

MINNESOTA STATE BOARD  
OF INVESTMENT  
MEETING  
**June 15, 1999**

&

INVESTMENT ADVISORY  
COUNCIL MEETING  
**June 1, 1999**

**AGENDA  
STATE BOARD OF INVESTMENT  
MEETING**

**Tuesday, June 15, 1999**

**9:00 A.M. -Room 125**

**State Capitol - Saint Paul**

**TAB**

- 1. Approval of Minutes of March 3, 1999**
  
- 2. Report from the Executive Director (H. Bicker)**
  - A. Quarterly Investment Review (January 1, 1999 – March 31, 1999) **A**
  - B. Administrative Report **B**
    1. Reports on budget and travel
    2. Litigation update
    3. Legislative update
    4. Reauthorization of the Proxy Voting Committee
    5. Update on tobacco information
  
- 3. Report from the SBI Administrative Committee (C. Johnson)** **C**
  - A. Approval of Executive Director's Proposed Workplan for FY00
  - B. Approval of Budget Plan for FY99
  - C. Review of Continuing Fiduciary Education Plan
  - D. Approval of process of Executive Director's Evaluation for FY99
  - E. Discussion of Year 2000 Contingency Banking Relationship RFP
  - F. Discussion of Year 2000 Computer Issue Progress Report
  
- 4. Reports from the Investment Advisory Council (J. Yeomans)**
  - A. Domestic Manager Committee **D**
    1. Review of manager performance
    2. Review of annual benchmark quality evaluation
    3. Recommendation to terminate American Express Asset Management from the Domestic Equity Program
    4. Recommendation to promote Cohen, Klingenstein & Marks to the Domestic Equity Program
    5. Recommendation to change the asset allocation for the Environmental Trust Fund
  
  - B. International Manager Committee **E**
    1. Review of manager performance
    2. Approval of International Equity Position Paper and recommendations
  
  - C. Alternative Investment Committee **F**
    1. Review of current strategy
    2. Recommendation of a new commitment to the Basic Retirement Funds:
      - William Blair Mezzanine Capital Partners III, L.L.C.
    3. Recommendation of a new commitment to the Post Retirement Fund:
      - Hellman & Friedman L.L.C.

**Minutes  
State Board of Investment  
March 3, 1999**

The State Board of Investment (SBI) met at 9:00 A.M. Wednesday, March 3, 1999 in Room 125 State Capitol, St. Paul, Minnesota. Governor Jesse Ventura; State Auditor Judith H. Dutcher; State Treasurer Carol C. Johnson; Secretary of State Mary Kiffmeyer, and Attorney General Mike Hatch were present. The minutes of the December 11, 1998 Board meeting were approved.

**Executive Director's Report**

Mr. Bicker, Executive Director, referred members to Tab A of the meeting materials and reported that the Combined Funds had exceeded inflation over the ten year period ending December 31, 1998 (Combined Funds 14.0% vs. Inflation 3.1 %), exceeded the median fund (23<sup>rd</sup> percentile) and outperformed its composite index (Combined Funds 15.3% vs. Composite 15.0%) for the most recent five year period. He stated that the Basic Funds has exceeded its composite index (Basic Funds 15.6% vs. Composite 15.4%) over the last five years and reported that the Post Fund had outperformed its composite index over the last five year period (Post Fund 14.9% vs. Composite 14.5%).

Mr. Bicker reported that the Basic Funds' assets increased 12.1% for the quarter ending December 31, 1998 due to positive investment returns. He said that the asset mix is essentially on target and that the Basic Funds underperformed its composite index for the quarter (Basic Funds 12.1% vs. Composite 12.5%) but he added that the Basic Funds had outperformed its Composite for both the three and five year periods.

Mr. Bicker reported that the Post Fund's assets increased 12.3% for the quarter ending December 31, 1998 due to positive investment returns. He said that the Post Fund asset mix is also on target and that the Post Fund has underperformed its composite index for the quarter (Post Fund 13.3% vs. Composite 13.7%) and he added that the Post Fund had also outperformed its Composite for the three and five year periods.

Mr. Bicker reported that the domestic stock manager group slightly underperformed for the quarter (Domestic Stocks 21.3% vs. Wilshire 5000 21.5%) but had outperformed for the year (Domestic Stocks 23.5% vs. Wilshire 5000 23.4%). He said that the International Stock manager group underperformed its composite index for the quarter (International Stocks 18.0% vs. Int'l. Composite 20.4%) but had outperformed for the most recent five year period (International Stocks 8.8% vs. Int'l. Composite 7.5%).

Mr. Bicker stated that the bond segment outperformed its target for the quarter (Bonds 0.4% vs. Lehman Aggregate 0.3%) but underperformed for the year (Bonds 8.3% vs. Lehman Aggregate 8.7%). He concluded his report with the comment that as of December 31, 1998, the SBI was responsible for over \$47 billion in assets.

### **Executive Director's Administrative Report**

Mr. Bicker referred members to Tab B for current budget and travel reports. He stated that the Office of the Legislative Auditor had completed its audit of SBI operations for fiscal year 1998 and had received a "clean opinion" on its financial statements.

Mr. Bicker gave a brief summary of legislative activity of interest to the SBI. He stated that a number of bills have been introduced that are related to the tobacco settlement money. He said that it is anticipated that the SBI would be responsible for the investment of these endowment funds. Mr. Bicker reported that the retirement systems have proposed legislation that would allow them to build an office building. He noted that the SBI may be interested in leasing space in that building should it be built. Mr. Bicker stated that legislation has also been proposed which would expand the vendors for the 403(b) teacher annuity employer match. He stated that under this bill, the SBI would be removed from the vendor selection process. He concluded his Administrative Report by stating that hearings on the SBI's administrative budget are also in progress.

Mr. Bicker asked Christie Eller, Assistant Attorney General, to update members on the status of litigation concerning Mercury Finance Corporation. Ms. Eller briefly summarized the previous legal activity and stated that a federal judge had approved a partial settlement with Mercury for approximately \$30 million. She said that the settlement will be allocated among the various claimants by an arbitrator. She stated that the next stage of litigation is against the auditors and that the discovery cutoff is April 30, 1999. She added that this type of litigation is extremely expensive and time consuming and that this period could hold a window of opportunity for potential settlement. She referred members to a memo from Mr. Bicker that was distributed at the meeting recommending authorization for the Executive Director to negotiate settlement with Peat Marwick with the assistance of counsel and subject to court approval (**see Attachment A**). Mr. Hatch moved approval of the recommendation, as stated in Attachment A. Ms. Johnson seconded the motion. The motion passed.

Mr. Bicker updated members on activity regarding tobacco holdings since the tobacco divestment resolution passed in September 1998. He stated that during the last quarter, the SBI's active managers sold approximately 335,000 shares of stock, bringing the SBI's tobacco holdings to approximately 3.8 million shares. He said that the market value of those investments had actually increased from \$162 million to almost \$174 million. In response to a question from Ms. Dutcher, Mr. Bicker stated that the divestment resolution states that the Board will be updated quarterly as to the progress of the resolution.

Mr. Bicker referred members to a memo distributed during the meeting regarding the recommended appointments to the Investment Advisory Council (IAC) (**see Attachment B**). He stated that the six recommended appointees are current incumbents. He added that three additional applications for members had been considered by the Selection Committee, but that their backgrounds and expertise were more in the areas of financial planning and not pension related investments. Ms. Johnson moved approval of the Selection Committee's recommendations, as stated in Attachment B. Ms. Kiffmeyer seconded the motion. The motion passed.

### **Domestic Manager Committee Report**

Ms. Yeomans referred members to Tab C of the meeting materials and briefly reviewed the performance for the quarter. She stated the Committee is recommending that Weiss, Peck and Greer, an active equity manager be terminated due to continued poor performance and turnover at the firm. She added that the assets of the portfolio be used to meet the liquidity needs in the near future. Ms. Dutcher moved approval of the Committee's recommendation, as stated in the Committee Report, which reads: "The Committee recommends that the SBI terminate its contractual relationship with Weiss, Peck & Greer for equity investment management services." Ms. Johnson seconded the motion. The motion passed.

### **International Manager Committee Report**

Ms. Yeomans referred members to Tab D of the meeting materials and briefly reviewed the performance for the international segment. She briefly updated members on the Committee's activity regarding the broad review of the international investment program. She said that the Committee concurred with staff's recommendation to use the Morgan Stanley Capital International (MSCI) All Country World Index as the international asset class target, effective July 1, 1999. She stated that the MSCI Europe, Australia and the Far East (EAFE) Index and the MSCI Emerging Markets Free Index continue to be the most appropriate indicies to the for the SBI's developed market managers and for the emerging managers, respectively. She added that the Committee also determined that global management and regional management are not appropriate for the SBI's international program at this time due to there being too few managers, poor track records, and too few assets under management.

In response to a question from Ms. Dutcher, Mr. Bicker confirmed that staff and the Committee will bring an asset class recommendation to the Board at the June 1999 meeting and that other international recommendations will follow at the September 1999 Board meeting. Ms. Dutcher stated her concern that the currency overlay profits are deteriorating and Ms. Yeomans noted that the purpose of the currency overlay program is to help reduce the volatility of the international program. Mr. Bicker added that the currency overlay program has netted the SBI approximately \$130 million to date and he reiterated that the Committee will continue its evaluation of the program and that a recommendation would be coming to the Board in either June or September 1999.

### **Alternative Investment Committee Report**

Ms. Yeomans referred members to Tab E of the meeting materials and briefly reviewed two recommendations from the Committee. She stated that the first recommendation is an investment for the Post Retirement Fund with an existing real estate manager, CB Richard Ellis Investors. She said that the second recommendation is also for the Post Fund with an existing private equity manager, GTCR Golder Rauner, L.L.C. Ms. Dutcher moved approval of both of the Committee's recommendations, as stated in the Committee Report, which reads: "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 \$40 million or 20%, whichever is less, in CB Richard

Ellis Investors Commercial Mortgage Fund V. This commitment will be allocated to the Post Retirement Fund. Approval by the SBI of this potential commitment is not intended to be, and does not constitute in any way, a binding or legal agreement or impose any legal obligations on the State Board of Investment and neither the State of Minnesota, the State Board of Investment or its Executive Director have any liability for reliance by CB Richard Ellis Investors upon this approval. Until a formal agreement is executed by the Executive Director on behalf of the SBI, further due diligence and negotiations may result in the imposition of additional terms and conditions on CB Richard Ellis Investors or reduction or termination of the commitment. 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 \$80 million or 20%, whichever is less, in GTCR Capital Partners, L.P. This commitment will be allocated to the Post Retirement Fund.

Approval by the SBI of this potential commitment is not intended to be, and does not constitute in any way, a binding or legal agreement or impose any legal obligations on the State Board of Investment and neither the State of Minnesota, the State Board of Investment or its Executive Director have any liability for reliance by GTCR Golder Rauner, L.L.C. upon this approval. Until a formal agreement is executed by the Executive Director on behalf of the SBI, further due diligence and negotiations may result in the imposition of additional terms and conditions on GTCR Golder Rauner, L.L.C. or reduction or termination of the commitment." Ms. Kiffmeyer seconded the motion. The motion passed.

The meeting adjourned at 9:40 A.M.

Respectfully submitted,



Howard J. Bicker  
Executive Director

**MINNESOTA  
STATE  
BOARD OF  
INVESTMENT**



**Board Members:**

Governor  
Jesse Ventura

State Auditor  
Judi Dutcher

State Treasurer  
Carol C. Johnson

Secretary of State  
Mary Kiffmeyer

Attorney General  
Mike Hatch

**Executive Director:**

Howard J. Bicker

Suite 105, MEA Bldg.  
55 Sherburne Avenue  
St. Paul, MN 55155  
(651) 296-3328  
FAX (651) 296-9572  
E-mail:  
minn.sbi@state.mn.us

An Equal Opportunity  
Employer

DATE: February 23, 1999

TO: Members, State Board of Investment

FROM: Howard Bicker, Executive Director

SUBJECT: Mercury Finance Litigation Update

**The following is based upon discussions with the SBI's outside counsel, Heins Mills & Olson and Christie Eller, Assistant Attorney General and is protected by attorney/client privilege which can only be waived by a majority vote of the SBI.**

For the past two years, the State Board of Investment has been involved in litigation as lead class plaintiff in a securities class action suit against Mercury Finance Company and Peat Marwick, its auditor. Mercury has filed for bankruptcy and has limited assets.

A federal judge has approved a settlement with Mercury, its directors' and officers' liability insurance carrier and one of the defendant Mercury officers. The settlement is in an amount of approximately \$30 million. The settlement has also been approved by the bankruptcy court. While there are in excess of \$1 billion in outstanding equity claims, this partial settlement was considered to be the best that would be available in light of the bankruptcy.

The \$30 million settlement will be allocated among the various claimants and their respective attorneys by an arbitrator.

Now that there has been the partial settlement against Mercury and the outside directors, the case against the auditors is preceeding. There is an April 30 cutoff for discovery against Peat Marwick. This phase of litigation is expected to commence in late March and will be expensive potentially erasing the proceeds awarded against the company. Peat Marwick has made an initial offer of settlement. Given the discovery deadline and the expressed willingness of Peat Marwick to discuss settlement, this is an opportune time to commence settlement discussions.

The SBI's outside counsel would like to begin such settlement discussions but does not wish to do so without authorization from the SBI. The SBI's claim is approximately \$3 to \$5 million and outside counsel believes the SBI's likely recovery would be a very small fraction of that amount. From the perspective of

the SBI, commencement of settlement discussions would be prudent in view of the time commitment and the further potential erosion of its recovery.

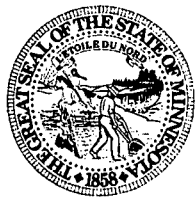
However, to the extent the SBI is the class representative, the decision to commence settlement must consider the best interest of the class. Outside counsel is recommending exploring settlement with Peat Marwick at the present time. They note, however, that while the potential settlement against Peat Marwick could be rather sizable in absolute terms, it would represent only a small fraction of the total claims outstanding.

**RECOMMENDATION:**

**Therefore, it is recommended that the Board authorize the Executive Director to negotiate settlement with Peat Marwick with the assistance of counsel and subject to court approval.**



**MINNESOTA  
STATE  
BOARD OF  
INVESTMENT**



**Board Members:**

Governor  
Jesse Ventura

State Auditor  
Judi Dutcher

State Treasurer  
Carol C. Johnson

Secretary of State  
Mary Kiffmeyer

Attorney General  
Mike Hatch

**Executive Director:**

Howard J. Bicker

Suite 105, MEA Bldg.  
55 Sherburne Avenue  
St. Paul, MN 55155  
(651) 296-3328  
FAX (651) 296-9572  
E-mail:  
minn.sbi@state.mn.us

An Equal Opportunity  
Employer

DATE: February 23, 1999

TO: Members, State Board of Investment

FROM: Investment Advisory Council Member Selection Committee

SUBJECT: **Recommended Appointments to IAC**

The terms of six members of the Investment Advisory Council expired in January 1999. The members continue to serve for a period of up to six months beyond the expiration of their term if the Board does not act upon candidate applications prior to that date. The six members are as follows:

- John Bohan Vice President/Pension Investments, Retired  
Grand Metropolitan-Pillsbury
- Malcolm McDonald Director and Corporate Secretary  
Space Center, Inc.
- Gary Norstrom Treasurer, Retired  
City of St. Paul
- Daralyn Peifer Director, Benefit Finance  
General Mills, Inc.
- Michael Troutman Vice President, Finance and Investments  
Board of Pensions, ELCA
- Jan Yeomans Treasurer  
3M Company

Each of the above named have submitted applications for reappointment to the IAC. The above named applicants have extensive professional plan sponsor and institutional investor experience which are meaningful characteristics for service on the IAC.

Three additional applications for membership on the Council also have been considered by the Selection Committee. These applicants have retail brokerage and individual financial services backgrounds which are less directly relevant to the business and function of the State Board of Investment.

**RECOMMENDATION:**

**The Committee recommends that the Board reappoint the following to four-year terms as members of the Investment Advisory Council.**

**AGENDA  
INVESTMENT ADVISORY COUNCIL  
MEETING**

**Tuesday, June 1, 1999  
2:00 P.M. - SBI Conference Room  
Room 10, Capitol Professional Office Building  
590 Park Street, St. Paul, MN**

**TAB**

- 1. Approval of Minutes of March 2, 1999**
  
- 2. Report from the Executive Director (H. Bicker)**
  - A. Quarterly Investment Review (January 1, 1999 – March 31, 1999) **A**
  - B. Administrative Report **B**
    1. Reports on budget and travel
    2. Litigation update
    3. Legislative update
    4. Reauthorization of the Proxy Voting Committee
    5. Update on tobacco information
  
- 4. Report from the SBI Administrative Committee** **C**
  - A. Approval of Executive Director's Proposed Workplan for FY00
  - B. Approval of Budget Plan for FY99
  - C. Review of Continuing Fiduciary Education Plan
  - D. Approval of process of Executive Director's Evaluation for FY99
  - E. Discussion of Year 2000 Contingency Banking Relationship RFP
  - F. Discussion of Year 2000 Computer Issue Progress Report
  
- 4. Reports from the Investment Advisory Council**
  - A. Domestic Manager Committee (D. Gorence)** **D**
    1. Review of manager performance
    2. Review of annual benchmark quality evaluation
    3. Recommendation to terminate American Express Asset Management from the Domestic Equity Program
    4. Recommendation to promote Cohen, Klingenstein & Marks to the Domestic Equity Program
    5. Recommendation to change the asset allocation for the Environmental Trust Fund
  
  - B. International Manager Committee (J. Mares)** **E**
    1. Review of manager performance
    2. Approval of International Equity Position Paper and recommendations
  
  - C. Alternative Investment Committee (K. Gudorf)** **F**
    1. Review of current strategy
    2. Recommendation of a new commitment to the Basic Retirement Funds:
      - William Blair Mezzanine Capital Partners III, L.L.C.
    3. Recommendation of a new commitment to the Post Retirement Fund:
      - Hellman & Friedman L.L.C.

**Minutes  
Investment Advisory Council  
March 2, 1999**

**MEMBERS PRESENT:** Gary Austin; Dave Bergstrom; John Bohan; Doug Gorence; Ken Gudorf; P. Jay Kiedrowski; Judy Mares; Malcolm McDonald; Gary Norstrem; Daralyn Peifer; Mike Troutman; Mary Vanek; Pam Wheelock and Jan Yeomans.

**SBI STAFF:** Howard Bicker; Mansco Perry; Jim Heidelberg; Lois Buermann; Tammy Brusehaver-Derby; Stephanie Gleeson; Debbie Griebenow; John Griebenow; Steve Koessl, Mike Messen; Charlene Olson; and Carol Nelson.

**OTHERS ATTENDING:** Ann Posey, Tom Richards, Richards & Tierney; Christie Eller; Eric Lipman; Jake Manahan; Jennifer Mohlenhoff; Peter Sausen; Bob Heimerl, Lloyd Belford, REAM; Eugene Edie, Mike Ravnitzky.

The minutes of the December 1, 1998 meeting were approved. Mr. Bicker announced to members that the June 1999 IAC meeting will be held at the SBI's new office location at 590 Park Street.

**Executive Director's Report**

Mr. Bicker, Executive Director, referred members to Tab A of the meeting materials and reported that the Combined Funds had exceeded inflation over the ten year period ending December 31, 1998 (Combined Funds 14.0% vs. Inflation 3.1 %), exceeded the median fund (23<sup>rd</sup> percentile) and outperformed its composite index (Combined Funds 15.3% vs. Composite 15.0%) for the most recent five year period. He stated that the Basic Funds has exceeded its composite index (Basic Funds 15.6% vs. Composite 15.4%) over the last five years and reported that the Post Fund had outperformed its composite index over the last five year period (Post Fund 14.9% vs. Composite 14.5%).

Mr. Bicker reported that the Basic Funds' assets increased 12.1% for the quarter ending December 31, 1998 due to positive investment returns. He said that the asset mix is essentially on target and that the Basic Funds underperformed its composite index for the quarter (Basic Funds 12.1% vs. Composite 12.5%).

Mr. Bicker reported that the Post Fund's assets increased 12.3% for the quarter ending December 31, 1998 due to positive investment returns. He said that the Post Fund asset mix is also on target and that the Post Fund has underperformed its composite index for the quarter (Post Fund 13.3% vs. Composite 13.7%).

Mr. Bicker reported that the domestic stock manager group slightly underperformed for the quarter (Domestic Stocks 21.3% vs. Wilshire 5000 21.5%) but had outperformed for the year (Domestic Stocks 23.5% vs. Wilshire 5000 23.4%). He said that the International Stock manager group underperformed its composite index for the quarter (International Stocks 18.0% vs. Int'l. Composite 20.4%) but had outperformed for the most recent three and five year periods.

Mr. Bicker stated that the bond segment outperformed its target for the quarter (Bonds 0.4% vs. Lehman Aggregate 0.3%) but underperformed for the year (Bonds 8.3% vs. Lehman Aggregate 8.7%). He concluded his report with the comment that as of December 31, 1998, the SBI was responsible for over \$47 billion in assets.

### **Executive Director's Administrative Report**

Mr. Bicker referred members to Tab B for current budget and travel reports. He stated that the Office of the Legislative Auditor had completed its audit of SBI operations for fiscal year 1998 and had received a "clean opinion" on its financial statements.

Mr. Bicker gave a brief summary of legislative activity of interest to the SBI. He stated that a number of bills have been introduced that are related to the tobacco settlement money. He said that it is anticipated that the SBI would be responsible for the investment of these endowment funds. Mr. Bicker reported that the retirement systems have proposed legislation that would allow them to build an office building. He noted that the SBI may be interested in leasing space in that building should it be built. Mr. Bicker stated that legislation has also been proposed which would expand the vendors for the 403(b) teacher annuity employer match. He stated that under this bill, the SBI would be removed from the vendor selection process. In response to questions from Mr. Bergstrom and Mr. Bohan, Mr. Bicker explained that the legislation would require that the vendor receiving the 403(b) contributions certify that all the 403(b) calculations have been done in order to be in compliance with the law. Mr. Bicker stated that there has not been legislative support for the SBI's position paper on a statewide deferred compensation program. Mr. Bicker reminded members that the SBI is currently working the the Mn. State Retirement System to revamp the State's 457 (deferred compensation) Plan and that approximately \$15 million a year in costs will be saved while providing participants with more flexibility and investment alternatives. He added that the next deferred compensation activity will take place over the summer months for the State University Systems. Mr. Bohan stated his belief that the beneficiaries of the plans will not benefit from the proposed legislative changes. Mr. Bicker concluded his Administrative Report by stating that hearings on the SBI's administrative budget are also in progress.

Mr. Bicker asked Christie Eller, Assistant Attorney General, to update members on the status of litigation concerning Mercury Finance Corporation. Ms. Eller briefly summarized the previous legal activity and stated that a federal judge had approved a partial settlement with Mercury for approximately \$30 million. She said that the settlement will be allocated among the various claimants by an arbitrator. She stated that the next stage of litigation is against the auditors and that the discovery cutoff is April 30,

1999. She added that this type of litigation is extremely expensive and time consuming and that this period could hold a window of opportunity for potential settlement.

Mr. Bicker updated members on activity regarding tobacco holdings since the tobacco divestment resolution passed in September 1998. He stated that during the last quarter, the SBI's active managers have sold approximately 335,000 shares of stock, bringing the SBI's tobacco holdings to approximately 3.8 million shares. He said that the market value of those investments had actually increased from \$162 million to almost \$174 million.

#### **Domestic Manager Committee Report**

Mr. Bohan referred members to Tab C of the meeting materials and briefly reviewed the performance of the domestic stock and bond managers. He stated that the Committee is recommending the termination of Weiss Peck & Greet, an active domestic stock manager, due to organizational changes and poor performance. He added that the assets would be used to meet current liquidity needs. Mr. Gudorf moved approval of the Committee's recommendation, as stated in the Committee Report. Mr. McDonald seconded the motion. The motion passed.

In response to a question from Ms. Yeomans, Mr. Bicker said that staff will complete a formal review of American Express in August 1999. In response to questions from Mr. Kiedrowski, Mr. Bicker reminded members that American Express had recently been given a revised investment mandate to use a more concentrated portfolio investment approach and that more short term volatility might be expected.

#### **International Manager Committee Report**

Ms. Mares referred members to Tab D of the meeting materials and discussed the performance for the quarter, noting that performance was impacted significantly by the manager's weightings in Japan and Korea. She said that the Committee is continuing to monitor Marathon's performance against a revised benchmark. She stated that the Committee does not have any action items but she briefly updated members on the Committee's activity regarding the broad review of the international investment program. She said that the Committee concurred with staff's recommendation to use the Morgan Stanley Capital International (MSCI) All Country World Index as the international asset class target, effective July 1, 1999. She stated that the MSCI Europe, Australia and the Far East (EAFE) Index and the MSCI Emerging Markets Free Index continue to be the most appropriate indicies for the SBI's developed market managers and for the emerging managers, respectively. She added that the Committee also determined that global management and regional management are not appropriate for the SBI's international program at this time due to there being too few managers, poor track records, and too few assets under management.

In response to a question from Ms. Yeomans, Mr. Bicker clarified that any international private equity investments would be considered part of the alternative investment segment and not the international program.

Mr. Bicker re-emphasized that several major issues need to be discussed during the international review so that if major changes are proposed, the Board can make decisions at the June 1999 Board meeting.

Mr. Bicker introduced Ms. Pam Wheelock to members and noted that Ms. Wheelock will be joining the IAC in her capacity as the new Commissioner of Finance.

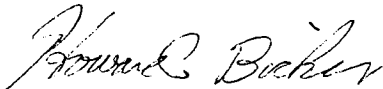
**Alternative Investment Committee Report**

Mr. Gudorf referred members to Tab E of the meeting materials and stated that the first recommendation is an investment for the Post Retirement Fund with an existing real estate manager, CB Richard Ellis Investors. He said that the second recommendation is also for the Post Fund with an existing private equity manager, GTCR Golder Rauner, L.L.C. Mr. McDonald moved approval of both of the Committee's recommendations, as stated in the Committee Report. Mr. Austin seconded the motion. In response to a question from Ms. Mares, Mr. Bicker said that the limited partners are being given an opportunity to invest in the debt financing. In response to a question from Mr. Gorence, Mr. Bicker stated that a standardized formula has been created to deal with conflicts between the debt and equity components of these types of investments. The motion passed.

In response to a question from Mr. Troutman, Mr. Gudorf stated that to date, the Committee has not evaluated the use of real estate investment trust (REIT) managers.

The meeting adjourned at 2:45 P.M.

Respectfully submitted,



Howard J. Bicker  
Executive Director

# Tab A

**LONG TERM OBJECTIVES**  
**Period Ending 3/31/99**

<b>COMBINED FUNDS: \$37.6 Billion</b>	<b>Result</b>	<b>Compared to Objective</b>
<p><b>Provide Real Return (10 yr.)</b></p> <p>Provide returns that are 3-5 percentage points greater than inflation over the latest 10 year period.</p>	<b>13.7% (1)</b>	10.7 percentage points above CPI
<p><b>Exceed Composite Index (5 yr.)</b></p> <p>Outperform a composite market index weighted in a manner that reflects the actual asset mix of the Combined Funds over the latest 5 year period.</p>	<b>16.3% (1)</b>	0.2 percentage point above composite index
<p><b>Exceed Median Fund (5 yr.)</b></p> <p>Provide returns that are ranked in the top half of universe of public and corporate plans over the latest 5 year period.</p>	20th percentile (2)	above the median fund in TUCS

<b>BASIC RETIREMENT FUNDS: \$19.6 Billion</b>	<b>Result</b>	<b>Compared to Objective</b>
<p><b>Exceed Composite Index (5 Yr.)</b></p> <p>Outperform a composite market index weighted in a manner that reflects the long-term asset allocation of the Basic Funds over the latest 5 year period.</p>	<b>16.6%</b>	0.1 percentage point above target

<b>POST RETIREMENT FUND: \$18.0 Billion</b>	<b>Result</b>	<b>Compared to Objective</b>
<p><b>Exceed Composite Index (5 Yr.)</b></p> <p>Outperform a composite market index weighted in a manner that reflects the long-term asset allocation of the Post Fund over the latest 5 year period.</p>	<b>16.0%</b>	0.4 percentage point above target

(1) Reflects performance of Basic Funds only through 6/30/93, Combined Funds thereafter. Performance is calculated net of fees.

(2) The SBI's stated objective is to rank in the top half (above 50th percentile) of the comparative universe. The SBI will strive to achieve performance which ranks in the top third (above 33rd percentile). Performance is ranked gross of fees.



## SUMMARY OF ACTUARIAL VALUATIONS

MSRS, TRA, PERA General Plans  
July 1, 1998

	Active (Basics)	Retired (Post)	Total (Combined)
<b>Liability Measures</b>			
1. Current and Future Benefit Obligation	\$19.9 billion	\$11.3 billion	\$31.2 billion
2. Accrued Liabilities	14.5	11.3	25.8
<b>Asset Measures</b>			
3. Current and Future Actuarial Value	\$21.2 billion	\$11.3 billion	\$32.6 billion
4. Current Actuarial Value	14.4	11.3	25.8
<b>Funding Ratios</b>			
Future Obligations vs. Future Assets (3 ÷ 1)	107%	100%	104%
Accrued Liabilities vs. Current Actuarial Value (4 ÷ 2)	100%	100%	100%*

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

**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, 6.0% Post

Full Funding Target Date: 2020

## EXECUTIVE SUMMARY

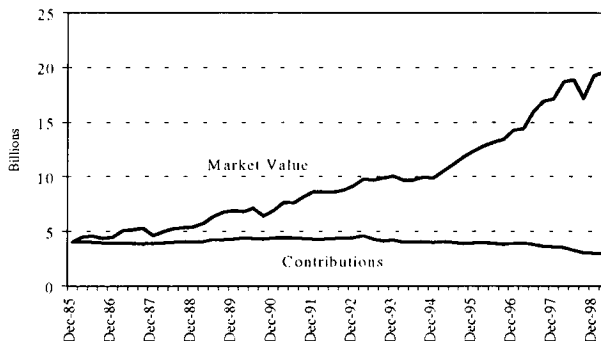
### Basic Retirement Funds (Net of Fees)

#### Asset Growth

The market value of the Basic Funds increased 2.1% during the first quarter of 1999. Positive investment returns accounted for the increase. Net contributions were negative.

#### Asset Growth During First Quarter 1999 (Millions)

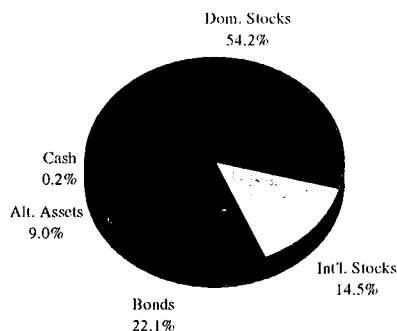
Beginning Value	\$ 19,244
Net Contributions	-72
Investment Return	474
Ending Value	\$ 19,646



#### Asset Mix

The positive returns in the stock market caused the allocation to domestic and international stocks to rise during the quarter, while the allocation to bonds decreased. Positive returns in alternative assets caused their allocation to increase during the quarter.

	Policy Targets	Actual Mix 3/31/99	Actual Market Value (Millions)
Domestic Stocks	45.0%	54.2%	\$10,644
Int'l. Stocks	15.0	14.5	2,853
Bonds	24.0	22.1	4,337
Alternative Assets*	15.0	9.0	1,775
Unallocated Cash	1.0	0.2	37
	100.0%	100.0%	\$19,646

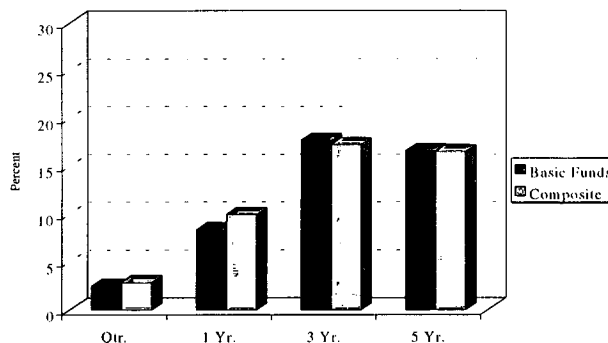


\* Any uninvested allocation is held in domestic stocks

#### Fund Performance (Net of Fees)

The Basic Funds underperformed its composite market index for the quarter and the year.

	Period Ending 3/31/99			
	Qtr.	1 Yr.	3 Yr.	5 Yr.
<b>Basics</b>	<b>2.5%</b>	<b>8.4%</b>	<b>17.7%</b>	<b>16.6%</b>
Composite	2.9	10.0	17.3	16.5



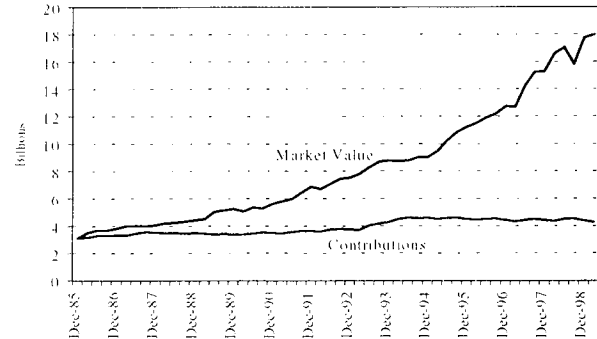
**EXECUTIVE SUMMARY**  
**Post Retirement Fund (Net of Fees)**

**Asset Growth**

The market value of the Post Fund increased 1.3% during the first quarter of 1999. Positive investment returns accounted for the increase. Net contributions were negative.

**Asset Growth**  
**During First Quarter 1999**  
**(Millions)**

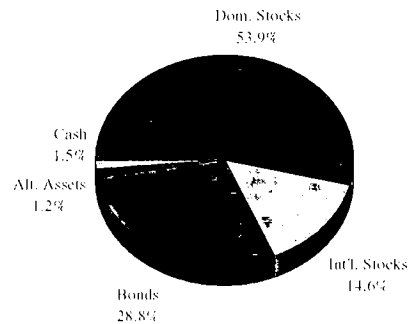
Beginning Value	\$17,743
Net Contributions	-107
Investment Return	334
Ending Value	\$17,970



**Asset Mix**

The positive returns in the stock market caused the allocation to domestic and international stocks to rise during the quarter, while the allocation to bonds decreased.

	Policy Targets	Actual Mix 3/31/99	Actual Market Value (Millions)
Domestic Stocks	50.0%	53.9%	\$9,680
Int'l. Stocks	15.0	14.6	2,632
Bonds	27.0	28.8	5,172
Alternative Assets*	5.0	1.2	223
Unallocated Cash	3.0	1.5	263
	100.0%	100.0%	\$17,970

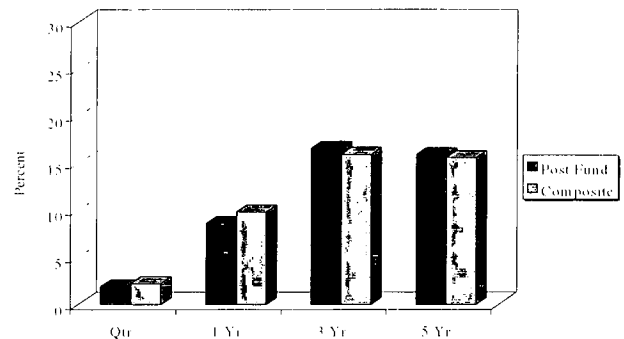


\* Any uninvested allocation is held in bonds

**Fund Performance (Net of Fees)**

The Post Fund underperformed its composite market index for the quarter and the year.

	Period Ending 3/31/99			
	Qtr.	1 Yr.	3 Yr.	5 Yr.
Post	1.9%	8.6%	16.6%	16.0%
Composite	2.2	9.9	16.0	15.6



**EXECUTIVE SUMMARY**  
**Stock and Bond Manager Performance**  
**(Net of Fees)**

**Domestic Stocks**

The domestic stock manager group (active, semi-passive and passive combined) underperformed its target for the quarter and the year.

	Period Ending 3/31/99			
	Qtr.	1 Yr.	3 Yr.	Annualized 5 Yr.
<b>Dom. Stocks</b>	<b>2.8%</b>	<b>11.9%</b>	<b>24.6%</b>	<b>23.2%</b>
Wilshire 5000	3.8	13.1	24.5	23.6

**International Stocks**

The international stock manager group (active and passive combined) matched its target for the quarter and underperformed for the year.

	Period Ending 3/31/99			
	Qtr.	1 Yr.	3 Yr.	Annualized 5 Yr.
<b>Int'l. Stocks</b>	<b>2.7%</b>	<b>1.3%</b>	<b>8.3%</b>	<b>9.0%</b>
Composite Index*	2.7	2.6	6.2	7.4

\* EAFE-Free through 4/31/96. 87% EAFE-Free and 13% Emerging Markets Free as of 12/31/96.

**Bonds**

The bond manager group (active and semi-passive combined) outperformed its target for the quarter and underperformed for the year.

	Period Ending 3/31/99			
	Qtr.	1 Yr.	3 Yr.	Annualized 5 Yr.
<b>Bonds</b>	<b>-0.2%</b>	<b>6.2%</b>	<b>8.2%</b>	<b>8.0%</b>
Lehman Agg.	-0.5	6.5	7.8	7.8

**Note:** The above returns reflect the performance of the Basic Funds' managers through 6/30/93 and of the Combined Funds (Basic and Post) since 7/1/93.

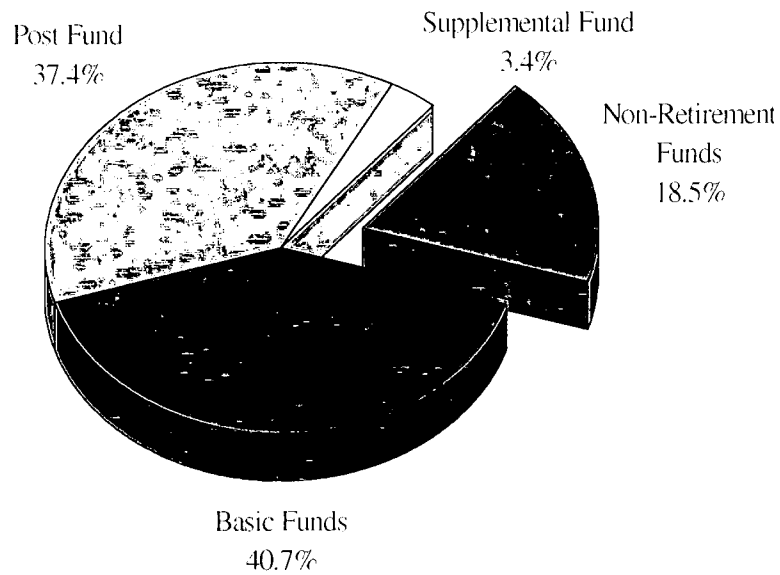
**Wilshire 5000:** The Wilshire 5000 stock index reflects the performance of all publicly traded stocks of companies domiciled in the U.S.

**Lehman Aggregate:** The Lehman Brothers Aggregate Bond Index reflects the performance of all investment grade (BAA or higher) bonds, U.S. treasury and agency securities and mortgage obligations with maturities greater than one year.

**EAFE:** The Morgan Stanley Capital International index of 20 stock markets in Europe, Australia and the Far East. EAFE-Free includes only those securities foreign investors are allowed to hold.

**Emerging Markets Free:** The Morgan Stanley Capital International index of 26 markets in developing countries throughout the world.

**EXECUTIVE SUMMARY**  
**Funds Under Management**



**3/31/99**  
**Market Value**  
**(Billions)**

**Retirement Funds**

Basic Retirement Funds	\$19.6
Post Retirement Fund	18.0
Supplemental Investment Fund	1.6

**Non Retirement Funds\***

Assigned Risk Plan	0.7
Permanent School Fund	0.5
Environmental Trust Fund	0.3
State Cash Accounts	7.5

<b>Total</b>	<b>\$48.2</b>
--------------	---------------

# MINNESOTA STATE BOARD OF INVESTMENT

## QUARTERLY INVESTMENT REPORT

First Quarter 1999  
(January 1, 1999 - March 31, 1999)

### Table of Contents

	Page
Capital Market Indices.....	2
Financial Markets Review .....	3
Combined Funds.....	5
Basic Retirement Funds .....	9
Post Retirement Fund.....	12
Stock and Bond Manager Pools.....	15
Alternative Asset Pools.....	16
Supplemental Investment Fund.....	17
Fund Description	
Income Share Account	
Growth Share Account	
Common Stock Index Account	
International Share Account	
Bond Market Account	
Money Market Account	
Fixed Return Account	
Assigned Risk Plan .....	20
Permanent School Trust Fund.....	21
Environmental Trust Fund.....	22
State Cash Accounts .....	23
Composition of State Investment Portfolios.....	24

## VARIOUS CAPITAL MARKET INDICES

	Period Ending 3/31/99				
	Qtr.	Yr.	3 Yr.	5 Yr.	10 Yr.
<b>Domestic Equity</b>					
Wilshire 5000	3.8%	13.1%	24.5%	23.6%	17.7%
Dow Jones Industrials	7.0	13.1	22.8	24.6	18.8
S&P 500	4.9	18.7	28.2	26.4	19.0
Russell 2000	-5.4	-16.3	7.7	11.2	11.5
<b>Domestic Fixed Income</b>					
Lehman Aggregate*	-0.5	6.5	7.8	7.8	9.1
Lehman Gov't./Corp.	-1.2	6.5	7.7	7.7	9.1
90 Day U.S. Treasury Bills	1.1	4.8	5.2	5.2	5.4
<b>International</b>					
EAFE**	1.4	6.1	8.5	8.7	5.7
Emerging Markets Free***	12.4	-21.0	-9.5	-5.3	10.5
Salomon Non U.S. Gov't. Bond	-4.8	11.6	4.4	6.8	8.9
<b>Inflation Measure</b>					
Consumer Price Index****	0.7	1.8	2.0	2.3	3.0

\* Lehman Brothers Aggregate Bond index. Includes governments, corporates and mortgages.

\*\* Morgan Stanley Capital International index of Europe, Australia and the Far East (EAFE).

\*\*\* Morgan Stanley Capital International Emerging Markets Free index.

\*\*\*\* Consumer Price Index (CPI) for all urban consumers, also known as CPI-U.

FINANCIAL MARKETS REVIEW

DOMESTIC STOCKS

The stock market generated a mixed bag of returns for the quarter. The Dow hit 10,000 and the technology heavy NASDAQ Composite jumped 12%. However, the smaller capitalization Russell 2000 index was down over 5%. As in previous quarters, a strong economic environment, overall positive corporate earnings reports, and high cash flows into the equity market contributed to the overall positive returns. However, market leadership, again, was concentrated in a few large-cap favorites and in the technology stocks, especially those with an internet focus.

The Wilshire 5000 provided a 3.8% return for the quarter. Performance among the different Wilshire Style Indices for the quarter is shown below:

Large Value	-0.0%
Small Value	-11.9
Large Growth	8.1
Small Growth	-8.6

The Wilshire 5000 increased 13.1% for the year ending March 31, 1999.

DOMESTIC BONDS

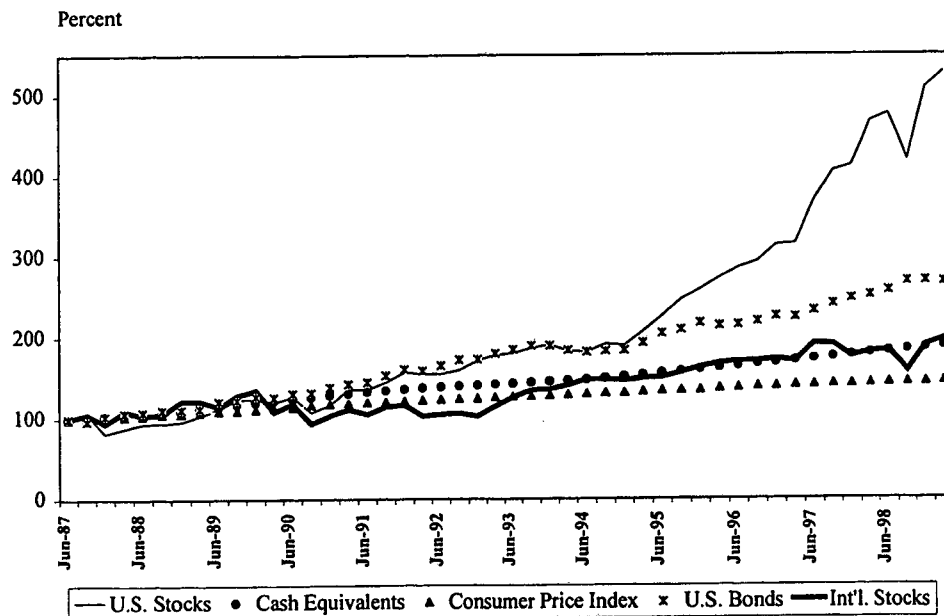
The bond market generated negative returns for the quarter. The corporate and mortgage sectors of the market outperformed Treasuries as interest rates moved higher during the quarter. Corporates also outperformed Treasuries due to spread tightening in the sector over the quarter. Mortgage spreads also narrowed during the quarter on decreased prepayment risks.

Overall, the Lehman Brothers Aggregate Bond Index decreased 0.5% for the quarter. The Lehman Aggregate sector returns for the quarter were:

Treasury/Agency	-1.4%
Corporates	-0.7
Mortgages	1.0

The Lehman Aggregate increased 6.5% 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 Stock Index; Lehman Brothers Aggregate Bond Index; 91 Day Treasury Bills; and the Consumer Price Index.



## FINANCIAL MARKETS REVIEW

### INTERNATIONAL STOCKS

In aggregate, international stock markets (as measured by the EAFE-Free index) provided a return of 1.3% for the quarter. Performance of the major markets is shown below:

Japan	12.2%
United Kingdom	4.3
Germany	-9.3
France	-2.1

The EAFE-Free index increased by 6.1% during the latest year.

The EAFE-Free index is compiled by Morgan Stanley Capital International (MSCI) and is a measure of 21 markets located in Europe, Australia and the Far East (EAFE), adjusted for free-float. The major markets listed above comprise about 64% of the value of the international markets in the index.

### EMERGING MARKETS

Emerging markets (as measured by MSCI Emerging Markets Free index) provided a return of 12.4% for the quarter. The performance of the five largest stock markets in the index is show below:

Mexico	28.8%
Korea	8.2
South Africa	13.1
Taiwan	11.6
Brazil	10.7

The Emerging Markets Free index had a return of -21.0% for the year.

The Emerging Markets Free index is compiled by MSCI and measures performance of 26 stock markets in Latin America, Asia, Africa and Eastern Europe. The markets listed above comprise about 53% of the value of the index.

### REAL ESTATE

Nationally, many real estate markets are fundamentally strong. Property types most favored by buyers at the present time include apartments, industrial parks and suburban office buildings.

### PRIVATE EQUITY

U.S. private equity firms raised an unprecedented \$85.3 billion for private equity limited partnerships of all types, from venture capital to buyouts in 1998. That represents a 52.9 percent increase from the upwardly revised 1997 total of \$55.8 billion. It was the fifth consecutive record year for fund raising. The first quarter of 1999 saw \$11.6 billion raised, slightly less than the \$13.4 billion raised in the first quarter of 1998.

### RESOURCE FUNDS

During the first quarter of 1999, West Texas Intermediate crude oil averaged \$13.15 per barrel compared to an average price of \$12.97 per barrel during the fourth quarter of 1998. The month of March saw the price rise from just over \$12 per barrel to nearly \$17 per barrel. With the low oil prices over the past year, oil companies are cautiously drilling for oil and gas.

**COMBINED FUNDS**

The "Combined Funds" represent the assets of both the Basic and Post Retirement Funds. While the Combined Funds do not exist under statute, the Board finds it instructive to review asset mix and performance of all defined benefit pension assets under its control. This more closely parallels the structure of other public and corporate pension plan assets and therefore allows for more meaningful comparison with other pension fund investors.

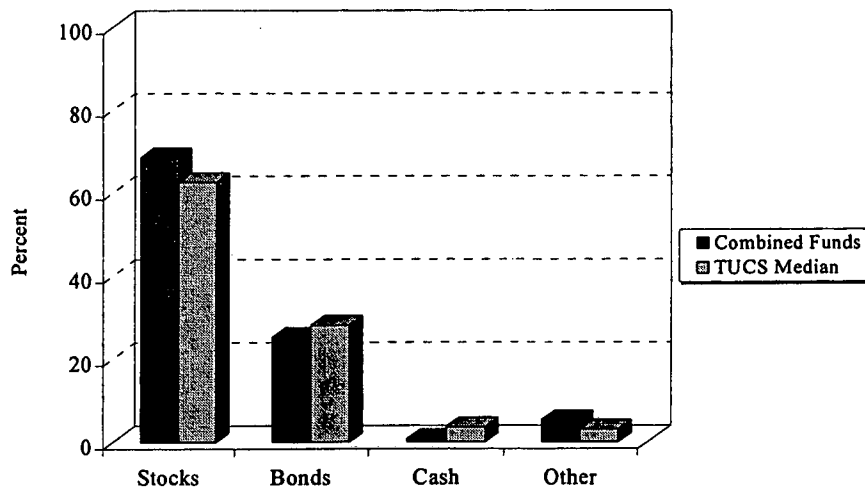
The comparison universe used by the SBI is the Trust Universe Comparison Service (TUCS). Only funds with assets over \$1 billion are included in the comparisons shown in this section.

**Asset Mix Compared to Other Pension Funds**

On March 31, 1999, the actual asset mix of the Combined Funds was:

	\$ Millions	%
Domestic Stocks	\$20,324	54.0%
International Stocks	5,486	14.6
Bonds	9,509	25.3
Alternative Assets	1,997	5.3
Unallocated Cash	300	0.8
<b>Total</b>	<b>\$37,617</b>	<b>100.0%</b>

Comparisons of the Combined Funds' asset mix to the median allocation to stocks, bond and other assets of the public and corporate funds in TUCS over \$1 billion are shown below:



	Stocks*	Bonds*	Cash	Other
<b>Combined Funds</b>	<b>68.6%</b>	<b>25.3%</b>	<b>0.8%</b>	<b>5.3%</b>
<b>Median Allocation in TUCS**</b>	<b>63.3</b>	<b>27.9</b>	<b>3.7</b>	<b>3.1</b>

\* Both domestic and international.

\*\* Public and corporate plans over \$1 billion.

**COMBINED FUNDS  
Performance Compared to Other Pension Funds**

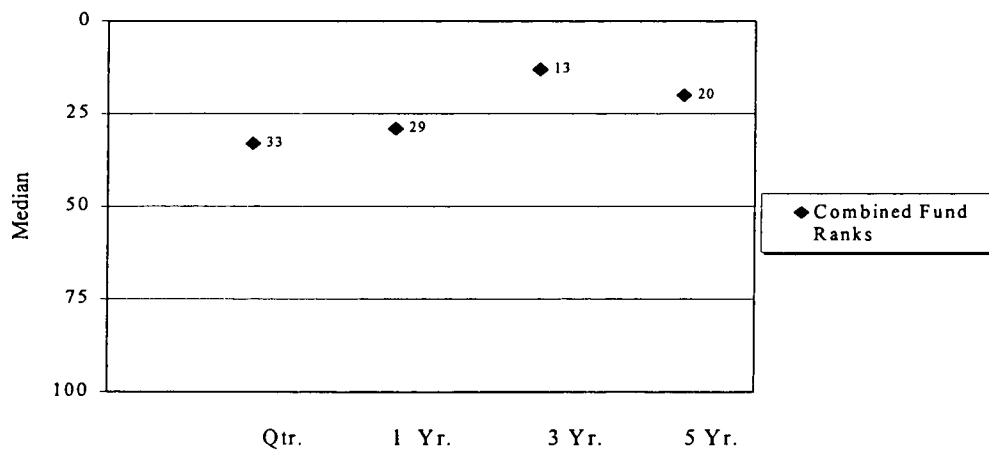
While the SBI is concerned with how its returns compare to other pension investors, universe comparisons should be used with great care. There are several reasons why such comparisons will provide an “apples to oranges” look at performance:

- **Differing Allocations.** Asset allocation will have a dominant effect on return. The allocation to stocks among the funds in TUCS typically ranges from 20-90%, 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.

With these considerations in mind, the performance of the Combined Funds compared to other public and corporate pension funds in Trust Universe Comparison Service (TUCS) are shown below.

The SBI’s returns are ranked against public and corporate plans with over \$1 billion in assets. All funds in TUCS report their returns gross of fees.

The SBI’s stated performance objective is that the Combined Funds will rank in the top half of the universe (above the 50th percentile) over the most recent five year period. The SBI will strive to achieve performance which ranks in the top third (above the 33rd percentile).



	Period Ending 3/31/99			
	Qtr.	Yr.	3 Yr.	5 Yr.
Combined Funds Percentile Rank in TUCS*	33rd	29th	13th	20th

\* Compared to public and corporate plans greater than \$1 billion, gross of fees.

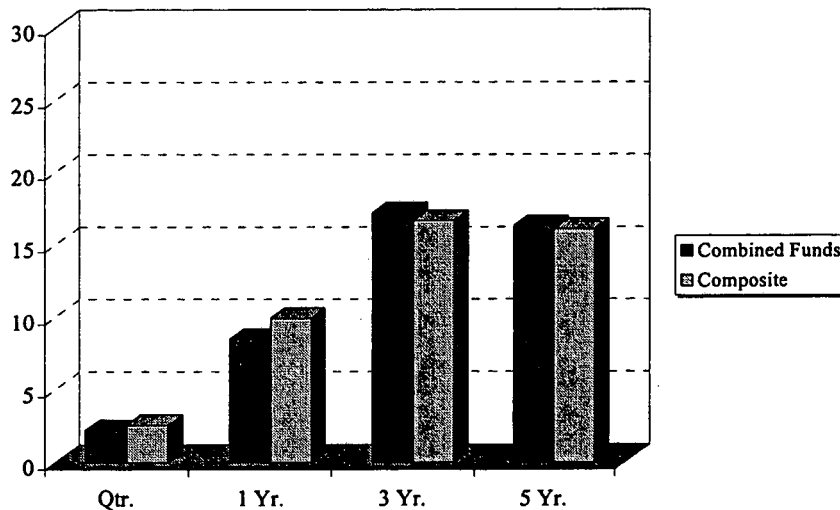
**COMBINED FUNDS**  
**Performance Compared to Composite Index**

The Combined Funds' performance is evaluated relative to a composite of market indices. The composite is

weighted in a manner that reflects the asset allocation of the Combined Funds:

	Market Index	Combined Funds Composite* 1Q99
Domestic Stocks	Wilshire 5000	50.6%*
Int'l. Stocks	Int'l. Composite	15.0
Bonds	Lehman Aggregate	27.3*
Alternative Assets	Real Estate Funds	2.1*
	Venture Capital Funds	2.6*
	Resource Funds	0.4*
Unallocated Cash	91 Day T-Bills	2.0
		100.0%

\* Alternative asset, bond and domestic equity weights are reset in the composite at the start of each month to reflect the amount of unfunded commitments in alternative asset classes. The above Combined Funds Composite weighting was as of the beginning of the quarter.



**Period Ending 3/31/99**

	Annualized			
	Qtr.	Yr.	3 Yr.	5 Yr.
Combined Funds**	2.2%	8.5%	17.2%	16.3%
Composite Index	2.6	9.9	16.7	16.1

\*\*Includes performance of Basic Funds through 6/30/93, Basic and Post Funds thereafter. Actual returns are reported net of fees.

This page intentionally left blank.

## BASIC RETIREMENT FUNDS

### Investment Objectives

The Basic Retirement Funds are composed of the retirement assets for currently working participants in eight statewide retirement funds. The Funds serve as accumulation pools for the pension contributions of public employees and their employers during the employees' years of active service. Approximately 300,000 public employees participate in the Basic Funds.

Employee and employer contribution rates are specified in state law as a percentage of an employee's salary. The rates are set so that contributions plus expected investment earnings will cover the projected cost of promised pension benefits. In order to meet these

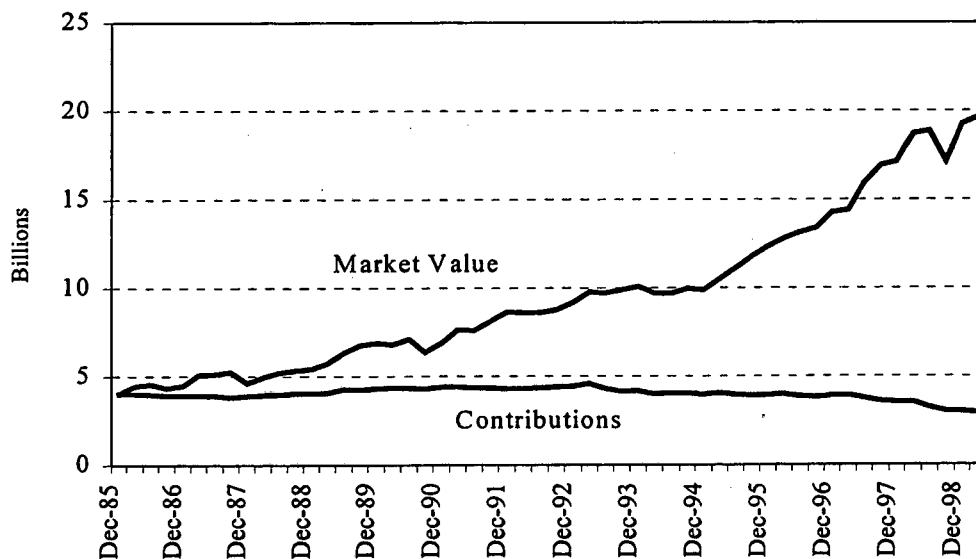
projected pension costs, the Basic Retirement Funds must generate investment returns of at least 8.5% on an annualized basis, over time.

Normally, pension assets will accumulate in the Basic Retirement Funds for thirty to forty years during an employee's years of active service. This provides the Basic Funds with a long investment time horizon and permits the Board to take an aggressive, high expected return investment policy which incorporates a sizeable equity component in order to meet or exceed its actuarial return target.

### Asset Growth

The market value of the Basic Retirement Funds' assets increased 2.1% during the first quarter of 1999. Positive

investment returns accounted for the increase during the quarter. Net contributions were negative.



	Last Five Years					Latest Qtr.
	In Millions					
	12/94	12/95	12/96	12/97	12/98	3/99
Beginning Value	\$10,086	\$9,890	\$12,338	\$14,275	\$17,146	\$19,244
Net Contributions	-206	-29	-59	-337	-539	-72
Investment Return	10	2,477	1,996	3,208	2,637	474
Ending Value	\$9,890	\$12,338	\$14,275	\$17,146	\$19,244	\$19,646

**BASIC RETIREMENT FUNDS**

**Asset Mix**

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 allocation policy is designed to add value to the Basic Funds over their long-term investment time horizon.

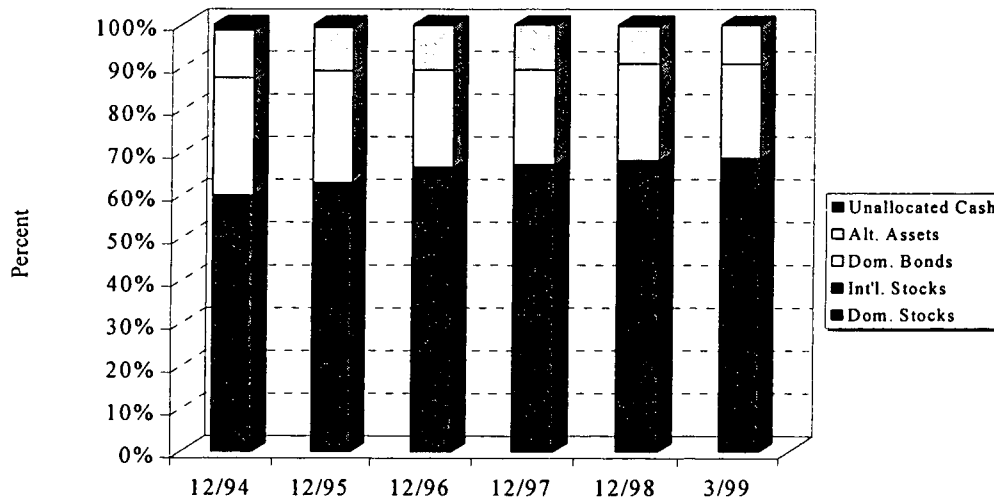
In October 1995, the Board revised its long term asset allocation targets for the Basic Funds, increasing international stocks from 10% to 15% and decreasing domestic stocks from 50% to 45%. The change was implemented over several quarters.

Domestic Stocks	45.0%
Int'l. Stocks	15.0
Bonds	24.0
Alternative Assets*	15.0
Unallocated Cash	1.0

Over the last year, asset allocations have remained fairly constant.

During the last quarter, the positive returns in the stock market caused the allocation to domestic and international stocks to rise, while the allocation to bonds decreased.

\* Alternative assets include equity-oriented real estate, venture capital and resource funds. Any uninvested allocation is held in domestic stocks.



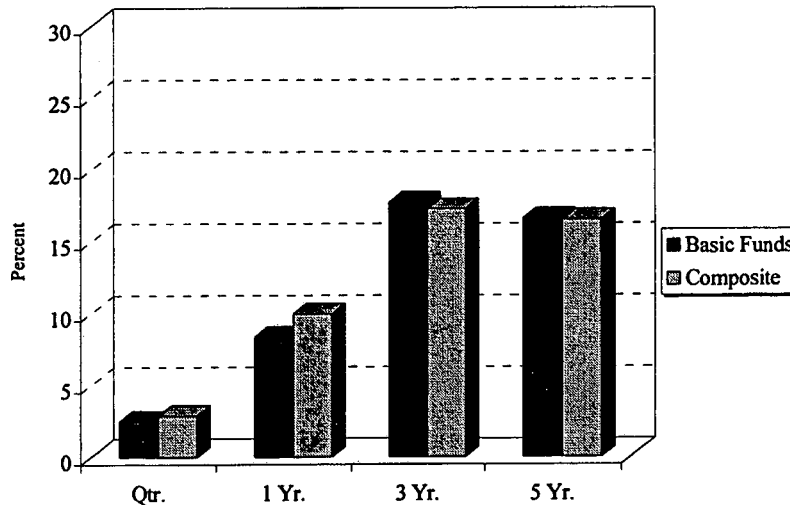
	Last Five Years					Latest Qtr.
	12/94	12/95	12/96	12/97	12/98	3/99
Domestic Stocks	49.7%	51.7%	52.0%	53.6%	53.8%	54.2%
Int'l. Stocks	10.3	11.3	14.5	13.6	14.4	14.5
Bonds	27.5	26.1	22.8	22.2	22.6	22.1
Real Estate	4.6	4.1	3.9	4.1	3.7	3.6
Private Equity	5.6	5.4	5.5	5.0	4.4	4.9
Resource Funds	0.9	0.7	1.0	1.4	0.7	0.5
Unallocated Cash	1.4	0.7	0.3	0.1	0.4	0.2
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**BASIC RETIREMENT FUNDS**  
**Total Fund Performance (Net of Fees)**

The Basic Funds' performance is evaluated relative to a composite of market indices. The composite is weighted in a manner that reflects the long-term asset allocation of the Funds:

	Basics Target	Market Index	Basics Composite* 1Q99
Domestic Stocks	45.0%	Wilshire 5000	51.2%*
Int'l. Stocks	15.0	Int'l Composite	15.0
Bonds	24.0	Lehman Aggregate	24.0
Alternative Assets	15.0	Real Estate Funds	3.7*
		Private Equity Funds	4.4*
		Resource Funds	.7*
Unallocated Cash	1.0	90 Day T-Bills	1.0
	100.0%		100.0%

\* Alternative asset and domestic stock weights are reset in the composite at the start of each month to reflect the uninvested portion of the allocation to alternative assets. The above Basic Funds Composite weighting was as of the beginning of the quarter.



Period Ending 3/31/99

	Qtr.	Yr.	Annualized 3 Yr.	Annualized 5 Yr.
Basic Funds**	2.5%	8.4%	17.7%	16.6%
Composite Index	2.9	10.0	17.3	16.5

\*\*Returns are reported net of fees.

Effective July 1, 1993, the Basic and Post Funds share the same domestic stock, international stock, and bond managers. See page 15 for the performance of these asset pools. Performance of the Basic Funds' alternative assets is on page 16.



**POST RETIREMENT FUND**

The Post Retirement Investment Fund contains the pension assets of retired public employees covered by statewide retirement plans. Approximately 95,000 retirees receive monthly annuities from the assets of the Fund.

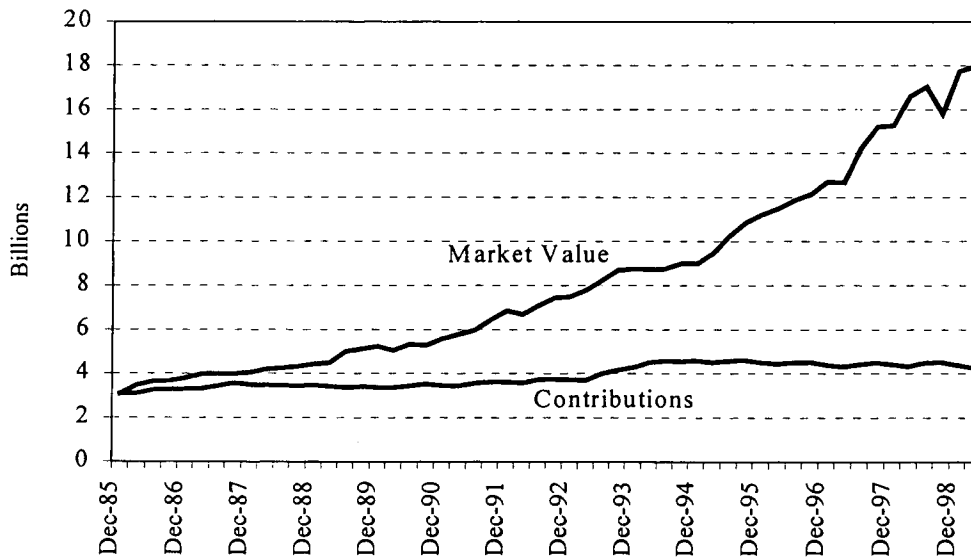
The post retirement benefit increase formula is based on the total return of the Fund. As a result, the Board maintains a long-term asset allocation strategy for the Post Fund which incorporates a substantial commitment to common stocks.

Upon an employee's retirement, a sum of money sufficient to finance the fixed monthly annuity is 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 6% on its invested assets on an annualized basis. If the Post Fund exceeds this earnings rate, excess earnings are used to finance permanent benefit increases for eligible retirees.

**Asset Growth**

The market value of the Post Retirement Fund increased by 1.3% during the first quarter of 1999.

The increase was the result of positive investment returns. Net contributions were negative.



	Last Five Years					Latest Qtr.
	In Millions					
	12/94	12/95	12/96	12/97	12/98	3/99
Beginning Value	\$8,766	\$9,001	\$11,216	\$12,705	\$15,273	17,743
Net Contributions	314	-102	-94	23	-45	-107
Investment Return	-79	2,317	1,583	2,545	2,515	334
Ending Value	\$9,001	\$11,216	\$12,705	\$15,273	\$17,743	17,970

**POST RETIREMENT FUND**

**Asset Mix**

The Board adopted an asset allocation strategy for the Post Fund in fiscal year 1993 which reflects the post retirement benefit increase formula enacted by the Legislature. Throughout fiscal year 1993, the actual asset mix of the Post Fund moved toward a 50% allocation to common stocks. In fiscal year 1994, the Board added allocations to international stocks and alternative investments.

The large allocation to common stocks allows 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.

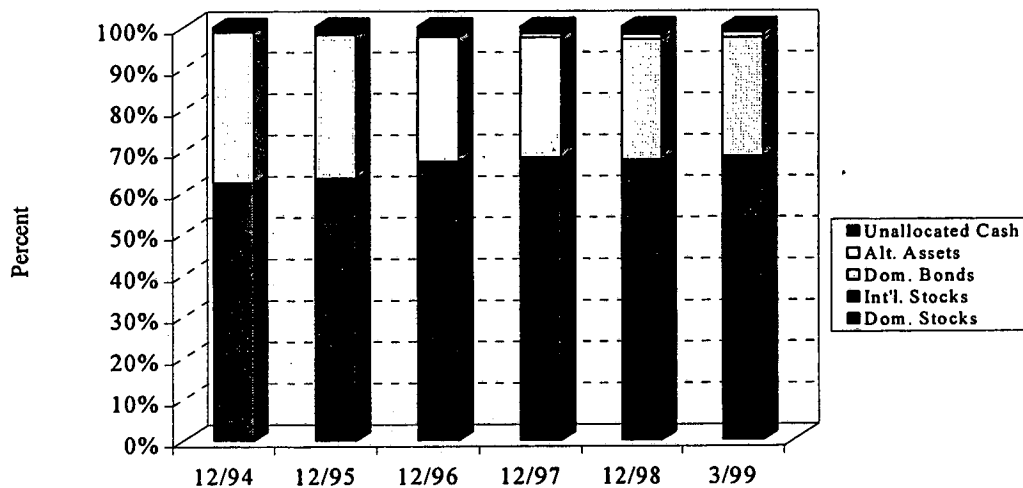
In October 1995, the Board revised its long term asset allocation targets for the Post Fund, increasing international stocks from 10% to 15% and decreasing bonds from 32% to 27%.

Over the last year, asset allocations have remained fairly constant.

During the last quarter, the positive returns in the stock market caused the allocation to domestic and international stocks to rise, while the allocation to bonds decreased.

Domestic Stocks	50.0%
Int'l. Stocks	15.0
Bonds	27.0
Alternative Assets*	5.0
Unallocated Cash	3.0
<b>Total</b>	<b>100.0%</b>

\* Alternative assets include yield oriented investment vehicles. Any uninvested allocation is held in bonds.



	Last Five years					Latest Qtr.
	12/94	12/95	12/96	12/97	12/98	3/99
Dom. Stocks	51.2%	51.9%	52.7	54.7%	53.2%	53.9
Int'l. Stocks	11.0	11.4	14.6	13.6	14.5	14.6
Bonds	36.5	34.7	30.2	29.1	29.2	28.8
Alt. Assets	0.1	0.2	0.6	0.9	1.1	1.2
Unallocated Cash	1.2	1.8	1.9	1.7	2.0	1.5
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

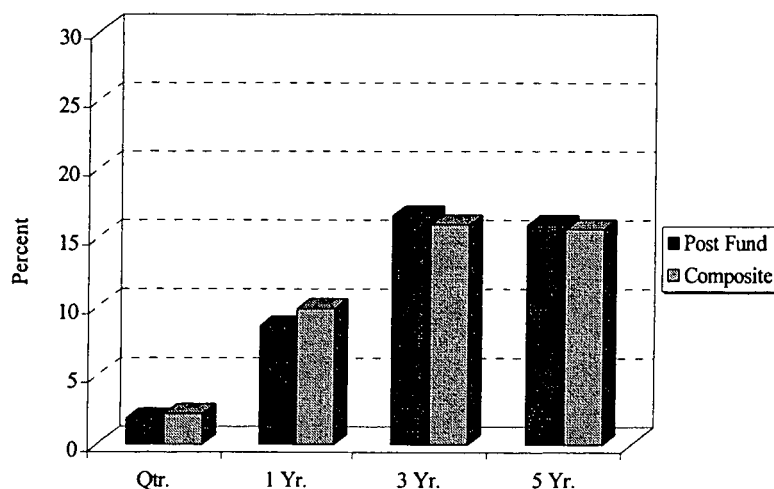
**POST RETIREMENT FUND  
Total Fund Performance (Net of Fees)**

The Post Fund's performance is evaluated relative to a composite of market indices. The composite is weighted in a manner that reflects the long-term asset allocation of the Fund:

Asset Class	Post Target	Market Index	Post Composite* 1Q99
Domestic Stocks	50.0%	Wilshire 5000	50.0%
Int'l. Stocks	15.0	Int'l. Composite	15.0
Bonds	27.0	Lehman Aggregate	30.9*
Alternative Assets	5.0	Real Estate Funds	0.4*
		Private Equity Funds	0.6*
		Resource Funds	0.1*
Unallocated Cash	3.0	90 Day T-Bills	3.0
	100.0%		100.0%

\*Alternative assets and bond weights are reset in the composite at the start of each month to reflect the uninvested portion of the allocation to alternative assets. The above Post Fund Composite weighting was as of the beginning of the quarter.

The asset mix of the Post Fund moved to a 50% stock allocation during fiscal year 1993.



**Period Ending 3/31/99**

	Qtr.	1 Yr.	Annualized 3 Yr.	Annualized 5 Yr.
Post Fund**	1.9%	8.6%	16.6%	16.0%
Composite Index	2.2	9.9	16.0	15.6

\*\* Returns are reported net of fees.

Effective July 1, 1993, the Basic and Post Funds share the same domestic stock, international stock, and bond managers. See page 15 for the performance of these asset pools.

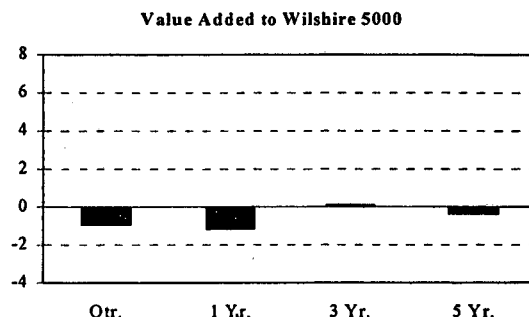
**STOCK AND BOND MANAGERS**  
Performance of Asset Pools (Net of Fees)

**Domestic Stock Pool**

**Target:** Wilshire 5000

**Expectation:** If one-third of the pool is actively managed, one-third is semi-passively managed, and one-third is passively managed, the entire pool is expected to exceed the target by +.18 - .40% annualized, over time.

	Period Ending 3/31/99			
	Qtr.	Yr.	3 Yrs.	5 Yrs.
<b>Stock Pool</b>	<b>2.8%</b>	<b>11.9%</b>	<b>24.6%</b>	<b>23.2%</b>
Wilshire 5000	3.8	13.1	24.5	23.6

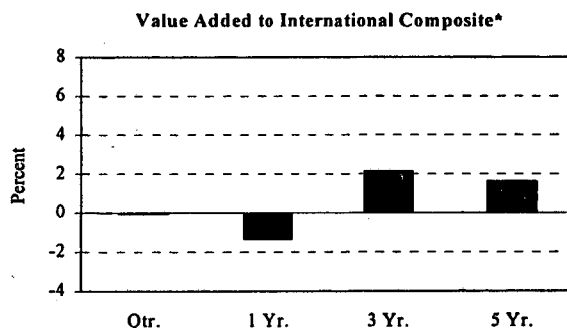


**International Stock Pool.**

**Target:** Composite of EAFE-Free and Emerging Markets Free\*

**Expectation:** If half of the pool is managed actively and half managed passively, the entire pool is expected to exceed the target by +.25%-.75% annualized, over time.

	Period Ending 3/31/99			
	Qtr.	Yr.	3 Yr.	5 Yrs.
<b>Int'l. Pool</b>	<b>2.7%</b>	<b>1.3%</b>	<b>8.3%</b>	<b>9.0%</b>
Composite Index*	2.7	2.6	6.2	7.4



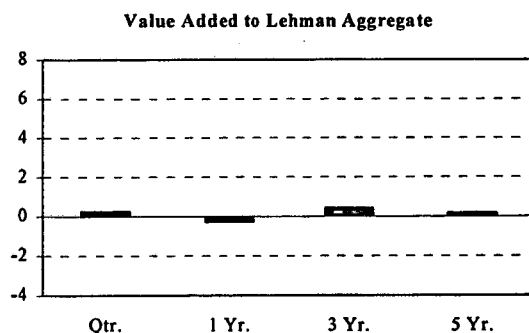
\*As of December 1996, the composite index is weighted 87% EAFE-Free and 13% Emerging Markets Free. Prior to May 1996, the target was 100% EAFE-Free.

**Bond Pool**

**Target:** Lehman Brothers Aggregate Bond Index

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

	Period Ending 3/31/99			
	Qtr.	Yr.	3 Yrs.	5 Yrs.
<b>Bond Pool</b>	<b>-0.2%</b>	<b>6.2%</b>	<b>8.2%</b>	<b>8.0%</b>
Lehman Agg.	-0.5	6.5	7.8	7.8



## ALTERNATIVE ASSET MANAGERS

### Performance of Asset Pools (Net of Fees)

#### Real Estate Pool (Basic Funds only)

**Expectation:** Real estate investments are expected to exceed the rate of inflation by 3-5% annualized, over the life of the investment.

The SBI began its real estate program in the mid-1980's and periodically makes new investments. Some of the existing investments, therefore, are relatively immature and returns may not be indicative of future results.

	Period Ending 3/31/99			
	Qtr.	Yr.	3 Yrs.	5 Yrs.
<b>Real Estate</b>	<b>5.0%</b>	<b>6.7%</b>	<b>17.6%</b>	<b>12.1%</b>
<b>Inflation</b>	<b>0.7</b>	<b>1.8</b>	<b>2.0</b>	<b>2.3</b>

#### Private Equity Pool (Basic Funds only)

**Expectation:** Private equity investments 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 private equity program in the mid-1980's and periodically makes new investments. Some of the existing investments, therefore, are relatively immature and returns may not be indicative of future results.

	Period Ending 3/31/99			
	Qtr.	Yr.	3 Yrs.	5 Yrs.
<b>Private Equity</b>	<b>13.5%</b>	<b>16.2%</b>	<b>26.6%</b>	<b>21.4%</b>

#### Resource Pool (Basic Funds only)

**Expectation:** Resource investments (primarily oil and gas) are expected to exceed the rate of inflation by 3-5% annualized, over the life of the investment.

The SBI began its resource program in the mid-1980's and periodically makes new investments. Some of the existing investments, therefore, are relatively immature and returns may not be indicative of future results.

	Period Ending 3/31/99			
	Qtr.	Yr.	3 Yrs.	5 Yrs.
<b>Resource Funds</b>	<b>-22.5%</b>	<b>-40.3%</b>	<b>6.5%</b>	<b>8.1%</b>

#### Yield Oriented Pool (Post Fund only)

**Expectation:** Yield oriented investments are expected to provide annualized returns at least 2% greater than historical public debt returns over the life of the investment. This equates to an absolute return of 10-11% annualized. The SBI began adding yield oriented alternative investments to the Post Fund in fiscal year 1996.

The SBI made its first commitment to the alternative investment program for the Post Fund in March 1994. All of the investments, therefore, are relatively immature and returns may not be indicative of future results.

	Period Ending 3/31/99			
	Qtr.	Yr.	3 Yrs.	5 Yrs.
<b>Yield Oriented</b>	<b>3.8%</b>	<b>13.3%</b>	<b>11.4%</b>	<b>11.4%</b>

## 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, Public Employees Defined Contribution Plan and Hennepin County Supplemental Retirement Plan.
2. It is one investment vehicle offered to employees as part of the state's Deferred Compensation Plan, the Individual Retirement Account Plan and College Supplemental Retirement Plan.
3. 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. They are net of investment management fees and a deduction for asset based charges used to defray costs of the administering retirement organizations.

**On March 31, 1999 the market value of the entire Fund was \$1.6 billion.**

## Investment Options

	<b>3/31/99 Market Value (In Millions)</b>
<b>Income Share Account</b> – a balanced portfolio utilizing both common stocks and bonds.	\$616
<b>Growth Share Account</b> – an actively managed, all common stock portfolio.	\$301
<b>Common Stock Index Account</b> – a passively managed, all common stock portfolio designed to track the performance of the entire U.S. stock market.	\$394
<b>International Share Account</b> – a portfolio of non U.S. stocks that incorporates both active and passive management.	\$24
<b>Bond Market Account</b> – an actively managed, all bond portfolio.	\$141
<b>Money Market Account</b> – a portfolio utilizing short-term, liquid debt securities.	\$52
<b>Fixed Interest Account</b> – an option utilizing guaranteed investment contracts (GIC's), which offer a fixed rate of return for a specified period of time.	\$85

## SUPPLEMENTAL INVESTMENT FUND ACCOUNTS

### INCOME SHARE ACCOUNT

#### Investment Objective

The primary investment objective of the Income Share Account is similar to that of the Combined 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.

	Target	Actual
Stocks	60.0%	64.0%
Bonds	35.0	31.9
Unallocated Cash	5.0	4.1
	100.0%	100.0%

#### Period Ending 3/31/99

	Annualized			
	Qtr.	1 Yr.	3 Yr.	5 Yr.
Total Account	2.3%	10.7%	18.2%	17.5%
Composite*	2.2	11.0	17.8	17.2

\* 60% Wilshire 5000/35% Lehman Aggregate Bond Index/5% T-Bills Composite.

### 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 primarily in the common stocks of US companies. The managers in the account also hold varying levels of cash.

#### Period Ending 3/31/99

	Annualized			
	Qtr.	1 Yr.	3 Yr.	5 Yr.
Total Account	2.3%	11.4%	24.5%	22.6%
Composite*	3.8	13.1	24.4	23.2

\* 95% Wilshire 5000/5% T-Bills Composite through October 1996. 100% Wilshire 5000 since November 1996.

### 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 U.S. stock market as a whole. 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.

#### Period Ending 3/31/99

	Annualized			
	Qtr.	1 Yr.	3 Yr.	5 Yr.
Total Account	3.9%	13.2%	24.9%	23.8%
Wilshire 5000	3.8	13.1	24.5	23.6

### INTERNATIONAL SHARE ACCOUNT

#### Investment Objective and Asset Mix

The investment objective of the International Share Account is to earn a high rate of return by investing in the stock of companies outside the U.S. Approximately half of the Account is "passively managed" and is designed to track the return of 20 markets included in the Morgan Capital International index of Europe, Australia and the Far East (EAFE-Free). The remainder of the Account is "actively managed" by several international managers and emerging markets specialists who buy and sell stocks in an attempt to maximize market value.

#### Period Ending 3/31/99

	Annualized			
	Qtr.	1 Yr.	3 Yr.	Since 9/1/94
Total Account	2.7%	1.3%	8.3%	7.8%
Composite*	2.7	2.6	6.2	6.1

\* As of December 1996, the benchmark is weighted 87% EAFE-Free and 13% Emerging Markets Free. Prior to May 1996, the target was weighted 100% EAFE-Free.

**SUPPLEMENTAL INVESTMENT FUND ACCOUNTS**

**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.

	Period Ending 3/31/99			
	Qtr.	1 Yr.	3 Yr.	5 Yr.
<b>Total Account</b>	-0.2%	6.2%	8.2%	8.0%
Lehman Agg.	-0.5	6.5	7.8	7.8

**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.

**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 market.

	Period Ending 3/31/99			
	Qtr.	1 Yr.	3 Yr.	5 Yr.
<b>Total Account</b>	1.2%	5.5%	5.6%	5.5%
90 Day T-Bills	1.1	4.8	5.1	5.2

**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.

**FIXED INTEREST ACCOUNT**

**Investment Objectives**

The investment objectives of the Fixed Interest Account are to protect investors from loss of their original investment and to provide competitive interest rates using somewhat longer term investments than typically found in a money market account.

	Period Ending 3/31/99			
	Qtr.	1 Yr.	3 Yr.	Annualized Since 11/1/94
<b>GIC Pool</b>	1.5%	6.4%	6.5%	6.6%

**Asset Mix**

The Fixed Interest Account is invested primarily in stable value instruments which are guaranteed investment contracts (GIC's) and GIC type investments offered by major U.S. companies and banks. Contributions into the Account are deposited into a single pool of these investments which have varying maturities, typically 3 to 5 years. The pool has a credited interest rate that changes monthly.



**ASSIGNED RISK PLAN**

**Investment Objectives**

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.

	3/31/99 Target	3/31/99 Actual
Stocks	20.0%	29.3%
Bonds	80.0	70.7
Total	100.0%	100.0%

**Investment Management**

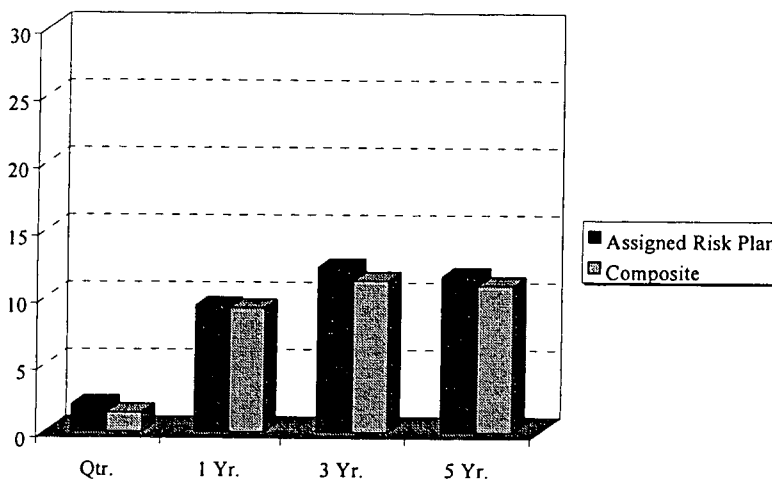
Voyageur Asset Management manages the bond segment of the Fund. GE Investment Management manages the equity segment.

**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 Voyageur Asset Management. The equity benchmark is the S&P 500 as of July 1, 1994. Prior to that date, the segment used a custom benchmark. The total fund benchmark is a combination of the fixed income and equity benchmarks, weighted according to the total fund asset allocation targets.

**Market Value**

On March 31, 1999 the market value of the Assigned Risk Plan was \$723 million.



**Period Ending 3/31/99**

	Annualized			
	Qtr.	Yr.	3 Yr.	5 Yr.
<b>Total Fund*</b>	2.0%	9.4%	12.2%	11.6%
Composite	1.4	9.3	11.3	10.9
<b>Equity Segment*</b>	6.0	17.7	27.2	25.3
Benchmark	4.9	18.7	28.2	26.4
<b>Bond Segment*</b>	0.5	6.3	7.1	7.2
Benchmark	0.6	6.5	7.1	7.2

\* Actual returns are calculated net of fees.

**PERMANENT SCHOOL FUND**

**Investment Objectives**

The investment objective of the Permanent School Fund is to produce a growing level of spendable income, within the constraints of maintaining adequate portfolio quality and liquidity. The income from the portfolio is used to offset expenditures on school aid payments to local school districts.

**Asset Mix**

Effective with FY98, the Permanent School Fund is invested in a balanced portfolio of common stocks and bonds. Common stocks provide the potential for significant capital appreciation, while bonds provide portfolio diversification and a more stable stream of current income.

Prior to FY98, the Fund was invested entirely in fixed income securities in order to maximize current income. It is understood that the change in asset mix will reduce portfolio income in the short term, but will enhance the value of the fund, over time.

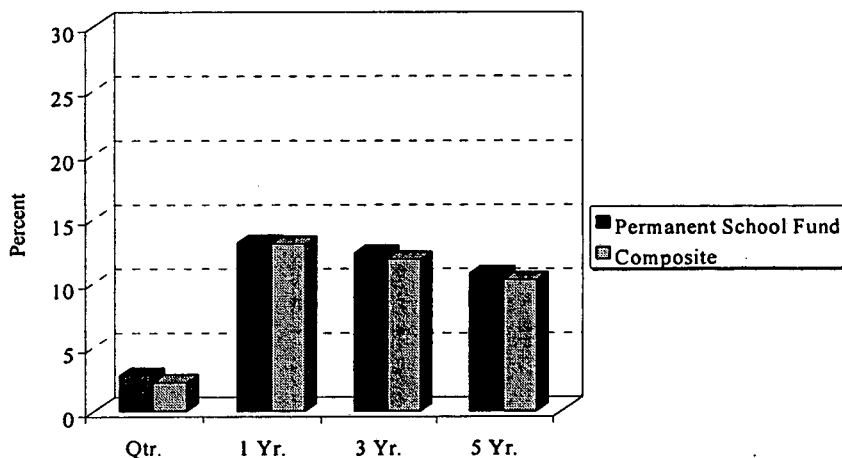
**Investment Management**

SBI staff manage all assets of the Permanent School Fund. The stock segment is passively managed to track the performance of the S&P 500. The bond segment is actively managed to add incremental value through sector, security and yield curve decisions.

**Market Value**

On March 31, 1999 the market value of the Permanent School Fund was \$538 million.

	3/31/99 Target	3/31/99 Actual
Stocks	50.0%	55.6%
Bond	48.0	42.8
Unallocated Cash	2.0	1.6
	100.0%	100.0%



	Period Ending 3/31/99			
	Qtr.	1 Yr.	3 Yr.	5 Yr.
<b>Total Fund (1) (2)</b>				
Composite	2.8%	13.1%	12.3%	10.7%
<b>Equity Segment (1) (2)</b>				
S&P 500	2.2	13.1	11.8	10.2
<b>Bond Segment (1)</b>				
Lehman Aggregate	5.1	18.8	N/A	N/A
	4.9	18.7	N/A	N/A
	-0.1	6.7	8.1	8.5
	-0.5	6.5	7.8	7.8

(1) Actual returns are calculated net of fees.  
 (2) Equities were added to the asset mix effective July 28, 1997. Prior to that date the fund was invested entirely in bonds. The composite Index has been weighted accordingly.

**ENVIRONMENTAL TRUST FUND**

**Investment Objective**

The Environmental Trust Fund's objective is to produce a growing level of spendable income, within the constraints of maintaining adequate portfolio quality and liquidity.

**Asset Mix**

The Environmental Trust Fund 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.

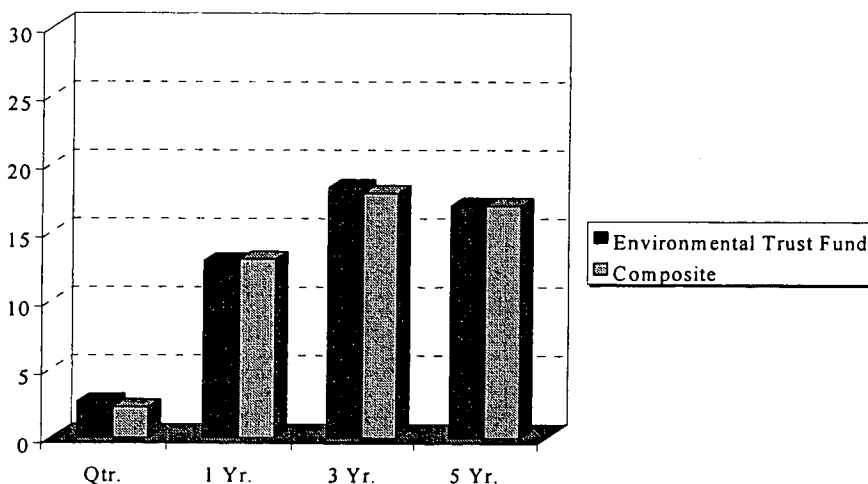
	3/31/99 Target	3/31/99 Actual
Stocks	50.0%	53.4%
Bonds	48.0	45.9
Unallocated Cash	2.0	0.7
	100.0%	100.0%

**Investment Management**

SBI staff manage all assets of the Environmental Trust Fund. The bond segment is actively managed to add incremental value through sector, security and yield curve decisions. The stock segment is passively managed to track the performance of the S&P 500.

**Market Value**

On March 31, 1999 the market value of the Environmental Trust Fund was \$273 million.



	Period Ending 3/31/99			
	Qtr.	1 Yr.	3 Yr.	5 Yr.
<b>Total Fund*</b>	2.6%	12.9%	18.3%	17.0%
Composite	2.2	13.1	17.9	17.0
<b>Equity Segment*</b>	5.1	18.8	28.3	26.3
S&P 500	4.9	18.7	28.2	26.4
<b>Bond Segment*</b>	-0.1	6.8	8.5	8.3
Lehman Agg.	-0.5	6.5	7.8	7.8

\* Actual returns are calculated net of fees.

## STATE CASH ACCOUNTS

**Description**

State Cash Accounts represent the cash balances in more than 400 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 temporary cash balances of certain trusts and retirement-related accounts.
2. Treasurer's Cash Pool contains the cash balances of special or dedicated accounts necessary for the operation of certain State agencies and non dedicated cash in the State Treasury.

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.

	Market Value (Millions)	Period Ending 3/31/99		Annualized	
		Qtr.	Yr.	3 Yr.	5 Yr.
Treasurer's Cash Pool*	\$6,616	1.1%	5.6%	5.6%	5.5%
Custom Benchmark**		1.0	5.0	5.3	5.4
Trust Fund Cash Pool*	52	1.2	5.5	5.6	5.6
Custom Benchmark***		1.1	4.9	5.2	5.4
90-Day T-Bills		1.1	4.8	5.1	5.2

\* Actual returns are calculated net of fees.

\*\* Beginning in January 1997, the Treasurer's Cash Pool is measured against a blended benchmark consisting of the Lehman Brother's 1 to 3 year Government Index for the first \$1.2 billion and the IBC all Taxable Money Fund Index for the balance of the portfolio. From April 1993 through December 1996, the benchmark was 75% State Street Short Term Investment Fund/25% 1-3 year Treasuries.

\*\*\* Beginning in January 1997, the Trust Fund Pool is measured against the IBC All Taxable Money Fund Index. From April 1993 through December 1996, the benchmark was 75% State Street Short Term Investment Fund/25% 1-3 year Treasuries.

**MINNESOTA STATE BOARD OF INVESTMENT**  
**Composition of State Investment Portfolios By Type of Investment**  
**Market Value March 31, 1999 (in Thousands)**

	Cash And		Bonds		Stocks		External	Int'l.	Alternative	Total
	Short Term	Securities	Internal	External	Internal	External				
<b>BASIC RETIREMENT FUNDS:</b>										
Teachers Retirement Fund	22,523 0.27%	-0-	1,817,681 22.06%	-0-	4,459,105 54.13%	-0-	1,195,752 14.52%	743,048 9.02%	8,238,109 100%	
Public Employees Retirement Fund	5,673 0.13%	-0-	948,463 22.09%	-0-	2,327,046 54.21%	-0-	623,940 14.54%	387,733 9.03%	4,292,855 100%	
State Employees Retirement Fund	5,436 0.13%	-0-	905,901 22.08%	-0-	2,224,456 54.21%	-0-	595,950 14.52%	371,538 9.06%	4,103,281 100%	
Public Employees Police & Fire Fund	2,673 0.13%	-0-	445,818 22.08%	-0-	1,094,353 54.21%	-0-	293,280 14.53%	182,614 9.05%	2,018,738 100%	
Highway Patrol Retirement Fund	344 0.13%	-0-	57,190 22.09%	-0-	140,312 54.21%	-0-	37,622 14.54%	23,379 9.03%	258,847 100%	
Judges Retirement Fund	30 0.14%	-0-	4,944 22.09%	-0-	12,131 54.21%	-0-	3,252 14.53%	2,021 9.03%	22,378 100%	
Public Employees P.F. Consolidated	172 0.03%	228 0.05%	105,652 22.10%	16	259,315 54.24%	0%	69,502 14.54%	43,209 9.04%	478,094 100%	
Correctional Employees Retirement	310 0.13%	-0-	51,775 22.09%	-0-	127,029 54.21%	-0-	34,059 14.54%	21,165 9.03%	234,338 100%	
<b>TOTAL BASIC FUNDS</b>	<b>37,161 0.19%</b>	<b>228 0%</b>	<b>4,337,424 22.08%</b>	<b>16 0%</b>	<b>10,643,747 54.18%</b>	<b>16 0%</b>	<b>2,853,357 14.52%</b>	<b>1,774,707 9.03%</b>	<b>19,646,640 100%</b>	
<b>POST RETIREMENT FUND</b>	<b>263,169 1.46%</b>	<b>-0-</b>	<b>5,172,092 28.78%</b>	<b>-0-</b>	<b>9,680,197 53.87%</b>	<b>-0-</b>	<b>2,632,186 14.65%</b>	<b>222,658 1.24%</b>	<b>17,970,302 100%</b>	
<b>TOTAL BASIC &amp; POST</b>	<b>300,330 0.80%</b>	<b>228 0%</b>	<b>9,509,516 25.28%</b>	<b>16 0%</b>	<b>20,323,944 54.03%</b>	<b>16 0%</b>	<b>5,485,543 14.58%</b>	<b>1,997,365 5.31%</b>	<b>37,616,942 100%</b>	

STATE CASH ACCOUNTS

**Description**

State Cash Accounts represent the cash balances in more than 400 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 temporary cash balances of certain trusts and retirement-related accounts.
2. Treasurer's Cash Pool contains the cash balances of special or dedicated accounts necessary for the operation of certain State agencies and non dedicated cash in the State Treasury.

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.

	Market Value (Millions)	Period Ending 3/31/99		Annualized	
		Qtr.	Yr.	3 Yr.	5 Yr.
Treasurer's Cash Pool*	\$6,616	1.1%	5.6%	5.6%	5.5%
Custom Benchmark**		1.0	5.0	5.3	5.4
Trust Fund Cash Pool*	52	1.2	5.5	5.6	5.6
Custom Benchmark***		1.1	4.9	5.2	5.4
90-Day T-Bills		1.1	4.8	5.1	5.2

\* Actual returns are calculated net of fees.

\*\* Beginning in January 1997, the Treasurer's Cash Pool is measured against a blended benchmark consisting of the Lehman Brother's 1 to 3 year Government Index for the first \$1.2 billion and the IBC all Taxable Money Fund Index for the balance of the portfolio. From April 1993 through December 1996, the benchmark was 75% State Street Short Term Investment Fund/25% 1-3 year Treasuries.

\*\*\* Beginning in January 1997, the Trust Fund Pool is measured against the IBC All Taxable Money Fund Index. From April 1993 through December 1996, the benchmark was 75% State Street Short Term Investment Fund/25% 1-3 year Treasuries.

**MINNESOTA STATE BOARD OF INVESTMENT**  
**Composition of State Investment Portfolios By Type of Investment**  
**Market Value March 31, 1999 (in Thousands)**

	Cash And		Bonds		Stocks		External		Alternative	Total
	Short Term	Securities	Internal	External	Internal	External	Int'l.	Assets		
<b>BASIC RETIREMENT FUNDS:</b>										
Teachers Retirement Fund	22,523 0.27%	-0-	1,817,681 22.06%	-0-	4,459,105 54.13%	1,195,752 14.52%	743,048 9.02%	8,238,109 100%		
Public Employees Retirement Fund	5,673 0.13%	-0-	948,463 22.09%	-0-	2,327,046 54.21%	623,940 14.54%	387,733 9.03%	4,292,855 100%		
State Employees Retirement Fund	5,436 0.13%	-0-	905,901 22.08%	-0-	2,224,456 54.21%	595,950 14.52%	371,538 9.06%	4,103,281 100%		
Public Employees Police & Fire Fund	2,673 0.13%	-0-	445,818 22.08%	-0-	1,094,353 54.21%	293,280 14.53%	182,614 9.05%	2,018,738 100%		
Highway Patrol Retirement Fund	344 0.13%	-0-	57,190 22.09%	-0-	140,312 54.21%	37,622 14.54%	23,379 9.03%	258,847 100%		
Judges Retirement Fund	30 0.14%	-0-	4,944 22.09%	-0-	12,131 54.21%	3,252 14.53%	2,021 9.03%	22,378 100%		
Public Employees P.F. Consolidated	172 0.03%	228 0.05%	105,652 22.10%	16 0%	259,315 54.24%	69,502 14.54%	43,209 9.04%	478,094 100%		
Correctional Employees Retirement	310 0.13%	-0-	51,775 22.09%	-0-	127,029 54.21%	34,059 14.54%	21,165 9.03%	234,338 100%		
<b>TOTAL BASIC FUNDS</b>	<b>37,161 0.19%</b>	<b>228 0%</b>	<b>4,337,424 22.08%</b>	<b>16 0%</b>	<b>10,643,747 54.18%</b>	<b>2,853,357 14.52%</b>	<b>1,774,707 9.03%</b>	<b>19,646,640 100%</b>		
<b>POST RETIREMENT FUND</b>	<b>263,169 1.46%</b>	<b>-0-</b>	<b>5,172,092 28.78%</b>	<b>-0-</b>	<b>9,680,197 53.87%</b>	<b>2,632,186 14.65%</b>	<b>222,658 1.24%</b>	<b>17,970,302 100%</b>		
<b>TOTAL BASIC &amp; POST</b>	<b>300,330 0.80%</b>	<b>228 0%</b>	<b>9,509,516 25.28%</b>	<b>16 0%</b>	<b>20,323,944 54.03%</b>	<b>5,485,543 14.58%</b>	<b>1,997,365 5.31%</b>	<b>37,616,942 100%</b>		

	Cash And Short Term Securities		Bonds Internal		Bonds External		Stocks Internal		Stocks External		External Int'l.		Alternative Assets		Total	
<b>MINNESOTA SUPPLEMENTAL FUNDS:</b>																
Income Share Account	24,866	196,573	-0-	-0-	-0-	-0-	-0-	-0-	394,141	64.03%	-0-	-0-	-0-	-0-	615,580	100%
		31.93%														
Growth Share Account	-0-	-0-	-0-	-0-	-0-	-0-	-0-	301,376	100%	-0-	-0-	-0-	-0-	301,376	100%	
Money Market Account	52,053	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	52,053	100%	
Common Stock Index Account	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	394,411	100%	-0-	-0-	-0-	-0-	394,411	100%
Bond Market Account	-0-	-0-	-0-	-0-	140,817	100%	-0-	-0-	-0-	-0-	-0-	-0-	-0-	140,817	100%	
International Share Account	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	24,169	100%	-0-	-0-	24,169	100%
Fixed Interest Account	2,000	-0-	-0-	-0-	82,543	97.63%	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	84,543	100%
		2.37%														
<b>TOTAL SUPPLEMENTAL FUNDS</b>	78,919	196,573	-0-	-0-	223,360		-0-	-0-	1,089,928	67.57%	24,169	1.50%	-0-	-0-	1,612,949	100%
	4.89%	12.19%			13.85											
<b>TOTAL RETIREMENT FUNDS</b>	379,249	196,801	0.50%	0%	9,732,876	24.81%	16	0%	21,413,872	54.59%	5,509,712	14.04%	1,997,365	39,229,891	100%	
	0.97%	0.50%											5.09%			



	Cash And Short Term Securities		Bonds		Bonds		Stocks		External Int'l.		Alternative Assets		Total	
			Internal	External	Internal	External	Internal	External	Int'l.		Assets			
<b>ASSIGNED RISK PLAN</b>	9,779	1.35%	-0-	506,068	-0-	207,181	-0-	-0-	-0-	-0-	-0-	-0-	723,028	100%
				69.99%		28.66%								
<b>ENVIRONMENTAL FUND</b>	1,801	0.66%	125,328	-0-	145,683	-0-	-0-	-0-	-0-	-0-	-0-	-0-	272,812	100%
			45.94%		53.40%									
<b>PERMANENT SCHOOL FUND</b>	8,492	1.58%	230,256	-0-	299,413	-0-	-0-	-0-	-0-	-0-	-0-	-0-	538,161	100%
			42.78%		55.64%									
<b>TREASURERS CASH</b>	6,618,921	100%	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	6,618,921	100%
<b>HOUSING FINANCE AGENCY</b>	28,510	12.31%	203,093	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	231,603	100%
			87.69%											
<b>MINNESOTA DEBT SERVICE FUND</b>	39,997	22.92	134,487	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	174,484	100%
			77.08%											
<b>MISCELLANEOUS ACCOUNTS</b>	286,033	62.26%	140,467	-0-	32,884	-0-	-0-	-0-	-0-	-0-	-0-	-0-	459,384	100%
			30.58%		7.16%									
<b>GRAND TOTAL</b>	7,372,782	15.28%	1,030,432	10,238,944	477,996	21,621,053	5,509,712	1,997,365	48,248,284	11.42%	4.14%	100%		
			2.14%	21.22%	0.99%	44.81%								

# Tab B

## **EXECUTIVE DIRECTOR'S ADMINISTRATIVE REPORT**

---

DATE: May 25, 1999

TO: Members, State Board of Investment

FROM: Howard Bicker

### **1. Reports on Budget and Travel**

A report on the SBI's Administrative budget for the period ending April 30, 1999 is included as **Attachment A**.

A report on travel for the period from February 16 - May 15, 1999 is included as **Attachment B**.

### **2. Litigation Update**

The SBI has been designated lead plaintiff in a class action suit against Mercury Finance Corporation. SBI legal counsel will give the Board a verbal update on the status of the litigation at the Board meeting on June 15<sup>th</sup>.

### **3. Legislative Update**

A summary of legislative activity of interest to the SBI is in **Attachment C**.

### **4. Reauthorization of the Proxy Voting Committee**

In March 1982, the Board established the Proxy Voting Committee to carry out the SBI's voting responsibilities. Each Board member has one designee on the Committee. The current membership is:

Peter Sausen, Chair	Governor's designee
Jennifer Mohlenhoff	State Auditor's designee
John Manahan	State Treasurer's designee
Eric Lipman	Secretary of State's designee
Ken Peterson	Attorney General's designee

According to statute, advisory committees of this nature must be re-authorized every two years (the last reauthorization was in March 1997). A resolution to accomplish this is in **Attachment D**.

## **5. Update on Tobacco Information**

The resolution adopted by the Board at its September 2, 1998 meeting required active managers to divest holdings in stock of companies that derive at least fifteen percent of revenues from tobacco products by September 2001. At that time staff notified each of the SBI's active and passive equity managers of the resolution in writing.

From December 31, 1998 to March 31, 1999 shares in SBI active stock portfolios were reduced by approximately 52,000 shares, dropping from 3.84 million shares to approximately 3.8 million shares. The market value of these holdings decreased from approximately \$174 million to less than \$115 million. Tables showing the holdings for the SBI active and semi-passive managers for December 31, 1998 and March 31, 1999 are in **Attachment E**.

**ATTACHMENT A**

**STATE BOARD OF INVESTMENT  
FISCAL YEAR 1999 ADMINISTRATIVE BUDGET REPORT  
GENERAL FUND APPROPRIATION  
FISCAL YEAR TO DATE THROUGH APRIL 30, 1999**

ITEM	FISCAL YEAR 1999 BUDGET	FISCAL YEAR 1999 EXPENDITURES
<b>PERSONAL SERVICES</b>		
FULL TIME EMPLOYEES	\$ 1,715,475	\$ 1,237,724
SEVERENCE PAYOFF	20,000	753
WORKERS COMPENSATION INSURANCE	1,000	764
MISCELLANEOUS PAYROLL	1,000	0
<b>SUBTOTAL</b>	<b>\$ 1,737,475</b>	<b>\$ 1,239,241</b>
<b>STATE OPERATIONS</b>		
RENTS & LEASES	94,525	74,831
REPAIRS/ALTERATIONS/MAINTENANCE	23,000	14,637
MOVING EXPENSES	100,000	0
PRINTING & BINDING	20,000	16,806
PROFESSIONAL/TECHNICAL SERVICES	55,000	1,606
COMPUTER SYSTEMS SERVICES	5,000	3,800
COMMUNICATIONS	27,000	17,628
TRAVEL, IN-STATE	3,000	619
TRAVEL, OUT-STATE	81,215	28,062
SUPPLIES	92,000	24,025
EQUIPMENT	60,000	39,412
EMPLOYEE DEVELOPMENT	12,000	13,842
OTHER OPERATING COSTS	28,000	29,514
<b>SUBTOTAL</b>	<b>\$ 600,740</b>	<b>\$ 264,782</b>
<b>TOTAL GENERAL FUND</b>	<b>\$ 2,338,215</b>	<b>\$ 1,504,023</b>

**(Blank)**

**ATTACHMENT B**

**STATE BOARD OF INVESTMENT**

**Travel Summary by Date  
February 16, 1999 – May 15, 1999**

<u>Purpose</u>	<u>Name(s)</u>	<u>Destination and Date</u>	<u>Total Cost</u>
<b>Staff Conference:</b> “Defined Contribution Forum” sponsored by Investment Management Institute	J. Heidelberg	Orlando, FL 2/24-2/28	\$623.70
<b>Manager Monitoring Domestic Stock Managers:</b> Brinson Partners, Lincoln Capital <b>Consultant Meeting:</b> Richards & Tierney	S. Koessl	Chicago, IL 2/25-2/26	\$675.21
<b>Staff Conference:</b> “Risk Management Seminar” sponsored by Association for Investment Management and Research (AIMR) <b>Staff Education:</b> BlackRock, Goldman Sachs, J. P. Morgan <b>Master Custodian:</b> State Street Bank	M. Menssen	Boston, MA New York, NY 3/7-3/11	\$2,432.01
<b>Staff Conference:</b> State Street’s Twenty-First Annual Client Conference	M. Perry	Phoenix, AZ 3/12-3/19	\$977.68
<b>Manager Monitoring Domestic Fixed Income Managers:</b> Morgan Stanley, Standish <b>Manager Search Domestic Fixed Income Manager:</b> Wellington Management	J. Matz	W. Conshohocken, PA Boston, MA 3/24-3/26	\$1,883.43

<u>Purpose</u>	<u>Name(s)</u>	<u>Destination and Date</u>	<u>Total Cost</u>
<b>Manager Monitoring Master Custodian:</b> State Street Securities Lending	M. Perry	Atlanta, GA 4/9-4/12	\$308.00
<b>Staff Conference:</b> GTCR Annual Meeting <b>Manager Search Alternative Investment Manager:</b> William Blair Mezzanine Capital Partners	J. Griebenow	Chicago, IL 4/13-4/14	\$784.00
<b>Staff Conference</b> KKR's Investors' Conference	A. Christensen	Palm Springs, CA 4/25-4/27	\$1,148.00
<b>Staff Conference</b> "National Association of State Investment Professionals (NASIP)" sponsored by Missouri State Employee's Retirement System	Mike Menssen Lois Buermann	St. Louis, MO 4/26-4/28	\$2,449.25
<b>Staff Conference</b> Hellman & Friedman Capital Partners' Annual Conference	J. Griebenow	San Francisco, CA 4/28-5/2	\$955.00
<b>Staff Conference</b> The First Reserve Client Conference and Fund Annual Meeting	A. Christensen	Houston, TX 5/3-5/4	\$1,643.99



ATTACHMENT C

**Bills of Interest to the Minnesota State Board of Investment  
1999 Legislative Session  
Includes Action Through 5/17/99**

<b>Description of Bill</b>	<b>HF/SF # and Author</b>	<b>Current Status</b>
Health and Human Services Funding bill - SBI to invest two new endowment funds established using tobacco settlement money	SF 2225	Senate and House passed 5/17
Omnibus pension bill - Expands vendors for 403(b) teacher annuity employer match opportunity - Expands flexibility for SBI to choose investment options for MnSCU plans - Retirement Systems Building	SF 319	Senate and House passed 5/15
Environmental and Agriculture Funding bill - SBI to invest long-term trust fund for landfill cleanup	SF 2226	Senate and House passed 5/17
State Government Funding bill - SBI Administrative Budget  - SBI to invest long-term care insurance fund	HF 878	Senate and House passed 5/17

## LEGISLATIVE REPORT

The 1999 Legislature passed several bills with provisions of interest to the SBI:

a) *State Departments Omnibus Budget Bill (HF 878)*

- The SBI's Administrative budget is funded at \$2,310,000 for FY 00 and \$2,376,000 for FY 01. These totals are the same as originally requested in the Governor's budget.
- The bill establishes a Long-Term Care Insurance Trust Fund to be invested by the SBI. The Trust Fund is used to pay premiums and costs of a public employee long-term care insurance program.

b) *Omnibus Pension Bill (SF 319)*

- *Investment Flexibility for the MnSCU Retirement Plans.* This provision will allow the SBI to provide participants in the Individual Retirement Account Plan and Supplemental Plan of the Minnesota State Colleges and Universities (MnSCU) with a range of investment choices in addition to insurance company investment products. These additional choices will include direct ownership of mutual fund shares as well as investment options sponsored by registered investment management firms and qualified banks.
- *Study and Selection of 403(b) Tax Sheltered Annuities.* This provision directs the Legislative Commission on Pensions & Retirement to study the issue of the appropriate means to provide 403(b) employer match opportunities for employees. This provision expands the number of insurance companies that may offer investment products for the match opportunity and includes mutual funds in the list of companies offering investment products. The SBI is required to make a new selection of companies by July 1, 2000.
- *Retirement Systems Building.* This provision allows PERA, MSRS, and TRA to use revenue bonds to finance a building to jointly office the three systems. The building could be a potential future site for SBI offices.

c) *Higher Education Funding Bill (HF 2380)*

The bill makes necessary amendments to the Edvest college savings program. Edvest provides tax deferred savings and matching dollars to participants who contribute to the program. As required by 1997 legislation, the SBI assists the Higher Education Services Office (HESO) in selecting a recordkeeper and investment manager for the program. Staff and HESO have been negotiating terms with vendors with the objective of selecting a vendor to provide a lower cost program for participants. The program is expected to be operational in calendar year 1999.

d) *Environmental and Agricultural Funding Bill (SF 2226)*

The bill establishes a Closed Landfill Investment Fund that is to be invested by the State Board of Investment. The Fund will receive \$5.1 million each fiscal year starting with fiscal year 2000 through fiscal year 2003. Moneys may be spent from the Fund after 2020.

e) *Health and Human Services Funding Bill (SF 2225)*

The bill establishes two endowment funds from tobacco settlement moneys, the Medical Education Fund and the Tobacco Use Prevention and Local Public Health Endowment Fund. The SBI will invest the funds. The initial deposits in fiscal year 2000 in the two funds will total approximately \$460 million. Earnings up to 5 percent of the market value of each fund may be expended in each year. When each Fund expires in 2025, the principal and any remaining earnings must be transferred to the General Fund.

(Blank)

- 10 -

ATTACHMENT D

**RESOLUTION OF THE  
MINNESOTA BOARD OF INVESTMENT  
CONCERNING PROXY VOTING**

WHEREAS, as a stockholder, the Minnesota State Board of Investment (SBI) is entitled to sponsor and cosponsor shareholder resolutions and participate in corporate annual meetings by casting its votes by proxy or through direct attendance at the meetings; and

WHEREAS, the SBI has previously established a Proxy Committee:

NOW THEREFORE, BE IT RESOLVED THAT:

1. To advise and assist the SBI in the implementation of proxy voting guidelines previously adopted by the Board the SBI hereby authorizes and reaffirms the establishment of the SBI Proxy Committee composed of a representative selected by each member of the SBI to be chaired by the designee of the Governor and convened as necessary in accord with the Guidelines.
2. The SBI further authorizes the SBI Proxy Committee to review the Guidelines periodically and report to the SBI as necessary.
3. The SBI further directs its staff to advise and assist the Proxy Committee in the implementation of this resolution and directs its Executive Director to obtain such consulting and reporting services as may be necessary.
4. This resolution shall take effect immediately.

Adopted this \_\_\_\_ day  
of June, 1999

---

Governor Jesse Ventura  
Chair, Minnesota State  
Board of Investment

**(Blank)**

**- 12 -**

**ATTACHMENT E**

**SBI Active Stock Holdings  
Tobacco Companies Identified by the IRRC  
that derive at least fifteen percent of revenue from tobacco products  
December 31, 1998**

*Domestic Common Stocks and American Depository Receipts (ADR's)*

<b>Company</b>	<b>Percent Revenue from Tobacco in 1997</b>	<b>SBI Shares 12/31/98</b>	<b>SBI Cost Value 12/31/98</b>	<b>SBI Market Value 12/31/98</b>
Imperial Tobacco Group	100	26,500	248,370	277,771
Philip Morris Cos., Inc.	46	3,157,947	87,449,745	168,950,165
Universal Corp.	74*	45,000	1,464,700	1,580,625
<b>Subtotal</b>		<b>3,229,447</b>	<b>\$89,162,815</b>	<b>\$170,808,561</b>

*International Stocks*

<b>Company</b>	<b>Percent Revenue from Tobacco in 1997</b>	<b>SBI Shares 12/31/98</b>	<b>SBI Cost Value 12/31/98</b>	<b>SBI Market Value 12/31/98</b>
Compagnie Financiere Richemont	68*	80,000	2,751,015	476,000
PT Gudang Garam	96	150,000	598,736	219,818
Rembrandt Group Ltd.	>50	385,000	3,376,822	2,356,094
<b>Subtotal</b>		<b>615,000</b>	<b>\$6,726,573</b>	<b>\$3,051,912</b>
<b>Total SBI Holdings</b>		<b>3,844,447</b>	<b>\$95,889,388</b>	<b>\$173,860,473</b>

Sources: The publication, "The Tobacco Industry," Eighth Edition, 1998, by the Investor Responsibility Research Center (IRRC), Washington D.C. is the source for the tobacco revenue information. SBI holdings data are from SBI bank records.

\*1998 data

**SBI Active Stock Holdings**  
**Tobacco Companies Identified by the IRRC**  
**that derive at least fifteen percent of revenue from tobacco products**  
**March 31, 1999**

*Domestic Common Stocks and American Depository Receipts (ADR's)*

<b>Company</b>	<b>Percent Revenue from Tobacco in 1997</b>	<b>SBI Shares 03/31/99</b>	<b>SBI Cost Value 03/31/99</b>	<b>SBI Market Value 03/31/99</b>
Philip Morris Cos., Inc.	46	3,132,534	86,680,734	110,226,040
Universal Corp.*	74	45,000	1,464,701	1,150,313
<b>Subtotal</b>		<b>3,177,534</b>	<b>\$88,145,435</b>	<b>\$111,376,353</b>

*International Stocks*

<b>Company</b>	<b>Percent Revenue from Tobacco in 1997</b>	<b>SBI Shares 03/31/99</b>	<b>SBI Cost Value 03/31/99</b>	<b>SBI Market Value 03/31/99</b>
Compagnie Financiere Richemont*	68	80,000	2,751,015	548,000
PT Gudang Garam	96	150,000	598,736	199,279
Rembrandt Group Ltd.	>50	385,000	3,376,822	2,757,543
<b>Subtotal</b>		<b>615,000</b>	<b>\$6,726,573</b>	<b>\$3,504,822</b>
<b>Total SBI Holdings</b>		<b>3,792,534</b>	<b>\$94,872,008</b>	<b>\$114,881,175</b>

Sources: The publication, "The Tobacco Industry," Eighth Edition, 1998, by the Investor Responsibility Research Center (IRRC), Washington D.C. is the source for the tobacco revenue information. SBI holdings data are from SBI bank records.

\*1998 data



# Tab C



**CAROL C. JOHNSON**  
Minnesota State Treasurer

---

DATE: May 25, 1999

TO: Members, State Board Investment

FROM: Carol C. Johnson, Chair  
Administrative Committee

**SUBJECT: Report from the SBI Administrative Committee**

The Administrative Committee met on May 21, 1999 to consider the following agenda items:

- Review of Executive Director's proposed workplan for FY00.
- Review of budget plan for FY00.
- Review of Continuing Fiduciary Education Plan.
- Review of Executive Director's Evaluation Process.
- Discussion of Year 2000 Contingency Banking Relationship RPF.
- Discussion of Year 2000 Computer Issue Progress Report

**1. Review of Executive Director's proposed workplan for FY00.**

Mr. Bicker presented his proposed workplan for FY00. Like previous workplans, the FY00 plan follows the same category order found in the Executive Director's position description. The plan is a compilation of on-going responsibilities as well as the new initiatives the Executive Director will undertake during the next fiscal year.

A summary of the proposed plan is shown in **Attachment A**. Supporting information was sent to each Board member in May 1999 as part of the FY00 Management and Budget Plan document.

**RECOMMENDATION:**

**The Committee recommends that the SBI approve the FY00 Executive Director's Workplan. Further, the Committee recommends that the workplan serve as the basis for the Executive Director's performance evaluation for FY00.**

## **2. FY00 Administrative Budget Plan.**

The SBI's administrative budget is funded by a legislative appropriation from the general fund. All expenditures are billed back to the various funds under the supervision of the SBI and the receipts are deposited in the general fund as non-dedicated revenue.

An overview of the budget is in **Attachment B**. Supporting information was sent to each Board member in May 1999 as part of the FY00 Management and Budget Plan.

### **RECOMMENDATION:**

**The Committee recommends that the SBI approve the FY00 Administrative Budget Plan and that the Executive Director have the flexibility to reallocate funds between budget categories in the event budgeting needs change during the year.**

## **3. Review of Continuing Fiduciary Education Plan.**

Minnesota Statutes Chapter 356A requires each public pension plan to establish a continuing education plan for its fiduciaries. The plan approved by the Committee is in **Attachment C**. Please note that the travel allocation policy for Board members and their designees is included in the plan.

### **RECOMMENDATION:**

**The Committee recommends that the SBI adopt the attached Continuing Fiduciary Education Plan.**

## **4. Review of Executive Director's Evaluation Process.**

The Committee discussed the process that will be used by the board to evaluate the Executive Director for FY99. The Committee members agreed that the performance reviews should be completed prior to the September 1999 meeting of the SBI and should follow the process used in the past.

### **RECOMMENDATION:**

**The Committee recommends that the SBI adopt the following process for the Executive Director's FY99 performance evaluation:**

- **The evaluation will be completed prior to the September 1999 meeting of the SBI and will be based on the results of the Executive Director's workplan for FY99.**

- **The SBI deputies/designees will develop an appropriate evaluation form for use by each member, which will reflect the categories in the Executive Director's position description and workplan.**
- **As the chair of the Board, the Governor's representative (Department of Finance), will coordinate distribution and collection of the evaluation forms and will forward the completed forms to the Executive Director. Board members are encouraged to meet individually with the Executive Director to review their own evaluation.**

**5. Discussion of Year 2000 Contingency Banking Relationship RFP.**

As a result of the concerns associated with the Year 2000 computer issue, an RFP was issued earlier this year for contingency banking services. The RFP was a collaborative effort of a task force consisting of representatives of the Office of the State Treasurer, the Department of Revenue, the Department of Finance and the State Board of Investment. This task force received two responses and after a review of the responses recommended entering into a relationship for contingency banking services with State Street Bank. The Committee concurred with the task force. The task force plans to seek Executive Council approval to enter into a contract with State Street Bank.

**6. Discussion of Year 2000 Computer Issue Progress Report.**

Staff presented its progress report on the Year 2000 computer progress. Representatives of State Street Bank and Wells Fargo/Norwest (the SBI's custodian bank) and Financial Control Systems (the SBI's accounting services vendor) gave brief presentations regarding their respective approaches and readiness efforts regarding the Y2K issue.

(Blank)

**ATTACHMENT A**

**STATE BOARD OF INVESTMENT  
Executive Director's Proposed Workplan**

**FY00**

**(Categories A, B, C, D, E correspond to the position description)**

	<b>Projected Time Frame</b>
<b>A. DEVELOPMENT OF INVESTMENT POLICIES</b>	
1. Review the asset allocation for the Environmental Trust Fund.	Jul. - Sep.
2. Assist in 403(b) legislatively mandated reviews.	Jul. - Jun.
3. Policy development for any potential endowment funds enacted by the legislature.	Jul. - Jun.
4. Review the policy statement for the Assigned Risk Plan.	Jan. - Jun.
<b>B. IMPLEMENTATION OF INVESTMENT POLICIES APPROVED BY THE SBI</b>	
1. Meet or exceed the performance objectives established for the Basics, Post, and Combined Funds.	On-going, reported quarterly
• Obtain returns that are 3-5 percentage points over inflation over the last 10 years (FY91-FY00) for the Combined Funds.	
• Outperform the median fund from the TUCS universe of Master Trusts over the last 5 years (FY96-FY00) for the Combined Funds.	
• Outperform a composite of market indices over the last 5 years (FY96-FY00). Separate composites are constructed for the Combined, the Basics and the Post Funds.	
2. Implementation of MnScu 401(a) Retirement Plans.	Jul. - Jun.

- |   |             |
|---|-------------|
| 3. Implementation of MN Education Savings Program.  | Jul – Sep.  |
| 4. Conduct international manager search.  | Jul. – Aug. |
| 5. Invest new state endowment funds.  | Jul. – Jun. |
| 6. Maintain Manager Short Lists for international, domestic and emerging equity and external fixed income programs. | On-going    |
| 7. Consider additional investments with new / existing alternative investment managers.                             | On-going    |

**C. REVIEW AND CONTROL OF INVESTMENT POLICIES**

- |   |             |
|---|-------------|
| 1. Monitor and evaluate active stock and bond manager performance in accordance with the SBI’s Manager Continuation Policy. | Semi-annual |
| 2. Review investment guidelines for stock, bond and international managers on an annual basis.                              | Apr. – Jun. |
| 3. Monitor implementation of Northern Ireland mandate.  | On-going    |
| 4. Monitor implementation of proxy voting guidelines and procedures.  | On-going    |
| 5. Provide staff support for initiatives assigned to the Proxy Committee.   |             |

**D. ADMINISTRATION AND MANAGEMENT OF STAFF OPERATIONS**

- |  |             |
|--|-------------|
| 1. Cooperate in all respects with the annual audit of SBI operations by the Legislative Auditor.         | Jul. – Dec. |
| 2. Coordinate police and fire fund consolidations.   | On-going    |
| 3. Prepare and seek approval of the SBI’s legislative proposals for 2000 Legislative Session, if needed. | Oct. – May  |
| 4. Prepare FY00 Management and Budget Plan.  | Apr. – Jun. |

5. Year 2000 Compliance.

Jun. – Jan.

**E. COMMUNICATION AND REPORTING**

1. Prepare reports on investment results.

Quarterly

2. Prepare status reports on the Executive Director's FY00 workplan for review by the SBI, IAC and Consultant, as requested.

As requested

3. Meet with the SBI and IAC on a quarterly basis and at other times as required.

Quarterly, or  
as requested

4. Meet with the Board's designees on a monthly basis, as requested.

Monthly, or  
as requested

5. Prepare FY99 Annual Report.

Jul. – Dec.

6. Coordinate round table discussions with SBI's external managers.

Periodic,  
2-3 per year

5. Compile and submit data for performance reports Mandated under MS Chapter 356.





- ATTACHMENT B

**Administrative Budget  
FY 00 Budget Plan  
Overview**

The FY00 budget plan is based on the SBI's FY00-01 Biennial Budget Request:

	<b>FY99 Projected</b>	<b>FY00 Plan</b>	<b>Difference</b>
Personal Services	\$1,731,504	\$1,844,000	\$ +112,496
Operating Expenses	539,427	466,000	-73,427
	<b>\$2,270,931</b>	<b>\$2,310,000</b>	<b>\$ + 39,069</b>

**Personal Services:**                   **80% of the budget**  
Salaries, retirement, insurance, FICA, severance

Personnel costs will be approximately \$112,496 more than in FY99. This is due primarily to salary increases that have been negotiated by the Department of Employee Relations and the various bargaining units that represent SBI employees. These contractual agreements will not be completed until late summer of 1999.

In addition to normal salary increases there is one position that was recently filled that was vacant for most of Fiscal Year 1999.

**Operating Expenses:**               **20% of the budget**  
Rents, leases, printing, data processing  
Professional/technical contracts  
Communications, travel, employee development, misc. fees  
Office equipment, furnishings, supplies

Overall, operating expenses will be approximately \$73,427 less than the amount spent in FY 99. The majority of this decrease is related to onetime costs of our office move during FY 1999.

**STATE BOARD OF INVESTMENT  
FISCAL YEARS 2000 - 2001 BUDGET PLAN  
GENERAL FUND SUMMARY**

DESCRIPTION	FY 1997 ACTUAL	FY 1998 ACTUAL	FY1999 PROJECTED	FY 2000 REQUEST	FY 2001 REQUEST
<b>PERSONAL SERVICES</b>					
FULL TIME EMPLOYEES	\$ 1,500,413	\$ 1,568,660	\$ 1,652,988	\$ 1,752,000	\$ 1,819,000
PART TIME EMPLOYEES	53,403	58,185	55,475	60,000	65,000
SEVERENCE PAYOFF	34,562	39,819	22,000	30,000	20,000
WORKERS COMPENSATION INSURANCE	718	764	800	1,000	1,000
MISCELLANEOUS PAYROLL	673	-	241	1,000	1,000
<b>SUBTOTAL</b>	<b>\$ 1,589,769</b>	<b>\$ 1,667,428</b>	<b>\$ 1,731,504</b>	<b>\$ 1,844,000</b>	<b>\$ 1,906,000</b>
<b>STATE OPERATIONS</b>					
RENTS & LEASES	90,498	92,496	110,991	126,000	130,000
REPAIRS/ALTERATIONS/MAINTENANCE	19,656	21,704	24,413	30,000	30,000
PRINTING & BINDING	15,531	16,625	17,237	20,000	20,000
PROFESSIONAL/TECHNICAL SERVICES	8,211	31,953	12,718	35,000	35,000
COMPUTER SYSTEMS SERVICES	203,600	69,394	-	-	-
COMMUNICATIONS	25,110	28,606	25,744	30,000	30,000
TRAVEL, IN-STATE	544	563	850	3,000	3,000
TRAVEL, OUT-STATE	52,318	53,389	55,250	65,000	65,000
SUPPLIES	39,471	36,916	48,906	50,000	50,000
EQUIPMENT	43,324	16,777	195,490	50,000	50,000
EMPLOYEE DEVELOPMENT	14,403	9,401	10,992	15,000	15,000
OTHER OPERATING COSTS	23,632	26,532	36,836	42,000	42,000
<b>SUBTOTAL</b>	<b>\$ 536,298</b>	<b>\$ 404,356</b>	<b>\$ 539,427</b>	<b>\$ 466,000</b>	<b>\$ 470,000</b>
<b>TOTAL GENERAL FUND</b>	<b>\$ 2,126,067</b>	<b>\$ 2,071,784</b>	<b>\$ 2,270,931</b>	<b>\$ 2,310,000</b>	<b>\$ 2,376,000</b>
<b>PERCENT INCREASE OVER PRIOR YEAR</b>		-2.6%	9.6%	1.7%	2.9%

## **ATTACHMENT C**

### **CONTINUING FIDUCIARY EDUCATION PLAN**

#### **REQUIRED BY MS 356A.13**

The State Board of Investment (SBI) undertakes the following activities related to fiduciary education. Taken as a group, these activities shall constitute the plan for continuing fiduciary education required by Minnesota Statutes 356A.13 (copy attached). In addition, pursuant to statutory requirements of qualification, the SBI executive director and many members of the Board's Investment Advisory Council (IAC) can be reasonably considered to be experts with respect to their duties as fiduciaries.

#### **1. Briefing for New Board/IAC Members**

Shortly after election to the Board or appointment to the IAC, each new member is briefed on SBI operations and policies. As part of the briefing, SBI's legal counsel will review the member's fiduciary obligations and responsibilities as specified in Minnesota Statutes Chapters 11A and 356A.

#### **2. Development and Review of Investment Policies**

The SBI adopts comprehensive investment policies for each fund under its control. The policies cover investment objectives, asset allocation, management structure and performance evaluation. Policy papers or reports on these topics are developed and written by SBI staff in conjunction with the IAC and consultants. Relevant research and analyses from the academic and professional investment fields are used to formulate these policy guidelines.

After they are formally adopted by the Board, these written policies guide the management of all assets under the SBI's control. The SBI intends to review its stated investment policies periodically. This review may occur within the framework of the SBI's regular quarterly meetings or may take place at special meetings or seminars specifically designated for this purpose.

#### **3. Input from Board's Consultants**

The SBI retains outside investment consultants to advise the Board members on a wide variety of investment management issues. As part of their contracts with the SBI, the consultants offer to meet with the Board members or their designees to discuss investment-related issues. These individual consultations occur throughout the year. In addition, the general consultant is available at each meeting of the Board and IAC. These meetings are supplemented by quarterly reports on investment performance prepared by the general consultant.

#### **4. Manager “Round Tables”**

The SBI intends to convene small groups of its external money managers to discuss issues related to investment management and the financial markets. These “round table” discussions will be held periodically throughout the year and will be open to Board members and their designees, IAC members and other interested parties. It is anticipated that 2-3 round tables will be held each year.

#### **5. Travel Allocation**

The SBI allocates \$2,500 annually to each Board member (or their designee) for costs associated with attendance at investment-related seminars and conferences. This allocation is used at the discretion of each Board member.

Date: May, 1999

#### **1996 Minnesota Statutes**

##### **356A.13. CONTINUING FIDUCIARY EDUCATION.**

Subdivision 1. **Obligation of fiduciaries.** A fiduciary of a covered pension plan shall make reasonable effort to obtain knowledge and skills sufficient to enable the fiduciary to perform fiduciary activities adequately. At a minimum, a fiduciary of a covered pension plan shall comply with the program established in accordance with subdivision 2.

Subd. 2. **Continuing fiduciary education program.** The governing boards covered pension plans shall each develop and periodically revise a program for the continuing education of any of their board members and any of their chief administrative officers who are not reasonably considered to be experts with respect to their activities as fiduciaries. The program must be designed to provide those persons with knowledge and skills sufficient to enable them to perform their fiduciary activities adequately.

**Tab D**

## COMMITTEE REPORT

---

DATE: May 25, 1999

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

FROM: **Domestic Manager Committee**

The Domestic Manager Committee met on May 13, 1999 to consider the following agenda items:

- Review of manager performance for the period ending March 31, 1999.
- Review of the annual benchmark quality evaluation.
- Recommendation to terminate American Express Asset Management from the Domestic Equity Program.
- Recommendation to promote Cohen, Klingenstein & Marks to the Domestic Equity Program.
- Recommendation to change to the asset allocation for the Environmental Trust Fund.

Action is requested by the SBI / IAC on the last three items.

### INFORMATION ITEMS:

1. **Review of manager performance for the period ending March 31, 1999.**

- *Stock Managers*

For the period ending March 31, 1999, the **domestic stock manager program** under-performed its aggregate benchmark and the Wilshire 5000 for the quarter, the year and the five year periods while outperforming the benchmark for the latest three year period. The **current managers** also under-performed the benchmark for the quarter, the year and the five-year periods and outperformed the benchmark and the Wilshire 5000 for the latest three year period.

Time period	Total Program	Wilshire 5000	Current Mgrs. Only	Aggregate Benchmark
Quarter	2.8%	3.8%	2.8%	3.2%
1 Year	11.9	13.1	12.2	12.8
3 Years	24.6	24.5	24.9	24.5
5 Years	23.2	23.6	23.6	23.7

The performance evaluation reports for the stock managers start on the first "blue page" of this Tab.

- **Bond Managers**

For the period ending March 31, 1999, the **bond manager program** and **current managers** outperformed the Lehman Aggregate and the aggregate benchmark for the quarter, three and five year time periods and under-performed the Lehman Aggregate and the benchmark for the latest one year period.

Time period	Total Program	Lehman Aggregate*
Quarter	-0.2%	-0.5%
1 Year	6.2	6.5
3 Years	8.2	7.8
5 Years	8.0	7.8

Current Mgrs. Only	Aggregate Benchmark
-0.2%	-0.5%
6.2	6.5
8.2	7.8
8.0	7.8

\* Reflects Salomon BIG index prior to 7/94.

The performance evaluation reports for the bond managers start on the **third “blue page”** of this Tab.

**2. Review of the annual benchmark quality evaluation.**

The SBI’s Manager Continuation Policy requires staff to review all active domestic stock managers’ custom benchmarks on an annual basis to determine if the benchmark can be used as a valid performance measurement standard for the manager. The custom benchmarks are evaluated by using a set of quantitative benchmark quality measures.

A review of the benchmark quality measures indicated that the managers’ current benchmarks are a satisfactory representation of the managers’ investment styles, and that the benchmarks can be used as valid measurement standards. While the benchmarks of *Oppenheimer Capital* and *Compass Capital* are satisfactory, staff has observed that some characteristics of each of these firms’ benchmarks fall at the lower end of an acceptable range and warrant further evaluation. Staff plans to review the benchmark construction process with the managers and Richards & Tierney later in the year.

A summary of the benchmark quality evaluation and a description of the benchmark quality measures are included beginning on **page 7** of this tab.



## **ACTION ITEMS:**

### **3. Recommendation to terminate American Express Asset Management from the Domestic Equity Program.**

American Express Asset Management (AMG), an active manager in the Domestic Equity Program, has severely under performed their custom benchmark, plotting below the warning level on a five year rolling VAM graph for eighteen consecutive months (see **page 6 after the first blue page in this tab**). As a result of this continuous under performance, Staff conducted an in-depth review of the firm.

AMG was hired by the SBI in January to manage a portfolio using a "rotational" style of management. Through 1996, performance of that product had not met SBI expectations. In January 1997, Staff authorized AMG to begin using a quantitative process to construct a concentrated 30 stock portfolio that AMG felt could provide better performance results relative to their custom benchmark. That quantitative process relies on the research team's analysis and company rankings as inputs to an optimization model.

Staff believes AMG's significant under performance during the past one, three and five year periods is a result of problems they have had with staff turnover on their research team. In the past year, AMG has lost eight equity research analysts and two portfolio managers from a team of thirty. In addition, AMG replaced their Director of Research. The level of turnover greatly concerns Staff, as the research team directly impacts the inputs into the model and the resulting performance of the SBI's portfolio.

Due to the continuing under-performance and a loss of confidence in AMG's ability to develop a research team that Staff believes can recover losses sustained relative to AMG's benchmark, Staff recommended that the SBI terminate its domestic equity relationship with American Express Asset Management Group.

The Committee concurred with staff's views that AMG fails to meet the SBI's qualitative guidelines. Due to these qualitative shortcomings and poor performance results, the Committee recommends that the SBI terminate its relationship with AMG.

## **RECOMMENDATION:**

**The Committee recommends that the SBI terminate its contractual relationship with American Express Asset Management for equity investment management services.**

**4. Recommendation to promote Cohen, Klingenstein & Marks to the Domestic Equity Program.**

Cohen, Klingenstein & Marks (CKM) was hired by the SBI in April 1994 as an active manager in the Emerging Manager Program. The firm was founded in 1981 as an economics and investment-consulting firm to institutional clients. CKM began managing money in 1987 and by 1990 had exited consulting to focus on investment management. Over the past several years, CKM has handled significant asset growth very well, facilitated by good planning and the liquidity of large-capitalization stocks. Assets under management at March 31, 1999 totaled \$2.9 billion.

CKM is a large-capitalization, growth stock manager that seeks to outperform the market by focusing on two variables: 1) economic cycles; and 2) security valuation. CKM employs a disciplined three-step investment approach. First, a top down economic outlook is developed. Second, proprietary quantitative screens are run to produce candidates for further research. Third, traditional fundamental analysis is applied to select stocks for the portfolio.

CKM has outperformed its benchmark since inception and over all other periods. Since the portfolio's April 1994 inception, CKM has outperformed its benchmark by almost 5.00%. This far exceeds the long-term return expectations for domestic active managers of +0.50% to +1.00%.

CKM is a strong organization with a good investment process, and demonstrated skill to add value to their custom benchmark. Therefore, Staff believes CKM would make a good addition to the Domestic Equity Program. The Committee concurs with Staff's recommendation.

**RECOMMENDATION:**

**The Committee recommends that Cohen, Klingenstein & Marks be transferred to the regular Domestic Equity Program from the Emerging Manager Stock Program.**

**5. Proposed change to the asset allocation for the Environmental Trust Fund.**

As a result of a 1998 Constitutional amendment, the spending guidelines for the Environmental Trust Fund (ETF) have changed. Previously the investments of the Fund were governed by accounting restrictions on capital gains and losses. The ETF will now be managed under an endowment policy that sets spending in each year of the biennium at up to 5.5% of the Fund's total market value at the end of the fiscal year, one year before the biennium.

As a result of the change in spending guidelines, the Legislative Commission of Minnesota Resources (LCMR) has indicated a desire to shift the asset allocation from a 50% stock / 50% bond to 70% stock / 30% bond allocation. The

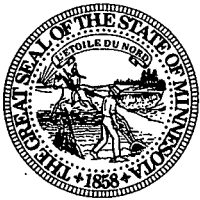
Committee believes that this allocation will position the Fund for the best long-term growth potential in both total market value and annual withdrawal levels.

**RECOMMENDATION:**

**The Committee recommends that the SBI approve a 70% stock / 30% bond asset allocation for the Environmental Trust Fund.**



MINNESOTA  
STATE  
BOARD OF  
INVESTMENT



Board Members:

Governor  
Jesse Ventura

State Auditor  
Judi Dutcher

State Treasurer  
Carol C. Johnson

Secretary of State  
Mary Kiffmeyer

Attorney General  
Mike Hatch

Executive Director:

Howard J. Bicker

Capitol Professional  
Office Building  
Suite 200  
590 Park Street  
St. Paul, MN 55103  
(651) 296-3328  
FAX (651) 296-9572  
E-mail:  
[minn.sbi@state.mn.us](mailto:minn.sbi@state.mn.us)  
[www.sbi.state.mn.us](http://www.sbi.state.mn.us)

An Equal Opportunity  
Employer

DATE: May 6, 1999

TO: Members, Domestic Manager Committee

FROM: Stephen J. Koessl *SK*  
Mansco Perry III *MP3*

SUBJECT: Annual Benchmark Quality Evaluation

The SBI's Manager Continuation Policy requires staff to review all custom benchmarks for active domestic stock managers on an annual basis. The purpose of the analysis is to determine whether a benchmark adequately reflects the manager's unique investment style and therefore can be used as a valid performance measurement standard for the manager.

Attached is a summary of the benchmark evaluation showing the key characteristics of the benchmarks through December 1998, and staff's assessment of each manager's benchmark. We have attached a glossary of terms for your reference.

The custom benchmarks for most of the active domestic stock managers are satisfactory and continue to show characteristics of a benchmark that reflects the investment style of the manager. While the benchmarks of Oppenheimer Capital and Compass Capital are acceptable, staff has observed some characteristics of each of these firms' benchmarks, which warrant continued staff monitoring:

**Oppenheimer Capital:** Oppenheimer's benchmark is a better representation of their style than the S&P 500, but there has been some deterioration in the qualitative characteristics over the past year or two. Oppenheimer is conducting a complete review of the benchmark construction process with BARRA, the firm that compiles their benchmark. They will look for changes to the construction process to improve the benchmark quality.

**Compass Capital's** benchmark quality deteriorated slightly over the past year. The deterioration results from a decrease in the style correlation, which represents a decline in the correlation of the managers benchmark misfit to its excess return versus the market.

As a result of staff's review of benchmark characteristics with SBI investment managers, staff plans to evaluate the benchmark construction process with the managers and Richards & Tierney later in the year.



# BENCHMARK QUALITY EVALUATION

For Period Ending  
December 1998

General Guidelines	Alliance Capital	American Express	Brinson Partners	Forstmann-Leff	Franklin Portfolio
Benchmark Evaluation Period	8601-9812	9301-9812	9308-9812	8601-9812	8905-9812
Benchmark Coverage (Recent)	92%	88%	97%	93%	95%
Positive Active Positions (Recent)	99%	100%	100%	98%	100%
Turnover (Recent semi-annual)	19%	16%	7%	38%	8%
<b>Active Risk</b>					
Annualized Std. Dev. of VAM - Portfolio vs. S&P500	6.00	5.07	3.77	6.50	4.77
- Portfolio vs. Bnmk	4.61	4.78	3.28	6.01	4.13
Risk Reduction	23%	6%	13%	8%	13%
<b>Correlation Analysis</b>					
Portfolio vs S&P500 correlation to Bnmk vs S&P500	0.642	0.345	0.496	0.431	0.506
Portfolio vs Bnmk correlation to Bnmk vs S&P500	0.083	0.073	-0.251	0.111	0.181
<b>Relative Style Coordinate Analysis</b> (Portfolio located closer to bnmk than S&P500?)	Yes	Yes	Yes	Yes	Yes
<b>Risk Characteristics (B/P, E/P, Growth, Etc.)</b> (Portfolio similar to bnmk over time?)	Yes	Yes	Yes	Yes	Yes
<b>Economic Sector Weights</b> (Portfolio similar to bnmk over time?)	Yes	Yes	Yes	Yes	Yes
<b>SBI's Overall Assessment</b>	Excellent	Satisfactory	Excellent	Satisfactory	Excellent
	Excellent, Satisfactory, Unsatisfactory				

# BENCHMARK QUALITY EVALUATION

For Period Ending  
December 1998

	GeoCapital Corporation	Lincoln Capital	Oppenheimer Capital
Benchmark Evaluation Period	9005-9812	9308-9812	9308-9812
Benchmark Coverage (Recent)	86%	100%	82%
Positive Active Positions (Recent)	97%	100%	100%
Turnover (Recent semi-annual)	31%	32%	21%
<b>Active Risk</b>			
Annualized Std. Dev. of VAM - Portfolio vs. S&P500 - Portfolio vs. Bnmk	11.07 7.38	5.42 3.39	4.40 4.19
Risk Reduction	33%	38%	5%
<b>Correlation Analysis</b>			
Portfolio vs S&P500 correlation to Bnmk vs S&P500	0.768	0.782	0.343
Portfolio vs Bnmk correlation to Bnmk vs S&P500	-0.011	-0.332	0.304
<b>Relative Style Coordinate Analysis</b> (Portfolio located closer to bnmk than S&P500?)	Yes	Yes	Yes
<b>Risk Characteristics (B/P, E/P, Growth, Etc.)</b> (Portfolio similar to bnmk over time?)	Yes	Yes	No
<b>Economic Sector Weights</b> (Portfolio similar to bnmk over time?)	Yes	Yes	No
<b>SBI's Overall Assessment</b>	Satisfactory	Excellent	Satisfactory
<b>General Guidelines</b>			
Benchmark Coverage (Recent)	≥ 85%		
Positive Active Positions (Recent)	Near 100%		
Turnover (Recent semi-annual)	< 25%		
Active Risk			
Annualized Std. Dev. of VAM - Portfolio vs. S&P500	Larger #		
- Portfolio vs. Bnmk	Smaller #		
Risk Reduction	% Change		
Correlation Analysis			
Portfolio vs S&P500 correlation to Bnmk vs S&P500	> 0.500		
Portfolio vs Bnmk correlation to Bnmk vs S&P500	-0.2 to 0.2		
Relative Style Coordinate Analysis (Portfolio located closer to bnmk than S&P500?)	Yes		
Risk Characteristics (B/P, E/P, Growth, Etc.) (Portfolio similar to bnmk over time?)	Yes		
Economic Sector Weights (Portfolio similar to bnmk over time?)	Yes		
SBI's Overall Assessment	Excellent, Satisfactory, Unsatisfactory		



# BENCHMARK QUALITY EVALUATION

For Period Ending  
December 1998

General Guidelines	CIC Asset	Cohen, Klingenstein & Marks	Compass Capital	New Amsterdam Partners
Benchmark Evaluation Period	9405-9812	9405-9812	9405-9812	9405-9812
Benchmark Coverage (Recent)	92%	96%	98%	100%
Positive Active Positions (Recent)	100%	100%	100%	100%
Turnover (Recent semi-annual)	18%	19%	13%	24%
<b>Active Risk</b>				
Annualized Std. Dev. of VAM - Portfolio vs. S&P500	5.80	6.76	6.12	4.66
- Portfolio vs. Bnmk	4.21	6.36	5.69	4.58
Risk Reduction	27%	6%	7%	2%
<b>Correlation Analysis</b>				
Portfolio vs S&P500 correlation to Bnmk vs S&P500	0.694	0.359	0.387	0.324
Portfolio vs Bnmk correlation to Bnmk vs S&P500	-0.144	0.076	-0.398	0.078
<b>Relative Style Coordinate Analysis</b> (Portfolio located closer to bnmk than S&P500?)	Yes	Yes	Yes	Yes
<b>Risk Characteristics (B/P, E/P, Growth, Etc.)</b> (Portfolio similar to bnmk over time?)	Yes	Yes	Yes	Yes
<b>Economic Sector Weights</b> (Portfolio similar to bnmk over time?)	Yes	Yes	Yes	Yes
<b>SBI's Overall Assessment</b>	Excellent	Satisfactory	Satisfactory	Satisfactory

# BENCHMARK QUALITY EVALUATION

For Period Ending  
December 1998

General Guidelines	Valenzuela Capital	Wilke Thompson	Winslow Capital	Zevenbergen Capital
Benchmark Evaluation Period	9405-9812	9405-9812	9405-9812	9405-9812
Benchmark Coverage (Recent)	96%	79%	98%	92%
Positive Active Positions (Recent)	100%	100%	100%	100%
Turnover (Recent semi-annual)	16%	13%	13%	24%
Active Risk				
Annualized Std. Dev. of VAM - Portfolio vs. S&P500 - Portfolio vs. Bnmk	6.63 5.99	14.26 9.72	8.77 6.83	8.22 6.64
Risk Reduction	10%	32%	22%	19%
Correlation Analysis				
Portfolio vs S&P500 correlation to Bnmk vs S&P500	0.492	0.732	0.631	0.598
Portfolio vs Bnmk correlation to Bnmk vs S&P500	-0.440	-0.277	0.109	0.052
Relative Style Coordinate Analysis (Portfolio located closer to bnmk than S&P500?)	Yes	Yes	Yes	Yes
Risk Characteristics (B/P, E/P, Growth, Etc.) (Portfolio similar to bnmk over time?)	Yes	Yes	Yes	Yes
Economic Sector Weights (Portfolio similar to bnmk over time?)	Yes	Yes	Yes	Yes
SBI's Overall Assessment	Satisfactory	Satisfactory	Excellent	Excellent

## GLOSSARY

**Benchmark coverage** measures the percentage of securities held in the actual portfolio which also are contained in the benchmark portfolio. If a benchmark truly captures the securities on which the manager has an investment opinion, it will have a high coverage ratio. Coverage ratios vary according to the level of discipline exhibited in a manager's definition and implementation of the investment process. A valid benchmark should produce a coverage ratio of 80% or greater.

An **active position** is the difference between the actual portfolio weight of a security less the corresponding benchmark weight of the same security. A good benchmark will generate positive active positions with very rare exceptions. The weighting of each holding in the active portfolio should exceed the corresponding weights assigned to the same securities in the benchmark because if a manager finds a particular stock attractive, he will hold more than the benchmark position. Conversely, if a manager feels a security is unattractive, he will not hold the security at all.

**Benchmark turnover** measures the proportion of the benchmark's market value allocated to purchases and reinvestment of income during a periodic rebalancing. A valid and investable benchmark should experience reasonable levels of turnover. Semi-annual turnover in the 20 to 30% range is consistent with a passive investment in the benchmark.

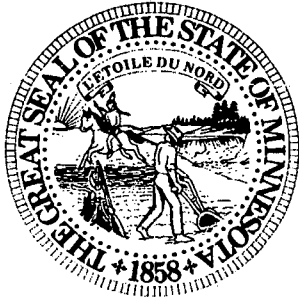
**Active Risk** analysis is a useful measure in determining explanatory power of a customized benchmark. It is the variability (standard deviation) of the manager's active return (active portfolio return less benchmark return). Since a customized benchmark is constructed to capture a manager's investment style, a good benchmark should produce lower active risk than using a market index as the benchmark. This indicates that the benchmark more effectively screens out random noise associated with factors unrelated to a manager's investment style. To indicate the amount of return the manager generates relative to the risk they take, an information ratio (IR) can be calculated. An IR is calculated by dividing the Value of Active Management (VAM or active return) by the active risk. Holding everything else constant, the lower active risk resulting from a valid benchmark will produce a higher information ratio (IR) than a market index. In general, the higher the information ratio the shorter the time frame needed to determine whether the manager can or cannot add value at a statistically significant level.

**Correlation analysis:** The explanatory power of a manager's benchmark can also be evaluated by looking at the correlation between three residual return series: the manager's actual returns versus those of the market, the benchmark returns versus those of the market, and the actual portfolio returns versus those of the benchmark.

A good benchmark should exhibit significantly positive correlation between portfolio vs. market and benchmark vs. market, because when the manager's benchmark, or investment style, performs well relative to the market, the actual portfolio should also do

well relative to the market. A good benchmark will have a correlation between portfolio vs. market and benchmark vs. market greater than 0.50.

If a manager's investment style is accurately reflected in the benchmark, the manager's ability to add value relative to the benchmark should not be affected by the performance of its investment style relative to the market. Therefore, the correlation between benchmark vs. market and portfolio vs. benchmark should be essentially zero over time.



# STATE BOARD OF INVESTMENT

---

---

## Stock Manager Evaluation Reports

First Quarter, 1999

**(Blank)**

**COMBINED RETIREMENT FUNDS  
DOMESTIC STOCK MANAGERS  
Periods Ending March, 1999**

	Quarter		1 Year		3 Years		5 Years		Since Inception (1)		Market Value (in millions)	Pool %
	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %		
<b>Active Managers</b>												
Alliance Capital	10.4	8.6	40.0	28.9	42.2	32.9	33.9	28.6	22.2	16.5	\$1,719.25	8.0%
American Express AMG	2.5	5.7	10.3	20.8	19.8	29.3	20.2	26.9	16.1	17.7	\$597.09	2.8%
Brinson Partners	-1.7	1.4	-0.1	6.8	19.4	21.8	22.0	21.7	19.1	19.1	\$679.43	3.2%
Forstmann-Leff	11.6	2.7	26.5	1.4	32.2	16.1	26.9	18.2	16.9	13.5	\$719.37	3.4%
Franklin Portfolio	-0.2	3.2	0.4	8.1	20.1	21.1	20.9	21.3	16.7	16.4	\$539.62	2.5%
GeoCapital	-4.0	-8.0	-10.6	-18.4	11.3	2.9	13.1	12.2	14.6	13.5	\$479.30	2.2%
Lincoln	8.1	6.7	33.7	32.1	32.5	34.9	30.5	30.7	26.2	26.4	\$921.79	4.3%
Oppenheimer	2.8	3.8	8.2	14.1	24.9	25.1	25.5	23.9	22.3	20.8	\$787.81	3.7%
Weiss Peck & Greer	-11.1	-7.0	-29.6	-10.8	-2.8	6.1	6.2	12.0	5.7	11.6	\$278.19	1.3%
<b>Emerging Managers (2)</b>	3.4	2.3	12.1	9.0	23.6	21.8	22.3	21.2	22.3	21.2	\$734.19	3.4%
<b>Semi-Passive Managers (3)</b>												
Franklin Portfolio	-1.0	2.4	7.0	12.6	24.0	25.7			26.7	27.9	\$2,124.57	9.9%
JP Morgan	1.8	2.4	11.9	12.6	25.5	25.7			27.9	27.9	\$2,261.12	10.6%
Barclays Global Investors	0.1	2.4	8.2	12.6	24.2	25.7			27.6	27.9	\$2,191.94	10.2%
<b>Passive Manager (4)</b>												
Barclays Global Investors	3.8	3.8	13.1	13.1	24.9	24.5			25.5	25.2	\$7,380.21	34.5%
									<b>Since 1/1/84</b>			
Current Aggregate	2.8	3.2	12.2	12.8	24.9	24.5	23.6	23.7	17.8	15.8	\$21,413.88	100.0%
Historical Aggregate (5)	2.8	3.2	11.9	12.5	24.6	24.4	23.2	23.5	16.2	16.4		
Wilshire Adjusted		3.8		13.1		24.5		23.6		16.4		
Wilshire 5000		3.8		13.1		24.5		23.6		16.7		

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

(2) Aggregate of emerging manager group. The benchmark reflects a composite of the individual manager customized benchmarks since inception of the program on 4/1/94.

(3) Semi-passive managers retained 1/95. All use completeness fund benchmark.

(4) Passive manager retained 7/95 to manage a Wilshire 5000 index fund.

(5) Includes the performance of terminated managers.

**(Blank)**



**ALLIANCE CAPITAL MANAGEMENT**  
**Periods Ending March, 1999**

**Portfolio Manager: Jack Koltes**

**Assets Under Management: \$1,719,253,221**

**Investment Philosophy**

Alliance searches for companies likely to experience high rates of earnings growth, on either a cyclical or secular basis. Alliance invests in a range of medium to large growth and 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.

**Staff Comments**

No comments at this time.

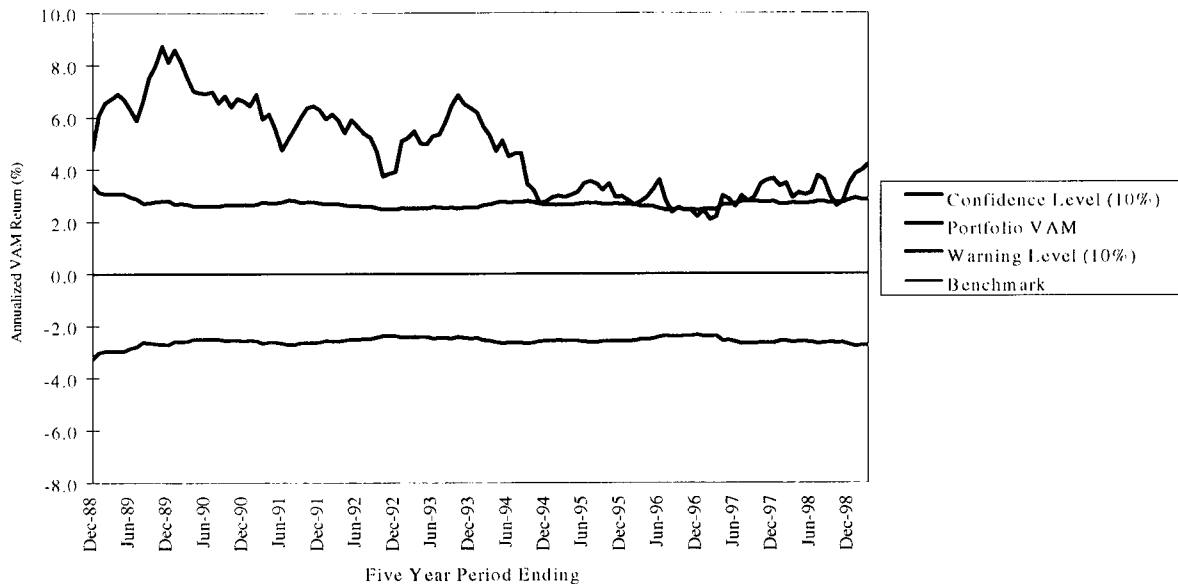
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	10.4%	8.6%
Last 1 year	40.0	28.9
Last 2 years	53.8	41.0
Last 3 years	42.2	32.9
Last 4 years	40.4	32.7
Last 5 years	33.9	28.6
Since Inception (1/84)	22.2	16.5

**Recommendation**

No action required.

**ALLIANCE CAPITAL MANAGEMENT**  
**Rolling Five Year VAM**



**AMERICAN EXPRESS ASSET MANAGEMENT**  
**Periods Ending March, 1999**

**Portfolio Manager: Jim Johnson**

**Assets Under Management: \$597,089,848**

**Investment Philosophy**

American Express Asset Management Group (AMG) employs a concentrated style of management. The methodology by which the portfolio is managed is based on a fundamentally driven and quantitatively managed process. Using 30 to 40 of the top-rated stocks by American Express Financial research analysts, the portfolio seeks to maximize the greatest level of risk-adjusted return for a predetermined level of risk tolerance. Due to the level of concentration, the active risk versus the normal portfolio will be higher than that of the typical active manager. Trading within the portfolio is also analyst driven, which will lead to turnover between 80 and 120 percent per year. Because the focus of the methodology is concentrated stock selection, the portfolio will remain fully invested at all times.

**Staff Comments**

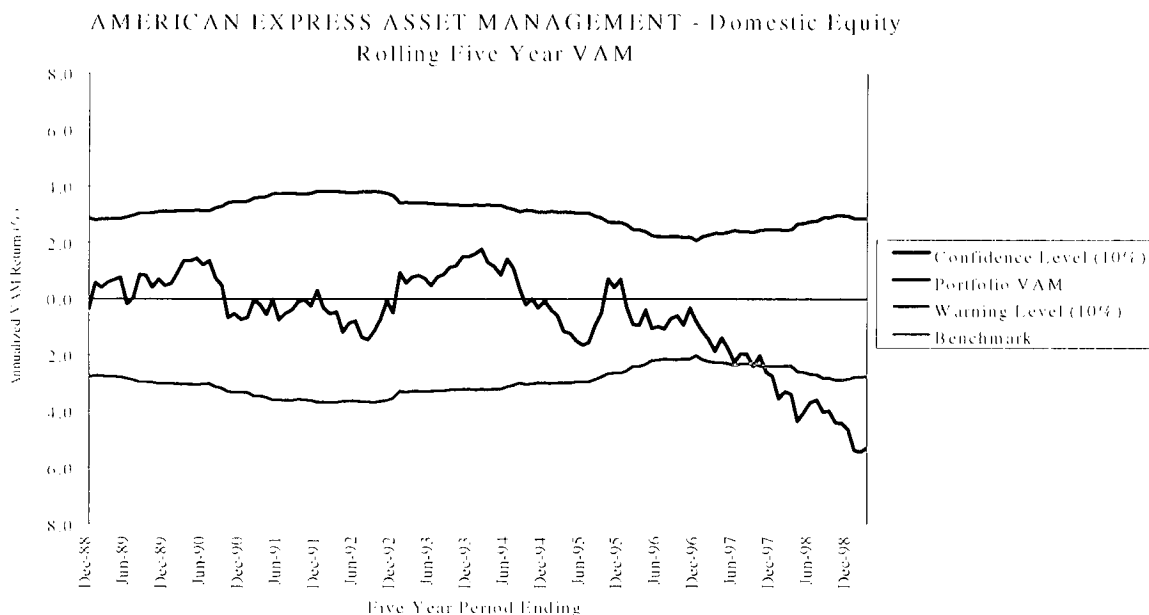
Staff met with AMG at their Minneapolis office in February 1999. AMG continues to have high analyst turnover. Guru Baliga who has been one of the top portfolio managers at AMG, left the firm in the fourth quarter to join Alliance Capital. In addition, AMG again underperformed their benchmark for the quarter and year due to an overweight in the grocery store and retail pharmacy areas, as well as poor stock selection in the technology sector.

**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	2.5%	5.7%
Last 1 year	10.3	20.8
Last 2 years	23.1	34.5
Last 3 years	19.8	29.3
Last 4 years	22.9	30.1
Last 5 years	20.2	26.9
Since Inception (1/84)	16.1	17.7

**Recommendation**

Due to continuing underperformance and staff's loss of confidence in AMG's ability to recover losses relative to their benchmark, staff recommends terminating the relationship with American Express.



**BRINSON PARTNERS**  
**Periods Ending March, 1999**

**Portfolio Manager: Jeff Diermeier**

**Assets Under Management: \$679,432,135**

**Investment Philosophy**

Brinson Partners uses a relative value approach to equity investing. They believe that the market price will ultimately reflect the present value of the cash flows the security will generate for the investor. They also believe both a macroeconomic theme approach and a bottom-up stock selection process can provide insight into finding opportunistic investments. Brinson uses their own discounted free cash flow model as their primary analytical tool for estimating the intrinsic value of a company.

**Staff Comments**

Staff performed an annual review of Brinson at their Chicago office in February 1999. Staff discussed the significance of the post-venture portion of the portfolio in depth with Alvin Marley, Managing Director. The makeup of the portfolio is 65% in 32 large cap stocks, 27% in 50 mid cap stocks, and the remaining 8% in the post venture portfolio. The organization remains solid, and the firm continues to focus on their investment philosophy. However, the market's recent preference for growth stocks has led to the recent underperformance.

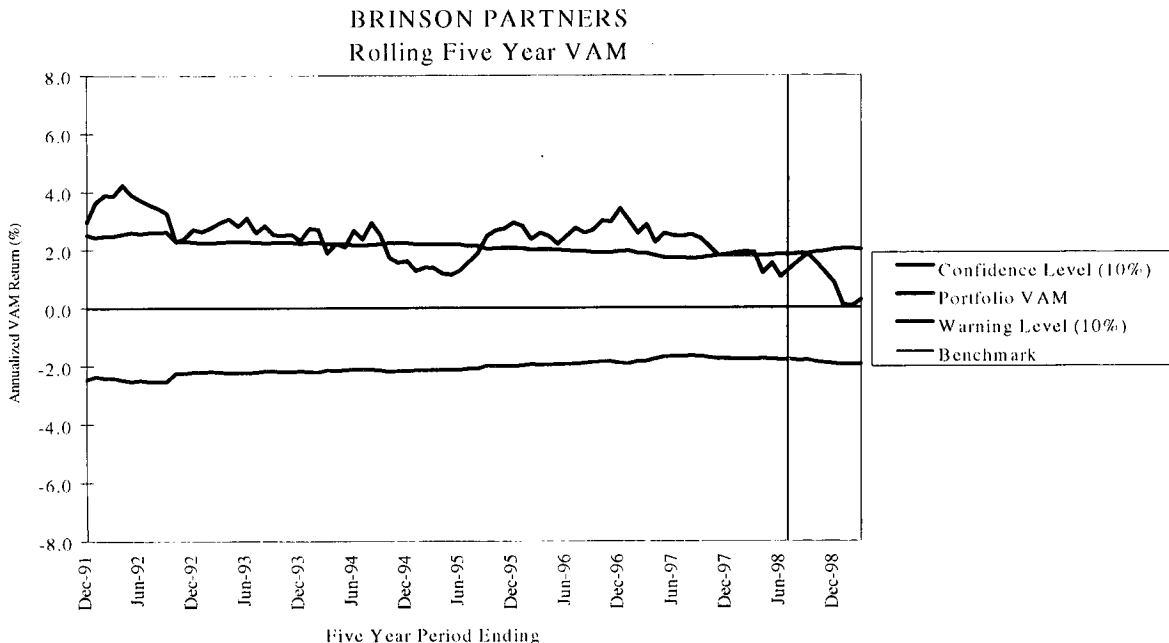
Staff has learned that Gary Brinson will be focusing on investment matters and relinquishing his business management duties to Peter Wuffli effective September 1999.

**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	-1.7%	1.4%
Last 1 year	-0.1	6.8
Last 2 years	19.9	25.6
Last 3 years	19.4	21.8
Last 4 years	23.9	23.8
Last 5 years	22.0	21.7
Since Inception (7/93)	19.1	19.1

**Recommendation**

No action required.



Note: Area to the left of vertical line includes performance prior to retention by the SBI.

**FORSTMANN-LEFF ASSOCIATES**  
**Periods Ending March, 1999**

**Portfolio Manager: Joel Leff**

**Assets Under Management: \$719,366,342**

**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 equity sectors over the course of a market cycle. The firm tends to purchase liquid, medium to large capitalization stocks. In the past, Forstmann-Leff has made sizable market timing moves at any point during a market cycle.

**Staff Comments**

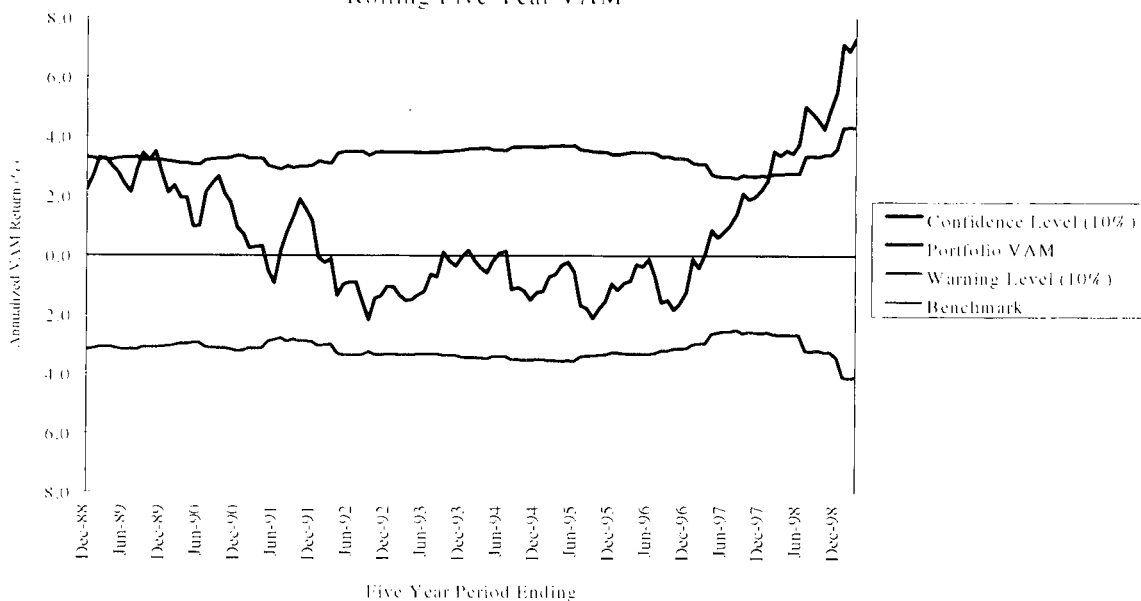
No comments at this time.

**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>	
Last Quarter	11.6%	2.7%	No action required.
Last 1 year	26.5	1.4	
Last 2 years	39.7	18.4	
Last 3 years	32.2	16.1	
Last 4 years	32.5	19.6	
Last 5 years	26.9	18.2	
Since Inception (1/84)	16.9	13.5	

**Recommendation**

**FORSTMANN-LEFF ASSOCIATES**  
**Rolling Five Year VAM**



**FRANKLIN PORTFOLIO ASSOCIATES**  
**Periods Ending March, 1999**

**Portfolio Manager: John Nagorniak**

**Assets Under Management: \$539,621,264**

**Investment Philosophy**  
**Active**

Franklin believes that rigorous and consistent application of fundamentally based valuation criteria will produce value added investment returns. Franklin builds a portfolio by using a series of more than 30 integrated computer models that value a universe of 3500 stocks. Their models rank each security based on fundamental momentum, relative value, future cash flow, and supplementary models, then a composite ranking provides one ranked list of securities reflecting their relative attractiveness. Stocks that fall below the median ranking are sold and proceeds reinvested in stocks from the top deciles in the ranking system. Franklin uses the BARRA E3 risk model to monitor the portfolio's systematic risk and industry weightings, relative to the selected benchmark, to achieve a residual risk of 4.0 to 4.5 percent for the active portfolio.

**Staff Comments**

Franklin has underperformed their benchmark due to recent volatility and narrow leadership in the stock market. Franklin's risk model is based on the historical volatility of individual stocks. Since history was less volatile than current conditions, the risk model underestimated tracking error of the portfolio. They believe the narrow leadership in the market caused the most pain in the portfolio, but do not see this as a permanent condition. The organization remains solid, and the firm continues to implement their quantitative process. Staff has scheduled a meeting with Franklin in May 1999 and will continue to monitor them closely.

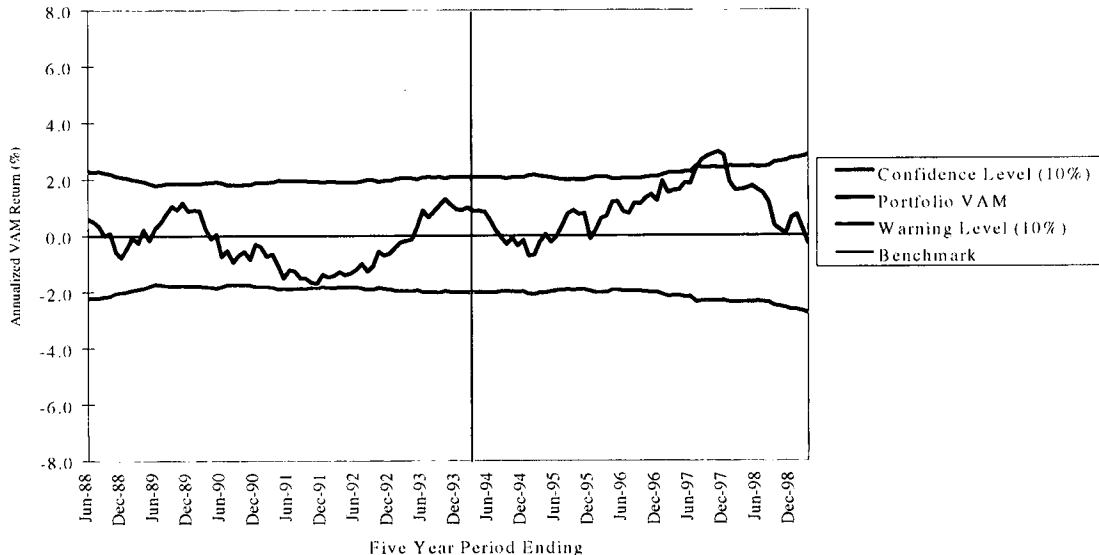
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	-0.2%	3.2%
Last 1 year	0.4	8.1
Last 2 years	23.1	25.5
Last 3 years	20.1	21.1
Last 4 years	23.1	23.3
Last 5 years	20.9	21.3
Since Inception (4/89)	16.7	16.4

**Recommendation**

Staff recommends that Franklin discuss their investment process at the August 1999 Domestic Manager Committee meeting.

FRANKLIN PORTFOLIO ASSOCIATES - Active  
 Rolling Five Year VAM



Note: Area to the left of vertical line includes performance prior to retention by the SBI.

**GEOCAPITAL CORP.**  
**Periods Ending March, 1999**

**Portfolio Manager: Barry Fingerhut**

**Assets Under Management: \$479,295,286**

**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 individual stock selection analysis to invest in the growth/technology and special situation areas of the market. In the growth/technology area, GeoCapital looks for companies that will have above average growth due to good product development and limited competition. In the special situation area, the key factors are 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 a lack of attractive investment opportunities.

**Staff Comments**

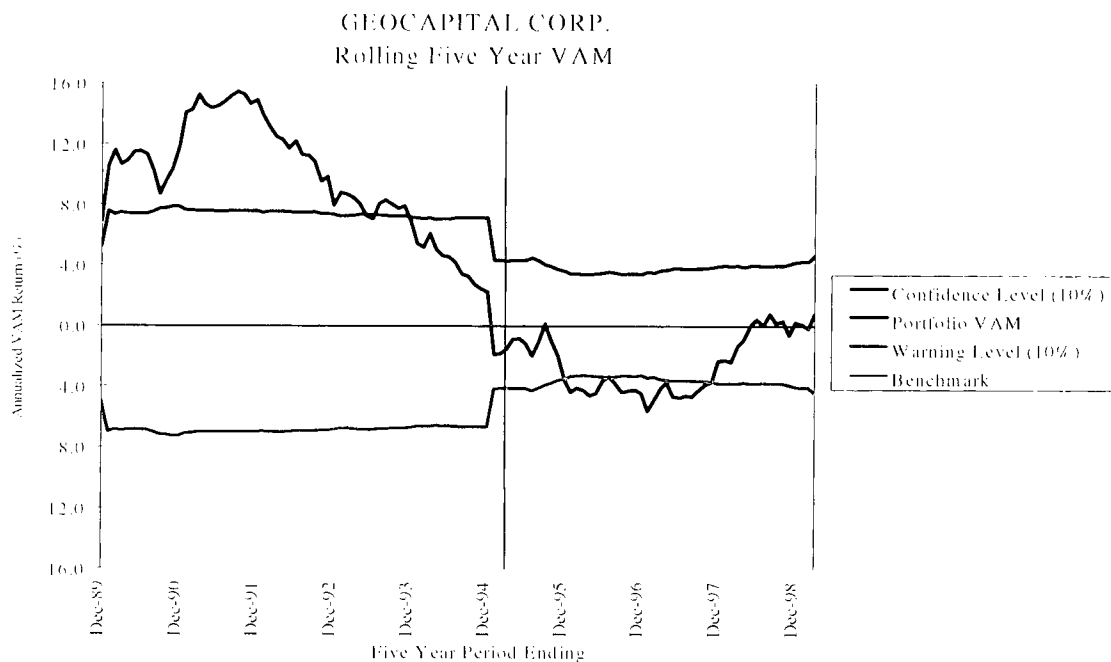
No comments at this time.

**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	-4.0%	-8.0%
Last 1 year	-10.6	-18.4
Last 2 years	16.5	7.3
Last 3 years	11.3	2.9
Last 4 years	14.8	10.2
Last 5 years	13.1	12.2
Since Inception (4/90)	14.6	13.5

**Recommendation**

No action required.



Note: Scale differs from other VAM graphs.

Area to the left of vertical line includes performance prior to retention by the SBI.

**LINCOLN CAPITAL MANAGEMENT**  
**Periods Ending March, 1999**

**Portfolio Manager: Parker Hall**

**Assets Under Management: \$921,785,977**

**Investment Philosophy**

Lincoln Capital concentrates on established medium to large capitalization companies that have demonstrated historically strong growth and will continue to grow. The firm uses traditional fundamental company analysis and relative price/earnings valuation disciplines in its stock selection process. In addition, companies held by Lincoln generally exhibit premium price/book ratios, high return on equity, strong balance sheets and moderate earnings variability.

**Staff Comments**

Staff performed an annual review of Lincoln at their Chicago office in February 1999. Lincoln outperformed their benchmark for the quarter and year due to positive stock selection in the health care and technology sectors. In addition, Lincoln has hired a financial services analyst and is in the process of searching for a consumer non-durables analyst. Further, Lincoln has implemented a new trading system that they believe will improve their trading efficiencies. Finally, the organization and investment process has remained stable and staff uncovered no negative issues.

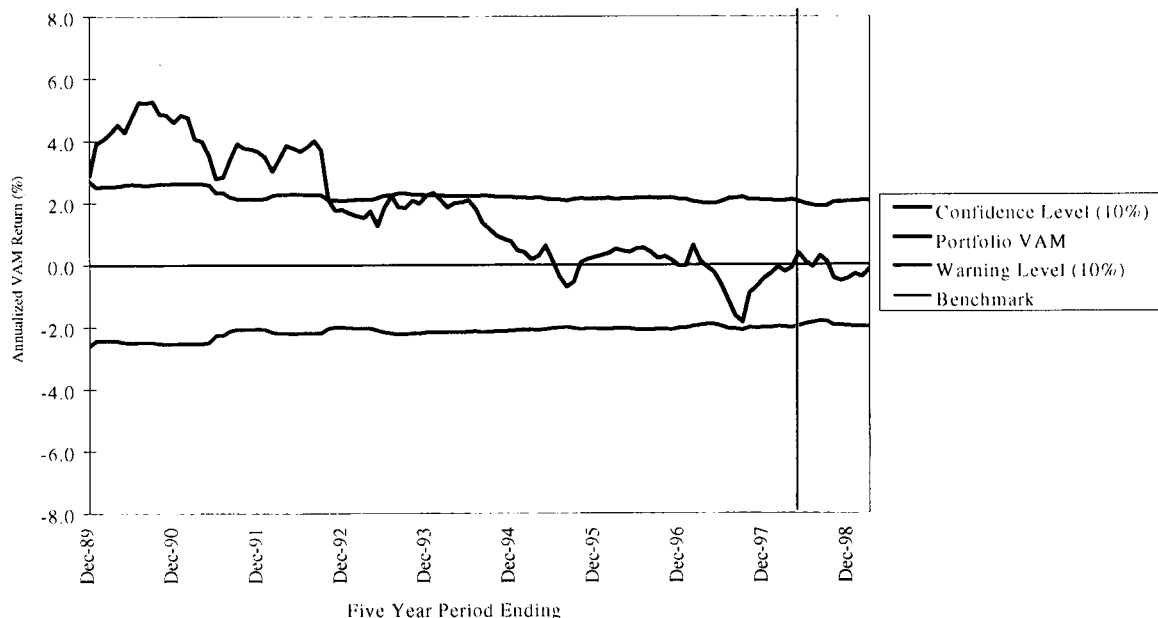
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	8.1%	6.7%
Last 1 year	33.7	32.1
Last 2 years	39.6	43.1
Last 3 years	32.5	34.9
Last 4 years	33.7	34.0
Last 5 years	30.5	30.7
Since Inception (7/93)	26.2	26.4

**Recommendation**

No action required.

**LINCOLN CAPITAL MANAGEMENT - Domestic Equity**  
**Rolling Five Year VAM**



Note: Area to the left of vertical line includes performance prior to retention by the SBI.

**OPPENHEIMER CAPITAL**  
**Periods Ending March, 1999**

**Portfolio Manager: John Lindenthal**

**Assets Under Management: \$787,812,070**

**Investment Philosophy**

Oppenheimer's objectives are to: 1) preserve capital in falling markets; 2) manage risk in order to achieve less volatility than the market; and 3) produce returns greater than the market indices, the inflation rate and a universe of comparable portfolios with similar objectives. The firm achieves its objectives by purchasing securities considered to be undervalued on the basis of known data and strict financial standards and by making timely changes in the asset mix. Based on its outlook on the market and the economy, Oppenheimer will make moderate shifts between cash and equities. Oppenheimer focuses on five key variables when evaluating companies: management, financial strength, profitability, industry position, and valuation.

**Staff Comments**

No comments at this time.

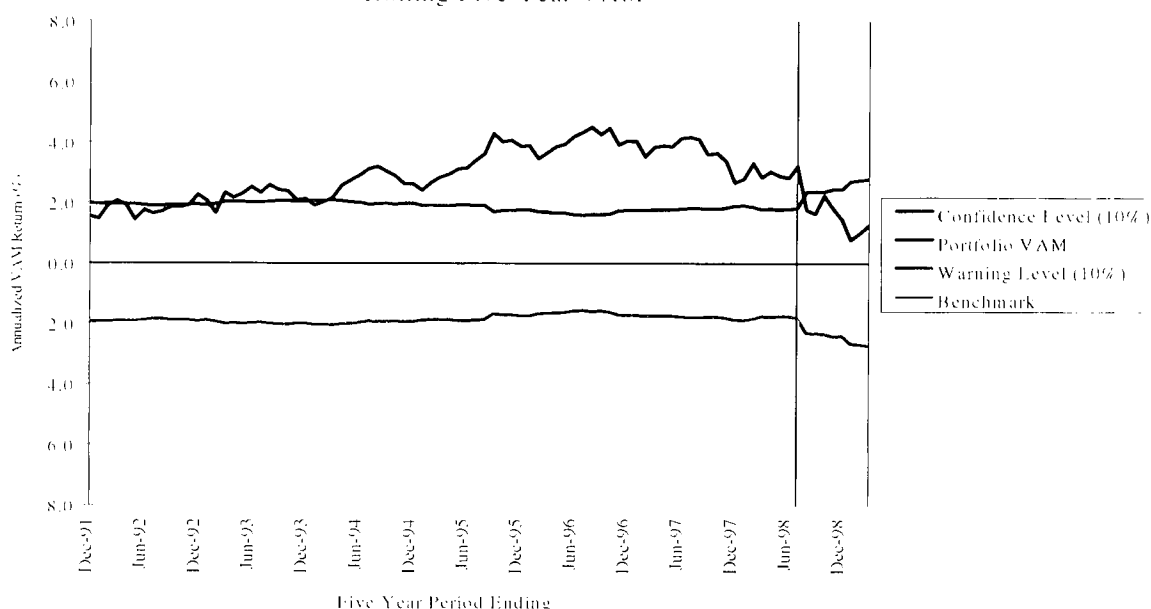
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	2.8%	3.8%
Last 1 year	8.2	14.1
Last 2 years	26.9	29.6
Last 3 years	24.9	25.1
Last 4 years	28.0	26.6
Last 5 years	25.5	23.9
Since Inception (7/93)	22.3	20.8

**Recommendation**

No action required.

OPPENHEIMER CAPITAL  
 Rolling Five Year VAM



Note: Area to the left of vertical line includes performance prior to retention by the SBI.



**FRANKLIN PORTFOLIO ASSOCIATES**  
**Periods Ending March, 1999**

**Portfolio Manager: John Nagorniak**

**Assets Under Management: \$2,124,566,550**

**Investment Philosophy**  
**Semi-Passive**

Franklin believes that rigorous and consistent application of fundamentally based valuation criteria will produce value added investment returns. Franklin builds a portfolio by using a series of more than 30 integrated computer models that value a universe of 3500 stocks. Their models rank each security based on fundamental momentum, relative value, future cash flow, and supplementary models. A composite ranking then provides one ranked list of securities reflecting their relative attractiveness. Stocks that fall below the median ranking are sold, and proceeds are reinvested in stocks from the top deciles in the ranking system. They use the BARRA risk model to monitor the portfolio's systematic risk and industry weightings relative to the selected benchmark. For this semi-passive mandate, they seek to achieve a residual risk of 1.5% or less. The firm remains fully invested at all times.

**Staff Comments**

Franklin has underperformed their benchmark due to recent volatility and narrow leadership in the stock market. Franklin's risk model is based on the historical volatility of individual stocks. Since history was less volatile than current conditions, the risk model underestimated tracking error of the portfolio. They believe the narrow leadership in the market caused the most pain in the portfolio, but do not see this as a permanent condition. The organization remains solid, and the firm continues to implement their quantitative process. Staff has scheduled a meeting with Franklin in May 1999 and will continue to monitor them closely.

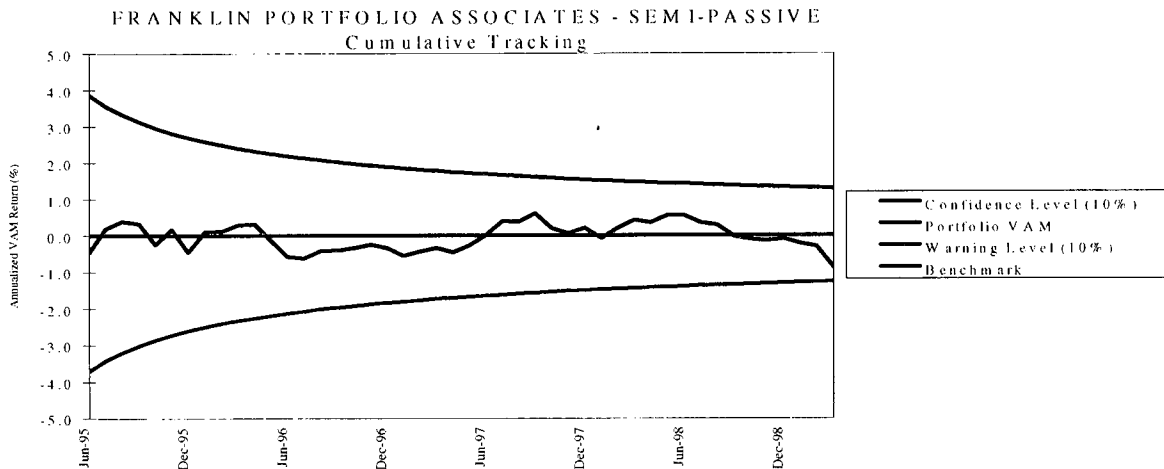
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark*</b>
Last Quarter	-1.0%	2.4%
Last 1 year	7.0	12.6
Last 2 years	27.5	29.5
Last 3 years	24.0	25.7
Last 4 years	N.A.	N.A.
Last 5 years	N.A.	N.A.
Since Inception (1/95)	26.7	27.9

**Recommendation**

Staff recommends that Franklin discuss their investment process at the August 1999 Domestic Manager Committee meeting.

\* Completeness Fund



**J.P. MORGAN INVESTMENT MANAGEMENT, INC.**  
**Periods Ending March, 1999**

**Portfolio Manager: Jim Wiess**

**Assets Under Management: \$2,261,121,804**

**Investment Philosophy**  
**Semi-Passive**

J.P. Morgan believes that superior stock selection is necessary to achieve excellent investment results. To accomplish this objective, they use fundamental research and a systematic valuation model. Analysts forecast the earnings and dividends for the 650 stock universe and enter them into a stock valuation model that calculates an expected return for each security. The stocks are ranked according to their expected return within their economic sectors. The most undervalued stocks are placed in the first quintile. The portfolio includes stocks from the first four quintiles, always favoring the highest ranked stocks whenever possible. Stocks in the fifth quintile are sold. In addition, the portfolio closely approximates the sector, style, and security weightings of the index chosen by the plan sponsor. The firm remains fully invested at all times.

**Staff Comments**

No comments at this time.

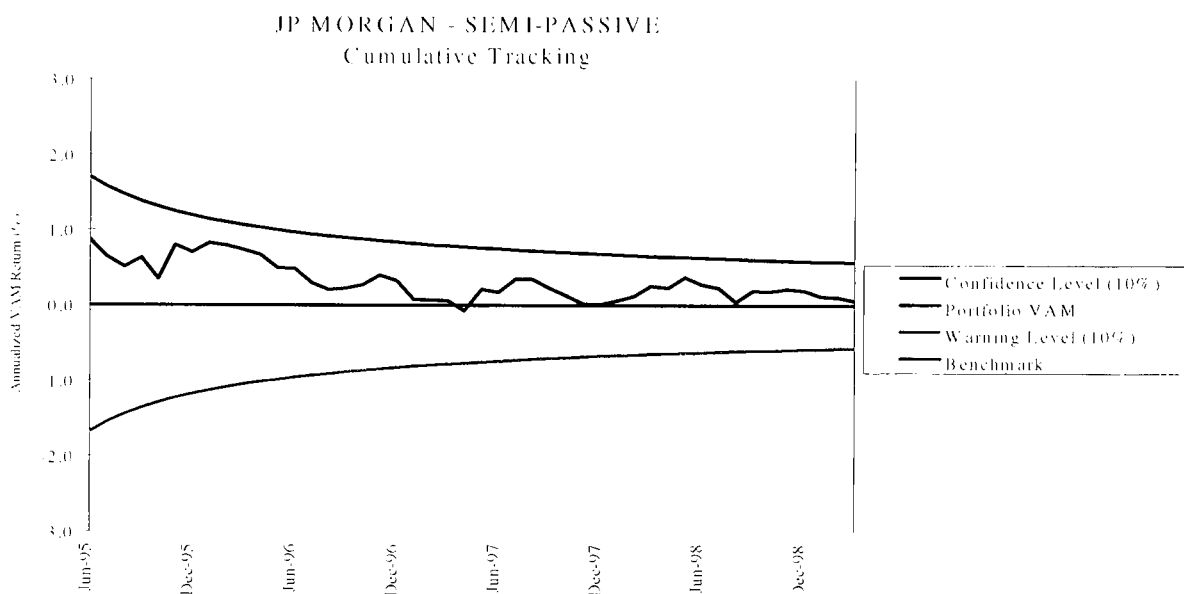
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark*</b>
Last Quarter	1.8%	2.4%
Last 1 year	11.9	12.6
Last 2 years	29.5	29.5
Last 3 years	25.5	25.7
Last 4 years	N.A.	N.A.
Last 5 years	N.A.	N.A.
Since Inception (1/95)	27.9	27.9

**Recommendation**

No action required.

\* Completeness Fund



**BARCLAYS GLOBAL INVESTORS**  
**Periods Ending March, 1999**

**Portfolio Manager: Nancy Feldkircher**

**Assets Under Management: \$2,191,935,333**

**Investment Philosophy**  
**Semi-Passive**

The Core Alpha Model desegregates individual equity returns for each of the 3500 stocks in their universe into fundamental, expectational, and technical components. The fundamental factors look at measures of underlying company value including earnings, book value, cash flow, and sales. These factors help identify securities that trade at prices below their true economic value. The expectational factors incorporate future earnings and growth rate forecasts made by over 2500 security analysts. The technical factors provide a measure of recent changes in company fundamentals, consensus expectations, and performance. Estimated alphas are then calculated and are used in a portfolio optimization algorithm to identify the optimal portfolio.

**Staff Comments**

Staff spoke with BGI in April 1999 regarding their recent performance. For the quarter and year the portfolio suffered due to the extreme volatility and narrowness in the stock market. BGI places an emphasis on stock valuation, which detracted from performance due to the fact that the market has favored growth stocks. BGI believes that the current level of volatility and the narrowness of the stock market will not last. BGI continues to implement their investment strategy and the organization remains stable. Staff will continue to monitor BGI closely.

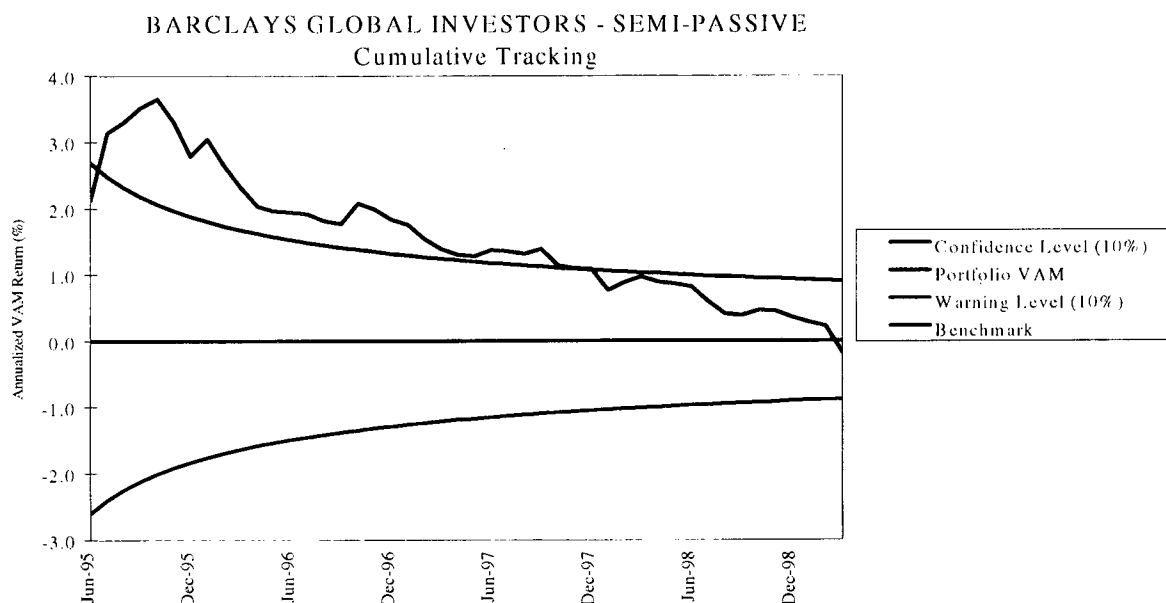
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark*</b>
Last Quarter	0.1%	2.4%
Last 1 year	8.2	12.6
Last 2 years	27.0	29.5
Last 3 years	24.2	25.7
Last 4 years	N.A.	N.A.
Last 5 years	N.A.	N.A.
Since Inception (1/95)	27.6	27.9

**Recommendation**

Staff recommends that BGI discuss their investment process at the August 1999 Domestic Manager Committee meeting.

\* Completeness Fund



**BARCLAYS GLOBAL INVESTORS**  
**Periods Ending March, 1999**

**Portfolio Manager: Rich Johnson**

**Assets Under Management: \$7,380,206,132**

**Investment Philosophy**  
**Passive**

Barclays Global Investors passively manages the portfolio against the Wilshire 5000 by minimizing tracking error and trading costs, and maximizing control over all investment and operational risks. Their strategy is to fully replicate the larger capitalization segments of the market and to use an optimization approach for the smaller capitalization segments. The optimizer weighs the cost of a trade against its contribution to expected tracking error to determine which trades should be executed.

**Staff Comments**

No comments at this time.

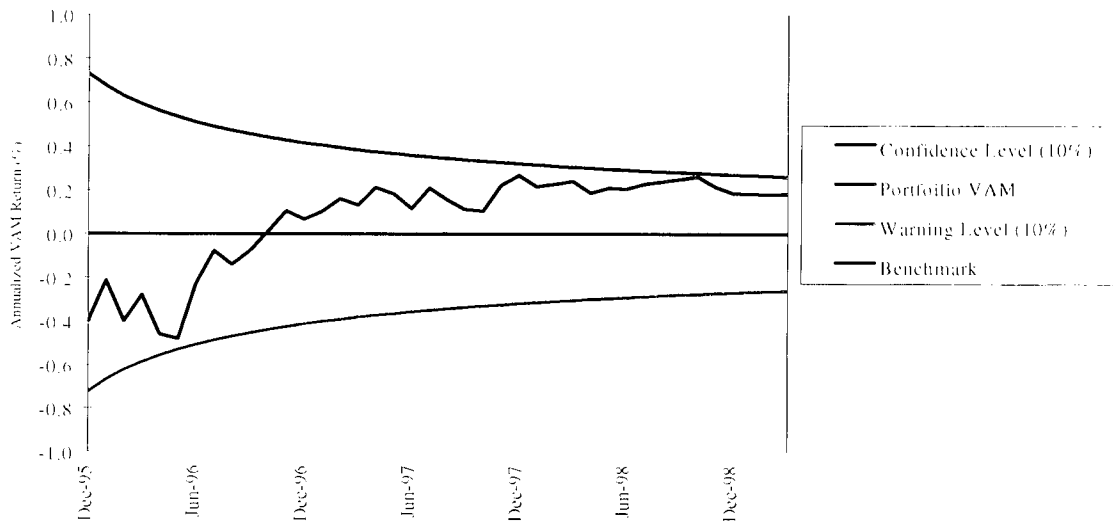
**Quantitative Evaluation**

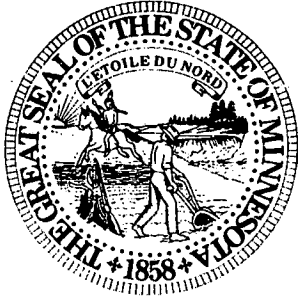
	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	3.8%	3.8%
Last 1 year	13.1	13.1
Last 2 years	29.6	29.3
Last 3 years	24.9	24.5
Last 4 years	N.A.	N.A.
Last 5 years	N.A.	N.A.
Since Inception (7/95)	25.5	25.2

**Recommendation**

No action required.

**BARCLAYS GLOBAL INVESTORS - PASSIVE**  
**Cumulative Tracking**





# STATE BOARD OF INVESTMENT

---

---

## Emerging Stock Manager Evaluation Reports

First Quarter, 1999

**(Blank)**

**COMBINED RETIREMENT FUNDS  
EMERGING EQUITY MANAGERS  
Periods Ending March, 1999**

	Quarter		1 Year		3 years		5 Years		Since Inception (1)		Market Value (in millions)	Pool %
	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %		
<b>Active Managers</b>												
CIC Assets	-0.1	-1.2	-8.0	0.7	16.1	20.5	18.6	21.6	18.6	21.6	\$70.34	9.6%
Cohen, Klingenstein, & Marks	10.5	4.8	28.4	19.6	32.7	27.0	29.4	24.5	29.4	24.5	194.66	26.5%
Compass Capital	-2.1	2.2	3.7	15.2	19.4	26.6	20.7	24.2	20.7	24.2	76.87	10.5%
New Amsterdam	-0.6	2.0	7.3	6.6	25.1	20.7	21.9	20.4	21.9	20.4	80.87	11.0%
Valenzuela Capital	-4.3	-3.0	-14.1	-11.3	17.7	13.2	18.1	15.8	18.1	15.8	68.78	9.4%
Wilke/Thompson	-10.1	-5.2	-7.7	-15.6	3.2	6.9	10.4	11.5	10.4	11.5	49.08	6.7%
Winslow Capital	-5.2	6.7	6.7	23.8	21.2	27.9	20.2	24.9	20.2	24.9	75.36	10.3%
Zevenbergen Capital	21.6	6.0	60.6	19.4	40.9	27.3	31.6	24.4	31.6	24.4	118.24	16.1%
											<b>\$734.19</b>	<b>100.0%</b>
<b>Since 4/1/94</b>												
Current Aggregate	3.4	2.3	12.1	9.0	23.8	22.2	22.7	21.6	22.7	21.6		
Historical Aggregate (2)	3.4	2.3	12.1	9.0	23.6	21.8	22.3	21.2	22.3	21.2		

(1) Since retention by the SBI.

(2) Includes the performance of terminated managers.





**CIC ASSET MANAGEMENT**  
**Periods Ending March, 1999**

**Portfolio Manager: Jorge Castro**

**Assets Under Management: \$70,339,665**

**Investment Philosophy**

CIC Asset Management (CIC) uses a disciplined relative value approach to manage equities. CIC believes that purchasing companies at attractive prices provides superior long-term performance with lower volatility. This investment process is designed for clients who desire equity market exposure with both incremental value added and downside protection due to reasonable dividend yields, moderate price to book values and low normalized price to earnings ratios. Finally, the process provides a synergy between quantitative valuation techniques and "Graham & Dodd" fundamental analysis.

**Staff Comments**

Staff met with CIC in January 1999 in their Los Angeles office to review their organization, investment process, and recent performance. CIC slightly outperformed for the quarter due to overweights in consumer cyclicals, energy, and financials and underweights in consumer nondurables and utilities. Performance over the last year suffered as CIC sold very large cap stocks to purchase stocks they felt held better value at the lower end of the large cap universe. CIC continues to suffer from the less than favorable value style.

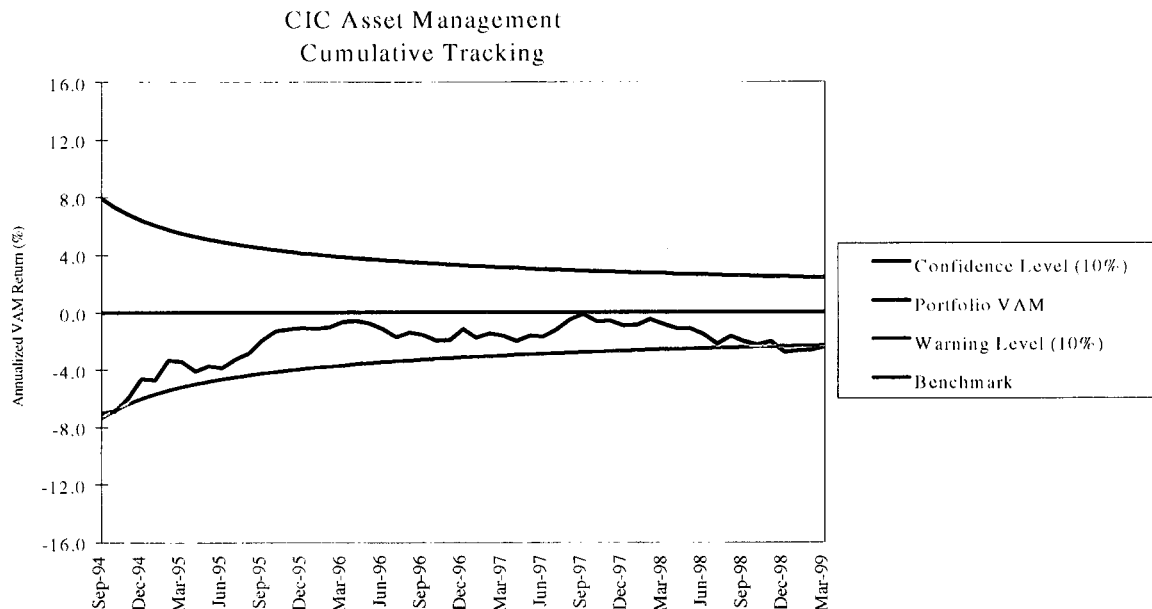
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark*</b>
Last Quarter	-0.1%	-1.2%
Last 1 Year	-8.0	0.7
Last 2 Years	17.1	21.5
Last 3 Years	16.1	20.5
Last 4 Years	20.5	23.2
Last 5 Years	18.6	21.6
Since Inception (4/94)	18.6	21.6

**Recommendation**

No action required.

\* Custom benchmark since inception date.



**COHEN KLINGENSTEIN & MARKS INCORPORATED**  
**Periods Ending March, 1999**

**Portfolio Manager: George Cohen**

**Assets Under Management: \$194,655,485**

**Investment Philosophy**

Cohen Klingenstein & Marks Inc. (CKM) seeks to outperform the market by focusing on two variables: 1) economic cycles; and 2) security valuation. Within economic cycles, they believe that stocks exhibit predictable patterns that reflect changing expectations on corporate profits and interest rates. Similarly, they believe that stock prices normally reflect earnings expectations. CKM exploits short run inefficiencies through an unbiased process that relates the price of a stock to the consensus earnings expectations.

**Staff Comments**

The CKM portfolio outperformed the benchmark for the quarter and the year. During the quarter, strong stock selection in the health care and cyclical sector led to outperformance. For the year, the portfolio outperformed as a result of good sector allocation and by emphasizing growth stocks rather than defensive and cyclical stocks.

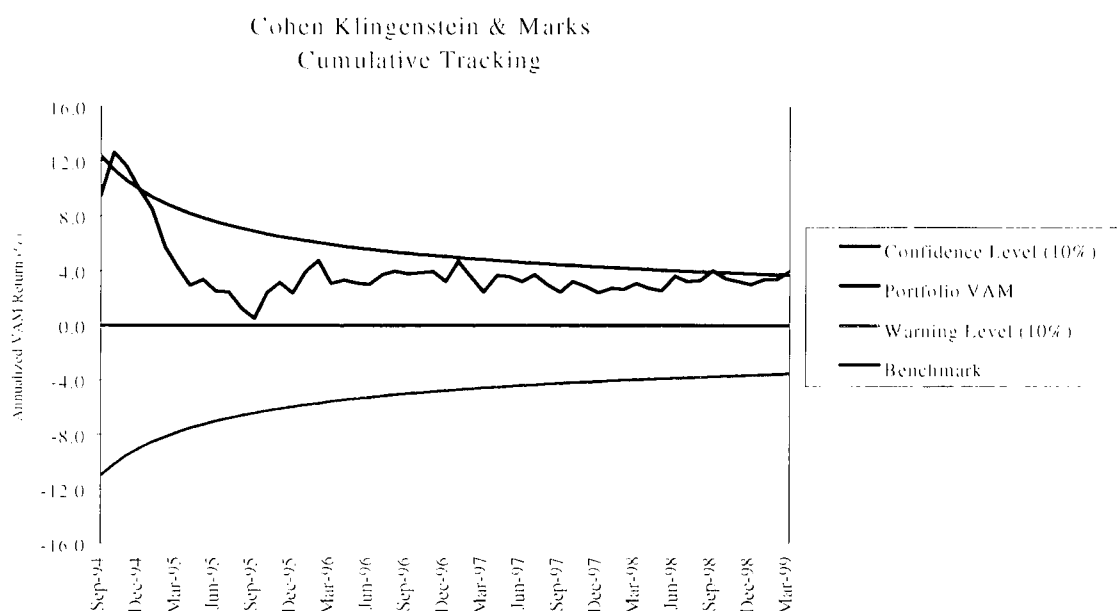
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark*</b>
Last Quarter	10.5%	4.8%
Last 1 Year	28.4	19.6
Last 2 Years	40.1	31.9
Last 3 Years	32.7	27.0
Last 4 Years	32.7	27.8
Last 5 Years	29.4	24.5
Since Inception. (4/94)	29.4	24.5

**Recommendation**

Staff recommends that CKM be graduated to the larger Domestic Equity Manager program.

\* Custom benchmark since inception date.



**COMPASS CAPITAL MANAGEMENT**  
**Periods Ending March, 1999**

**Portfolio Manager: Charles Kelley**

**Assets Under Management: \$76,870,514**

**Investment Philosophy**

Compass Capital Management (CCM) combines aspects of growth and value investing to achieve the proper blend of return (growth) and risk (value). They use a computer based data network to screen for large, well established companies whose earnings grow in spite of a weak economy and over long time periods, but which may experience earnings pressure with downturns in the economy. Particular focus is given to growth in sales, earnings, dividends, book value and the underlying industry. Due to their "growing company" orientation, their portfolios generally do not hold utility, bank, deep cyclical (auto companies for example), or oil and gas stocks.

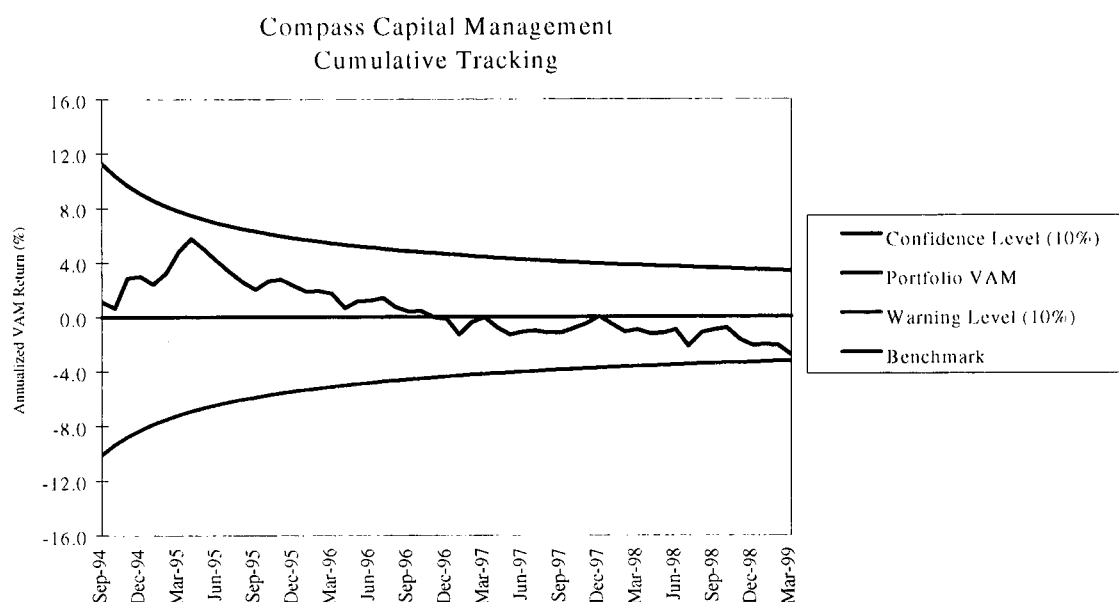
**Staff Comments**

Staff met with Winslow in April 1999 in their office to review their organization, investment process, and recent performance. Portfolio performance during the quarter and the year suffered from a large underweight in the technology sector as well as poor stock selection within this sector. Overweights in the capital goods and basic industries sectors also hurt performance.

**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark*</b>	<b>Recommendation</b>
Last Quarter	-2.1%	2.2%	
Last 1 Year	3.7	15.2	No action required.
Last 2 Years	22.9	31.9	
Last 3 Years	19.4	26.6	
Last 4 Years	21.3	27.2	
Last 5 Years	20.7	24.2	
Since Inception	20.7	24.2	
(4/94)			

\* Custom benchmark since inception date.



**NEW AMSTERDAM PARTNERS**  
**Periods Ending March, 1999**

**Portfolio Manager: Michelle Clayman**

**Assets Under Management: \$80,867,626**

**Investment Philosophy**

New Amsterdam Partners believes that investment results are evaluated by actual return, and therefore, investment opportunities should be evaluated by expected return. They believe that all valid techniques depend on forecasts of the amounts and timing of future cash flows. Thus, the firm focuses on forecasted earnings growth, yield, price-to-book ratio, and forecasted return on equity. They believe that the disciplined application of their valuation techniques, in conjunction with sound financial analysis of companies, is the key to understanding and maximizing investment returns.

**Staff Comments**

No comments at this time.

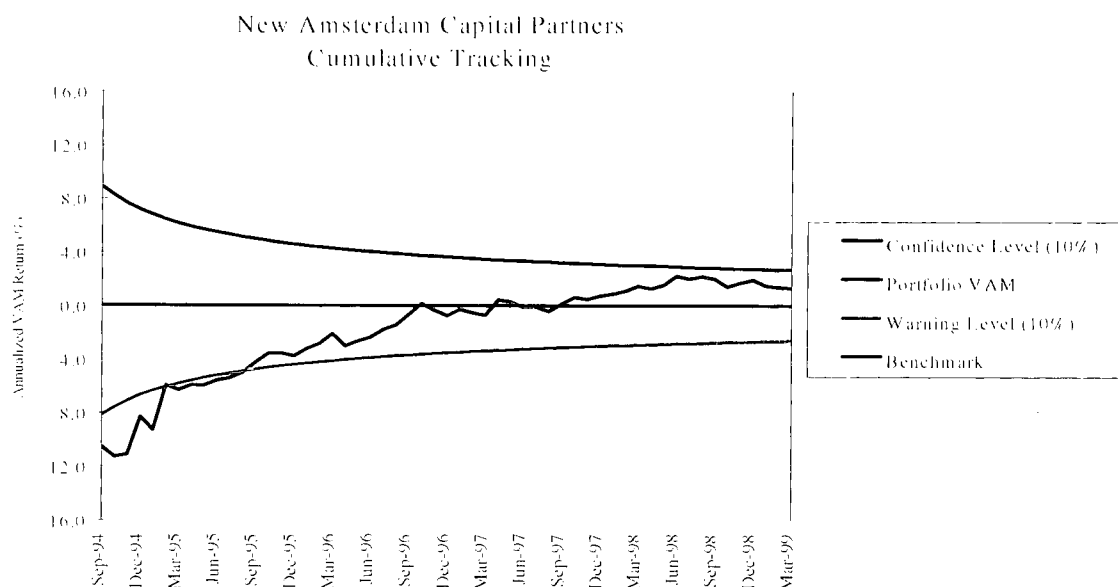
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark*</b>
Last Quarter	-0.6%	2.0%
Last 1 Year	7.3	6.6
Last 2 Years	30.5	25.0
Last 3 Years	25.1	20.7
Last 4 Years	25.9	21.9
Last 5 Years	21.9	20.4
Since Inception (4/94)	21.9	20.4

**Recommendation**

No action required.

\* Custom benchmark since inception date.



**VALENZUELA CAPITAL MANAGEMENT**  
**Periods Ending March, 1999**

**Portfolio Manager: Tom Valenzuela**

**Assets Under Management: \$68,783,305**

**Investment Philosophy**

Valenzuela Capital Management (VCM) believes that stock selection and adherence to valuation analysis are the backbone of superior performance. Their investment philosophy is one of risk averse growth. VCM seeks companies undergoing strong rates of change in earnings, cash flow and returns. These companies are experiencing positive changes in revenues, gross and operating margins and financial structure. To be considered for investment, these stocks must sell at or below market valuations. VCM believes that below-market valuations provide downside protection during weak market periods. In strong markets, the portfolios will be driven by both earnings growth and multiple expansion.

**Staff Comments**

No comments at this time.

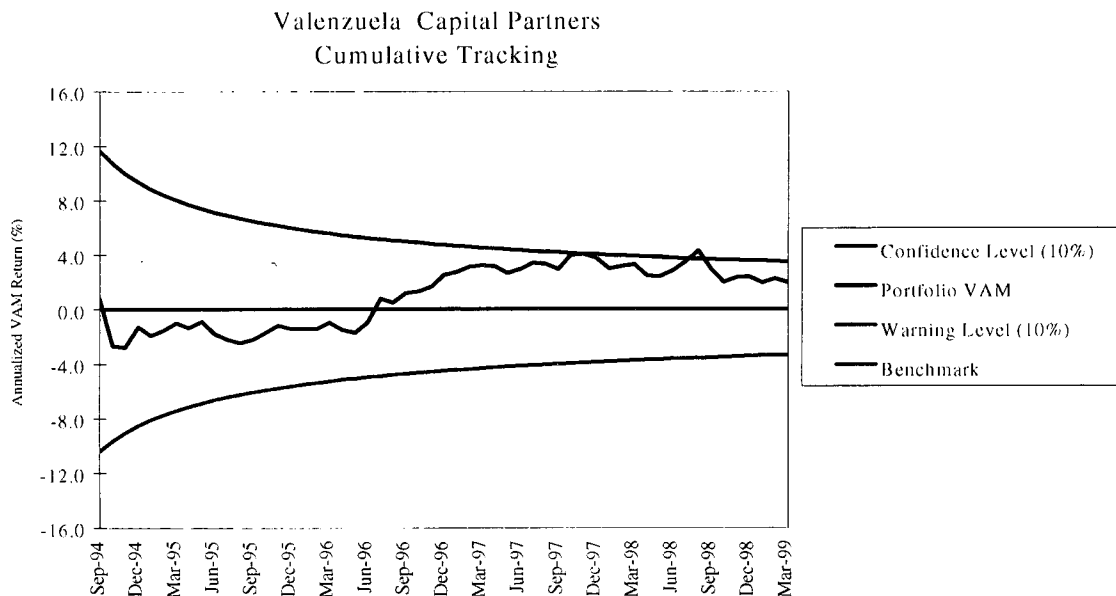
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark*</b>
Last Quarter	-4.3%	-3.0%
Last 1 Year	-14.1	-11.3
Last 2 Years	13.4	13.3
Last 3 Years	17.7	13.2
Last 4 Years	20.0	16.9
Last 5 Years	18.1	15.8
Since Inception (4/94)	18.1	15.8

**Recommendation**

No action required.

\* Custom benchmark since inception date.



**WILKE/THOMPSON CAPITAL MANAGEMENT INC.**  
**Periods Ending March, 1999**

**Portfolio Manager: Mark Thompson**

**Assets Under Management: \$49,082,833**

**Investment Philosophy**

The investment philosophy of Wilke/Thompson (W/T) is to invest in high quality growth companies that demonstrate the ability to sustain strong secular earnings growth, notwithstanding overall economic conditions. W/T's investment approach involves a bottom-up fundamental process. The stock selection process favors companies with strong earnings, high unit growth, a proprietary market niche, minimum debt, conservative accounting and strong management practices. They formulate investment ideas by networking with the corporate managers of their current and prospective holdings, as well as with regional brokers, venture capitalists, and other buy-side portfolio managers.

**Staff Comments**

Staff met with W/T in April 1999 in their office to review their organization, investment process, and recent performance. The portfolio underperformed during the first quarter due to overweights in the computer software, distribution, and media/publishing sectors, as well as poor stock selection within these sectors. Strong stock selection enabled the portfolio to outperform the benchmark for the year.

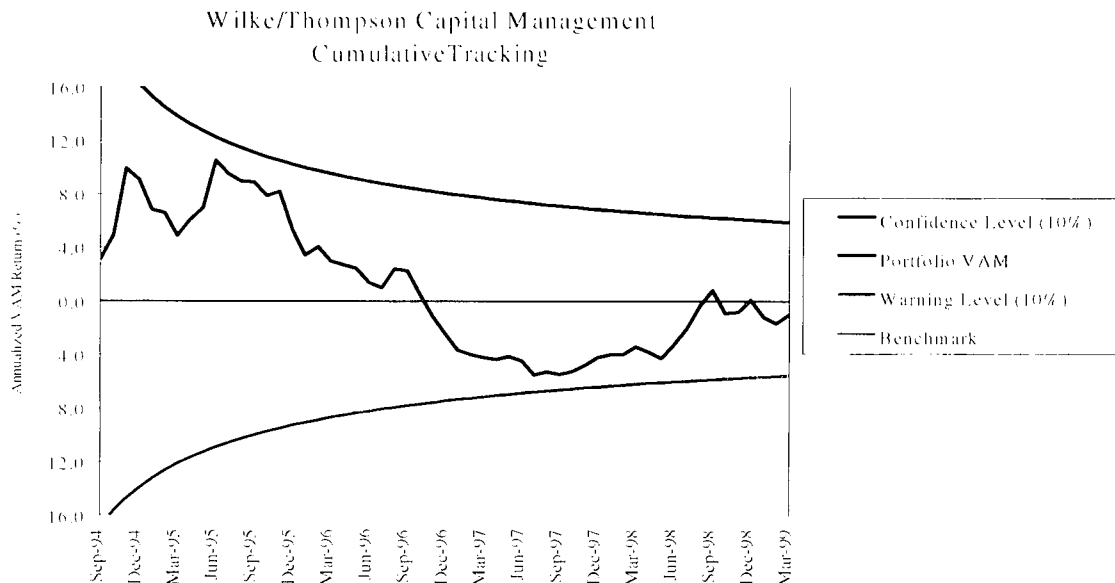
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark*</b>
Last Quarter	-10.1%	-5.2%
Last 1 Year	-7.7	-15.6
Last 2 Years	16.4	12.0
Last 3 Years	3.2	6.9
Last 4 Years	9.5	12.2
Last 5 Years	10.4	11.5
Since Inception (4/94)	10.4	11.5

**Recommendation**

No action required.

\* Custom benchmark since inception date.



**WINSLOW CAPITAL MANAGEMENT**  
**Periods Ending March, 1999**

**Portfolio Manager:** Clark Winslow

**Assets Under Management:** \$75,355,261

**Investment Philosophy**

Winslow Capital Management (WCM) believes that investing in companies with above average earnings growth provides the best opportunities for superior portfolio returns over time. WCM believes that a high rate of earnings growth is often found in medium capitalization growth companies of \$1 to \$10 billion market capitalization. Thus, to seek superior portfolio returns while maintaining good liquidity, Winslow Capital emphasizes a growth strategy buying securities of both medium and large cap companies. The objective is to achieve a weighted average annual earnings growth rate of 15-20% over a 2-3 year time horizon.

**Staff Comments**

Staff met with Winslow in April 1999 in their office to review their organization, investment process, and recent performance. The Winslow portfolio significantly underperformed the benchmark for the quarter and the year. Poor stock selection within the technology sector was the primary cause. Winslow held computer software stocks, which performed poorly, rather than the strong performing hardware and Internet stocks, because of concerns about their high valuations. Stock selection within the healthcare sector was also poor.

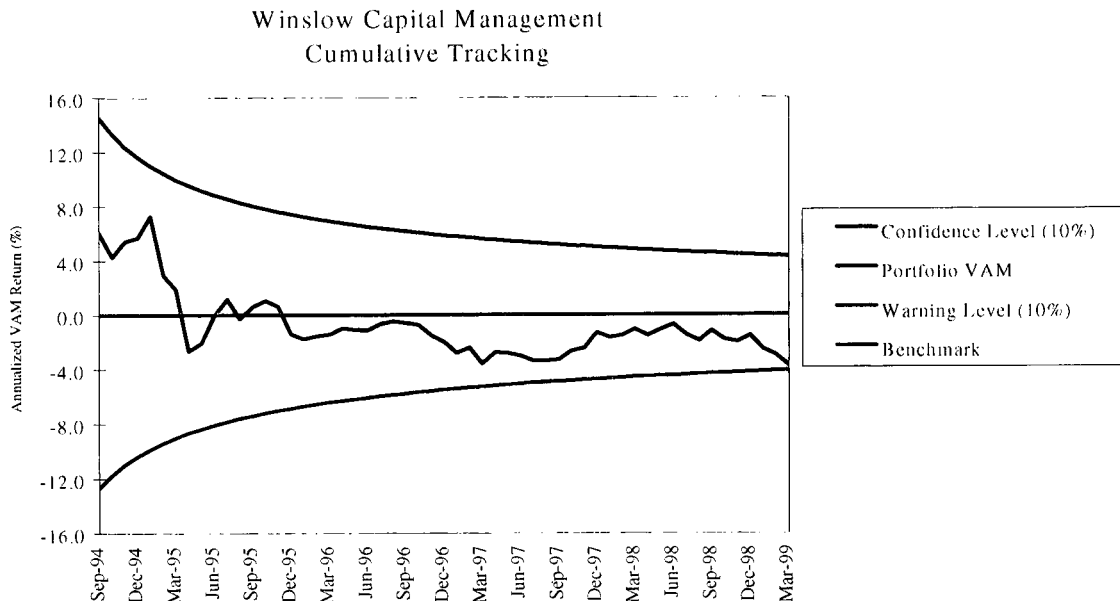
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark*</b>
Last Quarter	-5.2%	6.7%
Last 1 Year	6.7	23.8
Last 2 Years	31.0	36.4
Last 3 Years	21.2	27.9
Last 4 Years	21.6	28.2
Last 5 Years	20.2	24.9
Since Inception (4/94)	20.2	24.9

**Recommendation**

No action required.

\* Custom benchmark since inception date.



**ZEVENBERGEN CAPITAL INC**  
**Periods Ending March, 1999**

**Portfolio Manager:** Nancy Zevenbergen

**Assets Under Management:** \$118,239,872

**Investment Philosophy**

Zevenbergen is an equity growth manager. The investment philosophy is based on the belief that earnings drive stock prices while quality provides capital protection. Hence, portfolios are constructed with companies showing above-average earnings growth prospects and strong financial characteristics. They consider diversification for company size, expected growth rates and industry weightings to be important risk control factors. Zevenbergen uses a bottom-up fundamental approach to security analysis. Research efforts focus on finding companies with superior products or services showing consistent profitability. Attractive buy candidates are reviewed for sufficient liquidity and potential diversification. The firm emphasizes that they are not market timers.

**Staff Comments**

Strong stock selection in the technology sector, including a weighting in Internet stocks twice that of the benchmark, and an overweight in the telecommunications sector resulted in significant outperformance for Zevenbergen's portfolio for the quarter and past year.

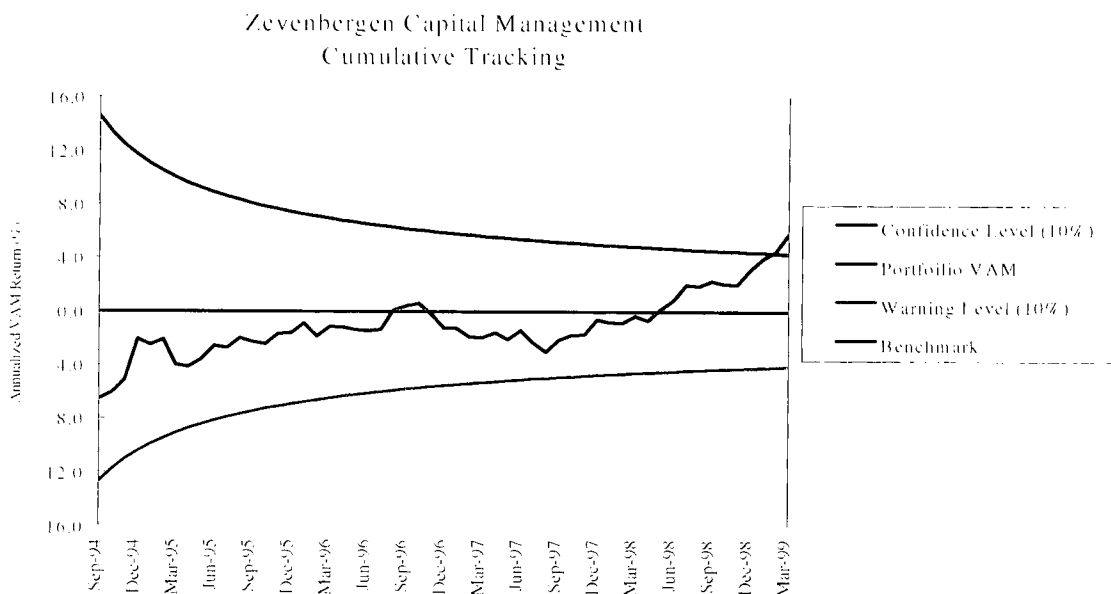
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark*</b>
Last Quarter	21.6%	6.0%
Last 1 Year	60.6	19.4
Last 2 Years	59.3	34.3
Last 3 Years	40.9	27.3
Last 4 Years	37.9	27.3
Last 5 Years	31.6	24.4
Since Inception (4/94)	31.6	24.4

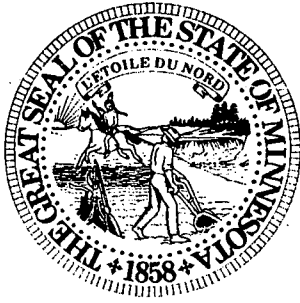
**Recommendation**

No action required.

\* Custom benchmark since inception date.







# STATE BOARD OF INVESTMENT

---

---

## **Bond Manager Evaluation Reports**

**First Quarter, 1999**



**COMBINED RETIREMENT FUNDS  
BOND MANAGERS  
Periods Ending March, 1999**

	Quarter		1 Year		3 years		5 Years		Since (1) Inception		Market Value (in millions)	Pool %
	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %		
<b>Active Managers</b>												
American Express (AMG)	-0.4	-0.5	7.0	6.5	8.0	7.8	8.1	7.9	6.9	6.8	\$598.54	6.2%
Credit Suisse	0.3	-0.5	6.2	6.5	8.8	7.8	8.4	7.8	7.3	6.7	623.31	6.5%
IAI	-0.6	-0.5	6.5	6.5	7.5	7.8	7.2	7.8	10.6	10.6	661.79	6.9%
Morgan Stanley	0.1	-0.5	5.5	6.5	8.4	7.8	8.2	7.8	10.9	10.6	872.86	9.0%
Standish	-0.3	-0.5	4.6	6.5	7.7	7.8	7.6	7.8	6.5	6.7	718.87	7.4%
Western	-0.1	-0.5	5.9	6.5	9.3	7.8	9.0	7.8	11.8	10.5	1,314.11	13.6%
<b>Semi-Passive Managers</b>												
BlackRock	-0.2	-0.5	6.9	6.5					8.1	7.8	1,678.08	17.4%
Goldman	-0.2	-0.5	5.9	6.5	7.9	7.8	8.0	7.8	7.0	6.7	1,602.14	16.6%
Lincoln	-0.4	-0.5	6.7	6.5	7.9	7.8	7.9	7.8	8.9	8.8	1,580.26	16.4%
											<b>\$9,649.97</b>	<b>100.0%</b>
									<b>Since 7/1/84</b>			
Current Aggregate	-0.2	-0.5	6.2	6.5	8.2	7.8	8.0	7.8	11.0	10.6		
Historical Aggregate (2)	-0.2	-0.5	6.2	6.5	8.2	7.8	8.0	7.8	10.4	10.5		
Lehman Aggregate (3)		-0.5		6.5		7.8		7.8		10.1		

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

(2) Includes performance of terminated managers.

(3) Prior to July 1994, this index reflects the Salomon BIG.

**(Blank)**

**AMERICAN EXPRESS ASSET MANAGEMENT**  
**Periods Ending March, 1999**

**Portfolio Manager: Jim Snyder**

**Assets Under Management: \$598,541,836**

**Investment Philosophy**

AMG uses duration management combined with in-depth fundamental analysis of the corporate sector to add value to the portfolio. Active duration management begins with an economic overview and interest rate outlook. These factors help AMG determine the direction of both short and long-term interest rates which leads to the portfolio duration decisions. After AMG determines duration, they use their extensive research capabilities to determine sector allocation and to select individual issues.

**Staff Comments**

American Express slightly outperformed for the quarter due to narrowing spreads and overweight positions in the corporate and mortgage sectors. Over the past year, American Express outperformed the benchmark primarily as a result of duration management and sector rotation decisions.

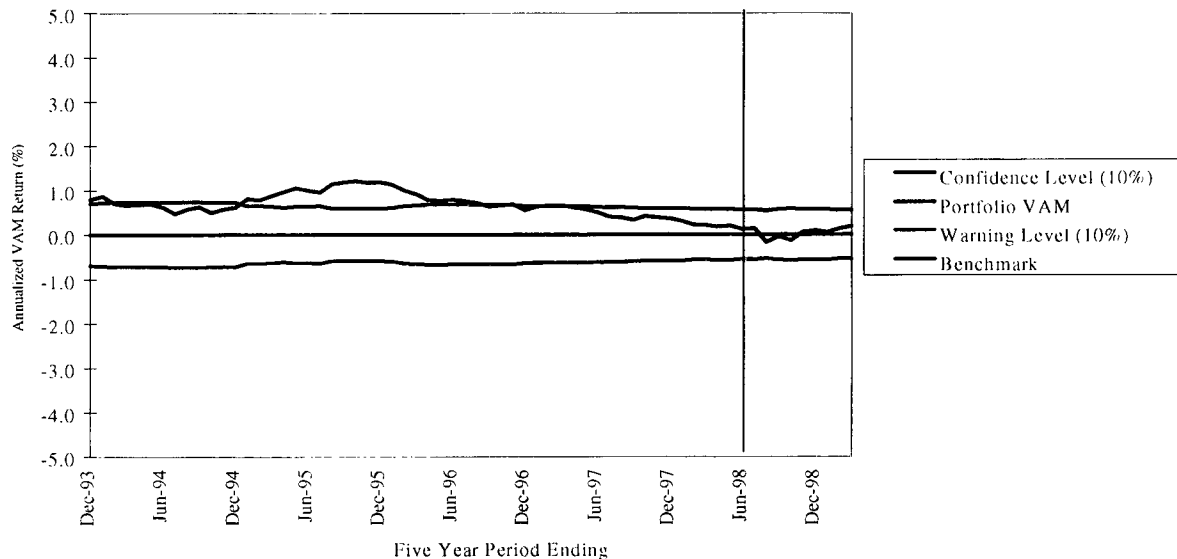
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	-0.4%	-0.5%
Last 1 year	7.0	6.5
Last 2 years	9.6	9.2
Last 3 years	8.0	7.8
Last 4 years	8.9	8.7
Last 5 years	8.1	7.9
Since Inception (7/93)	6.9	6.8

**Recommendations**

No action required.

**AMERICAN EXPRESS ASSET MANAGEMENT - Fixed Income**  
**Rolling Five Year VAM**



Note: Area to the left of the vertical line includes performance prior to retention by the SBI.

**CREDIT SUISSE ASSET MANAGEMENT**  
**(Formerly BEA Associates)**  
**Periods Ending March, 1999**

**Portfolio Manager: Robert Justich**

**Assets Under Management: \$623,314,768**

**Investment Philosophy**

Credit Suisse Asset Management (CSAM) investment approach focuses on individual bond selection and on sector selection rather than short term interest rate forecasting. CSAM keeps the duration close to the benchmark but may be slightly longer or shorter depending on their long-term economic outlook. CSAM's approach is distinguished by 1) a quantitative approach which avoids market timing; 2) contrarian weightings of bond sectors; and 3) rigorous call and credit analysis rather than yield driven management.

**Staff Comments**

Robert Moore, CSAM's Head of U.S. Core Fixed Income and the SBI's portfolio manager, resigned in early May. Two members of the fixed income team will assume Moore's duties. Robert Justich, a senior portfolio manager will become Head of U.S. Core Fixed Income and will be the SBI's portfolio manager. Rich Lindquist, currently head of high yield, will share overall responsibility for all CSAM domestic fixed income assets with Justich. Staff views this as a serious change and will monitor the organization closely and report any developments to the Committee.

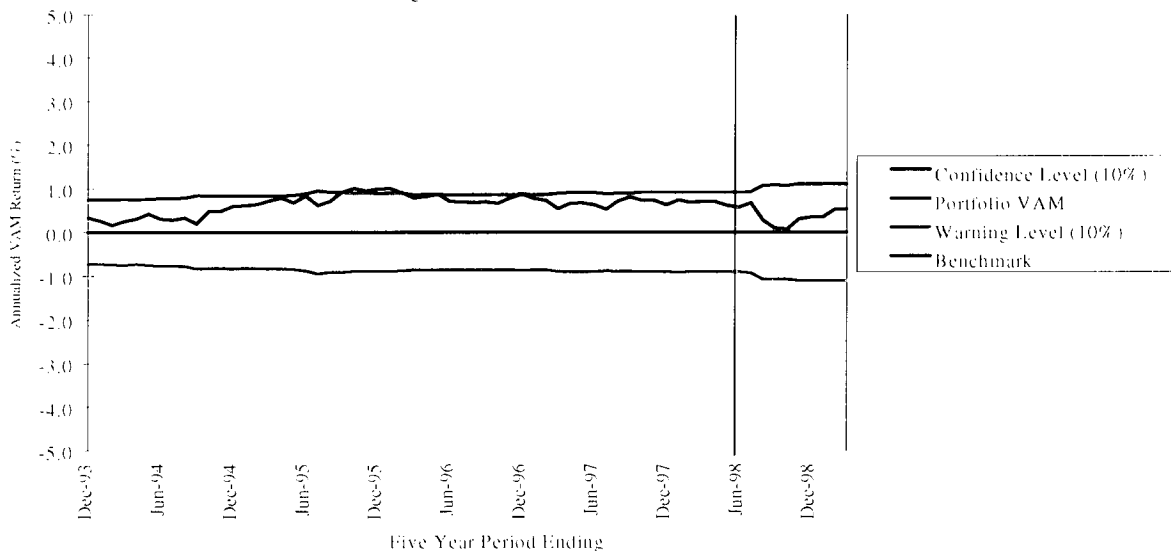
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	0.3%	-0.5%
Last 1 year	6.2	6.5
Last 2 years	10.2	9.2
Last 3 years	8.8	7.8
Last 4 years	9.3	8.5
Last 5 years	8.4	7.8
Since Inception (7/93)	7.3	6.7

**Recommendations**

No action required.

**CREDIT SUISSE ASSET MANAGEMENT**  
**Rolling Five Year VAM**



Note: Area to the left of the vertical line includes performance prior to retention by the SBI.

**INVESTMENT ADVISERS**  
**Periods Ending March, 1999**

**Portfolio Manager: Larry Hill**

**Assets Under Management: \$661,794,420**

**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 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.

**Staff Comments**

IAI named Keith Wirtz President and Chief Investment Officer during the quarter. Keith had been the chief investment strategist at the investment management unit of Bank of America. John Alexander, Chief Operating Officer, will be responsible for business operations while Keith will be responsible for the firm's domestic equity, international equity and fixed income investment products.

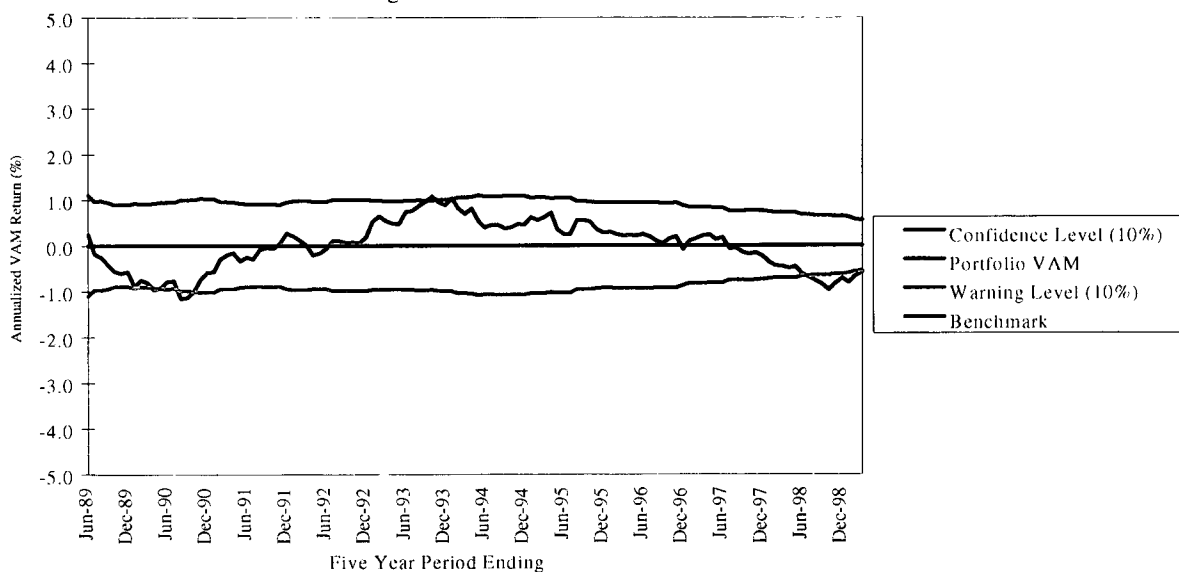
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	-0.6%	-0.5%
Last 1 year	6.5	6.5
Last 2 years	9.0	9.2
Last 3 years	7.5	7.8
Last 4 years	7.9	8.5
Last 5 years	7.2	7.8
Since Inception (7/84)	10.6	10.6

**Recommendations**

No action required.

**INVESTMENT ADVISERS - Fixed Income**  
**Rolling Five Year VAM**



**MORGAN STANLEY DEAN WITTER INVESTMENT MANAGEMENT**  
 (Formerly Miller, Anderson & Sherrerd)  
 Periods Ending March, 1999

**Portfolio Manager: Tom Bennett**

**Assets Under Management: \$872,859,253**

**Investment Philosophy**

Morgan Stanley 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, Morgan Stanley intensively researches and, in some cases, manages the mortgage pools in which it invests.

**Staff Comments**

Staff met with Morgan Stanley in March 1999 in their West Conshohocken, PA office to review their investment process and performance. Morgan Stanley feels the good performance of spread sectors since late 1998 has begun to reduce their attractiveness and has pared back their positions in corporates and mortgages, but remains overweight relative to the benchmark. Morgan Stanley also expects interest rates to fall from their current levels and has positioned the duration of the portfolio long relative to the benchmark. This strategy detracted from performance during the first quarter as rates moved higher. Morgan Stanley's strong relative performance during the quarter was the result of narrowing spreads and overweight positions in corporates and mortgages, which more than offset their duration strategy.

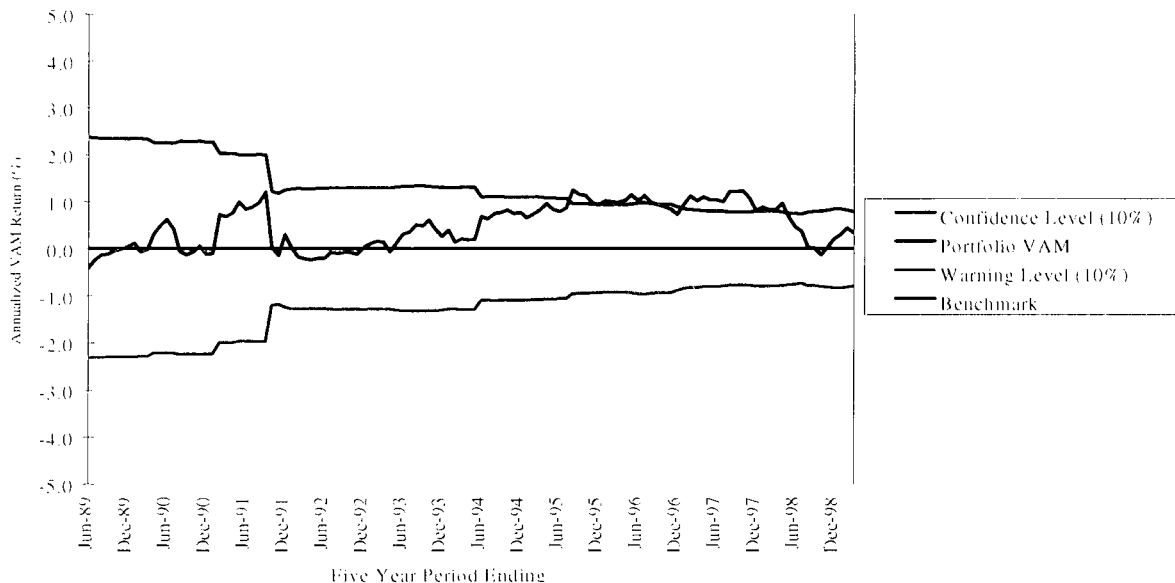
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	0.1%	-0.5%
Last 1 year	5.5	6.5
Last 2 years	8.8	9.2
Last 3 years	8.4	7.8
Last 4 years	9.3	8.5
Last 5 years	8.2	7.8
Since Inception (7/84)	10.9	10.6

**Recommendations**

No action required.

Morgan Stanley Dean Witter Investment Management  
 Rolling Five Year VAM





**STANDISH, AYER & WOOD**  
**Periods Ending March, 1999**

**Portfolio Manager: Austin Smith**

**Assets Under Management: \$718,869,181**

**Investment Philosophy**

Standish adds value by capitalizing on market inefficiencies and trading actively through intra and inter-sector swapping. The firm does not forecast interest rates but adds value to the portfolio by buying non-Treasury issues. Key to the approach is active sector trading and relative spread analysis of both sectors and individual issues. In addition to sector spreads, the firm also analyzes how secular trends affect bond pricing. The firm believes that 65% of its value added comes from inter-sector swapping in non-government sectors.

**Staff Comments**

Staff met with Standish in March 1999 in their Boston office to review the organization, investment process and performance. Standish feels corporates are attractive despite recent gains and remains overweight the sector. In the mortgage sector, Standish believes spreads continue to be attractive and is slightly overweight. Standish outperformed for the quarter due to overweight positions in corporates and mortgages and exposure to non-dollar securities. Standish has underperformed significantly over the last year, primarily due to an overweight position in the corporate sector and poor security selection within the sector.

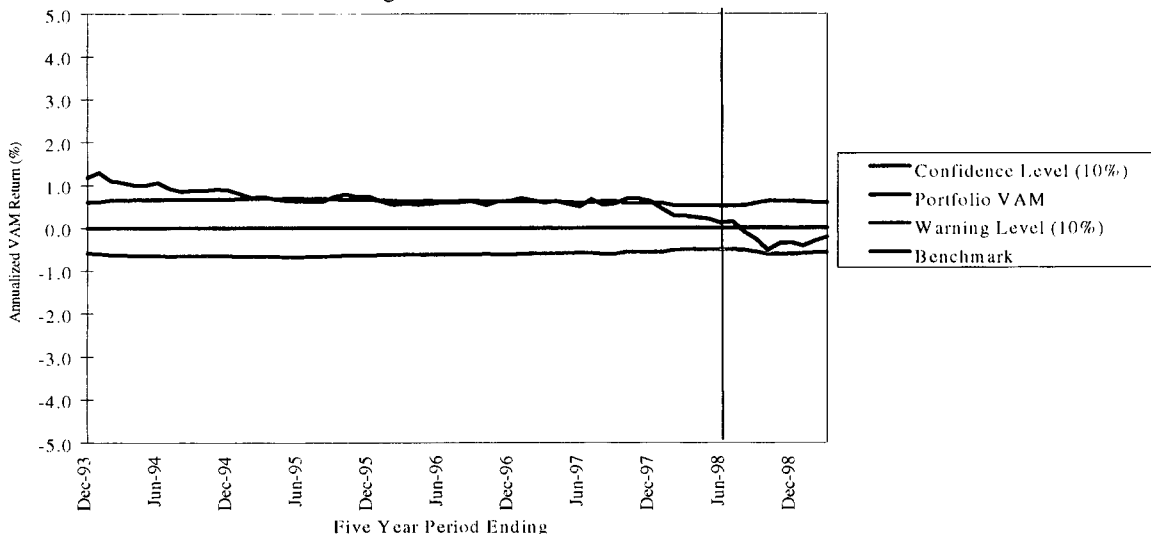
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	-0.3%	-0.5%
Last 1 year	4.6	6.5
Last 2 years	8.2	9.2
Last 3 years	7.7	7.8
Last 4 years	8.5	8.5
Last 5 years	7.6	7.8
Since Inception (7/93)	6.5	6.7

**Recommendations**

No action required.

**STANDISH, AYER & WOOD**  
**Rolling Five Year VAM**



Note: Area to the left of the vertical line includes performance prior to retention by the SBI.

**WESTERN ASSET MANAGEMENT**  
**Periods Ending March, 1999**

**Portfolio Manager: Ken Leech**

**Assets Under Management: \$1,314,114,973**

**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.

**Staff Comments**

No comments at this time.

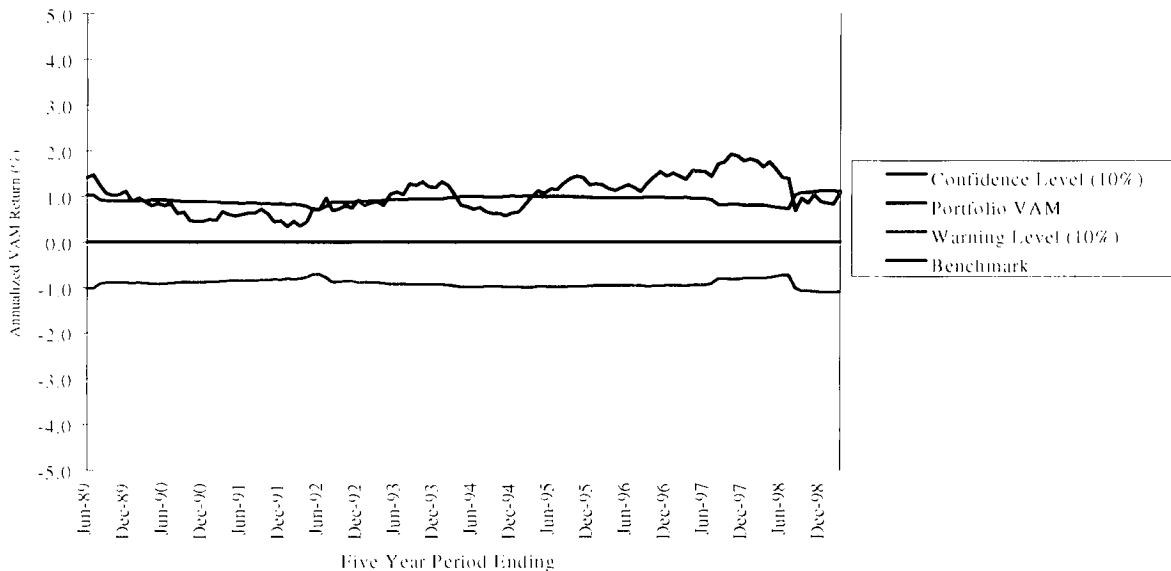
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	-0.1%	-0.5%
Last 1 year	5.9	6.5
Last 2 years	10.3	9.2
Last 3 years	9.3	7.8
Last 4 years	10.0	8.5
Last 5 years	9.0	7.8
Since Inception (7/84)	11.8	10.5

**Recommendations**

No action required.

**WESTERN ASSET MANAGEMENT**  
**Rolling Five Year VAM**



**BLACKROCK FINANCIAL MANAGEMENT**  
**Periods Ending March, 1999**

**Portfolio Manager: Keith Anderson**

**Assets Under Management: \$1,678,082,491**

**Investment Philosophy**

BlackRock uses a controlled-duration style. BlackRock's enhanced index strategy can be described as active management with tighter duration and sector constraints to ensure that the portfolio's aggregate risk characteristics and tracking error never significantly differ from the desired index. BlackRock's value added is derived primarily from sector and security selection driven by relative value analysis while applying disciplined risk control techniques.

**Staff Comments**

No comments at this time.

**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	-0.2%	-0.5%
Last 1 year	6.9	6.5
Last 2 years	9.5	9.2
Last 3 years	N/A	N/A
Last 4 years	N/A	N/A
Last 5 years	N/A	N/A
Since Inception (4/96)	8.1	7.8

**Recommendation**

No action required.

**Tracking graph will be created for period ending 6/30/99.**

**GOLDMAN SACHS**  
**Periods Ending March, 1999**

**Portfolio Manager: Sharmin Mossavar Rahmani**

**Assets Under Management: \$1,602,135,303**

**Investment Philosophy**

Goldman is an enhanced index manager who focuses on security selection. When analyzing treasuries, the firm models Treasury coupons with an arbitrage based pricing model. This model determines the spread between actual and intrinsic market yields and determines whether the security is rich or cheap. Goldman takes a highly quantitative and analytical approach to value mortgage securities as well. Goldman uncovers undervalued securities using proprietary research and internally developed models. In the corporate sector, Goldman performs its own credit review of each issue. Goldman adds value to the corporate sector with extensive research, market knowledge, and trading skill.

**Staff Comments**

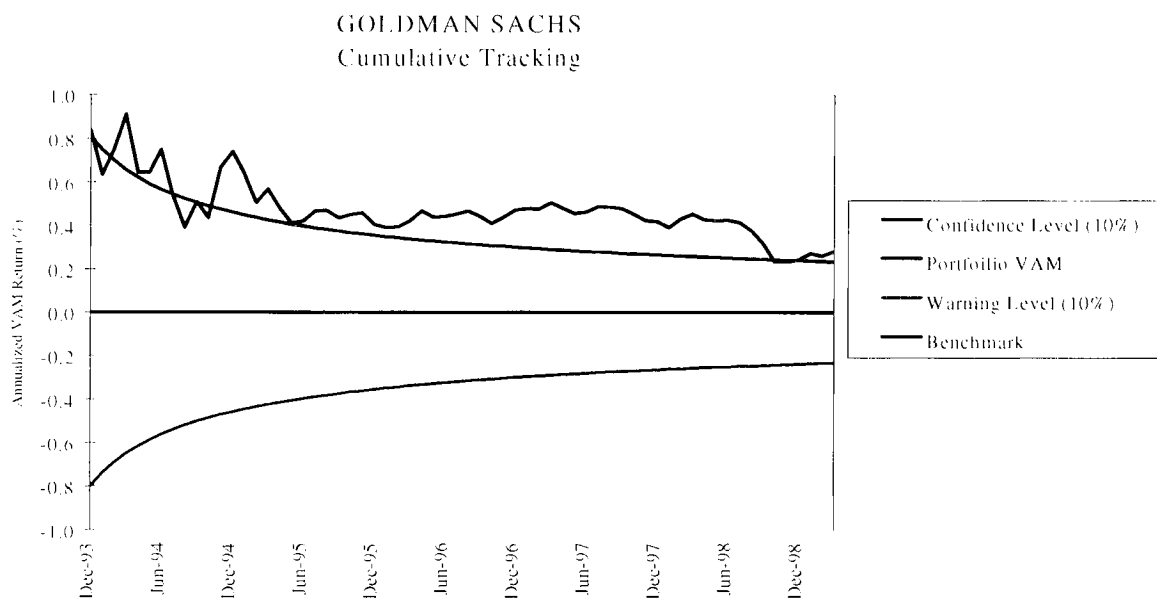
Goldman slightly outperformed during the first quarter due to an overweight position in asset-backed securities as well as security selection within the corporate and mortgage sectors. Over the past year, Goldman underperformed the benchmark primarily as a result of exposure to dollar-denominated emerging market debt during the financial crisis of third quarter 1998.

**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	-0.2%	-0.5%
Last 1 year	5.9	6.5
Last 2 years	9.1	9.2
Last 3 years	7.9	7.8
Last 4 years	8.7	8.5
Last 5 years	8.0	7.8
Since Inception (7/93)	7.0	6.7

**Recommendations**

No action required.



**LINCOLN CAPITAL MANAGEMENT**  
**Periods Ending March, 1999**

**Portfolio Manager: Andrew Johnson**

**Assets Under Management: \$1,580,262,629**

**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 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.

**Staff Comments**

No comments at this time.

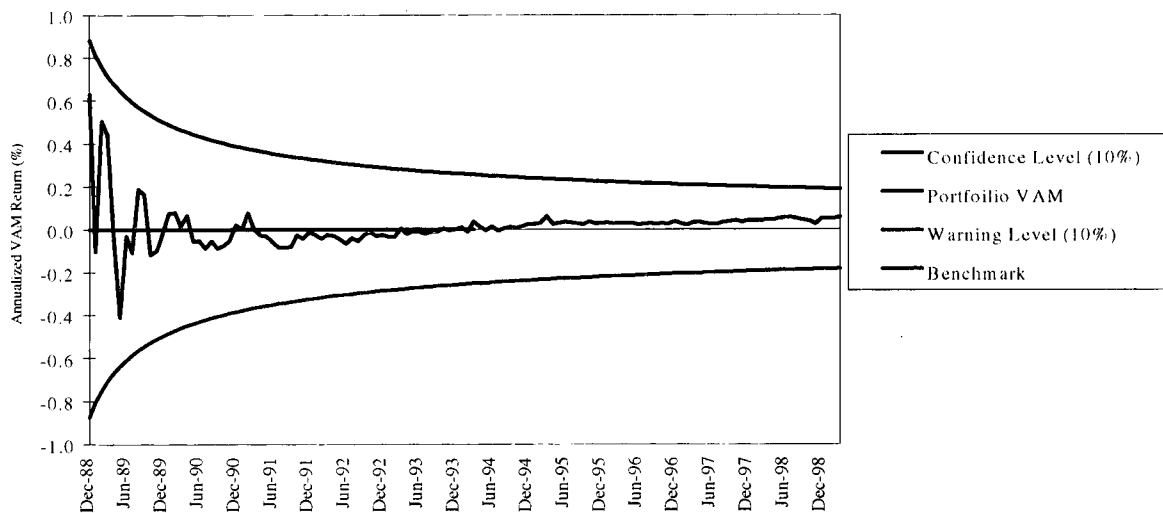
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	-0.4%	-0.5%
Last 1 year	6.7	6.5
Last 2 years	9.4	9.2
Last 3 years	7.9	7.8
Last 4 years	8.6	8.5
Last 5 years	7.9	7.8
Since Inception (7/88)	8.9	8.8

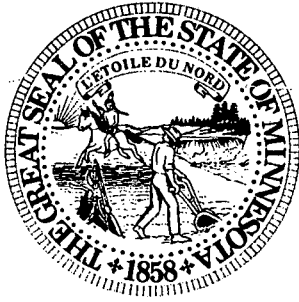
**Recommendations**

No action required.

**LINCOLN CAPITAL MANAGEMENT - Fixed Income**  
**Cumulative Tracking**



This page left blank intentionally.



# STATE BOARD OF INVESTMENT

---

---

## Non-Retirement Manager Evaluation Reports

First Quarter, 1999





**COMBINED RETIREMENT FUNDS  
NON - RETIREMENT MANAGERS  
Periods Ending March, 1999**

	Quarter		1 Year		3 years		5 Years		Since Inception		Market Value (in millions)
	Actual	Bmk	Actual	Bmk	Actual	Bmk	Actual	Bmk	Actual	Bmk	
	%	%	%	%	%	%	%	%	%	%	
GE Investment Management (1)	6.0	4.9	17.7	18.7	27.2	28.2			29.3	30.1	\$211.89
Voyageur Asset Management (2)	0.5	0.6	6.3	6.5	7.1	7.1	7.2	7.2	7.9	7.5	510.86
Internal Stock Pool (3)	5.1	4.9	18.8	18.7	28.3	28.2	26.4	26.4	22.8	22.8	477.98
Internal Bond Pool - Income Share (4)	-0.3	-0.5	6.8	6.5	8.3	7.8	8.2	7.8	9.0	8.6	196.58
Internal Bond Pool - Trust (5)	-0.1	-0.5	6.8	6.5	8.1	7.8			9.0	8.5	378.49

(1) GE Investment Management was retained by the SBI in January 1995.

The benchmark is the S&P 500 Index.

(2) Voyageur Asset Management was retained by the SBI in July 1991.

The benchmark is a custom index.

(3) The Internal Stock Pool was initiated in July 1993.

The benchmark is the S&P 500 Index.

(4) The Income Share Account was initiated in July 1986.

The benchmark is the Lehman Aggregate.

Prior to July 1994, this index reflects the Salomon BIG.

(5) The Trust Account was initiated in July 1994.

The benchmark is the Lehman Aggregate.



**GE INVESTMENT MANAGEMENT - Assigned Risk Plan**  
**Periods Ending March, 1999**

**Portfolio Manager: Gene Bolton**

**Assets Under Management: \$211,894,170**

**Investment Philosophy**  
**Assigned Risk Plan**

GE Investment's Multi-Style Equity program attempts to outperform the S&P 500 consistently while controlling overall portfolio risk through a multiple manager approach. Three portfolio managers with value or growth orientations are supported by a team of analysts. The three portfolios are combined to create a well diversified equity portfolio while maintaining low relative volatility and a style-neutral position between growth and value. All GE managers focus on stock selection from a bottom-up perspective.

**Staff Comments**

At the end of 1998, GE restructured the Multi-Style portfolio. Performance for the quarter exceeded the benchmark. This was attributed to good stock selection in the consumer cyclical, energy, financial and technology sectors. While performance for the longer time periods has trailed the benchmark, the organization remains stable and has a clearly articulated investment strategy. Staff will closely monitor performance to determine if the change in portfolio structure continues to generate improved returns.

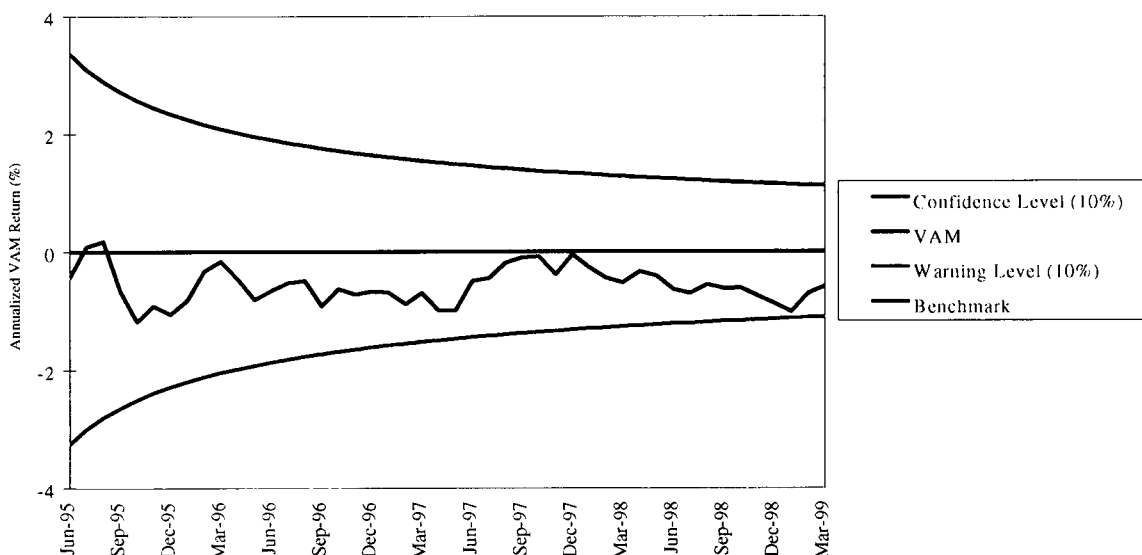
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	6.0%	4.9%
Last 1 year	17.7	18.7
Last 2 years	32.0	32.6
Last 3 years	27.2	28.2
Last 4 years	28.4	29.2
Last 5 years	N.A.	N.A.
Since Inception (1/95)	29.3	30.1

**Recommendation**

No action required.

**GE INVESTMENT MANAGEMENT**  
**Cumulative Tracking**



**VOYAGEUR ASSET MANAGEMENT - Assigned Risk Plan**  
**Periods Ending March, 1999**

**Portfolio Manager: Melissa A. Uppgren**

**Assets Under Management: \$510,863,989**

**Investment Philosophy**  
**Assigned Risk Plan**

Voyageur uses a top-down approach to fixed income investing. Their objective is to obtain superior long-term investment returns over a pre-determined benchmark that reflects the quality constraints and risk tolerance of the Assigned Risk Plan. Due to the specific liability requirement of the plan, return enhancement will focus on sector analysis and security selection. Yield curve and duration analysis are secondary considerations.

**Staff Comments**

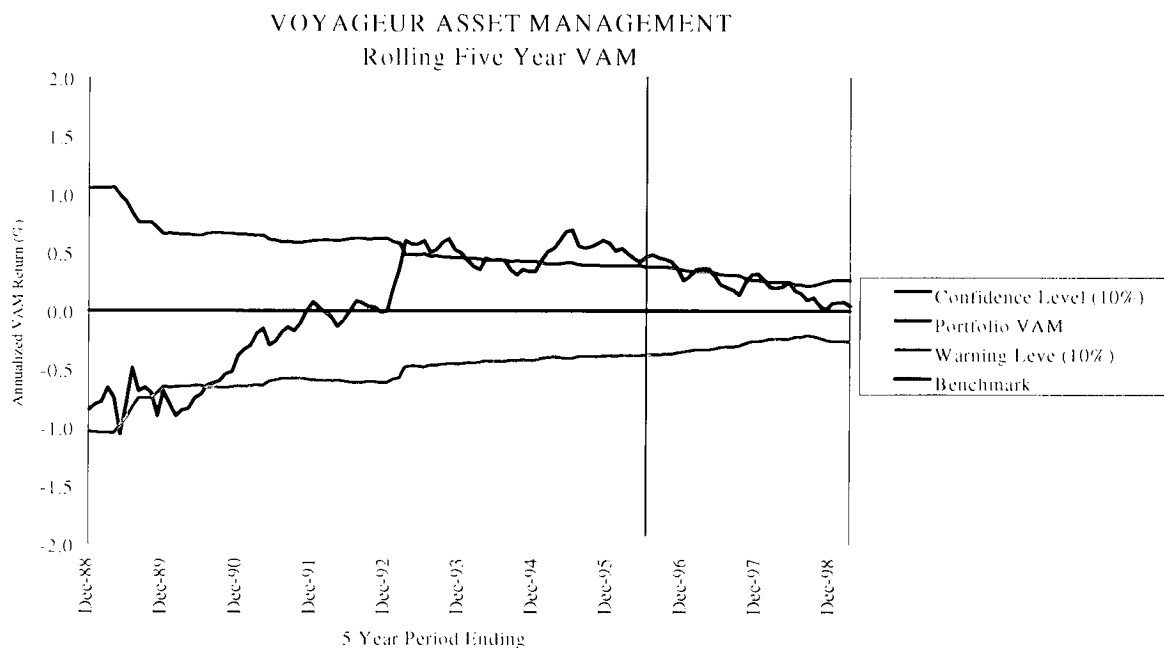
Portfolio performance for the quarter and the year was hurt by a slightly long duration relative to that of the benchmark. The organization and investment process continue to be sound. Staff plans to meet with Voyageur at their offices in the coming quarter.

**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	0.5%	0.6%
Last 1 year	6.3	6.5
Last 2 years	7.8	7.9
Last 3 years	7.1	7.1
Last 4 years	7.8	7.7
Last 5 years	7.2	7.2
Since Inception (7/91)	7.9	7.5

**Recommendation**

No action required.



**INTERNAL STOCK POOL - Trust/Non-Retirement Assets  
Periods Ending March, 1999**

**Portfolio Manager: Mike Messen**

**Assets Under Management: \$477,980,430**

**Investment Philosophy  
Environmental Trust Fund  
Permanent School Fund**

**Staff Comments**

The current manager assumed responsibility for the account in December 1996. The Internal Equity Pool is managed to closely track the S&P 500 Index. The strategy replicates the S&P 500 by owning all of the names in the index at weightings similar to those of the index. The optimization model's estimate of tracking error with this strategy is approximately 10 basis points per year.

No comments at this time.

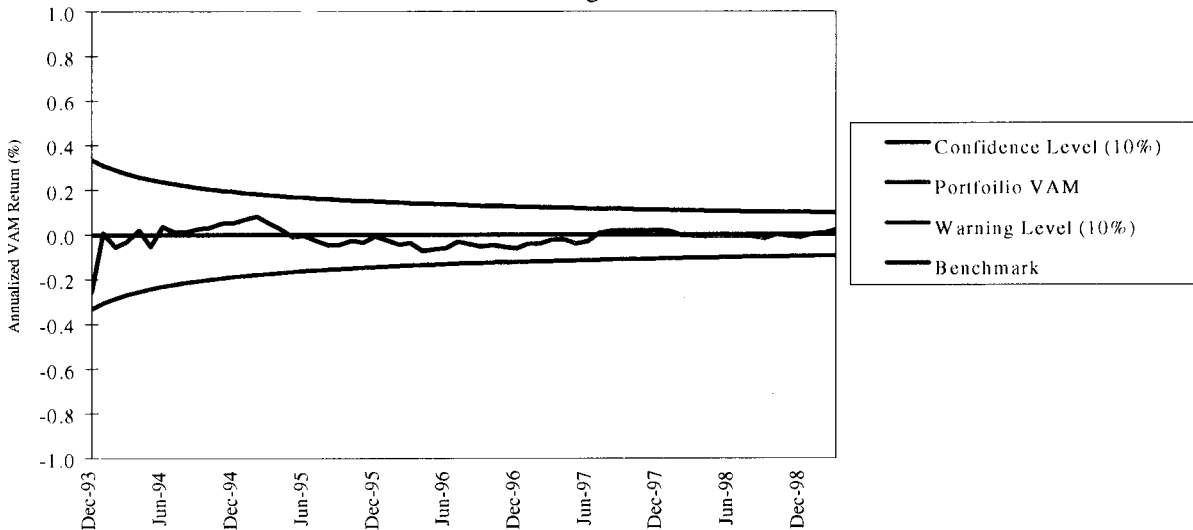
**Quantitative Evaluation**

**Recommendation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	5.1%	4.9%
Last 1 year	18.8	18.7
Last 2 years	32.7	32.6
Last 3 years	28.3	28.2
Last 4 years	29.2	29.2
Last 5 years	26.4	26.4
Since Inception (7/93)	22.8	22.8

No action required.

**INTERNAL STOCK POOL  
Trust/Non-Retirement Assets  
Cumulative Tracking**



**INTERNAL BOND POOL - Income Share Account**  
**Periods Ending March, 1999**

**Portfolio Manager: Mike Messen**

**Assets Under Management: \$196,579,895**

**Investment Philosophy**  
**Income Share Account**

The current manager assumed responsibility for this portfolio in December 1996. The investment approach emphasizes sector and security selection. The approach utilizes sector trading and relative spread analysis of both sectors and individual issues. The portfolio weightings in mortgage and corporate securities are consistently equal to or greater than the market weightings. The portfolio duration remains close to the benchmark duration but may be shortened or lengthened depending on changes in the economic outlook.

**Staff Comments**

No comments at this time.

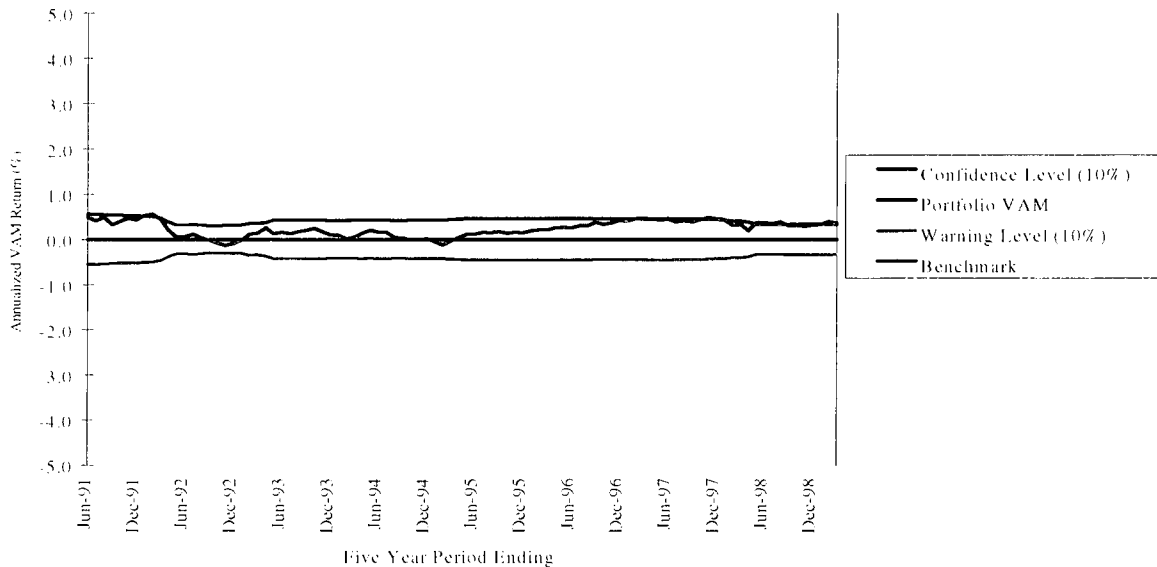
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	-0.3%	-0.5%
Last 1 year	6.8	6.5
Last 2 years	9.5	9.2
Last 3 years	8.3	7.8
Last 4 years	9.2	8.5
Last 5 years	8.2	7.8
Since Inception (7/86)	9.0	8.6

**Recommendation**

No action required.

**INTERNAL BOND POOL - INCOME SHARE ACCOUNT**  
**Rolling Five Year VAM**



**INTERNAL BOND POOL - Trust/Non-Retirement Assets**  
**Periods Ending March, 1999**

**Portfolio Manager: Mike Messen**

**Assets Under Management: \$382,067,553**

**Investment Philosophy**  
**Environmental Trust Fund**  
**and Permanent School Trust Fund**

**Staff Comments**

The current manager assumed responsibility for the portfolio in December 1996. The internal bond portfolio's investment approach emphasizes sector and security selection. The approach utilizes sector trading and relative spread analysis of both sectors and individual issues. The portfolio weightings in mortgage and corporate securities are consistently equal to or greater than the market weightings. The portfolio duration remains close to the benchmark duration but may be shortened or lengthened depending on changes in the economic outlook.

No comments at this time.

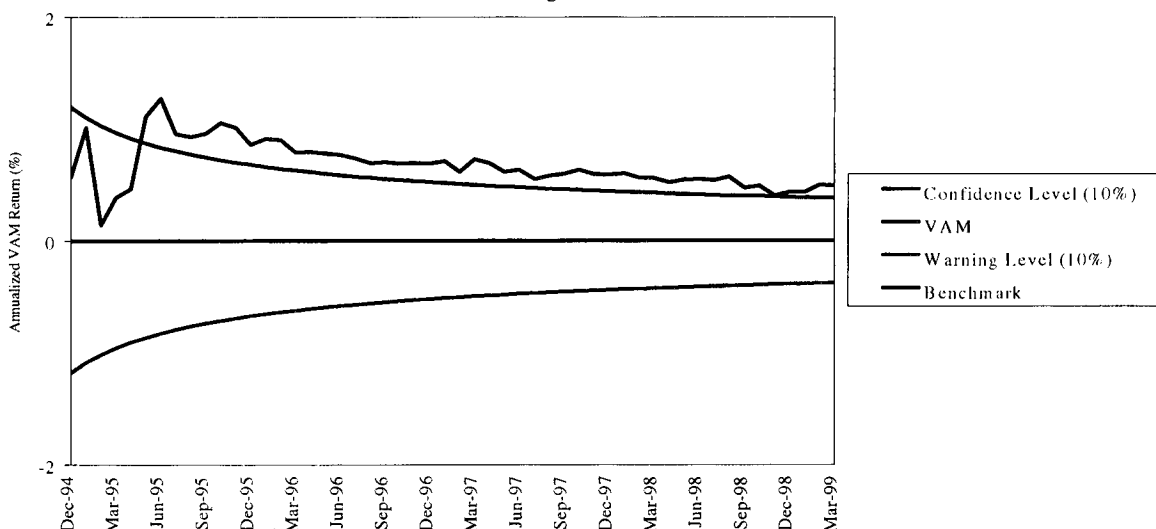
**Quantitative Evaluation**

**Recommendation**

	<b>Actual</b>	<b>Benchmark</b>	
Last Quarter	-0.1%	-0.5%	No action required.
Last 1 year	6.8	6.5	
Last 2 years	9.4	9.2	
Last 3 years	8.1	7.8	
Last 4 years	9.1	8.5	
Last 5 years	N.A.	N.A.	
Since Inception (7/94)*	9.0	8.5	

\* Date started managing the Permanent School Fund against the Lehman Aggregate.

**INTERNAL BOND POOL - TRUST/NON-RETIREMENT ASSETS**  
**Cumulative Tracking**



This page left blank intentionally.



# Tab E

## COMMITTEE REPORT

---

DATE: May 25, 1999

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

FROM: **International Manager Committee**

The International Manager Committee met on May 10, 1999 to consider the following agenda items:

- Review of manager performance for the period ending March 31, 1999.
- Adoption of the International Equity Position Paper and resulting recommendations.

**Action is required on the last item.**

### INFORMATION ITEM:

#### 1. Review of manager performance for the period ending March 31, 1999.

The **international stock program** matched its composite index for the quarter ending March 31, 1999, while it under performed for the last year. The program outperformed for the three and five year periods. Performance of the **equity managers** (without the currency overlay) underperformed the target for the quarter and the year, but outperformed the target for all other periods:

Time Period	Total Program	Composite Index*	Equity Mgrs. Only
Quarter	2.7%	2.7%	2.5%
1 Year	1.3	2.6	1.8
3 Year	8.3	6.2	7.1
5 Year	9.0	7.4	8.3

\*The composite index has been weighted 87% EAFE Free/13% Emerging Markets Free since 12/31/96. 100% EAFE Free prior to 5/1/96.

Performance evaluation (VAM) reports are behind the "blue page" in this Tab section.

## **ACTION ITEM:**

### **2. Adoption of the International Equity Investing Policy Paper and resulting recommendations.**

Staff/International Manager Committee conducted a formal review of international equity investing and the International Equity Program. The intent was to evaluate the program with the objective of enhancing the long-term performance of the retirement funds managed by the Minnesota State Board of Investment (SBI).

Specifically, the following areas were addressed:

- Evaluate **indices** for the asset class target and individual manager benchmarks.
- Explore the potential use of **global managers**.
- Explore the potential use of **regional managers**.
- Examine the **international program structure**.
- Re-examine the **currency overlay program**.

Over the last several quarters, Staff and the International Manager Committee have discussed various aspects of international investing. Staff has prepared a policy paper that summarizes the discussions and material reviewed during the process. The Committee is forwarding the paper and recommends that the IAC/SBI adopt the paper and associated recommendations. A copy of the International Equity Investing Policy Paper begins on **page 5** of this Tab. The major findings discussed in the paper are shown below:

- An evaluation of the available international benchmarks concluded that the Morgan Stanley Capital International (MSCI) index series remains the most appropriate for use by the SBI. The Committee also believes that the use of a floating weight asset class target should replace the current fixed weight international target.
- A review of both global and regional management strategies as possibilities for the International Equity Program concluded that neither is appropriate for the SBI at this time.
- The Committee believes that the SBI's overall active/passive approach for the International Program should be maintained. The program should employ passive management with an EAFE Free index account for at least 33% of the International Program to retain core EAFE Free exposure. Active managers should be retained to manage at least 33% of the International Program. Lastly, emerging markets should continue to be managed actively with no passive exposure.

- The review also concluded that adding a semi-passive or enhanced indexing approach should not be pursued at this time, but may be useful as more products enter the marketplace in the future.
- The Policy Paper includes several changes with regard to the structure of the International Program. Developed market managers should no longer have the discretion to invest in emerging markets. All of the developed markets managers may employ an active country/active stock strategy. Active managers in the Program may or may not be measured against a custom benchmark. Lastly, the Committee believes that the SBI should maintain a minimal number of developed and emerging markets managers to prudently manage the assets in the Program.
- Staff and the Committee reviewed the Program's approach to currency management, and recommend that Staff/IAC continue to have discretion with regard to the use of currencies by the Program's active equity managers. Staff and the Committee believe the SBI should discontinue the currency overlay program to hedge currency exposure. However, they believe that the current currency manager should be retained to manage foreign currencies with the goal of adding value to the total International Program until a formal review of each active manager can be conducted.

#### **RECOMMENDATIONS:**

1. **The Committee recommends that the SBI adopt the use of MSCI's "EAFE Free & EMF" index as the asset class target for the International Equity Program, changing from a fixed weight target to a floating, capitalization weighted index to take effect July 1, 1999 (the start of fiscal year 2000).**
2. **The Committee recommends that the SBI adopt a policy requiring at least 33% of the International Equity Program be actively managed and requiring at least 33% of the International Equity Program be passively managed.**
3. **The Committee recommends that the SBI restrict all EAFE Free managers to investments in developed markets and prohibit them from investing in emerging markets.**
4. **The Committee recommends that the SBI allow all active managers to be active country and active stock managers.**
5. **The Committee recommends that the passive international equity manager's performance be measured against EAFE Free and active equity managers may or may not be measured against a custom benchmark.**
6. **The Committee recommends that the SBI retain a minimum of four active EAFE Free managers and three EMF managers to prudently manage the assets**

**in the International Equity Program, given the current allocation to international equities.**

- 7. The Committee recommends that Staff/IAC retain discretion to allow the active international equity managers use of currency management in the SBIs' portfolios.**
- 8. The Committee recommends that the SBI discontinue the use of a currency overlay program to hedge international currency exposure.**
- 9. The Committee recommends that the SBI retain Record Treasury Management as an active manager to manage foreign currencies with the goal of adding value to the total program until a review of all active managers is conducted. The size of the currency manager's underlying portfolio should be in line with the average size of an active EAFE manager (currently \$500 million).**
- 10. If the SBI adopts recommendations 2, 5, and 6, the Committee recommends that a search committee be formed to look at potential additions to the SBI's active EAFE program. It is anticipated that if a search were conducted a recommendation would be presented at the December 1999 Board meeting.**

# **INTERNATIONAL EQUITY INVESTING**

**Minnesota State Board of Investment**

**Staff Position Paper**

**May 1999**

(Blank)

# INTERNATIONAL EQUITY INVESTING

## TABLE OF CONTENTS

	<b>Page</b>
Executive Summary	9
Introduction	13
Background	14
Why Invest In International Markets?	14
Increased Investment Opportunity	14
Diversification to Lower Overall Portfolio Risk	16
Potential for Higher Total Portfolio Returns	19
The Current International Equity Program	23
Benchmark Indices	24
Available Indices	24
Description of Each Index Family	25
Advantages and Disadvantages of the Indices	29
Asset Class Target: Fixed Weight Vs Floating Weight	32
Benchmark Recommendation	33
Global Management	37
Major Investment Firms	37
Benchmarks	37
Performance	39
Assets under Management	41
Global Impact on Asset Allocation	41
Recommendation	42



## TABLE OF CONTENTS (Continued)

	<b>Page</b>
Regional Management	43
Major Investment Firms	43
Products/Regions Offered	50
Allocations/Rebalancing	50
Recommendation	50
International Program Structure	51
Active versus Passive Management	51
Current Manager Composition	54
Recommendations	55
Currency Management	56
What is Currency Management?	56
History of the SBI's Currency Overlay Program	57
Concerns About the Currency Overlay Program	58
Recommendations	59
Appendix A	60
Footnotes	61
Bibliography	62

## EXECUTIVE SUMMARY

This paper reviews international equity investing and the International Equity Program for purposes of enhancing the long-term performance of the Minnesota State Board of Investment's (SBI's) retirement funds.

In the introduction, the case for international investing is reaffirmed. The attractiveness is three-fold: increased investment opportunity, diversification to lower overall portfolio risk, and the potential for higher total portfolio returns.

After a review of major international indices, Staff and the Investment Advisory Council (IAC) found that there are several good indices available to measure international manager performance. In recent years, competition between the major index providers has diminished the differences between the indices. However, some differences between the indices remain. While none of the published indices are perfect, Staff/IAC recommends continuing to use Morgan Stanley Capital International's (MSCI's) EAFE Free to measure developed market managers and Emerging Markets (EM) Free to measure emerging market managers. The Staff/IAC also recommend eliminating the fixed weight asset class target put in place in late 1996, and replacing it with a floating, market capitalization, weighted index. The recommended index is MSCI's "EAFE Free & EM Free" which is a published index.

Staff/IAC reviewed information on investment firms that offer global equity products to determine if they would offer any advantages for the SBI's retirement funds. A global equity product is a portfolio of stocks from developed countries including the United States, where managers add value through stock selection and over or under weighting countries. Results of the survey showed that there are a limited number of firms offering global equity products that can handle a sizeable portfolio. In addition, a global mandate would not provide any different U.S. exposure than the program currently experiences within the current rebalancing guidelines in place. Staff/IAC have concluded that global management is not a viable option at this point for the SBI.

Staff/IAC also reviewed information on regional mandates collected by InterSec Research Corporation, and found that regional equity products are very limited in number. Regional investing presents an additional problem for institutional investors: the need to allocate funds to all regions within the asset class target at appropriate weightings. Most institutional investors prefer to hire broad market investment managers to make the country/regional allocation decisions. Country/regional allocation is a strategy that portfolio managers can use to add value to the International Equity Program. For these reasons, Staff/IAC believe there is limited opportunity to successfully implement a regional investment program at this time.

Staff/IAC reviewed the issue of active versus passive management for the International Equity Program. Due to inefficiencies in the international equity markets, it is recommended that the SBI adopt a policy requiring at least 33% of the International Equity Program be actively managed and at least 33% of the International Equity Program be passively managed.

Currently, there are very few investment firms offering semi-passive or enhanced index products. Therefore, Staff/IAC is not recommending this type of product, but will continue to review developments in this area.

In emerging markets, the recommendation is to use active management only in order to take advantage of opportunities in these highly inefficient markets.

Recommendations on the current international manager structure include the following:

1. Restrict all EAFE managers to investments in developed markets.
2. Allow active EAFE managers to be active country and active stock managers.
3. Measure the performance of passive managers against EAFE Free. The active managers may or may not be measured against a custom benchmark.

4. To prudently manage the SBI's current allocation to international equities, the SBI should maintain a minimum of four active EAFE Free managers and three EMF managers.

In 1995, the SBI put a currency overlay program into place to minimize short-term absolute return volatility of the International Equity Program due to currency movements. In 1998, the SBI reduced the size of the currency overlay program by 50% to reduce the tracking error relative to the unhedged asset class target and to reduce the risk associated with the sizable account controlled by one manager.

The SBI has had continuing discussions about currency management, and has the following concerns with regard to the currency overlay program:

1. The performance of the active and passive international managers in aggregate is measured against an unhedged asset class target. Retaining the currency overlay program at its current level will cause significant tracking error relative to the unhedged asset class target
2. Staff believes Record Treasury Management has a process that can add value to the International Equity Program. However, the size of the account should be in line with other active international equity managers to ensure that the returns of their account will not significantly impact the International Equity Program.

Staff/IAC recommends the following:

- The SBI give Staff/IAC the discretion to allow the active international equity managers to continue to use currency management in the SBIs' portfolios.
- The SBI discontinue the use of a currency overlay program to hedge international currency exposure.
- The SBI retain Record Treasury Management as an active manager to manage foreign currencies with the goal of adding value to the total program until a review of all active managers is complete. The size of the currency manager's underlying portfolio should be in line with the average size of an active EAFE manager (currently \$500 million).

(Blank)

## INTRODUCTION

The purpose of this paper is to formally review the International Equity Program. The intent is to evaluate the program with the objective of enhancing the long-term performance of the retirement funds managed by the Minnesota State Board of Investment (SBI).

The SBI approved the addition of international equities as an asset class in the retirement funds in September 1991. In October 1995, the SBI approved an allocation to emerging markets. The International Equity Program has been successful, and the addition of international stocks has been beneficial to the retirement funds. However, approaches to international investing have evolved significantly since the inception of the SBI's International Equity Program. Therefore, Staff and the Investment Advisory Council (IAC) agreed to review international equity investing and evaluate the International Equity Program. Specifically, the following areas are addressed:

- Evaluate **indices** for the asset class target and individual manager benchmarks.
- Explore the potential use of **global managers**.
- Explore the potential use of **regional managers**.
- Examine the **international program structure**.
- Re-examine the **currency overlay program**.

This paper examines these topics and incorporates the current Staff/IAC position and recommendations where appropriate.

## BACKGROUND

### WHY INVEST IN INTERNATIONAL MARKETS?

The case for international investing, in both developed and emerging markets, remains strong. The attractiveness is three-fold:

- Increased investment opportunity.
- Diversification to lower overall portfolio risk.
- Potential for higher total portfolio returns.

### INCREASED INVESTMENT OPPORTUNITY

As of year-end 1998, half of the value in the world's capital markets resides outside of the United States. Investing in international markets allows the SBI to significantly increase its investment opportunity set. **Figure 1** shows the global capital markets measured by market capitalization weight in the Morgan Stanley Capital International's (MSCI) All Country World Index (ACWI). While the U.S. makes up 49% of the value, or capitalization, of the world markets, four countries (Japan, the United Kingdom, Germany, and France) represent the next 28%. In addition, emerging equity markets (i.e. Latin America, Eastern Europe, Africa and the Middle East, and Asia excluding Japan) are developing rapidly and currently comprise approximately 4% of the world markets.

---

**Figure 1. Market Capitalization by Country as of December 31, 1998.**

**Morgan Stanley Capital International  
All Country World Index (ACWI)**

<u>Country</u>	<u>Weight (%)</u>	<u>Country</u>	<u>Weight (%)</u>
Argentina	0.18	Korea	0.40
Australia	1.16	Malaysia	0.21
Austria*	0.15	Mexico	0.44
Belgium*	0.87	Netherlands*	2.94
Brazil	0.45	New Zealand	0.08
Canada	1.73	Norway	0.17
Chile	0.17	Pakistan	0.02
China Free	0.03	Peru	0.04
Colombia	0.03	Philippines	0.10
Czech Republic	0.04	Poland	0.05
Denmark	0.40	Portugal*	0.30
Finland*	0.70	Russia	0.05
<b>France*</b>	<b>4.25</b>	Singapore	0.31
<b>Germany*</b>	<b>4.82</b>	South Africa	0.39
Greece	0.28	Spain*	1.51
Hong Kong	0.93	Sri Lanka	0.00
Hungary	0.06	Sweden	1.19
India	0.30	Switzerland	3.64
Indonesia	0.07	Taiwan	0.75
Ireland*	0.22	Thailand	0.10
Israel	0.13	Turkey	0.08
Italy*	2.36	<b>United Kingdom</b>	<b>9.61</b>
<b>Japan</b>	<b>9.49</b>	<b>United States</b>	<b>48.75</b>
Jordan	0.01	<u>Venezuela</u>	<u>0.04</u>
		<b>All Country</b>	<b>100.0</b>
		<b>World Index</b>	

\* These countries are currently members of the European Economic and Monetary Union (EMU), have converted to the euro currency, and are 18.12% of the ACWI. Luxemburg (not listed) is the eleventh country in the EMU.

---



## DIVERSIFICATION TO LOWER OVERALL PORTFOLIO RISK

The theory of diversification in investment portfolios, for which Harry Markowitz, Ph.D., won a Nobel Prize, states that combining uncorrelated assets into a single portfolio results in a superior risk/return trade-off. Correlation is a statistical measure of how much markets move together over a discrete period of time. A correlation of +1.0 would indicate the returns of a market moved exactly like the returns of another market - up or down. A correlation of zero would indicate there was no association of returns, that is, if one market's return increased, the return of the other could not be predicted.

**Figure 2** shows the historical correlation of several asset classes: developed markets (hedged), developed markets (unhedged), emerging markets (unhedged), U.S. equity, and U.S. bonds. The ten-year correlation data indicates that developed (either hedged or unhedged) and emerging market equity returns are not well correlated to either U.S. equity or U.S. bonds, thus using international equities in a portfolio will provide diversification. A portfolio that is diversified with international securities is likely to exhibit more stable performance over time and a superior risk/return trade-off.

Recently, the foreign markets have seemed more correlated due to short-term negative market shocks that bring all security markets down together. While the world has become more interdependent, global events still impact stock markets differently. For example, despite a significant financial meltdown in Asia, Russia, and Brazil during 1998 and a *negative 25%* return in MSCI's Emerging Markets Free Index, the U.S. equity market returned *positive 28%* for the year as measured by the S&P 500.

Figure 2.

## Historical Correlation of Returns 1988 - 1998

	Developed Markets (Hedged)	Developed Markets (Unhedged)	Emerging Markets (Unhedged)	US Equities	US Bonds
Developed Mkts. (Hedged)	1.00				
Developed Mkts. (Unhedged)	0.85	1.00			
Emerging Mkts. (Unhedged)	0.57	0.49	1.00		
US Equities	0.62	0.50	0.50	1.00	
US Bonds	0.16	0.17	0.01	0.39	1.00

Despite growing global economic integration, the correlation between various national markets continues to be sufficiently low that diversification through international equities reduces risk.<sup>1</sup> **Figure 3** shows the historical correlation of U.S. markets (as represented by the S&P 500) with a sample of financial markets from around the world. The chart indicates that the equity markets of foreign countries through 1997 were not highly correlated with U.S. equities. (Data for 1998 was not available at the time of this review.)

**Figure 3** also shows that the correlation between the U.S. and international markets remained relatively constant for the two periods shown, 1971-1986 and 1988-1997. This indicates that international equity markets had not become more correlated with the U.S. equity markets during those periods, and that diversification benefits of international investing remained strong.

---

**Figure 3. Correlation of International Equities with U.S. Equities**

Correlation of select country markets with S&P 500.

	<u>1971 – 1986*</u>	<u>1988 – 1997**</u>
Canada	0.66	0.69
Netherlands	0.55	0.57
UK	0.47	0.56
EMU	N/A	0.50
Singapore	0.37	0.48
<b>ACWI ex-US</b>	<b>N/A</b>	<b>0.47</b>
France	0.40	0.46
Hong Kong	0.26	0.46
Switzerland	0.44	0.45
<b>EAFE</b>	<b>0.47</b>	<b>0.45</b>
Germany	0.32	0.38
Mexico	N/A	0.35
Japan	0.27	0.26
Brazil	N/A	0.26
Greece	N/A	0.08
Turkey	N/A	-0.08

Source: \* Solnick (1991), International Investments

\*\* Barclays Global Investors

---

## POTENTIAL FOR HIGHER TOTAL PORTFOLIO RETURNS

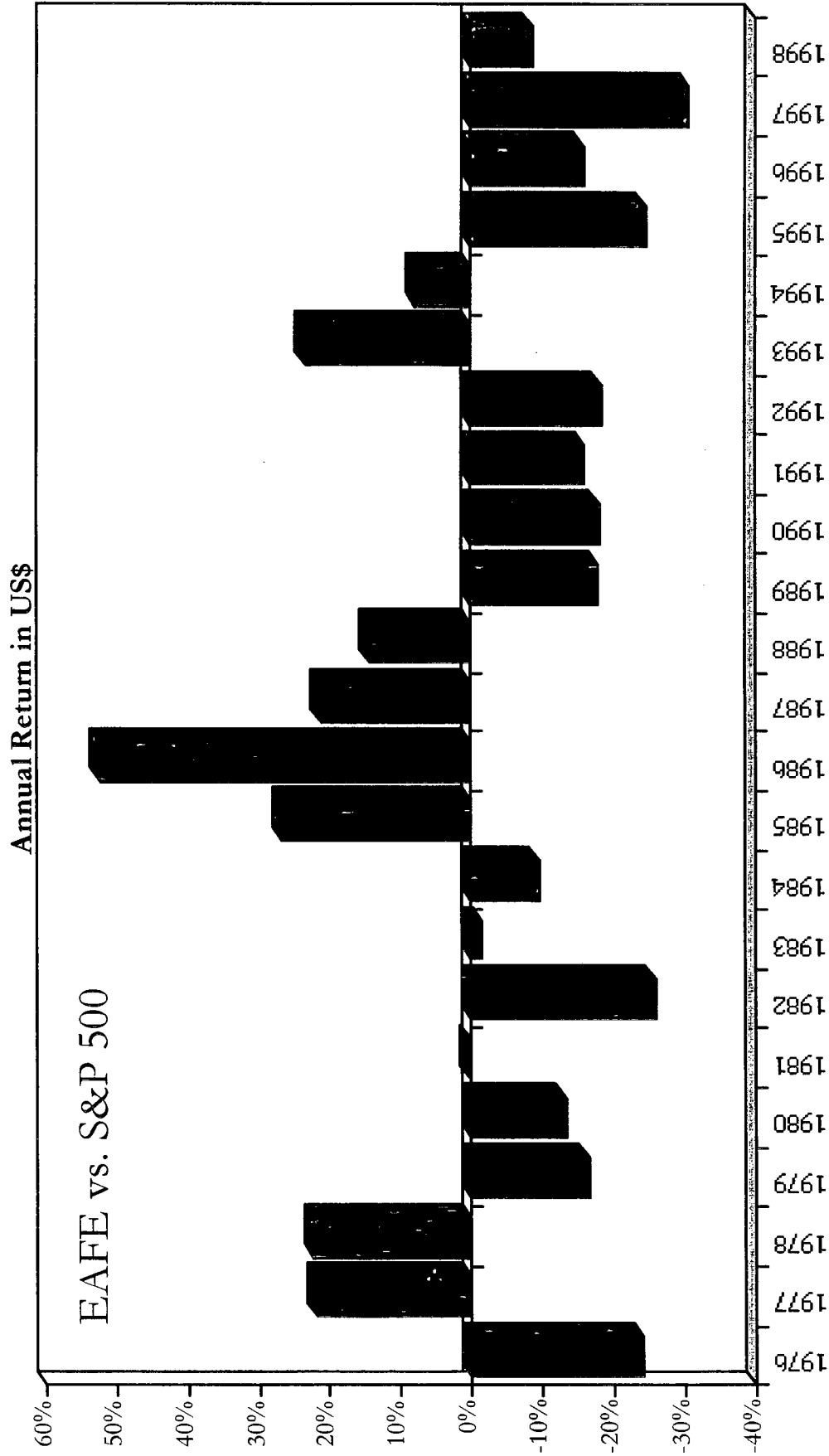
The growing global economy has rewarded many international companies with healthy sales and higher earnings. This environment has led many investors into the international equity markets. Staff believes that the expected returns of international equities are commensurate with the risks. By adding international equities to the plan, the SBI is able to get more exposure to equity markets without paying a higher price in overall program volatility.

International markets have generated higher returns than the U.S. market in some periods. **Figures 4(a) and 4(b)** show the annual returns of the developed markets and the emerging markets, respectively, relative to the U.S. equity market as represented by the S&P 500. Developed markets are represented by the MSCI Europe, Australia and Far East Index (EAFE) and emerging markets are represented by the MSCI Emerging Markets Free Index (EMF) and International Finance Corporation (IFC) indices. During periods where the bars are above the horizontal line, the foreign markets outperformed the U.S. S&P 500. During periods where the bars are below the horizontal line, the foreign markets under-performed the U.S. markets. During the most recent 8-year period, U.S. markets generated higher returns than international markets due to a strong U.S. economy, low interest rates, minimal inflation, restructured corporations, and high corporate profits. During other periods, such as the late 1970's and for a period from the late 1980's through the early 1990's, international stock markets outperformed U.S. stock markets. Many believe that the current trend of higher U.S. returns will again reverse with international markets outperforming the U.S.



Figure 4(a)

## Developed Markets Relative Performance

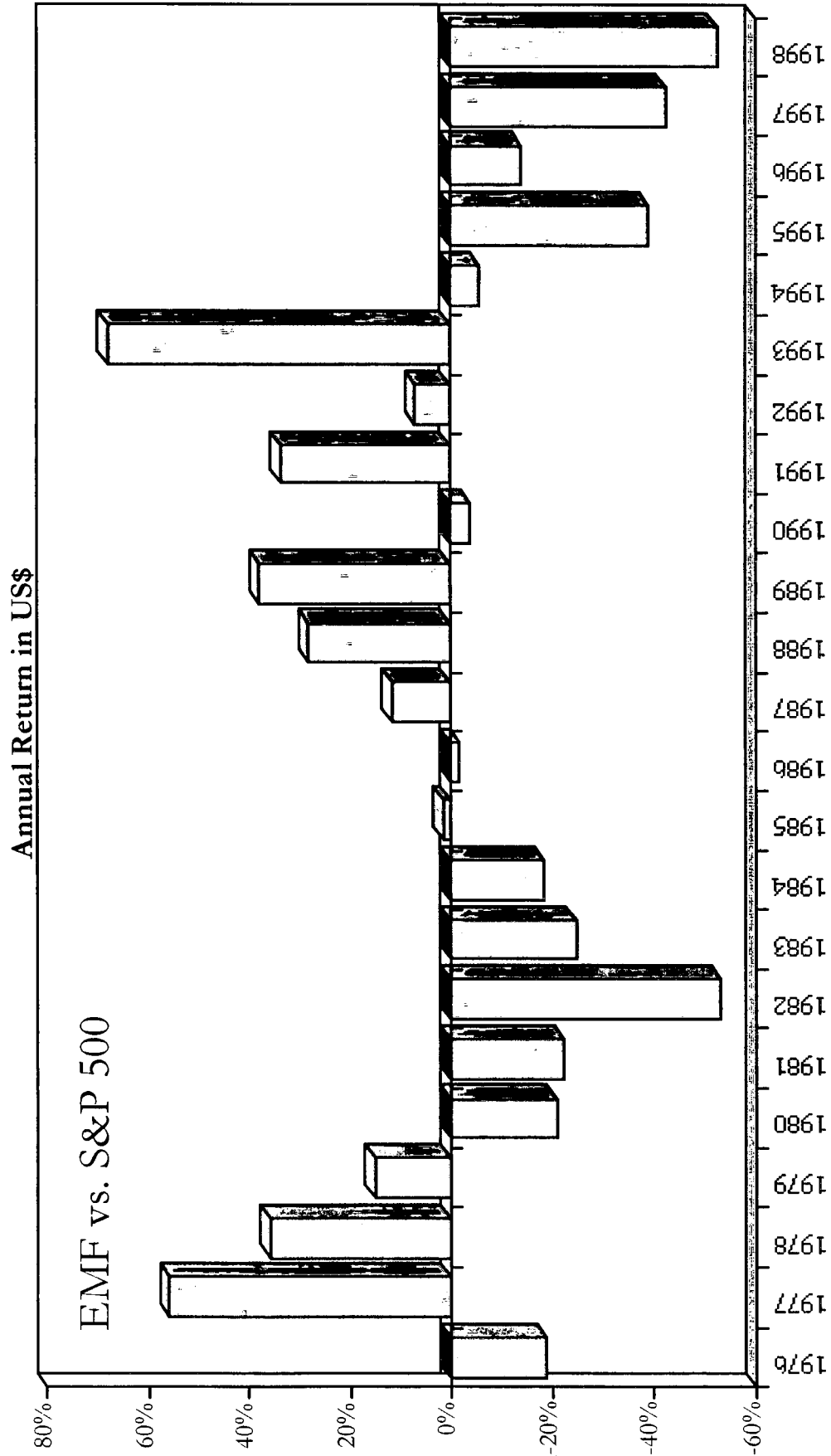


During periods where the bars are above the horizontal line, foreign markets outperformed the U.S. market.



Figure 4(b)

## Emerging Markets Relative Performance



During periods where the bars are above the horizontal line, foreign markets outperformed the U.S. market.

1976-1984: Composite of IFC Emerging Markets Database Markets: Argentina, Brazil, Chile, Mexico, India, South Korea, Thailand, Zimbabwe; 1985-1987: IFC Investable Index; 1988-1998: MSCI Emerging Markets Free Index



## **THE CURRENT INTERNATIONAL EQUITY PROGRAM**

As of December 31, 1998, the International Equity Program consisted of four active developed markets managers, one passive developed markets manager, three emerging markets managers, and one currency manager. The developed markets managers' benchmark is the MSCI EAFE Free. The emerging markets managers' benchmark is MSCI EM Free index. The term "Free" refers to an index that is free of securities with local market restrictions on share ownership by foreign investors. Therefore, a "Free" index reflects actual buyable opportunities for a foreign investor. Throughout this paper, EAFE and EAFE Free may be used interchangeably, as the indices are very similar. At this time, the difference is limited to one country, Singapore, where foreign ownership restrictions exist.

The asset class target for the International Equity Program is currently a fixed weight target: 87% EAFE Free and 13% EM Free. This target was set in December 1996 after the Board approved an allocation of up to 2% of the total Fund to stocks of emerging markets. At that level, emerging markets represented approximately 13% of the SBI's international stock pool. Coincidentally, at that time, MSCI's All Country World Index also had a weighting of about 13% in emerging markets.



## BENCHMARK INDICES

This section addresses the indices (benchmarks) that are available to measure international managers investing in developed and emerging markets. As market indices are constantly evolving, a periodic review is warranted.

Custom benchmarks, similar to those used in the SBI Domestic Equity Program, are not a viable option for international equity investing at this time. A significant amount of quantitative research, database improvements and tool development will need to occur before institutional investors can seriously consider their use. However, customized benchmarks could become feasible in the future, and staff will continue to monitor changes taking place in the industry.

### AVAILABLE INDICES

Currently, there are four major index “providers” available for **developed markets**. They include:

- The Morgan Stanley Capital International Indices (MSCI).
- The Salomon Smith Barney World Equity Indices (Salomon).
- The Financial Times Actuaries World Indices (FT-AWI).
- The Dow Jones Global Indices (DJGI).

There are also four major providers of **emerging markets** benchmarks. They include:

- The Morgan Stanley Capital International Indices (MSCI).
- The Salomon Smith Barney World Equity Indices (Salomon).
- The International Finance Corporation (IFC).
- ING Baring Securities (Baring).

## DESCRIPTIONS OF EACH INDEX FAMILY

Staff conducted a review of the following firms in fall of 1998. At that time, the data available from most of the index providers was through December 1997.

*Morgan Stanley Capital International (MSCI)* was formed in 1986 when Morgan Stanley & Co. purchased Capital International Perspective S.A. for their data and indices. Capital International had developed Capital International World Indices in the late 1960's to allow comparisons across stock markets and industries.

Today, Capital International retains full editorial discretion over index deletions and additions. Historical information dates back to December 1969. Their research database includes 28,000 securities. The indices are constructed by aggregating the appropriate MSCI Country Indices. The MSCI EAFE Index is the most widely recognized and used developed markets index in the U.S. As of December 1997, it included 21 developed markets, 1080 stocks and a total capitalization, (market price multiplied by shares outstanding) of \$5.9 trillion. The Emerging Markets Free (EMF) Index included 26 countries and 991 securities. The All Country World Index (ACWI) is a capitalization-weighted combination of EAFE, EMF, the U.S., and Canada. As of September 30, 1998, ACWI included 47 countries, approximately 2500 securities, and a total market capitalization of \$20.9 trillion. Each index, ACWI, EAFE, and EMF, is an aggregate of the appropriate country indices. The chart in **Appendix A** shows the countries included in each of these indices.

MSCI constructs a country index by listing every security in that market with its price, shares, significant owners, free float, and monthly trading volume. Then, they examine each industry group to identify the most investable securities: those with the largest size, most trading volume, and the largest free float (market capitalization not owned by governments, other companies, or a significant position by an individual owner). They avoid cross-ownership (companies substantially owned by other companies) where possible and require companies to have at least 25% free float to be included in the index. MSCI selects what they believe to be the most investable stocks, and includes them in the

country index at their full market capitalization weight. The target is to select about 60% of the market capitalization of each industry group. Combining all industry groups then results in the index holding 60% of the market capitalization of each country. This consistency in construction methodology across countries ensures that each country's weight in the regional and composite indices is proportional to its weight in the total universe.<sup>2</sup>

*Salomon Smith Barney's (Salomon)* flagship index is the Europe and Pacific Broad Market Index (BMI). As of December 31, 1997, it held 21 developed countries, 3,949 securities, and total market capitalization of \$5.8 trillion. The BMI can be divided into two sub-indices: the Primary Market Index (PMI) with a total of 957 large-capitalization stocks representing the top 80% of each country's available market capitalization and the Extended Market Index (EMI) with 2,992 stocks representing the bottom 20%. The Salomon emerging market index, included 27 countries and 1,128 stocks as of December 1997.<sup>3</sup> The indices are designed to measure the institutional investable equity universe as it exists; hence, the indices cover about 95% of the universe capitalization.

The BMI is a market capitalization weighted index that includes all listed shares of all companies with market capitalization (float) of at least \$100 million. Salomon does an annual index reconstitution in which all issues are marked-to-market in May with respect to percentage float, total shares outstanding and industry classification. Companies are added to the BMI if their float equals or exceeds \$100 million. Companies are deleted if their float falls below \$75 million. The reconstituted index is pre-announced and is implemented at the July 1 opening each year.<sup>4</sup>

*Financial Times Actuaries World Indices (FT-AWI)* are jointly compiled by FT-SE International Limited, Goldman, Sachs & Co. and Standard & Poor's in conjunction with the Institute of Actuaries and the Faculty of Actuaries. Their indices are predominately used by European fund managers. Data dates back to December 1985. At the end of December 1997, the EuroPac Index included 1,474 securities with a total market capitalization of \$6.9 trillion in 23 countries. This index is divided into two sub-indices:

the Large Cap Index, which represents the top 75% in market capitalization in each country, and the Medium/Small Cap Index, which represents the bottom 25% in market capitalization in each country.

FT-AWI indices include approximately 80 to 85% of the market value of equity securities available to international investors. Securities that comprise the bottom 5% are excluded. FT-AWI eliminates securities that have traded less than 15 days in the last two quarters. The remaining securities are examined to determine the average market capitalization. All securities larger than the average are included in the index, and the sector distribution is determined from these large-cap issues. Securities smaller than average are ranked by market cap in each economic sector and added to the index until the sector weights are close to the sector distribution set by the large-cap issues.<sup>5</sup> FT-AWI imposes restrictions on securities with less than 25% free float: any securities with greater than 25% free float are included at full capitalization weighting.<sup>6</sup>

*Dow Jones Global Indices (DJGI)*, tracks both real-time and historical data. Dow Jones currently calculates 13 regional indexes and 35 country indexes. They do not have a developed market index that can be used as a comparison to the indices discussed above. As of June 30, 1998, the Dow Jones Global Index included 34 countries, about 2900 securities, and market capitalization of \$18 trillion. Their indices represent 80% of the world's investable equity capital, and they are market capitalization weighted.

The construction of an index begins by including the top 50% of companies by market capitalization, which are sorted into industries. The remaining companies are reviewed individually to assess how adding each company will affect the industry weightings until the 80% target is reached. Where significant foreign ownership restrictions apply, the proportion of shares available to foreign investors is included. Issues are not included if they have had more than 10 non-trading days in a quarter. Companies whose stock is 75% controlled by another corporation or a government are excluded.<sup>7</sup>

*The International Finance Corporation (IFC)* has developed the International Finance Corporation Investable, an emerging market index. As of December 31, 1997, this index included 31 emerging countries and 1,424 securities. It includes all emerging market countries where stock markets are open to foreign investors to some degree. IFC adjusts capitalization to account for foreign ownership restrictions. In 1996, IFC also began incorporating a cross-holding adjustment, and began excluding those shares held by the government of the local country. IFC selects the largest, most liquid securities, covering 70% of the market to create the IFC Investable. The index excludes stocks that have less than \$10 million in trading volume per year (\$40,000 per day) and foreign investable market capitalization below \$25 million.<sup>8</sup>

*ING Baring Securities (Baring)* compiles the Baring Securities Emerging Market Index (BEMI). Baring's goal is to create a benchmark of markets and shares international investors could realistically trade. In 1994, Baring established the Baring-Extended, a broader index series including 24 countries (instead of 21) and 600 securities (instead of 450). As of December 31, 1997, the Extended BEMI included 26 countries and 643 securities.

Barings includes countries undergoing rapid industrialization with at least \$2 billion in market capitalization and 100 listed companies, but they may exclude countries for political risk, foreign investment restrictions, and lack of institutional interest. Barings includes stock with capitalization greater than 1% of all stocks in the country. It excludes stocks with free-float of less than 10% of their total capitalization or with average daily trading volume of less than \$100,000. Before being added to the index, the stock's weighting is adjusted for foreign ownership or free-float adjustments, whichever gives the more conservative weighting to the index.<sup>7</sup>

## **ADVANTAGES AND DISADVANTAGES OF THE INDICES**

The indices described above are not perfect, but at this time they are the best benchmarks available to use as a measure of investment manager performance. In recent years, the competition between index providers to offer a better index has diminished the differences between the benchmarks. However, many differences still remain and this section addresses the primary advantages or disadvantages of each index.

### **Developed Market Indices**

The major difference between the developed market indices is the coverage of the total market capitalization in each market. The differences are listed below:

	Mkt. Cap. Coverage
MSCI EAFE	60%
SALOMON BMI	95%
FT-AWI	85%
Dow Jones Global Index	80%

Depending on the plan sponsor's objective, each of these indices is an investable benchmark, that is, one in which a foreign investor has the option to forgo active management and simply hold the passive benchmark portfolio. If the investor desires the most comprehensive coverage of the international markets, Salomon BMI or FT-AWI may be preferred. However, if the desire is to achieve international diversification, MSCI EAFE will accomplish that while keeping the investor in the largest and most liquid international stocks.

In the developed markets, MSCI EAFE has the advantage of being the most widely used and recognized index by U.S. institutional investors. Ninety-seven percent of U.S. institutional investors use MSCI benchmarks to measure international equity performance. It also has the longest history, dating back to December 1969. Moreover,

MSCI is starting to market stock index futures that will match its country indices with a 1% tracking error. EAFE's coverage of the developed markets, while not as comprehensive as its peers, is appropriate for international diversification. Having fewer names in the benchmark is not a disadvantage, as the correlation of the four developed market indices is about 97%. Fewer names also saves/reduces transaction costs in a passive implementation. **Figure 5** compares the number of countries and securities in each of the developed market indices.

---

**Figure 5.                      Developed Market Index Composition  
As of December 1997**

	<u>Number of Countries</u>	<u>Number of Stocks</u>
MSCI EAFE Index	21	1,080
Salomon Europe and Pacific BMI	21	3,949
FT-AWI EuroPac Index	23	1,474
Dow Jones	N/A	N/A

**Emerging Market Index Composition  
As of December 1997**

	<u>Number of Countries</u>	<u>Number of Stocks</u>
MSCI EMF Index	26	991
Salomon Emerging Mkt. Index	27	1,128
IFC Investable	31	1,424
Extended BEMI	26	643

---

A disadvantage with MSCI EAFE is that they use a selection process to include the most investable securities in their indices instead of firm rules that would allow investment managers to predict index changes.

An advantage of FT-AWI EuroPac Index is that it is widely used by European fund managers. It also includes only issues that are available to foreign investors after

adjusting for the percentage held by the government. The disadvantages are its lack of use by U.S. institutional investors and less historical data, with inception being 1985.

The Salomon Broad Market Index has the deepest market coverage, holding 3,949 securities in 21 countries. It attempts to represent every investable company worth more than \$100 million free float market capitalization and adjust for cross-ownership. Salomon's indices, also, closely track the local market derivatives. However, the disadvantage is that a significant number of small capitalization names are included in the index: approximately 2,600 securities have a market capitalization of \$500 million or less. For a large plan sponsor trying to put sizeable amounts of money into international markets, transactions in these smaller securities will be more difficult and costly.

Dow Jones indices are relatively deep, covering 80% of the market capitalization. However, they have the shortest history with inception in December 1991. Dow Jones is marketing stock index futures based on their Dow Jones country indices. There has not yet been significant use of the Dow Jones indices by U.S. institutional investors, but the indices are available real-time and are published in the Wall Street Journal daily.

### **Emerging Markets**

In the emerging markets, any of the benchmarks discussed above could be used to capture the returns of the emerging markets. The MSCI EMF and the IFC Investable are the most commonly used emerging markets indices in the U.S.

The MSCI EMF is similar to its competitors with regard to the number of countries and securities in its index (see **Figure 5**). MSCI also uses a consistent methodology to select index constituents across both emerging and developed markets, which is an advantage if there is a desire to measure the combined developed and emerging markets managers with one asset class target.

The Salomon Emerging Market Index and The IFC Investable have the most comprehensive coverage with the largest number of countries and securities



(see **Figure 5**). The Baring-Extended BEMI has a large-cap bias, and consequently is the most liquid index.

### **ASSET CLASS TARGET: FIXED WEIGHT VS FLOATING WEIGHT**

Currently, the SBI's international equity asset class target is a fixed weight combination of the MSCI's EAFE Free Index for developed markets and the MSCI's EM Free Index for the emerging markets. In late 1996, the target was set at 87% EAFE Free and 13% EM Free based on the allocation to emerging markets and the resulting developed and emerging market weights in the actual portfolio at that time.

This fixed weight method requires little portfolio rebalancing if both developed and emerging market investment returns are similar. But when the developed and emerging markets have very different returns or move in opposite directions, as they did in 1998, the actual portfolio weightings diverge from the fixed target requiring a rebalance back to the target weights of EAFE and EMF. As of December 1998, the SBI's actual emerging market weighting was 9% compared to the target's 13% due to market movements.

The strategy to periodically rebalance a program, that is to sell high priced assets and buy low priced assets, is known to add value to programs over the long-term. However, emerging market transaction costs of 2 to 3% quickly reduce the potential value added from a rebalance strategy. Staff does not believe using a fixed weight target with periodic rebalancing is cost effective in the international markets at this time. If trading in the international markets becomes more efficient, Staff will reexamine this issue.

An asset class target can be based on market capitalization weights, GDP-weights, or some other method. However, anything other than a floating, capitalization-weighted target will require more frequent rebalances. A floating target will significantly reduce the need to rebalance, as the portfolios will move in tandem with the target based on market capitalization. Capitalization-weighted indices are essentially self-balancing

which reduces ongoing management and transaction costs. However, changes to the benchmark such as the addition or deletion of a country will still require a portfolio rebalance.

## **BENCHMARK RECOMMENDATION**

None of the indices are perfect, but EAFE Free is an industry standard. It is well known and the most widely used benchmark by active managers. EAFE Free has significant coverage in the area of international stocks where large institutional investors transact, and more product is available geared to EAFE Free. At this time, Staff believes the advantages to changing benchmarks do not outweigh the costs. **Therefore, Staff recommends that the SBI continue to use MSCI EAFE Free Index to measure the developed market managers.**

For emerging markets, MSCI's EMF is widely used and recognized index. It includes an appropriate number of countries and securities for an institutional investor. **Staff recommends the SBI continue to use MSCI's EMF Index to measure the emerging market managers.**

The major advantage to using both MSCI's EAFE Free and EMF for developed and emerging market is that they can be combined, based on market capitalization weights, into one international index for use as the asset class target. MSCI's construction process ensures that the industry and country weights within the indices are representative of the overall market allowing a combination of the two indices into one.

**Staff recommends that the SBI use MSCI's "EAFE Free & EMF" index as the asset class target for the International Equity Program, replacing the current fixed weight target with a floating, capitalization weighted index, effective July 1, 1999 (the start of fiscal year 2000).**

Note that moving from the fixed target of 13% emerging markets to a floating weight target could cause the SBI's total Fund allocation to emerging markets to go higher than the 2% originally approved. While the new EAFE Free & EMF target would put emerging markets at about 1.5% of the total Fund right now, a floating benchmark could at times put the emerging markets at an allocation higher than 2%. The approval of this measure would replace the original mandate limiting emerging market stock to 2% of the total fund.

A comparison of the monthly returns in **Figure 6** shows that a benchmark of EAFE Free & EMF closely track the returns of the current fixed weight benchmark and the actual International Equity Program, indicating that it will provide a similar target with respect to risk and return that the SBI has had in place over the last few years.

As can be seen in **Figure 7**, the country weightings in the International Equity Program generally are in line with those of the EAFE Free & EMF target. The slight differences are due to: 1) the smaller weighting in emerging markets in the current International Equity Program and 2) the active bets made by the international equity managers.

**Figure 6**  
**Monthly Return Comparison**

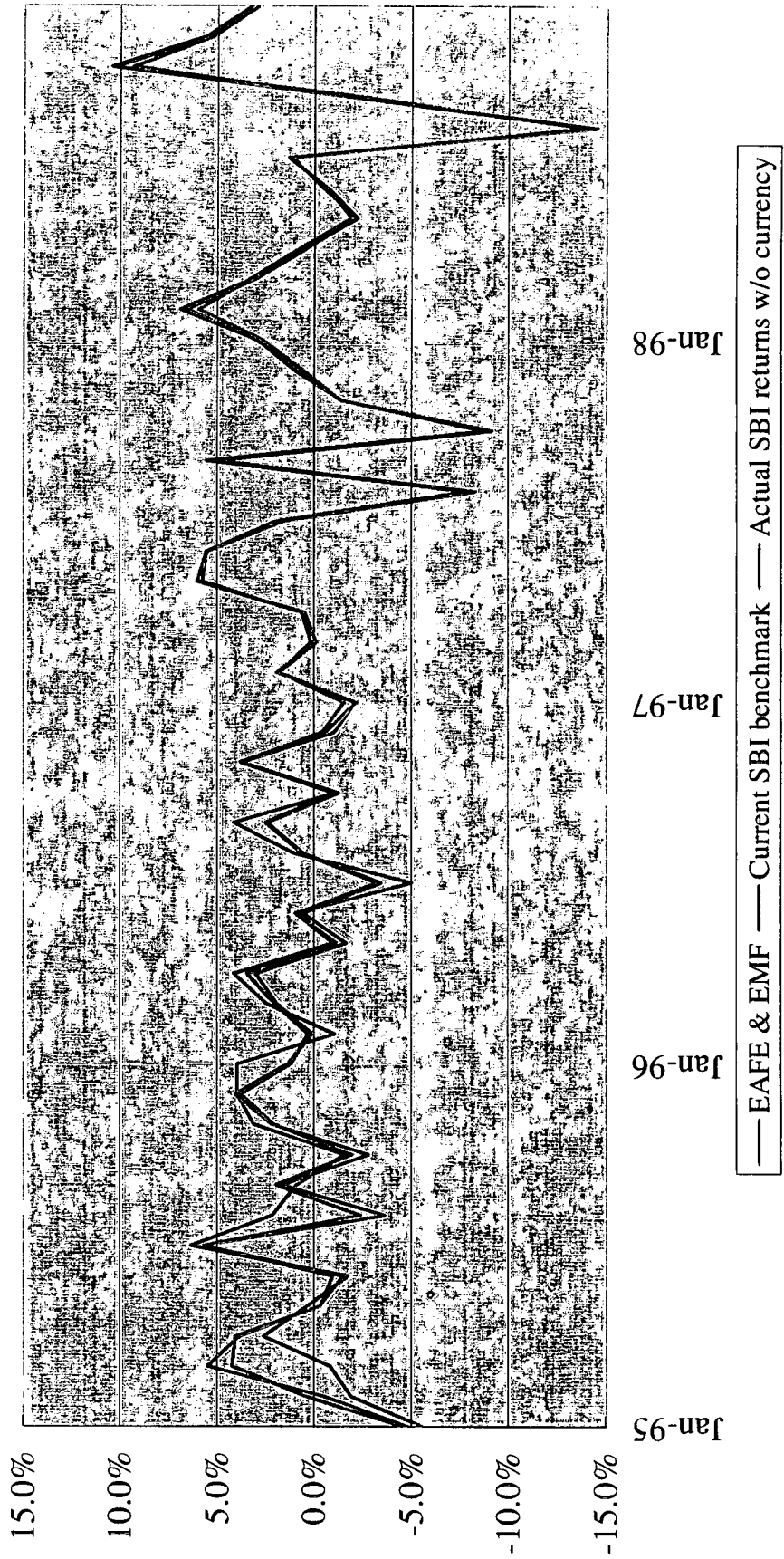


Figure 7

## Country Weightings As of December 1998

Country	Actual Int'l Equity Program Weightings	EAFE Free & EMF Weightings	Difference (Actual Portfolio to EAFE Free & EMF)
Argentina	0.7%	0.4%	0.3%
Australia	2.9%	2.3%	0.6%
Austria	0.3%	0.3%	0.0%
Belgium	1.7%	1.8%	-0.1%
Brazil	1.1%	0.9%	0.2%
Canada	0.2%	0.0%	0.2%
Chile	0.4%	0.3%	0.1%
China	0.1%	0.1%	0.1%
Columbia	0.0%	0.1%	-0.1%
Czech Republic	0.1%	0.1%	0.0%
Denmark	0.6%	0.8%	-0.2%
Egypt	0.1%	0.0%	0.1%
Finland	1.8%	1.4%	0.4%
France	9.5%	8.6%	0.9%
Germany	9.2%	9.7%	-0.5%
Ghana	0.1%	0.0%	0.1%
Greece	0.3%	0.6%	-0.3%
Hong Kong	2.1%	1.9%	0.2%
Hungary	0.3%	0.1%	0.2%
India	0.4%	0.6%	-0.2%
Indonesia	0.0%	0.1%	-0.1%
Ireland	0.4%	0.5%	-0.1%
Israel	0.1%	0.3%	-0.2%
Italy	4.5%	4.8%	-0.3%
Japan	17.7%	19.2%	-1.5%
Jordan	0.0%	0.0%	0.0%
Korea, Republic of	0.3%	0.8%	-0.5%
Luxembourg	0.1%	0.0%	0.1%
Malaysia	0.4%	0.4%	0.0%
Mexico	0.8%	0.9%	-0.1%
Netherlands	6.3%	5.9%	0.4%
New Zealand	0.4%	0.2%	0.2%
Norway	0.4%	0.4%	0.1%
Pakistan	0.0%	0.0%	0.0%
Peru	0.1%	0.1%	0.0%
Philippines	0.2%	0.2%	0.0%
Poland	0.1%	0.1%	0.0%
Portugal	0.5%	0.6%	-0.1%
Russia	0.0%	0.1%	-0.1%
Singapore	0.7%	0.6%	0.1%
South Africa	0.6%	0.8%	-0.2%
Spain	2.7%	3.1%	-0.4%
Sri Lanka	0.0%	0.0%	0.0%
Sweden	3.0%	2.4%	0.6%
Switzerland	7.0%	7.3%	-0.3%
Taiwan	0.2%	1.5%	-1.3%
Thailand	0.2%	0.2%	0.0%
Turkey	0.2%	0.2%	0.1%
United Kingdom	19.3%	19.4%	-0.1%
United States	1.8%	0.0%	1.8%
Venezuela	0.1%	0.1%	0.0%
	100.0%	100.0%	

## **GLOBAL MANAGEMENT**

As the world marketplace evolves companies compete on an increasingly global basis. Globalization is increasingly forcing investment management firms to conduct their research differently than they have in the past. Where before firms may have had analysts researching the best stocks in a region, today they need to take a more global perspective and evaluate firms relative to their competitors in other parts of the world.

Globalization has raised the question of whether the SBI should use global managers that research and invest in stocks both within and beyond the borders of the U.S. A global manager selects the best stocks in each industry and either directly or indirectly sets the country allocation.

### **MAJOR INVESTMENT FIRMS**

Based on information provided by InterSec Research Corporation, ten firms had a global equity product with more than \$750 million in assets under management as of December 1998. Staff reviewed pertinent information from each of these firms. A list of the investment firms, their performance, benchmarks, and assets under management are included in **Figure 8**.

### **BENCHMARKS**

The benchmark used by nine of the ten investment firms examined was the MSCI World Index. The World Index is a developed market index that includes EAFE plus the U.S. and Canada. (It does not include emerging markets, which makes it different from the All Country World Index discussed earlier. See Appendix A.) The tenth firm used a benchmark composite consisting of at least two or more indices such as the MSCI ACWI or EAFE and others including Salomon, Russell 3000, or Wilshire 5000.

Figure 8.

**GLOBAL MANAGER SURVEY  
PERFORMANCE SUMMARY**

Manager	Product	Assets under Management												
		1997	1996	1995	1994	1993	1992	1991	1990	1989	1988			
JP Morgan	Global Equity	16.8	16.2	18.7	4.1	24.6	-2.8	20.7	-7.1	18.0	17.2			
Lazard Asset Mngmt	Global Equity	17.1	17.9	24.9	4.8	25.0	-1.9	23.6	1.9	33.5	36.2			
Brinson Partner's	Global Equity	17.1	20.9	25.9	-0.1	22.7	6.5	25.3	-10.6	27.5	23.4			
Scudder Kemper	Global Equity	18.2	15.9	24.0	0.5	36.5	5.1	20.6	-8.9	31.0				
Capital Guardian Trust	Global Equity	21.1	18.9	22.0	5.4	29.5	-0.5	18.5	-11.3	25.8	21.5			
Janus Capital	Janus Aspen Worldwide	22.2	29.0	27.4	1.5									
Marvin & Palmer	Global Equity	25.2	13.3	17.6	-13.1	42.1	-0.2	36.3	-6.3	26.6	15.9			
Sanford C. Bernstein	Global Strategic Value	21.8	22.0	30.6	2.8									
TCW Group*	Comprehensive Asset Allocation	13.7	16.1	19.6	-6.1	36.8	11.9							
Templeton	Global Tax-exempt Equity Composit	12.2	21.6	24.3	0.4	34.8	6.7	22.1	-11.1	24.7				
<b>Benchmarks:</b>	MSCI World	15.8	13.5	20.7	5.1	22.5	-5.2	18.3	-17.0	16.6	23.3			
	Comp. Asset Alloc. Benchmark composite*	13.9	12.1	20.9	4.1	19.4	-0.6							

\* TCW Group's benchmark consists of at least 2 indexes. Generally, a 40-50% MSCI weighting in World, ACWI ex US, or EAFE, and other components can include Salomon, Russell 3000, or Wilshire 5000.

## PERFORMANCE

As **Figure 8** indicates, performance is varied. At times, the firms have significantly outperformed the benchmarks, such as Marvin & Palmer's 1993 return of 42.1% against the benchmark return of 22.5%. At other times, the firms have significantly underperformed, such as the 1994 return by Marvin & Palmer of -13.1% versus the benchmark of 5.1%.

Staff reviewed specific portfolio weightings of several of the largest of these global managers in order to analyze and evaluate the country allocations each of the managers were willing to make in their global product. **Figure 9** lists the manager, the largest U.S. position during the last 5 years, the normal range around the benchmark that their U.S. position was 90% of the time during the last 5 years, and their U.S. weight in the global product on December 31, 1998. The MSCI World Index is included in the chart as a reference.

---

**Figure 9. Global Managers' U.S. Country Bets**

<u>Manager</u>	<u>Largest US Position in the Last 5 Years</u>	<u>Normal Range of US Allocation Relative to Bmk in Last 5 Years (Percentage Pts.)</u>	<u>U.S. Wtg. on 12/98</u>
Brinson	45.2%	+/- 0-10	42.8%
Cap Guardian	40.7%	+/- 10-20	38.2%
Janus Capital	30.0%	+/- 20-30	30.0%
Lazard Asset Mgmt.	22.0% over bmk	+/- 10-20	46.6%
Scudder Kemper	31.4%	+/- 20-30	31.4%
TCW Group	20.0% over bmk	+/- 0-20	24.0%
<b>MSCI World Index</b>	<b>49.1%</b>	<b>+/- 35-45%*</b>	<b>48.8%</b>

\* The range of the U.S. weightings in the MSCI World Index during the last 5 years.

---



The information collected indicates that some managers are willing to make fairly significant bets with respect to their U.S. position relative to the benchmark, by under or over weighting their holdings by 20 to 30% relative to the benchmark. These bets often account for a significant portion of the under or over performance of a global manager relative to a benchmark. On December 31, 1998, all six managers had incorrectly under weighted the U.S. market during a period of very strong U.S. market returns.

Staff also compared the performance of the ten global managers to the SBI's combined U.S. and International Equity Program. The ten global managers' returns were combined on an equal-weighted basis. **Figure 10** below shows that the SBI outperformed the equal weighted global managers' returns.

**Figure 10.**

**SBI and Global Manager Performance Comparison**

<u>Period</u>	<u>SBI's Int'l And U.S. Equity Returns</u>	<u>Equal Wtd. Return of Ten Global Mgrs.</u>	<u>SBI better/(poorer) than Equal Wtd. Global Mgrs.</u>
3Q98	(12.8%)	(13.1%)	0.3%
2Q98	1.3%	2.6%	(1.3%)
1Q98	13.3%	13.8%	(0.5%)
1997	25.4%	18.4%	7.0%
1996	19.4%	18.9%	0.5%
1995	31.0%	22.9%	8.1%

The SBI's allocation to U.S. and international equities has undoubtedly contributed to the SBI's better performance relative to the equal-weighted global managers' returns. Since the SBI has a 50% allocation to U.S. equities and a 15% allocation to international equities, in a global sense, the SBI's U.S. equity position is 77% with the remaining 23% in other international stocks. Hence the large over-weighting in the U.S., during the last few years, when the U.S. stock market has been performing extremely well, caused the SBI's returns to outperform the global managers' aggregate returns.

## **ASSETS UNDER MANAGEMENT**

Assets under management in global mandates have increased in recent years. The ten largest global products range from \$750 million to \$9.7 billion. This is a very limited universe from which to select. If the SBI becomes interested in allocating part of the retirement fund assets to a global manager, a 10% allocation would be about \$4 billion. Historically, the SBI has limited a portfolio to no more than one-third of the assets in a manager's product. Therefore, the SBI would need to use multiple global managers for such an allocation.

## **GLOBAL IMPACT ON ASSET ALLOCATION**

The SBI currently uses rebalancing guidelines that allow an asset class to deviate up to 10% from the asset allocation target weighting before mandatory rebalancing becomes necessary. This means that the 50% U.S. equity allocation can fluctuate between 45% and 55% of the total fund assets without the need to rebalance back to the 50% target. If the U.S. equity position goes below 45% or above 55% a rebalance is mandatory.

The example in **Figure 11** illustrates the impact the addition of a global mandate would have on the SBI's U.S./international allocation. The example shows that the country allocations from a global mandate would not shift the SBI's equity program's allocation to U.S. equities beyond the current rebalancing guidelines unless the global manager chose the extremely risky position of holding no U.S. stock in a global portfolio.

---

**Figure 11.**

**Example of Global Impact on SBI Asset Allocation**

Assumptions:

- Reduce the allocation to both U.S. and international equities by 5 percentage points each (i.e., reduce the current U.S. allocation from 50% to 45% and the international allocation from 15% to 10%).
- Allocate 10% of fund assets or about \$4 billion to global management.
- In the global portfolio, the U.S. exposure is assumed to be 24% (the lowest U.S. exposure on December 31, 1998 from figure 9).

<u>Asset Class</u>	<u>New Allocation</u>	<u>10% Global Allocation</u>	<u>Total Allocation</u>	<u>Current Program's +/- 10% Tolerance</u>
U.S.	45.0%	2.4%	47.4%	45.0% - 55.0%
Int'l	10.0%	7.6%	17.6%	13.5% - 16.5%

---

**RECOMMENDATION**

**At this point, Staff/IAC have decided not to recommend global management for the SBI.** The addition of a global mandate would not provide a different U.S. exposure than the program currently experiences with current rebalancing guidelines in place. In addition, the number of managers with sizable assets under management in a global product is limited.

Staff will continue to meet with global managers and follow the trends in the industry to keep the SBI apprised of future developments in the area of global management.

## REGIONAL MANAGEMENT

A natural way for investors to think about international investing is by region. Many investment firms continue to offer products for Europe, the Pacific, Japan, and others. Regional investing can provide the investor with the ability to get the specific regional exposure desired, or to make an active decision to over or under weight a region versus a more comprehensive index.

The use of regional mandates requires a specific allocation process. Absent a forecast, the decision to allocate has been delegated to EAFE style managers by most institutional investors. Additionally, it is difficult to find investment firms that can handle a regional portfolio for a large institutional investor such as the SBI. Most institutional investors have not used regional managers, so the assets under management in these types of products have grown more slowly than in EAFE products.

### MAJOR INVESTMENT FIRMS

Staff reviewed information on regional mandates collected by InterSec Research Corporation. The Intersec data indicates that managers with regional mandates had no advantage within their region relative to those with an EAFE mandate. Assuming the SBI would allocate at least \$200 million to any new firms hired, the focus was on firms with at least \$600 million under management in any regional product. As of December 1998, there were approximately 18 firms with a regional product with total assets exceeding \$600 million.

The list of products, managers, and assets under management are included in **Figures 12 (a) through (f)**.

**Figure 12(a)**

**Active European Equity by Manager**

<b>Manager</b>	<b>Assets (US\$ Mill) Yearend 1997</b>
Mercury Asset Mgmt. International Ltd.	2,190
Clay Finlay, Inc.	1,906
Capital Guardian Trust Co.	1,632
J.P. Morgan Investment Mgmt., Inc.	1,529
Morgan Grenfell Inv. Services Ltd.	1,251
Paribas Asset Management, Inc.	1,238
Scottish Widows Inv. Mgmt. Ltd.	792
Rowe Price-Fleming International, Inc.	775
Oechsle International Advisors	739
Baillie Gifford Overseas Limited	686
Phillips & Drew	635
Lombard Odier Int'l. Portfolio Mgmt. Ltd.	587
Marathon Asset Management Ltd.	530
Putnam Investments	436
Sanford C. Bernstein & Co., Inc.	425
Alliance Capital Mgmt., L.P.	378
Walter Scott and Partners Ltd.	309
Schroder Capital Mgmt. International, Inc.	286
Citibank Global Asset Management	203
Carlson Investment Management (U.S.) Inc.	183
Morgan Stanley Asset Mgmt., Inc.	177
U.S. Trust Company of New York	168
DSI International Management, Inc.	149
Lazard Asset Management	147
Odey Asset Management Ltd.	119
Scudder Kemper Investments, Inc.	114
GE Investments	100
Baring Asset Management, Inc.	80
TCW Group	51
WorldInvest Ltd.	37
Investment Advisers, Inc.	31
Philippe Investment Management	31
Julius Baer Investment Mgmt, Inc.	29
Pictet International Mgmt. Ltd.	29
Prime Lipper Asset Management	27
Seligman Henderson Co.	22
GIM Capital Management, Inc.	17
Wellington Management Company, LLP	1
<b>Total</b>	<b>18,037</b>

**Figure 12(b)**

**Active Pacific Equity by Manager**

<b>Manager</b>	<b>Assets (US\$ Mill) Yearend 1997</b>
Nomura Asset Management U.S.A. Inc.	2,075
Schroder Capital Mgmt. International, Inc.	1,552
Rowe Price-Fleming International, Inc.	833
Putnam Investments	634
Chancellor LGT Asset Management	571
SG Pacific Asset Management, Inc.	419
J.P. Morgan Investment Mgmt., Inc.	374
Scudder Kemper Investments, Inc.	302
Global Asset Management	257
Templeton Worldwide, Inc.	249
American Express Asset Mgmt. Int'l., Inc.	227
Daiwa International Capital Mgmt. Corp.	153
Baring Asset Management, Inc.	152
Sit/Kim International Invt. Assoc., Inc.	111
GE Investments	100
Clay Finlay, Inc.	80
Walter Scott and Partners Ltd.	55
U.S. Trust Company of New York	41
HSBC Asset Mgmt. Americas, Inc.	33
Alliance Capital Mgmt., L.P.	9
Wellington Management Company, LLP	1
<b>Total</b>	<b>8,228</b>

**Figure 12(c)****Active Pacific ex Japan Equity by Manager**

<b>Manager</b>	<b>Assets (US\$ Mill) Yearend 1997</b>
Schroder Capital Mgmt. International, Inc.	278
Scudder Kemper Investments, Inc.	253
Chancellor LGT Asset Management	195
Clay Finlay, Inc.	116
Baring Asset Management, Inc.	111
Global Asset Management	103
Crosby Asset Mgmt. (Hong Kong) Ltd.	100
Wellington Management Company, LLP	98
Fidelity Management Trust Co.	79
Alliance Capital Mgmt., L.P.	30
<b>Total</b>	<b>1,362</b>

**Figure 12(d)**

**Active Japan Equity by Manager**

<b>Manager</b>	<b>Assets (US\$ Mill) Yearend 1997</b>
J.P. Morgan Investment Mgmt., Inc.	2,174
DSI International Management, Inc.	348
Barclays Global Investors	285
Morgan Stanley Asset Mgmt., Inc.	261
Schroder Capital Mgmt. International, Inc.	226
Acadian Asset Management	222
Nomura Asset Management U.S.A. Inc.	200
Grantham Mayo Van Otterloo and Co. LLC	156
Scudder Kemper Investments, Inc.	135
INVESCO Global Asset Mgmt. (N.A.), Inc.	128
Daiwa International Capital Mgmt. Corp.	110
Fidelity Management Trust Co.	91
Rowe Price-Fleming International, Inc.	76
TCW Group	76
Brinson Partners, Inc.	73
Global Asset Management	72
Alliance Capital Mgmt., L.P.	71
First Quadrant, L.P.	57
Seligman Henderson Co.	56
SG Pacific Asset Management, Inc.	44
Martin Currie Inc.	38
Nikko Global Asset Mgmt. (USA), Inc.	33
Wellington Management Company, LLP	10
Sanford C. Bernstein & Co., Inc.	5
Nicholas-Applegate Capital Mgmt.	5
Mercury Asset Mgmt. International Ltd.	2
<b>Total</b>	<b>4,953</b>



**Figure 12(e)****Active Far East ex Japan Equity by Manager**

<b>Manager</b>	<b>Assets (US\$ Mill) Yearend 1997</b>
Newport Pacific Management	1,024
Morgan Stanley Asset Mgmt., Inc.	200
HSBC Asset Mgmt. Americas, Inc.	188
American Express Asset Mgmt. Int'l., Inc.	180
Bankers Trust Company	96
Capital Guardian Trust Co.	70
Daiwa International Capital Mgmt. Corp.	26
TCW Group	7
Citibank Global Asset Management	3
<b>Total</b>	<b>1,793</b>

**Figure 12(f)****Active Latin American Equity by Manager**

<b>Manager</b>	<b>Assets (US\$ Mill) Yearend 1997</b>
Scudder Kemper Investments, Inc.	648
Batterymarch Financial Mgmt., Inc.	477
Rowe Price-Fleming International, Inc.	216
Globalvest Management Company LP	135
Morgan Stanley Asset Mgmt., Inc.	28
Investment Placement Group	7
<b>Total</b>	<b>1,512</b>

## **PRODUCTS/REGIONS OFFERED**

As of December 1998, there were 6 investment firms with an Asian product that had total assets exceeding \$600 million. In European equities, there were 11 investment firms that offered a product with assets exceeding \$600 million. And in Latin America, there is only one investment firm with a product that has more than \$600 million in assets.

## **ALLOCATIONS/REBALANCING**

Regional investing requires the institutional investor to allocate funds across regions. Most institutional investors prefer to hire broad market investment managers to make the country/regional allocation decisions. Those decisions are an area of expertise for many portfolio managers, and an area in which they can add value to the International Equity Program. In addition, if a regional program were set up, a regional target allocation would need to be determined, then, as the market returns of one region outperformed another, it would become necessary to rebalance the regional portfolios back to the target allocations. This rebalance would be necessary whenever the market takes the portfolios too far from the target allocation. As mentioned earlier, in international markets these rebalances can be costly and may place a drag on performance.

## **RECOMMENDATION**

**At this time, the Staff/IAC believes there is limited opportunity to successfully implement a regional investment program. Staff will continue to monitor the trend in regional investing.**

## **INTERNATIONAL PROGRAM STRUCTURE**

This section addresses the International Program structure and the related recommendations of Staff and the IAC.

### **ACTIVE VERSUS PASSIVE MANAGEMENT**

In 1992, the SBI created the International Equity Program with a structure that required at least 50% of the program to be actively managed. This approach uses index funds to get broad exposure to the asset class while active management is used to add value. Similarly, the SBI's Domestic Equity and Fixed Income Programs each have core index exposure and active managers to add value. To date, this strategy has been relatively successful for the SBI.

International equity markets are less efficient than U.S. equity markets, due in large part, to the behavior and legal considerations in many local markets. Therefore, it can be argued that some active managers will outperform the indices. Consistent with the policy of the past 15 years, the SBI has allocated a significant portion of assets to active management, based upon the belief that the SBI can identify and retain active managers that will outperform their benchmarks over the long term. Since October 1992, the international managers have added 70 basis points, net of fees, to the return of the composite benchmark (87% EAFE Free and 13% EMF).

The SBI should continue to have at least one-third of the program actively managed in order to take advantage of the inefficient international markets. As the SBI identifies additional active managers that can add value relative to the benchmark, the weighting in active management could increase to more than 50% of the International Equity Program.

While active management is important to the International Program, the SBI should maintain some exposure to passive management. Passive management is an appropriate investment strategy that provides diversification benefits. It also allows large sums of money to be invested at lower administrative cost. The returns produced by an index manager are predictable relative to a chosen benchmark, usually +/-50 basis points annualized. The SBI should maintain some core exposure to passive management to control the tracking error of the total International Equity Program. The amount of passive management should not fall below one-third of the International Program in order to maintain stability in the program relative to the benchmark.

**Staff/IAC recommends that the SBI adopt a policy that requires at least 33% of the International Equity Program be actively managed, and at least 33% of the International Equity Program be passively managed.**

Staff and the IAC have had discussions about alternatives to the present structure. An option is to add semi-passive, enhanced index, or risk controlled managers to the International Equity Program similar to the approach used for the Domestic Equity Program. Staff reviewed this alternative and found that there are very few organizations offering enhanced indexing for international securities. Those that do, generally, have very short track records. **Staff/IAC is not recommending a semi-passive, enhanced index, or risk controlled management approach at this time, but will continue to review developments in this area.**

**For emerging markets, Staff/IAC is recommending active management exclusively** in order to obtain the best risk/reward relationship. Staff believes that the high level of market inefficiency and the opportunities presented by those inefficiencies will allow active managers who do company and country research to add value relative to passive management.

Passive management in the emerging markets has historically had a higher tracking error, or deviation from the benchmark, than in developed markets. This is due to liquidity

constraints, longer trade settlement periods and settlement failures in the emerging markets. In addition, trading costs in emerging markets are about three times higher than in EAFE countries and about five times higher than in the U.S.<sup>9</sup> According to State Street Global Advisors, over a long period of time, tracking error is expected to be -20 to -125 basis points.

Given these considerations, Staff/IAC have reached the following conclusions with respect to active versus passive management:

- **Staff/IAC concur with the current policy that the International Equity Program should have core exposure through an EAFE Free index account and retain active managers to add value to the asset class target.**
- **Staff/IAC recommend new policy language that requires the International Equity Program to be at least 33% actively managed and at least 33% passively managed.**
- **Finally, the Staff/IAC recommends that the emerging markets continue to be actively managed.**

## CURRENT MANAGER COMPOSITION

As mentioned earlier, Staff/IAC recommend that the developed market managers continue to be measured against the MSCI EAFE Free index and the emerging market managers continue to be measured against the MSCI EM Free index. This recommendation is no change from existing policy.

The current active EAFE managers have been part of the SBI's program since 1993. The EM Free managers were hired in 1996. The current international equity managers provide a good mix of management styles. The list of current managers, their general style, and their hire dates are listed in **Figure 13**.

---

**Figure 13. List of Current International Equity Managers**

<u>Manager</u>	<u>General Style</u>	<u>Hire Date</u>
<b>Active EAFE Free Managers</b>		
Brinson	Active Country/Passive Stock	Apr. 1993
Marathon	Bottom-up, value	Nov. 1993
Rowe Price	Combination, emphasizes top-down, growth	Nov. 1993
Scudder	Combination, emphasizes top-down, thematic /value	Nov. 1993
<b>Active EM Free Managers</b>		
City of London	Combination, closed end funds	Nov. 1996
Genesis	Combination, emphasizes bottom-up, growth	May 1996
Montgomery	Combination, emphasizes risk control	May 1996
<b>Passive EAFE Free</b>		
State Street	Passive EAFE Free	Oct. 1992

---

## RECOMMENDATIONS

Staff and the IAC recommend the following changes to the current international managers:

- 1. Restrict all EAFE managers to investments in developed markets. The authority to invest in emerging markets was granted to EAFE managers prior to the SBI retaining emerging markets managers. Currently, the active EAFE managers may hold up to 15% of the portfolio in emerging market stocks.**
- 2. Allow active EAFE managers to be active country and active stock managers.**
- 3. Measure the performance of passive managers against EAFE Free. The active managers may or may not be measured against a custom benchmark.**
- 4. Given the SBI's current allocation to international equities, the SBI should maintain a minimum of four active EAFE Free managers and a minimum of three EM Free managers. Staff and the IAC believe this number is necessary to prudently manage the assets in the International Equity Program.**



## CURRENCY MANAGEMENT

### WHAT IS CURRENCY MANAGEMENT?

International investment returns consist of two components: the movement of stock prices in the local market (the local market return) and the impact of currency translation (currency returns). To invest in a non-dollar security, a U.S. investor must first convert dollars to the local currency and use the local currency to purchase foreign securities. Subsequently, share price quotations, stock dividends, and sale or redemption proceeds must be converted from that currency back into U.S. dollars to calculate the portfolio's U.S. dollar returns. Because foreign exchange rates fluctuate constantly with changes in each currency's supply and demand, currency movements can increase or decrease the dollar value of the investment even if the security's price remains unchanged. The local market return and the currency return combine into the U.S. dollar return of the international portfolio.

Currency movements can significantly impact the portfolio returns. At times, a strong U.S. dollar can eliminate the local market gains of the EAFE Index. Alternatively, a weak U.S. dollar can increase the portfolio's U.S. return beyond the local market return. While currencies may contribute to the total return volatility, currencies, in and of themselves, add no long-term value to a program because there is no economic value to holding a currency.

When foreign countries perform differently than one's home economy, currency exposures provide a measure of diversification, so currency is an important contributor to the diversification that international investing brings to a plan. The longer the plan's time horizon the more diversification is derived from the currency exposure.<sup>9</sup> Figure 2, earlier in this paper, showed the correlation of various asset classes. The correlation of unhedged international equity with U.S. equity was 0.50 and the correlation of hedged international equity with U.S. equity was slightly higher at 0.62. This indicates that

unhedged international equity may be a slightly better diversifier in a U.S. portfolio than hedged equity.

Currency adds short-term volatility to the absolute returns of an International Equity Program. Investors can attempt to protect a portfolio from this short-term volatility through the use of hedging at a cost. Currency hedging reduces an investor's exposure to a currency by changing the foreign currency into the U.S. dollar through the currency markets using forward contracts, options, or futures. Hedging allows an investor to lock-in a fixed exchange rate. The net result to the investor is the return of the stock less the cost of the hedge.

## **HISTORY OF THE SBI'S CURRENCY OVERLAY PROGRAM**

The active EAFE managers have always had the ability to hedge currency within their portfolios. In many instances, this is an important part of their investment management process. Staff/IAC believe the active managers should continue to be measured against an unhedged benchmark, but they can make tactical bets using currency hedging.

In 1995, after a lengthy study, the SBI added currency management as an overlay on the passive EAFE index portfolio. The intent was to reduce the short-term absolute return volatility in the International Equity Program. The goals of the currency program were to:

1. Avoid/minimize absolute loss to the portfolio in periods when the dollar rises/strengthens relative to another currency or group of currencies.
2. Participate in absolute gains available to the portfolio in periods when the dollar falls/weakens relative to another currency or group of currencies.
3. As a consequence of 1 and 2, reduce the absolute volatility of returns associated with currency exposure in the underlying stock portfolio.

Record Treasury Management Limited was hired in late 1995 to manage a percentage of the SBI's currency exposure in the International Equity Program. They employ a systematic approach that uses a form of dynamic hedging. The SBI limits the overlay program to the major currencies that individually comprise 5% or more of the value of the passive EAFE index. Until recently, this included the Japanese Yen, British Pound Sterling, German Mark, French Franc, Swiss Franc, and Dutch Guilder which in aggregate made up about 75% to 80% of the value of the EAFE index. On January 1, 1999, the Euro went into affect as the currency of the European Union reducing the currencies in the overlay program to four: European Euro, Japanese Yen, British Pound Sterling, and Swiss Franc. These currencies in aggregate make up about 90% of the value of the EAFE index.

In 1998, the Staff/IAC recommended a 50% reduction in the currency overlay program, as the program represented a sizeable amount of assets controlled by one investment firm. Staff/IAC wanted to reduce the tracking error and the investment firm risk resulting from such a large account.

Through December 1998, the currency overlay program has successfully minimized the volatility of the International Equity Program's absolute returns as the SBI intended, and it has added almost one hundred and fifty million dollars to the International Equity Program.

## **CONCERNS ABOUT THE CURRENCY OVERLAY PROGRAM**

Staff, the IAC and the SBI's consultants have had an ongoing discussion about the future of the currency overlay program. Staff/IAC believe the process used by Record Treasury Management can add value by taking advantage of opportunities created through the trending nature of currencies. It is felt that their returns are asymmetrical, that is, they add value when the U.S. dollar is strong, but they do not give up as much value when the

U.S. dollar is weak because their process takes them out of the market. However, Staff/IAC has the following concerns:

1. The performance of the active and passive international managers in aggregate is measured against an unhedged asset class target. Retaining the currency overlay program at its current level will cause tracking error relative to the unhedged asset class target
2. Staff believes Record Treasury Management has a process that can add value to the International Equity Program. However, the size of the account should be in line with other active international equity managers to ensure that the returns of their account will not significantly impact the International Equity Program.

## **RECOMMENDATIONS**

For the reasons mentioned above, Staff/IAC are making the following recommendations:

- **Staff/IAC recommend that the SBI give Staff/IAC the discretion to allow the active international equity managers to continue to use currency management in the SBIs' portfolios.**
- **Staff/IAC recommend the SBI discontinue the use of a currency overlay program to hedge international currency exposure.**
- **Staff/IAC recommend the SBI retain Record Treasury Management as an active manager to manage foreign currencies with the goal of adding value to the total program until a review of active managers can be conducted. The size of the currency manager's underlying portfolio should be in line with the average size of an active EAFE manager (currently \$500 million).**

APPENDIX A

Selected Free MSCI Regional and Composite Indices  
Weights as of 12/31/98\*

USA					51.0%		49.0%
Canada					1.8%		1.7%
Austria	0.5%		0.3%		0.2%		0.2%
Belgium	2.6%		1.9%		0.9%		0.9%
France	12.8%		9.4%		4.4%		4.3%
Germany	14.5%		10.7%		5.0%		4.9%
Ireland	0.7%		0.5%		0.2%		0.2%
Italy	7.1%		5.2%		2.5%		2.4%
Netherlands	8.9%		6.5%		3.1%		3.0%
Portugal	0.9%	Europe	0.7%		0.3%		0.3%
Spain	4.6%	(33.3%)	3.4%		1.6%		1.5%
Switzerland	11.0%		8.1%		3.8%		3.7%
United Kingdom	29.0%		21.3%		10.1%		9.7%
Denmark	1.2%		0.9%		0.4%		0.4%
Finland	2.1%		1.6%		0.7%		0.7%
Norway	0.5%		0.4%	EAFE	0.2%	World	0.2%
Sweden	3.6%		2.6%	(45.8%)	1.2%	(96.0%)	1.2%
Australia			8.3%		2.6%		1.2%
New Zealand			0.6%		0.2%		0.1%
Japan		80.3%	All	68.0%	21.0%		9.9%
Hong Kong		7.9%	Country	6.7%	2.1%		1.0%
Singapore		2.9%	Far East	2.2%	0.7%		0.3%
			(12.3%)				
Malaysia	0.0%		0.0%		1.5%		0.0%
					0.0%		0.0%
China	1.9%		0.2%	All	0.2%		0.7%
Indonesia	4.8%		0.6%	Country	0.5%		1.8%
Korea	29.3%	Emerging	3.4%	Asia	2.9%		10.7%
Philippines	5.9%	Markets	0.7%	Pacific	0.7%		2.1%
Taiwan	27.3%	Asia	3.2%	(13.8%)	5.4%		9.9%
Thailand	7.6%	(1.7%)	0.9%		0.7%		2.8%
India	21.7%				0.7%		7.9%
Pakistan	1.2%				2.1%		0.3%
Sri Lanka	0.2%				0.1%		0.4%
							0.0%
							0.0%
Argentina	13.3%						4.6%
Brazil	34.1%	Emerging					11.9%
Chile	12.8%	Markets					4.5%
Colombia	2.1%	Latin					0.8%
Mexico	32.2%	America					11.3%
Peru	2.7%	(1.3%)					1.0%
Venezuela	2.8%						1.0%
							0.0%
Czech Republic	6.2%						1.1%
Greece	40.1%	Emerging					7.3%
Hungary	8.9%	Markets					1.6%
Israel	18.2%	Europe/					3.3%
Jordan	1.1%	Mid East					0.2%
Poland	7.7%	(0.7%)					1.4%
Russia	6.9%						1.3%
Turkey	11.0%						2.0%
South Africa							10.3%
							0.4%

\* Weights in parentheses indicate % of All Country World Index.

Source: Morgan Stanley Capital International



## FOOTNOTES

1. Burton G. Malkiel, Ph.D., “The Case for International Investing and Indexing,” Dow Jones Global Indexes Quarterly Review, Issue Number 3, Summer 1998.
2. Morgan Stanley Capital International, “Regional and Composite Indices,” June 1998
3. The WM Company Research and Consultancy, “Emerging Markets Indices – Update 4: as at December 1997,” 1998
4. The Salomon Brothers World Equity Index, “Introduction and Answers to Frequently Asked Questions”, August 1997.
5. State Street Global Advisors, Benchmark Book: an SSgA Reference Tool, “Developed Market Benchmarks,” p. 9.
6. Nakovick, Nancy, Goldman, Sachs & Co., “Marketing the FT-Actuaries World Indices.”
7. Dow Jones & Co., “Dow Jones Global Indexes: What the world is up to,” User Guide.
8. State Street Global Advisors, “Emerging Markets Research Summary.”
9. Schoenfeld, Steven A., “Index-Based Investment in Emerging Stock Markets,” Emerging Markets Quarterly, Spring 1998
10. Bridgewater Associates, “Currency Observations,” Developing An Effective Currency Overlay Program: The Nuts & Bolts.

## BIBLIOGRAPHY

Bridgewater Associates, "Currency Observations," Developing An Effective Currency Overlay Program: The Nuts & Bolts

Burton G. Malkiel, Ph.D., "The Case for International Investing and Indexing," Dow Jones Global Indexes Quarterly Review, Issue Number 3, Summer 1998.

Dow Jones & Co., "Dow Jones Global Indexes: What the world is up to," User Guide.

Maginn, John L. and Tuttle, Donald L., Managing Investment Portfolios: A Dynamic Process, Second Edition, 1990.

Morgan Stanley Capital International, "Regional and Composite Indices," June 1998.

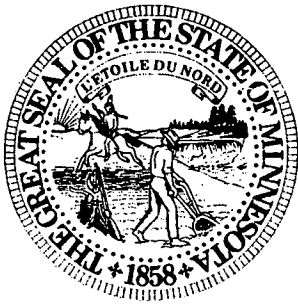
The Salomon Brothers World Equity Index, "Introduction and Answers to Frequently Asked Questions", August 1997.

Schoenfeld, Steven A., "Integrated International Equity Strategies: Combining Developed and Emerging Markets," 1998.

State Street Global Advisors, "Emerging Markets Research Summary."

State Street Global Advisors, Benchmark Book: an SsgA Reference Tool, "Developed Market Benchmarks," p. 9.

The WM Company Research and Consultancy, "Emerging Markets Indices – Update 4: as at December 1997," 1998



# STATE BOARD OF INVESTMENT

---

## International Manager Evaluation Reports

First Quarter, 1999



**(Blank)**

**COMBINED RETIREMENT FUNDS  
INTERNATIONAL STOCK MANAGERS  
Periods Ending March, 1999**

	Quarter		1 Year		3 years		5 Years		Since Inception		Market Value (in millions)	Equity Pool %
	Actual	Bmk	Actual	Bmk	Actual	Bmk	Actual	Bmk	Actual	Bmk		
	%	%	%	%	%	%	%	%	%	%		
<b>Active EAFE</b>												
Brinson (1)	2.0	1.3	7.8	6.1	11.3	8.4	11.6	8.8	11.4	10.9	\$567.01	10.3%
Marathon (2)	5.6	1.3	1.2	6.1	5.0	8.4	6.5	8.8	7.7	8.3	387.97	7.0%
Rowe Price (2)	1.1	1.3	3.8	6.1	9.8	8.4	9.9	8.8	10.0	8.3	593.20	10.8%
Scudder (2)	4.9	1.3	3.9	6.1	11.0	8.4	11.5	8.8	10.9	8.3	443.28	8.0%
<b>Active Emerging Markets</b>												
City of London (3)	11.6	12.4	-20.2	-21.0					-5.6	-10.8	217.37	3.9%
Genesis (4)	3.3	12.4	-29.7	-21.0					-10.7	-11.0	190.81	3.5%
Montgomery (4)	5.5	12.4	-30.5	-21.0					-12.9	-11.0	180.40	3.3%
<b>Passive EAFE</b>												
State Street (5)	1.3	1.3	6.4	6.1	8.8	8.4	9.1	8.8	11.5	11.3	2,933.84	53.2%
									<b>Since 10/1/92</b>			
Equity Only*	2.5	2.7	1.8	2.6	7.1	6.2	8.3	7.4	10.9	10.2	5,513.87	100.0%
<b>Total Program**</b>	<b>2.7</b>	<b>2.7</b>	<b>1.3</b>	<b>2.6</b>	<b>8.3</b>	<b>6.2</b>	<b>9.0</b>	<b>7.4</b>	<b>11.5</b>	<b>10.2</b>	<b>\$5,509.68</b>	

\* Equity managers only. Includes impact of terminated managers. Aggregate benchmark weighted 87% EAFE-Free/13% Emerging Markets Free as of 12/30/96. 100% EAFE-Free prior to 5/1/96.

\*\* Includes impact of currency overlay unrealized gain/loss. Aggregate benchmark weighted 87% EAFE-Free/13% Emerging Markets Free as of 12/30/96. 100% EAFE-Free prior to 5/1/96.

(1) Active country/passive stock. Retained April 1, 1993.

(2) Fully active. Retained November 1, 1993. Marathon's performance against custom benchmark returns can be seen on page 6.

(3) Retained November 1, 1996.

(4) Retained May 1, 1996.

(5) Retained October 1, 1992.

**Impact of Currency Overlay Program**

Cumulative Dollar Value Added  
(Since inception, December 1, 1995) \$141,845,980

**(Blank)**

**BRINSON PARTNERS**  
**Periods Ending March, 1999**

**Portfolio Manager: Richard Carr**

**Assets Under Management: \$567,008,730**

**Investment Philosophy**

Brinson manages an active country/passive stock portfolio for the SBI. The firm uses a proprietary valuation model to rank the relative attractiveness of individual markets based on fundamental considerations. Inputs include forecasts for growth, inflation, risk premiums and foreign exchange movements. Quantitative tools are used to monitor and control portfolio risk, while qualitative judgments from the firm's professionals are used to determine country allocations. Brinson establishes an allocation range around the target index to define the limits of their exposure to individual countries and to assure diversification. Brinson constructs its country index funds using a proprietary optimization system.

Brinson utilizes currency equilibrium bands to determine which currencies are over or under valued. The firm will hedge to control the potential risk for real losses from currency depreciation.

**Staff Comments**

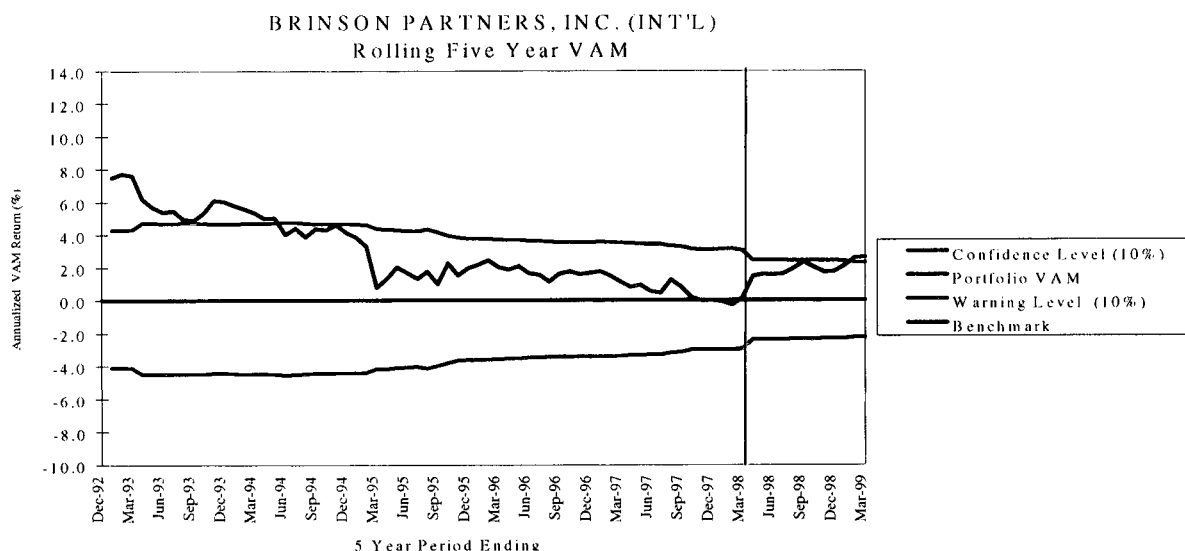
Gary Brinson is relinquishing his role as Chief Executive Officer of Brinson Partners to fully devote his time and energy to managing the investment process as Chief Investment Officer. Peter Wuffli, presently Chief Financial Officer of UBS AG, will assume the responsibility for management of business operations.

**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	2.0%	1.3%
Last 1 year	7.8	6.1
Last 2 years	12.5	12.1
Last 3 years	11.3	8.4
Last 4 years	14.6	9.4
Last 5 years	11.6	8.8
Since Inception (4/93)	11.4	10.9

**Recommendations**

No action required.



Note: Area to the left of vertical line includes performance prior to retention by the SBI.

**MARATHON ASSET MANAGEMENT**  
**Periods Ending March, 1999**

**Portfolio Manager: William Arah**

**Assets Under Management: \$387,970,274**

**Investment Philosophy**

Marathon uses a blend of flexible, qualitative disciplines to construct portfolios which exhibit a value bias. Style and emphasis will vary over time and by market, depending on Marathon's perception of lowest risk opportunity. Since they believe that competition determines profitability, Marathon is 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. At the stock level, Marathon tracks a company's competitive position versus the attractiveness of their products or services and attempts to determine whether the company is following an appropriate reinvestment strategy for their current competitive position.

**Staff Comments**

Staff met with Marathon in February 1999 in the SBI office to discuss the firm's investment process and recent performance. During the first quarter, Marathon outperformed primarily due to country allocation, underweighting continental Europe, which performed poorly, and overweighting Japan, which performed very well. Good stock selection in the United Kingdom also contributed to first quarter performance. Over the past year, the main factor for Marathon's underperformance was poor stock selection in Europe where Marathon's mid-cap and value holdings lagged the indices.

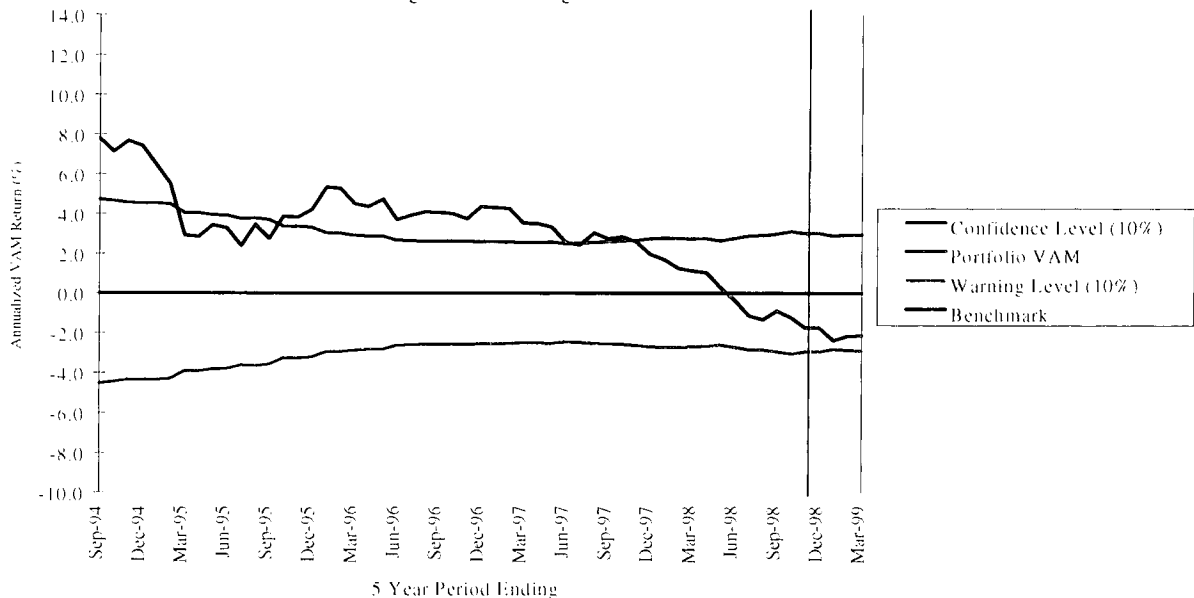
**Quantitative Evaluation**

	<b>Actual</b>	<b>EAFE Benchmark</b>	<b>Custom Benchmark</b>
Last Quarter	5.6%	1.3%	2.3%
Last 1 year	1.2	6.1	1.1
Last 2 years	5.6	12.1	7.0
Last 3 years	5.0	8.4	5.2
Last 4 years	7.7	9.4	7.0
Last 5 years	6.5	8.8	6.0
Since Inception (11/93)	7.7	8.3	6.4

**Recommendations**

No action required.

**MARATHON ASSET MANAGEMENT**  
**Rolling Five Rolling VAM**



Note: Area to the left of vertical line includes performance prior to retention by the SBI.

**ROWE PRICE-FLEMING INTERNATIONAL, INC.**  
**Periods Ending March, 1999**

**Portfolio Manager: David Warren**

**Assets Under Management: \$593,196,691**

**Investment Philosophy**

Rowe Price-Fleming (RPF) believes that world stock markets are segmented. The firm attempts to add value by identifying and exploiting the resulting pricing inefficiencies. In addition, they believe that growth is frequently under priced in the world markets. RPF establishes its economic outlook based largely on interest rate trends and earnings momentum. The portfolio management team then assesses the country, industry and currency profile for the portfolio. Within this framework, stock selection is the responsibility of regional portfolio managers. Stocks are selected using fundamental analysis that emphasizes companies with above-market earnings growth at reasonable valuations. Information derived from the stock selection process is a key factor in country allocation as well.

**Staff Comments**

Staff met briefly with Rowe Price in March 1999 in the SBI office to discuss recent performance. Rowe Price underperformed during the quarter primarily due to country allocations. The portfolio was underweight in Japan and overweight in the Netherlands, both of which hurt performance. Stock selection in Japan also hurt as Rowe Price underweighted bank stocks, which performed very well. Offsetting these effects somewhat was an overweight position in Latin American markets, which performed well. However, the overweight in Latin America was the main reason for underperformance over the past year.

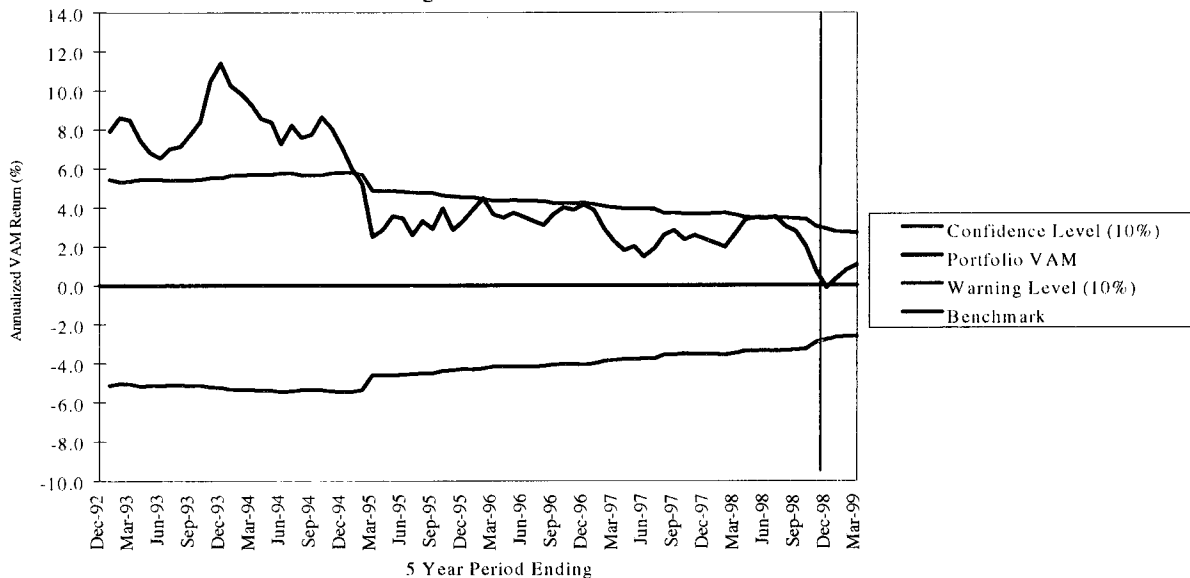
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	1.1%	1.3%
Last 1 year	3.8	6.1
Last 2 years	9.8	12.1
Last 3 years	9.8	8.4
Last 4 years	12.1	9.4
Last 5 years	9.9	8.8
Since Inception (11/93)	10.0	8.3

**Recommendations**

No action required.

**ROWE PRICE-FLEMING**  
**Rolling Five Year VAM**



Note: Area to the left of vertical line includes performance prior to retention by the SBI.

**SCUDDER, STEVENS & CLARK**  
**Periods Ending March, 1999**

**Portfolio Manager: Sheridan Reilly**

**Assets Under Management: \$443,284,328**

**Investment Philosophy**

Scudder believes that successful international investing requires knowledge of each country's economy, political environment and financial market obtained through continuous and thorough research of individual markets and securities. The investment process focuses on three areas: country analysis, global themes and unique situations. Ideas from all three areas are integrated into Scudder's research universe. Using their own internal research, the firm seeks companies with potential for earnings and dividend growth, strong or improving balance sheets, superior management, conservative accounting practices and dominant position in growing industries.

**Staff Comments**

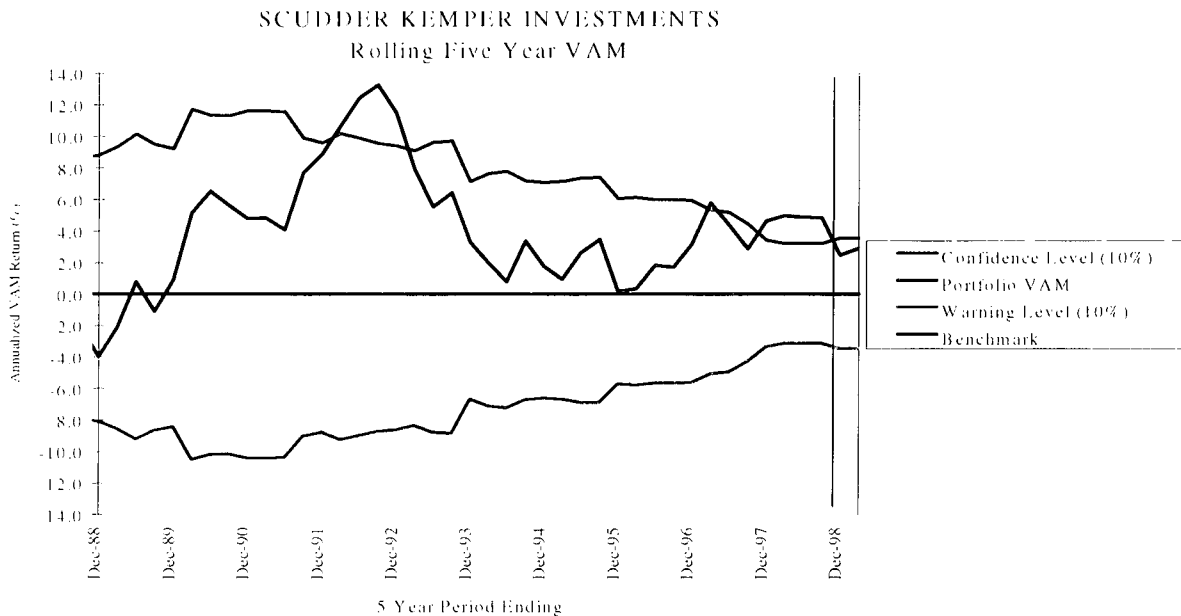
No comments at this time.

**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	4.9%	1.3%
Last 1 year	3.9	6.1
Last 2 years	10.9	12.1
Last 3 years	11.0	8.4
Last 4 years	14.3	9.4
Last 5 years	11.5	8.8
Since Inception (11/93)	10.9	8.3

**Recommendations**

No action required.



**CITY OF LONDON**  
**Periods Ending March, 1999**

**Portfolio Manager: Barry Olliff**

**Assets Under Management: \$217,366,374**

**Investment Philosophy**

City of London is an emerging markets specialist. The firm invests in closed-end country and regional funds to enhance performance when discounts to net asset value (NAV) narrow and to assure broad diversification within markets. They perform two levels of analysis. The first level is to compile macro-economic data for each country in their universe. Countries are ranked nominally according to the relative strength of their fundamentals and the expected upward potential of their stock markets. The second level is research on closed-end country and regional funds which use analyzed funds for corporate activity, liquidation dates, liquidity and discounts to NAV. They also analyze the quality and expertise of the closed-end fund managers. Countries are then re-ranked according to the relative pricing and discounts to NAV of country specific funds.

**Staff Comments**

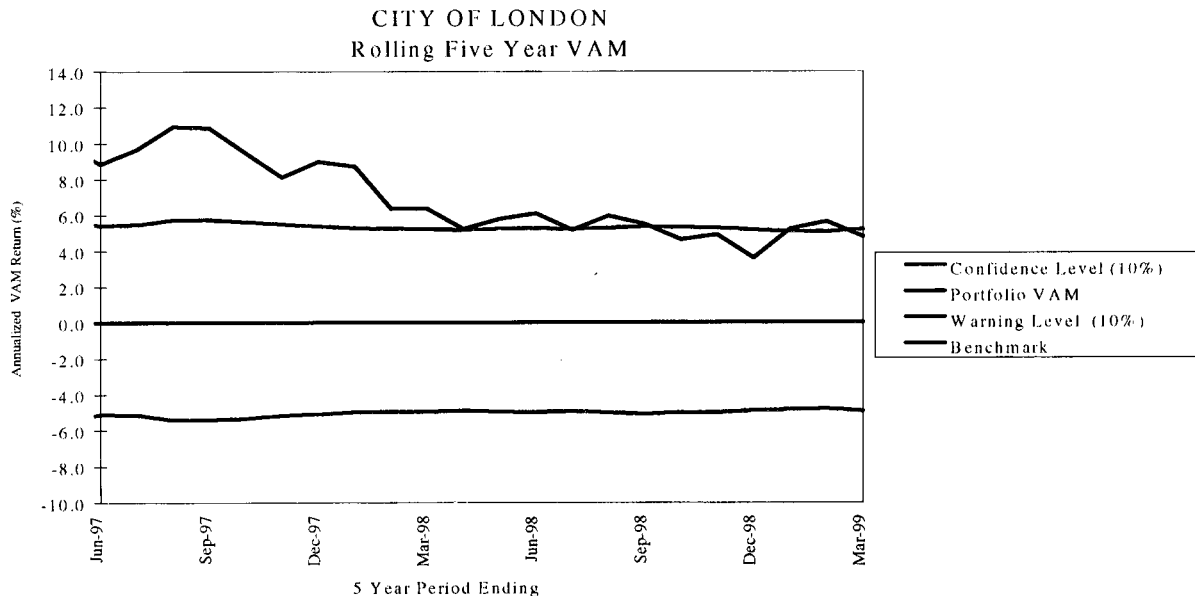
No comments at this time.

**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	11.6%	12.4%
Last 1 year	-20.2	-21.0
Last 2 years	-11.8	-17.3
Last 3 years	N/A	N/A
Last 4 years	N/A	N/A
Last 5 years	N/A	N/A
Since Inception (11/96)	-5.6	-10.8

**Recommendations**

No action required.





**GENESIS ASSET MANAGERS, LTD.**  
**Periods Ending March, 1999**

**Portfolio Manager: Paul Greatbatch**

**Assets Under Management: \$190,805,988**

**Investment Philosophy**

Genesis is an emerging markets specialist. The firm believes that the critical factor for successful investment performance in emerging markets is stock selection. They also believe that structural changes in emerging markets will continue to create both winners and losers in the corporate sector. Finally, they believe that following index stocks will not necessarily expose an investor to the highest returns since those stocks are typically concentrated in large capitalization companies that have already attained a certain level of recognition. They identify those countries in which structural change will most likely generate growth opportunities for business and/or where the environment is supportive of a flourishing private sector. Stock selection is based on Genesis' estimate of the value of the company's future real earnings stream over five years relative to its current price. The portfolio consists of the most undervalued stocks across all markets with emphasis on growth with value.

**Staff Comments**

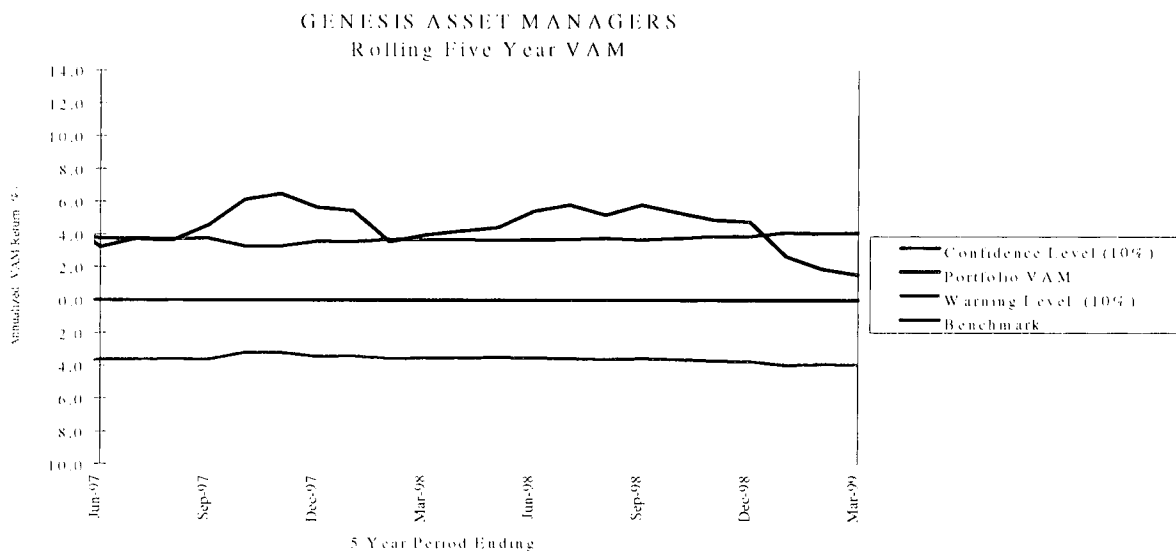
Staff met with Genesis in March 1999 in the SBI office to discuss their investment process and performance. Genesis' underperformance during the quarter resulted from poor country decisions, primarily Genesis' allocation to Brazil. Genesis started the quarter with an overweight in Brazil, then moved to an underweight position during the January devaluation. This strategy was costly as the Brazilian market subsequently rose sharply. Also contributing were an overweight in the poorly performing Chinese market and underweights in India and Korea, both of which performed well. Over the past year, the principal source of underperformance was the portfolio's underweighting of the Asian region. Genesis correctly believed corporate results would be poor and underweighted the region. However, the market was driven by macro factors, and after the crisis abated, money flowed back into the region leading to good performance.

**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	3.3%	12.4%
Last 1 year	-29.7	-21.0
Last 2 years	-20.3	-17.3
Last 3 years	N/A	N/A
Last 4 years	N/A	N/A
Last 5 years	N/A	N/A
Since Inception (5/96)	-10.7	-11.0

**Recommendations**

No action required.



**MONTGOMERY ASSET MANAGEMENT**  
**Periods Ending March, 1999**

**Portfolio Manager: Josephine Jimenez**

**Assets Under Management: \$180,403,539**

**Investment Philosophy**

Montgomery is an emerging markets specialist. The firm combines quantitative investment techniques and fundamental stock selection to take advantage of market inefficiencies and low correlations within the emerging markets. Their top-down analysis begins with a quantitative approach which evaluates historical volatility and correlations between markets. The model identifies attractive countries which are then qualitatively analyzed for "event risk" which the model cannot take into account. Fundamental analysis is used to evaluate the financial condition, quality of management, and competitive position of each stock. Stocks will come from two tiers. Tier 1 will be 60-100 blue chip stocks. Tier 2 will be 100-150 smaller cap stocks with substantial growth potential. Characteristics of selected stocks may include low PE's to internal growth rates, above average earnings growth potential or undervalued/hidden assets.

**Staff Comments**

Staff met briefly with Montgomery in April 1999 in the SBI office to discuss their investment process and recent performance. Montgomery's underperformance during the first quarter is primarily attributable to their broad exposure to small-cap stocks and an overweight position in Central Europe. These decisions were offset somewhat by well-timed decisions to re-enter the Mexican and Brazilian markets, taking full advantage of the strong performance of these markets in the first quarter. Over the past year the main reason for underperformance was Montgomery's broad exposure to small-cap stocks.

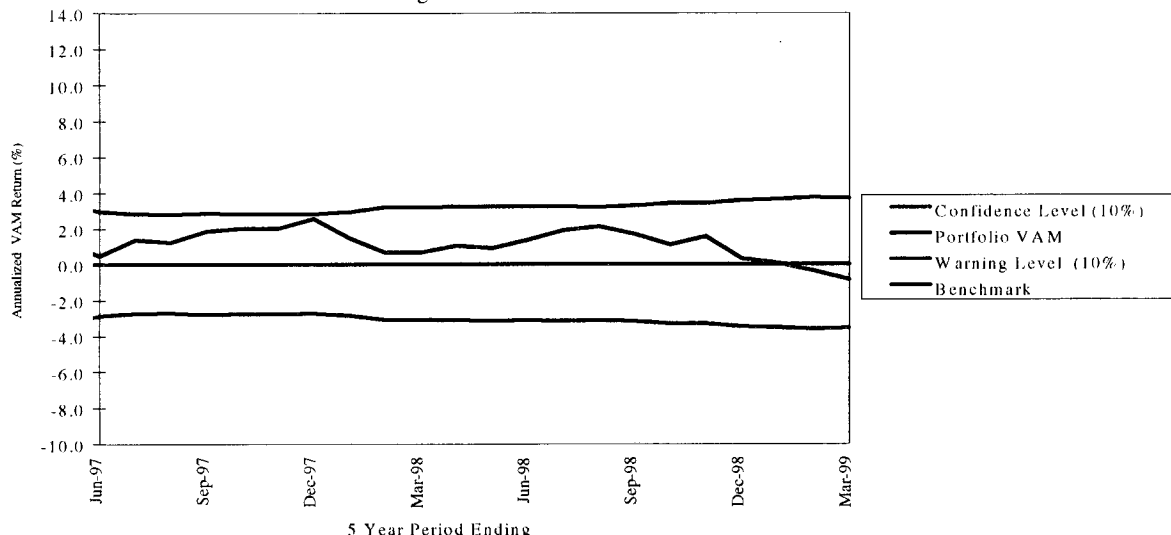
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	5.5%	12.4%
Last 1 year	-30.5	-21.0
Last 2 years	-22.2	-17.3
Last 3 years	N/A	N/A
Last 4 years	N/A	N/A
Last 5 years	N/A	N/A
Since Inception (5/96)	-12.9	-11.0

**Recommendations**

No action required.

**MONTGOMERY ASSET MANAGEMENT**  
**Rolling Five Year VAM**



Note: Shaded area includes performance prior to managing SBI account.

**STATE STREET GLOBAL ADVISORS**  
**Periods Ending March, 1999**

**Portfolio Manager: Lynn Blake**

**Assets Under Management: \$2,933,838,201**

**Investment Philosophy**

State Street Global Advisors passively manages the portfolio against the Morgan Stanley Capital International (MSCI) index of 20 markets located in Europe, Australia and the Far East (EAFE). They buy only securities which are eligible for purchase by foreign investors, therefore they are benchmarked against the MSCI EAFE-Free index. SSgA fully replicates the index whenever possible because it results in lower turnover, higher tracking accuracy and lower market impact costs. The MSCI EAFE-Free reinvests dividends at the Belgian tax rate. The portfolio reinvests dividends at the lower U.S. tax rate, which should result in modest positive tracking error, over time.

**Staff Comments**

No comment at this time.

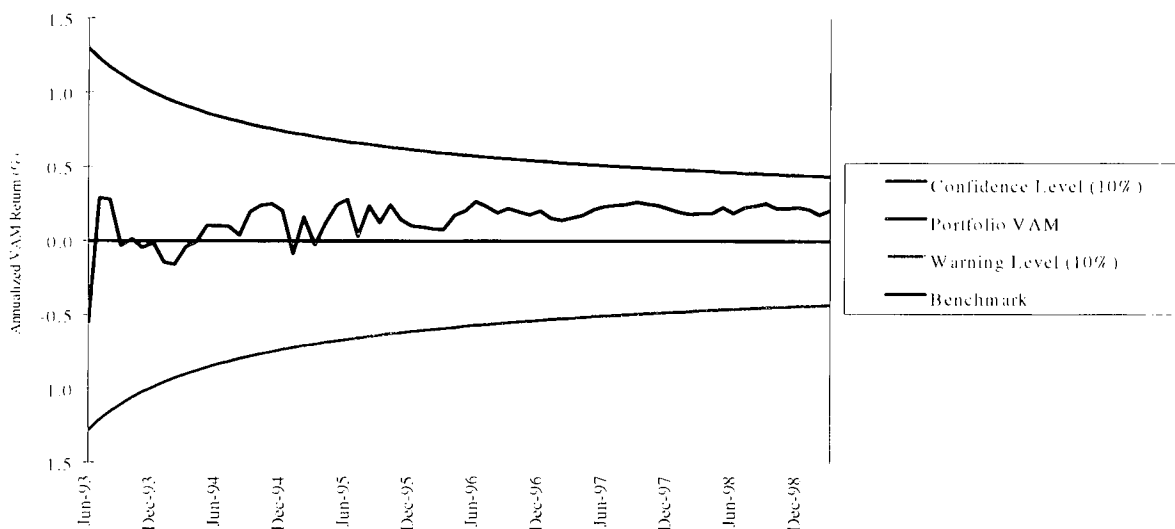
**Quantitative Evaluation**

	<b>Actual</b>	<b>Benchmark</b>
Last Quarter	1.3%	1.3%
Last 1 year	6.4	6.1
Last 2 years	12.4	12.1
Last 3 years	8.8	8.4
Last 4 years	9.8	9.4
Last 5 years	9.1	8.8
Since Inception (10/92)	11.5	11.3

**Recommendation**

No action required.

STATE STREET GLOBAL ADVISORS  
 Cumulative Tracking



**RECORD TREASURY MANAGEMENT**  
**Periods Ending March, 1999**

**Portfolio Manager: Neil Record**

**Exposure Included in Overlay: 1,074,403,678**

**Investment Philosophy**

Record Treasury avoids all forms of forecasting in its approach to currency overlay. Rather, the firm employs a systematic model which uses a form of dynamic hedging. The firm creates a portfolio of synthetic currency options using forward contracts. Like traditional options, Record's "in-house options" allow the client to participate in gains associated with foreign currency appreciation and avoid losses associated with foreign currency depreciation. As with all dynamic hedging programs, Record will tend to sell foreign currency as it weakens and buy as it strengthens.

The SBI has chosen to limit the overlay program to currencies that comprise 5% or more of the EAFE index: Japanese Yen, British Pound Sterling, German Mark, French Franc, Swiss Franc, Dutch Guilder. One twelfth of the exposures in the SBI's EAFE index fund were added to the overlay program each month from December 1995 to November 1996. Each currency is split into equal tranches that are monitored and managed independently. The strike rate for each tranche is set at 2% out-of-the money at the start date of each tranche. This requires a 2% strengthening of the US dollar to trigger a hedge for that tranche.

**Staff Comments**

No comment at this time.

**Quantitative Evaluation**

	<b>Index Fund + Record</b>	<b>Index Fund(1)</b>
Last Quarter	1.6%	1.3%
Last 1 Year	5.4	6.4
Last 2 Years	12.9	12.4
Last 3 Years	11.1	8.7
Last 4 Years	N/A	N/A
Last 5 Years	N/A	N/A
Since Inception (12/95)	12.1	10.0

**Recommendations**

No action required.

(1) Actual unhedged return of the entire EAFE-Free index fund managed by State Street Global Advisers. Includes return of underlying stock exposure. (As reported by State Street Bank)

This page left blank intentionally.

# Tab F

## **COMMITTEE REPORT**

---

DATE: May 25, 1999

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

FROM: **Alternative Investment Committee**

The Alternative Investment Committee met on May 12, 1999 to review the following information and action items:

- Review of current strategy.
- Investment for the Post Retirement Fund with a new private equity manager, William Blair Mezzanine Capital Partners III, L.L.C.
- Investment for the Basic Retirement Fund with an existing private equity manager, Hellman & Friedman L.L.C.

**The Board/IAC action is required on the last two items.**

### **INFORMATION ITEMS:**

#### **1) Review of Current Strategy.**

To increase overall portfolio diversification, 15% of the Basic Retirement Funds and 5% of the Post Retirement Fund are allocated to alternative investments. Alternative investments include real estate, private equity and resource investments where Minnesota State Board of Investment (SBI) participation is limited to commingled funds or other pooled vehicles. Charts summarizing the Board's current commitments are attached (see **Attachments A and B**).

## **Basic Funds**

- 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 Real Estate Investment Trusts (REITs), open-end commingled funds and closed-end commingled funds. The remaining portion of the portfolio can include investments in less diversified, more focused (specialty) commingled funds and REITs. Currently, the SBI has an investment at market value of \$651 million in seventeen (17) commingled real estate funds and REITs.
- The private equity investment strategy is to establish and maintain a broadly diversified private equity portfolio comprised of investments that provide diversification by industry type, stage of corporate development and location. Currently, the SBI has an investment at market value of \$972 million in forty-one (41) commingled private equity funds.
- The strategy for resource investment is to establish and maintain a portfolio of 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 an investment at market value of \$106 million in eleven (11) commingled oil and gas funds.

## **Post Fund**

- The Post Fund assets allocated to alternative investments will be invested separately from the Basic Funds' alternative investments to assure that returns are accounted for appropriately. Because the Post Fund invests the retired employees' pension assets, an allocation to yield oriented alternative investments will be emphasized. The Basic Retirement Funds' invest the active employees' pension assets and have less concern regarding the current yield for their alternative investments. The SBI has an investment at market value of \$211 million in thirteen (13) yield oriented funds for the Post Fund: Four (4) are in real estate, seven (7) are in private equity and two (2) are in resource funds.



**ACTION ITEMS:**

- 1) Investment for the Post Retirement Fund with a new private equity manager, William Blair Mezzanine Capital Partners III, L.L.C., in William Blair Mezzanine Capital Partners III, L.P.**

William Blair Mezzanine Capital Partners III, L.L.C is seeking investors for a new \$300 million private equity fund, William Blair Mezzanine Capital Partners III. This Fund is the third private equity fund managed by William Blair Mezzanine Capital Partners III, L.L.C. William Blair Mezzanine Capital Partners III will focus, like prior funds, on assembling a diverse portfolio of primarily mezzanine and subordinated debt investments with equity participations.

More information on William Blair Mezzanine Capital Partners III is included as **Attachment C**.

**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 \$60 million or 20%, whichever is less, in William Blair Mezzanine Capital Partners III. This commitment will be allocated to the Post Retirement Fund.**

**Approval by the SBI of this potential commitment is not intended to be, and does not constitute in any way, a binding or legal agreement or impose any legal obligations on the State Board of Investment and neither the State of Minnesota, the State Board of Investment or its Executive Director have any liability for reliance by William Blair Mezzanine Capital Partners III, L.L.C. upon this approval. Until a formal agreement is executed by the Executive Director on behalf of the SBI, further due diligence and negotiations may result in the imposition of additional terms and conditions on William Blair Mezzanine Capital Partners III, L.L.C. or reduction or termination of the commitment.**

**2) Investment for the Basic Retirement Fund with an existing private equity manager, Hellman & Friedman, L.L.C., in Hellman & Friedman Capital Partners IV, L.P.**

Hellman & Friedman, L.L.C. is seeking investors for a new \$2 billion private equity fund, Hellman & Friedman Capital Partners IV, L.P. This Fund is the fourth in a series of private equity funds managed by Hellman & Friedman, L.L.C. Hellman & Friedman Capital Partners IV, L.P. will focus, like prior funds, on assembling a diverse portfolio of private equity investments.

More information on Hellman & Friedman Capital Partners IV, L.P. 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 \$150 million or 20%, whichever is less, in Hellman & Friedman Capital Partners IV, L.P. This commitment will be allocated to the Basic Retirement Fund.**

**Approval by the SBI of this potential commitment is not intended to be, and does not constitute in any way, a binding or legal agreement or impose any legal obligations on the State Board of Investment and neither the State of Minnesota, the State Board of Investment or its Executive Director have any liability for reliance by Hellman & Friedman, L.L.C. upon this approval. Until a formal agreement is executed by the Executive Director on behalf of the SBI, further due diligence and negotiations may result in the imposition of additional terms and conditions on Hellman & Friedman, L.L.C. or reduction or termination of the commitment.**

**ATTACHMENT A**

**Minnesota State Board of Investment**  
*Alternative Investments*  
*Basic Retirement Funds*  
*March 31, 1999*

Market Value of Basic Retirement Funds	\$19,646,465,335
Amount Available for Investment	<b>\$1,217,872,003</b>

	<b>Current Level</b>	<b>Target Level</b>	<b>Difference</b>
Market Value	\$1,729,097,797	\$2,946,969,800	\$1,217,872,003
MV +Unfunded	\$2,520,137,490	\$3,929,293,067	\$1,409,155,577

<b>Asset Class</b>	<b>Market Value</b>	<b>Unfunded Commitment</b>	<b>Total</b>
Real Estate	\$650,846,601	\$60,578,973	\$711,425,574
Private Equity	\$971,629,486	\$585,964,521	\$1,557,594,007
Resource	\$106,621,710	\$144,496,199	\$251,117,909
<b>Total</b>	\$1,729,097,797	\$791,039,693	\$2,520,137,490

**Minnesota State Board of Investment**  
*Alternative Investments*  
*Post Retirement Funds*  
*March 31, 1999*

Market Value of Post Retirement Funds	\$17,970,097,129
Amount Available for Investment	<b>\$687,151,350</b>

	Current Level	Target Level	Difference
Market Value	\$211,353,507	\$898,504,856	\$687,151,350
MV +Unfunded	\$392,020,090	\$1,797,009,713	\$1,404,989,623

Asset Class	Market Value	Unfunded Commitment	Total
Real Estate	\$67,584,549	\$7,840,105	\$75,424,655
Private Equity	\$114,471,573	\$129,287,683	\$243,759,256
Resource	\$29,297,384	\$43,538,795	\$72,836,179
<b>Total</b>	\$211,353,507	\$180,666,583	\$392,020,090

**ATTACHMENT B**  
**Minnesota State Board of Investment**  
- Alternative Investments -  
As of March 31, 1999

	Total Commitment	Funded Commitment	Market Value	Distributions	Unfunded Commitment	IRR %	Period Years
<b><u>Real Estate-Basic</u></b>							
Aetna	42,376,529	42,376,529	116,307,465	0	0	6.79	16.92
AEW V	15,000,000	15,000,000	1,081,547	10,560,056	0	-2.71	11.29
<b>Colony Capital</b>							
Colony Investors II	40,000,000	36,986,764	23,161,725	21,495,144	3,013,236	10.41	4.00
Colony Investors III	100,000,000	46,289,862	44,952,594	0	53,710,138	-5.42	1.25
Equitable	40,000,000	40,000,000	105,193,493	277,669	0	6.07	17.47
Equity Office Properties Trust	140,388,854	140,388,854	191,288,488	35,276,584	0	13.76	7.34
First Asset Realty	916,185	916,185	232,757	829,650	0	4.80	4.92
<b>Heitman</b>							
Heitman Advisory Fund I	20,000,000	20,000,000	3,024,435	19,592,430	0	1.60	14.64
Heitman Advisory Fund II	30,000,000	30,000,000	4,365,240	38,434,209	0	3.90	13.36
Heitman Advisory Fund III	20,000,000	20,000,000	467,571	21,764,261	0	1.30	12.19
Heitman Advisory Fund V	20,000,000	20,000,000	20,834,397	10,518,541	0	8.10	7.32
Lasalle Income Parking Fund	15,000,000	14,644,401	13,315,014	6,278,339	355,599	6.74	7.53
RREEF USA Fund III	75,000,000	75,000,000	21,922,139	97,919,287	0	4.67	14.89
<b>T.A. Associates Realty</b>							
Realty Associates Fund III	40,000,000	40,000,000	52,183,400	11,952,436	0	13.75	4.83
Realty Associates Fund IV	50,000,000	46,500,000	50,485,235	4,346,390	3,500,000	12.13	2.16
<b>TCW</b>							
TCW Realty Fund III	40,000,000	40,000,000	357,008	48,390,849	0	2.05	13.66
TCW Realty Fund IV	30,000,000	30,000,000	1,631,970	27,223,733	0	-0.42	12.41
Funds in Liquidation (AEW III, AEW IV)	<u>35,000,000</u>	<u>35,000,000</u>	<u>42,121</u>	<u>28,532,825</u>	0	N/A	N/A
<b>Real Estate-Basic Totals</b>	<b>753,681,568</b>	<b>693,102,595</b>	<b>650,846,600</b>	<b>383,392,403</b>	<b>60,578,973</b>		
<b><u>Real Estate-Post</u></b>							
Colony Investors II	40,000,000	36,986,764	23,161,725	21,495,144	3,013,236	10.41	4.00
<b>Westmark Realty Advisors</b>							
Westmark ComI MTG Fund II	13,500,000	13,397,500	12,183,489	5,446,722	102,500	11.26	3.68
Westmark ComI MTG Fund III	21,500,000	21,275,052	22,346,013	3,057,957	224,948	12.63	2.33
Westmark ComI MTG Fund IV	<u>14,300,000</u>	<u>9,800,579</u>	<u>9,893,322</u>	<u>424,326</u>	<u>4,499,421</u>	10.94	1.25
<b>Real Estate-Post Totals</b>	<b>89,300,000</b>	<b>81,459,895</b>	<b>67,584,549</b>	<b>30,424,149</b>	<b>7,840,105</b>		
<b>Real Estate-Totals</b>	<b>842,981,568</b>	<b>774,562,490</b>	<b>718,431,149</b>	<b>413,816,552</b>	<b>68,419,078</b>		

# Minnesota State Board of Investment

- Alternative Investments -

As of March 31, 1999

Investment	Total Commitment	Funded Commitment	Market Value	Distributions	Unfunded Commitment	IRR %	Period Years
<b><u>Venture Capital-Basic</u></b>							
Allied	5,000,000	5,000,000	211,774	6,059,302	0	3.60	13.54
<b>Bank Fund</b>							
<i>Banc Fund III</i>	20,000,000	20,000,000	31,415,740	12,274,920	0	19.52	6.43
<i>Banc Fund IV</i>	25,000,000	25,000,000	27,465,600	2,633,171	0	11.01	3.12
<i>Banc Fund V</i>	48,000,000	9,600,000	9,415,469	15,419	38,400,000	-3.73	0.71
<b>Blackstone Partners II</b>	50,000,000	46,243,206	42,430,511	41,191,091	3,756,794	48.45	5.35
<b>Brinson Partners</b>							
<i>Brinson Partners I</i>	5,000,000	5,000,000	892,656	7,730,489	0	9.86	10.89
<i>Brinson Partners II</i>	20,000,000	18,779,998	4,897,499	31,223,266	1,220,002	25.60	8.34
<b>Churchill Capital Partners II</b>	20,000,000	20,000,000	8,939,077	21,158,021	0	15.63	6.42
<b>Contrarian Capital II</b>	37,000,000	29,612,357	27,159,694	12,446	7,387,643	-6.95	1.83
<b>Coral Partners</b>							
<i>Coral Partners Fund I</i>	7,011,923	7,011,923	1,706,330	5,130,811	0	-0.43	12.78
<i>Coral Partners Fund II</i>	10,000,000	8,069,315	9,496,899	24,517,340	1,930,685	25.27	8.68
<i>Coral Partners Fund IV</i>	15,000,000	11,250,000	8,363,090	3,119,933	3,750,000	0.78	4.69
<i>Coral Partners Fund V</i>	15,000,000	2,285,815	2,052,815	0	12,714,185	-11.59	0.79
<b>Crescendo</b>							
<i>Crescendo II</i>	15,000,000	11,094,773	10,492,562	2,286,019	3,905,227	17.09	2.24
<i>Crescendo III</i>	25,000,000	7,750,000	7,750,000	0	17,250,000	0.00	0.40
<b>DSV</b>	10,000,000	10,000,000	3,567,638	20,244,324	0	8.25	13.97
<b>First Century</b>	10,000,000	10,000,000	3,102,352	14,024,709	0	9.28	14.29
<b>Fox Paine and Company</b>	40,000,000	9,059,036	9,491,650	0	30,940,964	0.00	0.94
<b>Golder Thoma Cressey Rauner</b>							
<i>Golder Thoma Cressey Rauner Fund III</i>	14,000,000	14,000,000	7,553,498	51,021,716	0	30.62	11.42
<i>Golder Thoma Cressey Rauner Fund IV</i>	20,000,000	19,750,000	24,362,694	26,183,666	250,000	37.60	5.16
<i>Golder Thoma Cressey Rauner Fund V</i>	30,000,000	25,350,000	34,909,689	673,223	4,650,000	27.39	2.75
<b>GTCR Fund VI</b>	90,000,000	18,225,000	17,458,621	0	71,775,000	-9.03	0.75
<b>GHJM Marathon Fund IV</b>	40,000,000	0	0	0	40,000,000	N/A	N/A
<b>Hellman &amp; Friedman III</b>	40,000,000	28,026,638	21,439,702	23,131,530	11,973,362	29.74	4.53
<b>Kohlberg Kravis Roberts</b>							
<i>KKR 1986 Fund</i>	18,365,339	18,365,339	26,762,422	202,717,756	0	28.91	12.96
<i>KKR 1987 Fund</i>	145,950,000	145,950,000	216,705,110	251,071,707	0	12.59	11.35
<i>KKR 1993 Fund</i>	150,000,000	150,000,000	154,626,778	111,304,061	0	15.09	5.28
<i>KKR 1996 Fund</i>	200,000,000	101,989,675	87,717,204	11,404,022	98,010,325	-4.60	2.58
<b>Matrix</b>							
<i>Matrix Partners II</i>	10,000,000	10,000,000	976,899	21,368,456	0	13.99	13.62
<i>Matrix Partners III LP</i>	10,000,000	10,000,000	621,934	73,727,244	0	74.97	8.90
<b>Piper Jaffrey Healthcare</b>							
<i>Piper Jaffrey Healthcare Fund II</i>	10,000,000	7,000,000	5,734,167	415,800	3,000,000	-11.59	2.08
<i>Piper Jaffrey Healthcare Fund III</i>	9,631,250	1,059,438	1,059,438	0	8,571,812	0.00	0.19
<b>RCBA Strategic Partners, L.P.</b>	50,000,000	12,821,578	13,880,807	0	37,178,422	9.00	0.27
<b>Summit Partners</b>							
<i>Summit Venture II L.P.</i>	30,000,000	28,500,000	7,552,082	65,496,333	1,500,000	29.05	10.88
<i>Summit Venture V L.P.</i>	25,000,000	6,875,000	6,783,088	421	18,125,000	-2.03	1.00
<b>T. Rowe Price</b>	213,880,000	213,880,000	15,682,990	210,234,474	0	9.45	N/A
<b>Thoma Cressey</b>	35,000,000	2,800,000	2,635,413	0	32,200,000	-9.01	0.61
<b>Warburg Pincus</b>							
<i>Warburg Pincus Equity Partners</i>	100,000,000	18,000,000	17,529,984	53,700	82,000,000	-4.90	0.76
<i>Warburg Pincus Ventures</i>	50,000,000	50,000,000	63,267,883	9,008,438	0	17.86	4.25
<b>Welsh, Carson, Anderson &amp; Stowe</b>	100,000,000	18,000,000	17,706,744	0	82,000,000	-2.94	0.68
<b>Zell/ Chilmark</b>	30,000,000	30,000,000	17,755,212	51,172,195	0	15.68	8.72
<i>Funds in Liquidation (KKR 1984, Summit Venture I)</i>	<u>35,000,000</u>	<u>35,000,000</u>	<u>55,770</u>	<u>148,678,911</u>	0	N/A	N/A
<b><i>Venture Capital-Basic Totals</i></b>	1,833,838,512	1,221,349,091	971,629,485	1,449,284,913	612,489,421		

# Minnesota State Board of Investment

- Alternative Investments -

As of March 31, 1999

Investment	Total Commitment	Funded Commitment	Market Value	Distributions	Unfunded Commitment	IRR %	Period Years
<b><i>Venture Capital-Post</i></b>							
Citicorp Mezzanine	40,000,000	33,771,195	31,206,986	14,535,986	6,228,805	22.48	4.25
Kleinwort Benson	25,000,000	19,302,052	16,596,997	3,198,540	5,697,948	1.77	3.50
<b>Summit Partners</b>							
<i>Summit Sub. Debt Fund I</i>	20,000,000	18,000,000	3,853,254	22,753,242	2,000,000	25.88	5.00
<i>Summit Sub. Debt Fund II</i>	45,000,000	18,000,000	18,578,901	4,673,028	27,000,000	24.18	1.66
T. Rowe Price	3,940,301	3,940,301	1,208,913	1,699,813	0	-45.08	N/A
<b>TCW/Crescent Mezzanine</b>							
<i>TCW Crescent Mezzanine Partner</i>	40,000,000	37,898,925	31,030,665	10,667,392	2,101,075	7.26	3.00
<i>TCW Crescent Mezzanine Partner II</i>	100,000,000	13,740,145	11,995,858	1,744,287	86,259,855	0.00	N/A
<b><i>Venture Capital-Post Totals</i></b>	273,940,301	144,652,618	114,471,573	59,272,288	129,287,683		
<b><i>Venture Capital-Totals</i></b>	2,107,778,813	1,366,001,709	1,086,101,059	1,508,557,201	741,777,104		

# Minnesota State Board of Investment

- Alternative Investments -  
As of March 31, 1999

	Total Commitment	Funded Commitment	Market Value	Distributions	Unfunded Commitment	IRR %	Period Years
<b><u>Resource-Basic</u></b>							
<b>Apache</b>	30,000,000	30,000,000	3,571,980	42,525,861	0	10.92	12.25
<b>First Reserve</b>							
<i>First Reserve I</i>	15,000,000	15,000,000	3,967,000	6,664,976	0	-2.67	17.50
<i>First Reserve II</i>	7,000,000	7,000,000	4,886,000	5,482,744	0	3.38	16.15
<i>First Reserve V</i>	16,800,000	16,800,000	16,609,003	24,519,754	0	13.93	8.91
<i>First Reserve VII</i>	40,000,000	37,721,934	22,559,443	10,049,880	2,278,066	-13.31	2.75
<i>First Reserve VIII</i>	100,000,000	8,402,547	5,930,525	0	91,597,453	-47.85	0.92
<b>Morgan Oil &amp; Gas</b>	15,000,000	15,000,000	3,557,228	20,906,987	0	6.90	10.60
<b>Simmons</b>							
<i>Simmons - SCF Fund II</i>	17,000,000	14,847,529	14,826,069	6,358,253	2,152,471	5.45	7.65
<i>Simmons - SCF Fund III</i>	25,000,000	19,156,791	22,727,550	8,245,755	5,843,209	18.24	3.75
<i>Simmons - SCF Fund IV</i>	<u>50,000,000</u>	<u>7,375,000</u>	<u>7,986,912</u>	<u>0</u>	<u>42,625,000</u>	-2.54	1.00
<b>Resource-Basic Totals</b>	315,800,000	171,303,801	106,621,710	124,754,210	144,496,199		
 <b><u>Resource-Post</u></b>							
<b>Merit Energy Partners</b>							
<i>Merit Energy Partners B L P</i>	24,000,000	19,632,849	18,516,088	1,902,425	4,367,151	3.54	2.75
<i>Merit Energy Partners C</i>	<u>50,000,000</u>	<u>10,828,356</u>	<u>10,781,296</u>	<u>32,173</u>	<u>39,171,644</u>	-0.27	0.42
<b>Resource-Post Totals</b>	74,000,000	30,461,205	29,297,384	1,934,598	43,538,795		
<b>Resource-Totals</b>	389,800,000	201,765,006	135,919,094	126,688,808	188,034,994		



## ATTACHMENT C

### PRIVATE EQUITY MANAGER PROFILE

#### I. BACKGROUND DATA

**NAME OF FUND:** William Blair Mezzanine Capital Fund III, L.P.  
("Fund III")

**FUND MANAGER:** William Blair Mezzanine Capital Partners III,  
L.L.C.

**TYPE OF FUND:** Private Equity Limited Partnership

**TOTAL FUND SIZE:** \$300 million

**MANAGER CONTACT:** Marc Walfish  
William Blair Mezzanine Capital Partners  
227 W. Monroe Street  
Chicago Illinois 60606  
Phone: (312) 364-8787  
Fax: (312) 364-8075

#### II. ORGANIZATION & STAFF

The General Partner of Fund III, William Blair Mezzanine Capital Partners III, L.L.C., will be responsible for all of Fund III's activities, from investment origination through closing, monitoring and disposition. The General Partner currently consists of five investment professionals. The General Partner expects to hire two additional investment professionals soon after the closing of Fund III.

The three senior managers of the General Partner will be Timothy J. MacKenzie, Terrance M. Shipp and Marc J. Walfish, who together also had full responsibility for managing Fund I and Fund II. Mr. Walfish has 21 years of mezzanine experience, while Messrs. MacKenzie and Shipp have 17 years each. Messrs. Shipp and Walfish have worked together making mezzanine investments in the Midwest since 1982, including on behalf of Fund I, Fund II and previously for a large institutional investor. Together, Messrs. MacKenzie, Shipp and Walfish have been integrally involved in over \$700 million of mezzanine investments, demonstrating the ability to successfully manage a substantial mezzanine portfolio through various economic cycles.

All investments for Fund III will be approved by an Investment Committee. This committee will be composed of Messrs. MacKenzie, Shipp and Walfish, together with E. David Coolidge III, John P. Kayser and James D. McKinney, three senior principals of William Blair & Company, L.L.C. ("Blair").

Blair will also be a principal of the General Partner. Blair is a full-line investment banking and brokerage concern headquartered in Chicago, Illinois. Blair offers a broad spectrum of services to clients throughout the U.S. and abroad, with particular emphasis on serving Midwestern, middle-market growth companies, some of which could be excellent investment candidates for Fund III.

### III. INVESTMENT STRATEGY

The General Partner will pursue the same strategy it followed in Funds I and II, incorporating five underlying principles: (i) unique origination capabilities; (ii) disciplined investing; (iii) diversification; (iv) transaction control; and (v) active portfolio management.

Fund III will invest primarily in fixed rate subordinated debt securities. These securities generally will be purchased with a significant equity component in the form of warrants, common stock or contingent interest.

Fund III's capital will be invested in a variety of situations, including recapitalizations, management buyouts and as growth and acquisition capital for businesses. Fund III will focus its activities on middle-market companies, particularly privately-owned businesses located in the Midwest. Fund III expects to invest in approximately 20 separate companies, with an average investment of approximately \$12.5 million.

### IV. INVESTMENT PERFORMANCE

Previous fund performance as of December 31, 1998 for William Blair Mezzanine investment funds and the SBI's investments with previous funds, where applicable, is shown below:

<b>Fund</b>	<b>Inception Date</b>	<b>Total Equity Commitments</b>	<b>SBI Investment</b>	<b>Net IRR from Inception</b>
Fund I	1993	\$115 million		15.7 %
Fund II	1997	\$190 million		9.0 %

### V. GENERAL PARTNER'S INVESTMENT

The Principals will make a capital commitment of at least \$12.5 million.

## **VI. TAKEDOWN SCHEDULE**

Capital contributions will be drawn down as needed, with not less than 10 days' prior written notice.

## **VII. FEES**

Fund III will pay the General Partner an annual management fee (the "Management Fee") equal to 1.75% of aggregate Commitments, payable quarterly in arrears throughout the first five years. In Year 6, the Management Fee will be equal to 1.75% of aggregate Capital Contributions (defined as the amount contributed to Fund III by all Partners pursuant to their Commitments). Upon the earlier of the beginning of Year 7 or the formation of a new fund ("Triggering Event"), the Management Fee will be reduced in accordance with the following schedule:

Commencing on the date of the Triggering Event: 1.575% of Invested Capital\*

Commencing on the first anniversary of the date of the Triggering Event: 1.40% of Invested Capital.

Commencing on the second anniversary of the date of the Triggering Event: 1.225% of Invested Capital

Commencing on the third anniversary of the date of the Triggering Event and thereafter: 1.05% of Invested Capital

\* Defined as the original cost basis of the aggregate investments in portfolio companies remaining in Fund III as of the beginning of the period.

The Management Fee will be reduced each year by all fees received by the General Partner during the year in connection with the activities of Fund III, including any closing, commitment, break-up and director fees.

Consistent with previous funds, it is possible that one or more Partners will be charged a reduced Management Fee based on the level of such Partner's Commitment and/or its status as a limited partner in Fund I and II. Any such arrangement will be disclosed to all Limited Partners prior to the initial closing, but will not necessarily be available to all Limited Partners on a consistent basis.

## VIII. ALLOCATIONS AND DISTRIBUTIONS

Except as described in the section below (See “Preferred Return”), income, gains, losses and expenses will be allocated as follows:

Income from short-term investments (e.g., Treasury bills, certificates of deposit, etc.) will be allocated to the Capital Accounts of the Partners in proportion to their Commitments.

Portfolio interest income, dividends and gains and losses will be allocated 80% to all Partners in proportion to their Commitments and 20% to the General Partner. Organizational expenses payable by Fund III will be allocated to all Partners in proportion to their Commitments, while the Management Fee and other Fund III expenses generally will be allocated 80% to the Capital Accounts of all Partners in proportion to their Commitments, and 20% to the Capital Account of the General Partner.

Fund III will pay the Management Fee and certain other expenses, including organizational expenses payable to third parties up to \$500,000, portfolio expenses (such as interest, brokerage and registration), general legal, accounting and auditing expenses, and extraordinary expenses (such as litigation, if any). Blair may provide certain of these services for Fund III and would be reimbursed therefor. The General Partner will bear the normal expenses incurred in administering Fund III, including salaries, rent, travel and other administrative expenses. Fund III also will pay expenses relating to mezzanine transactions that are not consummated. It is anticipated that expenses incurred in connection with consummated transactions will be borne by the portfolio company.

**PREFERRED RETURN:** Notwithstanding the above, income, gains, losses and expenses will be allocated as follows:

- First, 100% to the accounts of all Partners in proportion to their Commitments, until such time as they have been allocated a cumulative annual rate of 9% on their investment;
- Second, 100% to the General Partner until such time as the General Partner has been allocated (excluding allocations to the General Partner with respect to its Commitment) its 20% profit participation; and
- Thereafter, generally, 80% to all Partners in proportion to their Commitments and 20% to the General Partner.

Distributions of cash or securities will be at the discretion of the General Partner. It is anticipated, however, that net current income will be distributed at least quarterly

and that the net cash proceeds from dispositions of investments generally will be distributed as realized.

#### **IX. TERM**

Fund III will have a ten-year term, with discretion of the General Partner to extend the term for not more than two one-year periods to allow for the orderly termination and liquidation of Fund III's investments.

#### **X. DIVERSIFICATION**

In order to create a diversified portfolio, the General Partner may not invest more than 20% of Fund III's aggregate Commitments in the securities of any single company.



## ATTACHMENT D

### PRIVATE EQUITY MANAGER PROFILE

#### I. BACKGROUND DATA

**NAME OF FUND:** Hellman & Friedman Capital Partners IV, L.P.  
("HFCP IV")

**FUND MANAGER:** Hellman & Friedman LLC ("H&F" or the "Firm")

**TYPE OF FUND:** Private Equity Limited Partnership

**TOTAL FUND SIZE:** \$2 billion

**MANAGER CONTACT:** John Pasquesi  
One Maritime Plaza, Suite 1200  
San Francisco, CA. 94111  
Phone: (415) 788-5111  
Fax: (415) 788-0176

#### II. ORGANIZATION & STAFF

H&F was organized in 1984 as a vehicle for principal investments. At the time of its formation, the founders believed that their personal resources would provide, in most cases, sufficient equity capital for the initial investments the Firm intended to make. From 1984 to 1987, the Firm invested the founders' capital in private equity investments. In addition, during its early years the Firm provided financial advisory services and was engaged on a retainer basis by a variety of clients, including APL Limited, Bank of America, The Clorox Company, Federated Department Stores, Hewlett-Packard Company and McKesson Corporation. Most noteworthy, the Firm served as the financial advisor and as the only outside investor in the buyout of Levi Strauss & Co. The Firm has not had a material advisory assignment since 1993, and H&F is unlikely to undertake any significant investment advisory assignment in the future unless it is directly related to current investment opportunities or existing portfolio companies.

Following its first three years of operation, the Firm realized that it had generated a number of attractive investment opportunities requiring or accommodating investment capital in excess of the personal resources of the Firm's founders. Since that time, H&F has formed three partnerships, totaling over \$2.5 billion of committed capital:

- Hellman & Friedman Capital Partners with \$327 million of committed capital, formed in 1987.

- Hellman & Friedman Capital Partners II, L.P. with \$877 million of committed capital, formed in 1991.
- Hellman & Friedman Capital Partners III, L.P. with \$1.5 billion of committed capital, formed in 1995.

Based on the Firm's success in these prior investment funds, H&F seeks to form HFCP IV with committed capital of \$2 billion.

H&F has 18 investment professionals. The five most senior Managing Directors of the Firm have invested together for an average of 13 years, and the 12 Managing Directors have been with the Firm for an average of 10 years. Based on this shared experience, H&F has developed a clear investment philosophy and an investment process that are institutionalized and shared across the organization to ensure a rigorous and consistent approach to all investments.

The Firm is managed by an Executive Committee consisting of F. Warren Hellman, Matthew R. Barger, John L. Bunce, Jr., John M. Pasquesi, Marco W. Hellman, Brian M. Powers and Thomas F. Steyer. The Executive Committee will be responsible for overseeing all investment decisions for HFCP IV. F. Warren Hellman is Chairman of the Firm and Matthew R. Barger serves as Senior Managing Director, responsible for the day-to-day operation of the Firm.

### **III. INVESTMENT STRATEGY**

The Firm's objective is to invest in outstanding businesses that generate high returns on the capital deployed in the business, have strong and defensible competitive positions and offer attractive growth prospects. H&F believes that companies with these characteristics exist in a variety of industries and pursues such opportunities broadly. The Firm seeks to make these investments in partnership with superior management teams. Despite its willingness to consider investments in a wide range of potential industries, the Firm has identified and made significant investments in several industries that H&F finds particularly attractive, including media, professional services and money management.

Like all prior H&F investment partnerships, HFCP IV expects to make a limited number of investments outside the U.S. Internationally, the Firm follows the same investment approach (with its focus on investing in outstanding businesses with strong management) and rigorous investment process that it employs for domestic investments. With an emphasis on risk-adjusted returns, the Firm attempts to analyze the additional risks that international investments entail (including, among others, currency, political and legal risks) and seeks higher returns than for a comparable domestic investment.



#### IV. INVESTMENT PERFORMANCE

Previous fund performance as of March 31, 1999 for Hellman & Friedman investment funds and the SBI's investments with previous funds, where applicable, is shown below:

<b>Fund</b>	<b>Inception Date</b>	<b>Total Equity Commitments</b>	<b>SBI Investment</b>	<b>Net IRR from Inception</b>
Fund I	1987	\$327 million		11.6%
Fund II	1991	\$877 million		16.0%
Fund III	1995	\$1.5 billion	\$40 million	32.1%

#### V. GENERAL PARTNER'S INVESTMENT

The Principals will make a cash contribution of at least \$100 million.

#### VI. TAKEDOWN SCHEDULE

Capital contributions will be drawn down as needed, with not less than 10 days' prior written notice.

#### VII. FEES

The Partnership will pay the General Partner an annual management fee, payable quarterly in advance, equal to 1.5% of committed capital.

Upon the formation of HFCEP IV's successor or the end of the Commitment Period, the Management Fee will be reduced to 0.75% of the cost of investments then held by HFCEP IV.

All investment banking fees, monitoring fees, directors fees and other fee income (in all cases net of related expenses) from portfolio companies will be credited in full against the Management Fee.

The Partnership will reimburse the General Partner for up to \$1,500,000 of the partnership's organizational expenses.

## **VIII. ALLOCATIONS AND DISTRIBUTIONS**

Profits of the Partnership will be allocated 80% to the Partners and 20% to the General Partner. Profits will consist of income and gains net of all losses, management fees and Partnership expenses. Until cumulative profits exceed cumulative losses, items of income and loss will be allocated to the Partners in proportion to their interests in each investment.

In the normal course of business, realized net profits will be fully distributed, subject to any appropriate reserves.

Upon termination of the Partnership, the General Partner will be required to restore to the Partnership profit distributions received which exceed 20% of aggregate net profits allocated to the General Partner.

## **IX. TERM**

The Partnership will terminate on the tenth anniversary of the formation date or, if earlier (i) sale or distribution of all or substantially all of the Partnership's property or (ii) the affirmative vote of 80% in interest of the Limited Partners. At the General Partner's discretion and with the consent of a majority in interest of the Limited Partners, the term may be extended an additional two years.

## **X. DIVERSIFICATION**

Without the consent of the Advisory Board by a majority vote, no more than 25% of the Partnership's commitments will be invested in a single portfolio company, and in no case will such investment be more than 30% of the Partnership's commitments.

No more than 30% of the Partnership's commitments will be invested in foreign investments. No more than 20% of the Partnership's commitments will be invested in publicly traded securities. The Partnership may not invest directly in real estate or oil or gas reserves. The Partnership may not sell securities short (other than in connection with hedging transactions entered into by the Partnership with the view to protect its returns on its investments).

The Partnership may not provide bridge financing to a portfolio company or prospective portfolio company if, following such financing, the aggregate amount of bridge financings made by the Partnership would exceed 25% of the Partnership's commitments