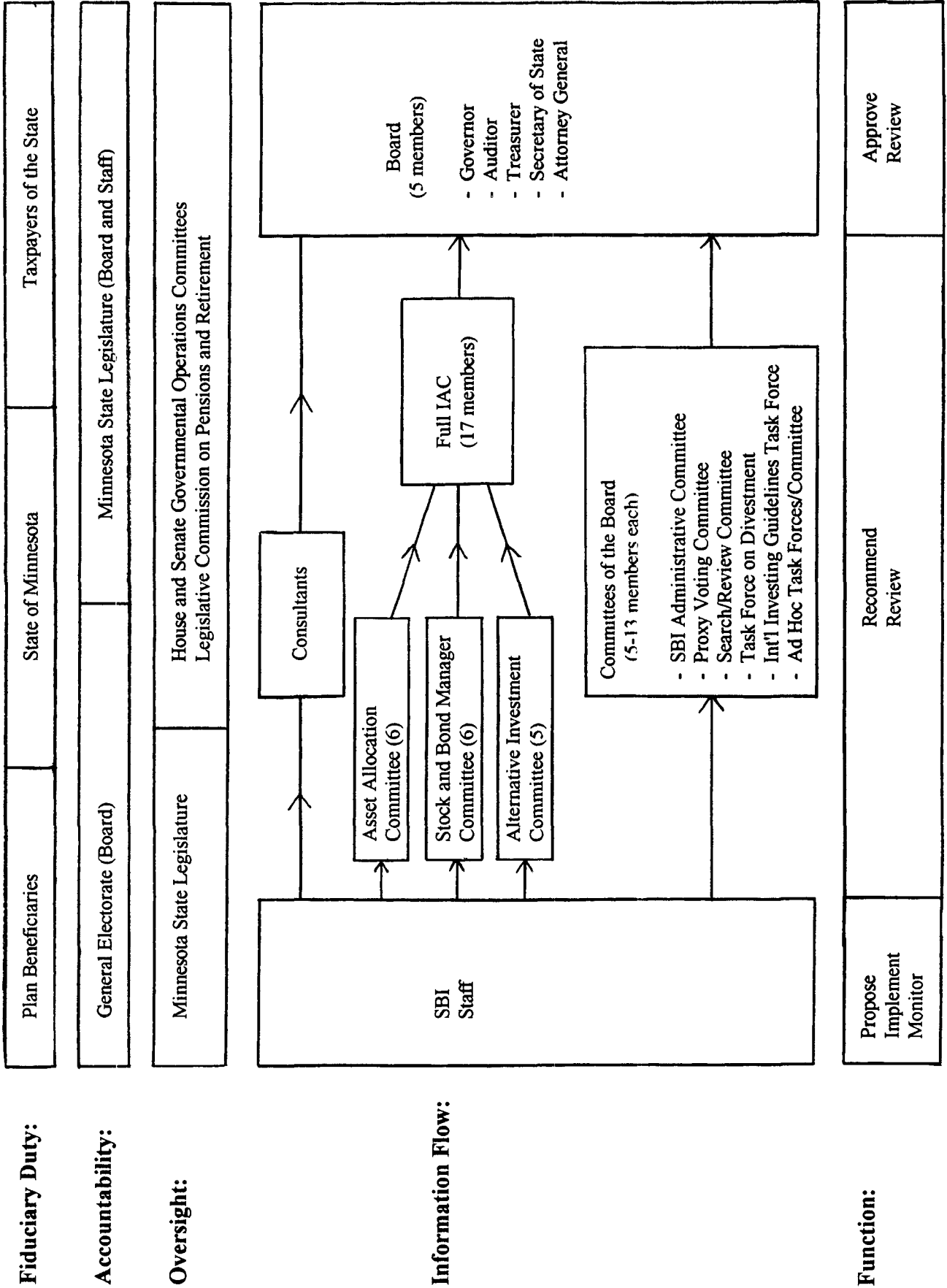
Generally, this provides great benefit to the proposals brought before the Board since the final product represents the best thinking of all concerned. On the other hand, the multiple layers inevitably lead to a lengthier decision making process and true consensus is not always possible given the differing viewpoints of the parties involved.

Staff Comment:

Staff is not recommending that the SBI change its review processes since the current structure has evolved over time in response to the needs expressed by the Board or to the processes demanded by the public nature its business. However, all parties must recognize that the SBI's process and procedures will be slower and more time consuming than the operations of a typical corporate pension plan. While the impact of this structure is difficult to quantify in terms of return, it will always be a constraint on the management of the funds under the control of the SBI.

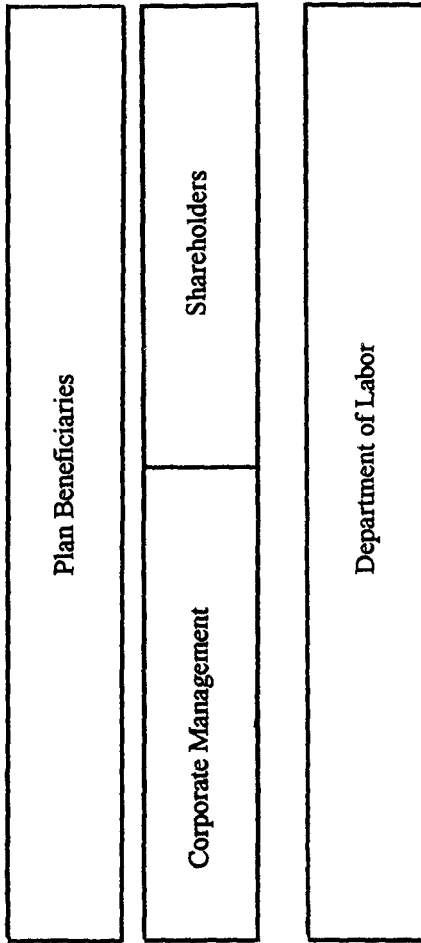
STATE BOARD OF INVESTMENT

Operating Environment



TYPICAL CORPORATE PENSION PLAN

Operating Environment

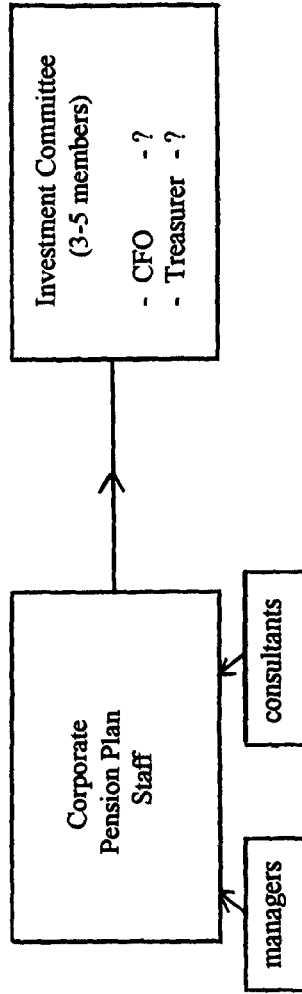


Fiduciary Duty:

Accountability:

Oversight:

Information Flow:



Function:



**Background Materials
on
Manager Continuation Policy**

		Page
	Staff Memo	1
Attachment A	Manager Commentary	9
Attachment B	Revised VAM Format	11
Attachment C	Revised Segment Reports	12
	Comments From Richards & Tierney	19
	Proposal from IAC Members and Office of State Auditor	23

DATE: July 30, 1993

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

FROM: Howard Bicker
Beth Lehman

SUBJECT: Manager Continuation Policy

In a memo dated July 8, 1993, you were sent copies of the comments that we received on the Manager Continuation Policy. Another copy of that material is attached for your reference.

The submissions brought out ideas that had not been voiced in prior meetings/discussions on this issue. Since that was the intent of the July 8 solicitation, we are pleased that individuals were willing to devote the time to think about this topic and develop specific suggestions.

As noted in the cover memo on the material submitted from from a group of Investment Advisory Council (IAC) members and the office of the State Auditor, we consider these comments to be ideas which should be open for further discussion. We also note that the group proposal does not have the consensus of all members on all points.

As a result, staff has reviewed the material and offers the following for your consideration. We look forward to discussing this with you at the meeting on Aug. 12.

Qualitative Guidelines

There appears to be general consensus that the qualitative guidelines in the current Manager Continuation Policy are appropriate and should not be modified at the present time.

Those guidelines state that certain events in a manager's organization or investment approach should place a firm "on probation" and dictate a prompt re-evaluation of the Board's relationship with the firm:

- change in the firm's ownership or important members of its management team
- change in the manager's investment style or philosophy
- inability to create or maintain an appropriate benchmark portfolio
- significant gain or loss of accounts over the previous year

A firm should remain on probation for qualitative reasons no longer than six months. The manager should be terminated if the issues are not resolved satisfactorily within that time.

Quantitative Guidelines

Reaching a consensus on the quantitative guidelines that should be used to evaluate manager performance has been much more difficult. A summary of current policy and recent proposals follows.

Summary of Current Policy:

The current policy focuses on performance relative to an agreed upon benchmark and uses a confidence interval to evaluate the value of active management (VAM). The confidence interval bands are calculated so that there is an 80% probability that a manager's return will fall within the bands and a 20% probability that it will fall outside the bands (10% above, 10% below). Performance that plots below the lower band mandates termination. Performance that is below the benchmark return over the most recent five years requires an in-depth written review by staff.

Summary of June 1993 Proposal:

The proposal discussed (but not accepted) at the June 1993 meeting of the IAC would have moved the focus from a cumulative time frame to the most recent five years. The confidence interval would continue to be calculated on a 80/20 basis. Performance that falls below the lower band of a five year rolling confidence interval would require an in-depth written review of the manager by staff and a formal re-interview by the Stock and Bond Manager Committee of the IAC. The end result would be a specific recommendation to continue or terminate a manager.

Summary of IAC Member/Auditor Proposal:

Notes: The following is a brief restatement of the proposal submitted several members of IAC and the office of the State Auditor (attached). The language in *(italics)* highlights issues that staff believes need to be clarified in order to understand how the proposal would be implemented.

(The proposal appears to address only domestic stock managers. It is not clear what guidelines would be applied to domestic bond managers and international stock managers.)

Compared to the staff June 1993 proposal, the new group proposal would shorten the time frame from five years to three years. Confidence intervals would be narrowed from 80/20 to 50/50: 50% probability that performance plots within the bands and 50% outside the bands (25% above, 25% below). *(It is not clear how the narrower band would be used since the trigger for action/analysis is performance that falls below the benchmark line, not the lower band of the interval. The confidence interval is not referred to elsewhere in the proposal.)*

If a manager's rolling three year performance plots below the benchmark line for 3 out of 4 quarters, the manager would be required to provide a written explanation and predict its own over/under performance over the next 1-2 years. A Manager Evaluation Committee would meet with the manager and review this information along with a written analysis prepared by staff and the consultant. Based on this information, the Committee would recommend a course of action. The possible actions would be:

- Continue the manager unless performance continues to lag over the next three quarters. (*The proposal is silent on what would occur in such an event.*)
- Continue the manager with "specific caveats" (*not defined*). If continued, the manager's performance would be watched closely over the next 1-2 years and compared to the manager's prediction about its own performance. (*The proposal is silent on what would occur if the manager's predictions proved to be inaccurate.*)
- Call for a comprehensive review and re-interview of the manager. The re-interview would use a process similar to the new manager search process. The comprehensive review would be prepared by staff and would include staff's assessment of the manager's actions in light of the near term economic outlook and market valuation levels. (*The proposal does not state whether the assessment is to be based on the manager's own analysis/outlook or on an economic forecast from some other source. This appears to add a market timing/style timing element to the manager evaluation process which is not part of the SBI's manager structure at the present time.*)

The Committee would then make a recommendation to the full IAC. The Committee would have the flexibility to take other actions "in exceptional circumstances." In such cases, the Committee would be required to justify its decision to do so.

The suggested membership of the Manager Evaluation Committee includes members of the Stock and Bond Manager Committee, Board member representatives and the SBI Executive Director. The chair of the Stock and Bond Manager Committee would also chair the new Committee and the chair of the IAC would serve as ex-officio member. (*If all these individuals are included, the Committee would have 13 members. Most committees or task forces of the SBI have 5 or 7 members.*)

Alternative Staff Proposals:

After considering the above, staff offers two alternatives for your consideration. Since there appears to be significant support for "tighter" quantitative guidelines, both alternatives shorten the time frames used to trigger analysis/re-interview:

- **Alternative #1** is based on the proposal that was discussed at the June 1993 IAC meeting. Rolling three year time periods would be used rather than rolling five year periods for domestic managers. The confidence interval would continue to be calculated on an 80/20 basis. The proposal is described in more detail below.

- **Alternative #2** is based on the IAC/Auditor group proposal. It incorporates three year time frames and 50/50 confidence intervals for domestic managers. It also attempts to fill in some of the "missing pieces" that were noted in the proposal as it was received. The proposal is described in more detail below.

Staff continues to believe that an excessively short term orientation on manager evaluation is unproductive. Whatever guidelines are adopted, staff urges the IAC/SBI to track and evaluate the costs generated by manager turnover.

Staff Alternative #1. This alternative is based on the proposal that was discussed at the June 1993 IAC meeting.

- **Quarterly commentaries from the managers to highlight active manager decisions and organizational changes.**

Each quarter, each manager would prepare a brief analysis (no more than 1 1/2 pages) of its own performance over the last quarter and year. This would include a description of active bets, the philosophy/outlook underlying those bets and explanation of what worked and did not work. In addition, the manager would highlight any significant ownership and personnel changes along with information about accounts gained and lost.

Staff comments (no more than 1/2 page) would be added which state whether the SBI staff/consultant attribution analysis confirms or disputes the manager's description of its active bets. Staff would also comment on the significance or insignificance of the organizational changes described by the manager.

The proposed format for this commentary is in **Attachment A**. Staff suggests that this information be included in each quarterly Board folder for each active and semi-passive manager (domestic stock, domestic bond, international stock). This report would replace the one page "Investment Commentaries" that now appear in the Board folder each quarter.

The purpose of the new commentary is to convey more information about, *and directly from*, each manager to the IAC/SBI on a regular basis. It will summarize the analysis that staff already conducts on an on-going basis for each firm.

- **Rolling three year, 80/20 VAM graph to highlight performance concerns for domestic stock and bond managers. Rolling five year, 80/20 VAM graph to highlight performance concerns for international stock managers.**

Value of active management (VAM) graphs would continue to be calculated on an 80/20 basis. Rolling three year graphs would be used for domestic stock and bond

managers and rolling five year graphs would be used for international stock managers. The longer time frame for international stock managers reflects the greater volatility that can be expected in performance due to the absence of adequate benchmarks for this asset class.

The graph would plot performance relative to the agreed upon benchmark and *would include the performance history that led the SBI to retain the firm as well as the SBI's actual experience*. Graphs would not be produced for the first three years of a domestic stock or bond manager's tenure with the SBI or for the first five years of an international manager's tenure. When produced, the graphs would include up to ten years of performance history. An example VAM report is shown in **Attachment B**.

Including a longer time period in the graph should put manager evaluation into a larger context and assist in distinguishing unusual, deteriorating performance from recurring patterns in an active manager's returns. The confidence interval will be wider or narrower depending on the level of active risk that a manager takes. As a result, the confidence interval would tailor the analysis to the manager's own investment approach and would establish/define expectations regarding a manager's return volatility over time.

- **Re-interview by the Stock and Bond Manager Committee required if performance falls below the lower band.**

Performance that plots below the lower band of the confidence interval of the VAM report would be considered a signal of serious under performance and would require a re-interview of the manager by the Stock and Bond Manager Committee of the IAC during the following quarter.

The Committee would use the same process that is currently applied to hiring new managers. The performance analysis should compare the SBI's actual experience with the performance of the firm's account composite that complies with the new performance presentation standards of the Association for Investment Management and Research (AIMR). These are the returns that should be used in most marketing/search presentations. Any significant differences in performance between the composite and the SBI's actual returns should be explained.

Staff Alternative #2. This alternative is based on the IAC/Auditor group proposal.

- **Quarterly commentaries from the managers to highlight active manager decisions and organizational changes.**

(See description in Alternative #1 above for more information.)

- **Rolling three year, 50/50 VAM graph to highlight performance concerns for domestic stock and bond managers. Rolling five year, 80/20 VAM graph to highlight performance concerns for international stock managers.**

As in Alternative #1, a VAM graph would be prepared for each manager each quarter using a rolling time periods. The confidence interval would be calculated on a 50/50 basis for domestic stock and domestic bond managers. A wider band (80/20) and longer time frame (five years) would be used for international stock managers to reflect the greater volatility that can be expected in performance due to the absence of adequate benchmarks for this asset class.

(See Alternative #1 for more information on the format and purpose of the VAM graph.)

- **Review by Stock and Bond Manager Committee required if performance plots below the benchmark line for one year.**

Any manager whose performance plots below the benchmark line on its VAM report for one year would be reviewed by the Stock and Bond Manager Committee during the following quarter. In each case, the Committee would review the last 4-8 quarterly commentaries from the manager and decide if further action is warranted at that time. The Committee could also request additional analysis by the SBI staff or consultant to assist in the review. The additional requests should be specified by the Committee so that the analysis can be tailored to the information needs of the Committee.

The review could result in a recommendation to watch performance closely over the next year, to meet with the manager to discuss the issue or to call for a formal re-interview of the manager. The Committee would need to re-affirm its findings if performance continues to lag the benchmark.

All recommendations would be reported to the full IAC. It is anticipated that the IAC and the Board would endorse the recommendations of the Stock and Bond Manager Committee since the Committee will have studied the issue most closely. However, the full IAC may choose to recommend another course of action by majority vote. Likewise, the Board may accept, reject or modify any recommendation from the Committee or the IAC.

- **Re-interview by special committee required if performance falls below the lower band for one year.**

Performance that plots below the lower band of the confidence interval of the VAM report would be considered a signal of serious under performance. If performance continues to plot below the lower band for one year, the manager would have to be formally re-interviewed using the process described below.

- **Re-interview process.**

Any re-interview, whether called for by the staff, the Stock and Bond Manager Committee, IAC or SBI, or required because performance falls below the lower band for one year, would be conducted by a special committee. The chair of the Stock and Bond Manager Committee would serve as the chair of the special committee. At least one other member of the Stock and Bond Manager Committee would serve on the committee along with at least three Board member designees. This would mean a committee of at least 5 members. The flexibility on membership is needed to assure that the re-interview can be conducted in a timely fashion.

The Committee would use the same process that is currently applied to hiring new managers. As noted in Alternative #1, the performance analysis should compare the SBI's actual experience with the performance of the firm's account composite that complies with the new performance presentation standards of the Association for Investment Management and Research (AIMR). These are the returns that should be used in most marketing/search presentations. Any significant differences in performance between the composite and the SBI's actual returns should be explained.

It is difficult to predict how many reviews and re-interviews would be prompted by Alternative #2 since there would be considerable flexibility in applying the guidelines.

Richards & Tierney is preparing three year rolling VAM graphs using a 50/50 confidence interval for the managers used by their clients. These graphs will be available at the meeting on Aug. 12 and should provide some perspective on how the guidelines would impact a broad range of external money managers.

For Both Alternative #1 and Alternative #2:

- **Information To Be Included in the Board Folder.**

The Board folder material proposed for each manager is illustrated in **Attachments A and B.**

Information to be displayed on the entire manager pool/asset class segment is included as **Attachment C.**

- **Other Reports To Be Prepared by Staff.**

Annual Benchmark Review. Staff would prepare an annual review of all domestic stock manager benchmarks. This written analysis would be presented to the Stock and Bond Manager Committee and would focus benchmark quality. Since benchmark quality is confirmed, in large part, by statistical tests, a statistical discussion should be

included. Staff would include such discussions in appendices where possible and focus on the conclusions drawn from the statistical analysis in the cover memo/summary of the report. (A similar analysis for domestic bond managers and international stock managers is not necessary *at this time* since they use market indices rather than customized benchmarks for evaluation purposes.)

Reports on Manager/Staff Meetings. Staff will meet with each manager at least annually, either at SBI offices or at the manager's place of business. Any comments on the meetings would be incorporated into the "staff comment" section of the quarterly report from each manager described above.

In-Depth Reviews. Staff would prepare an in-depth review on a manager if a manager is placed on probation for qualitative reasons or if a manager is to be re-interviewed. While the components of the review can be tailored for each manager, staff expects that such a review would include:

- *Organizational background.* Ownership, professional staff, account growth, staff turnover.
- *Investment approach.* Philosophy, prominent characteristics, perceived changes in approach over time.
- *Performance analysis.* Performance attribution relative to the benchmark, perceived trends in sources of value added/lost.

ATTACHMENT A

**Manager Commentary
XYZ Manager**

Period Ending:	x/x/xx		Qtr.	Year
		Actual		
		Benchmark		

1. Past Performance. Summarize your performance over the last quarter and year. Specifically, what active bets did you make relative to your benchmark? Which of these bets worked/did not work and why?

2. Future Strategy. What active bets are in place at the present time relative to your benchmark? Summarize the rationale for making these active bets.

ATTACHMENT B

XYZ Manager
Period Ending x/x/xx

Portfolio Manager: xxx

Assets Under Management: Sxxx

Investment Philosophy
(paragraph description)

Qualitative Evaluation
(reported by exception)

Quantitative Evaluation
(SBI actual, net of fees)

Recommendations

	Actual	Benchmark
Last Quarter		
Last 1 year		
Last 2 years		
Last 3 years		
Last 4 years		
Last 5 years		
Since Incept.		

Value of Active Management Graph
Performance Relative to Benchmark

VAM graph will be drawn: after 3 years for domestic stock and bond managers
after 5 years for international stock managers

When produced, the graph would include up to 10 years of history to give longer term perspective on the pattern of a manager's returns. A shaded area would represent performance prior to retention by the SBI. Those returns would be reduced by the manager's base fee to approximate performance net of fees.

ATTACHMENT C

DOMESTIC STOCK MANAGERS

Current Managers	Quarter Actual Brk	1 Year Actual Brk	2 Years Actual Brk	3 Years Actual Brk	4 Years Actual Brk	5 Years Actual Brk	Period Ending x/xx/xx		% Pool	Mkt. Value
							(1) Since 1/1/92 Actual Brk	(2) Since Inception Actual Brk		

Alliance										
Brinson										
Forstmann										
Franklin										
GeoCapital										
AI Regional										
DS										
Independence										
Fundt										
Lieber										
Lincoln										
Lynch & Mayer										
Oppenheimer										
Waddell & Reed										
Weiss Peck & Greer										
Emerging Managers (3)										
Wilshire Associates (4)										
Current Aggregate										
Historical Aggregate (5)										
Wilshire Adjusted (6)										
Wilshire 5000										

Since 1/1/92 Since 1/1/84

- 1) Since tilted index fund was fully implemented.
- 2) Since retention by the SBI. Time period varies for each manager.
- 3) Aggregate of emerging manager group.
- 4) Passive manager. Tilted index fund began 10/90. Fully implemented 1/92.
- 5) Includes performance of terminated managers.
- 5) Adjusted for liquor and tobacco restrictions through 3/31/93.

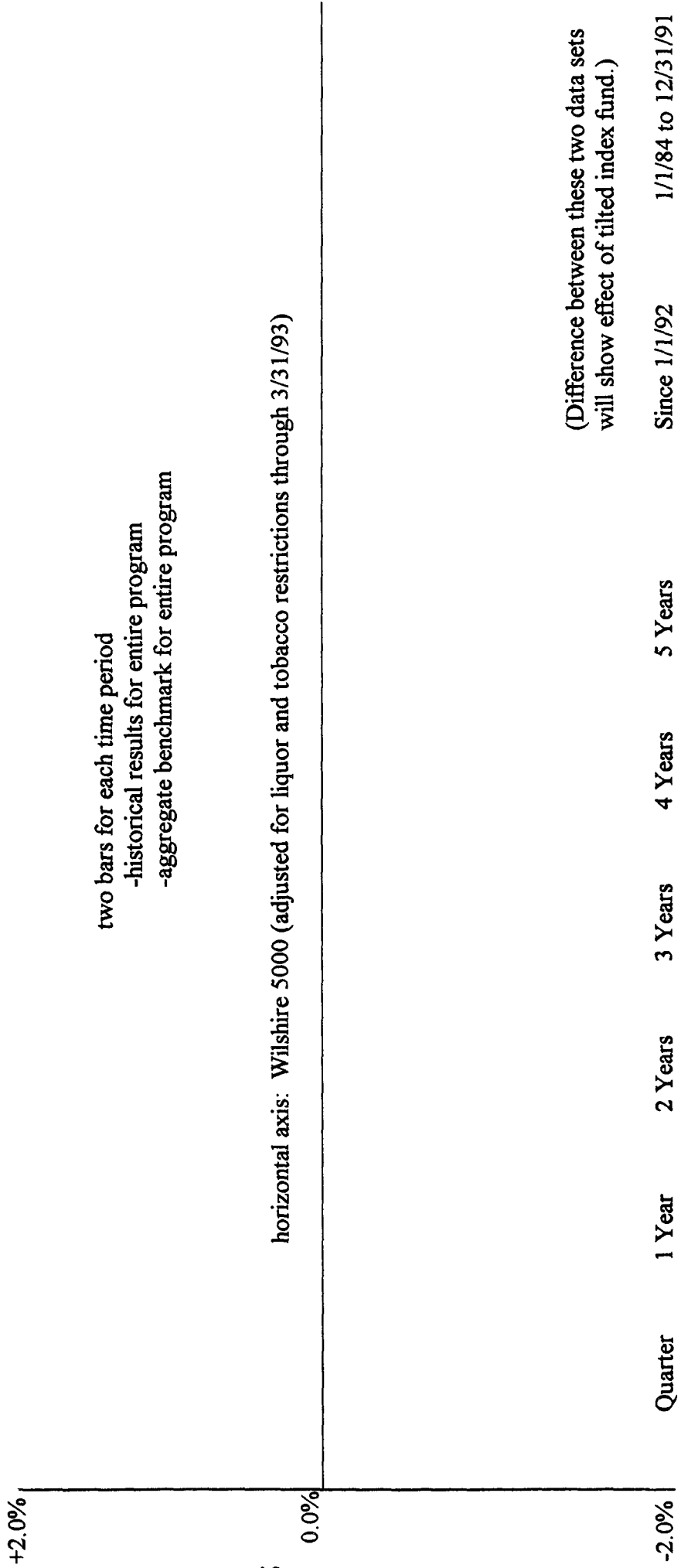
Attachment C (cont.)

Domestic Stock Manager Program
Period Ending x/xx/xx
Value Added

Long Term Return Expectation: +0.20% to +0.45%

two bars for each time period
-historical results for entire program
-aggregate benchmark for entire program

horizontal axis: Wilshire 5000 (adjusted for liquor and tobacco restrictions through 3/31/93)



ATTACHMENT C

DOMESTIC BOND MANAGERS

Current Managers	Quarter Actual Brk	1 Year Actual Brk	2 Years Actual Brk	3 Years Actual Brk	4 Years Actual Brk	5 Years Actual Brk	Since Inception Actual Brk	(1)	% Pool	Mkt. Value

BEA
 AI
 Miller
 Standish
 Western
 DS (2)
 CW (3)
 Goldman (4)
 Fidelity (4)
 Lincoln (4)

Current Aggregate
 Historical Aggregate (5)

Alomon BIG

1) Since retention by the SBI Time period varies for each manager
 2) Govt./Corp. only.
 3) Mortgages only
 4) Semi-passive manager
 5) Includes performance of terminated managers.

Attachment C (cont.)

Domestic Bond Manager Program

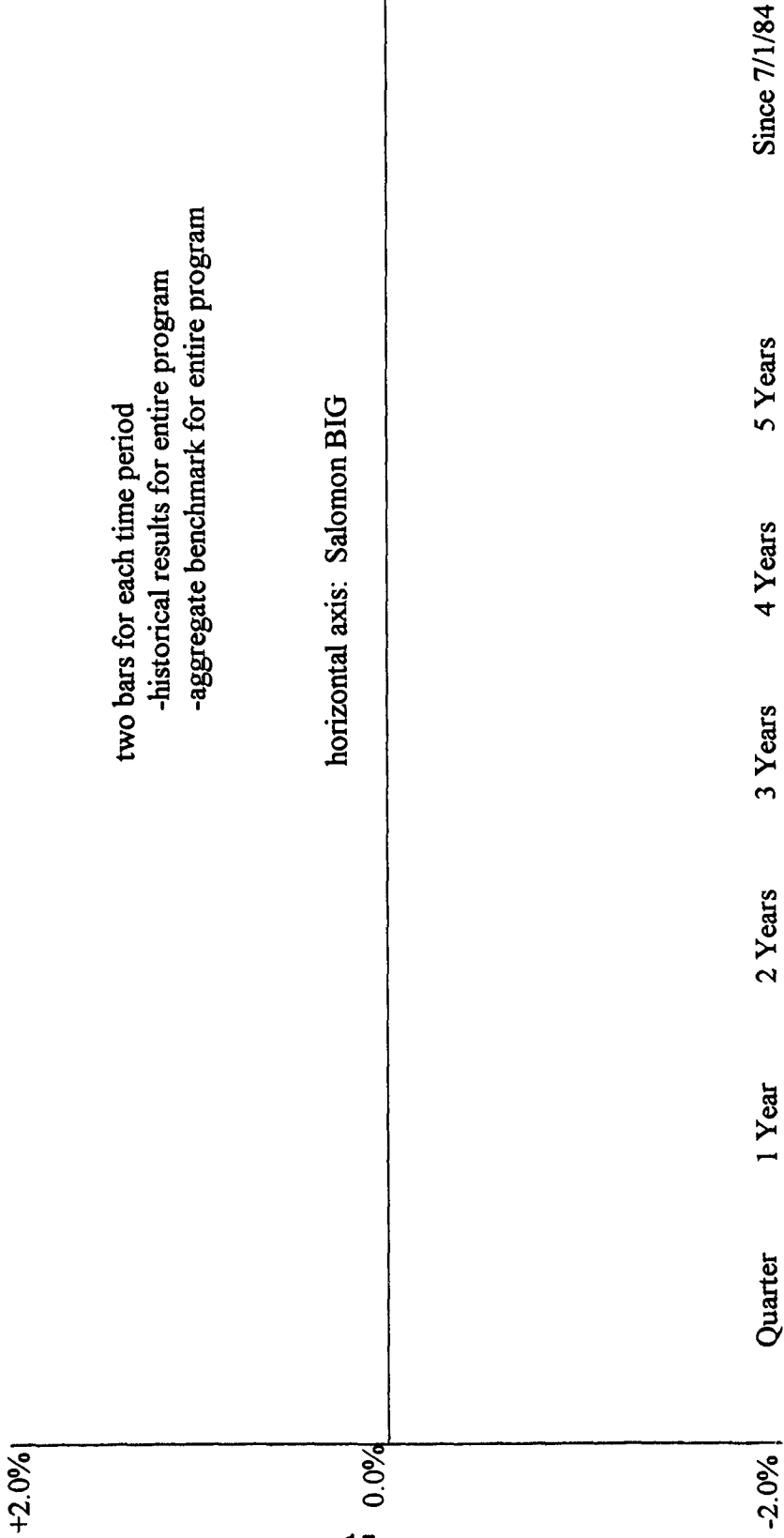
Period Ending x/xx/xx

Value Added

Long Term Return Expectation: +0.20% to +0.35%

two bars for each time period
-historical results for entire program
-aggregate benchmark for entire program

horizontal axis: Salomon BIG



ATTACHMENT C

INTERNATIONAL STOCK MANAGERS

Period Ending x/xx/xx

Current Managers	Quarter Actual Brk	1 Year Actual Brk	Since Inception (1) Actual Brk	% of Pool	Mkt. Value Millions
---------------------	-----------------------	----------------------	-----------------------------------	--------------	------------------------

Baring (2)

Brinson(2)

mgr 1

mgr. 2

mgr. 3

mgr. 4

State Street (3)

(Data for 2, 3, 4 and 5 years would be added as more time passes.)

Current Aggregate

Historical Aggregate (4)

EAFE

EAFE Adjusted (5)

(1) Since retention by the SBI Time period varies for each manager

(2) Active country/passive stock manager

(3) Passive manager.

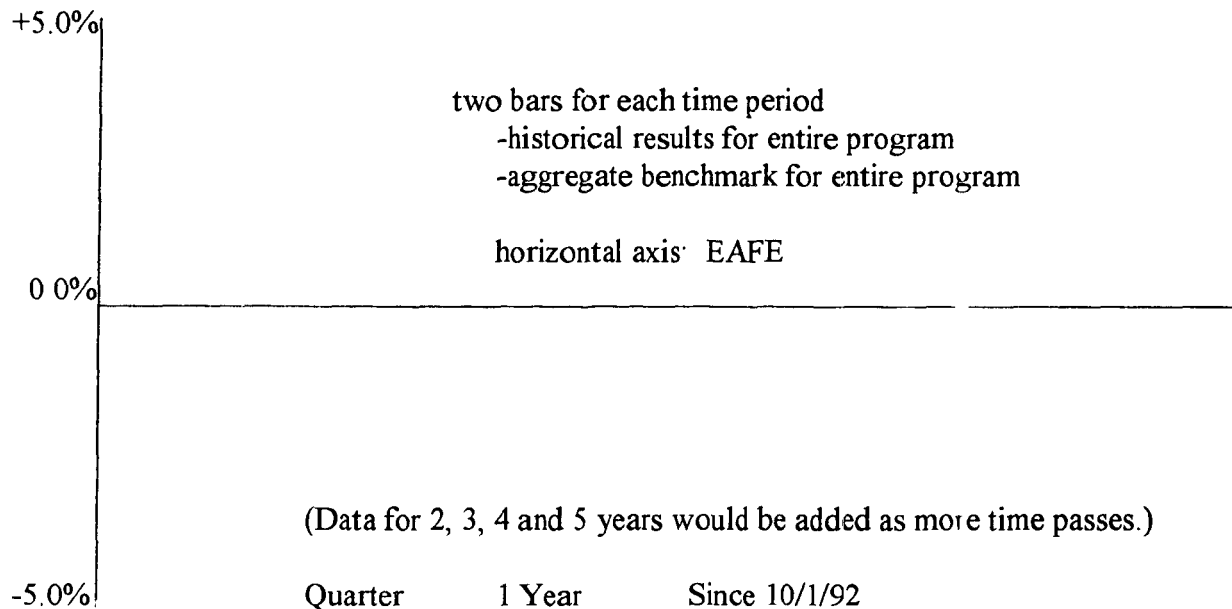
(4) Includes performance of terminated managers

(5) Adjusted and re-weighted for South Africa restrictions.

Period Ending x/xx/xx

Value Added

Long Term Return Expectation: +0.25% to +0.75%



MINNESOTA
STATE
BOARD OF
INVESTMENT



Board Members:

Governor
Arne H. Carlson

State Auditor
Mark B. Dayton

State Treasurer
Michael A. McGrath

Secretary of State
Joan Anderson Growe

Attorney General
Hubert H. Humphrey III

Executive Director:

Howard J. Bicker

Suite 105, MEA Bldg.
55 Sherburne Avenue
St. Paul, MN 55155
(612)296-3328
FAX (612)296-9572

An Equal Opportunity
Employer

DATE: July 8, 1993

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

FROM: Howard Bicker *Howard Bicker*

SUBJECTS: 1. Comments on the Manager Continuation Policy
2. Meeting on August 12, 1993

1. Comments on the Manager Continuation Policy

In early June, I asked members of the Board, members of the Investment Advisory Council (IAC) and Board member designees to suggest potential revisions to the Manager Continuation Policy. I requested that proposals be submitted by June 30, 1993.

The two sets of written comments that were sent to the SBI's offices are attached for your review. One is from Richards & Tierney and the other is from a group of IAC members and a Board Deputy.

Since relatively few comments were received, staff contacted other IAC members to find out if they had any suggestions for modifications to the policy. While they are open to discussing changes, they said that they did not have any suggestions at this time. Most basically agree and with the approach contained in the current policy along with the changes proposed at the June 1993 IAC meeting.

The most specific comment was offered by Mike Troutmann. He reiterated his concern about making changes that lead the SBI to a short term focus on manager evaluation. He said he would evaluate all proposals within that context.

2. Meeting on August 12, 1993.

This is to remind you that the Manager Continuation Policy will be discussed at a joint meeting of the Asset Allocation and Stock and Bond Manager Committee:

Thursday, August 12, 1993
8:30 a.m. - 12:00 noon
SBI Conference Room
Room 105 MEA Building
55 Sherburne Avenue
St. Paul, Minnesota

Agenda

- Discussion of potential revisions to the Manager Continuation Policy. This memo and the attached comments will serve as the background materials for this agenda item.
- Discussion of constraints on the Basic and Post Retirement Funds. Staff intends to distribute background materials on this topic by the end of July.

All members of the SBI and IAC are encouraged to attend this meeting and participate in the discussion.

Please contact me if you have any questions.

Attachments

cc: Board Member Designees
Richards & Tierney

Richards & Tierney, Inc.
Specialized Investment Services
111 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604
(312) 461-1100
FAX: (312) 461-0001

**RECEIVED BY MINNESOTA STATE
BOARD OF INVESTMENT**

JUN 30 1993

TO: Howard Bicker, Minnesota State Board of Investment
FROM: Richards & Tierney
DATE: June 28, 1993

RE: **Comments on the Manager Continuation Policy**

Richards & Tierney (R&T) would like to contribute several thoughts to the Manager Continuation Policy (MCP) discussion. We would like the Board, the IAC, and staff to consider the following issues:

- 1) The unpredictable nature of manager performance.
- 2) The importance of qualitative inputs.
- 3) The cost of "transacting" in managers.
- 4) Linking manager continuation to manager selection.

1) Unpredictability of Manager Performance

Past performance is at best a weak indicator of future performance. Even the best managers cannot guarantee positive results relative to a valid benchmark quarter after quarter, or even year after year. Superior managers will experience up and down periods, and those down periods may seem uncomfortably long in duration. The down periods often result from the fact that superior managers are far from omniscient. They are human and make mistakes. Further, they may pursue contrarian strategies that pay off in the long-run, but produce poor near-term results.

The odds that a superior manager will underperform a valid benchmark over typical evaluation periods are surprisingly high. (Those odds are even greater if an inappropriate benchmark, such as the Wilshire 5000, is applied to a manager with a distinct non-index investment style.) For example, we calculate that there is roughly a 1-in-4 chance that a superior manager will underperform a valid benchmark over any three-year interval.

2) Importance of Qualitative Inputs

We continue to assert that actual performance versus a benchmark should be but one of several criteria used to evaluate a manager. The uncertainty of relative performance, as discussed above, is the primary reason for turning to additional sources of information.

It would be convenient if there were one number on which we could rely to indicate whether a manager will be successful in the future. Unfortunately, and much to the

frustration of a manager's clients, such a predictive number does not exist. Clients must supplement return history with a heavy dose of non-return information to increase their chances of making productive manager continuation decisions.

We have expressed the opinion that a manager (both current and prospective) should be evaluated based on the following information and associated importance.

People	20%
Physical (organization, size, years)	10%
Process (investment philosophy, decision-making)	30%
Procedures (benchmarks, trading, quality control)	20%
Performance	20%

The precise definition of these items and their relative importance is open to debate. Nevertheless, the key point is that performance should be given a weight not materially different than that of other factors. We note that the current MCP incorporates these ideas by considering both qualitative and quantitative elements in the evaluation process.

3) Costs of "Transacting" in Managers

Changing managers is an expensive process, both in terms of assets and time. Transaction costs are incurred whenever assets are bought or sold. While measuring transaction costs is difficult, we believe most practitioners would agree that, on average, common stocks cost 1% or more (one-way) to trade. When we consider that managers' portfolios rarely overlap significantly, then it is reasonable to assume that a terminated manager's entire portfolio is sold and that a new portfolio is purchased in a transition. This activity, therefore, results in a minimum 2% cost is incurred in firing a manager and hiring a replacement. (On a \$300 million portfolio, that cost translates into \$6 million).

Of course, if the fired manager were truly inferior and the successor manager were truly superior, then the 2% cost would be recovered over several years. However, as we pointed out earlier, there is always uncertainty as to whether the fired manager was actually superior and whether the hired manager can actually add value. Thus, while the costs of transacting in managers are certainly real, the benefits may be illusory.

The efficient allocation of people resources should also be weighed when considering whether to continue with a manager. Considerable work must be performed by SBI staff and the various IAC and SBI committees when a manager is fired or hired. We (conservatively) estimate that 300-person hours are involved in the SBI's firing a manager and hiring a replacement.

4) Linking Manager Continuation to Manager Selection

We believe that the MCP should be fully integrated with the selection process. The same concerns affect both decision-making processes. The only difference between the two is that when considering whether to continue with a manager, that manager has been

working with the Board's money as opposed to working with other clients' money when the selection process took place.

When a manager is under review, all information pertinent to an assessment of the manager's skill should be considered. This data should include information (both qualitative and quantitative) originally used to hire the manager. Clients should ask (and should be able to find documentation) as to why the manager was hired. Clients should then answer the questions, "What has changed? Was the change significant? What is the likely future impact of the change on the manager's performance?"

In evaluating past performance, clients should consider the manager's entire history. Recent performance may receive more consideration than earlier performance, but the latter should certainly receive some consideration - after all, that data played a role in hiring the manager in the first place. It is ironic that some clients refuse to hire a manager who does not possess an extensive and successful track record (at least five years in length), yet those clients are willing to fire the same manager after only three years. The asymmetry seems illogical.

Conclusions

Clients spend considerable time and effort selecting investment managers. Presumably, when managers are hired, clients have strong beliefs in the managers' value-added capabilities. They are willing to entrust managers with large pools of assets. For these reasons alone, productive client/manager relationships should be long-term and mutually supportive. The inherent difficulty of ascertaining managers skills and the large expense of changing managers reinforces the need for such relationships.

The Board's MCP should be a guide to produce sound, consistent, and timely decisions. The intent of the MCP is not to provide the right answers, but to ensure that the right questions are asked. A well-conceived MCP, combined with a careful selection process, will avoid excessive and costly manager turnover.

We recommend the following:

- 1) Any changes to the quantitative MCP guidelines should be simulated to determine how often they trigger manager reviews. Guidelines that can be expected to generate more than one review a year should be considered suspect.
- 2) Performance over "rolling" time periods should be used only in addition to reviews of performance over longer time periods. Preferably, performance data used in the selection process would be joined with actual experience to provide a long-term perspective on the manager's results.
- 3) Poor past performance should merely trigger a manager review, not dictate the outcome of that review. Past performance should be viewed as one of

several indicators of the manager's ability to add value in the future.

- 4) The Board should continue its diligent manager monitoring program. Poor performance is typically a result of significant change in an organization, not a cause. As the current MCP describes, manager monitoring should focus on specific qualitative (e.g., personnel, excessive growth, ownership) and quantitative (e.g., investment style, risk taken relative to the benchmark) signs of change.

Minnesota State Board of Investment

JUL 06 1993

MANAGER EVALUATION PROPOSAL

The proposed Manager Evaluation Policy seeks to increase the accountability of active management and improve the monitoring process. The proposal represents the input of the following IAC and SBI members but should not be construed as a complete consensus on all points. The proposal is a first attempt to put our thoughts together to facilitate discussion of the manager evaluation process. At the August 12, 1993 meeting, we expect to incorporate new ideas and suggest changes to this proposal.

Jan Yeomans
Chair, IAC

John Bohan
Chair, Asset Allocation Committee

Jim Eckmann
Chair, Stock & Bond Manager Committee

Dave Bergstrom
Member, Stock & Bond Manager Committee

Laurie Fiori Hacking
Member, Asset Allocation Committee

Mark Dayton
State Auditor

MANAGER EVALUATION POLICY

I. ALTERNATIVE FRAMEWORK FOR QUANTITATIVE GUIDELINES

- Replace each manager's current cumulative Value of Active Management (VAM) graph with a three-year rolling performance graph with narrower confidence interval ranges of 75 and 25, instead of 90 and 10.

Manager Under Performance

Three-Year Rolling Performance

- Performance that plots below a manager's benchmark in three of the preceding four quarters utilizing a three-year rolling performance analysis will trigger action by the staff and review by the Manager Evaluation Committee during the following quarter.

Under performance in three of the preceding four quarters will trigger both a letter to the manager asking the manager to explain the under performance and a meeting with the manager to enable open discussion and response to concerns regarding the manager's under performance.

Under Performance Triggers a Letter to the Manager and a Meeting with Representatives of the Manager Evaluation Committee and Staff

- The manager will be asked to explain recent under performance, quantify the factors of under performance and discuss how the manager plans to achieve the Board's active return expectation relative to the benchmark and net of all fees. Additionally, the manager should state its expected relative performance over the next twelve to twenty-four months.
- Representatives of the Manager Evaluation Committee and staff will review the manager's letter and meet with the manager to discuss the under performance during the next quarter. The Committee should evaluate:
 - i) The validity of the manager's reasoning process
 - ii) The manager's pattern of performance. The investment consultant and staff will be asked to provide the manager's one year, two year, three year, four year, etc., trailing performance numbers from inception to determine the year-to-year performance trend. The investment consultant and staff should also quantify the factors of under performance through performance attribution for the Committee. The performance analysis should include the performance history that led the SBI to retain the firm.

- Based on the letter, the meeting with the manager, and the performance analysis, the Manager Evaluation Committee should make an explicit decision to recommend that a manager be continued or call for a comprehensive review and re-interview of the manager. The Manager Evaluation Committee should use the following decision framework:
 - i) Endorse the continuation of the manager unless the manager underperforms its benchmark in the three succeeding quarters.
 - ii) Endorse the continuation of the manager with specific caveats and continue to closely scrutinize the manager's performance over the succeeding twelve to twenty-four month period. The Committee will pay particular attention to the manager's stated relative performance expectations.
 - iii) Call for a re-interviewing and comprehensive review of the manager if the manager's ability to add value is in doubt.
- The Manager Evaluation Committee will have the flexibility to deviate from the decision framework in exceptional circumstances. If the Manager Evaluation Committee does deviate from this framework, the Committee must notify the IAC of the exception and present an explanation of its action and its rationale.
- When the Manager Evaluation Committee determines that a re-interviewing and comprehensive review of the manager is appropriate, the re-interview and comprehensive review will use the following process:
 - i) The Manager Evaluation Committee will require the manager to make a presentation to the Committee and the manager will be "re-interviewed" as if the manager had no relationship with the SBI. The Committee would use the same process that is currently applied to hiring new managers when re-interviewing existing managers whose ability to add value is in doubt.
 - ii) A comprehensive review of a manager by staff would include a written qualitative evaluation assessing the manager's investment approach, the manager's current strategy and active bets, a discussion of the manager's thought processes and rationale and staff's judgment about whether the manager's actions are logical and consistent with the economy in the near term, the valuation levels in the market, etc. The staff would thus evaluate the weight and significance of the manager's explanations, the components of the manager's under performance and the manager's stated relative performance expectations in order to make a recommendation about whether the manager will achieve the Board's active return expectation relative to the benchmark and net of all fees. The quantitative analysis would be limited to a general discussion (not a statistical discussion) of the appropriateness of the benchmark. The performance analysis should include the performance history that led the

SBI to retain the firm and the performance history of a comparable client over the same or substantially similar timeframe. The Manager Evaluation Committee may request information on peer group performance in the manager's style for one year, three year, and five year periods, e.g. large cap growth, small cap growth, large cap value, small cap value, etc.

- After a manager is re-interviewed and an in-depth review is completed, the Manager Evaluation Committee would recommend its action to the full IAC and present an explanation of its action and its rationale to continue or terminate a manager.

II. QUALITATIVE GUIDELINES

- No change to the qualitative guidelines is recommended. The Manager Evaluation Committee will review the managers according to both qualitative and quantitative guidelines.

III. THE MANAGER EVALUATION COMMITTEE

- The Manager Evaluation Committee should include representatives of the Stock and Bond Manager Committee of the Investment Advisory Committee, the Executive Director of the SBI, and should include designees of each of the Board members. The Chair of the Stock and Bond Manager Committee will chair the Manager Evaluation Committee. As with all committees, the IAC Chair is an ex-officio member of the Committee. The rationale for including the Executive Director of the SBI and the Board designees on the Committee is one of continuity. Because under performing managers may be reviewed on a comprehensive basis and may be "re-interviewed", using the same individuals who participated in the manager search committees will provide continuity to the Manager Evaluation Committee. While this is a suggested committee format, this is not the only approach that should be considered.

IV. ADDITIONAL INFORMATION TO BE PROVIDED IN THE SBI BOARD FOLDER

- The Board folder will include the following performance information on each manager: quarterly, one year, three-year rolling annualized, five-year rolling annualized, and annualized since inception.
- A three-year rolling performance graph with confidence intervals with the narrowed standard deviation band of 75 and 25 for each active equity manager. The lower band will represent a warning line, not a termination line.
- Rolling five-year performance graphs which will compare each active equity manager's actual performance relative to its benchmark and relative to the Wilshire 5000. This

information may be used by the SBI, IAC, and staff to evaluate the opportunity costs of the SBI's active management investment policy.

- A five-year rolling performance graph comparing the following:
 - i) The total return of the Wilshire 5000 (adjusted or unadjusted?) trailing performance numbers,
 - ii) The aggregate active equity managers' benchmarks including the tilted index fund benchmark,
 - iii) The aggregate active equity managers' benchmarks excluding the tilted index fund benchmark, and
 - iv) The historical aggregate active equity managers' performance.
- The aggregate benchmark and aggregate return of active equity managers excluding the tilted index fund should be added to the current quarterly summary manager performance table. The table should be reformatted to include both the historical and current active equity aggregate benchmark and return excluding the tilted index fund.
- Along with each equity manager's charts, specific manager performance objectives (non-uniform for all equity managers) should be stated. Each manager's return expectation will differ based on its individual ability to add value to the benchmark. The review of these performance objectives should occur over the next year and should be discussed with the active managers as soon as possible.

V. ADDITIONAL WORK REQUIRED OF STAFF

- Staff will conduct in-depth reviews of the managers only if the Manager Evaluation Committee, the IAC, a member of the Board, the Executive Director of the SBI, or the investment consultant has lost confidence in the manager and has called for a re-interview and comprehensive review of the manager.
- Because the Manager Evaluation Policy adds additional responsibility for the SBI staff, if staff would like to limit responsibilities that are not productive or relate to better performing managers, or other responsibilities described in the staff's proposal entitled "Regular Reviews," staff should submit any additional recommendations.

Tab G

COMMITTEE REPORT

DATE: September 7, 1993

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

FROM: **Asset Allocation Committee**

The Asset Allocation Committee met on August 23, 1993 to review the following items:

- update on asset allocation transition in the Post Fund
- reconsideration of total fund objectives for Basic, Post and Combined Funds

INFORMATION ITEM:

1. Update on Post Fund Asset Allocation Transition

In June 1992, the Board adopted new asset allocation targets for the Post Fund with a higher stock exposure due changes in the benefit increase formula. Progress in reaching the new allocation targets proceeded gradually throughout fiscal year 1993:

	6/30/92	9/30/92	12/31/92	3/31/93	6/30/93	Target
Stocks	9%	16%	30%	40%	50.8%	50%
Bonds	80%	80%	66%	57%	46.6%	47%
Cash	11%	4%	4%	3%	2.6%	3%

The **bond portfolio** was managed internally during the transition and moved from \$5.7 billion on 6/30/92 to \$3.9 billion on 6/30/93. This equates to average monthly cash/bond sales of \$254 million. Using BARRA portfolio risk analysis, staff moved the bond portfolio to a market duration in the first month and subsequently re balanced the portfolio on a monthly basis as bonds were liquidated to finance the stock purchases. During the transition, the portfolio was targeted to the Shearson Government/Corporate bond index. The actual return on the bond segment for the year was 13.7% vs. the index return of 13.1%.

The **stock portfolio** was managed externally during the transition and moved from \$0.6 billion on 6/30/92 to \$4.2 billion on 6/30/93. Corresponding to the figures reported above, this translates to average monthly stock purchases of \$254 million. During the transition, the S&P 500 was the most appropriate market index for

performance comparison. The actual return on the stock portfolio for the year was 10.5% vs. an index return of 13.6%. The stock transition was accomplished both with purchases of stock in the open market and with transfers from the Basic Funds:

- The existing portfolio and market purchases moved toward the S&P 500 during the first six months (July-December). Thereafter, this portion of the stock segment was fully indexed to the S&P 500 (January-June).
- The Post Fund was able to "purchase" approximately \$1 billion of stocks from the Basic Funds during the year. Most of these securities were available because the Basics were "selling" existing positions in domestic stocks in order to buy international stocks. In aggregate, these purchases/transfers were targeted toward the Wilshire 5000. This process saved the Post Fund approximately \$10 million in transaction costs that would have otherwise been necessary if the \$1 billion in stocks had been purchased on the open market. Likewise, the Basic Funds saved approximately \$10 million in transactions costs by not selling \$1 billion in stocks to raise cash to buy international securities. Total estimated savings were \$20 million.

Considering the magnitude of the transition (more than \$3 billion bonds sold and \$3 billion stocks purchased), the Committee agrees with staff's assessment that the transition was implemented efficiently. By proceeding gradually, the SBI was able to accomplish the move without negatively impacting the financial markets. In addition, both the Basic and Post Funds were able to save substantial transactions costs due to the timing of the asset allocation moves. While the above market returns in the bond portfolio were offset by below index returns in the stock segment, the Committee believes that the overall results are favorable within the context of such a large asset allocation transition.

For your information, a summary of the monthly purchases and sales that occurred as part of the transition is in **Attachment A**.

ACTION ITEM:

1. Reconsideration of Total Fund Objectives.

The Committee recommended revised fund objectives for the Basic, Post and Combined Funds to the SBI at the June 1993 meeting. As you know, the Board tabled consideration of the recommendation until the SBI had the opportunity to review constraints on fund performance. The Committee reconsidered its prior report on fund objectives in light of the recommendations that the Committee expects to be forwarded by the IAC to the Board (see discussion under Tab F).

Staff and the Committee continue to recommend that the funds use the following comparisons:

- provide real rates of return over ten years (Combined Funds)
- exceed median fund over five years (Combined Funds)
- exceed market index composite over five years (Basic Fund, Post Fund)

The current objectives for the Basic Funds and the modifications necessary are shown in **Attachment B**. Performance relative to these objectives should be reported using the format shown in **Attachment C**. This new format will replace the existing report now included as the first page of Tab A of the quarterly Board folder. The new reporting format will incorporate returns from the Post Fund beginning July 1, 1993. Results for the Combined Funds will reflect only the performance of the Basic Funds for all periods before July 1, 1993.

The Committee discussed once again whether the Board should have a higher performance standard than exceeding the median fund. In response, the Committee suggests that the Board differentiate between performance *objectives* and performance *goals*:

- The Committee recommends that the standards delineated in **Attachment B** should be considered the Board's *objectives* for the Funds. As such, the Board will report actual results relative to these stated standards on an ongoing basis. As noted above, these objectives state that the Combined Funds should exceed the *median* fund over five years. The implication is that the stated objective reflects what the Board is *expecting* to achieve.
- The Committee also suggests that the Board should have a performance *goal* to reflect what it is *striving* to achieve relative to other pension funds. The Committee recommends that the Board's goal for the Combined Funds should be performance that is in the *top third* of all pension funds over five years. As a goal rather than objective, this target could be noted in a footnote in the report format. The Committee believes that top third performance is an appropriate goal *if* the Board removes all investment restrictions and adopts a more aggressive asset allocation for the Combined Funds.

RECOMMENDATION

The Committee recommends that the SBI adopt the total fund objectives for the Basic, Post and Combined Funds shown in **Attachment B** and the accompanying report format shown in **Attachment C** for the period beginning July 1, 1993. Further, the Committee recommends that the SBI adopt a performance goal of striving to achieve performance in the top third of all pension funds for the Combined Funds *if* the Board removes all investment restrictions/constraints and adopts all recommendations reported under Tab F.

ATTACHMENT A

**POST RETIREMENT FUND
Summary of Asset Sales/Purchases
Due to Asset Allocation Transition
Fiscal Year 1993**

Month	Bonds/Cash "Sold"	Stocks "Purchased"	Purchase Source
July	\$200 million	\$200 million	\$150 million (market) \$50 million (Basics)*
August	\$150 million	\$150 million	\$150 million (market)
September	\$200 million	\$200 million	\$200 million (market)
October	\$281 million	\$281 million	\$150 million (market) \$131 million (Basics)**
November	\$270 million	\$270 million	\$200 million (market) \$70 million (Basics)**
December	\$500 million	\$500 million	\$400 million (market) \$100 million (Basics)**
January	\$150 million	\$150 million	\$150 million (Basics)**
February	\$285 million	\$285 million	\$200 million (market) \$35 million (Basics)* \$50 million (Basics)**
March	\$300 million	\$300 million	\$200 million (market) \$100 million (Basics)**
April	\$412 million	\$412 million	\$200 million (market) \$212 million (Basics)**
May	\$200 million	\$200 million	\$100 million (market) \$100 million (Basics)**
June	\$200 million	\$200 million	\$200 million (market)
Total	\$3,058 million	\$3,058 million	\$2,150 million (market) \$998 million (Basics)

* purchased from Basics as part of normal rebalancing activity

** purchased from Basics due to international stock program

**ATTACHMENT B
TOTAL FUND OBJECTIVES**

CURRENT OBJECTIVES Basic Retirement Funds	PROPOSED OBJECTIVES Basic, Post or Combined (as noted)
<p><i>Provide Real Return</i></p> <p>Provide real returns that are 3-5 percentage points greater than the rate of inflation over moving 10 year periods.</p>	<p><i>Provide Real Return</i></p> <p>Use same objective for <i>Combined Funds</i>.</p>
<p><i>Exceed Median Fund</i></p> <p>Outperform the median fund from a universe of public and private funds with a balanced asset mix, excluding alternative investments, over moving 5 year periods.</p>	<p><i>Exceed Median Fund</i></p> <p>Modify for <i>Combined Funds</i> as follows: Outperform the median fund from a universe of public and corporate funds with a balanced asset mix over moving 5 year periods.</p>
<p><i>Exceed Composite Market Index</i></p> <p>Outperform a composite index weighted in a manner that reflects the long term asset allocation of the Basic Funds over moving 5 year periods.</p>	<p><i>Exceed Composite Market Index</i></p> <p><i>Basic Funds:</i> Outperform a composite index weighted in a manner that reflects the long term asset allocation of the Basic Funds over moving 5 year periods.</p> <p><i>Post Fund:</i> Outperform a composite index weighted in a manner that reflects the long term asset allocation of the Post Fund over moving 5 year periods.</p> <p><i>Combined Funds:</i> Outperform a composite index weighted in a manner that reflects the actual asset mix of the Combined Funds over moving 5 year periods.*</p>

**The composite index for the Combined Funds will need to be changed each month to reflect the changes in market value in each of the funds. The SBI does not establish long term asset allocation targets for the Combined Funds.*

ATTACHMENT C
RETURN OBJECTIVES REPORT FORMAT
Period Ending xx/xx/xx

COMBINED FUNDS: \$xx.x Billion	Return	Compared to Objective
<i>Provide Real Return (10 yr.)</i>	x.x%*	x.x percentage points above/below target
Provide returns that are 3-5 percentage points greater than inflation over moving 10 year periods		
<i>Exceed Median Fund (5 yr.)</i>	x.x%*	x.x percentage points above/below target
Outperform the median fund from a universe of public and corporate funds with a balanced asset mix over moving 5 year periods		
<i>Exceed Composite Index (5 yr.)</i>	x.x%*	x.x percentage points above/below target
Outperform a composite index weighted in a manner that reflects the <i>actual asset mix</i> of the Combined Funds over moving 5 year periods		

BASIC RETIREMENT FUNDS: \$x.x Billion	Return	Compared to Objective
<i>Exceed Composite Index (5 yr.)</i>	x.x%	x.x percentage points above/below target
Outperform a composite index weighted in a manner that reflects the <i>long term asset allocation</i> of the Basic Funds over moving 5 year periods		

POST RETIREMENT FUND: \$x.x Billion	Return	Compared to Objective
<i>Exceed Composite Index (5 yr.)</i>	x.x%**	x.x percentage points above/below target
Outperform a composite index weighted in a manner that reflects the <i>long term asset allocation</i> of the Post Fund over moving 5 year periods		

* Reflects performance of Basic Funds only through 6/30/93, Combined Funds thereafter.

** Since asset allocation transition was completed, 7/1/93.

Tab H

COMMITTEE REPORT

DATE: September 7, 1993

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

FROM: **Stock and Bond Manager Committee Report**

The Stock and Bond Manager Committee met on August 31, 1993 to review the following items:

Information Items:

- Update on July 1, 1993 allocation to new and existing domestic stock and bond managers.
- Review of manager performance for the period ending June 30, 1993.

Action Items:

- Recommendation to terminate the contractual relationship with Lieber & Co., a domestic stock manager.
- Recommendation to renew the contractual relationship with State Street Global Advisors, the international stock index manager.
- Recommendation to authorize global bond investing on a pilot program basis.

INFORMATION ITEMS:

1. Update on July 1, 1993 Allocations

During FY93, the SBI conducted searches for additional domestic stock and bond managers to enlarge the manager pools and provide capacity to absorb the assets of the Post Retirement Fund. In June 1993, the SBI approved allocation ranges for each of the new and existing domestic stock managers. On July 1, 1993, the managers received the amounts shown in **Attachments A and B**.

2. Review of Manager Performance

- **Domestic Stock Managers**

For the quarter ended June 30, 1993, the Basic Funds' domestic equity program underperformed its aggregate benchmark and matched the Wilshire 5000 Adjusted

(Equity Program 0.7%; Aggregate Benchmark 0.8%; vs Wilshire 5000 Adjusted 0.7%). The current equity managers in the Basic Funds outperformed the their aggregate benchmark and the Wilshire 5000 adjusted for the latest year (Equity Managers 16.4%; Aggregate Benchmark 16.1%; Wilshire 5000 Adjusted 16.0%). For the latest five year period, the current equity managers outperformed both the aggregate benchmark and the Wilshire 5000 adjusted.

The performance evaluation reports and investment commentaries for stock managers start on **page 11**.

- **Domestic Bond Managers**

For the quarter ended June 30, 1993, the Basic Funds' bond portfolio returned 3.3% versus 2.8% for its benchmark, the Salomon Broad Investment Grade Index (BIG). The portfolio performed well primarily because of a longer duration than the benchmark as interest rates fell. The portfolio outperformed the BIG for the year (13.4% vs. 12.0%) and for the latest five years (11.8% vs 11.4%).

The evaluation reports and investment commentaries for bond managers start on **page 33**.

- **International Stock Managers**

Performance for the SBI's international stock managers since inception is shown below

	Quarter Ended			Since
	12/31/92	3/31/93	6/30/93	Inception
Baring (active/passive)			5.0%	5.0%
Brinson (active/passive)			5.3%	5.3%
State Street (index)	-3.7%	11.9%	9.4%	17.9%
Total Program	-3.7%	11.9%	8.4%	16.7%
EAFE	-3.9%	12.0%	10.1%	18.5%

Baring and Brinson were funded on April 1, 1993. Both of these active country/passive stock managers were underweighted in Japan and consequently underperformed the index for the quarter. State Street was initially funded on October 1, 1992. The firm's negative tracking for the quarter was due entirely to currency pricing differences between the pricing source used by MSCI and the pricing source used by the SBI's custodian bank. Staff is working with the manager and the custodian to resolve the pricing differences.

ACTION ITEMS:

1. Recommendation to Terminate Contract with Lieber & Co.

As noted in the VAM reports, staff is recommending that the contract with Lieber & Co. be terminated at this time. In the past, this manager provided the SBI with significant value added relative to its benchmark. Over the last 2-3 years, however, the firm has persistently under performed due to poor stock selection and this trend does not show signs of improvement. Lieber under performed by 2.4% in the last quarter, and by 5.2% for the last year. Due to poor stock selection in the last 24-36 months, the firm has under performed its benchmark by 1.7% for the last five years and by 0.3% since inception (nine and one half years).

In addition to these quantitative issues, staff noted two qualitative concerns. First, staffing changes at Lieber in the last 1-2 years have not provided perceptible benefit and may have altered the firm's decision making process. Second, the firm's future plans focus on growth in its mutual fund business rather than larger institutional clients such as the SBI. Staff feels that in the future, Lieber's two main principals, who have been the SBI's portfolio managers, will continue to allocate more of their time to managing the mutual fund operation.

RECOMMENDATION:

The Committee recommends that the SBI terminate its contractual relationship with Lieber & Co.

2. Recommendation to Renew Contract with State Street Global Advisors

State Street Global Advisors has managed the SBI's EAFE index fund since October 1, 1993. The initial contract was written with a one year term and expires on September 30, 1993. Staff and the Committee recommend that the contract be renewed subject to the standard 30 day termination provision.

Staff noted that State Street was able to "cross" 54% of the trades necessary to build the index fund with sales by its other clients during the first six months (October-March). This surpassed the projections made by State Street during the interview process and saved the SBI an estimated \$2.2 million in transactions costs. A trade summary prepared by State Street is in Attachment C.

RECOMMENDATION:

The Committee recommends that the SBI authorize the executive director, with assistance from SBI legal counsel, to negotiate and execute a contract amendment with State Street Global Advisors for international passive stock management services.

3. Recommendation to Authorize Global Bond Investing

As noted in Tab F, the Asset Allocation Committee has recommended that the SBI move forward with global bond investing as soon as possible. In response, staff developed an interim proposal to incorporate a small, tactical allocation to non US bonds which is outlined below. After discussion, the Committee endorsed the staff proposal. (Note: "international" investing focuses on non US markets while "global" investing includes both US and non US markets.)

Several of the SBI's current active bond managers invest globally for their current clients. Staff proposed that the SBI authorize these bond managers to invest up to 10% of their individual portfolios in non US bonds. Each manager would use this authority to invest opportunistically with the primary objective of enhancing returns over the Salomon BIG and would be responsible for making the associated security selection and currency decisions. Since the objective is to enhance returns, the benchmark would remain the Salomon BIG. The managers suggested for the new authority, subject to further review by SBI staff, are:

- BEA Associates
- Miller Anderson & Sherrerd
- Standish Ayer & Wood
- Western Asset Management

Expanding the investment guidelines for the existing managers will give the SBI a small exposure to non US bonds without embarking on time consuming manager searches. Since the exposure would be limited (e.g. at current asset levels, no more than \$200 million non US bonds in a total bond portfolio of \$6.6 billion), this should be considered an interim or experimental approach to global bond investing. If approved by the Board, staff should monitor this pilot program and continue its research into other implementation alternatives.

RECOMMENDATION:

Subject to further staff review, the Committee recommends that BEA, Miller, Standish and Western be allowed to invest up to 10% of their portfolios in non US bonds, as outlined above. If granted, this expanded authority should be considered an interim approach to global bond investing.

The Committee requests that the Asset Allocation Committee review impact of this interim program within 2 years. At that time, the Asset Allocation Committee should recommend that the authorization be continued or modified based on additional staff research into global bond investing.

ATTACHMENT A

DOMESTIC EQUITY PROGRAM
ENDING VALUES

<u>Manager</u>	<u>Before Transfer June 30, 1993</u>	<u>After Transfer July 1, 1993</u>	<u>% Allocation After Transfer</u>
Alliance Capital	\$666 million	\$666 million	7.4
Brinson Partners	-0-	\$248 million	2.7
Forstmann-Leff	\$332 million	\$332 million	3.7
Franklin Portfolio	\$213 million	\$356 million	4.0
GeoCapital	\$230 million	\$230 million	2.6
IDS Advisory	\$267 million	\$348 million	3.9
Investment Advisors	-0-	\$89 million *	1.0
Independence	\$221 million	\$347 million	3.9
Jundt Associates	-0-	\$204 million	2.3
Lincoln Capital	-0-	\$242 million	2.7
Lieber & Company	\$185 million	\$185 million	2.0
Lynch & Mayer	\$210 million	\$306 million	3.4
Oppenheimer Capital	-0-	\$248 million	2.7
Weiss Peck & Greer	-0-	\$132 million **	1.5
Waddell & Reed	\$261 million	\$365 million	4.1
Wilshire Associates	\$3,519 million	\$4,683 million	52.1
Total	<u>\$6,140 million</u>	<u>\$8,981 million</u>	<u>100.0</u>

* IAI received \$15 million additional contribution in August 1993.

** Weiss Peck & Greer received \$70 million additional contribution in August 1993.

ATTACHMENT B

**DOMESTIC BOND PROGRAM
ENDING VALUES**

<u>Manager</u>	<u>Before Transfer June 30, 1993</u>	<u>After Transfer July 31, 1993</u>	<u>% Allocation After Transfer</u>
Ark	\$141 million	-0-	-0-
BEA	-0-	\$291 million	4
IAI	\$220 million	\$520 million	8
Miller	\$318 million	\$525 million	8
Standish	-0-	\$516 million	8
Western	\$630 million	\$940 million	14
IDS	-0-	\$259 million	4
TCW	-0-	\$259 million	4
Fidelity	\$818 million	\$1,102 million	17
Lincoln	\$764 million	\$1,100 million	17
Goldman	-0-	\$1,106 million	17
Total	\$2,892 million	\$6,616 million	100

MINNESOTA STATE BOARD OF INVESTMENT SIX MONTH CONTRIBUTION SUMMARY

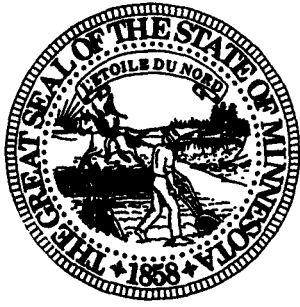
<u>Contribution Date</u>	<u>% of Trade Crossed</u>		<u>Estimated \$ Savings</u>
	<u>Internally</u>	<u>Externally</u>	
October 1992	83%		\$720,000
November 1992	73%		350,000
December 1992	18%		150,000
January 1993	42%		460,000
February 1993	40%		110,000
March 1993	67%		440,000
<u>TOTAL</u>	54%		\$2.2mm

Total Portfolio Value 3/31/93 = \$663,292,685

TRADE SUMMARY - OCTOBER 1992-MARCH 1993

ATTACHMENT C (con't)

Country	Total Contribution by Country	Total Crosses	Total Market Trades	Rate of Commission & Taxes	Estimated Mkt Impact	Estimated		Total Tran costs Bp's	Estimated Cost SAVINGS USD	Estimated Cost SAVINGS Bp's
						Total Tran costs USD	Total Tran costs Bp's			
AUSTRIA	\$2,838,404	\$848,715	\$1,989,689	0.55%	0.95%	\$29,845	105.1	\$12,731	44.9	
AUSTRALIA	\$15,538,822	\$6,114,837	\$9,423,985	0.35%	0.75%	\$103,664	66.7	\$67,263	43.3	
BELGIUM	\$7,912,000	\$6,254,036	\$1,657,964	0.30%	1.35%	\$27,356	34.6	\$103,192	130.4	
SWITZERLAND	\$25,649,000	\$14,874,516	\$10,774,484	0.20%	0.39%	\$63,569	24.8	\$87,760	34.2	
GERMANY	\$39,933,198	\$22,544,150	\$17,389,048	0.03%	0.65%	\$118,246	29.6	\$153,300	38.4	
DENMARK	\$4,446,919	\$1,323,631	\$3,123,288	0.35%	0.95%	\$40,603	91.3	\$17,207	38.7	
SPAIN	\$11,312,812	\$4,436,915	\$6,875,897	0.20%	0.75%	\$65,321	57.7	\$42,151	37.3	
FINLAND	\$2,129,026	\$1,329,026	\$800,000	0.30%	1.10%	\$11,200	52.6	\$18,606	87.4	
FRANCE	\$37,364,787	\$20,963,661	\$16,401,126	0.07%	0.93%	\$164,011	43.9	\$209,637	56.1	
HONGKONG	\$20,367,841	\$8,263,154	\$12,174,687	0.50%	0.56%	\$129,052	63.4	\$87,589	43.0	
ITALY	\$13,140,000	\$8,489,253	\$2,968,617	0.23%	0.67%	\$26,718	20.3	\$76,403	58.1	
JAPAN	\$258,500,035	\$147,241,069	\$111,258,966	0.03%	0.47%	\$556,295	21.5	\$736,205	28.5	
NETHERLANDS	\$19,313,857	\$7,455,874	\$11,857,983	0.08%	0.47%	\$65,219	33.8	\$41,007	21.2	
NORWAY	\$1,775,000	\$1,070,188	\$704,812	0.35%	0.95%	\$9,163	51.6	\$13,912	78.4	
NEW ZEALAND	\$1,723,134	\$1,145,666	\$577,468	0.35%	0.83%	\$6,814	39.5	\$13,519	78.5	
SWEDEN	\$8,325,000	\$2,632,460	\$5,692,540	0.30%	0.75%	\$59,772	71.8	\$27,641	33.2	
SINGAPORE	\$8,400,849	\$3,522,613	\$4,878,236	0.55%	0.80%	\$65,856	78.4	\$47,555	56.6	
UNITED KINGDOM	\$115,227,681	\$68,356,685	\$46,870,996	0.51%	0.69%	\$562,452	48.8	\$478,497	41.5	
CASH	\$6,101,635	\$0	\$0	N/A	N/A	N/A	N/A	N/A	N/A	
TOTALS	\$600,000,000	\$326,866,449	\$265,419,786			\$2,105,155	35.1	\$2,234,176	37.2	



STATE BOARD OF INVESTMENT

Stock Manager Evaluation Reports

Second Quarter, 1993

DOMESTIC STOCK MANAGERS
Second Quarter 1993

Domestic 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 standards against which to judge the manager's performance.

Staff Recommendations:

Staff recommends the following actions concerning manager status:

- Staff recommends that Lieber's contract be terminated.

Manager performance relative to benchmarks is evaluated on a quarter basis by the Stock and Bond Manager Committee of the Investment Advisory Council.

Current Managers	Total Market Value 6/30/93 (Millions)	Quarter Ending 6/30/93		Year Ending 6/30/93		Annualized Five Years Ending 6/30/93		Annualized Since Inception***		% of Stock Segment 6/30/93 Basic Funds
		Actual	Bmrk	Actual	Bmrk	Actual	Bmrk	Actual	Bmrk	
Alliance	\$666	-0.9%	-3.1%	17.8%	9.2%	17.0%	11.2%	17.9%	11.6%	10.8%
Forstmann	332	-0.1	0.4	12.9	14.3	10.3	11.6	12.7	12.0	5.4
Franklin	213	4.0	0.9	28.1	19.9	--	--	14.6	13.2	3.5
GeoCapital	230	0.5	6.2	15.6	31.5	--	--	16.3	15.9	3.7
IDS	267	0.8	0.7	18.5	17.8	14.2	13.6	14.9	14.3	4.3
Independence	221	0.3	0.1	16.1	15.3	--	--	12.9	12.1	3.6
Lieber & Co.	185	-2.3	0.1	13.8	19.0	9.1	10.8	11.0	11.3	3.0
Lynch & Mayer	210	-2.0	2.3	14.3	18.6	--	--	8.6	9.6	3.5
Waddell & Reed	251	6.2	2.0	24.0	18.7	11.8	11.1	12.3	11.4	4.2
Wilshire Assoc.	3,570	0.7	1.0	15.3	15.7	13.4	13.8	14.1	14.3	58.0
Current Aggregate*		0.7	0.8	16.4	16.1	13.9	13.4	14.4	14.0	100.0
Historical Aggregate**		0.7	0.8	16.3	16.2	13.2	13.2	13.8	13.9	
Wilshire 5000 Adjusted****		0.7		16.0		13.4		14.0		
Wilshire 5000		0.8		16.1		13.8		14.3		

* Includes performance of current managers only.

** Includes performance of terminated managers.

*** Time periods vary for each manager depending on date of retention.

**** Adjusted for liquor and tobacco restriction.

Notes: Franklin retained 4/1/89; GeoCapital retained 4/90; Lynch & Mayer, Independence retained 2/92.
 Wilshire Assoc. began custom tilt phase-in in October 1990.

ALLIANCE CAPITAL MANAGEMENT

PORTFOLIO MANAGER: Jack Koltes

ASSETS UNDER MANAGEMENT: \$665,698,937

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)

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

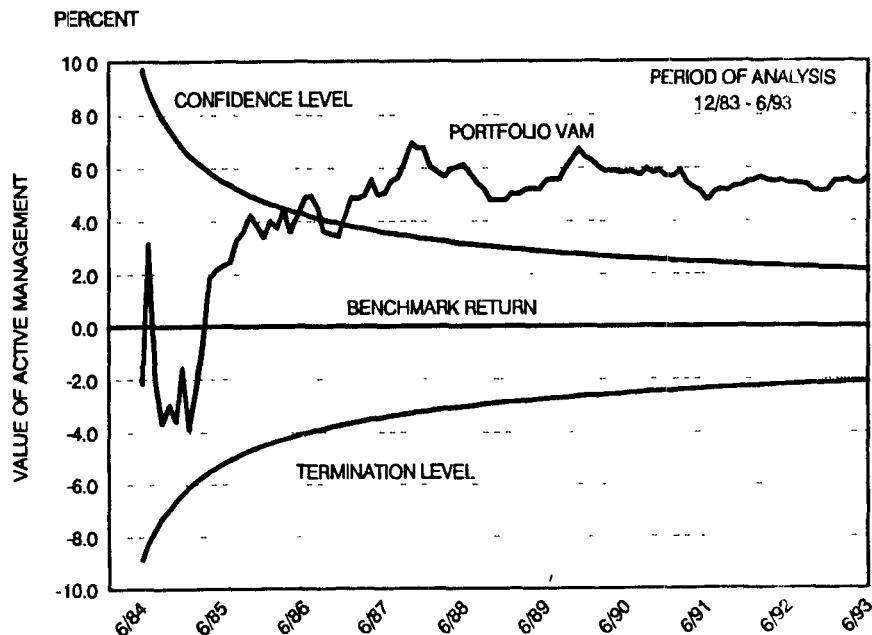
	Latest Qtr.	Latest 1 Yr.	Latest 5 Yrs.	Since 1/1/84
Actual Return	-0.9%	17.8%	17.0%	17.9%
Benchmark	-3.1	9.2	11.2	11.6

STAFF RECOMMENDATIONS

No action recommended.

VALUE OF ACTIVE MANAGEMENT REPORT

ALLIANCE CAPITAL MANAGEMENT



FORSTMANN LEFF ASSOCIATES

PORTFOLIO MANAGER: Joel Leff

ASSETS UNDER MANAGEMENT: \$332,079,511

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.
- Their investment style is aggressive, which creates volatile returns. While not a problem, this needs to be taken into account when evaluating them over shorter time frames.

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

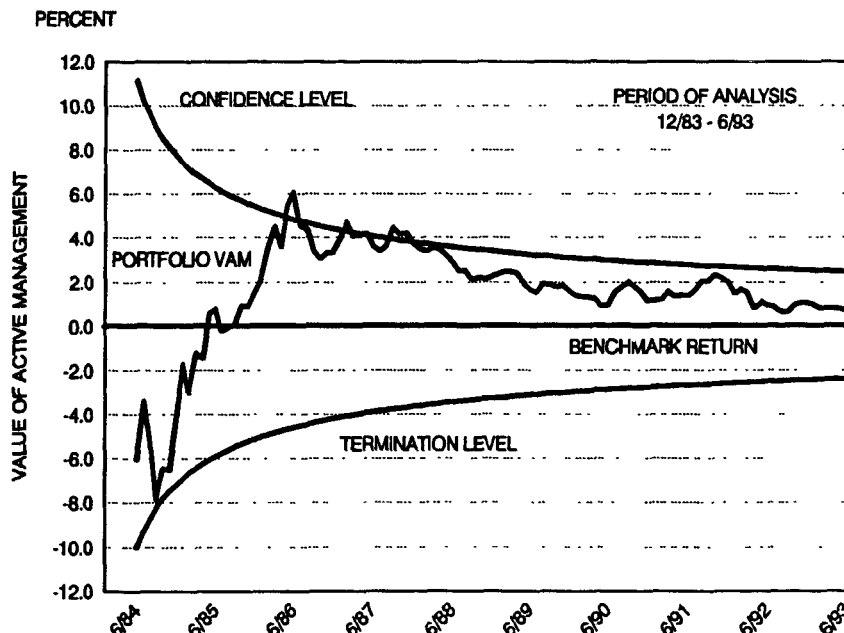
	Latest Qtr.	Latest 1 Yr.	Latest 5 Yrs.	Since 1/1/84
Actual Return	-0.1%	12.9%	10.3%	12.7%
Benchmark	0.4	14.3	11.6	12.0

STAFF RECOMMENDATIONS

No action recommended.

VALUE OF ACTIVE MANAGEMENT REPORT

FORSTMANN LEFF



FRANKLIN PORTFOLIO ASSOCIATES

PORTFOLIO MANAGER: John Nagorniak

ASSETS UNDER MANAGEMENT: \$213,411,478

INVESTMENT PHILOSOPHY

Franklin's investment decisions are quantitatively driven and controlled. The firm's stock selection model uses 30 valuation measures covering the following factors: 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. 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 remains fully invested at all times.

QUALITATIVE EVALUATION

(Reported by Exception)

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

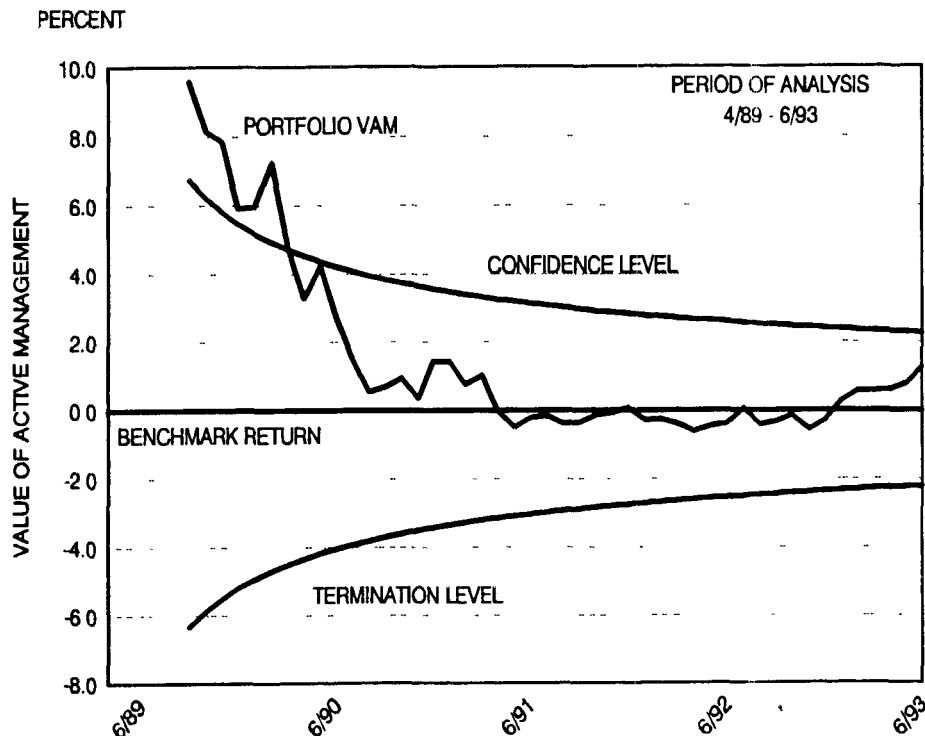
	Latest Qtr.	Latest 1 Yr.	Latest 5 Yrs.	Since 4/1/89
Actual Return	4.0%	28.7%	N.A.	14.6%
Benchmark	0.9	19.9	N.A.	13.2

STAFF RECOMMENDATIONS

No action recommended

VALUE OF ACTIVE MANAGEMENT REPORT

FRANKLIN PORTFOLIO ASSOCIATES



GEOCAPITAL CORP.

PORTFOLIO MANAGER: Barry Fingerhut

ASSETS UNDER MANAGEMENT: \$230,110,452

INVESTMENT PHILOSOPHY

GeoCapital invests primarily in small capitalization equities with the intent to hold them as they grow into medium and large capitalization companies. The firm uses a theme approach and an individual stock selection analysis to invest in the growth/technology and intrinsic value areas of the market. In the growth/technology area GeoCapital looks for companies that will have above average growth due to a good product development program and limited competition. In the intrinsic value area, the key factors in this analysis are the corporate assets, free cash flow, and a catalyst that will cause a positive change in the company. The firm generally stays fully invested, with any cash positions due to the lack of attractive investment opportunities.

QUALITATIVE EVALUATION

(Reported By Exception)

Exceptional strengths are:

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

QUANTITATIVE EVALUATION

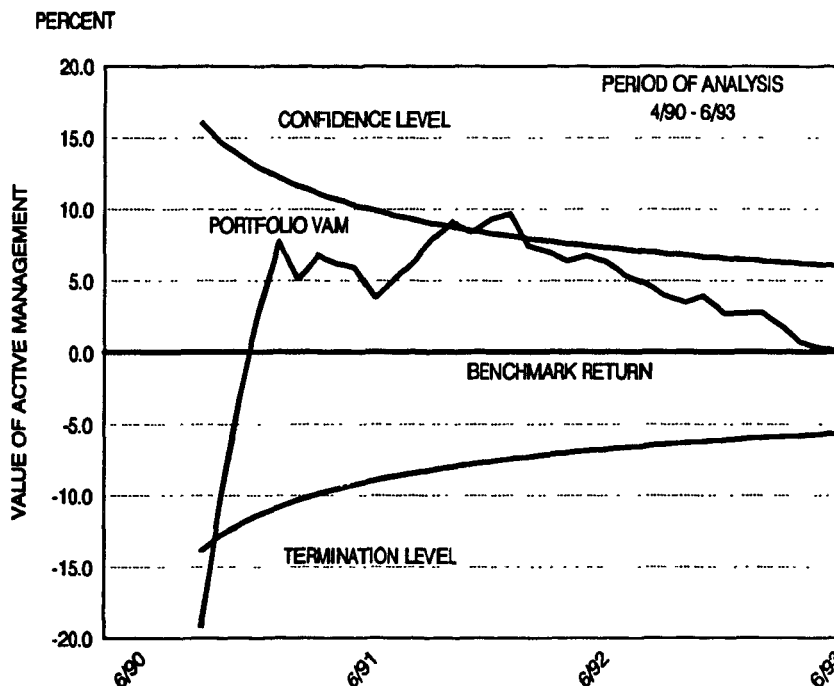
	Latest Qtr.	Latest 1 Yr.	Latest 5 Yrs.	Since 4/1/90
Actual Return	0.5%	15.6%	N.A.	16.3%
Benchmark	6.2	31.5	N.A.	15.9

STAFF RECOMMENDATIONS

No action recommended.

VALUE OF ACTIVE MANAGEMENT REPORT

GEOCAPITAL CORP.



IDS ADVISORY

PORTFOLIO MANAGER: Pete Anderson

ASSETS UNDER MANAGEMENT: \$266,853,936

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.

QUALITATIVE EVALUATION

(Reported By Exception)

Current concerns are:

- Manager is currently addressing specific benchmark issues.

Exceptional strengths are:

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

QUANTITATIVE EVALUATION

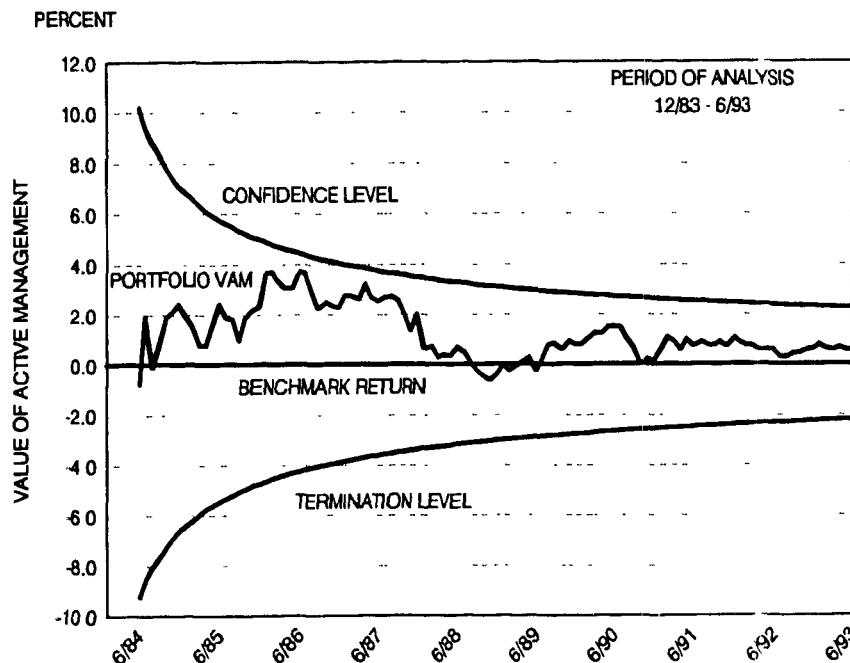
	Latest Qtr.	Latest 1 Yr.	Latest 5 Yrs.	Since 1/1/84
Actual Return	0.8%	18.5%	14.2%	14.9%
Benchmark	0.7	17.8	13.6	14.3

STAFF RECOMMENDATIONS

No action recommended

VALUE OF ACTIVE MANAGEMENT REPORT

IDS ADVISORY



INDEPENDENCE ASSOCIATES

PORTFOLIO MANAGER: Bill Fletcher

ASSETS UNDER MANAGEMENT: \$221,369,987

INVESTMENT PHILOSOPHY

Independence believes that individual stocks which outperform the market always have two characteristics: 1) they are intrinsically cheap; and 2) their business is in the process of improving. Independence ranks their universe by using a multifactor model. Using input primarily generated by their internal analysts, the model ranks each stock based on 10 discreet criteria. Independence constricts their portfolio by using the top 60% of their ranked universe and optimizing it relative to the benchmark selected by the client to minimize the market and industry risks. Independence maintains a fully invested portfolio and rarely holds more than a 1% cash position.

QUANTITATIVE EVALUATION

	Latest Qtr.	Latest 1 Yr.	Latest 5 Yrs.	Since 2/1/92
Actual Return	0.3%	16.1%	N.A.	12.9%
Benchmark	0.1	15.3	N.A.	12.1

QUALITATIVE EVALUATION

(Reported By Exception)

Exceptional strengths are:

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

STAFF RECOMMENDATIONS

No action recommended.

VAM graph will be created for period ending 9/30/93.

LIEBER & COMPANY

PORTFOLIO MANAGER: Stephen Lieber, Nola Falcone **ASSETS UNDER MANAGEMENT:** \$185,216,281

INVESTMENT PHILOSOPHY

Lieber & 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 firm focuses on macroeconomic trends and specific product developments within particular industries or companies. Stock selection concentrates on well-managed, small-to-medium sized companies with high growth and high return on equity. Particularly attractive to Lieber are takeover candidates or successful turn around situations. The firm generally is fully invested, with any cash positions the result of a lack of attractive investment concepts.

QUALITATIVE EVALUATION

(Reported By Exception)

Exceptional strengths are:

- Strong leadership
- Attractive, unique investment approach.
- Extensive securities research process.

Current concerns are:

- Recent performance has lagged due to poor stock selection, which has been the firm's focus.
- Organizational/staffing changes during the last 12-24 months have not provided perceptible benefit.

QUANTITATIVE EVALUATION

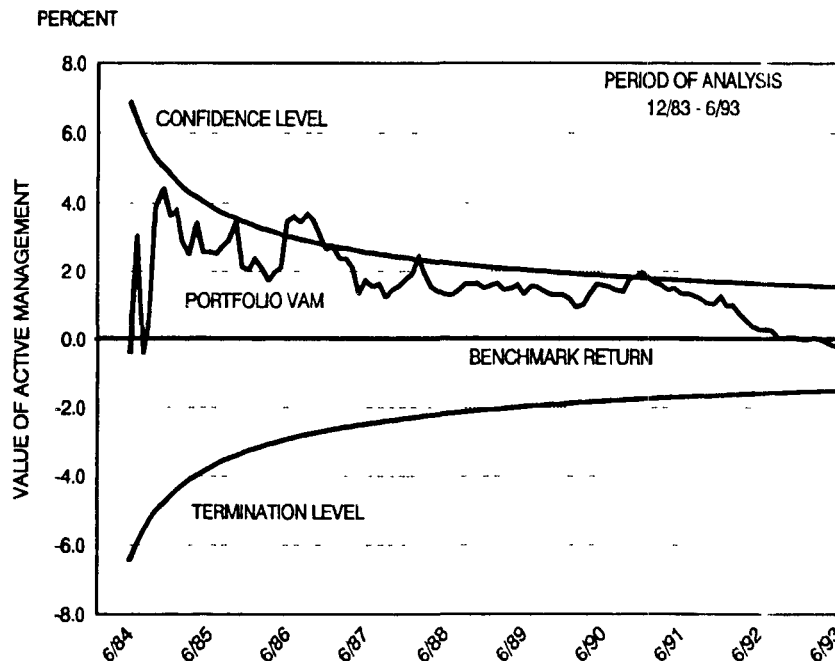
	Latest Qtr.	Latest 1 Yr.	Latest 5 Yrs.	Since 1/1/84
Actual Return	-2.3%	13.8%	9.1%	11.0%
Benchmark	0.1	19.0	10.8	11.3

STAFF RECOMMENDATIONS

Staff recommends that the manager's contract be terminated.

VALUE OF ACTIVE MANAGEMENT REPORT

LIEBER & CO.



LYNCH & MAYER

PORTFOLIO MANAGER: Eldon Mayer

ASSETS UNDER MANAGEMENT: \$209,619,297

INVESTMENT PHILOSOPHY

Lynch & Mayer invest primarily in high-quality large capitalization growth stocks. They believe that outstanding investments are a function of corporate earnings growth considerably above historical trends or consensus expectations. Lynch & Mayer are bottom up stock pickers and rely on very little economic analysis in their selection process. Lynch & Mayer screens out stocks below a certain market capitalization and liquidity level and then eliminates additional stocks based on various fundamental criteria. After the screening process they look for at least one of the following four factors: 1) acceleration of growth; 2) improving industry environment; 3) corporate restructuring; or 4) turnaround. The firm generally stays fully invested, with any cash due to lack of attractive investment opportunities.

QUANTITATIVE EVALUATION

	Latest Qtr.	Latest 1 Yr.	Latest 5 Yrs.	Since 2/1/92
Actual Return	-2.0%	14.3%	N.A.	8.6%
Benchmark	2.3	18.6	N.A.	9.6

QUALITATIVE EVALUATION

(Reported By Exception)

Exceptional strengths are:

- Organizational continuity and strong leadership.
- Highly successful and experienced professionals.

STAFF RECOMMENDATIONS

No action recommended.

VAM graph will be created for period ending 9/30/93.

WADDELL & REED

PORTFOLIO MANAGER: Henry Herrman

ASSETS UNDER MANAGEMENT: \$260,945,895

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)

Exceptional strengths are:

- Highly successful and experienced professionals.

QUANTITATIVE EVALUATION

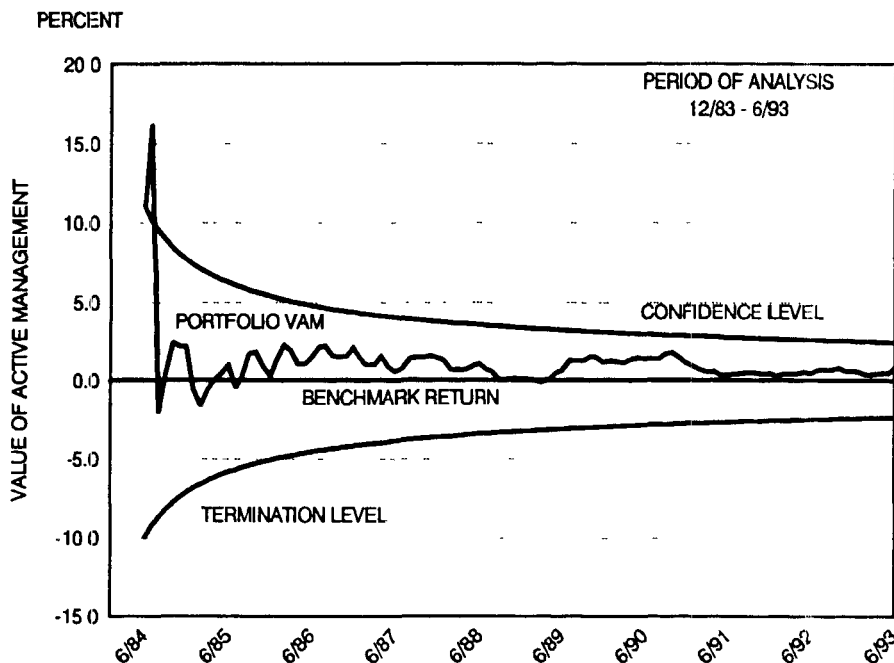
	Latest Qtr.	Latest 1 Yr.	Latest 5 Yrs.	Since 1/1/84
Actual Return	6.2%	24.0%	11.8%	12.3%
Benchmark	2.0	18.7	11.1	11.4

STAFF RECOMMENDATIONS

No action recommended

VALUE OF ACTIVE MANAGEMENT REPORT

WADDELL & REED



ALLIANCE CAPITAL MANAGEMENT
Investment Commentary
6/30/93

As of 6/30/93, Alliance's portfolio represented 10.8% of the total stock portfolio and 25.8% of the active stock portfolio. For the most recent quarter and year, Alliance Capital outperformed its benchmark by 2.4% and 8.0% respectively. The breakdown of Alliance Capital's value added for the latest quarter and year are shown below:

	Qtr.	Year
Stock Selection	1.4%	6.9%
Sector Allocation	0.8	0.7
Trading/Other	0.1	0.2

SECTOR ALLOCATION

The following table highlights Alliance's largest sector deviations relative to their benchmark.

	Quarter		Latest Year	
	Avg. Actual	Avg. Bnmk.	Avg. Actual	Avg. Bnmk.
Consumer Durable	3.7%	10.6%	4.3%	8.6%
Financial	20.6	9.5	19.1	9.5
Basic Material	6.4	9.3	6.8	11.0
Technology	19.5	16.3	15.1	16.5

For the quarter, Alliance Capital's sector allocation positive value added was primarily due to the consumer durables sector (0.5%). For the year, the financial sector was the primary contributor to the positive value added (0.7%). In addition, during the latest year Alliance's overweighting of growth stocks with above average earnings volatility and financial leverage generated positive value added.

STOCK SELECTION

For the latest quarter, the basic material (1.1%) and financial (0.6%) sectors contributed the majority of the positive value added. For the year, the basic material (1.6%), consumer non-durable (1.5%), technology (1.0%) and the financial (2.4%) sectors were the primary contributors to the positive stock selection performance.

FORSTMANN LEFF ASSOCIATES
Investment Commentary
6/30/93

As of 6/30/93, Forstmann-Leff's portfolio represented 5.4% of the total stock portfolio and 12.8% of the active stock portfolio. For the most recent quarter and year, Forstmann-Leff underperformed its benchmark by 0.5% and 1.2% respectively. The breakdown of Forstmann-Leff's value added for the latest quarter and year are shown below:

	Qtr.	Year
Stock Selection	-0.3%	0.2%
Sector Allocation	0.1	0.2
Trading/Other	-0.3	-1.6

SECTOR ALLOCATION

The following table highlights Forstmann-Leff's largest sector deviations relative to their benchmark.

	Quarter		Latest Year	
	Avg. Actual	Avg. Bnmk.	Avg. Actual	Avg. Bnmk.
Consumer				
Durable	2.8%	6.7%	3.5%	6.4%
Financial	16.2	10.5	15.0	11.2
Cash	13.9	30.0	21.8	30.0
Energy	9.1	1.5	6.6	4.5
Transportation	6.4	2.6	4.5	2.3
Utilities	9.0	3.3	6.2	2.5

For the quarter, none of the sectors showed a materially large positive or negative value added. For the year, the utility (0.4%) sector and cash (0.6%) created positive value added but was mostly offset by the energy sector (-0.6%).

STOCK SELECTION

For the latest quarter, the majority of the negative value added came from the technology sector (-1.0%). This was partially offset by good performance in the capital goods sector (0.8%). For the year, good performance in the basic material (1.6%) and capital goods (0.7%) sectors was mostly offset by poor performance in the consumer non-durable (1.5%) and utility (-0.8%) sectors.

FRANKLIN PORTFOLIO ASSOCIATES TRUST
Investment Commentary
6/30/93

As of 6/30/93, Franklin's portfolio represented 3.5% of the total stock portfolio and 8.2% of the active stock portfolio. For the most recent quarter and year, Franklin outperformed its benchmark by 2.9% and 8.2% respectively. The breakdown of Franklin's value added for the latest quarter and year are shown below:

	Qtr	Year
Stock Selection	2.7%	7.5%
Sector Allocation	0.2	0.5
Trading/Other	0.0	-1.4

SECTOR ALLOCATION

The following table highlights Franklin's largest sector deviations relative to their benchmark.

	Quarter		Latest Year	
	Avg. Actual	Avg. Bnmk.	Avg. Actual	Avg. Bnmk.
Financial	18.7%	16.0%	18.8%	15.8%
Basic Material	5.3	11.6	6.0	11.9
Consumer Non-Durable	30.0	25.7	29.1	26.6

For the quarter, none of the sectors showed a materially large positive or negative value added. For the year, basic material (0.7%) sector contributed the majority of the positive value added. In addition, Franklin's overweighting in recently successful value stocks, relative to their benchmark, produced positive value added for the year.

STOCK SELECTION

For the quarter, the consumer non-durable (2.0%) sector contributed the majority of the positive value added. For the year, the consumer non-durable (2.5%), technology (2.5%), basic materials (0.8%) and transportation (0.9%) sectors generated most of the positive value added.

GEOCAPITAL CORPORATION
Investment Commentary
6/30/93

As of 6/30/93, GeoCapital's portfolio represented 3.7% of the total stock portfolio and 8.9% of the active stock portfolio. For the most recent quarter and year, GeoCapital underperformed its benchmark by 5.3% and 12.1% respectively. The breakdown of GeoCapital's value added for the latest quarter and year are shown below:

	Qtr.	Year
Stock Selection	-4.0%	-10.8%
Sector Allocation	-1.1	-0.9
Trading/Other	-0.2	-0.5

SECTOR ALLOCATION

The following table highlights GeoCapital's largest sector deviations relative to their benchmark.

	Quarter		Latest Year	
	Avg.	Avg.	Avg.	Avg.
	Actual	Bnmk.	Actual	Bnmk.
Energy	0.5%	3.7%	0.2%	3.6%
Financial	19.7	5.8	18.3	4.9
Capital Goods	0.0	4.8	0.0	4.2
Technology	24.5	29.6	23.0	27.0
Cash	2.9	2.0	3.3	2.0

For the quarter, negative value added was generated by the financial (-0.9%) sector. For the year, the capital goods (-0.4%) and technology (-0.5%) sectors and cash (-0.6%) produce the negative value added. This was partially offset by the finance sector (0.9%).

STOCK SELECTION

For the latest quarter, the negative value added was generated by the consumer non-durable (-1.9%) and technology (-2.1%) sectors. For the year, the consumer non-durable (-6.5%) and technology (-5.0%) provided all of the negative value added.

IDS ADVISORY
Investment Commentary
6/30/93

As of 6/30/93, IDS's portfolio represented 4.3% of the total stock portfolio and 10.3% of the active stock portfolio. For the most recent quarter and year, IDS outperformed its benchmark by 0.1% and 0.5% respectively. The breakdown of IDS's value added for the latest quarter and year are shown below:

	Qtr.	Year
Stock Selection	0.3%	2.0%
Sector Allocation	0.3	-0.4
Trading/Other	-0.5	-1.1

SECTOR ALLOCATION

The following table highlights IDS's largest sector deviations relative to their benchmark.

	Quarter		Latest Year	
	Avg. Actual	Avg. Bnmk.	Avg. Actual	Avg. Bnmk.
Transportation	8.7%	2.3%	6.2%	3.4%
Utilities	1.3	11.2	1.4	10.5
Consumer Durable	13.4	6.6	12.3	6.7
Basic Material	16.8	6.3	21.0	7.9
Consumer Non-Durable	9.3	26.7	12.1	28.0
Energy	9.7	4.6	6.0	4.2
Technology	7.6	12.0	12.7	11.9

For the quarter, the primary contributor to the positive value added was the consumer non-durable sector (0.7%). For the year, the majority of the negative value added came from the basic material (-2.0%) sector. This was partially offset by good performance in the consumer non-durable (1.4%) sector.

STOCK SELECTION

For the quarter, the consumer durable (0.8%) sector generated the majority of the value added. This was partially offset by poor performance in the consumer non-durable sector (-0.6%). For the year, the technology (1.5%), basic material (1.1%), and transportation (1.2%) sectors generated most of the positive value added. This was partially offset by poor performance in the consumer non-durable (-1.9%) sector.

INDEPENDENCE INVESTMENT ASSOCIATES
Investment Commentary
6/30/93

As of 6/30/93, Independence's portfolio represented 3.6% of the total stock portfolio and 8.5% of the active stock portfolio. For the most recent quarter and year, Independence outperformed its benchmark by 0.2% and 0.7% respectively. The breakdown of Independence's value added for the latest quarter and year are shown below:

	Qtr.	Year
Stock Selection	0.0%	-0.7%
Sector Allocation	0.4	1.4
Trading/Other	-0.2	-0.1

SECTOR ALLOCATION

The following table highlights Independence's largest sector deviations relative to their benchmark.

	Quarter		Latest Year	
	Avg. Actual	Avg. Bnmk.	Avg. Actual	Avg. Bnmk.
Consumer				
Non-Durable	25.3%	29.2%	27.6%	30.7%
Financial	16.4	12.6	15.0	11.9
Technology	5.7	7.9	4.3	7.9
Capital Goods	6.5	6.1	8.5	5.5
Utilities	13.4	17.0	14.6	16.5

For the quarter, the consumer non-durable sector (0.3%) was the primary contribution to the positive value added. For the year, the consumer non-durable (0.4%) and financial (0.5%) sectors produced the majority of the positive value added. In addition, during the latest year their overweighting of smaller capitalization value stocks, relative to their benchmark, generated positive value added.

STOCK SELECTION

For the latest quarter, none of the sectors produced a significant positive or negative value added. For the year, poor stock selection in the utility (-1.0%), consumer non-durable (-0.6%) and consumer durable (-0.5%) sectors was partially offset by good performance in the basic material (0.6%) and energy (0.6%) sectors.

LIEBER & COMPANY
Investment Commentary
6/30/93

PERFORMANCE RESULTS

As of 6/30/93, Lieber's portfolio represented 3.0% of the total stock portfolio and 7.2% of the active stock portfolio. For the most recent quarter and year, Lieber underperformed its benchmark by 2.3% and 4.3% respectively. The breakdown of Lieber's value added for the latest quarter and year are shown below:

	Qtr.	Year
Stock Selection	-1.6%	-4.5%
Sector Allocation	-0.4	1.2
Trading/Other	-0.4	-1.0

SECTOR ALLOCATION

The following table highlights Lieber's largest sector deviations relative to their benchmark.

	Quarter		Latest Year	
	Avg. Actual	Avg. Bnmk.	Avg. Actual	Avg. Bnmk.
Energy	0.2%	3.0%	0.2%	3.1%
Financial	34.4	20.8	30.7	20.3
Utilities	0.0	3.9	0.0	4.2
Capital Goods	2.6	5.7	3.5	5.6

For the quarter, none of the sectors produced a significant positive or negative value added. For the year, the financial sector generated almost all the positive value added (1.2%).

STOCK SELECTION

For the latest quarter, the technology (-0.5%) and financial (-0.7%) sectors generated the majority of the negative value added. For the year, the technology (-2.6%), capital goods (-0.7%) and financial (-1.1%) sectors contributed the majority of the negative stock selection performance.

LYNCH & MAYER
Investment Commentary
6/30/93

As of 6/30/93, Lynch & Mayer's portfolio represented 3.5% of the total stock portfolio and 8.1% of the active stock portfolio. For the most recent quarter and year, Lynch & Mayer underperformed its benchmark by 4.3% and 3.7% respectively. The breakdown of Lynch & Mayer's value added for the latest quarter and year are shown below:

	Qtr.	Year
Stock Selection	-3.6%	-4.1%
Sector Allocation	0.6	2.8
Trading/Other	-1.4	-2.3

SECTOR ALLOCATION

The following table highlights Lynch & Mayer's largest sector deviations relative to their benchmark.

	Quarter		Latest Year	
	Avg. Actual	Avg. Bnmk.	Avg. Actual	Avg. Bnmk.
Consumer Durable	8.9%	6.9%	12.2%	6.7%
Technology	24.6	22.3	19.3	15.4
Basic Material	1.5	7.6	0.4	6.9
Energy	8.9	3.1	6.0	4.5

For the quarter, the basic material (0.4%) sector was the major contributor to the positive value added. For the year, cash (0.4%) and the consumer durable (0.7%), technology (1.0%), basic material (0.6%) and utility (0.5%) sectors produced the positive value added.

STOCK SELECTION

For the latest quarter, the consumer non-durable (-0.5%), consumer durable (-0.4%), energy (-0.6%), technology (-0.6%) and utility (-0.7%) sectors all contributed to the negative value added. For the year, the consumer durable (-3.0%) and technology (-1.7%) sectors generated the majority of the negative stock selection performance. This was partially offset by good performance in the consumer non-durable sector (1.6%).

WADDELL & REED
Investment Commentary
6/30/93

As of 6/30/93, Waddell & Reed's portfolio represented 4.2% of the total stock portfolio and 10.1% of the active stock portfolio. For the most recent quarter, Waddell & Reed outperformed its benchmark by 4.2% and 4.6% respectively. The breakdown of Waddell & Reed's value added for the latest quarter and year are shown below:

	Qtr.	Year
Stock Selection	5.2%	7.7%
Sector Allocation	-0.3	-2.7
Trading/Other	-0.6	-0.2

SECTOR ALLOCATION

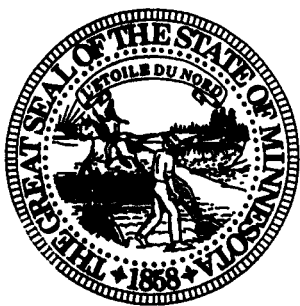
The following table highlights Waddell & Reed's largest sector deviations relative to their benchmark.

	Quarter		Latest Year	
	Avg. Actual	Avg. Bnmk.	Avg. Actual	Avg. Bnmk.
Financial	9.8%	3.7%	7.4%	2.4%
Basic Material	8.0	12.8	5.9	13.4
Technology	13.4	14.7	7.7	13.9
Cash	20.0	20.0	26.7	20.0
Capital Goods	1.8	6.0	3.0	6.1

For the quarter, none of the sectors showed a material positive or negative value added. For the year, cash (-1.6%) and the technology sector (-1.2%) were the major contributors to the negative performance. In addition, Waddell & Reed's overweighting of large capitalization growth stocks, relative to their benchmark, during the last year generated negative value added.

STOCK SELECTION

For the latest quarter, the consumer durable (0.8%), basic material (2.0%), and technology (1.5%) sectors were the major contributor to the positive value added. For the year, the transportation (1.6%), basic material (2.7%), capital goods (1.0%), technology (1.3%), and consumer durables (1.5%) sectors produced the good stock selection performance.



STATE BOARD OF INVESTMENT

Bond Manager Evaluation Reports

Second Quarter, 1993

DOMESTIC BOND MANAGERS
Second Quarter 1993

Domestic bond manager returns are evaluated against the performance of the Salomon Brothers Broad Investment Grade Index (BIG). The Salomon BIG represents most investment grade bonds (BBB or better). The bond managers initially had customized indices. However, since all the managers add value to their portfolio by using the entire bond market, their benchmarks were changed to the Salomon BIG on 10/1/91.

Staff Recommendations:

Staff recommends the following actions concerning manager status:

— No action recommended.

Manager performance relative to the Salomon BIG is evaluated on a quarterly basis by the Stock and Bond Manager Committee of the Investment Advisory Council.

Current Managers	Total Market Value 6/30/93 (Millions)	Quarter Ending 6/30/93		Year Ending 6/30/93		Annualized Five Years Ending 6/30/93		Annualized Since Inception***		% of Stock Segment 6/30/93 Basic Funds
		Actual	Bmrk	Actual	Bmrk	Actual	Bmrk	Actual	Bmrk	
Ark Asset	\$142	2.7%	2.8%	11.9%	12.0%	11.0%	11.0%	12.3%	12.4%	4.9%
IAI	220	3.8	2.8	16.0	12.0	12.2	11.4	13.6	13.2	7.6
Miller Anderson	318	3.9	2.8	14.5	12.0	11.7	11.4	13.4	13.2	11.0
Western Asset	630	4.0	2.8	14.9	12.0	12.8	11.5	14.4	13.1	21.8
Fidelity*	818	2.9	2.8	12.5	12.0	11.6	11.4	11.6	11.4	28.3
Lincoln*	764	2.7	2.8	12.2	12.0	11.4	11.4	11.4	11.4	26.4
		Since 7/1/84								
Current Aggregate**		3.3	2.8	13.3	12.0	11.8	11.4	13.4	12.9	
Historical Aggregate***		3.3	2.8	13.3	12.0	11.7	11.4	12.9	12.9	
Salomon Broad Investment Grade Index		2.8		12.0		11.4		13.2		

* Semi-passive manager.

** Includes performance of current managers only.

*** Includes performance of terminated managers.

ARK ASSET MANAGEMENT

PORTFOLIO MANAGER: Kevin Hurley

ASSETS UNDER MANAGEMENT: \$

INVESTMENT PHILOSOPHY

Ark'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. 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:

- The firm has used an index-like approach in its management of the portfolio and has made relatively few active bets.

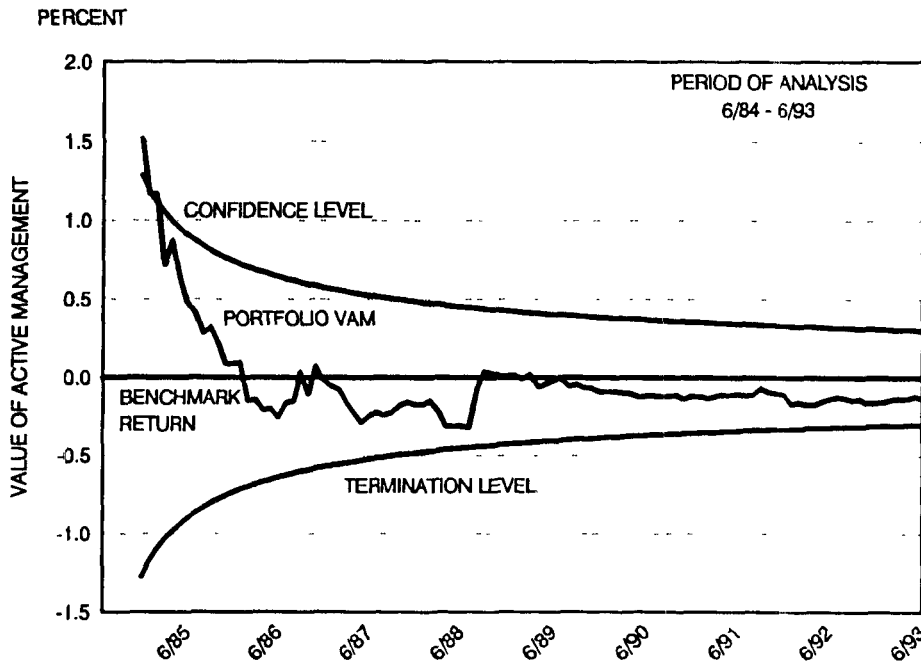
QUANTITATIVE EVALUATION

	Latest Qtr.	Latest 1 Yr.	Latest 5 Yrs.	Since 1/1/84
Actual Return	2.7%	11.9%	11.0%	12.3%
Benchmark	2.8	12.0	11.0	12.4

STAFF RECOMMENDATIONS

The manager's contract expired on June 30, 1993 and was not renewed.

VALUE OF ACTIVE MANAGEMENT REPORT
ARK ASSET MANAGEMENT



INVESTMENT ADVISERS

PORTFOLIO MANAGER: Larry Hill

ASSETS UNDER MANAGEMENT: \$220,326,189

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 and focuses largely on specific bond characteristics such as call provisions.

QUALITATIVE EVALUATION

(Reported by Exception)

The current evaluation notes the following:

- The manager's duration decisions have added value recently.

QUANTITATIVE EVALUATION

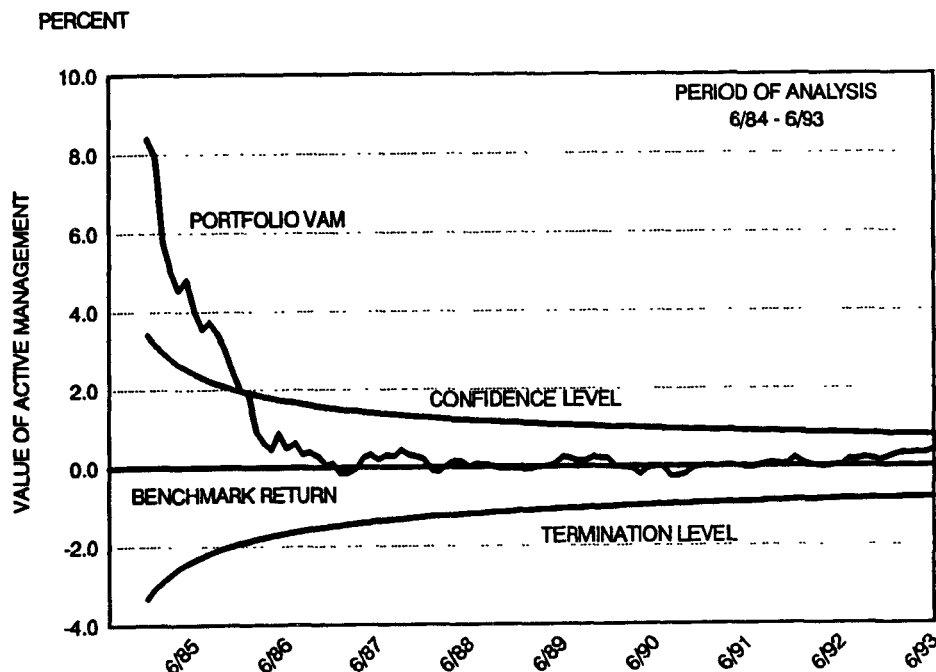
	Latest Qtr.	Latest 1 Yr.	Latest 5 Yrs.	Since 1/1/84
Actual Return	3.8%	16.0%	12.2%	13.6%
Benchmark	2.8	12.0	11.4	13.2

STAFF RECOMMENDATIONS

No action recommended.

VALUE OF ACTIVE MANAGEMENT REPORT

INVESTMENT ADVISERS



MILLER ANDERSON

PORTFOLIO MANAGER: Tom Bennet

ASSETS UNDER MANAGEMENT: \$317,971,840

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. Changes 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 invest in mortgage securities, Miller Anderson intensively researches and, in some cases, manages the mortgage pools in which it invests.

QUALITATIVE EVALUATION

(Reported By Exception)

The firms strengths continue to be:

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

QUANTITATIVE EVALUATION

	Latest Qtr.	Latest 1 Yr.	Latest 5 Yrs.	Since 1/1/84
Actual Return				
SBI Pricing	3.9%	14.5%	11.7%	13.4%
Miller Pricing*	3.9	14.3	11.8	13.8
Benchmark	2.8	12.0	11.4	13.2

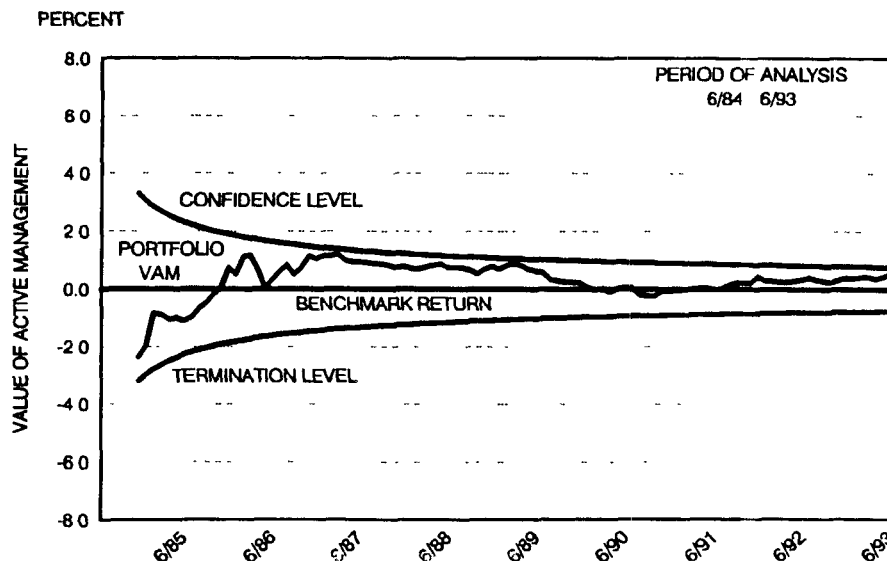
STAFF RECOMMENDATIONS

No action recommended.

*Returns calculated using Miller's pricing. VAM below uses Miller pricing.

VALUE OF ACTIVE MANAGEMENT REPORT

MILLER ANDERSON



WESTERN ASSET MANAGEMENT

PORTFOLIO MANAGER: Kent Engel

ASSETS UNDER MANAGEMENT: \$629,972,939

INVESTMENT PHILOSOPHY

Western recognizes the importance of interest rate 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 securities research process.

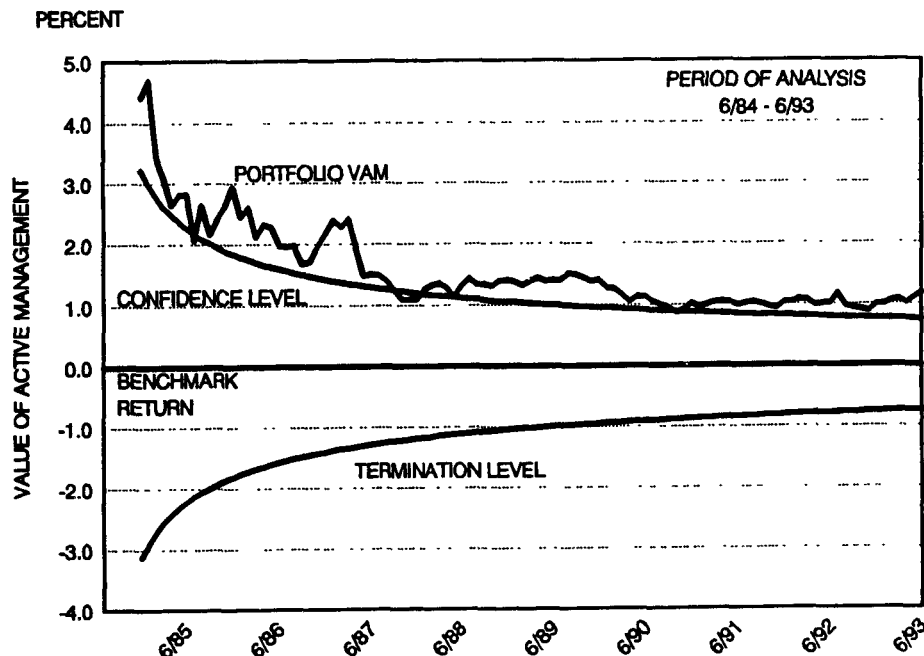
QUANTITATIVE EVALUATION

	Latest Qtr.	Latest 1 Yr.	Latest 5 Yrs.	Since 1/1/84
Actual Return	4.0%	14.9%	12.8%	14.4%
Benchmark	2.8	12.0	11.5	13.1

STAFF RECOMMENDATIONS

No action recommended.

VALUE OF ACTIVE MANAGEMENT REPORT
WESTERN ASSET MANAGEMENT



FIDELITY MANAGEMENT TRUST

PORTFOLIO MANAGER: Tom Steffanci

ASSETS UNDER MANAGEMENT: \$818,031,492

INVESTMENT PHILOSOPHY

Fidelity is an enhanced index manager who builds an index portfolio using stratified sampling and a risk factor model. Using stratified sampling, Fidelity divides the Salomon BIG into subsectors based on characteristics like maturity, coupon, sector and quality and chooses securities to represent each cell. The portfolio is then compared to the Salomon BIG using a risk factor model. Fidelity adds value to the portfolio through sector selection, issue selection, credit research and yield curve strategies. Fidelity weights sectors based on their relative value and attempts to buy stable credits or credits likely to be upgraded. Finally, Fidelity changes the maturity distribution of the portfolio securities to take advantage of non-parallel shifts in the yield curve.

QUALITATIVE EVALUATION

(Reported By Exception)

The firm's strengths are:

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

Current concerns are:

- New portfolio manager as of March 1993. (Former portfolio manager, Sharmin Mossavar-Rahmani left to join Goldman Sachs.)

QUANTITATIVE EVALUATION

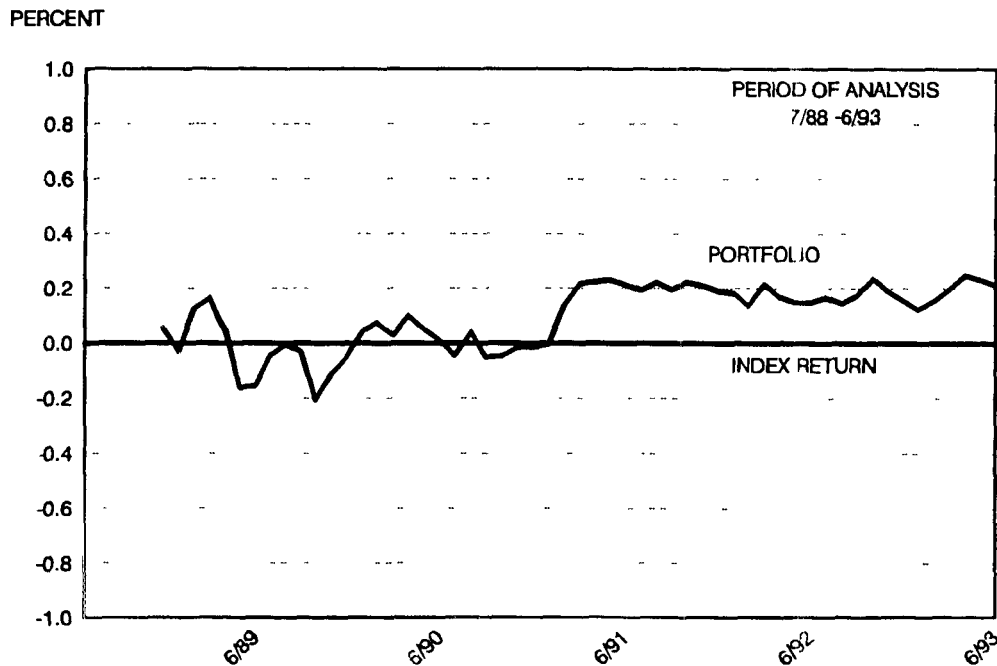
	Latest Qtr.	Latest 1 Yr.	Latest 5 Yrs.	Since 1/1/84
Actual Return	2.9%	12.5%	11.6%	11.6%
Benchmark	2.8	12.0	11.4	11.4

STAFF RECOMMENDATIONS

No action recommended.

CUMULATIVE TRACKING REPORT

FIDELITY



LINCOLN CAPITAL MANAGEMENT

PORTFOLIO MANAGER: Brian Johnson

ASSETS UNDER MANAGEMENT: \$764,309,249

INVESTMENT PHILOSOPHY

Lincoln is an enhanced index manager that uses a quantitative approach to managing the portfolio. Lincoln calculates the index's expected return for changes in 54 variables. These variables include interest rates, yield curve shape, call features and sector spreads. Lincoln then constructs a portfolio to match the expected returns for a given change in any of the variables. Lincoln relaxes the return tolerances, defined as the difference between the portfolio's expected returns and that for the index, for an enhanced index fund. The portfolio's securities are selected from a universe of 250 liquid issues using a proprietary risk-valuation model. A linear program or portfolio optimizer then constructs the most undervalued portfolio that still matches the return characteristics of the index.

QUALITATIVE EVALUATION

(Reported By Exception)

The firm's strengths are:

- Highly successful and experienced professionals.
- Extensive quantitative capabilities.

QUANTITATIVE EVALUATION

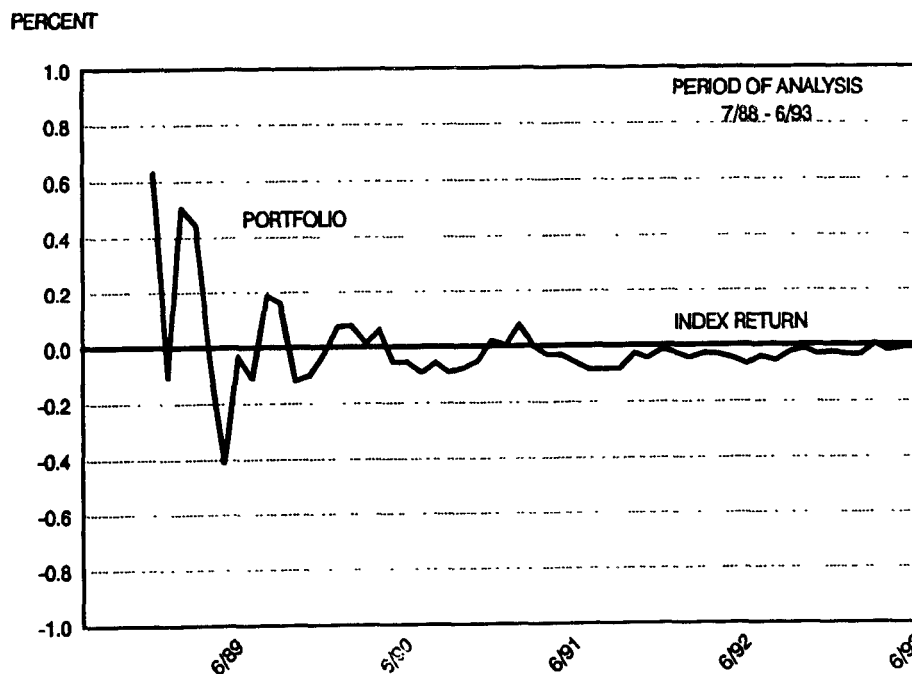
	Latest Qtr.	Latest 1 Yr.	Latest 5 Yrs.	Since 1/1/84
Actual Return	2.7%	12.2%	11.4%	11.4%
Benchmark	2.8	12.0	11.4	11.4

No action recommended.

STAFF RECOMMENDATIONS

CUMULATIVE TRACKING REPORT

LINCOLN



ARK ASSET MANAGEMENT COMPANY, INC.
Investment Commentary
6/30/93

Ark's portfolio represented 5% of the Basic Funds' fixed income assets. Ark underperformed the benchmark by 4 basis points for the quarter and by 12 basis points for the last year. Since inception, Ark has underperformed the benchmark by 15 basis points. Ark's contract with the Minnesota State Board of Investment, which expired June 30, 1993, was not renewed.

DURATION AND YIELD CURVE POSITIONING

During the quarter, Ark's duration matched the Salomon BIG duration of 4.5 years. Therefore, the duration decision did not significantly affect performance.

SECTOR ALLOCATION

Below is a breakdown of Ark's sector allocation versus the Salomon Broad Investment Grade Index:

	June 30, 1992		June 30, 1993	
	Ark	Benchmark	Ark	Benchmark
Treasury/Agency	37%	53%	38%	53%
Mortgages	30	29	29	29
Corporates	29	18	33	18
Cash	4	0	0	0

Ark continued to overweight corporates and asset-backed securities while they underweighted the Treasury/Agency sector. Ark's mortgage holdings roughly equaled the benchmark weighting. Overweighting the corporate sector helped performance since this sector's returns outpaced Treasury and mortgage sector returns for the quarter and the year.

INVESTMENT ADVISERS, INC.
Investment Commentary
6/30/93

Investment Adviser's portfolio represented 8% of the Basic Funds' fixed income assets. Over the past year, IAI outperformed the benchmark by 397 basis points, and this quarter they outperformed by 100 basis points. This stemmed mostly from IAI's duration and yield curve positioning.

IAI believes that the recovery will continue to be slow. IAI expects that over-supply in the U.S. labor market, lack of wage pressures and slow money growth will continue for the balance of 1993. In addition to this, they believe consumers and businesses will pay off debt rather than spend, keeping credit growth slow. IAI thinks these factors will keep inflation levels low. Because of this, IAI believes long term bond yields will fall below 6.5% before the end of the year, while short term rates will remain at approximately 3%.

DURATION AND YIELD CURVE POSITIONING

On 6/30/93, the portfolio duration was 6.4 years versus the benchmark duration of 4.5 years. Since long term interest rates declined during the quarter, this duration bet helped IAI's performance.

IAI positioned the portfolio for a flatter yield curve, with long term rates expected to decline relative to intermediate and short term rates. This helped IAI's performance since the yield curve flattened during the quarter.

SECTOR ALLOCATION

Below is a breakdown of IAI's sector allocation versus the Salomon Broad Investment Grade Index:

	June 30, 1992		June 30, 1993	
	IAI	Benchmark	IAI	Benchmark
Treasury/Agency	81%	53%	57%	53%
Mortgages	15	29	23	29
Corporates	3	18	20	18
Cash	1	0	0	0

IAI remained overweighted in the Treasury/Agency sector and they increased their exposure to the corporate sector. The majority of these corporates are shorter maturity asset-backed securities. Underweighting corporates during most of the past year has been a drag on performance since this sector outperformed Treasuries and mortgages. (However, IAI took steps during the quarter to enhance their corporate capabilities by hiring a new professional Mark Simonson. Mark managed corporate bonds for ten years at Lutheran Brotherhood.) IAI underweighted the mortgage sector which helped performance since mortgages were the worst performing sector this quarter.

MILLER, ANDERSON & SHERRERD
Investment Commentary
6/30/93

Miller, Anderson & Sherrerd's portfolio represented 11% of the Basic Funds' fixed income assets. Miller outperformed the benchmark by 254 basis points for the year and by 111 basis points for the quarter. The portfolio had a duration longer than the benchmark and was "barbelled" in anticipation of a flatter yield curve. Both of these active bets helped performance. Overweighting the mortgage sector, however, was the primary drag on performance since this sector underperformed corporates by more than 200 basis points.

Miller believes that inflation is under control and that slow, steady growth will continue. They believe that real interest rates are too high and will eventually decline and therefore have a long duration portfolio. Miller also believes the long end of the yield curve will decline more than the intermediate or short portions and are positioned for a flattening yield curve. They continue to hold a large portion of the portfolio in the mortgage sector but are also overweighted in corporate holdings. They believe call-protected, senior corporate securities remain good values. They believe high quality corporates appear fully valued, so they are looking for value in A and BBB quality issues.

DURATION AND YIELD CURVE POSITIONING

Portfolio duration as of 6/30/93 was 6.5 years versus the benchmark of 4.5 years. Since long rates declined during the quarter, the long duration portfolio had a positive impact on performance. Miller's positioning for a flatter yield curve also added to performance since long rates declined and short rates increased.

SECTOR ALLOCATION

Below is a breakdown of Miller's sector allocation versus the Salomon Broad Investment Grade Index:

	June 30, 1992		June 30, 1993	
	Miller	Benchmark	Miller	Benchmark
Treasury/Agency	34%	53%	22%	53%
Mortgages	41	29	38	29
Corporates	18	18	39	18
Cash	7	0	1	0

Miller underweighted the Treasury/Agency sector, and overweighted the corporate and mortgage sectors relative to the benchmark. The mortgage sector was the worst performing this quarter, which detracted from performance.

WESTERN ASSET MANAGEMENT
Investment Commentary
6/30/93

Western Asset Management's portfolio represented 22% of the Basic Funds' fixed income portfolio. Western outperformed the benchmark by 292 basis points for the year and by 125 basis points for the quarter. Western outperformed because they overweighted corporate securities and correctly positioned the portfolio for lower long term rates and flatter yield curve.

Western believes the economy is growing, but at a modest rate. Western thinks this will keep inflation low and lead to lower long term rates. Therefore, they are maintaining a duration longer than the benchmark. They continue to hold a barbelled maturity structure, since they expect short rates to stabilize and long rates to decline further. Corporate and asset-backed securities are overweighted since Western expects spreads on these sectors to narrow relative to Treasuries. They remain underweighted in mortgages because they believe declining interest rates and accelerated mortgage prepayments will allow the corporate and government sector to outperform the mortgage-backed sector.

DURATION AND YIELD CURVE POSITIONING

Western's portfolio duration was 5.4 years versus the benchmark of 4.5 years on 6/30/93. The long duration enhanced portfolio performance since interest rates declined.

Western is also making a significant bet that the yield curve will flatten. At the end of June, they held 20% of the portfolio in cash instruments. This shows they believe the spread between short term and long term rates will substantially narrow in the near term.

SECTOR ALLOCATION

Below is a breakdown of Western's allocation to each sector versus the Salomon Broad Investment Grade Index:

	June 30, 1992		June 30, 1993	
	Western	Benchmark	Western	Benchmark
Treasury/Agency	36%	53%	12%	53%
Mortgages	18	29	19	29
Corporates	44	18	49	18
Cash	2	0	20	0

Western enhanced returns by remaining overweighted in the corporate sector and underweighted in mortgages. For the quarter and past year, mortgages have significantly underperformed corporates and Treasuries. Western is concentrating its ownership of corporates in cyclical industries and lower quality investment grade issues since they think these securities offer the most value.

FIDELITY MANAGEMENT TRUST
Investment Commentary
6/30/93

Fidelity's portfolio represents 28% of the Basic Funds' fixed income segment. For the year, Fidelity's portfolio returned 12.50% versus 11.98% for the Salomon BIG. Fidelity outperformed the BIG for the quarter, 2.89% versus 2.77%. Fidelity outperformed the market for the past year primarily because they overweighted corporate securities and underweighted Treasury securities. Additionally, value was added by emphasizing bank and finance securities within the corporate sector.

DURATION

Since Fidelity is an index manager, they do not add value through duration decisions. The portfolio is consistently within 0.2 year of the Salomon BIG duration.

SECTOR ALLOCATION

The following table compares Fidelity's sector allocations to the Salomon BIG.

	June 30, 1992		June 30, 1993	
	Fidelity	SAL BIG	Fidelity	SAL BIG
	%	%	%	%
Treasury/Govt Spon.	40	53	31	53
Mortgages	31	29	30	29
Corporates	28	18	35	19
Cash/other	1	0	4	0

The above shows that for the quarter and year, Fidelity overweighted corporate securities. Fidelity matched the mortgage weighting last quarter and for most of the year. The corporate weighting helped performance since corporates performed well for both the quarter and the year. Quarterly mortgage and corporate returns were 2.12% and 3.21% respectively while the government sector returned 2.97%. Yearly returns for mortgages and corporates were 9.05% and 13.62% while governments returned 13.00%.

Within the sectors, the majority of the government assets were invested in long duration securities while the corporate securities had a shorter duration. For the quarter, Fidelity added value within the corporate sector by emphasizing the bank and finance subsector. Issue selection also added value to the portfolio.

LINCOLN ASSET MANAGEMENT
Investment Commentary
6/30/93

Lincoln's portfolio represents 26 % of the Basic Funds' fixed income segment. For the year, Lincoln's portfolio returned 12.22 % versus 11.98% for the Salomon BIG. Lincoln underperformed the BIG for the quarter, 2.70% versus 2.77%. For the year, Lincoln added value primarily through security selection.

DURATION

Since Lincoln is an index manager, they do not add value through duration decisions. The portfolio is consistently within 0.1 year of the Salomon BIG duration.

SECTOR ALLOCATION

The following table compares Lincoln's sector allocations to the Salomon BIG.

	June 30, 1992		June 30, 1993	
	Lincoln %	SAL BIG %	Lincoln %	SAL BIG %
Treasury/Govt Spon.	50	53	46	53
Mortgages	30	29	29	29
Corporates	15	18	21	18
Cash/other	5	0	4	0

The above shows that Lincoln's portfolio mirrored the market. Lincoln was slightly overweighted in corporates for the quarter which helped returns since this was the best performing sector. However, within the corporate sector, Lincoln underweighted BBB securities which had the highest corporate returns. Quarterly mortgage and corporate returns were 2.12% and 3.21% respectively while the government sector returned 2.97%. Yearly returns for mortgages and corporates were 9.05% and 13.62% while governments returned 13.00%.

Within the corporate sector, the portfolio duration is shorter than the index. Also, Lincoln overweighted asset backed securities and is reducing their underweighting in BBB securities.

Within the government sector, Lincoln has and continues to overweight Government Trust Certificates. These certificates had and still have wider spreads than other agency securities.

Lincoln slightly underweighted mortgages. However, Lincoln believes the option adjusted spread for current coupon 15 year mortgages is high and overweighted the holdings of these securities. Lincoln also added value through mortgage deferred settlements.

Tab I

COMMITTEE REPORT

DATE: September 7, 1993

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

FROM: **Alternative Investment Committee**

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

- Review of current strategy.
- Results of annual review sessions with existing managers.
- Status of First Reserve, an existing resource manager.
- Investment with a new private equity manager, Blackstone Capital Partners.
- Additional investment with an existing real estate manager, Zell/Merrill Lynch.

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 \$435 million to fifteen (15) 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 twenty-five (25) commingled venture capital funds for a total commitment of \$637 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 \$138 million to eight (8) commingled oil and gas funds.

2) Results of Annual Review Sessions with Existing Managers.

During the quarter, the Alternative Investment Committee and staff attended annual review sessions with one of the SBI's resource managers, First Reserve, and one of the SBI's real estate managers, AEW. Overall, the meetings went well and produced no major surprises.

Summaries of the review sessions are included as **Attachments B and C** of this Committee Report.

3) Status of First Reserve, an existing resource manager.

As discussed at the last several SBI meetings, First Reserve has been involved in litigation which potentially could have forced them into Chapter 11 bankruptcy. At the December 1992 meeting, the SBI authorized the executive director, with assistance from the SBI's legal counsel and concurrence of the IAC Alternative Investment Committee, to approve or disapprove of partnership changes and to negotiate and execute any amendments that are necessary and appropriate to provide the best management of fund assets of affected partnerships managed by First Reserve.

In June 1993, First Reserve settled the litigation and no action was necessary by the executive director regarding the First Reserve partnerships. The settlement amount is less than 5% of the jury's original verdict. Contributions to fund the settlement will come from the General Partner and liquid assets within the First Reserve funds. No limited partner contributions are required. First Reserve believes that the financial impact of the settlement will not materially impair any of the First Reserve funds nor the General Partner of First Reserve.

ACTION ITEMS:

1) Investment in Blackstone Capital Partners II

The Blackstone Group is seeking investors in a new \$750 million to \$1 billion private equity fund, Blackstone Capital Partners II. The fund will be a follow-on fund to Blackstone Capital Partners I which was formed in 1987 with \$810 million in investor commitments. Like Fund I, Fund II will invest in a diverse number and type of private equity transactions. Up to 25% of Fund II may be invested outside of the United States and Canada.

More information of the Blackstone Fund is included as **Attachment D**.

RECOMMENDATION

The Committee recommends that the SBI authorize the Executive Director, with assistance from the SBI's legal counsel, to negotiate and execute a commitment of up to \$50 million or 20%, whichever is less, in Blackstone Capital Partners II.

2) Additional investment with an existing real estate manager, Zell/Merrill Lynch in Zell/Merrill Lynch Opportunity Partners III.

Sam Zell and Merrill Lynch are seeking investors in a new \$275 million to \$1 billion real estate fund, Zell/Merrill Lynch Opportunity Partners III. The fund will be a follow-on fund to Zell/Merrill Lynch Opportunity Partners I and II. Fund I was formed in August 1988 with \$409 million in investor commitments. Fund II was formed in December 1991 with \$430 million in investor commitments. Like Fund I and II, Fund III will invest in opportunistic real estate situations typically at a significant discount to replacement cost.

More information on the Zell/Merrill Lynch Fund III is included as **Attachment E**.

RECOMMENDATION:

The Committee recommends that the SBI authorize the Executive Director, with assistance from the SBI's legal counsel, to negotiate and execute a commitment of up to \$50 million or 20%, whichever is less, in Zell/Merrill Lynch Opportunity Partners III.

ATTACHMENT A

**MSBI ALTERNATIVE INVESTMENT PORTFOLIO AS OF 06/30/93
\$VALUE AND % OF BASIC RETIREMENT FUND**

	MARKET VALUE	UNFUNDED COMMITMENT	TOTALS
REAL ESTATE \$ % OF BASIC RET FUND	\$385,565,304 3.97%	\$33,447,646 0.34%	\$419,012,950 4.31%
VENTURE CAPITAL \$ % OF BASIC RET FUND	\$411,672,489 4.23%	\$274,185,945 2.82%	\$685,858,434 7.05%
RESOURCE \$ % OF BASIC RET FUND	\$107,330,494 1.10%	\$13,551,006 0.14%	\$120,881,500 1.24%
TOTALS % OF BASIC RET FUND	\$904,568,287 9.30%	\$321,184,597 3.30%	\$1,225,752,884 12.61%
15% ALLOCATION TARGET =			\$1,458,409,500
AMOUNT AVAILABLE FOR INVESTMENT =			\$232,656,616
MARKET VALUE OF BASIC RETIREMENT FUND 06/30/93 =			\$9,722,729,999

See next page for additional detail.

The market value information for alternative investments in this Attachment has been revised based on updated information during April and May 1993.

ATTACHMENT A (con't)

STATE OF MINNESOTA ALTERNATIVE EQUITY INVESTMENTS

JUNE 30, 1993

	INCEP T DATE	TOTAL COMMIT	FUNDED COMMIT.	MARKET VALUE	DISTRIBUTIONS	UNDE NDED COMMIT	IRR	PERIOD (YEARS)
REAL ESTATE								
AETNA 13354 *	Jun-93	\$2,500,000	\$2,500,000	\$2,376,529	\$0	\$0	0 00	0 1
AETNA	Apr-82	\$40,000,000	\$40,000,000	\$53,028,054	\$0	\$0	2 86	11.3
AEW III	Sep-85	\$20,000,000	\$20,000,000	\$19,346,025	\$0	\$0	-0 43	7 9
AEW IV	Sep-86	\$17,400,000	\$15,000,000	\$4,150,996	\$829	\$2,400,000	-17 81	6 9
AEW V	Dec-87	\$15,000,000	\$15,000,000	\$10,094,146	\$65,593	\$0	-7.24	5 6
EQUITABLE	Oct-81	\$40,000,000	\$40,000,000	\$67,688,485	\$0	\$0	5 07	11 8
HEITMAN I	Aug 84	\$20,000,000	\$20,000,000	\$13,320,040	\$11,842,633	\$0	4 02	9 0
HEITMAN II	Nov 85	\$30,000,000	\$30,000,000	\$29,083,516	\$11,477,759	\$0	5 14	7 7
HEITMAN III	Feb-87	\$20,000,000	\$20,000,000	\$15,755,142	\$5,425,918	\$0	1.16	6 5
HEITMAN V	Dec 91	\$20,000,000	\$20,000,000	\$20,467,330	\$409,392	\$0	4 65	1 6
LASALLE	Sep 91	\$15,000,000	\$6,019,808	\$6,289,219	\$0	\$8,980,192	3 68	1 9
PAINE WEBBER *	Feb-90	\$500,000	\$500,000	\$338,750	\$78,151	\$0	-5.50	3 5
RREEF	May-84	\$75,300,000	\$75,300,000	\$64,291,251	\$21,306,787	\$0	2 02	9 2
TCW III	Aug-85	\$40,000,000	\$40,000,000	\$30,351,363	\$10,900,073	\$0	0 48	8 0
TCW IV	Nov-86	\$30,000,000	\$30,000,000	\$20,964,358	\$2,399,405	\$0	-4 51	6 7
ZELL	Nov-91	\$50,000,000	\$27,932,546	\$28,020,100	\$0	\$22,067,454	0.55	1 7
TOTAL REAL ESTATE		\$435,700,000	\$402,252,354	\$385,565,304	\$63,906,540	\$33,447,646		
VENTURE CAPITAL								
ALLIED	Sep-85	\$5,000,000	\$5,000,000	\$2,998,018	\$3,544,838	\$0	5 64	7 9
BANK FUND III TRUST	Oct-92	\$20,000,000	\$5,000,000	\$4,702,545	\$8,372	\$15,000,000	-16 35	0 8
BRINSON	May-88	\$5,157,668	\$5,157,668	\$3,889,600	\$2,760,717	\$0	9 20	5 2
BRINSON II	Nov-90	\$20,000,000	\$12,000,000	\$11,430,310	\$5,460,271	\$8,000,000	27.49	2 7
CHURHILL III	Oct-92	\$20,000,000	\$4,000,000	\$3,884,073	\$111,014	\$16,000,000	-0 20	0 8
DSV	Apr-85	\$10,000,000	\$10,000,000	\$10,248,245	\$1,336,124	\$0	2 00	8 3
FIRST CENTURY	Dec-84	\$10,000,000	\$9,350,000	\$7,830,489	\$4,308,419	\$650,000	7.12	8 6
GOLDER THOMA III	Oct-87	\$14,000,000	\$10,505,000	\$13,237,869	\$4,747,968	\$3,495,000	18 08	5 8
GOLDER THOMA IV	Apr-93	\$20,000,000	\$0	\$0	\$0	\$20,000,000	0 00	0 0
IAI VENTURES I	Mar-91	\$518,789	\$518,789	\$505,823	\$209,083	\$0	18.17	2 4
IAI VENTURES II	Jul-90	\$10,000,000	\$5,753,640	\$5,987,564	\$558,532	\$4,246,360	7 67	3 0
IMR PARTNERSHIP	Aug-92	\$30,000,000	\$588,000	\$184,864	\$0	\$29,412,000	-77.30	1 0
INMAN BOWMAN	Jun-85	\$7,500,000	\$7,500,000	\$6,423,427	\$0	\$0	-3.08	8 1
KKR I	Jun-84	\$25,000,000	\$25,000,000	\$51,210,000	\$65,565,943	\$0	31.12	9 1
KKR II	Apr-86	\$18,365,339	\$18,365,339	\$28,550,000	\$44,259,293	\$0	20 77	7 3
KKR III	Nov-87	\$146,634,660	\$131,790,000	\$178,310,000	\$98,973,532	\$14,844,660	8.64	5 7
KKR IV	May-91	\$150,000,000	\$0	\$0	\$0	\$150,000,000	0.00	0 0
MATRIX II	Aug-85	\$10,000,000	\$10,000,000	\$4,948,074	\$12,050,777	\$0	11 32	8 0
MATRIX III	May-90	\$10,000,000	\$6,500,000	\$6,277,655	\$497,220	\$3,500,000	3.19	3 2
NORTHWEST	Jan-84	\$10,000,000	\$10,000,000	\$5,367,749	\$6,324,104	\$0	2 39	9 5
SUMMIT I	Dec-84	\$10,000,000	\$10,000,000	\$3,693,041	\$13,427,356	\$0	11 28	8 6
SUMMIT II	May-88	\$30,000,000	\$25,500,000	\$22,405,096	\$19,627,263	\$4,500,000	22.45	5 2
SUPERIOR	Jun-86	\$6,645,000	\$6,312,750	\$8,109,002	\$1,020,464	\$332,250	8 94	7 1
T ROWE PRICE	Nov-87	\$18,911,375	\$18,911,375	\$5,954,745	\$15,285,577	\$0	25.55	5 7
ZELL/CHILMARK	Jul-90	\$30,000,000	\$25,794,325	\$25,524,300	\$2,726,766	\$4,205,675	10.27	3 0
TOTAL V C		\$637,732,831	\$363,546,886	\$411,672,489	\$302,803,633	\$274,185,945		
RESOURCES								
AMGO I	Sep-81	\$15,000,000	\$15,000,000	\$4,305,937	\$3,614,536	\$0	-6.38	11 9
AMGO II	Feb-83	\$7,000,000	\$7,000,000	\$5,933,355	\$2,325,453	\$0	2 13	10 5
AMGO IV	May-88	\$12,300,000	\$12,300,000	\$15,783,803	\$1,508,552	\$0	9 24	5 2
AMGO V	May-90	\$16,800,000	\$14,535,147	\$15,600,877	\$3,403,869	\$2,264,853	11.77	3 2
APACHE III	Dec-86	\$30,000,000	\$30,000,000	\$8,445,954	\$33,904,430	\$0	10 75	6 6
B P ROYALTY	Feb-89	\$25,000,000	\$25,000,000	\$29,375,000	\$13,838,637	\$0	16 89	4 5
MORGAN OIL&GAS	Aug-88	\$15,000,000	\$13,799,697	\$18,230,064	\$921,106	\$1,200,303	10 19	5 0
SIMMONS OFS	Aug-91	\$17,000,000	\$6,914,150	\$9,655,504	\$10,000	\$10,085,850	43.53	2 0
TOTAL RESOURCES		\$138,100,000	\$124,548,994	\$107,330,494	\$59,526,583	\$13,551,006		
TOTAL ALT INV		\$1,211,532,831	\$890,348,234	\$904,568,287	\$426,236,756	\$321,184,597		

ATTACHMENT B

ANNUAL REPORT SUMMARY AEW/STATE STREET FUNDS III, IV, V July 19, 1993

MANAGER REPRESENTATIVES: Reid Samuelson, Bob Kilroy
Katherine Tallman

SBI ASSETS UNDER MANAGEMENT: \$33,591,167

BACKGROUND AND DESCRIPTION:

The AEW/State Street Funds III, IV and V are managed by Aldrich, Eastman and Waltch under the trusteeship of State Street Bank and Trust of Boston. Funds III, IV and V were begun in September 1985, September 1986 and December 1987, respectively. The SBI's investment commitment totals \$50 million to the AEW funds. 100% of the SBI's investment commitment has been funded. Each fund has a 15 year term. The funds specialize in convertible and participating mortgages to maximize real estate returns. The real estate portfolios are diversified by location and property type. On-site property management is typically contracted to outside firms or conducted by joint venture partners. The firm's primary office is in Boston.

QUALITATIVE EVALUATION:

- While performance of each of the three AEW funds continued to be disappointing in 1992, the funds appear to be improving from prior years. The performance was reflective of general real estate market conditions and the high debt positions of their respective portfolios.
- Since inception, AEW Funds III (7.9 years old), IV (6.9 years old) and V (5.6 years old) have provided the SBI with -0.4%, -17.8%, and -7.2% annualized internal rates of return, respectively.
- In 1991, AEW Fund IV participants agreed to invest pro rata an additional \$14,000,000 (of which the SBI's portion would be \$2,400,000), if necessary, to meet the Fund's potential short term liquidity needs. To date, no capital calls have been made for these funds and the manager believes there will be no need to do so in the near future.
- In 1992, occupancy for Funds III, IV and V were 91%, 95%, and 94%, respectively. This compares to 1991 occupancy levels of 89%, 91%, and 91%, respectively.
- During the quarter, the portfolio manager, Jeff Stevenson, died. His responsibilities were assumed by his manager, Reid Samuelson.

ATTACHMENT B (con't)

QUANTITATIVE EVALUATION: (through June 30, 1993)

	AEW III	AEW IV	AEW V
COMMITMENT:	\$20,000,000	\$17,400,000	\$15,000,000
FUNDED COMMITMENT	\$20,000,000	\$15,000,000	\$15,000,000
MARKET VALUE OF FUNDED COMMITMENT:	\$19,346,025	\$4,150,996	\$10,094,146
CASH DISTRIBUTIONS:	\$0	\$829	\$65,593
INCEPTION DATE(S):	Sept. 1985	Sept. 1986	Dec. 1987
INTERNAL RATE OF RETURN (IRR): (annualized, since inception)	(0.43)%	(17.81)%	(7.24)%

DIVERSIFICATION PROFILE

LOCATION		PROPERTY TYPE	
Northeast	8.6%	Office	9.6%
Southeast	5.3	Retail	55.3
Mideast	10.7	Industrial	24.9
East N. Central	7.7	Residential	<u>10.2</u>
West N. Central	17.2		100.0%
Southwest	9.8		
Pacific	<u>40.7</u>		
	100.0%		

ATTACHMENT C

ANNUAL REVIEW SUMMARY AMGO I, II, IV, & V July 19, 1993

MANAGER REPRESENTATIVES: John Hill, Cathleen Ellsworth

SBI ASSETS UNDER MANAGEMENT: \$41,623,972

BACKGROUND AND DESCRIPTION:

The general partner and manager of AMGO I, II, IV, and V is First Reserve Corp. The general partner's strategy is to create a diversified portfolio of oil and gas investments. The portfolio is diversified by location, geological structure, investment type, and operating company. AMGO I, II, IV and V were formed in July 1981, December 1982, May 1988, and May 1990 and have terms of twenty, nineteen, ten and ten years, respectively.

QUALITATIVE EVALUATION:

- As discussed at prior SBI meetings commencing December 1992, First Reserve has been involved in litigation which potentially could have forced them into Chapter 11 bankruptcy. The suit has been settled and First Reserve will not file Chapter 11 bankruptcy.
- Gas prices continue to rebound and increased 43% during the first six months of 1993. Oil prices are firming, averaging \$19.84 for the first six months of 1993 versus \$19.73 for the first six months of 1992.
- Rig count is still depressed relative to historic levels, however, the industry is predicting an increase in drilling expenditures. The rig count is up 5.5% to 688 for the first six months of 1993 and currently stands at 730.
- During the first quarter of 1993, First Reserve has consolidated the majority of its oil field services companies into one entity. The impact of this consolidation will enable the portfolio company to respond to down markets and exploit growth opportunities, have access to credit markets, and generate considerable cost savings in both general and administrative expenses.
- The SBI's investment in the four funds are spread over 16 portfolio companies. Performance has improved steadily over the past year and the manager believes the outlook for each of the Funds is promising.

ATTACHMENT C (con't)

QUANTITATIVE EVALUATION: (through June 30, 1993)

	AMGO I	AMGO II	AMGO IV	AMGO V
COMMITMENT:	\$15,000,000	\$7,000,000	\$12,300,000	\$16,800,000
FUNDED COMMITMENT:	\$15,000,000	\$7,000,000	\$12,300,000	\$14,535,147
MARKET VALUE OF FUNDED COMMITMENT:	\$4,305,937	\$5,933,355	\$15,783,803	\$15,600,877
CASH DISTRIBUTIONS:	\$3,614,536	\$2,325,453	\$1,508,552	\$3,403,869
INCEPTION DATE(S):	Sept. 1981	Feb. 1983	May 1988	May 1990
INTERNAL RATE OF RETURN (IRR): (annualized, since inception)	-7.14%	2.17%	9.24%	11.77%

DIVERSIFICATION PROFILE

INVESTMENT TYPE

	I	II	IV	V
Common	71.1%	63.3%	83.5%	84.1%
Preferred	11.4	13.6	7.8	0.0
Debt	14.6	13.3	3.3	11.0
Other	<u>2.9</u>	<u>9.8</u>	<u>5.4</u>	<u>4.9</u>
	100.0%	100.0%	100.0%	100.0%

INDUSTRY SECTOR

	I	II	IV	V
Oil & Gas Properties	27.9%	18.5%	29.7%	28.7%
Marketing & Distributions	17.0	24.1	25.5	17.7
Services & Manufacturing	47.2	45.3	39.6	48.7
Cash	<u>7.9</u>	<u>12.1</u>	<u>5.2</u>	<u>4.9</u>
	100.0	100.0%	100.0%	100.0%

ATTACHMENT D

PRIVATE EQUITY MANAGER PROFILE

I. BACKGROUND DATA

NAME OF FUND: Blackstone Capital Partners II

FUND MANAGER: The Blackstone Group L.P.

TYPE OF FUND: Private Equity Limited Partnership

TOTAL FUND SIZE: Up to \$750 Million

INTERVIEW DATE: June 17, 1993

MANAGER CONTACT: Peter G. Peterson and
Stephen A. Schwarzman

ADDRESS: 345 Park Avenue
New York, NY 10154

TELEPHONE: (212) 935-2626

II. ORGANIZATION AND STAFF

The fund will be managed by Blackstone Management Partners L.P., an affiliate of The Blackstone Group L.P. with the same individual general partners. Peter G. Peterson is Chairman and Co-founding partner of Blackstone. Stephen A. Schwarzman is President and Co-founder of Blackstone.

Blackstone was founded in 1985 and this will be the second fund under their management.

Mr. Peterson was Chairman and CEO of Lehman Brothers-Kuhn Loeb and President and CEO of Bell & Howell. Additionally, he served as U.S. Secretary of Commerce. Prior to founding Blackstone, Mr. Schwarzman was engaged principally in the mergers and acquisitions business of Lehman Brothers, where he served as Chairman of the firm's Mergers & Acquisition Committee. In addition to Messrs. Peterson and Schwarzman, Blackstone has a professional staff which has extensive training in corporate finance, banking and accounting.

The Blackstone Group, L.P. is a private merchant banking firm in New York, with offices in Paris, Tokyo and Hong Kong. Their businesses include strictly friendly principal investments, mergers and acquisitions/financial advisory services to major

ATTACHMENT D (con't)

corporate clients, restructuring advisory services, and asset management. Blackstone currently has 14 general and limited partners and approximately 50 professionals located in New York, Hong Kong and Paris.

III. INVESTMENT STRATEGY

Blackstone Domestic Capital Partners II L.P. is being organized to invest in equity and equity-related securities (including preferred stock and debt securities) in conjunction with privately negotiated transactions. These "Private Equity Investments" will generally be made in connection with acquisitions, dispositions, restructurings, workouts, management acquisitions and other appropriate similar situations and generally will utilize some degree of leverage

Private Equity Investments in these transactions may be made on a global basis, but no more than 25% of the aggregate capital commitments may be invested outside of the United States and Canada. Private Equity Investments will be structured to provide the Partnership with management rights designed to qualify the Partnership as a "venture capital operating company." The Partnership will not invest directly in real estate assets in the United States or Europe, although the Partnership may invest in companies with substantial real estate holdings in these areas. The Partnership may invest directly in real estate assets in areas of rapidly growing economies such as Southeast and East Asia.

The Partnership will not make start-up venture capital investments or open market purchases of publicly traded securities unless such open market purchases are made in connection with a privately negotiated transaction.

Blackstone has developed substantial experience in executing transactions in partnership with industrial companies. These "corporate partnership" transactions combine the comparative advantages of an industrial company and a friendly entrepreneurial financial firm. Drawing upon its expertise and the relationships developed through its investment banking and other business areas, Blackstone intends to continue to focus on transactions with corporate partners in executing the Partnership's investment strategy.

The Partnership will not pursue the acquisition of a business if such acquisition is opposed by a majority of the members of its board of directors or by stockholders possessing a majority of the voting power of its outstanding securities.

Blackstone is also organizing Blackstone Offshore Capital Partners II L.P. for non-U.S. investors. The Offshore Partnership will have terms substantially identical to those of the Domestic Capital Partnership. Subject to applicable legal or regulatory restrictions, the two Partners will invest side-by-side, pro rata to their available capital.

ATTACHMENT D (con't)

IV. INVESTMENT PERFORMANCE

Blackstone Capital Partners II will be the second fund of the General Partner. The first Fund had its final closing in 1987 with aggregate capital commitments of \$810 million. Fund I has closed 8 transactions through the first quarter of 1993 for a commitment total of \$483 million. The investment period for Fund I assets will cease in October, 1993. (It is anticipated that a significant portion of the unused commitment from Fund I will be rolled over as commitments to Fund II). The current portfolio of Fund I has achieved a gross internal rate of return of almost 35% since inception. The performance objective for Fund II is to earn a rate of return of 25% to 30% per annum.

V. GENERAL PARTNER'S INVESTMENT

Blackstone will make a commitment to invest a minimum of \$15 million in investments of the Partnership. Of this amount, an amount equal to 1% of the aggregate capital commitments of the partnership will be made through the General Partner. To the extent \$15 million exceeds 1% of the aggregate capital commitments, the balance will be invested directly in each portfolio company.

VI. TAKEDOWN SCHEDULE

The Fund will have a five year investment period. Capital commitments will be taken down pro rata for 5 years after the final closing.

VII. DISTRIBUTIONS

- Distributions from investments will be allocated between the General Partner and the Limited Partners pro rata based on their capital contributions. With respect to the Limited Partner's share of distributions, after the Limited Partner has received a return of capital and a 10% preferred return, distributions will be made 80% to the General Partner and 20% to the Limited Partner until the General Partner has received 20% of total distributions. Thereafter, distributions will be allocated 80% to the Limited Partner and 20% to the General Partner.
- Each Limited Partner will receive a preferred return on its capital which will be calculated on a cumulative basis for all investments disposed of and will take into consideration the fact that Limited Partners may be admitted to the Partnership on different dates. For this and other reasons, the determination of the General Partner's carried interest will be made separately for each Limited Partner.

ATTACHMENT D (con't)

VIII. TERM

- The term of the Partnership will be ten years, with an option at the General Partner's discretion to extend it for up to two additional one-year periods. The Partnership will have a five-year commitment period beginning with the final closing.

IX. MANAGEMENT FEE

- An annual management fee equal to 1.5% of total capital commitments will be paid during the five-year commitment period and subsequently reduced to .75% of funded capital commitments until the related investments are disposed of.
- The management fee will be reduced by certain net fees earned by the Investment Advisor in operating and advising the Partnership. The following fees will be credited against the management fees paid by the Limited Partners:
 - (a) 80% of commitment, topping and break-up fees;
 - (b) 50% of organization fees in excess of third-party expenses incurred by the Partnership in connection with investments not made;
 - (c) 100% of such fees to the extent of such third-party expenses.

ATTACHMENT E

REAL ESTATE MANAGER PROFILE

I. BACKGROUND DATA

FUND MANAGER: Zell/Merrill Lynch

TYPE OF FUND: Opportunistic and Financially Distressed Situation
Real Estate Investment Trust

TOTAL FUND SIZE: \$275 Million to \$1 Billion

INTERVIEW DATE: June 1, 1993

MANAGER CONTACT: Sam Zell or Don Phillips

ADDRESS: Two North Riverside Plaza
Chicago, IL 60606

TELEPHONE: 312-454-0100

II. ORGANIZATION AND STAFF

Sam Zell and his affiliate, Equity Financial and Management Company (Zell/Equity), will have primary investment responsibility for the fund. Merrill Lynch will have an oversight role and is the fund's lead placement agent.

Samuel Zell is Chairman of Board of Equity Financial and Management Company. Through this entity, founded in 1968, and other affiliated entities, Zell is involved in numerous real estate and corporate investments typically in countercyclical, financially distressed and undervalued situations. Acquisition decisions are made on a centralized basis in Chicago by a group of 25 people supported by 125 professionals. Property development, management, and leasing functions are organized on a more decentralized basis from 16 regional offices, and includes over 2000 employees. Zell currently has controlling interests in more than 250 real estate projects nationwide which are valued at approximately \$5 billion.

Merrill Lynch is a global securities firm with a strong focus in real estate investment banking. Since 1988, Merrill Lynch completed real estate-related transactions globally totaling more than \$30 billion in value. Merrill Lynch will act as the fund's lead placement agent. Also, Merrill will sit on an Investment Committee for the fund which will consist of four members, two from Merrill and two from Zell/Equity. A

ATTACHMENT E (con't)

majority vote from the Investment Committee is needed to approve fund acquisitions.

This fund, Opportunity Partners III, is the third Real Estate Fund for Zell and Merrill Lynch.

Opportunity Partners I closed in August 1988 with \$408.7 million in equity capital commitments. Today that portfolio is fully invested in 36 properties representing a total investment of approximately \$763 million whose replacement cost exceeds \$1.2 billion. The equity value of the real estate portfolio as of 12/31/92 reflects an increase of 8.7% over cumulative equity contributions made to the fund. Investors in the first fund included, among others, Michigan State Employees; the Illinois State Board; Ameritech; The Boeing Company; Oregon Public Employees; and Northwestern Mutual Life.

Opportunity Partners II closed in December 1991 with \$430.1 million in equity capital commitments. As of March 1993, 11 properties have been acquired, representing a gross property investment of more than \$300 million with a replacement cost exceeding \$680 million. Due to the short holding period, fund properties are currently being held at cost. The managing general partner anticipates using 100% of the equity capital commitments of Opportunity Partners II prior to closing Opportunity Partners III. Investors in the second fund included, among others, Bellsouth, Alcoa; Allstate; 3M; State of Oregon and Delta Airlines.

III. INVESTMENT STRATEGY

The investment strategy of the fund is to make equity or equity-related investments in opportunistic real estate situations. The partnership will acquire office, retail, and residential properties and may also invest in mixed-use and industrial properties. Although the focus will be on equity acquisitions, the partnership may acquire convertible or participating mortgages, mortgages or deeds of trust. The partnership may invest in real estate assets indirectly through the acquisition of controlling interests in partnerships, joint ventures, or corporations whose assets are primarily composed of real estate.

The partnership is being created to take advantage of current economic and real estate conditions by making equity investments in real estate assets which are either underperforming, or owned by entities either seeking to redeploy capital or experiencing financial difficulties.

IV. GENERAL PARTNER'S COMMITMENT

Zell/Merrill Lynch will commit an amount equal to the greater of \$25 million or 2.5% of the Limited Partners' equity capital commitments.

ATTACHMENT E (con't)

V. TAKEDOWN SCHEDULE

It is anticipated that the commitments will be drawn down over a period of up to five years on an as needed basis.

VI. DISTRIBUTION OF PROFITS:

From Operations:

Distributions of available cash from operations will be made quarterly as follows: First, pro rata to the Capital Partners in accordance with their Equity Capital Contributions until they have received a cumulative return equal to the annual CPI percentage increase (minimum 3%) plus 5% per annum; next, 85% to the Capital Partners and 15% to the Managing General Partner until the Capital Partners have received a cumulative return equal to the annual CPI percentage increase (minimum 3%) plus 9% per annum; thereafter, 70% to the Capital Partners and 30% to the Managing General Partner.

From Sales or Refinancings:

During the Investment Period, net proceeds from a sale or refinancing of Opportunity Partners III's assets will either be reinvested in the portfolio or distributed, as discussed below, at the discretion of the Managing General Partner. Except as provided below, after the close of the Investment Period, net proceeds from a sale or refinancing of Opportunity Partners III's assets will be distributed at the time of the sale or refinancing as follows:

First, pro rata to the Capital Partners until they have received, on a cumulative compounded basis, a return equal to the annual CPI percentage increase (minimum 3%) plus 5% per annum; second, pro rata to the Capital Partners until they have received an amount equal to their original investment; next, 85% to the Capital Partners and 15% to the Managing General Partner until the Capital Partners have received, on a cumulative compounded basis, an aggregate return equal to the annual CPI percentage increase (minimum 3%) plus 9% per annum (including amounts previously received); thereafter, 70% to the Capital Partners and 30% to the Managing General Partner.

Notwithstanding the above, the net proceeds of a sale or refinancing of a property may be reinvested or reserved at any time, if in the sole discretion of the Managing General Partner, such reinvestment or reserve is necessary to protect Opportunity Partners III's existing investments.

ATTACHMENT E (con't)

VII. MANAGEMENT FEE

An asset management fee of 75 basis points of the partnership's total capital will be paid annually

The Managing General Partner will be entitled to receive a 1.5% acquisition fee in connection with the acquisition of each partnership asset, subject to a potential reduction in the event of a third party brokerage commission

VIII. TERM

The Managing General Partner will actively pursue opportunities to sell the properties as appropriate, but no later than in the tenth year. In any event, the Managing General Partner will use its best efforts to sell the properties within 15 years of the closing date.

IX. LEVERAGE

It is initially expected that Opportunity Partner III's aggregate leverage will be approximately 65% of the total consideration paid for the properties. Thereafter, aggregate leverage will be permitted so as not to exceed 80% of the appraised value of the portfolio. Opportunity Partners III intends to establish a line of credit to fund acquisitions and working capital needs.

Tab J

TASK FORCE REPORT

DATE: September 7, 1993

TO: Members, State Board of Investment

FROM: **Task Force on Divestment**

The Task Force on Divestment met on August 27, 1993 to review implementation of the Board's resolution on South Africa. This report summarizes their findings and conclusions and recommends that the Board establish conditions under which the resolution should be rescinded.

1. Recent Developments Concerning South Africa

The date for election of a non-racial constituent assembly has been set for April 27, 1994. The African National Congress (ANC) has stated that this is one of the conditions that must be met before the ANC will support lifting the remaining economic sanctions against South Africa. The other stated conditions of the ANC are that a multi-party transitional executive council is to be established that will operate along side the current government and that a bill amending the current constitution to provide for the transitional structures has been enacted.

In anticipation of a formal request to lift sanctions, ANC President Nelson Mandela and South Africa President F.W. DeKlerk were in the US in early July 1993. A recent article from the Wall Street Journal on July 28, 1993 quotes New York State Comptroller H. Carl McCall as telling Mr. Mandela that the \$56 billion New York Common Fund would begin a "reinvestment campaign" when the ANC makes its announcement. The article also reports that Los Angeles is reviewing its restrictions policy and may "consider lifting curbs in the near future."

The Investor Responsibility Research Center (IRRC) has been monitoring the ANC's press releases and interviews closely. According to IRRC staff, Mandela has been saying that he cannot announce a call to stop anti-apartheid activism because of the recent violence in South Africa. At the same time, however, he has said that when he does announce a call to end sanctions, he wants them to be lifted immediately. At this time, IRRC believes that this announcement will be made sometime after September 1993.

2. Companies Doing Business in South Africa

US Companies

President Bush lifted federal restrictions against investing in South Africa in 1991. Initially, US companies were slow to return to the country. That situation has changed recently as more companies have announced their plans to renew or begin operations there. Since February 1993, fifteen (15) companies were added to the SBI's restricted list raising the number of US companies from 74 to 89. The entire list represents about 10% of the total US stock market. As more companies re-enter/re-invest in South Africa, these figures are likely to grow.

Non US Companies

The list of non US companies with direct investment in South Africa is much larger. At the present time, more than 450 companies are included by IRRC. They represent 25-30% of the value of the more common international stock market indices such as Morgan Stanley Capital International's Index of Europe, Australia and the Far East (EAFE) or the Financial Times-Actuaries (FT-Actuaries) index.

3. Return Impact of South Africa Restrictions

The performance impact of the Board's South Africa policy is difficult to determine for several reasons. First, the Board has implemented its policy in phases and not all companies were affected during all stages. Second, an active manager may or may not have chosen to hold one or more of the securities if there had been no restrictions. Finally, the policy is not an explicit prohibition since an active manager may choose to hold a restricted stock if it believes it would be a breach of fiduciary responsibility not to do so.

While they are not completely representative of the Board's policy, the performance of "South Africa Free" indices shows that explicit prohibitions on holding South Africa-related stocks would have produced lower returns over recent periods:

- The Russell 3000, a broad US stock index similar to the Wilshire 5000, returned 15.5% annualized for the five years ending March 31, 1993. A "South Africa Free" Russell 3000 returned 15.3% for the same period. Therefore, South Africa prohibitions would have reduced returns for this index by 0.2% annualized. (Data source: Richards & Tierney)
- The Morgan Stanley Capital International index of Europe, Australia and the Far East (EAFE) is the most commonly cited international stock market index. EAFE returned -0.8% annualized for the five years ending March 31, 1993. A "South Africa Free" EAFE returned -2.7% during the same period. Therefore, South Africa prohibitions would have reduced returns for this index by 1.9% annualized. (Data source: Pension Consulting Alliance).

The potential impact of the SBI's resolution on the international stock program was discussed in greater detail in the position paper on international investing that was adopted by the Board in September 1992. Staff has updated the section of the paper that deals with this issue to include the most recent data available. The revised material begins on page 13.

RECOMMENDATION:

In light of recent developments in South Africa, the Task Force recommends that the Board adopt the attached amendment to its restated resolution dated June 2, 1993. The amendment provides that the resolution will be continued until the completion of free and open elections in the Republic of South Africa. The amendment also provides that the Task Force may recommend that the Board rescind the resolution before that date if events in South Africa warrant. Until such time, the Task Force recommends that the "divestment through attrition" policy should continue to apply to both domestic and international portfolios. In the interim, they underscore the provision in the Board's resolution that explicitly allows an active manager to purchase a restricted stock if the manager believes it would be a breach of fiduciary responsibility not to do so.

**AMENDMENT TO THE RESTATED RESOLUTION
OF THE MINNESOTA STATE BOARD OF INVESTMENT
REGARDING SOUTH AFRICA DATED JUNE 2, 1993**

Concerning Conditions for Rescission of the Resolution

WHEREAS, the State Board of Investment has established the Task Force on Divestment to advise the Board on the implementation of its resolution concerning South Africa, and

WHEREAS, the Task Force on Divestment has monitored events in the country of South Africa and has noted the recent progress toward establishing a multi-racial government, including the announcement of April 27, 1994 as the date for election of a non-racial constituent assembly, and

WHEREAS, the Task Force believes that such progress, if continued, will serve to increase the safety and stability of investment in companies doing business with, or operating in, the Republic of South Africa, and

WHEREAS, the amended and restated resolution of the State Board of Investment dated June 2, 1993 does not establish under what conditions implementation of the resolution shall be discontinued, and the Task Force on Divestment has now recommended that the Board establish such conditions,

NOW, THEREFORE, BE IT RESOLVED, that the State Board of Investment amends section 13 of its restated resolution dated June 2, 1993 as follows:

"13. This resolution shall be effective immediately and shall continue until free and open elections are completed in the Republic of South Africa at which time this restated resolution is hereby rescinded. The Task Force on Divestment may recommend to the Board that implementation of the resolution be discontinued before free and open elections are completed if the Task Force determines that other events have transpired which will support the establishment of a multi-racial government in the Republic of South Africa, and which have increased the safety and stability of investments in companies doing business with, or operating in, the Republic of South Africa."

Adopted this 16th day of September, 1993.

**AMENDED AND RESTATED
RESOLUTION OF THE
MINNESOTA STATE BOARD OF INVESTMENT**

**Regarding South Africa
June 2, 1993**

WHEREAS, the policy of Apartheid as maintained by the present government of the Republic of South Africa is not only morally repugnant to all who believe in the inherent rights of individual freedom and equal treatment under the law and has resulted in the systematic enslavement and subjugation of the non-white majority of South Africa but casts doubt on the safety and stability of investment in companies doing business with, operating in, or making loans to the Republic of South Africa.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. No monies held and invested by the Minnesota State Board of Investment (SBI) in its actively managed stock portfolios shall remain invested in or hereinafter be invested in the stocks of:
 - (a) any foreign or United States company or any subsidiary or affiliate thereof doing business or operating in the Republic of South Africa, or
 - (b) any bank or financial institution which makes loans to the Republic of South Africa or a governmental enterprise thereof, or other loans deemed by the SBI to directly support Apartheid, subject to and in accordance with the provisions hereinafter set forth.
2. Foreign and United States companies, and subsidiaries and affiliates thereof covered by section 1 shall be identified:
 - (a) by reference to the most recent annual report of the American Consulate General of Johannesburg, entitled "American Firms, Subdivisions and Affiliates - South Africa," or
 - (b) through correspondence with the United Nation's Center on Transnational Corporations, or
 - (c) through information available through The Investor Responsibility Research Center, or
 - (d) by other procedures satisfactory to the SBI.

3. Banks or financial institutions covered by Section 1 shall be identified:
 - (a) from the records of the Interfaith Center on Corporate Responsibility and the Investor Responsibility Research Center, or
 - (b) from affidavits of such institutions, or
 - (c) by other procedures satisfactory to the SBI.
4. The divestiture required by section 1 shall be completed not later than June 1, 1993. In the event a manager holds stock now covered by section 1, or which was not covered by section 1 of this resolution at the time of its initial purchase but subsequently is covered by section 1, the managers shall be so notified and shall proceed in accordance with section 6 (c) and (d) in an effort to meet the SBI's goal of divestment of such stock by June 1, 1995, or, if the stock is acquired after June 1, 1993, 2 years after the date the stock became subject to section 1 of this resolution. Notwithstanding anything contained herein to the contrary, if during the process of divestiture, the SBI determines that completion of divestiture not later than June 1, 1993, would be inconsistent with the SBI's fiduciary obligations, then the SBI shall authorize an extension of time within which to complete divestiture. The SBI shall periodically evaluate the situation in the Republic of South Africa and determine whether the divestiture program shall be accelerated, decelerated or otherwise modified, including whether, as a result of lack of improvement in conditions in those countries, or for other reasons, it is necessary to seek complete divestiture of the securities covered by this resolution.
5. During implementation of this resolution, the SBI shall hereafter direct its active stock managers to neither invest funds in the stocks of i) foreign and United States companies and subsidiaries and affiliates thereof of ii) banks or financial institutions both of which are described in sections one, two and three of this resolution nor reinvest funds in the stocks of such entities following the divestment or sale thereof unless:
 - (a) SBI staff or other persons and entities charged with the day-to-day investment of funds entrusted to the SBI conclude that other available investment alternatives are not as sound from a fiduciary point of view, or
 - (b) the SBI concludes that the failure to invest or reinvest in such entities would be inconsistent with the SBI's fiduciary obligations, or
 - (c) the entities meet the standards set forth in section 7 of the resolution.
6. The process of divestiture of and limiting new investments in stocks held in the SBI's actively managed stock portfolios will be conducted consistent with fiscal prudence and so as to minimize financial market disturbance. On June 1, 1993 and monthly thereafter, the SBI shall notify its active stock managers of the implementation of this resolution. The active stock managers shall be directed as follows

- (a) To discontinue purchases of stock covered by section 1 of this resolution unless failure to so invest would be a breach of the active stock manager's fiduciary duty to the SBI.
 - (b) In the event such manager finds it is necessary to purchase any of the stocks covered by section 1 of this resolution in fulfillment of its fiduciary obligations, the active stock manager must send a letter certifying the reasons for the purchase to the SBI.
 - (c) Active managers are not automatically required to sell any stock held which is covered by section 1 of the resolution solely to achieve divestiture.
 - (d) All decisions to sell stock should be made by the SBI's active stock managers only for economic or financial reasons in the normal course of business.
7. Notwithstanding the foregoing, the SBI may authorize the holding by the SBI's active stock managers of investments covered by this resolution in companies engaging in corporate political, social, and economic activities, in addition to compliance with the Statement of Principals (formerly known as the Sullivan Principals), as amended from time to time, or a similar corporate policy, that are deemed by the SBI to be of substantial assistance to efforts to eliminate Apartheid.

Evidence to the SBI of such corporate political, social and economic activities, which must go beyond workplace reform and include steps taken in substantial opposition to Apartheid, shall include the following:

- (a) actions to persuade the government of the Republic of South Africa to eliminate Apartheid including tangible opposition to the system of pass laws, influx controls and other fundamental building blocks of Apartheid;
- (b) absence of participation and investment in the bantustan/homelands;
- (c) formal recognition of and collective bargaining with black trade unions that are independent of government control;
- (d) providing specific training and upgrading programs at the work-place and increasing the number of non-whites in technical, skilled, professional and management positions, including positions in which non-whites supervise whites;
- (e) payment of a reasonable, livable wage to all employees;
- (f) substantial expenditures to raise the level of education and skills of the non-white majority population, including the provision of schooling for workers and children in the community;

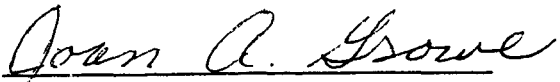
- (g) substantial expenditures to provide decent, affordable, permanent housing units to workers and their families on a non-discriminatory basis; and
- (h) substantial expenditures to provide health and medical services to workers and their families on a non-discriminatory basis.

To be substantial, a company's expenditures should represent a proportion of profit after taxes or of revenue that is among the highest proportions spent by all United States companies in South Africa and that is significantly more than the proportion spent by the company in other countries.

8. In furtherance of the principles set forth in the resolution the SBI shall, pursuant to procedure set forth in this resolution, seek out and persuade other shareholders to act in a concerted manner to change corporate political, social and economic activities in the Republic of South Africa. The SBI, in conjunction with its staff, shall act in these and other ways to persuade corporations to continually improve their corporate political, social and economic activities in the Republic of South Africa consistent with the resolution; and from the date of this resolution, vote the shares held "For" all management or stockholder proposals consistent with this section
9. During implementation of this amended and re-stated resolution, the SBI may direct its staff to write to the companies and institutions identified in sections 2 and 3 to inform them of the adoption of this resolution and its provisions, to give them notice of the actions they should take in order to avoid divestiture, and to provide them an opportunity to describe any actions they may be taking to work for peaceful fundamental change in the Republic of South Africa.
10. The SBI shall seek appropriate financial and legal advice concerning the divestiture program set forth for consideration in this resolution.
11. To advise and assist in implementation of this resolution, the SBI hereby authorizes the formation of an Advisory Task Force on Divestment composed of a representative selected by each member of the SBI and at least one representative from the Minnesota corporate community, one representative from a Minnesota public employee labor group and one representative from a public employee retirement group.
12. To assist in implementation of this resolution, the SBI authorizes its Executive Director to obtain professional or technical services from the Interfaith Center on Corporate Responsibility, the Investor Responsibility Research Center or other available resources.

13. This resolution shall take effect immediately.

Amended and Restated this 2nd day of June, 1993.


Secretary of State

Exerpt from: "International Equity Investing for the Basic Funds," which was adopted by the SBI in September 1992. Data updated through 6/30/93 where available.

WHAT IMPACT DO SOUTH AFRICA RESTRICTIONS HAVE?

The Board's resolution on South Africa applies the same restrictions to foreign and domestic holdings in all of the Board's actively managed stock portfolios. Under this policy, the Board's international managers with actively managed stock portfolios will be directed to refrain from purchasing stock of companies with direct investment in South Africa unless the manager determines that failure to complete a purchase would be a breach of the manager's fiduciary responsibility.

Staff relies on information compiled by the Investor Responsibility Research Center (IRRC) in Washington D.C. to identify U.S. companies with direct investment in South Africa. IRRC maintains a similar service for international companies and staff has access to this information through the Board's subscription to IRRC's South Africa Review Service.

A South Africa restriction has two impacts on either domestic or international portfolios:

- It reduces the range of investment opportunities.
- It can have either a positive or negative affect on performance, depending on the time period examined.

As shown in Figure 1, about 24% of the market capitalization, or market value, of the Financial Times-Actuaries (FT-Actuaries) Index is eliminated when South Africa-related securities are excluded. The impact is not uniform across all countries, however. For example:

- The United Kingdom is reduced by about 44%
- Germany is reduced by about 82%
- Japan is reduced by about 9%

As a result, South Africa restrictions will increase exposure to the Pacific Basin/Japan, unless country weights are adjusted.

South Africa restrictions will alter industry diversification as well. A "South Africa Free" index shows increased exposure to financials, utilities and banks and a decrease in the energy, health and consumer goods sectors. The remaining securities in the index have a greater bias toward small company stocks and growth oriented companies than an unrestricted index.

Return data for "South Africa Free" indices have been available for only four to five years. Returns for longer historical periods can be approximated, however, if an index is carefully reconstructed to reflect South Africa restrictions over time. In 1990, J.P. Morgan completed such a study using return data from calendar 1982-1988. Richards & Tierney used a similar methodology to extend the data through June 30, 1993. Three sets of returns were calculated and compared:

- Market returns calculated using a universe similar to FT-Actuaries (Unrestricted).
- Returns calculated after South Africa restricted securities were excluded (Restricted).
- Returns calculated after restricted securities were excluded but country weights were adjusted back to their original market weights (Restricted and Reweighted).

The results of the analysis are shown in Figure 2:

- A Restricted index had somewhat higher returns over the time period studied (Unrestricted 16.56% vs. Restricted 17.29%). The impact tended to be positive from 1982-88 and negative from 1989-92 relative to an Unrestricted index. The impact during the first half of 1993 was positive.
- A Restricted and Reweighted index had approximately the same returns as an Unrestricted index over the period studied (Unrestricted 16.56% vs. Restricted and Reweighted 16.49%).
- Restrictions are likely to increase the volatility of returns, unless the country weights are adjusted (Standard Deviations: Unrestricted 17.24; Restricted 18.81; Restricted and Re-weighted 17.20).
- Restrictions will cause significant year-to-year tracking error relative to EAFE. The SBI could easily experience returns that deviate from the index by up to ± 7 percentage points or more in any year due to South Africa restrictions. If the index is

re-weighted, the expected tracking error drops to within ± 2 percentage points but is still significant.

Diversification potential is usually measured by correlation data. Correlation coefficients for most asset classes range between 0 and 1; the lower the number, the stronger the diversification effect. The J.P. Morgan study provided the following correlation data:

**Correlation of Monthly Returns
1982-89**

	U.S.	Non	Restricted	Re-weighted
U.S.	1.00			
Non-U.S.	0.45	1.00		
Non-U.S. Restricted	0.38	0.98	1.00	
Non-U.S. Restricted/and Re-weighted	0.42	0.99	0.99	1.00

Source: J.P. Morgan

As shown above, the correlation between non-U.S. portfolios is high (0.98-0.99). This indicates that non-U.S. portfolios with or without restrictions will move up and down together. The correlation between the non-U.S. portfolios and the U.S. portfolio is fairly low (0.38-0.45). This indicates South Africa restrictions do not diminish the diversification potential of an international portfolio.

Staff concludes that the Board's South Africa restrictions will alter the composition of its international portfolios relative to a broad index. While the resulting performance differences could be either positive or negative, the deviations are likely to be material on a quarterly or yearly basis. Therefore, staff recommends that the Board utilize a benchmark for its active managers that is "South Africa Free" and reweighted back to market weights on a country by country basis as long as the South African policy is in effect.

FIGURE 1
THE IMPACT OF SOUTH AFRICA RESTRICTIONS
FT-ACTUARIES INDEX
6/30/93

	FT-Actuaries Index	South Africa Free (SAF) FT-Actuaries Index	
Number of companies	1,474	1,248	
% capitalization of index removed	--	23.6%	
	# Companies in Index	# Companies Excluded in SAF Index	Market Capitalization Removed in SAF Index
Australia	68	5	20.1%
Austria	18	1	3.4
Belgium	42	5	12.7
Denmark	33	5	18.5
Finland	23	2	23.8
France	97	20	35.0
Germany	62	38	82.2
Hong Kong	55	1	2.6
Ireland	15	0	0.0
Italy	72	9	31.5
Japan	470	22	8.6
Malaysia	69	0	0.0
Netherlands	24	7	50.6
New Zealand	13	0	0.0
Norway	22	1	3.2
Singapore	38	1	7.5
Spain	46	1	2.6
Sweden	36	10	20.3
Switzerland	52	28	75.0
U.K.	<u>219</u>	<u>70</u>	<u>44.1</u>
Total	1,474	226	23.6%

Source: Richards & Tierney

FIGURE 2

IMPACT OF SOUTH AFRICA RESTRICTIONS ON RETURNS (1)

Calendar	Non-U.S. Markets Unrestricted	(2) South Africa Restricted	(3) South Africa Restricted and Re-weighted
1982	-0.08%	-3.31%	-1.19%
1983	23.40	24.94	23.41
1984	8.86	12.93	10.83
1985	58.40	56.87	62.25
1986	67.61	78.49	67.34
1987	25.14	30.25	26.28
1988	27.16	29.41	27.10
1989	11.26	7.92	10.52
1990	-23.85	-27.74	-23.48
1991	12.62	12.14	10.67
1992	-12.81	-13.86	-15.53
1993 (through 6/30)	23.91	29.51	24.57
Annualized	16.56%	17.29%	16.49%
Standard Dev.	17.24	18.81	17.20
Estimated Tracking Error (95%)	--	± 6.12	± 1.59

(1) Data obtained from J.P. Morgan using BARRA returns 1/1/82 - 12/31/88 and from Richards & Tierney using FT-Actuaries returns from 1/1/89 - 6/30/93.

(2) Returns calculated after South Africa restricted securities were removed.

(3) Returns calculated after South Africa securities were removed but country weights were adjusted back to market weights.

Source: Richards & Tierney