

**MINNESOTA STATE BOARD
OF INVESTMENT
MEETING
December 12, 1996
&
INVESTMENT ADVISORY
COUNCIL MEETING
December 11, 1996**

**AGENDA
STATE BOARD OF INVESTMENT
MEETING**

Thursday, December 12, 1996

8:30 A.M. -Room 112

State Capitol - Saint Paul

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| 3. Approval of follow-on investment for the Post Retirement Fund (Summit Subordinated Debt Fund II) | |
| 6. Update on Tobacco Issues (H. Bicker) | I |

**Minutes
State Board of Investment
September 4, 1996**

The State Board of Investment (SBI) met at 8:30 A.M. Wednesday, September 4, 1996 in Room 125 State Capitol, St. Paul, Minnesota. Governor Arne H. Carlson; State Auditor Judith H. Dutcher; State Treasurer Michael A. McGrath; Secretary of State Joan Anderson Growe and Attorney General Hubert H. Humphrey III were present.

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 June 30, 1996 (Combined Funds 11.1% vs. Inflation 3.7%), matched the median fund (Combined Funds and Median 12.8%) and outperformed their composite index (Combined Funds 12.8% vs. Composite 12.3%) for the most recent five year period. He stated that the Basic Funds had exceeded their composite index (Basics 13.0% vs. Composite 12.6%) over the last five years while the Post Fund had outperformed its composite index for the period July 1, 1993 through June 30, 1996 (Post Fund 11.6% vs. Composite 11.5%)

Mr. Bicker reported that the Basic Funds' assets increased 2.7% for the quarter ending June 30, 1996 due to positive investment returns. He said that the asset mix is essentially on target and that funding for the emerging markets managers continues. He added that the Funds' had outperformed its composite index for the quarter (Basics 3.5% vs. Composite 3.4%) and year (Basics 18.8% vs. Composite 18.4%).

Mr. Bicker reported that the Post Fund's assets increased 3.4% for the quarter ending June 30, 1996 due primarily to investment returns. He said that the asset mix is essentially on target and that the Fund had outperformed its composite index for the quarter (Post 2.9% vs. Composite 2.7%) and for the year (Post 17.2% vs. Composite 16.3%).

Mr. Bicker reported that the domestic stock manager group underperformed for the quarter (Domestic Stocks 4.2% vs. Wilshire 5000 4.4%) and the year (Domestic Stocks 25.9% vs. Wilshire 5000 26.2%). He said that the international stock manager group outperformed for the quarter (International Stocks 3.1% vs. EAFE-Free 1.6%) and for the year (International Stocks 16.9% vs. Composite 13.4%). He added that the bond segment also outperformed for the year (Bonds 5.3% vs. Lehman Aggregate 5.0%).

Mr. Bicker reported that the Assigned Risk Plan (ARP) had underperformed for the quarter (ARP 1.4% vs. Composite 1.6%) but had outperformed its composite index for the year (ARP 9.8% vs. Composite 9.5%). He concluded his report with the comment that as of June 30, 1996 the SBI was responsible for over \$31 billion in assets.

Executive Director's Administrative Report

Mr. Bicker referred members to Tab B for the Portfolio Statistics and Tab C of the meeting materials for the current budget and travel reports. Mr. Carlson asked if anyone had any questions regarding the investment performance. Hearing none, Mr. Bicker proceeded by stating that the SBI had completed an open appointment process to fill a vacancy on the Investment Advisory Council (IAC). He said that the SBI Deputies are recommending that Mr. Doug Gorence be appointed to the IAC. In response to a question from Mr. Carlson, Mr. Bicker said that Mr. Gorence has been in the pension business for approximately 12 years and been employed by Honeywell in their pension area for the last 7 years. Mr. McGrath moved approval of the Deputies recommendation to appoint Mr. Gorence to the IAC, as stated in the Director's Administrative Report, which reads "The SBI Deputies recommend that the SBI appoint Douglas Gorence to the Investment Advisory Council for a term ending January 2000". Ms. Grove seconded the motion. The motion passed.

Mr. Bicker stated that Minnesota Mutual, one of the vendors for the State's Deferred Compensation Plan, had submitted a contract amendment that would allow participants to transfer their entire fixed account balance to other vendors in the Plan over a five year period. He added that this would be an improvement to the Plan for participants. Ms. Grove moved approval of the Executive Director's recommendation, as stated in the Director's Administrative Report, which reads "Pending concurrence by the Deferred Compensation Review Committee, the Executive Director recommends that the SBI approve an amendment to the agreement with Minnesota Mutual Life Insurance Company for the Deferred Compensation Plan which will allow participants to transfer their entire general account balance to other product providers in the Plan over a five year period. Further, the SBI should authorize the Executive Director, with assistance from SBI legal counsel, to negotiate and execute the amendment on behalf of the SBI." The motion passed.

Administrative Committee Report

Mr. McGrath noted that during the quarter the Committee had met with the SBI's emerging markets managers. He said that there were no action items from the Committee at this time.

Domestic Manager Committee Report

Ms. Yeomans referred members to Tab E of the meeting materials and said that the Committee had no particular concerns regarding the equity or bond manager performance at this time. She stated that the Committee is recommending that IAI, one of the SBI's equity managers, be removed from probationary status. She explained that there had been recent changes in personnel managing the SBI's account and in the ownership of the firm, but that these changes have not negatively impacted the management of the SBI's portfolio. Ms. Dutcher moved approval of the Committee's recommendation, as stated in the Committee Report, which reads "Staff believes that the TSB/Lloyds Bank merger and change in portfolio manager has not negatively impacted the management of the SBI

portfolio. The Committee concurred and recommends that IAI be removed from probation." Ms. Growe seconded the motion. The motion passed.

Ms. Yeomans stated that the Committee discussed the level of cash in the domestic equity benchmarks. She stated that the view of the IAC differs from that of staff and Richards & Tierney. She explained that staff and Richards & Tierney believe that there should be a 1% cash level to reflect the reality of some residual cash in the portfolio due to such things as unsettled trades and dividend payments. She said that the IAC believes that it is more important to outperform an index and she noted that passive indices do not include a cash allocation. She said that the Committee is recommending that the SBI eliminate all cash from the domestic equity manager benchmarks. In response to questions from Mr. Carlson, Ms. Yeomans said that the proposed recommendation will motivate managers to keep their cash levels at a minimum. Mr. Carlson asked Mr. Bicker for his comments. Mr. Bicker stated that staff had originally recommended a 1% level but he noted that staff did not object to removing all cash from the benchmarks. In response to a question from Ms. Dutcher, Ms. Posey of Richards & Tierney stated that their firm believes that a benchmark should reflect the practical reality of investing and that they would suggest a benchmark cash level of 1-5%. In response to a question from Ms. Dutcher, Mr. Bicker said that many of the manager's benchmarks had been reduced over time to 1% cash, with 1 or 2 managers remaining at the 5% cash level. In response to a question from Mr. Humphrey, Mr. Bicker stated that an average equity manager would likely have a 3-4% cash position due to dividend receipts and unsettled trades. Mr. McGrath moved approval of the Committee's recommendation to eliminate all cash from the domestic equity manager benchmarks, as stated in the Committee Report, which reads "The Committee recommends that the SBI eliminate all cash from domestic equity manager benchmarks." Mr. Humphrey seconded the motion. The motion passed.

Ms. Yeomans stated that the next recommendation involves the benchmarks used for two internally managed short term cash pools, the Trust Fund Pool and the Invested Treasurer's Cash (ITC) Pool. She said that currently both pools have been managed against a benchmark that was weighted 75% cash equivalents/25% 1-3 year debt. She explained that the cash flows and maturity structure of the Trust Fund Pool has changed significantly since the blended benchmark was adopted, and that the maturity structure of the pool is six months or less. Ms. Yeomans stated that the recommendation for the Trust Fund Pool is to use a cash equivalents benchmark rather than the current blended benchmark.

Ms. Yeomans stated that a blended benchmark continues to be appropriate for the ITC Pool benchmark. However, she said that a benchmark based on set percentages has been problematic due to significant volatility in cash flows. She said that the recommendation is to continue using a blended benchmark, but to convert the long end of the benchmark from a fixed percentage to a fixed dollar amount based on a forecasted figure.

In response to a request from Mr. Carlson, Mr. Bicker further described the two pools. He added that the fixed dollar amount for the ITC pool benchmark can be modified as

necessitated by change in cash flows, legislation and economic factors. Mr. Carlson requested that the ITC Pool recommendation undergo further analysis and discussion by staff and the Department of Finance. Mr. Bicker agreed. Mr. Carlson clarified that was not opposed to taking action on the recommendation involving the Trust Fund Pool. Mr. McGrath moved approval of the Committee's recommendation regarding the Trust Fund Pool's benchmark, as stated in the Committee Report, which reads "The Committee recommends that the following benchmarks be used to measure the performance of the internally managed cash pools: The Trust Fund Pool should be measured against a cash equivalents benchmark rather than a blended benchmark. The IBC All Taxable Money Fund Index is recommended as the performance standard for this pool. 91 Day T-Bills should continue to be reported as an alternative measure for the internally managed cash pools as it continues to be a widely recognized performance standard for short term cash." Ms. Growe seconded the motion. The motion passed.

International Manager Committee Report

Ms. Yeomans stated that the international segment added value during the quarter both in local currency terms and US dollar terms. She reported that the Committee is recommending that the SBI terminate its relationship with Templeton Investment Council. She explained that the firm has had high staff turnover and that clients have experienced significantly different returns depending upon the portfolio manager assigned to their account. She said that this raised questions as to whether the firm can replicate acceptable returns in the future. Ms. Growe 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 Templeton Investment Counsel." Ms. Dutcher seconded the motion. The motion passed.

Alternative Investment Committee Report

Ms. Yeomans referred members to Tab G of the meeting materials and said that the Committee is recommending an additional investment for the Basic Retirement Funds with an existing real estate manager, TA Associates Realty. In response to questions from Mr. Carlson, Mr. Bicker stated that their three previous funds had performed well, providing returns in the mid-teens. Mr. McGrath moved approval of the Committee's recommendation, 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 \$50 million or 20%, whichever is less, in The Realty Associates Fund IV. This commitment will be allocated to the Basic Retirement Funds. 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 TA Associates Realty 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 TA Associates Realty or reduction or termination of the commitment." Mr. Humphrey seconded the motion. The motion passed.

Ms. Yeomans stated that the Committee is also recommending an additional investment for the Post Retirement Fund with an existing real estate manager, Westmark Commercial Realty Advisors. She said that the fund will invest in diversified real estate mortgage loans that are somewhat similar to fixed income investments. In response to questions from Mr. Carlson, Mr. Bicker said that mortgages are currently trading approximately 3% above Treasury investments and that this type of fund is appropriate for the Post Fund which must generate realized income in order to pay out benefit increases. Ms. Dutcher moved approval of the Committee's recommendation, 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 \$30 million or 20%, whichever is less, in Westmark Commercial Mortgage Fund 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 Westmark Realty Advisors 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 Westmark Realty Advisors or reduction or termination of the commitment." Ms. Growe seconded the motion. The motion passed.

Tobacco Issues

Mr. Bicker referred members to Tab H of the meeting materials for updated information regarding tobacco issues that had occurred since the May 24, 1996 report. Mr. Carlson asked Mr. Bicker to review the updated information. Mr. Bicker reported that staff has been monitoring three different groups of tobacco-related companies: the 6 companies involved in lawsuits initiated by Attorneys General in several states, the 13 companies on the list put out by the American Medical Association, and the 25 companies listed by the Investors Responsibility Research Center (IRRC). He reported that the SBI's market value exposure in the IRRC's list of 25 companies as of June 30, 1996 was \$320 million. He added that the SBI's largest holdings are in Philip Morris, Loews, RJR Nabisco and Sara Lee and that these companies are held in the SBI's active and passive portfolios.

Ms. Growe commented that some Board members have had concerns regarding tobacco investments for some time and that the Board did not take any action regarding tobacco at the June 1996 meeting as a courtesy to the Governor since he was unable to attend that meeting. She said that she does not think there is an absolute right or wrong answer from an investment point of view but she does believe that these investments are much riskier now. She pointed out three areas of concern: recent poor performance, growing volatility, and mixed recommendations from investment professionals. She said she believes that as long as the threat of litigation persists, there will be downward pressure of the price of the stocks. She stated that a number of the SBI's own stock managers believe that the litigation risk is too high to justify investment at the present time. Ms. Growe read a resolution she had prepared (see Attachment A) and moved its approval. Mr. McGrath seconded the motion.

Mr. Humphrey stated that he was recusing himself from voting on the motion for two reasons. First, he wants to avoid the appearance of conflict of interest between his duties as a Board member and his duties as a law enforcer. Second, he stated that he is barred by court order from disclosing what his office is finding in secret tobacco company documents and he did not want his vote to be construed as being based upon such information.

Ms. Dutcher commented that in March 1993, prior to her service on the Board, three of the current members voted to lift the SBI's restrictions on investments in tobacco companies. She said money managers are paid significant fees to manage assets for the SBI. She stated the Board has a philosophical choice to let these experts decide whether or not to invest in these stocks or to begin to micro-manage their decision process. She said she thinks micro-managing would lead to a dangerous trend and would be moving away from the broader asset allocation decisions the Board has typically makes. She also said that she had some concern regarding the wording of part of Ms. Growe's resolution regarding percent of revenue from tobacco operations. In response to a question from Ms. Dutcher, Ms. Posey of Richards & Tierney, stated that she is not aware of any corporate pension plans that are discussing potential divestment in tobacco companies. In response to questions from Mr. Carlson, Mr. Bicker said that he was not aware of any divestment plans by the Star Tribune Company or the St. Paul Pioneer Press regarding tobacco stocks in their company pension plans.

Ms. Growe stated that she would like to address some of Ms. Dutcher's comments. She noted that for many years the Board had a liquor and tobacco restriction, but that it had been lifted in 1993 because there was not sufficient documentation as to when and why the Board had initially adopted the policy. She said that she believes the environment has changed significantly since that time with regard to tobacco investments. She noted that her proposed resolution does not require forced sales or divestment of tobacco stocks. She said she thinks the proposal responds to the current environment in a responsible way.

Mr. Carlson commended Ms. Growe for presenting the resolution in a way that avoids moral and social discussion and stays on economic issues. He said the Board does have the right to say "no" to certain stocks that are losers. He said that he believes the real issue is whether or not the Board wants to become involved in making investment decisions on specific companies. He stated his intention to vote against the resolution because he does not want the Board to micro-manage specific investments or to second guess the SBI's money managers on the market. He added, however, that he would consider curtailment of further growth in the tobacco investments if the staff and IAC could provide sufficient reasons to do so. He asked that further economic analysis be prepared for the Board regarding volatility and the potential downside of litigation.

Ms. Growe stated that the SBI's consultant had prepared a chart for her showing the volatility of the tobacco industry versus other industries in the consumer non-durable sector. She said that the chart shows that tobacco industry group has the highest level of risk of all in the industries included in that sector grouping. In response to questions from

Mr. Carlson, Ms. Posey reviewed the components of the chart which plots the volatility of sectors for the five year period ending June 30, 1996. Mr. Carlson noted that several other industries and sectors are shown on the chart as being more risky than tobacco and that the SBI is not considering divesting in those areas. Ms. Posey said that active managers analyze the risk/rewards that are expected in the future and not the past, while index managers hold whatever stocks are in the market place or index. Ms. Yeomans added that short term volatility often creates an opportunity to buy low and sell high so volatility can be a plus from the viewpoint of an active manager.

Ms. Growe said that she does not believe there is an absolute right or wrong answer to the investment issue. She said that she is suggesting that the Board proceed cautiously by not purchasing any additional tobacco positions for the next year or until significant changes have taken place. She emphasized that she is not suggesting that the Board divest its existing tobacco holdings. Mr. Carlson stated that he agrees that the Board should proceed with caution. He said that he believes that the real question is whether or not the market has already discounted the impact of pending litigation. He noted that many of the affected firms are very well diversified and do not focus solely on tobacco. He restated his request for additional analysis and noted that the SBI's money managers should be made aware the Board's nervousness and concern. Mr. Carlson asked for any additional comments. Mr. Humphrey noted that three years ago there were no tobacco lawsuits from the public sector. He said now there were thirteen and the number will continue to rise. He said circumstances have changed in the past few years regarding tobacco companies. Ms. Growe asked for a roll call vote regarding her proposed resolution and Mr. Bicker called the roll. (Aye: Growe, McGrath. Nay: Carlson, Dutcher. Abstain: Humphrey). The Governor announced that the motion failed.

The meeting adjourned at 9:45 a.m.

Respectfully submitted,



Howard J. Bicker
Executive Director

RESOLUTION

Whereas funds under the direction of the State Board of Investment contain investments in companies that manufacture tobacco products;

Whereas these tobacco companies are the subject of an ever-increasing level of legal activity, including a large and growing number of individual private actions and private class actions;

Whereas the State of Minnesota has brought litigation against a number of these tobacco companies, alleging ongoing violations of Minnesota law and seeking substantial monetary recoveries and significant changes in the companies' business activities;

Whereas these tobacco companies are the subject of fourteen similar actions brought by twelve other states, one city and one county, each seeking large monetary recoveries and changes in the companies' operations; and more governmental jurisdictions are expected to file similar actions;

Whereas, according to published reports, the activities of these companies are currently under criminal investigation by five federal grand juries;

Whereas recently announced federal regulations, if fully implemented, would alter the business activities of these tobacco companies in significant respects;

Whereas there is a risk that some or all of the foregoing activities will substantially affect the profitability of tobacco companies;

Whereas the ability of the market and investment advisors to evaluate this risk is limited because much of the evidence is unavailable to the public;

Whereas published reports indicate that these companies have recently offered to pay in excess of \$100 billion to settle pending legal claims, suggesting that those claims may be more meritorious than the market has previously perceived them to be;

Whereas market reactions to recent legal developments, including an adverse jury verdict, demonstrate that these stocks have heightened volatility and are vulnerable to unfavorable legal developments; and

Whereas the Board considers it prudent to moderate the exposure of its funds to the foregoing risks until those risks have been further clarified; and

Whereas, for these reasons, investments in these stocks may pose excessive and unnecessary risks; and in light of the Board's fiduciary responsibility;

NOW THEREFORE be it resolved that for a period of not less than twelve months, or until further order of the Board, the staff of the Board and its investment managers are directed to make no new investment, whether for managed funds or for indexed funds, in additional shares of American Brands, BAT Industries, Brooke Group, Ltd., Loews, Philip Morris and RJR Nabisco or corporations that derive 50% of their revenue from the sale of tobacco products. During this period, the staff of the Board and its investment managers shall continue to hold, sell or otherwise manage the Board's current investments in shares of these companies in a manner consistent with the existing policies and practices of the Board.

**AGENDA
INVESTMENT ADVISORY COUNCIL
MEETING**

**Wednesday, December 11, 1996
2:00 P.M. - SBI Conference Room
Room 105, MEA Building - Saint Paul**

TAB

- 1. Approval of Minutes of September 3, 1996**

- 2. Report from the Executive Director (H. Bicker)**
 - A. Quarterly Investment Review (July 1, 1996 - September 30, 1996) **A**
 - B. Portfolio Statistics (September 30, 1996) **B**
 - C. Administrative Report **C**
 1. Reports on budget and travel
 2. Report on January 1, 1997 post retirement benefit increase
 3. Status of proposals for 1997 Legislative Session
 4. Tentative meeting dates for calendar 1997
 5. Benchmark for Invested Treasurer's Cash Pool

- 3. Report from the SBI Administrative Committee (M. McGrath)** **D**
 - A. Report on audit results for FY96
 - B. Update on FY96 annual report
 - C. Review of directed commissions
 - D. Approval of biennial budget proposal for FY98-99

- 4. Report from The Deferred Compensation Review Committee (P. Sausen)** **E**

- 5. Reports from the Investment Advisory Council**
 - A. Domestic Manager Committee (J. Bohan)** **F**
 1. Review of manager performance
 2. Discussion regarding the active stock program
 3. Review of selected active stock managers
 4. Review of the Emerging Manager Program

 - B. International Manager Committee (J. Mares)** **G**
 1. Review of manager performance
 2. Update on funding of emerging markets specialists

 - C. Alternative Investment Committee (K. Gudorf)** **H**
 1. Review of current strategy
 2. Approval of private equity investments for the Basic Retirement Funds (IAI US Venture Fund II, Piper Jaffray Healthcare Fund II)
 3. Approval of follow-on investment for the Post Retirement Fund (Summit Subordinated Debt Fund II)

- 6. Update on Tobacco Issues (H. Bicker)** **I**

**Minutes
Investment Advisory Council
September 3, 1996**

The Investment Advisory Council met on Tuesday, September 3, 1996 at 2:00 P.M. in the State Board of Investment (SBI) Conference Room, 55 Sherburne Avenue, St. Paul.

MEMBERS PRESENT: Gary Austin; Dave Bergstrom; Roger Durbahn; Ken Gudorf; Laura King; Peter Kiedrowski; Han Chin Liu; Malcolm McDonald; Gary Norstrom; Daralyn Peifer; Patrick Sexton and Jan Yeomans.

MEMBERS ABSENT: John Bohan, Laurie Fiori Hacking; Judy Mares and Michael Stutzer.

SBI STAFF: Howard Bicker; Beth Lehman; Jim Heidelberg; Lois Buermann; Mike Menssen; Karen Vnuk; Debbie Griebenow; Charlene Olson and Lin Nadeau.

OTHERS ATTENDING: Ann Posey, Richards & Tierney; Christie Eller; Jake Manahan; Carey Moe; Peter Sausen; Ed Stuart, Robert Heimerl and Lloyd Belford, REAM; Vern Jackels; Carl Simmons and Doug Gorence.

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 June 30, 1996 (Combined Funds 11.1% vs. Inflation 3.7%), matched the median fund (Combined Funds and Median 12.8%) and outperformed their composite index (Combined Funds 12.8% vs. Composite 12.3%) for the most recent five year period. He stated that the Basic Funds had exceeded their composite index (Basics 13.0% vs. Composite 12.6%) over the last five years while the Post Fund had outperformed its composite index for the period July 1, 1993 through June 30, 1996 (Post Fund 11.6% vs. Composite 11.5%)

Mr. Bicker reported that the Basic Funds' assets increased 2.7% for the quarter ending June 30, 1996 due to positive investment returns. He said that the asset mix is essentially on target and that funding for the emerging markets managers continues. He stated that the Funds' had outperformed its composite index for the year (Basics 18.8% vs. Composite 18.4%).

Mr. Bicker reported that the Post Fund's assets increased 3.4% for the quarter ending June 30, 1996 due primarily to investment returns. He reported that the asset mix is

essentially on target and that the international component continues to be funded. He said that the Fund had outperformed its composite index for the year (Post 17.2% vs. Composite 16.3%).

Mr. Bicker reported that the domestic stock manager group underperformed for the quarter (Domestic Stocks 4.2% vs. Wilshire 5000 4.4%) and the year (Domestic Stocks 25.9% vs. Wilshire 5000 26.2%). He said that the international stock manager group outperformed for the year (International Stocks 16.9% vs. Composite 13.4%). He added that the bond segment matched its index for the quarter (at 0.6%) and outperformed for the year (Bonds 5.3% vs. Lehman Aggregate 5.0%).

Mr. Bicker reported that the Assigned Risk Plan (ARP) had underperformed its composite index for the quarter (ARP 1.4% vs. Composite 1.6%) and outperformed its composite index for the year (ARP 9.8% vs. Composite 9.5%). He concluded his report with the comment that as of June 30, 1996 the SBI was responsible for over \$31 billion in assets.

Executive Director's Administrative Report

Mr. Bicker referred members to Tab B for the Portfolio Statistics and Tab C of the meeting materials for the current budget and travel reports. Mr. Bicker introduced Mr. Doug Gorence, Director of Pension Investments at Honeywell, and stated that he will be recommended to the Board to fill the current vacancy on the IAC. In response to questions from Ms. King, Mr. Bicker confirmed that the open appointment process had been followed.

Mr. Bicker stated that the Board will also consider an amendment to the agreement with Minnesota Mutual for the Deferred Compensation Plan which will allow participants to transfer their fixed account balances to other Plan providers over a five year period.

Administrative Committee Report

Mr. Bicker referred members to Tab D of the meeting materials and stated that the Committee had met during the quarter to update the country groupings in the SBI's International Investing Guidelines. He said that the Committee had adopted the updated country groupings and had heard presentations from the SBI's emerging markets managers on their interest in investing in countries included in Group 3. Mr. Bicker added that no action is necessary by the IAC. In response to questions from Ms. King, Mr. Bicker identified who serves on the Administrative Committee and confirmed that the guidelines had been in place for the last four years. He added that the guidelines do not prohibit a manager from investing in the market of any country. He stated that the SBI's international managers have indicated that the policy of giving written notice or a presentation to the Committee has not negatively impacted their normal investment process. In response to additional questions from Ms. King, several IAC members recounted their recollection of discussions that took place when the SBI began to invest internationally. Ms. Yeomans stated that the international investing guidelines were formulated to address concerns expressed by some constituent groups. Mr. McDonald said he believes the guidelines have not hampered the managers' investment processes.

Domestic Manager Committee Report

Mr. Bergstrom referred members to Tab E of the meeting materials and briefly reviewed the stock and bond manager performance. He said that the Committee is recommending that IAI be removed from probationary status. He said that the new portfolio manager for the SBI's account is on board and that the investment process has changed slightly to match the manager's expertise. He added that the TSB/Lloyds Bank Merger has been completed and that the current organizational structure does not affect IAI's internal investment or management structure. Mr. McDonald moved approval of the Committee's recommendation to remove IAI from probation, as stated in the Committee Report. Mr. Gudorf seconded the motion. The motion passed.

Mr. Bergstrom stated that staff and the Committee have been analyzing and discussing what the appropriate level of cash should be in the benchmarks of the domestic equity managers. He said that staff had proposed a 1% level to reflect the reality of managers having a small amount of cash in their portfolio while the Committee had proposed that all cash be eliminated from the benchmarks since cash is not included in the Wilshire 5000 index. Ms. Posey stated that Richards & Tierney agrees with staff and believes that the benchmarks should reflect the practical realities of managing an active portfolio, which include having residual cash. She said that a 1% level would send a message to the managers that they are expected to be fully invested. She added that the performance of the total program should not be negatively affected by the level of cash in the active manager benchmarks if the benchmark for the completeness fund is constructed correctly. In response to questions from Mr. Norstrom, Ms. Posey said she believes the SBI should recognize the realities of managing an active program and adjust for it through the completeness fund structure.

Mr. Bicker stated that when the benchmarks were initially constructed, he had been uncomfortable with having a significant cash component in any benchmark. He said that in his opinion, either 1% or 0% would be acceptable and an improvement over the 5-15% levels that were used previously. A discussion followed where several IAC members questioned whether or not 1% benchmark cash level is realistic. Ms. Yeomans stated that she could agree with either a 3-5% level or a cashless benchmark, but not with 1%. Mr. Gudorf moved approval of the Committee's recommendation to eliminate all cash from domestic equity manager benchmarks, as stated in the Committee Report. Mr. McDonald seconded the motion. The motion passed.

Mr. Bergstrom stated that a review had also been conducted on the benchmarks for the internally managed short term cash pools, the Trust Fund Pool and the Invested Treasurer's Cash (ITC) Pool. He said that currently, both pools use a blended benchmark weighted 75% cash equivalents/25% 1 to 3 year debt. He reported that since the blended benchmark was adopted, the cashflows and maturity structure of the Trust Fund Pool have changed significantly, resulting in the maturity structure of the Pool now being focused entirely on cash equivalents. He said that the recommendation is to use the IBC All Taxable Money Fund Index as the benchmark for the Trust Fund.

Mr. Bergstrom stated that the recommendation for the ITC Pool is that it should continue to use a blended benchmark, but that it should convert the long end of the benchmark from a fixed percentage to a fixed dollar amount which would be adjusted annually. He explained that the Pool's cash flows are very volatile and that the proposed change should help to stabilize the benchmark. He said that the recommendation includes a provision to measure the fixed dollar portion of the benchmark against the Lehman Brother's 1 to 3 year Government Index and that the remainder of the benchmark should use the IBC Index. He added that the recommendation calls for a \$600 million fixed dollar portion of the benchmark for the 12 month period beginning October 1996. He added that 91 Day T-Bills will continue to be reported for both pools for comparative purposes.

In response to questions from Ms. Yeomans, Mr. Bicker said that the switch from the Merrill Lynch index to the Lehman Index was done to be more consistent with other return data and because the Lehman index does not have any inter-month movement of assets. He noted that the returns of both the indexes were essentially identical. Mr. Bicker said that the fixed dollar amount could be adjusted more often than annually if warranted, due to economic or legislative changes. In response to questions from Ms. King, Mr. Bicker stated that forecasting is not the issue and that the goal of the change is to add stability to the pool so the assets can be better managed. Ms. King moved approval of the Committee's recommendation, as stated in the Committee Report. Ms. Yeomans said she wondered if a rolling 12 month forecast would be helpful in estimating the fixed dollar amount. Mr. Bicker agreed. He said it would not change his opinion of the current proposed recommendation, but he said it could be helpful in analyzing what future fixed dollar amounts should be. Ms. Posey suggested that staff may want to consider adding in an expectation for returns around the benchmark, as they have done for other asset classes. Mr. McDonald seconded Ms. King's earlier motion. The motion passed.

International Manager Committee Report

Mr. Kiedrowski referred members to Tab F of the meeting materials and noted that the international segment had value added through country and security selection as well as through the currency overlay program. He noted that the Committee had been discussing ways to improve the reporting on the currency overlay program. In response to a question from Mr. Kiedrowski, Ms. Lehman confirmed that staff and Richards & Tierney are working to resolve discrepancies in valuation data between the SBI's custodian and the currency overlay manager.

Mr. Kiedrowski updated members on the progress made during the quarter in funding the emerging markets managers. He reported that Montgomery Asset Management was fully funded during May and June 1996 and that Genesis Asset Managers has received approximately half of its allocation. He noted that funding for the City of London had been delayed, pending completion of legal documents and he said that the Committee had encouraged staff to set a firm deadline in order to expedite the process. Ms. Lehman confirmed that the deadline is November 1, 1996.

Mr. Kiedrowski reported that the Committee is recommending that the SBI terminate its contract with Templeton Investment Counsel due to staff turnover and return dispersion. Ms. Lehman confirmed that shortly after SBI staff visited the firm in June, four professionals had departed and that one of the individuals was the SBI's portfolio manager. Mr. Durbahn moved approval of the Committee's recommendation to terminate Templeton. Ms. Peifer seconded the motion. In response to a question from Ms. King, Mr. Kiedrowski said that although Templeton's returns for the SBI have been satisfactory, staff and the Committee do not have confidence in the firm's ability to perform well going forward. He noted that other clients appear to have experienced significantly different performance results. Mr. Bicker added that the firm had declined to disclose detail on the individual portfolios in their composite returns. In response to a question from Mr. Gudorf, Mr. Bicker said that if the recommendation is approved, the funds would be reallocated to existing international managers. The motion made earlier passed.

Alternative Investment Committee Report

Mr. Gudorf referred members to Tab G of the meeting materials and reported that the Committee had met with several venture capital fund managers during the quarter to gain information on investing in smaller venture capital funds. He said that the Committee is recommending an additional investment for the Basic Retirement Funds with an existing real estate manager, TA Associates Realty, in the Realty Associates Fund IV. He said the Committee's second recommendation is for an additional investment for the Post Retirement Fund with an existing real estate manager, Westmark Commercial Realty Advisors, in Westmark Commercial Mortgage Fund III. Mr. Kiedrowski moved approval of both recommendations from the Committee, as stated in the Committee Report. Mr. McDonald seconded the motion. The motion passed.

Mr. Gudorf stated that there are still substantial funds available for investment in the alternative investment area and he said that the Committee would welcome suggestions from IAC members of managers/funds that may be candidates for future investments in all three alternative investment areas. Mr. Bicker noted that the private equity segment had a 40% return for the fiscal year. Ms. Yeomans encouraged Mr. Bicker to highlight those positive returns and agreed that the recent gains have been impressive. Mr. Gudorf added that for the 5 year period, private equity had returned over 20%.

The meeting adjourned at 2:50 p.m.

Respectfully submitted,



Howard J. Bicker
Executive Director

Tab A

RETURN OBJECTIVES

Period Ending 9/30/96

COMBINED FUNDS: \$25.6 Billion	Return	Compared to Objective
Provide Real Return (10 yr.)	11.8% (1)	8.1 percentage points above target
Provide returns that are 3-5 percentage points greater than inflation over moving 10 year periods.		
Exceed Median Fund (5 yr.)	11.8% (1)	0.2 percentage point below target Rank: 59th percentile (2)
Outperform the median fund from a universe of public and corporate funds with a balanced asset mix over moving 5 year periods.		
Exceed Composite Index (5 yr.)	11.8% (1)	0.2 percentage point above target
Outperform a composite market index weighted in a manner that reflects the actual asset mix of the Combined Funds over moving 5 year periods.		

BASIC RETIREMENT FUNDS: \$13.4 Billion	Return	Compared to Objective
Exceed Composite Index (5 Yr.)	11.9%	0.1 percentage point above target
Outperform a composite index weighted in a manner that reflects the long-term asset allocation of the Basic Funds over moving 5 year periods.		

POST RETIREMENT FUND: \$12.2 Billion	Return	Compared to Objective
Exceed Composite Index	11.4% (3)	0.1 percentage point above target (3)
Outperform a composite index weighted in a manner that reflects the long-term asset allocation of the Post Fund over moving 5 year periods.		

(1) Reflects performance of Basic Funds only through 6/30/93, Combined Funds thereafter.

(2) The SBI's stated performance 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).

(3) Since asset allocation transition to 50% domestic stocks was completed, 7/1/93, annualized.

ACTUARIAL VALUATIONS
MSRS, TRA, PERA General Plans
June 30, 1995

	Active (Basics)	Retired (Post)	Total (Basics & Post)
Liability Measures			
1. Current and Future Benefit Obligation	\$16.9 billion	\$8.0 billion	\$24.9 billion
2. Accrued Liabilities	12.1	8.0	20.1
Asset Measures			
3. Current and Future Actuarial Value	\$16.7 billion	\$8.0 billion	\$24.7 billion
4. Current Actuarial Value	8.9	8.0	16.9
Funding Ratios			
Future Obligations vs. Future Assets (3 ÷ 1)	99%	100%	99%
Accrued Liabilities vs. Current Actuarial Value (4 ÷ 2)	74%	100%	84%*

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

The funding ratio required by **Governmental Standard Accounting Board Statement No. 5** compares Cost Value of assets to the Current Benefit Obligation. This calculation provides funded ratios of 83% for the Basics, 100% for the Post and 91% for the Total, respectively.

Notes:

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

Actuarial Assumptions:

Salary Growth: 6.5%

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

Full Funding Target Date: 2020

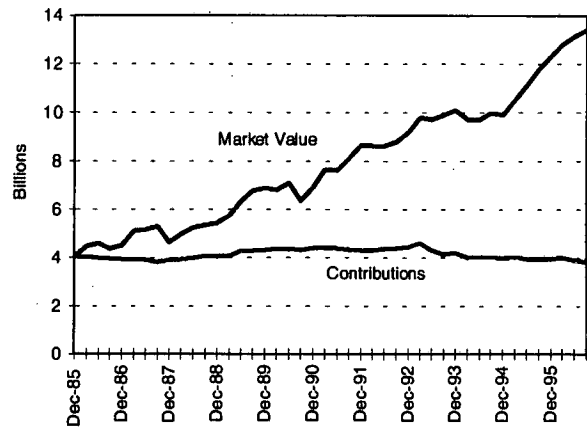
EXECUTIVE SUMMARY
Basic Retirement Funds

Asset Growth

The market value of the Basic Funds increased 1.9% during the third quarter of 1996. Positive investment returns accounted for the increase during the period.

Asset Growth
During Third Quarter 1996
(Millions)

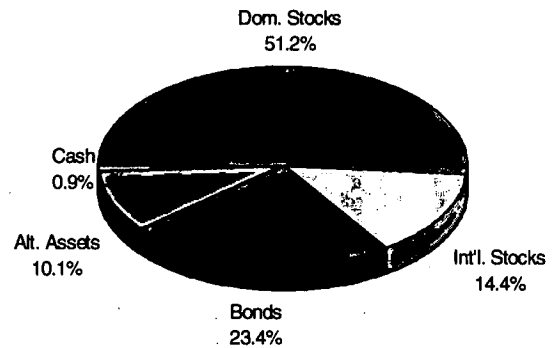
Beginning Value	\$ 13,146
Net Contributions	-61
Investment Return	317
Ending Value	\$ 13,402



Asset Mix

Assets are moving from domestic stocks to international stocks to reflect the Board's new asset allocation targets and to accommodate normal fund rebalancing.

	Policy Targets	Actual Mix 9/30/96	Actual Market Value (Millions)
Domestic Stocks	45.0%	51.2%	\$6,867
Int'l. Stocks	15.0	14.4	1,926
Bonds	24.0	23.4	3,131
Alternative Assets*	15.0	10.1	1,354
Unallocated Cash	1.0	0.9	124
	100.0%	100.0%	\$13,402

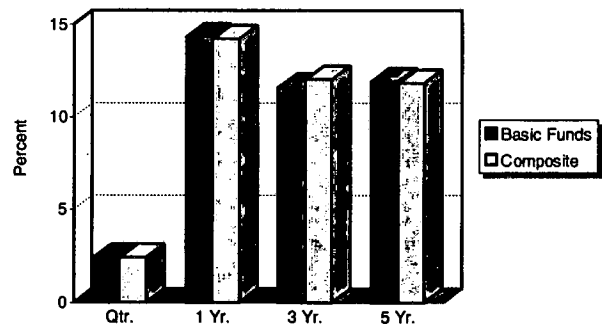


* Any uninvested allocation is held in domestic stocks

Fund Performance

The Basic Funds matched its composite market index for the quarter and outperformed it for the year.

	Qtr.	1 Yr.	3 Yr.	5 Yr.
Basics	2.4%	14.3%	11.6%	11.9%
Composite	2.4	14.2	12.0	11.8



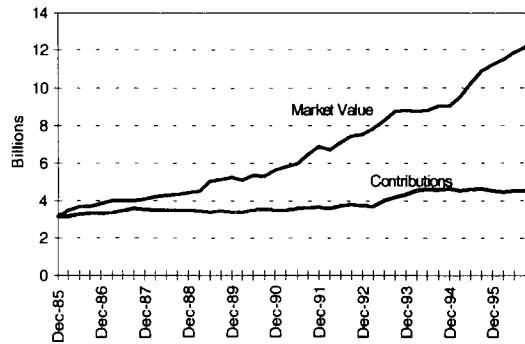
EXECUTIVE SUMMARY
Post Retirement Fund

Asset Growth

The market value of the Post Fund increased 2.4% during the third quarter of 1996. The increase resulted mostly from positive investment returns.

Asset Growth
During Third Quarter 1996
(Millions)

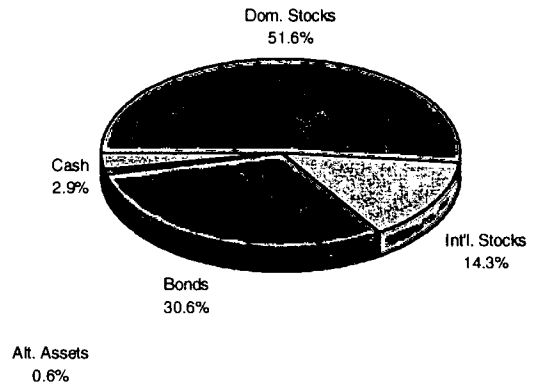
Beginning Value	\$11,883
Net Contributions	19
Investment Return	262
Ending Value	12,164



Asset Mix

Assets are moving from domestic stocks to international stocks to reflect the Board's new asset allocation targets and to accommodate normal fund rebalancing.

	Policy Targets	Actual Mix 9/30/96	Actual Market Value (Millions)
Domestic Stocks	50.0%	51.6 %	\$6,279
Int'l. Stocks	15.0	14.3	1,747
Bonds	27.0	30.6	3,718
Alternative Assets*	5.0	0.6	71
Unallocated Cash	3.0	2.9	349
	100.0%	100.0%	\$12,164



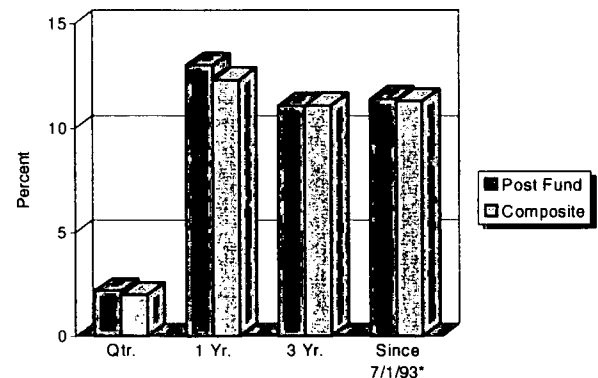
* Any uninvested allocation is held in bonds

Fund Performance

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

	Qtr.	1 Yr.	3 Yr.	Since 7/1/93*
Post	2.2%	13.0%	11.1%	11.4%
Composite	2.0	12.3	11.1	11.3

* Date asset allocation transition to 50% domestic common stocks was completed.



EXECUTIVE SUMMARY

Stock and Bond Manager Performance

Domestic Stocks

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

	Qtr.	1 Yr.	3 Yr.	5 Yr.
Dom. Stocks	2.9%	18.7%	15.5%	14.9%
Wilshire 5000*	2.8	18.9	16.4	15.3

* Buy/hold index adjusted for liquor and tobacco restrictions through 3/31/93 and AHP restriction through 10/31/93.

International Stocks

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

	Qtr.	1 Yr.	3 Yr.	Since 10/1/92*
Int'l. Stocks	0.2%	11.3%	9.8%	13.3%
Composite Index*	-0.4	8.4	8.0	12.3

* EAFE-Free through 4/31/96. Composite of EAFE-Free and Emerging Markets Free since 5/1/96.

Bonds

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

	Qtr.	1 Yr.	3 Yr.	5 Yr.
Bonds	2.2%	5.4%	5.1%	8.0%
Lehman Agg.*	1.8	4.9	5.0	7.5

* Prior to July 1, 1994, the Salomon Broad Investment Grade Bond Index was used.

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 24 markets in developing countries throughout the world.

EXECUTIVE SUMMARY
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.

	9/30/96 Target	9/30/96 Actual
Stocks	20.0%	27.0%
Bonds	80.0	73.0
Unallocated Cash	0.0	0.0
Total	100.0%	100.0%

Investment Management

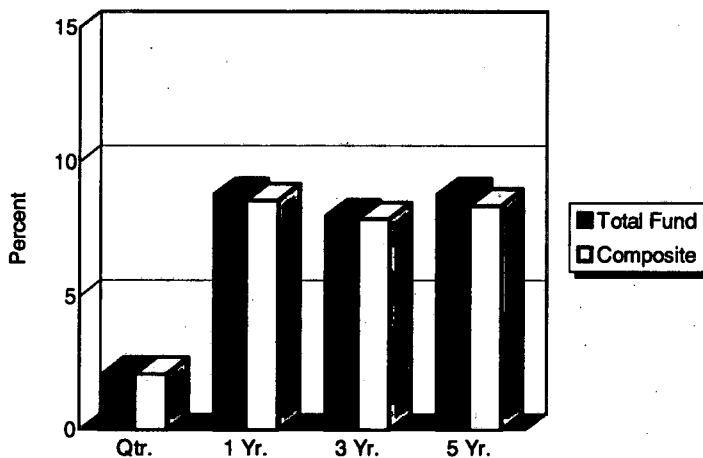
The entire portfolio was transferred from the Department of Commerce to the SBI in May 1991. Voyager Asset Management has managed the bond segment of the Fund since inception. Since January 1995, GE Investment Management has managed the equity segment.

Performance Benchmarks

A custom benchmark has been established for the bond segment which reflects the duration of the liability stream and the long-term sector allocation of Voyager Asset Management. The equity benchmark is the S&P 500 as of July 1, 1994. Prior to that date, the equity segment used a custom benchmark. The total fund benchmark is a combination of the fixed income and equity benchmarks, weighted according to the asset allocation target.

Market Value

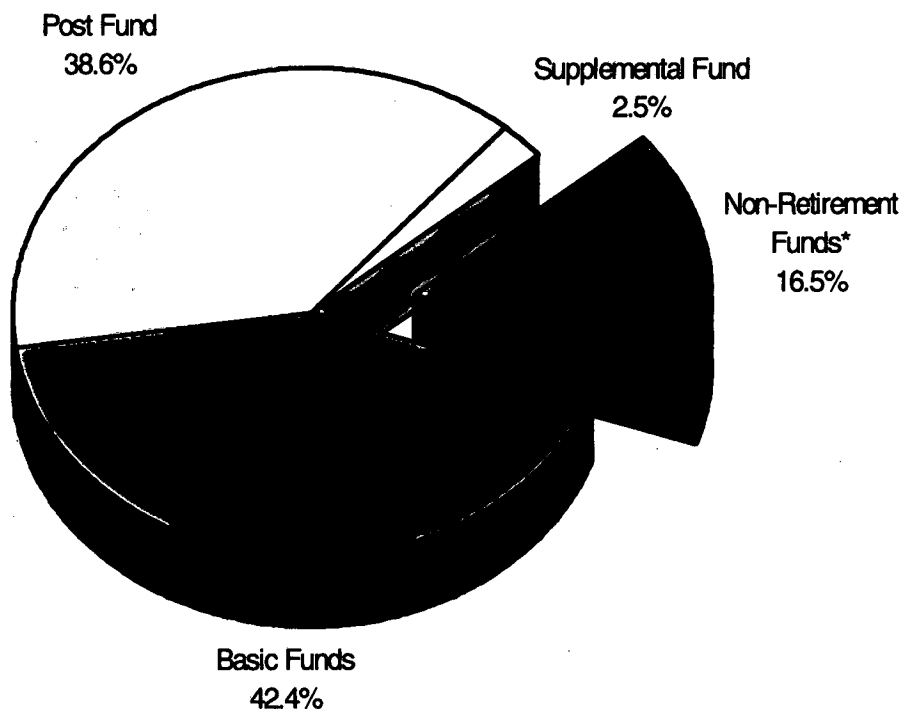
On September 30, 1996 the market value of the Assigned Risk Plan was \$541 million.



Period Ending 9/30/96

	Qtr.	Yr.	3 Yr.	5 Yr.
Total Fund	2.1%	8.8%	8.0%	8.8%
Composite Index	2.1	8.6	7.9	8.4
Equity Segment	2.5	19.2	16.6	13.1
Benchmark	3.1	20.5	18.1	13.4
Bond Segment	2.0	5.6	5.6	7.5
Benchmark	1.8	5.7	5.5	7.0

EXECUTIVE SUMMARY
Funds Under Management



	9/30/96
	Market Value
	(Billions)
Retirement Funds	
Basic Retirement Funds	\$13.4
Post Retirement Fund	12.2
Supplemental Investment Fund	0.8
Non Retirement Funds*	
Assigned Risk Plan	0.5
Permanent School Fund	0.4
Environmental Trust Fund	0.1
State Cash Accounts	4.2
Total	\$31.6

Tab B

MINNESOTA STATE BOARD OF INVESTMENT

QUARTERLY INVESTMENT REPORT

Third Quarter 1996
(July 1, 1996 - September 30, 1996)

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VARIOUS CAPITAL MARKET INDICES

	Period Ending 9/30/96				
	Qtr.	Yr.	3 Yr.	5 Yr.	10 Yr.
Domestic Equity					
Wilshire 5000	2.8%	18.9%	16.3%	15.3%	14.4%
Dow Jones Industrials	4.6	25.7	21.4	17.5	16.4
S&P 500	3.1	20.5	17.5	15.3	15.0
Russell 2000	0.3	13.1	12.7	15.8	11.9
Domestic Fixed Income					
Lehman Aggregate*	1.8	4.9	5.0	7.5	8.5
Lehman Gov't./Corp.	1.8	4.5	4.6	7.7	8.4
90 Day U.S. Treasury Bills	1.3	5.3	4.9	4.4	5.8
International					
EAFE**	-0.1	8.6	8.1	8.2	8.7
Emerging Markets Free***	-3.6	5.2	7.5	15.8	N/A
Salomon Non U.S. Gov't. Bond	3.3	4.0	9.0	11.5	11.2
Inflation Measure					
Consumer Price Index****	0.7	3.0	2.8	2.8	3.7

* 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 third quarter had a difficult start, but finished with positive returns. The stock market had negative returns in July due to the strong job growth reported for June. This created concern that the economy might be growing too rapidly and would increase the rate of inflation.

During August and September, the stock markets recovered as the outlook on the economy and inflation improved and corporate earnings estimates remained generally positive.

The Wilshire 5000 provided a 2.8% return for the quarter. Performance among the different Wilshire Style Indexes for the quarter is shown below:

Large Value	4.7%
Small Value	2.6
Large Growth	-0.2
Small Growth	1.8

The Wilshire 5000 increased 18.9% during the latest year.

DOMESTIC BONDS

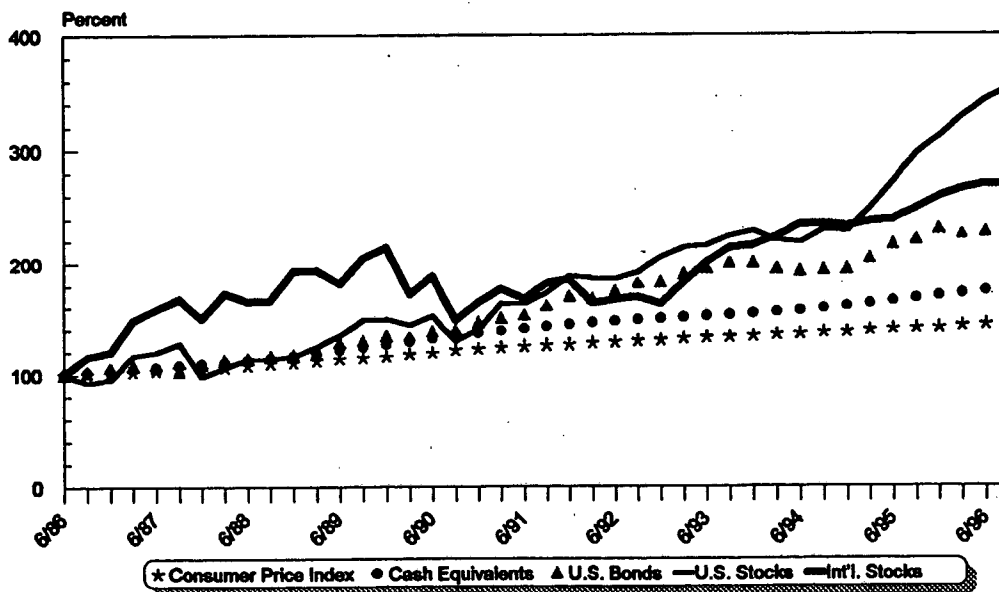
The bond market had positive returns with yields declining slightly. Inflation remains at bay keeping interest rates low. Although interest rates ended the quarter where they started, rates were volatile during the quarter as investors responded to each piece of reported economic news.

Overall, the Lehman Brothers Aggregate Bond Index increased 1.8% for the quarter. The Lehman Aggregate sector returns for the quarter were:

Treasury/Agency	1.7%
Corporates	2.0
Mortgages	2.0

The Lehman Aggregate increased 4.9% for the latest year.

PERFORMANCE OF CAPITAL MARKETS
Cumulative Returns



Indices used are: Morgan Stanley's Index of Europe, Australia and the Far East (EAFE); Wilshire 5000 Index; 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 index) provided a return of -0.1% for the quarter. As shown below, performance varied widely among the major markets:

Japan	-5.6%
United Kingdom	8.4
Germany	3.5
France	0.7

The EAFE index increased by 8.6% during the latest year. The index is compiled by Morgan Stanley Capital International (MSCI) and is a measure of 20 markets located in Europe, Australia and the Far East (EAFE). The major markets listed above comprise about 70% 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 -3.6% for the quarter. The performance of the five largest stock markets is shown below:

Malaysia	0.7%
South Africa	-6.1
Brazil	2.9
Thailand	-13.1
Mexico	2.3

The Emerging Markets Free index increased by 5.2% for the year. The index is compiled by MSCI and measures performance of 24 stock markets in Latin America, Asia, Africa and Eastern Europe. The markets listed above comprise about 65% of the value of the index.

REAL ESTATE

Nationally, many real estate markets are improving. Property types most favored by buyers at the present time include apartments, industrial parks and suburban office buildings. Shopping mall investments, however, have performed poorly which is reflective of the weak national retail environment.

PRIVATE EQUITY

According to the *Private Equity Analyst*, "total commitments to private equity partnerships of all kinds soared 29% in 1995 to \$27.2 billion. That's a new record, surpassing the previous peak of \$21.1 billion set in 1994." In this year's first half, limited partner commitments are down from last year.

RESOURCE FUNDS

Crude oil prices performed well during the quarter. The posted price of West Texas Intermediate crude oil averaged \$21.58 per barrel during the quarter compared to \$16.75 per barrel a year earlier, an increase of 29%.

Natural gas prices at the Henry Hub continued strong and averaged \$2.18 per thousand cubic feet (MCF), compared to \$1.54 MCF in the year earlier quarter. Price firmness reflects a significant need to rebuild storage in anticipation of the winter heating season.

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.

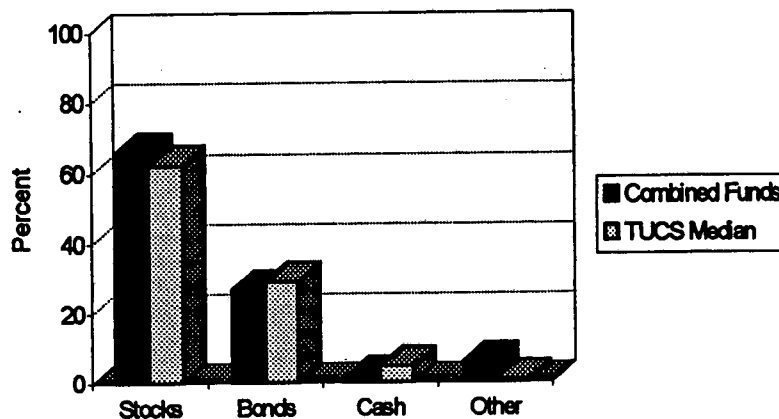
The comparison universe used by the SBI is the Master Trust portion of the Trust Universe Comparison Service (TUCS). This universe contains information on more than 200 public and corporate pension and trust funds with a balanced asset mix.

Asset Mix Compared to Other Pension Funds

On September 30, 1996, the actual asset mix of the Combined Funds was:

	\$ Millions	%
Domestic Stocks	\$13,146	51.4%
International Stocks	3,673	14.4
Bonds	6,849	26.8
Alternative Assets	1,425	5.6
Unallocated Cash	473	1.8
Total	\$25,566	100.0%

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 on September 30, 1996 are shown below:



	Stocks*	Bonds*	Cash	Other
Combined Funds	65.8%	26.8%	1.9%	5.6%
Median Allocation in TUCS	62.3	29.2	4.7	0.7

* Both domestic and international.

COMBINED FUNDS
Performance Compared to Other Pension Funds

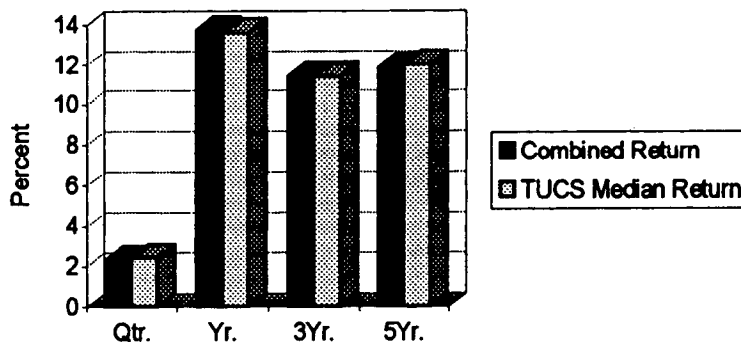
While the SBI is naturally concerned with how its returns compare to other pension investors, universe comparison data should be used with great care. There are several reasons why such comparisons will provide an “apples to oranges” look at performance:

- **Differing Treatment of Fees.** All SBI returns in this report are shown *after* all management fees while TUCS data is reported *before* fees. If the SBI reported returns before fees, its returns and rankings would be *higher* than those shown in this report.
- **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 TUCS are shown below:



Period Ending 9/30/96

	Annualized			
	Qtr.	Yr.	3 Yr.	5 Yr.
Combined Funds Return*	2.3%	13.7%	11.4%	11.8%
TUCS Median Fund Return**	2.4	13.6	11.4	12.0
Percentile Rank in TUCS	57th	45th	51st	59th

* After fees. Includes Basic Funds only through 6/30/93, Basic and Post thereafter.

** Before 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).

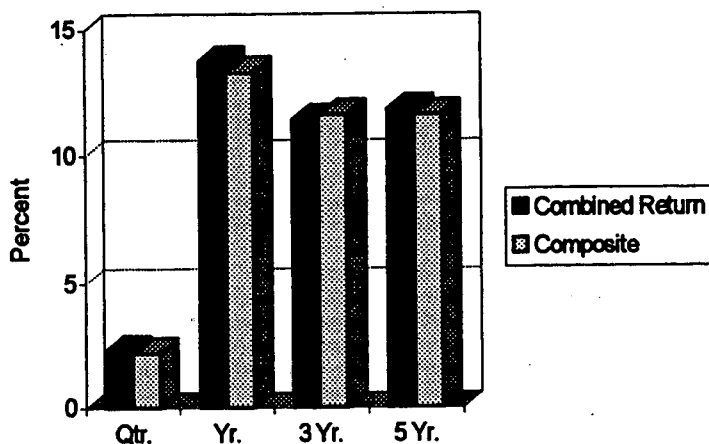
COMBINED FUNDS
Performance Compared to Composite Index

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 Index Weights 3Q96
Domestic Stocks	Wilshire 5000	50.3%*
Int'l. Stocks	Int'l. Composite	14.5
Bonds	Lehman Aggregate	27.8*
Alternative Assets	Wilshire Real Estate	2.1*
	Venture Capital Funds	3.0*
	Resource Funds	0.4*
Unallocated Cash	91 Day T-Bills	1.9
		100.0%

* Alternative asset, bond and domestic equity weights are reset in the composite at the start of each quarter to reflect the amount of unfunded commitments in alternative asset classes.



	Period Ending 9/30/96			
	Qtr.	Yr.	3 Yr.	5 Yr.
Combined Funds**	2.3%	13.7%	11.4%	11.8%
Composite Index***	2.2	13.3	11.6	11.6

**Includes performance of Basic Funds through 6/30/93, Basic and Post Funds thereafter.

***Adjusted to reflect the SBI's restrictions on liquor and tobacco stocks through 3/31/93 and AHP restriction through 10/31/93.

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 250,000 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

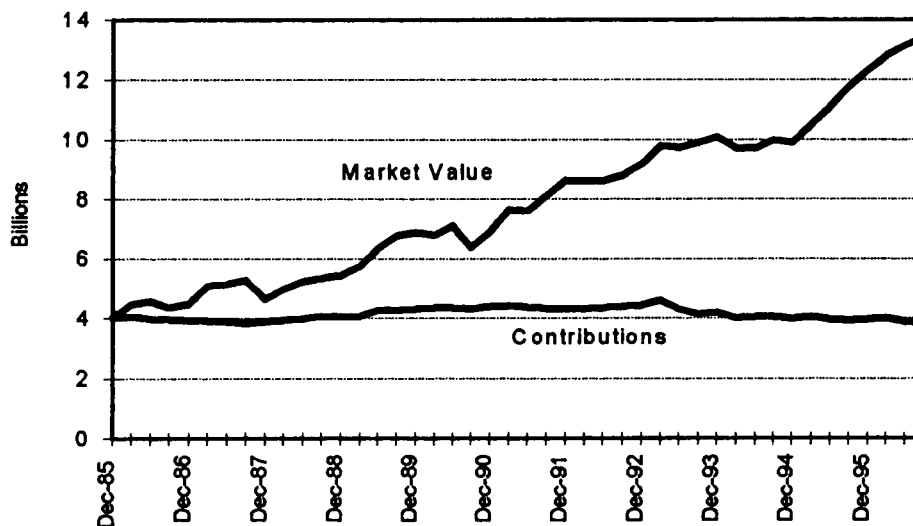
projected pension costs, the Basic Retirement Funds must generate investment returns of at least 8.5% on an annualized basis, over time.

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 1.9% during the third quarter of 1996.

Positive investment returns accounted for the increase.



	Last Five Years							Latest Qtr.
	In Millions							
	12/91	12/92	12/93	12/94	12/95	3/96	6/96	9/96
Beginning Value	\$6,919	\$8,639	\$9,191	\$10,086	\$9,890	\$12,338	\$12,797	\$13,146
Net Contributions	-92	-34	-239	-206	-29	35	-105	-61
Investment Return	1,812	586	1,134	-10	2,477	424	454	317
Ending Value	\$8,639	\$9,191	\$10,086	\$9,890	\$12,338	\$12,797	\$13,146	\$13,402

BASIC RETIREMENT FUNDS

Asset Mix

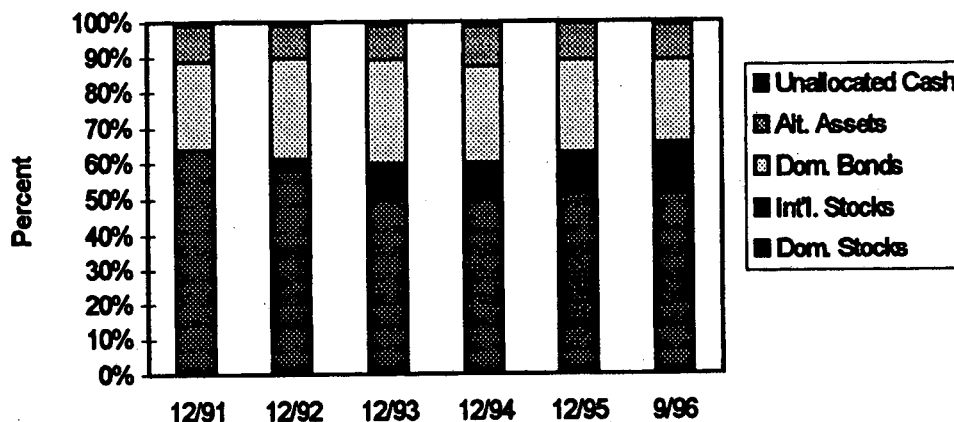
The long-term asset allocation of the Basic Funds is based on the superior performance of common stocks over the history of the capital markets. The asset allocation policy is designed to add value to the Basic Funds over their long-term investment time horizon.

The actual asset mix changed from the prior quarter due to market movements and asset rebalancing.

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 will be implemented over several quarters. Over the last year, assets have moved from domestic stocks to international stocks to reflect the Board's new asset allocation targets and to accommodate normal fund rebalancing.

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

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



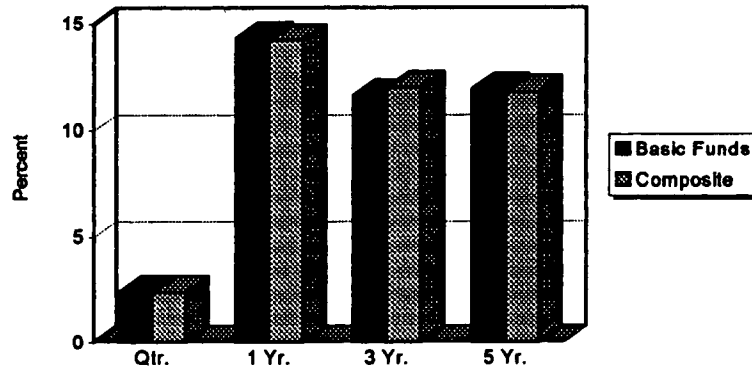
	Last Five Years						Latest Qtr.	
	12/91	12/92	12/93	12/94	12/95	3/96	6/96	9/96
Domestic Stocks	63.9%	57.9%	49.9%	49.7%	51.7%	52.3%	51.5%	51.2%
Int'l. Stocks	0.0	3.2	10.0	10.3	11.3	13.2	14.4	14.4
Bonds	24.7	28.5	29.4	27.5	26.1	23.9	23.2	23.4
Real Estate	4.8	4.2	4.1	4.6	4.1	3.9	3.9	3.9
Private Equity	4.7	4.2	4.6	5.6	5.4	5.5	5.4	5.3
Resource Funds	1.1	1.2	1.1	0.9	0.7	0.7	0.8	0.9
Unallocated Cash	0.8	0.8	0.9	1.4	0.7	0.5	0.8	0.9
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

BASIC RETIREMENT FUNDS
Total Fund Performance

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 3Q96
Domestic Stocks	45.0%	Wilshire 5000	50.5%*
Int'l. Stocks	15.0	Int'l Composite	14.5
Bonds	24.0	Lehman Aggregate	24.0
Alternative Assets	15.0	Wilshire Real Estate	3.8*
		Private Equity Funds	5.5*
		Resource Funds	0.7*
<u>Unallocated Cash</u>	<u>1.0</u>	<u>91 Day T-Bills</u>	<u>1.0</u>
	100.0%		100.0%

* Alternative asset and domestic stock weights are reset in the composite each quarter to reflect the uninvested portion of the allocation to alternative assets.



Period Ending 9/30/96

	Annualized			
	Qtr.	Yr.	3 Yr.	5 Yr.
Basic Funds	2.4%	14.3%	11.6%	11.9%
Composite Index**	2.4	14.2	12.0	11.8

**Adjusted to reflect the SBI's restrictions on liquor and tobacco stocks through 3/31/93 and AHP restriction through 10/31/93.

Effective July 1, 1993, the Basic and Post Funds share the same stock, domestic bond and international stock managers. See page 14 for the performance of these asset pools. Performance of the Basic Funds' alternative assets is on page 15.

POST RETIREMENT FUND

The Post Retirement Investment Fund contains the pension assets of retired public employees covered by statewide retirement plans. Approximately 60,000 retirees receive monthly annuities from the assets of the Fund.

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 5% 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.

Through fiscal year 1992, unrealized capital gains (or losses) were excluded from the statutory definition of

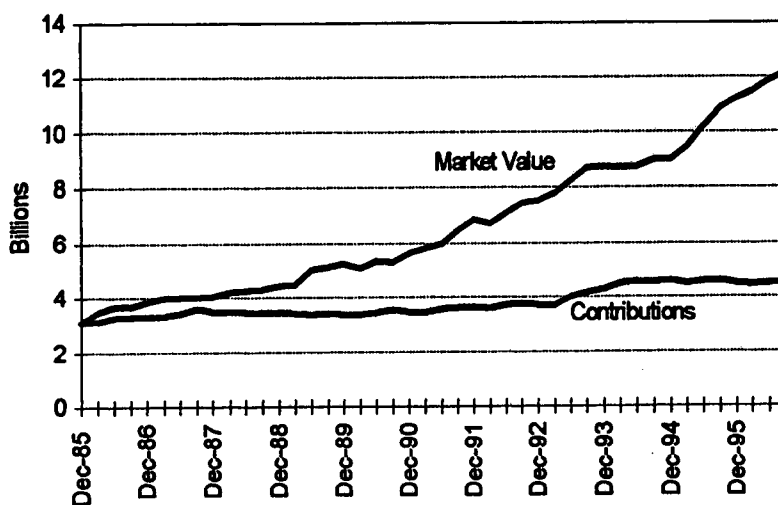
earnings. For this reason the Post Fund previously was not designed to maximize long-term total rates of return. Rather, the SBI attempted to generate a high, consistent stream of realized earnings for the Post Fund that maintained current benefits, as well as produced benefit increases over time.

Since fiscal year 1993, the post retirement benefit increase formula has been based on total return rather than realized earnings. As a result, the Board has adopted a new long-term asset allocation strategy for the Post Fund which incorporates a substantial commitment to common stocks. The transition to a 50% allocation to domestic stocks was completed by the end of fiscal year 1993.

Asset Growth

The market value of the Post Retirement Fund increased by 2.4% during the third quarter of 1996.

The increase was mostly due to positive investment returns.



	In Millions						Latest Qtr.	
	12/91	12/92	12/93	12/94	12/95	3/96	6/96	9/96
Beginning Value	\$5,590	\$6,855	\$7,500	\$8,766	\$9,001	\$11,216	\$11,496	\$11,883
Net Contributions	162	95	386	314	-102	-55	60	19
Investment Return	1,103	550	880	-79	2,317	335	327	262
Ending Value	\$6,855	\$7,500	\$8,766	\$9,001	\$11,216	\$11,496	\$11,883	\$12,164

POST RETIREMENT FUND

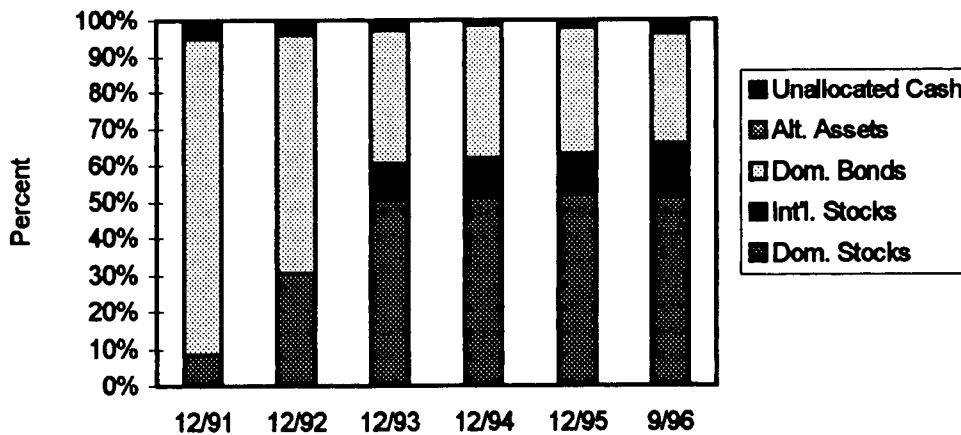
Asset Mix

The Board adopted a new asset allocation strategy for the Post Fund in fiscal year 1993 which reflects the new post retirement benefit increase formula recently enacted by the Legislature. Throughout fiscal year 1993, the actual asset mix of the Post Fund moved toward 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 will allow the Fund to increase the long-term earning power of its assets and allow the Fund to focus on generating higher long-term total rates of return.

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, assets have moved from bonds and domestic stocks to international stocks to reflect the Board's new asset allocation targets and to accommodate normal fund rebalancing.

Domestic Stocks	50.0%
Int'l. Stocks	15.0
Bonds	27.0
Alternative Assets	5.0
Unallocated Cash	3.0
Total	100.0%



	Last Five years					Latest Qtr.		
	12/91	12/92	12/93	12/94	12/95	3/96	6/96	9/96
Dom. Stocks	8.5%	30.6%	50.5%	51.2%	51.9%	52.9%	52.1%	51.6%
Int'l. Stocks	0.0	0.0	10.0	11.0	11.4	13.3	14.5	14.3
Bonds	86.5	65.6	36.9	36.5	34.7	31.7	30.7	30.6
Alt. Assets	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.6
Unallocated Cash	5.0	3.8	2.6	1.2	1.8	1.8	2.3	2.9
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

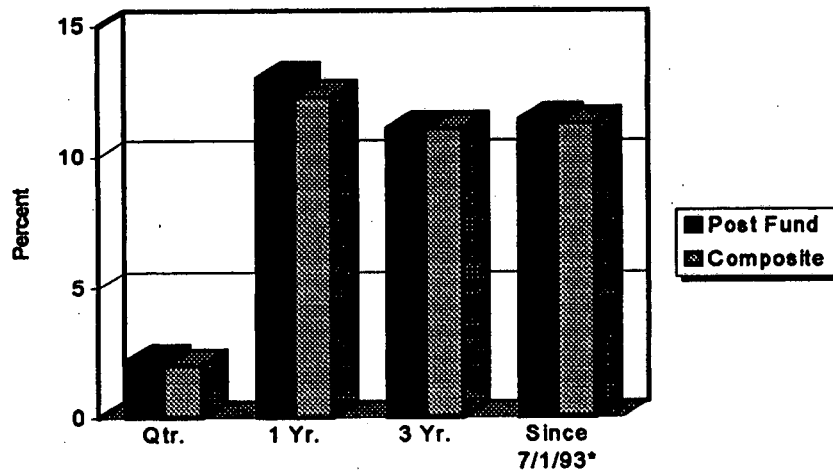
POST RETIREMENT FUND
Total Fund Performance

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 3Q96*
Domestic Stocks	50.0%	Wilshire 5000	50.0%
Int'l. Stocks	15.0	Int'l. Composite	14.5
Bonds	27.0	Lehman Aggregate	32.0*
Alternative Assets	5.0	Wilshire Real Estate	0.2*
Unallocated Cash	3.0	Private Equity Funds	0.3*
		91 Day T-Bills	3.0
	100%		100.0%

*Alternative assets and bonds are reset in the composite each quarter to reflect the uninvested portion of the allocation to alternative assets.

The asset mix of the Post Fund moved to a 50% stock allocation during fiscal year 1993. The performance of the fund since 7/1/93 is shown below.



	Qtr.	1 Yr.	3 Yr.	Annualized Since 7/1/93
Post Fund	2.2%	13.0%	11.1%	11.4%
Composite Index	2.0	12.3	11.1	11.3

Effective July 1, 1993, the Basic and Post Funds share the same domestic stock, domestic bond and international stock managers. See page 14 for the performance of these asset pools.

STOCK AND BOND MANAGERS
Performance of Asset Pools

Domestic Stock Pool

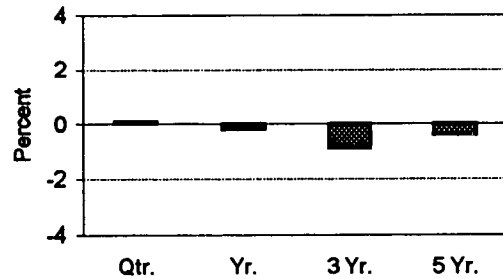
Target: Wilshire 5000 Adjusted*

Expectation: If half of the pool is actively managed and half is passively and semi-passively managed, the entire pool is expected to exceed the target by +.25-.55% annualized, over time.

	Qtr.	Yr.	Annualized	
			3 Yrs.	5 Yrs.
Stock Pool	2.9%	18.7%	15.5%	14.9%
Wilshire 5000*	2.8	18.9	16.4	15.3

*Adjusted for liquor and tobacco restrictions through 3/31/93 and AHP restriction through 10/31/93.

Value Added to Wilshire 5000 Adjusted*



Bond Pool

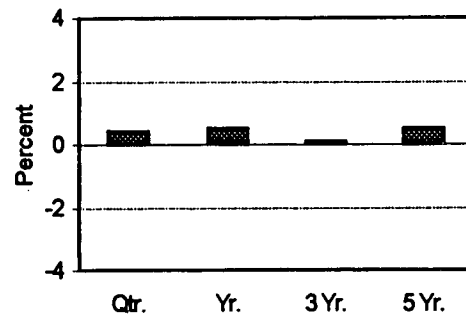
Target: Lehman Brothers Aggregate Bond Index

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.

	Qtr.	Yr.	Annualized	
			3 Yrs.	5 Yrs.
Bond Pool	2.2%	5.4%	5.1%	8.0%
Lehman Agg.*	1.8	4.9	5.0	7.5

* Prior to July 1, 1994, the Salomon Broad Investment Grade Bond Index was used.

Value Added to Lehman Aggregate*



International Stock Pool

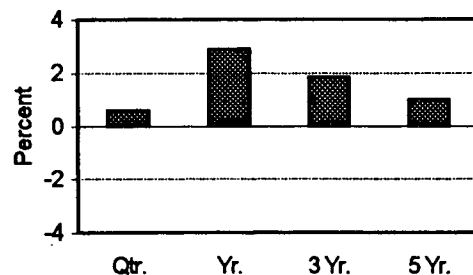
Target: EAFE-Free/Emerging Markets Free*

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.

	Qtr.	Yr.	Annualized	
			3 Yr.	Since 10/1/92
Int'l. Pool	0.2%	11.3%	9.8%	13.3%
Composite Index*	-0.4	8.4	8.0	12.3

* With the addition of emerging markets to the SBI international portfolio, the benchmark is moving toward a target of 85% EAFE-Free and 15% Emerging Markets Free. Prior to May 1996, the target was 100% EAFE-Free.

Value Added to Composite Index*



ALTERNATIVE ASSET MANAGERS
Performance of Asset Pools

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 Wilshire Real Estate Index contains returns of 30 commingled funds. The index does not include returns from funds that are less than 3 years old or are not fully invested. A return for the current quarter is not available at this time. The return for the one, three and five year periods are computed using the SBI's actual return for the latest quarter.

	Qtr.	Yr.	Annualized	
			3 Yrs.	5 Yrs.
Real Estate	1.9%	0.1%	3.7%	-1.1%
Real Estate Index		4.0	3.1	-1.4
Inflation	0.7	3.0	2.8	2.8

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. Some of the investments, therefore, are relatively immature and returns may not be indicative of future results.

	Qtr.	Yr.	Annualized	
			3 Yrs.	5 Yrs.
Private Equity	6.2%	37.6%	22.5%	14.2%

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. Some of the investments, therefore, are relatively immature and returns may not be indicative of future results.

	Qtr.	Yr.	Annualized	
			3 Yrs.	5 Yrs.
Resource Funds	5.3%	17.6%	10.3%	10.1%

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.

	9/30/96 Target	9/30/96 Actual
Stocks	20.0%	27.0%
Bonds	80.0	73.0
Unallocated Cash	0.0	0.0
	100.0%	100.0%

Investment Management

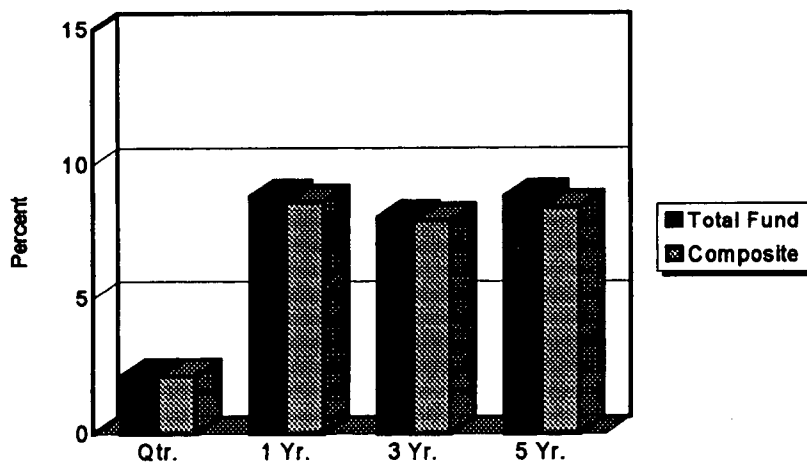
The portfolio was transferred from the Department of Commerce to the SBI on May 1, 1991. Voyageur Asset Management has managed the bond segment of the Fund since inception. Since January 1995, GE Investment Management has managed the equity segment.

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 asset allocation target.

Market Value

On September 30, 1996 the market value of the Assigned Risk Plan was \$541 million.



	Period Ending 9/30/96			
	Qtr.	Yr.	3 Yr.	5 Yr.
Total Account	2.1%	8.8%	8.0%	8.8%
Composite	2.1	8.6	7.9	8.4
Equity Segment	2.5	19.2	16.6	13.1
Benchmark	3.1	20.5	18.1	13.4
Bond Segment	2.0	5.6	5.6	7.5
Benchmark	1.8	5.7	5.5	7.0

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 but they do *not* include a deduction for asset based charges used to defray costs of the administering retirement organizations.

On September 30, 1996 the market value of the entire fund was \$822 million.

Investment Options

Income Share Account - a balanced portfolio utilizing both common stocks and bonds.

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

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

International Share Account - a portfolio of non U.S. stocks that incorporates both active and passive management.

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

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

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

SUPPLEMENTAL INVESTMENT FUND
Income Share Account

Investment Objective

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

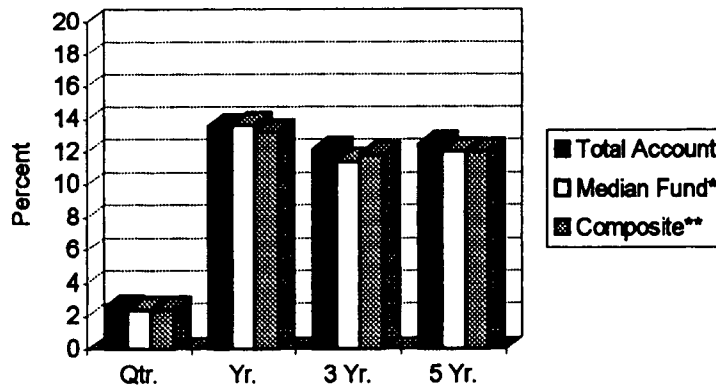
Investment Management

The Account combines internal and external management. SBI staff manage the entire fixed income segment. Throughout the period shown below, the entire stock segment has been managed as part of a passively managed index fund designed to track the Wilshire 5000. The current manager for these assets is Barclays Global Investors.

Market Value

On September 30, 1996 the market value of the Income Share Account was \$398 million.

	Target	Actual
Stocks	60.0%	62.3%
Bonds	35.0	32.6
Unallocated Cash	5.0	5.1
	100.0%	100.0%



	Period Ending 9/30/96			
	Qtr.	Yr.	3 Yr.	5 Yr.
Total Account	2.5%	13.5%	12.1%	12.4%
Median Fund*	2.4	13.6	11.4	12.0
Composite**	2.4	13.2	11.8	12.0
Equity Segment	3.0	19.1	16.5	15.5
Wilshire 5000***	2.8	18.9	16.4	15.3
Bond Segment	2.0	5.4	5.2	8.1
Lehman Agg.****	1.8	4.9	5.0	7.5

*TUCS Median Master Trust

**60% Wilshire 5000/35% Lehman Aggregate Bond Index/5% T-Bills Composite. Wilshire 5000 is adjusted as noted below.

*** Buy/hold index adjusted for liquor and tobacco restrictions through 3/31/93 and AHP restriction through 10/31/93.

**** Prior to 7/1/94 the Salomon BIG was the benchmark and a component of the Composite.

SUPPLEMENTAL INVESTMENT FUND
Growth Share Account

Investment Objective

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

Asset Mix

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

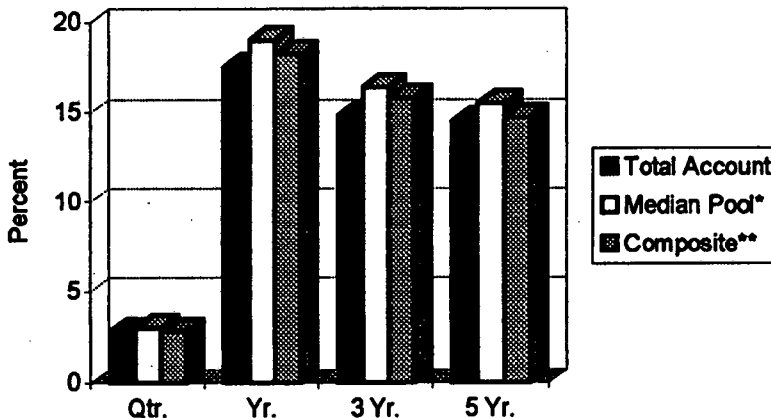
Investment Management

Throughout the period shown below, the entire Account has been managed by the same external stock managers utilized by the Basic and Post Retirement Funds. Through June 1996, the Account was actively managed. Since July 1996, the Account has utilized both active and semi-passive managers.

Market Value

On September 30, 1996 the market value of the Growth Share Account was \$162 million.

	Target	Actual
Stocks	95.0%	94.9%
Unallocated Cash	5.0	5.1
	100.0%	100.0%



Period Ending 9/30/96

	Annualized			
	Qtr.	Yr.	3 Yr.	5 Yr.
Total Account	2.8%	17.5%	14.8%	14.5%
Median Pool*	3.0	19.0	16.4	15.5
Composite**	2.8	18.2	15.8	14.7

* TUCS Median Equity Pool

** 95% Wilshire 5000/5% T-Bills Composite. Wilshire 5000 buy/hold index is adjusted for liquor and tobacco restrictions through 3/31/93 and AHP restriction through 10/31/93.

SUPPLEMENTAL INVESTMENT FUND
Common Stock Index Account

Investment Objective and Asset Mix

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

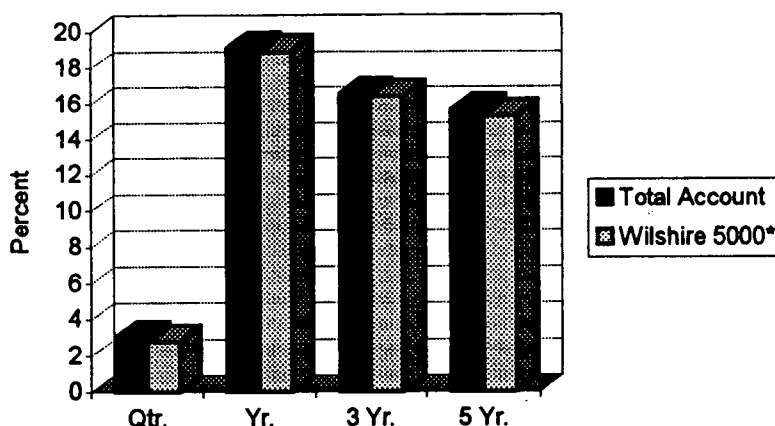
The Account is invested 100% in common stock.

Investment Management

Until July 1995, the entire Account was managed by Wilshire Associates as part of a passively managed index fund. Since July 1995, the Account has been managed by Barclays Global Investors.

Market Value

On September 30, 1996 the market value of the Common Stock Index Account was \$102 million.



Period Ending 9/30/96
Annualized
Qtr. Yr. 3 Yr. 5 Yr.

Total Account	3.0%	19.1%	16.5%	15.6%
Wilshire 5000*	2.8	18.9	16.4	15.3

*Buy/hold index adjusted for liquor and tobacco restrictions through 3/31/93 and AHP restriction through 10/31/93.

SUPPLEMENTAL INVESTMENT FUND
International Share Account

Investment Objective and Asset Mix

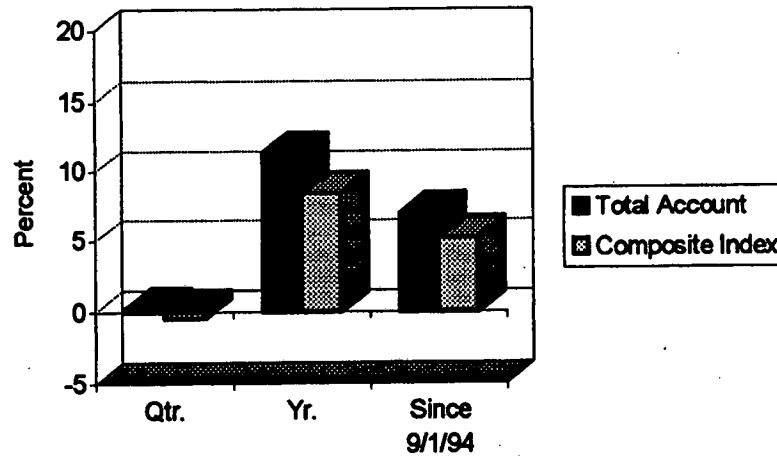
The investment objective of the International Share Account is to earn a high rate of return by investing in the stock of companies outside the U.S. Approximately half of the Account is "passively managed" and is designed to track the return of 20 markets included in the Morgan Capital International 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.

Investment Management

The Account was opened for contributions in September 1994. Beginning October 1994, the Account uses the same group of international active and passive international stock managers as the Basic and Post Retirement Funds.

Market Value

On September 30, 1996 the market value of the International Share Account was \$14 million.



Period Ending 9/30/96
Annualized
Since
9/1/94

Total Account	0.2%	11.3%	6.9%
Composite Index*	-0.4	8.4	5.2

* With the addition of emerging markets to the SBI international portfolio, the benchmark is moving toward a target of 85% EAFE-Free and 15% Emerging Markets Free. Prior to May 1996, the target was weighted 100% EAFE-Free.

SUPPLEMENTAL INVESTMENT FUND
Bond Market Account

Investment Objective

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

Asset Mix

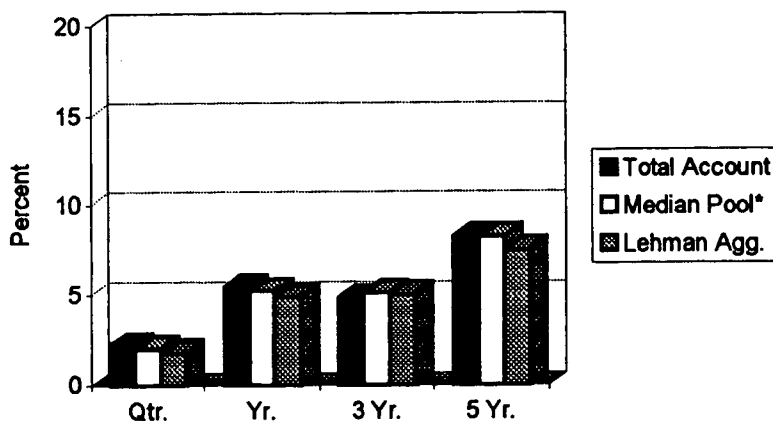
The Bond Market Account invests primarily in high-quality, government and corporate bonds that have intermediate to long-term maturities, usually 3 to 20 years.

Investment Management

The entire Account is managed by the same external bond managers utilized by the Basic and Post Retirement Funds. Through June 1996, the Account was actively managed. Since July 1996, the Account has utilized both active and semi-passive managers.

Market Value

On September 30, 1996 the market value of the Bond Market Account was \$25 million.



	Period Ending 9/30/96			
	Qtr.	Yr.	3 Yr.	5 Yr.
Total Account	2.2%	5.4%	4.8%	8.2%
Median Pool*	2.0	5.2	5.1	8.2
Lehman Aggregate**	1.8	4.9	5.0	7.5

* TUCS Median Fixed Income Pool

** Prior to July 1, 1994, the Salomon Broad Investment Grade Index was used.

SUPPLEMENTAL INVESTMENT FUND
Money Market Account

Investment Objective

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

Asset Mix

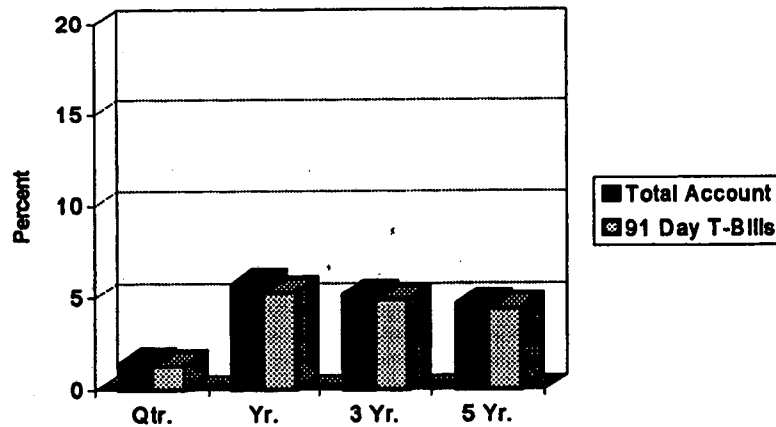
The Money Market Account is invested entirely in high quality short-term investments such as U.S. Treasury Bills, bank certificates of deposit, repurchase agreements, and high grade commercial paper. The average maturity of these investments is 30 to 60 days.

Investment Management

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

Market Value

On September 30, 1996 the market value of the Money Market Account was \$50 million.



Period Ending 9/30/96

Annualized

Qtr. Yr. 3 Yr. 5 Yr.

Total Account	1.4%	5.7%	5.1%	4.6%
91 Day T-Bills	1.3	5.3	4.9	4.4

SUPPLEMENTAL INVESTMENT FUND
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.

Asset Mix

The Fixed Interest Account is invested in guaranteed investment contracts (GIC's) offered by major U.S. insurance companies and banks and GIC type investments. Effective November 1, 1994 new contributions into the Account are deposited into a new pool of GIC's and GIC-type investments. The pool has a blend of maturities and a credited interest rate that changes monthly. The remaining GIC from the prior structure will mature in October 1996.

Investment Management

Since November 1, 1994, the new portfolio of GIC's and GIC-type investments has been managed by Galliard Capital Management (formerly Norwest Investment Management).

Market Value

On September 30, 1996 the market value of the Fixed Interest Account was \$71 million.

Existing 3 Year Contract

Contract Period	Annual Effective Interest Rate	Manager
Nov. 1, 1993-Oct. 31, 1996	4.625% (blended rate)	Principal Mutual/Hartford Life

GIC Pool

	Period Ending 9/30/96		Annualized Since 11/1/94
	Qtr.	Yr.	
Total Pool	1.6%	6.7%	6.8%

PERMANENT SCHOOL FUND

Investment Objectives

The objective of the Permanent School Fund is to provide a high, consistent stream of income to assist in offsetting state expenditures on school aid while maintaining adequate portfolio quality.

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

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

Asset Mix

The Permanent School Fund is invested entirely in a portfolio of fixed income securities to maximize current income.

Investment Management

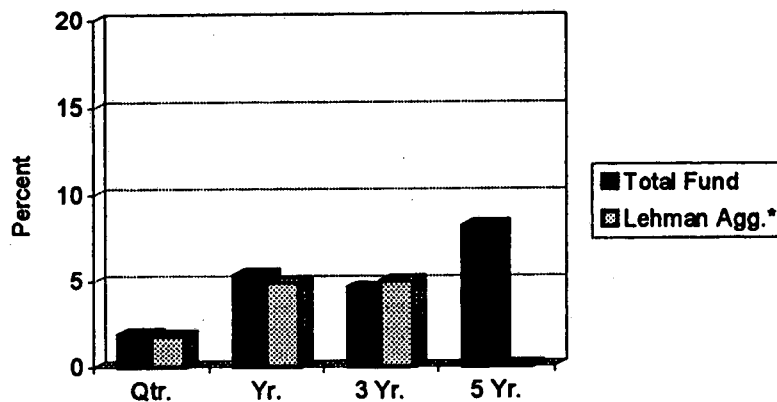
The Permanent School Fund is managed internally by SBI staff. The investment approach utilizes sector trading and relative spread analysis of both sectors and individual issues. The portfolio weightings in mortgage and corporate securities are consistently equal to or greater than the market weightings. The portfolio duration remains close to the benchmark duration but may be slightly shorter or longer depending on the economic outlook. (Prior to July 1993 the fund used a buy and hold, laddered maturity structure).

Performance Benchmark

Since July 1993 the Lehman Aggregate Index has been the benchmark for the Permanent School Fund. Prior to that date, an acceptable benchmark for the laddered portfolio was not available.

Market Value

On September 30, 1996 the market value of the Permanent School Fund was \$422 million.



Period Ending 9/30/96

Annualized

	Qtr.	Yr.	3 Yr.	5 Yr.
Total Fund	1.9%	5.3%	4.6%	8.2%
Lehman Agg.	1.8	4.9	5.0	NA

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.

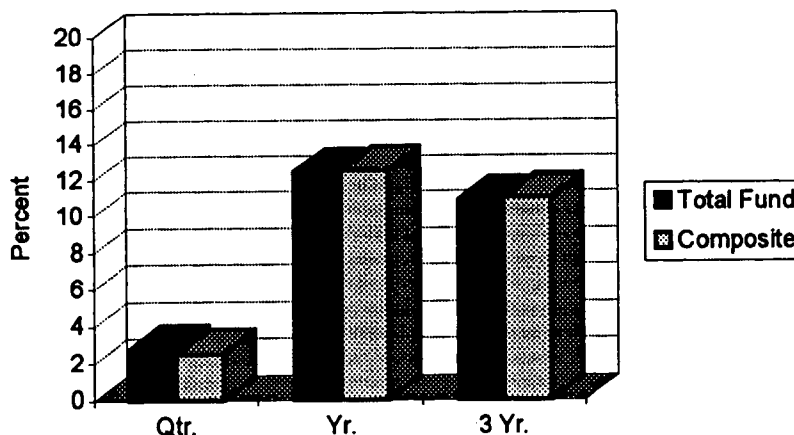
Investment Management

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 September 30, 1996 the market value of the Environmental Trust Fund was \$143 million.

	Target	Actual
Stocks	50.0%	50.4%
Bonds	48.0	47.2
Unallocated Cash	2.0	2.4
	100.0%	100.0%



Period Ending 9/30/96

	Qtr.	1 Yr.	3 Yr.	Annualized Since 7/1/93
Total Fund	2.7%	12.4%	10.8%	10.9%
Composite	2.5	12.5	11.0	11.0
Equity Segment	3.1	20.4	17.5	16.9
S&P 500	3.1	20.5	17.5	17.0
Bond Segment	1.9	4.9	5.3	6.0
Lehman Agg.	1.8	4.9	5.0	5.5

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 cash balances of retirement-related accounts managed internally and cash balances in the Permanent School Fund.
2. Treasurer's Cash Pool contains the cash balances of special or dedicated accounts necessary for the operation of certain State agencies and the balance of the Invested Treasurer's Cash.

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

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

Investment Objectives

Safety of Principal. To preserve capital.

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

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

Asset Mix

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

Investment Management

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

Period Ending 9/30/96

	Market Value (Millions)	Annualized			
		Qtr.	Yr.	3 Yr.	5 Yr.
Treasurer's Cash Pool	\$3,462	1.4%	5.6%	5.0%	5.1%
Trust Fund Cash Pool	91	1.4	5.7	5.2	5.1
Benchmark*		1.4	5.7	5.1	
91-Day T-Bills		1.3	5.3	4.9	4.4

* 75% State Street Short Term Investment Fund/25% 1-3 Year Treasuries. This benchmark was established in April 1993. The Investment Advisory Council (IAC) intend to review the appropriateness of this benchmark in FY96. Until that time, the IAC believes that the pools should continue to be monitored against 91-Day T-Bills.

PORTFOLIO STATISTICS

	PAGE
I. Composition of State Investment Portfolios 9/30/96	1
II. Cash Flow Available for Investment 6/30/96 - 9/30/96	4
III. Monthly Transactions and Asset Summary - Retirement Funds	5

MINNESOTA STATE BOARD OF INVESTMENT
Composition of State Investment Portfolios By Type of Investment
Market Value September 30, 1996 (in Thousands)

	Cash And Short Term Securities	Bonds Internal	Bonds External	Stocks Internal	Stocks External	External Int'l.	Alternative Assets	Total
BASIC RETIREMENT FUNDS:								
Teachers Retirement Fund	\$47,509 0.83%	-0-	\$1,329,929 23.33%	-0-	\$2,925,992 51.34%	\$820,003 14.39%	\$576,364 10.11%	\$5,699,797 100%
Public Employees Retirement Fund	\$29,451 1.03%	-0-	\$666,618 23.30%	-0-	\$1,465,082 51.21%	\$411,012 14.36%	\$288,887 10.10%	\$2,861,050 100%
State Employees Retirement Fund	\$27,171 0.99%	-0-	\$638,889 23.31%	-0-	\$1,404,141 51.23%	\$393,916 14.37%	\$276,871 10.10%	\$2,740,988 100%
Public Employees Police & Fire Fund	\$15,483 1.14%	-0-	\$314,863 23.27%	-0-	\$692,001 51.15%	\$194,137 14.35%	\$136,454 10.09%	\$1,352,938 100%
Highway Patrol Retirement Fund	\$1,933 0.99%	-0-	\$45,441 23.31%	-0-	\$99,870 51.23%	\$28,018 14.37%	\$19,691 10.10%	\$194,953 100%
Judges Retirement Fund	\$159 0.99%	-0-	\$3,748 23.31%	-0-	\$8,237 51.23%	\$2,311 14.37%	\$1,624 10.10%	\$16,079 100%
Public Employees P.F. Consolidated	\$778 0.20%	\$7,775 2.01%	\$89,566 23.13%	\$1,746 0.45%	\$193,751 50.03%	\$54,831 14.16%	\$38,820 10.02%	\$387,267 100%
Correctional Employees Retirement	\$1,472 0.99%	-0-	\$34,615 23.31%	-0-	\$76,076 51.23%	\$21,342 14.37%	\$15,001 10.10%	\$148,506 100%
POST RETIREMENT FUND	\$349,188 2.87%	-0-	\$3,718,199 30.57%	-0-	\$6,279,105 51.62%	\$1,747,402 14.36%	\$70,559 0.58%	\$12,164,453 100%
TOTAL BASIC & POST	\$473,144 1.85%	\$7,775 0.03%	\$6,841,868 26.76%	\$1,746 0.01%	\$13,144,255 51.41%	\$3,672,972 14.37%	\$1,424,271 5.57%	\$25,566,031 100%

	Cash And Short Term Securities	Bonds Internal	Bonds External	Stocks Internal	Stocks External	External Int'l.	Alternative Assets	Total
MINNESOTA SUPPLEMENTAL FUNDS:								
Income Share Account	\$20,169 5.07%	\$129,630 32.57%	-0-	-0-	\$248,213 62.36%	-0-	-0-	\$398,012 100%
Growth Share Account	\$8,196 5.07%	-0-	-0-	-0-	\$153,428 94.93%	-0-	-0-	\$161,624 100%
Money Market Account	\$50,008 100%	-0-	-0-	-0-	-0-	-0-	-0-	\$50,008 100%
Common Stock Index Account	-0-	-0-	-0-	-0-	\$102,466 100%	-0-	-0-	\$102,466 100%
Bond Market Account	-0-	-0-	\$25,136 100%	-0-	-0-	-0-	-0-	\$25,136 100%
International Share Account	-0-	-0-	-0-	-0-	-0-	\$14,322 100%	-0-	\$14,322 100%
Fixed Interest Account	-0-	-0-	\$70,796 100%	-0-	-0-	-0-	-0-	\$70,796 100%
TOTAL SUPPLEMENTAL FUNDS	\$78,373 9.53%	\$129,630 15.76%	\$95,932 11.67%	\$1,746 0.01%	\$504,107 61.30%	\$14,322 1.74%	-0-	\$822,364 100%
TOTAL RETIREMENT FUNDS	\$551,517 2.09%	\$137,405 0.52%	\$6,937,800 26.29%	\$1,746 0.01%	\$13,648,362 51.72%	\$3,687,294 13.97%	\$1,424,271 5.40%	\$26,388,395 100%

	Cash And Short Term Securities	Bonds Internal	Bonds External	Stocks Internal	Stocks External	External Int'l.	Alternative Assets	Total
ASSIGNED RISK PLAN	\$8,496 1.57%	-0-	\$392,610 72.58%	-0-	\$139,820 25.85%	-0-	-0-	\$540,926 100%
ENVIRONMENTAL FUND	\$3,463 2.42%	\$67,528 47.22%	-0-	\$72,022 50.36%	-0-	-0-	-0-	\$143,013 100%
PERMANENT SCHOOL FUND	\$8,416 2.00%	\$413,250 98.00%	-0-	-0-	-0-	-0-	-0-	\$421,666 100%
TREASURERS CASH	\$3,466,057 100%	-0-	-0-	-0-	-0-	-0-	-0-	\$3,466,057 100%
HOUSING FINANCE AGENCY	\$17,762 7.75%	\$211,492 92.25%	-0-	-0-	-0-	-0-	-0-	\$229,254 100%
MINNESOTA DEBT SERVICE FUND	\$72,431 47.91%	\$78,738 52.09%	-0-	-0-	-0-	-0-	-0-	\$151,169 100%
MISCELLANEOUS ACCOUNTS	\$209,719 68.19%	\$97,833 31.81%	-0-	-0-	-0-	-0-	-0-	\$307,552 100%
GRAND TOTAL	\$4,337,861 13.71%	\$1,006,246 3.18%	\$7,330,410 23.16%	\$73,768 0.23%	\$13,788,182 43.57%	\$3,687,294 11.65%	\$1,424,271 4.50%	\$31,648,032 100%

**STATE OF MINNESOTA
STATE BOARD OF INVESTMENT**

**Net Cash Flow Available For Investment
April 1, 1996 - June 30, 1996**

Teachers Retirement Fund	(\$38,600,000.00)
Public Employees Retirement Fund	(11,900,000.00)
State Employees Retirement Fund	0.00
Public Employees Police & Fire	(900,000.00)
Highway Patrol Retirement Fund	0.00
Judges Retirement Fund	0.00
Public Employees P&F Consolidated	(10,498,245.31)
Correctional Employees Retirement Fund	0.00
Post Retirement Fund	19,448,474.70
Supplemental Retirement Fund - Income	(521,180.23)
Supplemental Retirement Fund - Growth	384,339.41
Supplemental Retirement Fund - Money Market	(941,587.90)
Supplemental Retirement Fund - Index	3,536,444.74
Supplemental Retirement Fund - Bond Market	128,441.19
Supplemental Retirement Fund - Fixed Interest,	169,406.01
Supplemental Retirement Fund - International	522,297.17
Total Retirement Funds Net Cash Flow	(39,171,610.22)
Assigned Risk Plan	(11,200,000.00)
Permanent School Fund	(5,494,661.95)
Total Net Cash Flow	(\$55,866,272.17)

**STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
Transaction and Asset Summary**

Retirement Funds

	Net Transactions			Cash Flow (Millions)	Asset Summary (at Market Value)			Total Mkt. Value (Millions)
	Bonds (Millions)	Stocks (Millions)	Total (Millions)		Short-Term % of Fund	Bonds % of Fund	Equity % of Fund	
January 1994	-1	1	0	14	2.1	32.3	65.6	20,105
February	-26	-25	-51	10	2.5	32.1	65.4	19,735
March	-3	14	11	1	2.5	32.4	65.1	19,051
April	37	186	223	132	2.0	31.9	66.1	19,285
May	0	-24	-24	-11	2.1	31.8	66.1	19,349
June	-13	0	-13	-6	2.1	32.2	65.7	19,038
July	0	4	4	25	2.2	32.0	65.8	19,507
August	0	-1	-1	-18	2.1	31.3	66.6	19,982
September	0	25	25	-30	1.8	31.5	66.7	19,581
October	0	2	2	22	1.9	30.9	67.2	19,824
November	0	0	0	-41	1.7	31.8	66.5	19,324
December	2	14	16	7	1.7	31.7	66.6	19,493
January 1995	1	10	11	-11	1.5	32.0	66.5	19,681
February	1	0	1	-1	1.5	31.8	66.7	20,249
March	2	18	20	-18	1.3	31.5	67.2	20,607
April	1	-305	-304	-6	2.7	31.2	66.1	21,049
May	0	13	13	14	2.6	31.5	65.9	21,681
June	8	-12	-4	-3	2.6	31.3	66.1	22,028
July	1	13	14	19	2.5	30.4	67.1	22,646
August	-1	14	13	-25	2.3	30.5	67.2	22,814
September	0	13	13	-21	2.1	30.1	67.8	23,369
October	1	-3	-2	-20	2.1	30.6	67.3	23,294
November	-5	87	82	-20	1.6	30.1	68.3	23,975
December	11	-6	5	-6	1.5	30.2	68.3	24,304
January 1996	0	12	12	-4	1.4	29.9	68.7	24,721
February	-301	303	2	4	1.4	28.0	70.6	24,859
March	0	-14	-14	-15	1.4	27.6	71.0	25,070
April	-42	-31	-73	-18	1.6	26.9	71.5	25,493
May	-1	-20	-21	-3	1.6	26.5	71.9	25,823
June	0	-52	-52	-20	1.8	26.8	71.4	25,829
July	-25	0	-25	16	2.0	27.7	70.3	25,076
August	0	-156	-156	39	2.4	27.3	70.3	25,453
September	3	51	54	-9	2.1	26.8	71.1	26,388

Tab C

EXECUTIVE DIRECTOR'S ADMINISTRATIVE REPORT

DATE: December 4, 1996

TO: Members, State Board Investment

FROM: Howard Bicker

1. Budget and Travel Reports

A report on the SBI's administrative budget for the period ending October 31, 1996 is included as **Attachment A**.

A travel report for the period from August 16-November 15, 1996 is included as **Attachment B**.

2. Post Retirement Benefit Increase for FY96

The post retirement benefit increase for FY96 will be 8.0395%. The increase will be payable to eligible retirees effective January 1, 1997.

This is the fourth increase granted under the revised formula that was enacted by the 1992 Legislature.

Benefit increases for the last nine years are shown below:

1988	6.9%
1989	4.0%
1990	5.1%
1991	4.3%
1992	4.6%
1993**	6.0%
1994**	4.0%
1995**	6.4%
1996**	8.0%

* Payable beginning January 1 of the following calendar year.

** Benefit increase granted under new formula.

3. 1997 Legislative Proposals

I am not recommending that the SBI propose an administrative bill for the 1997 Legislative Session. However, there are several initiatives that will be introduced by

the retirement systems that will be of interest to the SBI. These issues will likely require comment by SBI staff during upcoming legislative hearings.

a. **Change in Retirement Plan Benefits and the Post Fund Benefit Increase**

The three statewide retirement systems (MSRS, PERA, TRA) have been working on a pension reform and benefit uniformity proposal that would change future Post Fund benefit increases. The proposal would increase the formula benefit to increase the amount of pension dollars initially paid to new retirees and decrease the size of the future benefit increases. The proposal would essentially lower by one percent the inflation component of the current formula and leave the investment component unchanged.

The proposal would amend the retirement systems' statutory provisions and would amend section 11A.18, which contains the post fund increase formula.

b. **State 457 Deferred Compensation Plan (DCP)**

Authority to retain mutual funds as product providers: Current law allows DCP assets to be invested only in the Supplemental Investment Fund, savings accounts in federally insured financial institutions and life insurance company fixed and variable annuities. David Bergstrom, Executive Director of MSRS reports that he intends to include in an MSRS bill the authority to invest DCP assets directly in mutual funds.

New federal legislation provides for the **establishment of a trust or custodial account** to hold 457 plan assets and eliminates the federal tax provision that 457 plan assets stand in the name of the state or employer. MSRS intends to include a provision to amend state law to reflect these changes.

Both provisions represent amendments to MSRS statutory language. Chapter 11A is not affected.

4. **Tentative Meeting Dates for Calendar 1997**

The quarterly meetings of the IAC/SBI are normally held on the first consecutive Tuesday and Wednesday of March, June, September and December. The dates for calendar 1997 are:

IAC
Tuesday, March 4, 1997
Tuesday, June 3, 1997
Tuesday, September 2, 1997
Tuesday, December 2, 1997

SBI
Wednesday, March 5, 1997
Wednesday, June 4, 1997
Wednesday, September 3, 1997
Wednesday, December 3, 1997

SBI staff will confirm the availability of Board members for the above dates over the next months.

5. Benchmark for the Invested Treasurer's Cash Pool

At its meeting in September 1996, the Governor asked the Board to defer action on a new benchmark for the Invested Treasurer's Cash (ITC) Pool until the Department of Finance had the opportunity to review it.

During the quarter, I met with staff of the Department of Finance (DOF) to discuss the attached position paper and the rationale behind the recommendation for a fixed dollar amount in the longer maturity portion of the ITC Pool benchmark.

DOF staff have no objection to the proposal. Therefore, I am resubmitting the paper to the Board for approval. The paper received a positive recommendation from the IAC at its meeting in September 1996. The entire paper is included as an attachment to this report and begins on page 7.

RECOMMENDATION:

The Executive Director recommends that the SBI adopt the attached position paper on the benchmarks for the internally managed Trust Fund Pool and ITC Pool.

ATTACHMENT A

**STATE BOARD OF INVESTMENT
FISCAL YEAR 1997 ADMINISTRATIVE BUDGET REPORT
GENERAL FUND APPROPRIATION
FISCAL YEAR TO DATE THROUGH OCTOBER 31, 1996**

ITEM	FISCAL YEAR 1997 BUDGET	FISCAL YEAR 1997 EXPENDITURES
PERSONAL SERVICES		
FULL TIME EMPLOYEES	\$ 1,505,000	\$ 457,036
SEVERENCE PAYOFF	20,000	0
WORKERS COMPENSATION INSURANCE	1,000	205
MISCELLANEOUS PAYROLL	1,000	0
SUBTOTAL	\$ 1,527,000	\$ 457,241
STATE OPERATIONS		
RENTS & LEASES	90,500	30,166
REPAIRS/ALTERATIONS/MAINTENANCE	13,000	2,867
BONDS AND INSURANCE	1,000	0
PRINTING & BINDING	16,000	10,675
PROFESSIONAL/TECHNICAL SERVICES	50,000	0
COMPUTER SYSTEMS SERVICES	202,500	50,853
COMMUNICATIONS	27,000	4,679
TRAVEL, IN-STATE	3,000	119
TRAVEL, OUT-STATE	55,000	16,427
SUPPLIES	48,000	11,936
EQUIPMENT	37,000	2,960
EMPLOYEE DEVELOPMENT	18,000	3,215
OTHER OPERATING COSTS	40,000	6,358
SUBTOTAL	\$ 601,000	\$ 140,255
TOTAL GENERAL FUND	\$ 2,128,000	\$ 597,496

ATTACHMENT B

STATE BOARD OF INVESTMENT

**Travel Summary by Date
August 16, 1996 - November 15, 1996**

<u>Purpose</u>	<u>Name(s)</u>	<u>Destination and Date</u>	<u>Total Cost</u>
Manager Monitoring Alternative Investments: Zell/Merrill Consolidated Advisory Board	M. Regal	Chicago, IL 8/26	\$447.20
Staff Education "1996 Private Equity Analyst Conference" sponsored by Asset Alternatives Inc.	M. Regal	New York, NY Boston, MA 9/9 - 9/12	\$2,078.41
Manager Monitoring Alternative Investments: Summit Partners Annual Meeting Master Custodian: State Street Bank and Trust Company			
Master Custodian: State Street Bank and Trust Company	W. Newton	Boston, MA 9/16 - 9/19	\$398.50
Manager Monitoring Alternative Investments: Zell/Merrill Annual Meeting	J. Griebenow	Chicago, IL 9/16 - 9/17	\$399.20
Manager Monitoring Domestic Equity Manager: Waddell & Reed	M. Menssen L. Buermann	Kansas City, MO 9/16	\$1,645.00
Manager Monitoring International Managers: Scudder Stevens & Clark, State Street Global Advisors, Baring Investment Services Manager Search International Managers: DSI International Management, Oechsle International Advisors	B. Lehman K. Vnuk	New York, NY Boston, MA 9/18 - 9/20	\$3,175.06

<u>Purpose</u>	<u>Name(s)</u>	<u>Destination and Date</u>	<u>Total Cost</u>
Manager Monitoring Alternative Investments: Public Funds Private Equity Study	J. Griebenow	Chicago, IL 9/20	\$273.00
Staff Education “ADP Constituents Conference” Sponsored by Automatic Data Processing	D. Griebenow	New York, NY 9/24 - 9/27	\$1,684.33
Staff Education National Association of Government Deferred Compensation Administrators	J. Heidelberg	Charleston, SC 9/30 - 10/3	\$1,539.24
Manager Monitoring Domestic Equity Managers: GeoCapital, Forstmann Leff, J.P. Morgan, Oppenheimer, Weiss, Peck & Greer Staff Education “Alpha Routine Side of Risk” Sponsored by Investors Press/ Rogers Casey	M. Menssen L. Buermann	New York, NY 10/7 - 10/11	\$3,398.16
Manager Monitoring Alternative Investments: Zell/Merrill Investors Meeting	J. Griebenow	Atlanta, GA 10/13 - 10/14	\$171.00
Staff Conference National Association of State Investment Officers Annual Meeting	H. Bicker B. Lehman	Chicago, IL 10/19 - 10/23	\$2,526.00
Board Member Travel 1996 NACD Corporate Governance Review and Director of the Year Award Dinner	J. Growe	Washington, D.C. 11/10 - 11/12	\$2,034.80

**Benchmark For
Internally Managed
Short Term Cash Accounts**

August 1996

BENCHMARK FOR INTERNALLY MANAGED SHORT TERM CASH POOLS

In January 1993, the State Board of Investment (SBI) adopted a new performance benchmark for the internally managed cash pools. At the time, the Investment Advisory Council (IAC) recommended that this decision be reviewed after staff had gained some experience with the new benchmark. This paper provides that review and proposes modifications to the benchmark.

Background

The State Board of Investment (SBI) manages the cash balances in more than 400 state agency accounts with the objectives of preserving capital and providing competitive money market returns. Staff invest the majority of these accounts through two pooled vehicles:

- **Invested Treasurer's Cash (ITC) Pool.** This pool contains cash balances from ITC and other accounts necessary for the operation of state agencies. Its average daily balance in FY96 was \$2.92 billion.
- **Trust Fund Pool.** This pool contains cash balances of trust fund and retirement related accounts that are managed internally. The Trust Fund Pool had an average daily balance of \$0.14 billion in FY96.

Historically, 91 Day Treasury Bills (T-bills) were used as the benchmark for all cash accounts. In 1991, the Program Evaluation Division of the Office of the Legislative Auditor criticized this benchmark and recommended that the SBI develop a customized benchmark for cash management that would better reflect the mix of securities actually being used.

After evaluating alternatives, staff recommended a benchmark for both pools that was weighted 75% cash equivalents / 25% 1-3 year debt. The State Street short term investment fund (STIF) return was recommended as the bogey for cash equivalents and the Merrill Lynch 1-3 Year Government Index was recommended as the bogey for the long portion of the benchmark.

The IAC endorsed this blended benchmark with reservations. Since the maturity structure of the pools fluctuates according to cash flow demands, it could be significantly different from the 75/25 split in the benchmark. Also, measuring the cash portion of the fund against State Street's actively managed STIF makes the benchmark a more difficult bogey than a passive index. As a result, the IAC felt the blended benchmark was very aggressive and recommended that it be reviewed within two years. They also recommended that 91 Day T-Bills continue to be reported as an alternative benchmark.

As a result of these recommendations, ITC and Trust Fund Pool performance have been reported against both 91 Day T-bills and the blended benchmark since January 1993. Results against both benchmarks are shown in **Appendix I**.

Benchmark Weights for the Trust Fund Pool

Since the blended benchmark was adopted, the cash flows and maturity structure of the Trust Fund Pool changed significantly. After the Post Fund moved to external management, the balance in the Trust Fund Pool dropped. It is now comprised of retirement fund contributions before they are invested in the Basic or the Post Funds and cashflows to the Permanent School Fund or Environmental Trust Fund before they are invested in stocks or bonds. Since these cash flows are held in the Pool for only a short time before they are allocated to long term investment vehicles, the maturity structure of the Trust Pool is now focused entirely on cash equivalents; maturities beyond 6 months are rarely used.

A blended benchmark is no longer representative of the maturity structure of the Trust Fund Pool. Therefore, staff recommend that the benchmark for the Trust Fund Pool drop the 1-3 year portion from its benchmark and be measured against a standard that is more representative of cash equivalents.

Benchmark Weights for the ITC Pool

Staff continue to believe that a blended benchmark is appropriate for the ITC Pool since its maturity structure will continue to include longer term securities. However, a benchmark based on set percentages has proved to be somewhat problematic.

The Invested Treasurer's Cash Pool continues to experience significant volatility in cash flows (see **Appendix II and Appendix III**). As a result, the dollar value attributable to 25% of the portfolio can vary significantly over very short periods of time as well. During the last three years, the amount has fluctuated by as much as \$245 million in a single month (see **Appendix IV**). This means the internal manager may be induced to buy or sell 5-10% of the entire ITC Pool in any month simply to match the benchmark weightings. Staff believe that this type of turnover is counterproductive and is incompatible with the objective of preserving capital.

Instead of a blended benchmark based on a **fixed percentage**, staff suggest that the benchmark be based on a **fixed dollar amount** for the 1-3 year portion of the benchmark. The fixed dollar amount selected would represent an amount that is never expected to be liquidated and should be determined in conjunction with the cashflow projections made by the Department of Finance. The balance of the portfolio, whatever its dollar value, would be measured against a cash equivalents measure.

Staff suggest that the fixed dollar portion of the benchmark be set at 20-25% of the projected minimum balance in the ITC for the coming year. For the twelve month period beginning October 1996, staff recommend a fixed dollar amount of \$600 million. The fixed dollar amount used in the benchmark would need to be updated at least annually to

reflect changing Minnesota economic conditions and changes in cash flow caused by legislative action.

Benchmark for Cash Equivalents

As noted earlier, the State Street STIF was selected as the bogey for cash equivalents. This was based, in large part, on the fact that both State Street and internal staff are bound by the same statutory constraints and should therefore be selecting securities from the same investment universe. After further review, staff recommend using IBC All Taxable Money Fund Average Index rather than the State Street STIF.

Neither the State Street STIF nor the IBC Index (formerly known as IBC Donoghue) are ideal benchmarks since neither meet key components of an “investable” performance standard i.e., neither is a passive representation of an investment universe and the securities that make up the benchmark are not known before the start of the measurement period. The IBC Index is more representative, however, because it reflects the results achieved by a broader group of managers. All funds included in the IBC Index average follow SEC Rule 2(a)7 which is roughly comparable to the types of securities available to the internal manager (Treasury, Agency, Commercial Paper and Short Term Corporate Obligations).

Benchmark for 1-3 Year Securities

Currently, the Merrill Lynch 1-3 Year Government Index is used to represent the long end of the maturities used in the benchmark. This index is updated daily as new issues are settled, old issues come within 3 years of maturity, or old issues become less than 1 year to maturity. In practice, this means the benchmark is changed on the last day of every month and on the 15th of every auction month (February, May, August, November). These frequent changes make managing against the benchmark more difficult.

As an alternative, staff recommend the Lehman 1 - 3 Year Government Index. This index is comprised of the same securities as the Merrill Lynch Index, however, it is updated only

on the first of the month to reflect the previous months maturity changes and new issuance.

Summary of Recommendations

Staff recommend that the SBI discontinue measuring the performance of the ITC Pool and the Trust Fund Pool against the current 75/25 blended benchmark. The following benchmarks are recommended:

- **Trust Fund Pool.** The Trust Fund Pool should be measured against a cash equivalents benchmark rather than a blended benchmark. The IBC All Taxable Money Fund Index is recommended as the performance standard for this pool.

- **ITC Pool.** The ITC Pool should continue to use a blended benchmark but convert the long end of the benchmark from a fixed percentage to a fixed dollar amount. The fixed dollar portion of the benchmark should be measured against the Lehman Brother's 1 to 3 year Government Index. The remainder of the benchmark should use the IBC Index. For the 12 month period beginning October 1996, the fixed dollar portion of the benchmark should be \$600 million.

- **91 Day Treasury Bills.** 91 Day T-Bills should continue to be reported as an alternative measure for the internally managed cash pools as it continues to be a widely recognized performance standard for short term cash portfolios.

APPENDIX I

Actual Returns vs. Benchmarks

ITC Pool

	ITC	Benchmark*	T-Bills**	ITC vs. Benchmark	ITC vs. T-Bills
1Q93	1.1	1.1	0.8	0.0	0.3
2Q	1.1	0.9	0.7	0.2	0.4
3Q	1.0	1.0	0.8	0.0	0.2
4Q	0.7	0.8	0.8	-0.1	-0.1
1993	4.0	3.9	3.1	0.1	0.8
1Q94	0.5	0.5	0.8	0.0	-0.3
2Q	0.8	0.7	1.0	0.1	-0.2
3Q	1.1	1.1	1.1	0.0	0.0
4Q	1.1	1.0	1.3	0.1	-0.2
1994	3.5	3.3	4.3	0.2	-0.7
1Q95	1.8	2.0	1.4	-0.2	0.4
2Q	1.7	2.0	1.4	-0.3	0.3
3Q	1.5	1.5	1.4	0.0	0.1
4Q	1.6	1.8	1.4	-0.2	0.2
1995	6.8	7.5	5.7	-0.7	1.0
1Q96	1.2	1.1	1.3	0.1	-0.1
2Q	1.3	1.3	1.3	0.0	0.0
1Q93-2Q96 Annualized	4.8	4.9	4.5	-0.1	0.3

Trust Fund Pool

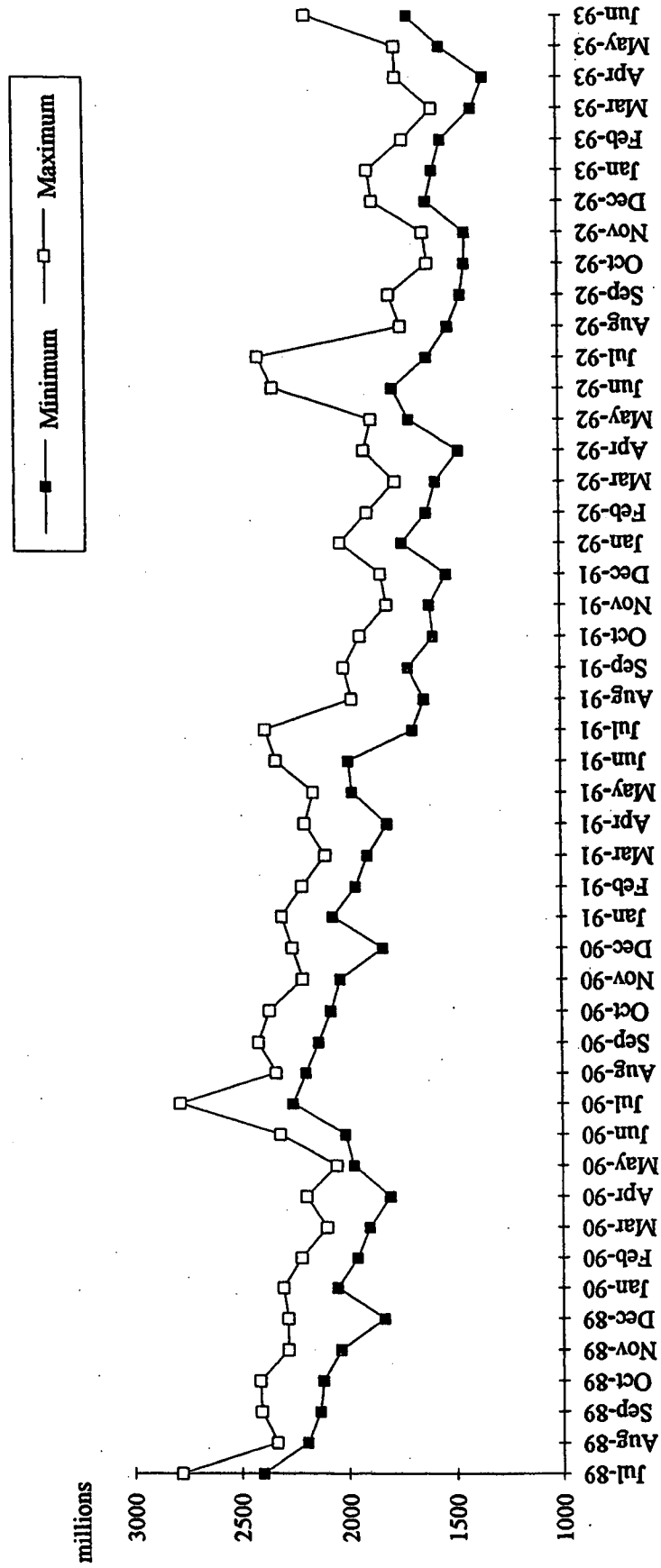
	Trust Pool	Benchmark*	T-Bills**	Trust vs. Benchmark	Trust vs. T-Bills
1Q93	1.4	1.1	0.8	0.3	0.6
2Q	0.9	0.9	0.7	0.0	0.2
3Q	0.8	1.0	0.8	-0.2	0.0
4Q	0.9	0.8	0.8	0.1	0.1
1993	4.1	3.9	3.1	0.2	0.9
1Q94	0.8	0.5	0.8	0.3	0.0
2Q	1.0	0.7	1.0	0.3	0.0
3Q	1.2	1.1	1.1	0.1	0.1
4Q	1.3	1.0	1.3	0.3	0.0
1994	4.4	3.3	4.3	1.0	0.1
1Q95	1.5	2.0	1.4	-0.5	0.1
2Q	1.5	2.0	1.4	-0.5	0.1
3Q	1.5	1.5	1.4	0.0	0.1
4Q	1.5	1.8	1.4	-0.3	0.1
1995	6.1	7.5	5.7	-1.4	0.4
1Q96	1.4	1.1	1.3	0.3	0.1
2Q	1.4	1.3	1.3	0.1	0.0
1Q93-2Q96 Annualized	5.0	4.9	4.5	0.1	0.5

* Blended Benchmark Weighted 75%, State Street STIF/25%, Merrill Lynch 1-3 Year Government
 ** 91 Day U.S. Treasury Bills

APPENDIX II

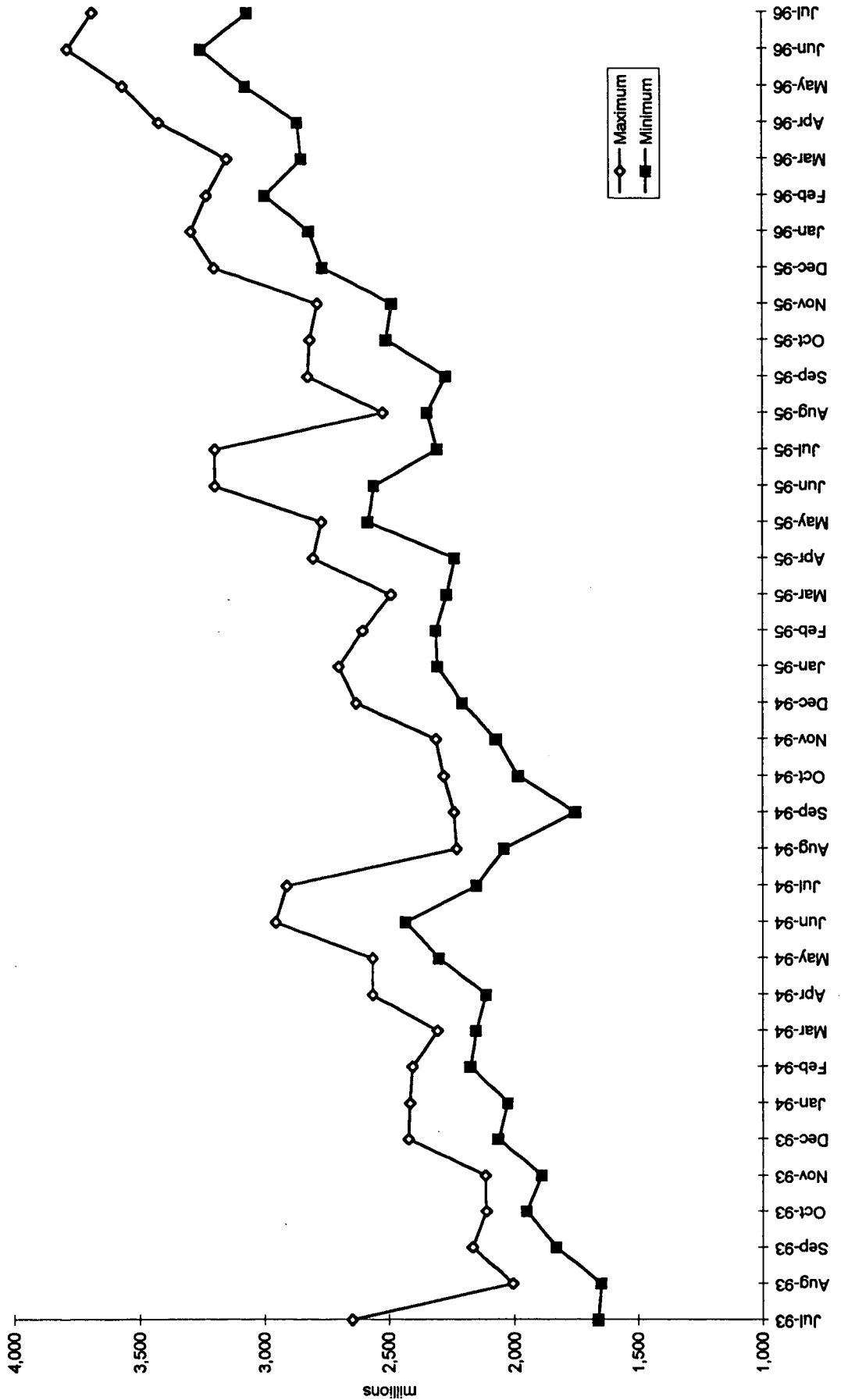
Treasurer's Cash Pool Monthly Maximum and Minimum Balances

JULY, 1989 - JUNE, 1993



APPENDIX III

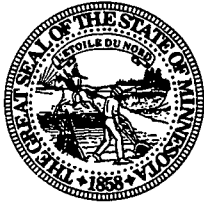
Treasurer's Cash Pool Monthly Maximum and Minimum Balances
July, 1993 - July, 1996



Appendix IV
Volatility of Invested Treasurers Cash
July 1993 - June 1996

	Balance During the Month			Dollar Value of 1-3 Year Portion			\$500 million	\$750 million
	Max	Min	Diff.	25% Max	25% Min	Diff.	as a % of Min.	as a % of Min.
Jul-93	\$2,647	\$1,663	\$984	\$662	\$416	\$246	30%	45%
Aug-93	\$2,005	\$1,650	\$355	\$501	\$413	\$89	30%	45%
Sep-93	\$2,167	\$1,832	\$335	\$542	\$458	\$84	27%	41%
Oct-93	\$2,110	\$1,950	\$160	\$528	\$488	\$40	26%	38%
Nov-93	\$2,114	\$1,891	\$223	\$529	\$473	\$56	26%	40%
Dec-93	\$2,421	\$2,063	\$358	\$605	\$516	\$90	24%	36%
Jan-94	\$2,414	\$2,026	\$388	\$604	\$507	\$97	25%	37%
Feb-94	\$2,404	\$2,172	\$232	\$601	\$543	\$58	23%	35%
Mar-94	\$2,304	\$2,151	\$153	\$576	\$538	\$38	23%	35%
Apr-94	\$2,564	\$2,110	\$454	\$641	\$528	\$114	24%	36%
May-94	\$2,564	\$2,297	\$267	\$641	\$574	\$67	22%	33%
Jun-94	\$2,955	\$2,431	\$524	\$739	\$608	\$131	21%	31%
Jul-94	\$2,910	\$2,148	\$762	\$728	\$537	\$191	23%	35%
Aug-94	\$2,226	\$2,039	\$187	\$557	\$510	\$47	25%	37%
Sep-94	\$2,237	\$1,753	\$484	\$559	\$438	\$121	29%	43%
Oct-94	\$2,277	\$1,981	\$296	\$569	\$495	\$74	25%	38%
Nov-94	\$2,307	\$2,070	\$237	\$577	\$518	\$59	24%	36%
Dec-94	\$2,628	\$2,202	\$426	\$657	\$551	\$107	23%	34%
Jan-95	\$2,699	\$2,302	\$397	\$675	\$576	\$99	22%	33%
Feb-95	\$2,601	\$2,307	\$294	\$650	\$577	\$74	22%	33%
Mar-95	\$2,488	\$2,265	\$223	\$622	\$566	\$56	22%	33%
Apr-95	\$2,801	\$2,233	\$568	\$700	\$558	\$142	22%	34%
May-95	\$2,766	\$2,579	\$187	\$692	\$645	\$47	19%	29%
Jun-95	\$3,198	\$2,555	\$643	\$800	\$639	\$161	20%	29%
Jul-95	\$3,199	\$2,302	\$897	\$800	\$576	\$224	22%	33%
Aug-95	\$2,520	\$2,342	\$178	\$630	\$586	\$45	21%	32%
Sep-95	\$2,822	\$2,268	\$554	\$706	\$567	\$139	22%	33%
Oct-95	\$2,813	\$2,506	\$307	\$703	\$627	\$77	20%	30%
Nov-95	\$2,783	\$2,483	\$300	\$696	\$621	\$75	20%	30%
Dec-95	\$3,200	\$2,760	\$440	\$800	\$690	\$110	18%	27%
Jan-96	\$3,292	\$2,815	\$477	\$823	\$704	\$119	18%	27%
Feb-96	\$3,230	\$2,994	\$236	\$808	\$749	\$59	17%	25%
Mar-96	\$3,148	\$2,845	\$303	\$787	\$711	\$76	18%	26%
Apr-96	\$3,419	\$2,862	\$557	\$855	\$716	\$139	17%	26%
May-96	\$3,563	\$3,074	\$489	\$891	\$769	\$122	16%	24%
Jun-96	\$3,782	\$3,251	\$531	\$946	\$813	\$133	15%	23%
Jul-96	\$3,683	\$3,065	\$618	\$921	\$766	\$155	16%	24%

Tab D



**STATE OF MINNESOTA
OFFICE OF THE STATE TREASURER**

303 State Administration Building
50 Sherburne Avenue
Saint Paul, Minnesota 55155

MICHAEL A. McGRATH
Treasurer

(612) 296-7091
Fax (612) 296-8615

DATE: December 4, 1996

TO: Members, SBI Administrative Committee

FROM: SBI Administrative Committee Report

The SBI Administrative Committee met on December 2, 1996 to review the following agenda items:

- Report on audit results for FY96
- Update on FY96 Annual Report
- Review of SBI's use of directed commissions
- Recommendation on biennial budget proposal for FY98-99

The Board action is requested on the last item.

INFORMATION ITEMS:

1. Results of FY96 Audit

The annual financial audit by the Office of the Legislative Auditor (OLA) is nearing completion. To date, no material findings have been brought to the attention of SBI staff.

A copy of the audit letter will be inserted in the SBI's annual report which will be issued in January 1997.

2. FY96 Annual Report

A draft of the text for the SBI's FY96 Annual Report has been sent to Board members/designees and IAC members for comment.

The report will be sent to the printer in late December and should be available for distribution by the end of January 1997.

3. Directed Commissions

The SBI has made use of directed commissions for a number of years. Plan sponsors such as the SBI use directed commissions to lower their costs and offset various plan expenses and internal research needs. For some services, directed commissions are the only method of payment that can be utilized.

Approximately 45% of all public funds with plan assets exceeding \$100 million direct commissions. On average, a fund directs approximately 37% of their available total. The SBI's use of commissions is less than 10% of the available total, which is below average.

Background information on directed commissions and a summary of the SBI's use of this resource is attached beginning on **page 3**.

ACTION ITEM:

1. FY98-99 Biennial Budget Request

As a state agency, the SBI's administrative budget is part of the State's biennial budget process and will be presented to the 1997 Legislature as part of the Governor's proposed budget.

A draft of the SBI's biennial budget document is attached for your review. It has been prepared in accordance with Department of Finance guidelines.

The general fund appropriation request is \$2,163,000 each year which is a "no change" base level of funding.

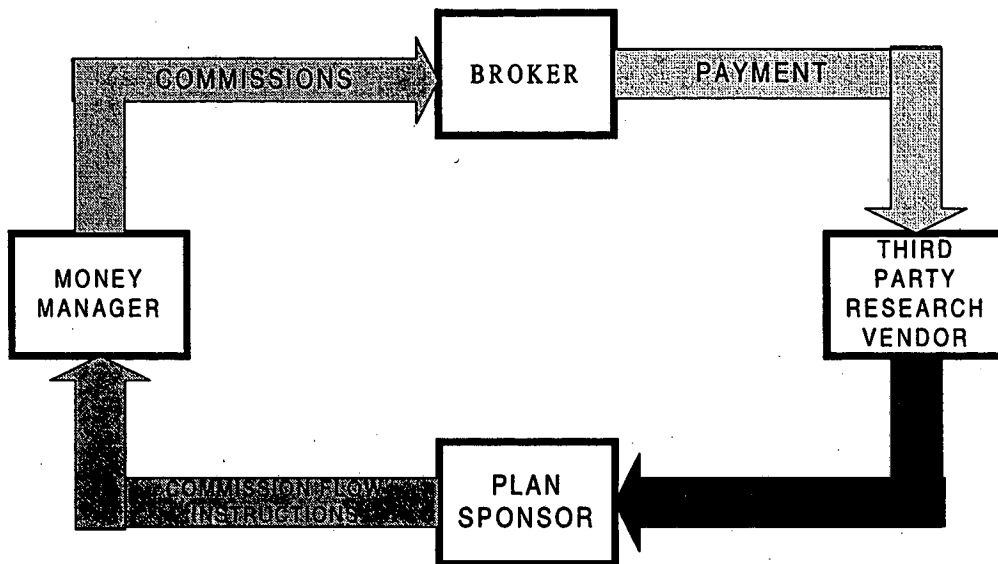
RECOMMENDATION:

The SBI Administrative Committee recommends that the SBI approve the FY98-99 budget request which begins on page 7 and authorize the Executive Director to seek its approval during the 1997 Legislative Session.

STATE BOARD OF INVESTMENT DIRECTED COMMISSIONS OVERVIEW

What is Plan Sponsor Directed Brokerage?

Plan Sponsor Directed Brokerage (also called client-directed brokerage) is simply the fund's use of its own commissions to purchase services it would otherwise buy with cash.



To take advantage of plan sponsor directed brokerage, the fund directs its investment managers to execute a portion of the fund's transactions through a specific list of brokers. Pension plans use directed commissions to offset various plan expenses and internal research needs.

Why do plan sponsors direct brokerage?

Plan sponsors direct brokerage to lower their commission costs. If the program is properly constructed with a focus on execution quality issues, it will also lower the fund's total costs.

STATE BOARD OF INVESTMENT DIRECTED COMMISSIONS OVERVIEW

BACKGROUND:

What are commissions?

Commissions are fees paid to a broker for executing a trade based on the number of shares or dollar value of the trade. Commissions can be one of the largest expenses of a plan while simultaneously they can be an asset of the plan when used to pay for goods or services that the plan normally would purchase with cash. Commission expense can be controlled in a number of ways:

- through use of lower cost non-traditional trading mechanisms, such as the electronic crossing networks
- by actively pushing for lower commission rates
- by utilizing commission dollars to pay for services normally paid for with cash

Where Did Use of Commission Dollars Originate?

Prior to 1975 commissions on all trades, regardless of size or volume, were 20 to 30 cents per share. To reflect the economies of scale inherent in many larger relationships, brokerage firms adopted the practice of providing proprietary and third-party research services to their investment manager clients in exchange for a given level of commissions. The net effect was a rebate of a portion of the commissions, circumventing the fixed rates. From this early beginning, the practice of using commission dollars to purchase certain research services (commonly referred to as soft-dollar purchases) has become an intricate part of the business at most money management firms.

How Are Commission Dollars Used?

Soft dollar and directed commission arrangements typically involve situations in which an investment manager or other fiduciary, such as a plan sponsor, of an employee benefit plan purchases goods or services with a portion of the brokerage commissions paid by the plan to a broker for executing a securities transaction.

STATE BOARD OF INVESTMENT DIRECTED COMMISSIONS OVERVIEW

Legal and Regulatory Issues.

Investment managers need some level of investment research as part of their asset management activities, while the plan sponsor must balance the needs of investment managers they have hired with their fiduciary responsibilities to conserve plan assets and reduce plan costs. The laws and or regulations dealing with the use of directed commissions and soft dollars varies based on the type of organization using the commissions. Investment managers using soft dollars are regulated by the U.S. Department of Labors Securities Exchange Commission (SEC). Section 28(e) of the Securities Exchange Act of 1934 deals specifically with the use of soft dollars by investment managers. Corporate benefit and Taft Hartley plan sponsors may be subject to department of Labor rules and Employee Retirement Income Security Act of 1974 (ERISA). Specific securities legislation does not exist governing a plan sponsor's use of directed commissions. Public benefit plan sponsors may be subject to state legislation or municipal ordinance.

Section 28(e) of the Securities Act of 1934 provides that no person who exercises investment discretion with respect to securities transactions will be deemed to have acted unlawfully or to have breached a fiduciary duty solely by reason of paying brokerage commissions for effecting a securities transaction in excess of the amount of commissions another broker dealer would have charged, if such person determined in good faith that the commission was reasonable in relation to the value of brokerage and research services provided by the broker-dealer.

Although an investment manager may be involved in a "soft dollar" arrangement which qualifies for the "Safe Harbor" provided by section 28(e) of the Securities Act of 1934, the fiduciary who appoints the manager is not relieved of their ongoing duty to monitor the performance of the manager including the use of soft dollars.

The SEC has indicated that the safe harbor of Section 28(e) is not available for directed brokerage transactions. A plan sponsor's decision to direct brokerage transactions must be made prudently and solely in the interest of the participants and beneficiaries. The sponsor has an initial responsibility to determine that the broker-dealer is capable of providing best execution for the plan's brokerage transactions. The sponsor has an ongoing responsibility to monitor services provided by the broker dealer so as to assure that the manager has secured best execution of the plan's brokerage transactions and that the commissions paid are reasonable in relation to the value of the brokerage and other services received by the plan.

Where an investment manager directs brokerage transactions through a designated broker-dealer to procure goods and services on behalf of the plan, and for which the plan would be otherwise obligated to pay, such use of brokerage commissions ordinarily would not violate the fiduciary provisions of ERISA, provided that the amount paid for the brokerage and other goods and services is reasonable, and the investment manager has fulfilled its fiduciary duty to obtain best execution for the plan's securities transactions. This result does not depend on the availability of the "safe harbor" under section 28(e) for these transactions.

**STATE BOARD OF INVESTEMENT
DIRECTED COMMISSIONS
FOUR YEAR SUMMARY**

CALENDAR YEAR	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996 *</u>
<u>PORTFOLIO ANALYTICS</u>				
ABEL NOSER	\$ 14,700	\$	\$	\$
ANDERSON FINANCIAL	3,400			
BARRA	57,000	104,720	43,081	76,569
BLOOMBERG	27,073	37,610	41,345	40,813
BRIDGE	43,640			
COMPUTER TRAINING		809	951	
DOW JONES NEWS				1,000
EQUITY DATA BASE SOFTWARE	1,095			
FIRST CALL CORP			5,383	16,403
FIRST DATA SERVICES	1,500			
HOLT VALUE	40,000	10,000		
BENCHMARK CONSTRUCTION	3,075			
IBBOTTSON		3,075	4,000	
MERRILL LYNCH PRICING	20,383	33,453	36,000	31,738
MOBIUS GROUP SOFTWARE	3,000	3,000	3,750	4,750
MOODY BOND RECORD	1,839			
MOODY'S CCR BANK BOOK	2,445	2,775	3,100	6,550
NASIO SURVEY SERVICES			1,150	
NELSON'S DIRECTORY		954		459
ONE SOURCE INFO SERVICES			29,384	
OPTIONS PRICING SERVICES		246		
S & P COMM PAPER GUIDE			1,245	1,850
S & P WEEKLY DIVIDEND RECORD	507	505	505	243
SEI	38,500	56,000	56,000	56,000
TRACK DATA	19,546	18,251	18,603	18,337
VALUE LINE	525	965	230	495
TOTAL PORTFOLIO ANALYTICS	<u>\$ 278,228</u>	<u>\$ 272,363</u>	<u>\$ 244,727</u>	<u>\$ 255,207</u>
<u>CUSTODY</u>				
STATE STREET BANK			\$ 256,179	\$ 239,090
TOTAL CUSTODY			<u>\$ 256,179</u>	<u>\$ 239,090</u>
<u>RESEARCH</u>				
CALLAN INVEST INSTITUTE	4,000	4,000	4,500	4,500
COUNCIL INSTITUTIONAL INVESTORS	20,410	24,180	25,000	25,000
DE MARCHE ASSOC.	40,000			
ICCR SUBSCRIPTION TIM SMITH				230
INTERNATIONAL INSTITUTE		1,195		
IRRC	28,215	20,640	18,480	26,240
MERCER				22,222
TOTAL RESEARCH	<u>\$ 92,625</u>	<u>\$ 50,015</u>	<u>\$ 47,980</u>	<u>\$ 78,192</u>
TOTAL EXPENDITURES	<u><u>\$ 370,853</u></u>	<u><u>\$ 322,378</u></u>	<u><u>\$ 548,886</u></u>	<u><u>\$ 572,489</u></u>

* CALENDAR YEAR TO DATE THROUGH SEPTEMBER 30, 1996

1998-99 BIENNIAL BUDGET
STATE BOARD OF INVESTMENT

- o Monitor and evaluate investment performance to insure investment objectives are met.
- o Assess developments in the broad financial markets and evaluate their potential impact on SBI operations and policies.
- o Communicate its investment policies to clients and constituents.

AGENCY DESCRIPTION
MISSION STATEMENT:

The State Board of Investment (SBI) develops and implements investment policies and strategies for the state's retirement funds, trust funds and cash accounts. The statutory goal of the SBI is "to establish standards which will insure that state and pension assets...will be responsibly invested to maximize the total rate of return without incurring undue risk." (*Minnesota Statutes* Section 11A.01).

The SBI, composed of 5 constitutional officers, provides investment management for the Basic Retirement Funds, the Post Retirement Fund, the Permanent School Fund, Environmental Trust Fund, Assigned Risk Plan, and the Supplemental Investment Fund. In addition, the SBI manages Invested Treasurer's Cash and approximately 50 other state cash accounts. On June 30, 1996, assets managed by the board totaled \$31.4 billion.

The board retains an executive director, an internal investment management staff, and external investment managers to execute its policies. In performing its duties, the board is assisted by the Investment Advisory Council which is composed of 17 persons with investment and retirement fund expertise.

The SBI staff recommends strategic planning alternatives to the board and council and executes the board's decisions. The staff also provides internal management for the Permanent School Fund, the Environmental Trust Fund and State Cash accounts; closely monitors the performance of all external managers retained by the board; and reviews prospective investment vehicles for legislative consideration. The majority of the board's activity relates to investment of retirement funds (roughly 85%). Primary clients are the current and retired members of the three statewide retirement systems (PERA, TRA, MSRS). For cash accounts, the board's largest clients are the State Treasurer and the Department of Finance.

CLIMATE:
All activities of the board are governed by M.S. Chapter 11A and Chapter 356A. To meet the goals established therein, the SBI must:

- o Establish and periodically update the investment objectives, asset allocation and investment management structure for each of the funds.
- o Seek and retain superior money managers to manage the assets of each fund.

Investment activity is divided into 2 major areas; externally managed and internally managed funds. Each concentration requires different strategies and investment vehicles.

External managed funds. Assets of the Basic Retirement Funds, Post Retirement Fund, Supplemental Investment Fund and Assigned Risk Plan (approximately 85% of the total) are under external management.

The Basic Retirement Funds invest the contributions of public employees and employers during the employees' years of public service. Approximately 255,000 public employees in eight statewide retirement funds participate in the Basic Funds. The purpose is to function in a fiduciary capacity, investing pension contributions to provide sufficient funds to finance promised benefits at retirement.

The Post Retirement Fund contains the assets of over 82,000 retired public employees covered by the nine statewide retirement plans. Upon retirement, money sufficient to finance fixed monthly annuities for the life of the retiree are transferred from the Basic Funds to the Post Fund. The Post Fund's main purpose is to ensure that each retiree's initially promised benefit is paid. The SBI must insure that assets transferred to the Post Retirement Fund generate sufficient returns to maintain promised benefits and to generate additional returns that will provide benefit increases to retired public employees.

Fiscal year 1980 to fiscal year 1992 benefit increases were granted if investment realized earnings exceeded the statutory 5% required income. This formula, with its emphasis on current income, caused the asset allocation of the fund to be highly concentrated in fixed income securities. Since Fiscal Year 1993 benefit increases have been paid using a formula tied to the total rate of return of the fund. This change in formula enables the asset allocation of the Post Retirement Fund to be more balanced and include a larger percentage of equities.

The Supplemental Investment Fund is a multi-purpose investment program that offers a range of investment options to state and local employees. It serves a wide range of participants and investment goals, and is, therefore, structured much like a family of mutual funds.

The Assigned Risk Plan is administered by the Dept. of Commerce to provide workers compensation insurance to companies unable to obtain private insurance. The goal is to match the projected liability stream while also maintaining adequate liquidity.

Internally managed funds. The SBI directly invests about 16% of the assets with which it is entrusted. This includes the assets of the Permanent School Fund, Environmental Trust Fund and all money in state cash accounts.

The Permanent School Fund is a trust fund created by the Minnesota State Constitution and designated as a long-term source of revenue for public schools. Income generated by the Permanent School Fund's assets is used to offset state school aid payments. The Fund's investment objectives have been influenced by the restrictive legal provisions under which its investments have been managed. Long run growth in Fund assets has been difficult to achieve without seriously reducing current spendable income and exposing the spendable income stream to unacceptable volatility. Currently the SBI maximizes current income by investing all the Fund's assets in fixed income securities.

The Environmental Trust Fund is a trust fund created by the State Constitution and designed to be a long-term source of revenue for funding environmental projects. The Fund's investment objectives are driven by the desire to generate current income which is used to finance a variety of projects proposed by the Legislative Commission on Minnesota Resources (LCMR). Currently the Environmental Trust Fund invested in a balanced portfolio of fixed income securities and a common stocks.

State Cash Accounts represent the cash balances in more than 400 individual accounts that flow through the Minnesota State Treasury. These accounts range in size from \$5,000 to over \$400 million, and are invested by SBI staff through two commingled short-term investment pools. The objectives of these pooled funds are to preserve capital, to provide a high level of current income and to meet the cash needs of state government without the forced sale of securities at a loss. The pools are expected to generate investment income equal to or greater than other money market-type funds.

AGENCY BUDGET PLAN:

In the past biennium the SBI absorbed inflation cost increases in all budget areas by re-prioritizing expenditures. SBI will not be able to absorb 1998- inflationary costs without impacting programs dramatically.

By Statute, the SBI bills the statewide retirement funds and non-general fund cash accounts for approximately 90% of its General Fund appropriation. These receipts are deposited in the General Fund as non-dedicated revenue. The General Fund appropriation not recovered by the bill-back provision (approximately 10%) represents the portion of the SBI's budget that is associated with the investment of the General Fund portion of the Invested Treasurer's Cash Fund. Any reduction in appropriations and expenditures will result in a matching reduction in revenue to the General Fund, and reduced billings to non-general fund accounts.

PERFORMANCE INDICATORS:

Statutes establish investment goals for the Basic and Post Retirement funds. In addition, the board has set more exacting standards for investment returns. The following pages demonstrate that long-term performance has generally exceeded both statutory requirements and the board's investment performance targets at the total fund level. Returns shown on the following pages are presented net of management fees and investment expenses.

SUMMARY OF INVESTMENT RESULTS

	6/30/96 Millions	Period Ending 6/30/96			FY97 Earnings Est.	FY96 Earnings	FY95 Earnings
		1 Year (%)	3 Years (%)	Annualized 5 Years (%)			
Basic Funds:	\$13,146	18.8	12.0	13.0	\$ 30.0 M	\$ 30.2 M	\$ 31.0 M
Market composite		18.4	12.3	12.6			
Median Fund		17.4	12.1	12.8			
Inflation (CPI)		2.8	2.8	2.9			
Actuarial assumption		8.5	8.5	8.5			
Post Fund:	\$11,883	17.2	11.6	NA			
Market composite		16.3	11.6	NA			
Actuarial assumption		5.0	5.0	5.0			
Benefit increase		8.0	6.1	5.8			
Inflation (CPI)		2.8	2.8	2.9			
Supplemental Fund:							
Income Share	\$ 389	17.6	12.4	13.0			
Median fund		17.4	12.1	12.8			
Growth Share	\$ 157	24.6	15.6	15.6			
Median pool		25.2	16.7	16.0			
International Share	\$ 14	17.0	NA	NA			
EAFE Index		13.4	NA	NA			
Common Stock Index	\$ 96	25.5	16.8	16.2			
Wilshire 5000		26.2	16.7	16.0			
Bond Market	\$ 24	5.3	5.3	9.1			
Lehman Aggregate		5.0	5.3	8.3			
Money Market	\$ 50	5.8	4.9	4.6			
91 Day T-Bills		5.4	4.7	4.4			
Fixed Interest	\$ 69	6.7	NA	NA			
Assigned Risk Plan	\$ 542	9.8	7.9	9.2			
Market composite		9.5	7.6	8.9			
State Cash Accounts							
Treasurer's Pool	\$3,704	5.7	4.8	NA			
Trust Pool	\$ 131	5.9	5.0	NA			
91 day T-bill		5.4	4.7	NA			

BASIC RETIREMENT FUNDS
Market Value 6/30/96: \$ 13.146 Billion

Period Ending 6/30/96
Annualized 3 Years 5 Years

Basic Funds	18.8%	12.0%	13.0%
Comparisons:			
Market Composite	18.4%	12.3%	12.6%
TUCS Median Fund	17.4%	12.1%	12.8%
Inflation (CPI)	2.8%	2.8%	2.9%
Actuarial Assumption	8.5%	8.5%	8.5%

The Basic Retirement Funds contain the assets of active employees in the three statewide retirement systems: MSRS, PERA, and TRA. The long term asset allocation of the portfolio on 6/30/96 was 60% stocks, 24% bonds, 1% cash and 15% alternative assets (real estate, venture capital and resource funds).

For fiscal year 1996, the Basic Funds exceeded their market composite index by 0.4 percentage points and surpassed the median fund in the Trust Universe Comparison Service (TUCS) by 1.4 percentage points.

Performance over the longer term has been favorable as well. Over the latest 5 year period, the Basic Funds have exceeded their market index composite by nearly 0.4 % annualized, and the median fund by approximately 0.2%. The Basic Funds continue to keep well ahead of the inflation rate and have surpassed the actuarially assumed rate of return.

POST RETIREMENT INVESTMENT FUND
Market Value on 6/30/96: \$ 11.797 Billion

	Period Ending 6/30/96		
	1 Year	3 Years	5 Years
Post Fund	17.2%	11.6%	NA
Comparisons:			
Market Composite	16.3%	11.5%	NA
Actuarial Assumption	5.0%	5.0%	5.0%
Benefit increase	8.0%	6.1%	5.8%
Inflation (CPI)	2.8%	2.8%	2.9%

The Post Retirement investment Funds contain the assets of retired employees in the three statewide retirement plans: MSRS, PERA, TRA. The long term asset allocation of the portfolio on 6/30/96 was 65% stocks, 27% bonds, 5% alternative assets and 3% cash.

Through fiscal year 1992, the statutory retirement benefit increase formula required the fund to generate realized earnings (dividends, interest, and net gain or loss from the sale of securities) in order to provide benefit increases to retirees. In fact, the benefit increases granted were among the highest in the nation. However, as interest rates fell during the 1980's, the Fund was forced to invest an increasing percentage of the portfolio in fixed income securities in order to maintain high levels of realized income. This diminished the prospect for future benefit increases and reduced the long term earning power of the Fund.

Since fiscal year 1993, the statutory formula has been based on total return and actual market value of the portfolio. The new formula has two components:

- An inflation adjustment which will provide 100% of the CPI, capped at 3.5%. This will be provided regardless of investment performance.
- An investment adjustment which will be based on Post Fund returns over a 5-year period. This will be provided only if the Fund generates returns above the actuarial assumed rate of 5% and the cumulative value of all inflation based adjustments previously granted.

The new formula, which was sought by the retirement systems and enacted by the 1992 Legislature, has allowed the Post Fund to increase its exposure to stocks and should increase the long term growth potential of its assets. Benefit increases granted since 1993 have surpassed inflation by significant amounts.

SUPPLEMENTAL INVESTMENT FUND

	Market Value 6/30/96	Period Ending 6/30/96		
		1 Year	3 Years	5 Years
Supplemental Fund:				
Income Share Account	\$ 389 M	17.6%	12.4%	13.0%
TUCS Median Fund		17.4%	12.1%	12.8%
Growth Share Account	\$ 157 M	24.6%	15.6%	15.6%
TUCS Median Stock Pool		25.2%	16.7%	16.0%
Common Stock Index Account	\$ 96 M	25.5%	16.8%	16.2%
Wilshire 5000 Stock Index		26.2%	16.7%	16.0%
International Share Account	\$ 14 M	17.0%	NA	NA
EAFE Index		13.4%	NA	NA
Bond Market Account	\$ 24 M	5.3%	5.3%	9.1%
Lehman Aggregate		5.0%	5.3%	8.3%
Money Market Account	\$ 50 M	5.8%	4.9%	4.6%
91 Day Treasury Bills		5.4%	4.7%	4.4%
Fixed Interest Account	\$ 69 M	91-94 GIC 92-95 GIC	93-96 GIC	
Interest Rate Obtained		6.7%	5.280%	4.625%

The Supplemental Investment Fund is an investment vehicle available to a wide range of state and local public employee groups for retirement related purposes. The largest participants in the Fund are the Deferred Compensation Plan and the Unclassified Employees Retirement Plan.

Overall, fiscal year 1996 was a strong year for the Fund. The Income Share, International Share, Bond Market and Money Market Accounts all exceeded their performance targets for the year, while the Common Stock Index and Growth Share Accounts trailed their performance objectives.

Over the last 3 and 5 year periods, the Income Share, Common Stock Index, Bond Market and Money Market Accounts have met or exceeded their targets. The small to medium capitalization stock bias in the Growth Share Account hurt performance over the same periods relative to the median stock pool.

The Fixed Interest Account utilizes investments in guaranteed investment contracts (GIC's) available through insurance companies and banks.

**Permanent School Trust Fund
Market Value on 6/30/96: \$ 419 Million**

The Permanent School Trust Fund is a trust established for the benefit of Minnesota public schools. Income from the Trust is used to offset state expenditures for school aid payments. Due to the State's need for a high, consistent level of current income as well as restrictive statutory accounting provisions, the Trust has been invested entirely in fixed income securities. While this investment strategy maximizes current income, it will reduce the long term growth of the Trust.

The 1992 Legislature approved statutory changes, suggested by the SBI, which make common stocks a more attractive investment vehicle for the Trust. Stocks will help the Trust grow over the long term because they are a higher returning asset class. Adding common stocks to the portfolio will, however, reduce spendable income over the short-run because stocks produce lower current income than bonds. Converting to an asset mix of 50% stock/50% bonds at this time would reduce spendable income fiscal years 1996-97.

Time Period	Income Generated
FY 1996	\$ 30.2 million
FY 1995	\$ 31.0 million
FY 1994	\$ 36.0 million
FY 1993	\$ 33.5 million
FY 1992	\$ 33.3 million

**Environmental Trust Fund
Market Value on 6/30/96: \$ 140 Million**

The Environmental Trust Fund is to be used to supplement traditional sources of funding for environmental and natural resource activity. The Trust will receive a portion of the net lottery proceeds until 2001.

The SBI added stocks to the portfolio during fiscal year 1994. Currently, the asset mix of the Trust is targeted at 50% common stocks and 50% fixed income to provide for long term growth.

Time Period	Income Generated
FY 1996	\$ 6,009,000
FY 1995	\$ 4,006,000
FY 1994	\$ 3,936,000
FY 1993	\$ 3,321,000

Assigned Risk Plan

Market Value on 6/30/96: \$ 542 Million

The Minnesota Assigned Risk Plan is the insurer of last resort for Minnesota companies seeking workers compensation insurance. The Plan is administered by the Dept. of Commerce. Investment management responsibility for the assets of the plan was transferred to the SBI by the Legislature in May 1991.

The investment goals of the Plan are to match the projected liability/payment stream and to provide sufficient liquidity/cash for payment of claims and operating expenses. Due to the relatively short duration of the liability stream, the asset mix of the plan was 20% stocks and 80% bonds during fiscal year 1996. This allocation is reviewed annually upon receipt of new actuarial valuations and will be changed to reflect changes in plan liabilities.

Period Ending 6/30/96

Actual Return	1 Year	3 Year	5 Year
Comparison:	9.8%	7.9%	9.2%
Market Composite	9.5%	7.6%	8.9%

State Cash Accounts

The SBI invests the cash balances in more than 400 separate accounts in the Minnesota State Treasury. These accounts range in size from \$5,000 to over \$400 million. Most of these accounts are invested through two pooled funds.

The Trust Fund Pool holds cash balances for retirement related accounts and trust funds that are not managed by external money managers. The Treasurer's Cash Pool holds the balances in the Invested Treasurer's Cash as well as special or dedicated accounts.

Period Ending 6/30/96

Market Value	1 Year	Annualized	3 Years
6/30/96			
Treasurers Cash Pool	\$ 3,704 M	5.7%	4.8%
Trust Fund Cash Pool	\$ 131 M	5.9%	5.0%
Comparison:			
3 Month T-Bill	5.4%		4.7%

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1998-1999 B I E N N I A L B U D G E T
(DOLLARS IN THOUSANDS)

PAGE: 00001

AGENCY: INVESTMENT BOARD

	FY 1996		Est. FY 1997	FY 1998		FY 1999	
				Base Level	Agency Plan	Base Level	Agency Plan
PROGRAM RESOURCE ALLOCATION:							
INVESTMENT OF FUNDS	2,059		2,126	2,163	2,163	2,247	2,247
REFUNDS/RETIRE FUNDS	37,333						
TOTAL EXPENDITURES BY PROGRAM	39,392		2,126	2,163	2,163	2,247	2,247
EXPENDITURES BY FUND:							
DIRECT APPROPRIATIONS:							
GENERAL							
OPEN APPROPRIATIONS:	2,059		2,126	2,163	2,163	2,247	2,247
SUPPLMNTL INVEST INVEST INDEX	5						
SUPPLEMENTAL INVEST SUPPL BOND	2						
SUPPLEMENTAL INVEST INVEST GIC	75						
SUPPLMNTL INVEST MONEYMARKET	4						
SUPPLEMENTAL INVESTMENT INCOME	26						
SUPPLEMENTAL INVESTMENT GROWTH	10						
POST RETIREMENT INVESTMENT	792						
INVEST EXT MONEY MANAGERS#1	7,271						
INVEST EXT MONEY MANAGERS.#2	29,147						
SUPPLEMENTAL INTL EQUITY	1						
TOTAL EXPENDITURES	39,392		2,126	2,163	2,163	2,247	2,247
FTE BY EMPLOYMENT TYPE:							
REGULAR	23.2		25.1	25.1	25.1	25.1	25.1
TEMP/SEAS/PART_TIME	.2		2.5	2.5	2.5	2.5	2.5
TOTAL FTE	23.4		27.6	27.6	27.6	27.6	27.6

GEN #11 (Level: EXPB)

REQUESTED BY: PIKAP01

Tab E

COMMITTEE REPORT

DATE: December 4, 1996

TO: Members, State Board of Investment

FROM: Deferred Compensation Review Committee

At its June 1996 meeting the Board authorized the Deferred Compensation Review Committee to conduct a search for a deferred compensation programs consultant through a request for proposal process.

The Committee met on September 23 to approve a draft of an RFP. The RFP included a request by Minnesota State Retirement System (MSRS) for a consultant to assist MSRS with its administrative responsibilities concerning the state 457 Deferred Compensation Plan.

Staff initially sent the RFP to 11 companies. Staff sent the RFP to an additional 5 companies who responded to the announcement in the State Register. Of the 16 companies who received the RFP 5 submitted responses. The Committee met November 12 and agreed to interview the following four firms:

- Foster Higgins
- Jeffrey Slocum & Associates
- Watson Wyatt
- William M. Mercer

Interviews were conducted in SBI offices December 3, 1996. Based on information gathered at the interviews and from the firms' responses, the Committee agreed to recommend that the Board retain Watson Wyatt.

RECOMMENDATION:

The Committee recommends that the Board authorize the executive director, with assistance from legal counsel, to negotiate and execute a contract for consulting services with Watson Wyatt.

Tab F

COMMITTEE REPORT

DATE: December 4, 1996

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

FROM: Domestic Manager Committee

The Domestic Manager Committee met on November 14, 1996 to consider the following agenda items:

- Review of manager performance for the period ending September 30, 1996.
- Discussion regarding enhancement of the Active Domestic Equity Program.
- Review of selected active stock managers as required by the Manager Continuation Policy.
- Review of the Emerging Manager Program.

Board action is requested on the last two items.

INFORMATION ITEMS:

1. Review of Manager Performance

- *Stock Managers*

For the quarter ended September 30, 1996, the domestic stock manager program matched its aggregate benchmark and outperformed the Wilshire 5000 by 0.1 percentage point. For the latest year, the current managers outperformed the benchmark but underperformed the Wilshire 5000. For the five year period, the current manager group outperformed the benchmark and the Wilshire 5000:

Time period	Total Program	Wilshire 5000*	Current Mgrs. Only	Aggregate Benchmark
Quarter	2.9%	2.8%	2.9%	2.9%
1 Year	18.7	18.9	18.7	18.4
3 Years	15.5	16.4	15.6	16.5
5 Years	14.9	15.3	15.7	15.2

* Adjusted for SBI's restrictions, as appropriate.

The domestic equity program outperformed the Wilshire 5000 for the quarter due to value added in the Emerging Manager Program and positive tracking error by the passive manager. The semi-passive equity managers matched their benchmark for the quarter. The active equity managers trailed their aggregate benchmark for the quarter slightly due to several managers' bets on mid- and smaller capitalization stocks. Active bets in technology and consumer non-durables added value but were insufficient to overcome the lag generated by other holdings.

The performance evaluation reports for the stock managers start on **page 19**. Manager Commentaries are in **Tab J**.

• ***Bond Managers***

For the period ended September 30, 1996, the bond manager program outperformed the Lehman Aggregate by 0.4 percentage point. The program has outperformed the Lehman Aggregate over the latest one, three, and five year periods.

Time period	Actual	Lehman Aggregate*
Quarter	2.2%	1.8%
1 Year	5.4	4.9
3 Years	5.1	5.0
5 Years	8.0	7.5

Current Mgrs. Only	Aggregate Benchmark
2.2%	1.8%
5.4	4.9
5.1	5.1
8.1	7.6

* Reflects Salomon BIG index prior to 7/94.

The performance evaluation reports for the bond managers start on **page 51**. Manager Commentaries are in **Tab J**.

2. Enhancement of the Active Domestic Equity Program

Over the past two years, several changes have been put in place to improve the Domestic Equity Program. The semi-passive component has been in place for 1.75 years and is adding value consistent with expectations. The new index manager has been in place for 1.25 years and has provided substantially better tracking performance than the prior passive manager.

For the past several months, staff have been working with each of the active managers to identify ways to enhance their potential to add value to the SBI's domestic equity program. As a result of this work, staff expect several of the active stock managers to move to a more concentrated portfolio approach for the SBI's account.

Arguments presented by staff suggest that most active managers construct portfolios that include their "best ideas" along with other stocks that have less potential for value added. It appears managers hold those extra stocks in order to provide clients with a diversified portfolio and to minimize their risk of termination due to short term underperformance. Staff contends that the SBI's Domestic Equity program is already well diversified with a large passive/semi-passive component. Therefore further diversification within an active manager's portfolio is not necessary. In addition, staff believes that the additional diversification dilutes the manager's ability to produce value added returns for the SBI over the long term.

Although this strategy is not appropriate for all managers, staff feels that Alliance Capital Management, IDS Advisory Group, Lincoln Capital Management, and Oppenheimer Capital have the potential to implement changes that would provide a more concentrated portfolio for the SBI. Each of these managers agree that they could likely add value with this strategy over the long term, although the volatility of their returns will increase over the short term. Staff research indicates that while active risk is expected to increase for each individual manager, the total program risk should not be affected materially because of the broad diversification within the program.

Staff informed the Committee that they intend to work with each of the four firms to implement a more concentrated portfolio that fits its unique investment approach. Each manager will continue to use their current benchmark and investment process, but will modify their construction process by reducing the number of holdings in their portfolios to approximately 15-30 names (currently, these managers hold 35-60 names). Two additional firms, Franklin Portfolio Associates and Forstmann-Leff, will make modest changes in the construction of their portfolios to enhance their performance, but due to their investment processes, they will not concentrate to the same extent.

Staff expects that the modifications described above will increase the probability of achieving the SBI's existing return expectations for the actively managed portion of the domestic equity program. While expected volatility for individual managers will increase from 30-50%, total program volatility relative to the Wilshire 5000 is expected to move from $\pm 0.57\%$ to $\pm 0.64\%$. Total volatility will increase only slightly due to the broadly diversified program structure already in place with the semi-passive and passive components of the program.

More information on the program change is included in the staff memo to the Committee which begins on page 7. The Committee did not object to the staff plan but asked that the change be monitored closely. Staff concurred and expects to provide the Committee with status reports as part of the on-going performance monitoring process.

ACTION ITEMS:

3. Review of Selected Active Domestic Stock Managers

During the quarter, the Committee reviewed information compiled by staff on five active stock managers whose rolling five year performance has been below their benchmark for one year. This review is required by the SBI's Manager Continuation Policy.

Staff summarized their recent on-site visits with each of the firms and reviewed attribution analysis prepared by the SBI's consultant, Richards & Tierney. Staff's recommendations and Committee discussion on the firms can be summarized as follows:

- Staff recommended that no action should be taken at this time with respect to *Forstmann-Leff, Weiss, Peck & Greer* and, *Investment Advisors Inc.* Forstmann-Leff and Weiss, Peck & Greer have significantly outperformed their benchmark during the past year and staff has seen improvements to the organizations. Staff believes that changes at Investment Advisors will be beneficial for performance, and staff has confidence in both the investment process and personnel utilized by the firm. The Committee concurred.
- Staff recommended that *GeoCapital* be formally re-interviewed during the next quarter. While GeoCapital is the SBI's most volatile manager and can be expected to display periods of both above and below benchmark returns, performance on a five year rolling basis has plotted below the VAM graph warning line for several quarters. Staff has a high level of confidence in the ability of the firm to add value over the long term. In light of recent performance, the Committee concurred with the recommendation to re-interview the firm and make a decision on continuation or termination.
- Staff recommended that *Waddell & Reed* be formally re-interviewed during the next quarter. Staff has serious concerns about the manager's ability to add value in the future given Waddell & Reed's poor sector bets. After discussion, the Committee recommended that the SBI terminate its relationship with Waddell & Reed. The firm was formally re-interviewed approximately one year ago and therefore the Committee does not feel an additional re-interview is likely to change staff's recommendation.

Additional detail on the reviews is available from staff, upon request.

RECOMMENDATIONS:

- **In accordance with the SBI's Manager Continuation Policy, the Committee recommends that the SBI convene a special committee to re-interview GeoCapital Corporation. The special committee will make a recommendation to the Board concerning the continuation or termination of the firm. The special committee should be comprised of a designee of each Board member and at least two members of the Domestic Manager Committee.**
- **The Committee recommends that the SBI terminate its contractual relationship with Waddell & Reed.**

4. Review of Emerging Stock Manager Program

The SBI funded the Emerging Manager Program on April 1, 1994 (2.5 years). Since contracts with the firms expire in March 1997, it is appropriate to review results to date and make recommendations on the future structure of the program.

Staff believes that the Emerging Manager Program has been a successful and viable strategy for the SBI. Since inception, the managers have added approximately 1.0% annualized to their aggregate benchmark. Most of the managers have experienced periods of both above and below benchmark returns. Staff noted that the performance of one manager, Cohen, Klingenstein & Marks, has been consistently above benchmark.

Since the Program is seen as a "feeder pool" to the active domestic equity program, the firms in the Program must have the potential to "graduate" to the larger program at some future point. In order to serve as a feeder pool, managers in the Emerging Manager Program should be capable of managing \$200 million or more for the SBI within the foreseeable future. Currently, each manager has a portfolio of approximately \$45 million.

Staff met with all the managers during October 1996. While staff believes most of the emerging managers have the potential to become a manager in the larger active program at some future date, staff has concluded that Kennedy Capital would have difficulty successfully putting a larger sum of money to work quickly for the SBI. Given that Kennedy invests in illiquid, small capitalization stocks, staff is concerned that Kennedy will be unable to find sufficient attractive investment opportunities going forward. Due to these concerns, staff does not believe that Kennedy has the potential to be an active domestic equity manager for the SBI, and therefore should be removed from the Emerging Manager Program.

In the future, staff believes that future managers should have at least \$100 million under management and have an acceptable benchmark in place before being considered for the SBI's Emerging Manager Program.

After discussion, the Committee concurred with the recommendations of staff concerning the program. Staff's complete memo to the Committee begins on page 13.

RECOMMENDATIONS:

The Committee recommends that:

- **The Emerging Manager Program be continued as part of the SBI investment structure for the domestic equity program. Future candidates for the Emerging Manager Program should have at least \$100 million under management and should be required to provide an acceptable benchmark prior to receipt of funding from the SBI.**
- **Kennedy Capital's contract be allowed to expire on March 31, 1997.**
- **The funds from Kennedy Capital be reallocated to Cohen, Klingenstein & Marks (CK&M). In addition, CK&M will be added to the Manager Monitoring Program and be considered as a candidate in future active equity manager searches.**
- **The SBI authorize the Executive Director, with assistance from SBI legal counsel, to negotiate and execute new contracts with the following eight firms for the Emerging Manager Program. All contracts will be for terms of five years and provide for immediate termination:**

CIC Asset Management	Los Angeles, CA
Cohen, Klingenstein & Marks, Inc.	New York, NY
Compass Capital Management	Minneapolis, MN
New Amsterdam Partners	New York, NY
Valenzuela Capital Management	New York, NY
Wilke/Thompson Capital Management, Inc.	Minneapolis, MN
Winslow Capital Management	Minneapolis, MN
Zevenbergen Capital, Inc.	Seattle, WA

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DATE: November 7, 1996

TO: Members, Domestic Manager Committee

FROM: Mike Menssen
Lois Buermann

SUBJECT: Enhancing the Return of the Active Domestic Equity Program

The SBI established its external active domestic stock manager program in 1983. Since its inception, the active domestic equity program has employed a multiple manager format. A number of external managers with different investment styles are retained and each manager is expected to outperform a customized benchmark which represents the manager's unique investment approach.

While individual managers within the active program have outperformed their respective benchmarks over varying periods of time, the program has not met long term performance expectations. Overall, the active managers underperformed the aggregate active manager benchmark by 0.22% annualized since January 1, 1984.

Staff has been working with each active manager to identify enhancements to their investment process that will increase the probability of producing value added returns, over time. As a result of this review, Staff believes it is appropriate for several of the active managers to increase the level of active risk in the SBI account and reduce the number of issues they hold at any point in time. In effect, the manager would hold a more concentrated portfolio and make larger bets with their "best" stock ideas.

Staff would like to discuss this concept with the Committee at its meeting on November 14, 1996.

A summary of recent changes to the domestic equity program is provided as background to the discussion. This is followed by a brief review of the changes anticipated for each active manager in the current program and the impact the changes would have on the total domestic equity program.

Recent Changes to the Domestic Equity Program

Over the last two years, the SBI has made significant changes to the domestic equity program:

- On January 1, 1994 three semi-passive managers (Barclays Global Investors, Franklin, JP Morgan) were hired and allocated approximately one quarter of the total domestic equity program. Their assignment is to manage within a specified risk level using the completeness fund as their benchmark and to provide modest levels of value added, over time.
- On July 1, 1995 the SBI terminated its relationship with its passive manager (Wilshire Asset Management) and hired a replacement (Barclays Global Investors). The benchmark of the passive manager was also changed from the completeness fund to the domestic equity asset class target, i.e., the Wilshire 5000.
- Assets have been withdrawn from the active component of the program to fund the increased allocation to international equities. Two managers were terminated (Lynch & Mayer, Jundt Assoc.) and assets were withdrawn from three others (Alliance, Forstmann-Leff, Waddell & Reed).

The changes have had a positive impact on performance:

- The semi-passive managers, in aggregate, have generated an excess return of 0.68% annualized which exceeds the return expectation of +0.15% to +0.30% annualized.
- The current passive manager's maximum tracking error for any twelve month period has been $\pm 0.16\%$. This compares favorably to the $\pm 0.60\%$ tracking error expectation for any twelve month period. Performance since inception has been +0.13% annualized which exceeds the long term return expectation of -0.10% annualized for an index fund. These results show significant improvement to the returns produced by the prior passive manager which were -0.40% annualized for the previous five years (calendar 1991-94) and -0.22% annualized for previous eleven years (calendar 1984-94).

Currently, the domestic equity program has the following structure:

- The actively managed component is 44.0% of the domestic equity assets. The manager group consists of twelve managers plus nine firms in the Emerging Manager Program.
- The semi-passive portion is 26.5%.
- The passive component is 29.5%.

Diversified vs. Concentrated Portfolios

Most active equity managers construct portfolios which include their best ideas along with other stocks that have less potential for value added. It appears that managers include stocks with lower potential value added for two reasons:

- *To provide diversified investment products to plan sponsors.* While this is beneficial to plan sponsors who retain a single equity manager, it does not have much relevance for the SBI. The SBI's Domestic Equity program is already well diversified with a large passive/ semi-passive component. Further diversification within an active portfolio is not necessary from a total program perspective.
- *To reduce the manager's business risk.* Diversification lowers short term portfolio volatility and thereby reduces the manager's risk of termination due to short term underperformance. From the SBI's perspective, this is counterproductive since this type of diversification may also dilute the manager's ability to produce value added returns over the long term.

These conclusions prompted SBI staff to review each of the current active managers and consider whether moving to a more concentrated portfolio approach is likely to increase the manager's potential to deliver value added to the SBI.

Certain limitations make concentrated portfolios inappropriate for some active managers:

- *Liquidity Constraints.* A manager's investment universe must have enough liquidity to absorb more concentrated holdings in a smaller number of stocks. This limitation eliminated the SBI's small to medium cap managers (Weiss, Peck & Greer, Investment Advisors, GeoCapital, Waddell & Reed).
- *Philosophical Match.* The concentrated portfolio concept would be inappropriate if it would change the manager's underlying investment philosophy and process. This consideration eliminated the managers who focus on adding incremental value across large number of names (Brinson, Independence).

Of the remaining active managers, Alliance Capital, IDS, Lincoln Capital, and Oppenheimer appear to have the best potential for the concentrated portfolio approach. Two other managers, Franklin Portfolio and Forstmann-Leff, have more limited potential. Below is a brief description of how each of these managers would apply the concentrated portfolio concept and the affect the change would have on expected volatility:

Alliance

Historically, Alliance has held 40-60 names in the SBI portfolio. An ongoing part of the Minneapolis office investment process is the construction of a "top 25" list. This list represents the office's best ideas based on input and discussion from all the investment staff at Alliance Capital. Using the concentrated portfolio concept, Alliance will hold 25-30 names for the SBI account. The issues would be the top 25 list plus a few names that are being sold out of the portfolio as they fall off the top 25 list. Based on some preliminary data from Alliance, staff expects that the volatility of value added would increase approximately 49%, i.e. from $\pm 3.5\%$ to $\pm 5.2\%$ annualized.

IDS

In the past, IDS has held 40-60 stocks in the SBI portfolio. In the future, IDS will construct a portfolio of 15-30 equity holdings based on their analysts' highest rated stocks from a list of 60-70 names. To construct the portfolio, they will use an optimization algorithm that provides the best risk to return ratio relative to IDS's benchmark. Based upon some preliminary data from IDS, staff expects that the volatility of value added would increase approximately 50%, i.e. from $\pm 3.8\%$ to $\pm 5.7\%$ annualized.

Lincoln Capital

In the past, Lincoln Capital has held 40-60 stocks in the SBI portfolio. Going forward they plan to hold 25 stocks in the portfolio based on their largest 25 holdings across all client portfolios. Based upon some preliminary data from Lincoln, staff expects that the volatility of value added would increase approximately 29%, i.e. from $\pm 3.4\%$ to $\pm 4.4\%$.

Oppenheimer Capital

Currently, Oppenheimer Capital holds approximately 35 stocks in the SBI portfolio. SBI had discussions with the portfolio manager to communicate the SBI's tolerance for higher risk in the individual active manager's portfolio. Oppenheimer will reduce the number of holdings in the portfolio when they feel that it will produce additional excess returns. Given that Oppenheimer currently runs concentrated portfolios, staff does not expect that volatility relative to their benchmark will increase materially from the current range of $\pm 3.5\%$ to $\pm 4.0\%$.

Franklin Portfolio Associates

Franklin's investment process incorporates sophisticated risk control procedures which allows them to control the risk of the portfolio relative to a pre-assigned benchmark. Historically, Franklin has held about 50-70 stocks in the SBI portfolio with a volatility relative to the benchmark of $\pm 3.0\%$ to $\pm 3.5\%$. Franklin believes volatility of the portfolio could be increased to $\pm 4.0\%$ to $\pm 4.5\%$ without causing any changes to their investment process or philosophy. This would reduce the number of stocks in the portfolio to the 40-50 range and increase expected volatility by 30%.

Forstmann-Leff

Historically, Forstmann-Leff has held about 60-80 stocks in the SBI portfolio. In recent discussions with Forstmann-Leff, it has become apparent that the firm artificially capped some of their favorite stocks due to concern about clients' tolerance for portfolio volatility. After discussion with staff on this issue, the firm expects to increase the active bets on some of their largest holdings. Since they generally purchase larger groups of stocks to execute their sector/industry bets, they do not expect to reduce the overall number of names in the account. If they purchased only a few stocks in a particular sector/industry, they would incur substantial stock specific risk and increase their risk of not obtaining that sector or industry return. Given that Forstmann-Leff is not making significant changes to the SBI's portfolio, staff does not expect that the volatility relative to their benchmark will increase materially from the current range of $\pm 3.5\%$ to $\pm 4.0\%$.

Effect on the Domestic Equity Program

Staff expects that the modifications described above will increase the probability of achieving the SBI's stated return expectations for the actively managed portion of the domestic equity program and therefore justifies the additional active risk that will be taken on by Alliance, IDS and Lincoln. While active risk is expected to increase for these three managers, total program risk should not be affected dramatically; overall projected volatility relative to the Wilshire 5000 is expected to move from $\pm 0.57\%$ to $\pm 0.64\%$. This is due to the broadly diversified program structure already in place with the semi-passive and passive components of the program.

**MINNESOTA
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DATE: November 7, 1996

TO: Members, Domestic Manager Committee

FROM: Mansco Perry III *MP3*

SUBJECT: **Emerging Manager Program Evaluation**

During 1993, the Minnesota State Board of Investment (SBI) established an active domestic equity Emerging Manager program. The purpose of this document is to evaluate the progress of the program, determine its relationship to the SBI's overall domestic equity program, and to establish guidelines and criteria for the future course of the program.

Program Origination

The Emerging Manager Program was created in response to an observation that many active domestic equity managers achieved significant positive value added during their earlier years when they invest fewer assets under management. By retaining newer, younger firms with limited assets under management, the SBI would have an opportunity to capture the potential enhanced performance. Additionally, deployment of such a program might enable the SBI to identify managers that could eventually be added to the SBI's active manager program and manage considerably larger portfolios for the SBI in the future.

At the inception of the program, the SBI defined emerging managers as active domestic equity managers with assets under management of between \$50 million and \$250 million, who had a minimum of 3 years of performance history and who registered as an investment advisor with the Securities and Exchange Commission. In practice, some of the firms hired managed assets in excess of \$250 million at the time they were retained. The SBI has an expectation that the managers will grow their businesses in such a manner that will enable them to manage a "full allocation" of assets for the SBI.

The total assets appropriated to the program, originally, were \$300 million, which reflected the average size of an SBI active domestic equity account in early 1994. Each of the ten managers was given \$30 million to invest for the SBI on April 1, 1994. Of the original ten managers, nine remain. The \$270 million invested with these nine managers has grown to \$426 million after 30 months.

Performance

Each manager was required to establish a customized benchmark within 2 years of initial funding. All firms established benchmarks during that time period and have been actively managing against those benchmarks for all of 1996. Benchmark data has been backdated to provide comparisons since inception. A summary of performance is included in **Attachment A**.

Based on the aggregate performance of the pool of emerging managers through September 1996, the managers have added approximately 100 basis points, on an annualized basis, to their aggregate benchmark. Such performance, albeit over a short time frame, validates our first goal of participating in the strong performance of small firms.

The individual managers have been managing against their customized benchmarks for only the past nine months. Evaluating manager performance against their benchmarks is even more difficult over such a short time period. One manager, Cohen, Klingenstein and Marks, has been a consistent "value adder" since inception. The remaining managers have had varying degrees of success with each manager having different "spurts" of superior and disappointing performance over the last 2.5 years.

Organizational Issues

From a qualitative standpoint, the emerging managers have had one "casualty" since the program commenced. First Capital Advisors was terminated within the first year of funding. The remaining managers appear to have stable businesses with investment processes which remain in accordance with the SBI's initial hiring decisions. Most of the remaining firms have experienced growth in clients assets. Two firms merit special note on this issue, CIC and Kennedy Capital.

- CIC has experienced some deterioration in their asset base. Since the SBI hired CIC, they have lost two clients. One of the lost accounts was for \$70 million and represented more than a third of CIC assets. However, CIC has been hired by 5 new clients and received additional funding by 5 existing clients since that time period. Staff believes that CIC continues to have the potential to be a larger, successful manager.
- Staff has concluded that Kennedy would have difficulty in digesting larger sums from the SBI. Kennedy has doubled its assets under management from \$800 million to \$1.6 billion since receiving funding from the SBI. Given the size of the companies in which Kennedy invests, staff is concerned that Kennedy will be unable to find sufficient attractive investment opportunities going forward. Additionally, Kennedy took four months to invest the initial SBI funding of \$30 million. In discussions with the Kennedy portfolio manager, staff concluded that it would take Kennedy a significant period to invest an additional allocation of \$100 million or more. Given concerns

regarding Kennedy's additional investment capacity and its inability to invest funds quickly, staff does not believe that Kennedy has the potential to be an active domestic equity manager for the SBI.

Future of Program

Staff believes that the Emerging Manager Program has been a successful and viable strategy for the SBI. The Emerging Manager Program is primarily a "feeder" program to the active domestic equity program. The firms in the emerging manager program should have the potential to "graduate" to the larger program at some future point. The program should enable the SBI to be in a better position to fill back when a larger manager is terminated. In order to serve as a feeder pool, managers in the Emerging Manager Program should be capable of managing \$200 million or more within the foreseeable future. Staff believes that future managers in the program should have at least \$100 million under management before being considered. Subsequent to admission to the program, staff should continually monitor the manager's "potential" to be able to manage a larger portfolio for the SBI. Any manager who is deemed to no longer have the potential to absorb additional assets should be a candidate for termination from the program regardless of its past performance.

The SBI's interests may best be served by requiring future manager hires to construct a benchmark prior to receiving funding. Any manager considered for the Emerging Manager Program should understand the need for a custom benchmark and should have the capability of providing performance analysis against their benchmark at all points subsequent to receiving funding from the SBI.

Recommendations

Overall, staff believes that the Emerging Manager Program has been successful and recommends that the program remain a part of the SBI investment structure.

- Staff recommends that the contracts of all the managers in the program except Kennedy Capital be renewed.
- Staff recommends that Kennedy Capital's contract be allowed to end without renewal based on staff's belief that Kennedy does not have the potential to manage a larger allocation of SBI funds.
- Staff recommends that the funds managed by Kennedy remain in the Emerging Manager Program and be reallocated to Cohen, Klingenstein and Marks. Staff also recommends that Cohen be added to the Manager Monitoring Program and be considered as a candidate in future active equity manager searches.

- Staff recommends that the future candidates for the Emerging Manager Program have at least \$100 million under management to be considered.
- Staff recommends that future candidates for the Emerging Manager Program be required to provide an acceptable benchmark prior to receiving funding.

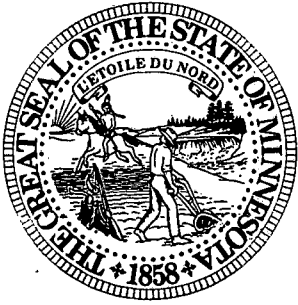
ATTACHMENT A

DOMESTIC EMERGING EQUITY MANAGERS
 Period Ending 9/30/96

Current Managers	Quarter		1 Year		2 years		3 Years		Since Inception (1)		Mkt Value (in millions)	% Pool
	Actual	Bmk	Actual	Bmk	Actual	Bmk	Actual	Bmk	Actual	Bmk		
CIC Assets	2.3	3.7	19.1	20.2	23.8	24.0	19.3	21.2	19.3	21.2	\$46.58	10.9%
Cohen, Klingenstein, & Marks	7.3	4.4	26.4	16.0	25.8	22.8	24.3	19.8	24.3	19.8	\$51.72	12.1%
Compass Capital	3.9	5.6	23.8	26.2	25.6	25.3	21.8	21.3	21.8	21.3	\$49.07	11.5%
Kennedy Capital	-2.6	-1.9	18.1	12.0	19.5	17.7	17.1	15.2	17.1	15.2	\$44.51	10.4%
New Amsterdam	6.8	2.9	20.2	14.4	22.6	20.2	17.3	18.0	17.3	18.0	\$44.67	10.5%
Valenzuela Capital	8.0	2.6	24.2	16.6	22.2	20.6	19.5	18.1	19.5	18.1	\$46.87	11.0%
Wilke \ Thompson	2.7	0.2	6.9	14.8	22.9	20.5	20.2	17.5	20.2	17.5	\$47.49	11.1%
Winslow Capital	5.3	4.2	15.5	18.2	20.5	23.2	19.6	20.3	19.6	20.3	\$46.88	11.0%
Zevenberger Capital	8.5	4.0	23.4	17.9	26.3	23.5	21.1	20.6	21.1	20.6	\$48.39	11.4%
Historical Aggregate	4.6	2.8 *	19.5	17.5 *	23.3	22.3 *	19.9	19.4 *	19.9	19.4 *	\$426.17	100.0%
Current Aggregate	4.6	2.8 *	19.5	17.5 *	23.3	22.1 *	20.2	19.2 *	20.2	19.2 *		

(1) Inception date for all managers is 4/1/94

* weighted average of above benchmarks



STATE BOARD OF INVESTMENT

Stock Manager Evaluation Reports

Third Quarter, 1996

DOMESTIC STOCK MANAGERS
Period Ending 9/30/96

Current Managers	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 %		
Alliance	3.1	4.6	15.6	19.8	16.3	17.9	16.9	14.1	17.6	13.0	\$820.69	6.0%
Brinson	3.6	3.3	23.7	17.5	18.8	15.6			18.2	15.7	\$427.32	3.1%
Forstmann-Leff	2.5	4.0	25.1	18.6	15.4	16.3		12.7	14.4	13.6	\$454.22	3.3%
Franklin Portfolio	3.7	2.8	15.4	16.4	14.8	15.4		17.0	15.7	14.9	\$566.90	4.2%
GeoCapital	1.2	-1.5	14.3	15.2	14.0	19.1		14.2	19.4	16.3	\$377.25	2.8%
IAI	-1.8	2.9	15.6	16.5	13.1	15.9			15.3	16.5	\$165.75	1.2%
IDS	7.2	4.9	23.4	21.9	17.4	18.2		16.9	17.6	15.5	\$581.87	4.3%
Independence	1.3	3.1	16.4	20.8	15.5	17.5			14.9	15.4	\$558.30	4.1%
Lincoln	4.4	4.8	28.1	24.5	22.0	20.3			20.4	18.8	\$442.92	3.2%
Oppenheimer	5.7	3.9	23.6	20.5	19.5	16.2			19.4	16.0	\$441.53	3.2%
Waddell & Reed	3.6	3.6	9.7	14.9	11.9	16.3		14.2	16.0	12.5	\$439.70	3.2%
Weiss Peck & Greer	0.8	0.8	26.1	9.5	14.7	15.1			16.5	16.7	\$331.36	2.4%
Emerging Managers (2)	4.6	2.8	19.5	18.4					19.9	21.2	\$426.17	3.1%
Semi-Passive (3)												
Franklin Portfolio	2.4	2.2	17.5	18.6					26.5	27.0	\$1,171.36	8.6%
JP Morgan	1.9	2.2	18.6	18.6					27.3	27.0	\$1,211.03	8.9%
Barclays Global Investors	2.4	2.2	19.2	18.6					29.3	27.0	\$1,218.67	8.9%
Passive (4)												
Barclays Global Investors	3.0	2.8	19.1	18.9					29.2	29.0	\$4,013.17	29.4%
									Since 1/1/84			
Current Aggregate	2.9	2.9	19.0	18.6	16.0	17.0	16.0	15.6	15.8	13.9	\$13,648.20	100.0%
Historical Aggregate (5)	2.9	2.9	18.7	18.7	15.5	16.5	14.9	15.3	14.3	14.5		
Wilshire Adjusted		2.8		18.9		16.4		15.3		14.6		
Wilshire 5000		2.8		18.9		16.3		15.3		14.8		

- (1) Since retention by the SBI. Time period varies for each manager.
(2) Aggregate of emerging manager group.
(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.

ALLIANCE CAPITAL MANAGEMENT
Period Ending 9/30/96

Portfolio Manager: Jack Koltes

Assets Under Management: \$820,693,226

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.

**Qualitative Evaluation
(reported by exception)**

Exceptional strengths:

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

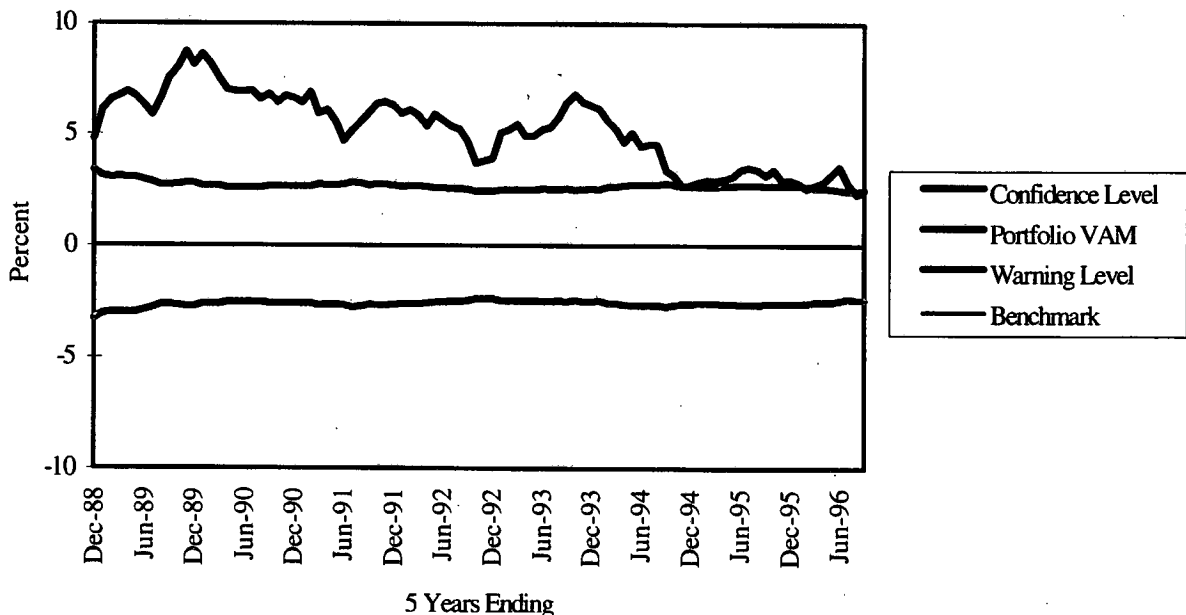
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	3.1%	4.6%
Last 1 year	15.6	19.8
Last 2 years	25.9	25.4
Last 3 years	16.3	17.9
Last 4 years	17.0	15.3
Last 5 years	16.9	14.1
Since Inception (1/84)	17.6	13.0

Recommendation

No action required.

ALLIANCE CAPITAL MANAGEMENT
Rolling Five Year Time Periods



Note: Graph uses 80/20 confidence interval.

BRINSON PARTNERS
Period Ending 9/30/96

Portfolio Manager: Jeff Diermeier

Assets Under Management: \$427,323,206

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 that 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.

**Qualitative Evaluation
 (reported by exception)**

Exceptional strengths:

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

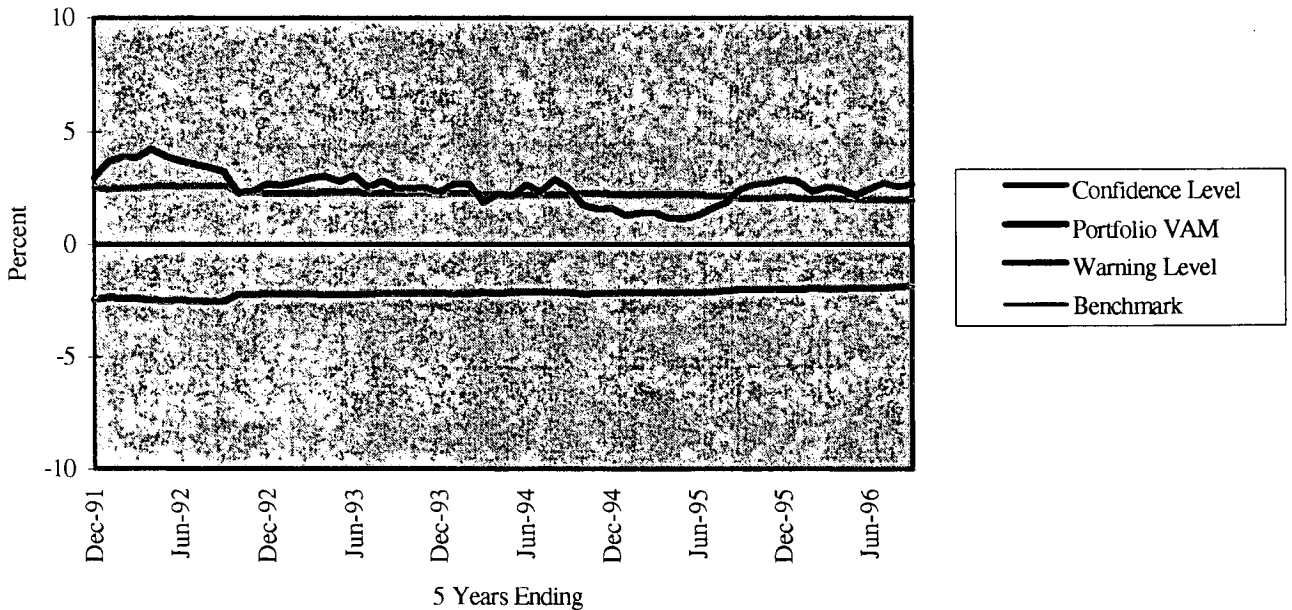
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	3.6%	3.3%
Last 1 year	23.7	17.5
Last 2 years	25.2	22.5
Last 3 years	18.8	15.6
Last 4 years	N.A.	N.A.
Last 5 years	N.A.	N.A.
Since Inception (7/93)	18.2	15.7

Recommendation

No action required.

BRINSON PARTNERS
 Rolling Five Year Time Periods



Note: Shaded area includes performance prior to managing the SBI account.
 Graph uses 80/20 confidence interval.

FORSTMANN LEFF ASSOCIATES
Period Ending 9/30/96

Portfolio Manager: Joel Leff

Assets Under Management: \$454,222,430

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.

Qualitative Evaluation
(reported by exception)

Exceptional strengths:

- Highly successful and experienced leadership.
- Well acquainted with needs of large clients.

Concerns:

- Portfolio VAM appears to have diminished, over time.

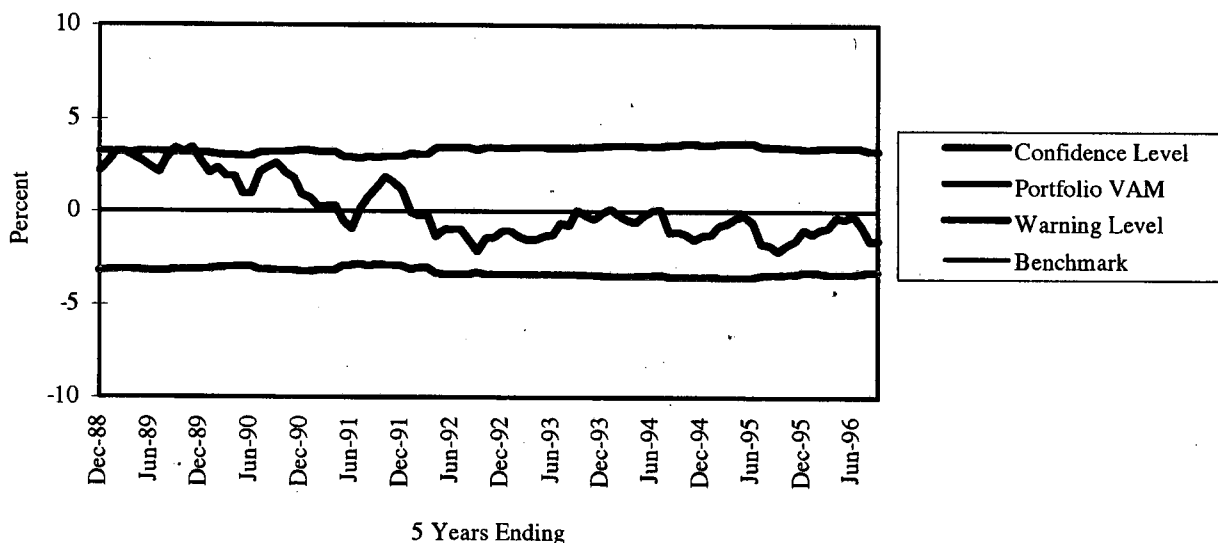
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	2.5%	4.0%
Last 1 year	25.1	18.6
Last 2 years	24.2	22.5
Last 3 years	15.4	16.3
Last 4 years	16.6	15.8
Last 5 years	12.7	14.4
Since Inception (1/84)	13.6	12.9

Recommendation

In accordance with SBI's Manager Continuation Policy, Forstmann-Leff is currently under review by staff and the Domestic Manager Committee because their rolling 5 year VAM line has been below the benchmark line for twelve months.

FORSTMANN-LEFF ASSOCIATES
Rolling Five Year Time Periods



Note: Graph uses 80\20 confidence interval.

FRANKLIN PORTFOLIO ASSOCIATES
Period Ending 9/30/96

Portfolio Manager: John Nagorniak

Assets Under Management: \$566,895,078

Investment Philosophy

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. They use the BARRA E.2 risk model to monitor the portfolio's systematic risk and industry weightings relative to the selected benchmark to achieve a residual risk of 3.0% to 3.5 for the active portfolio.

Qualitative Evaluation
(reported by exception)

Exceptional strengths:

- Familiar with the needs of large institutional clients.
- Firms investment approach has been consistently applied over a number of markets cycles.
- Highly successful and experienced professionals.
- Organizational continuity and strong leadership.

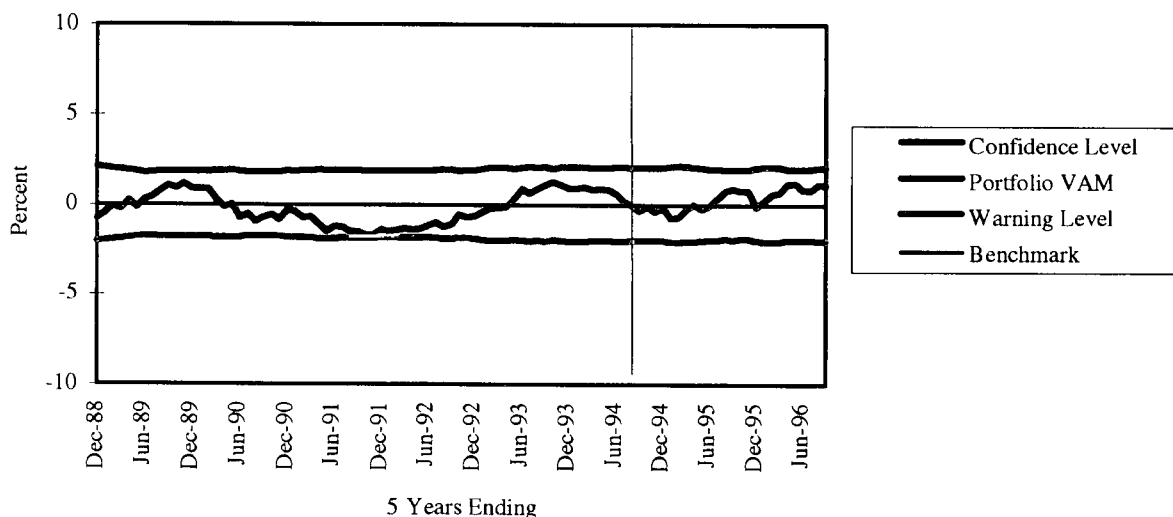
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	3.7%	2.8%
Last 1 year	15.4	16.4
Last 2 years	23.3	22.3
Last 3 years	14.8	15.4
Last 4 years	18.3	16.6
Last 5 years	17.0	15.7
Since Inception (4/89)	14.9	14.2

Recommendation

No action required.

FRANKLIN PORTFOLIO ASSOCIATES
Rolling Five Year Time Periods



Note: Area through 6/94 includes performance prior to managing SBI account. Graph uses 80/20 confidence interval. Area to the left of the vertical line includes performance prior to retention by the SBI.

GEOCAPITAL CORP.
Period Ending 9/30/96

Portfolio Manager: Barry Fingerhut

Assets Under Management: \$377,247,925

Investment Philosophy

GeoCapital invests primarily in small capitalization equities with the intent to hold them as they grow into medium and large capitalization companies. The firm uses a theme approach and an individual stock selection analysis to invest in the growth/technology and intrinsic value areas of the market. In the growth/technology area, GeoCapital looks for companies that will have above average growth due to a good product development and limited competition. In the intrinsic value area, the key factors in this analysis 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 the lack of attractive investment opportunities.

**Qualitative Evaluation
 (reported by exception)**

Exceptional strengths:

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

Concerns:

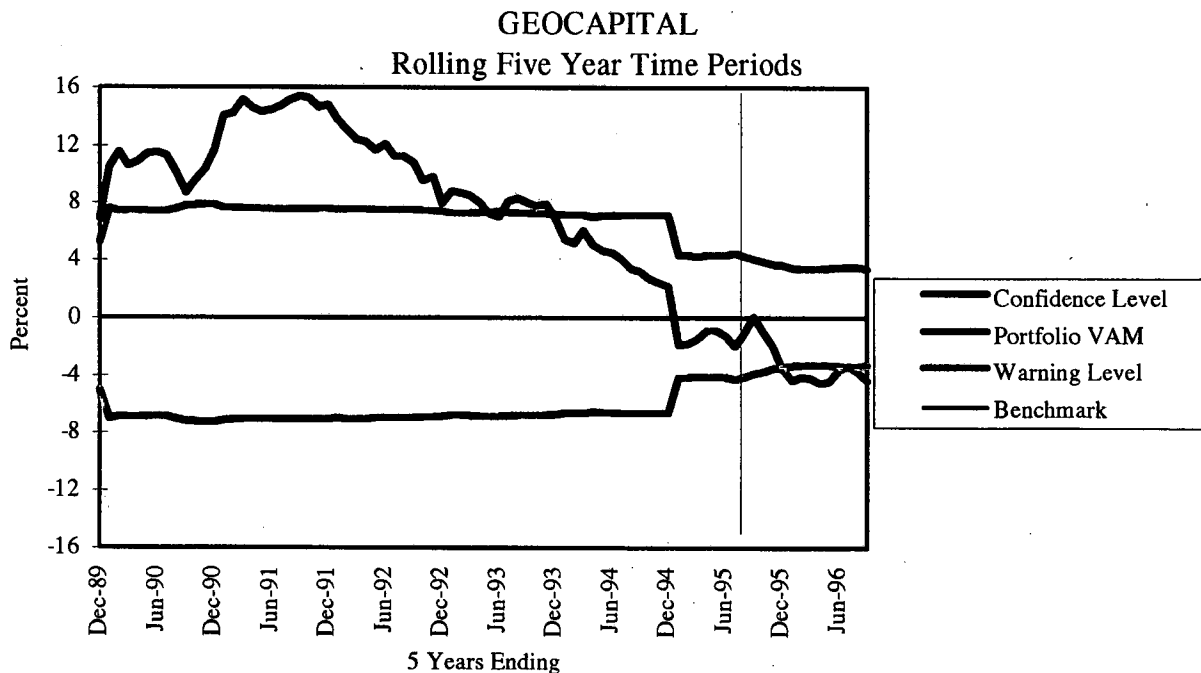
- Performance continues to lag expectations.

Quantitative Evaluation

	Actual	Benchmark
Last Quarter	1.2%	-1.5%
Last 1 year	14.3	15.2
Last 2 years	20.4	25.1
Last 3 years	14.0	19.1
Last 4 years	17.4	23.9
Last 5 years	14.2	19.4
Since Inception (4/90)	16.3	18.3

Recommendation

In accordance with SBI's Manager Continuation Policy, GeoCapital is currently under review by staff and the Domestic Manager Committee because their rolling 5 year VAM line has been below the benchmark line for twelve months.



Note: Area through 6/95 includes performance prior to managing SBI account. Scale differs from other manager VAM graphs. Graph uses 80/20 confidence interval. Area to the left of vertical line includes performance prior to retention by the SBI.

INVESTMENT ADVISERS INC.

Period Ending 9/30/96

Portfolio Manager: Mark Hoonsbeen

Assets Under Management: \$165,748,293

Investment Philosophy

IAI's investment philosophy is to own the highest quality companies which demonstrate sustainable growth. IAI tries to achieve this objective by investing at least 80% of the portfolio in companies which have their headquarters in Minnesota, Wisconsin, Illinois, Iowa, Nebraska, Montana, North Dakota and South Dakota. Twenty percent of the portfolio can be used to purchase if IAI cannot find enough investment opportunities in the region, stocks that display the same quality and growth characteristics but have headquarters outside this region.

**Qualitative Evaluation
(reported by exception)**

Exceptional strengths:

- Attractive, unique investment approach.
- Investment style successfully applied over a number of market cycles.

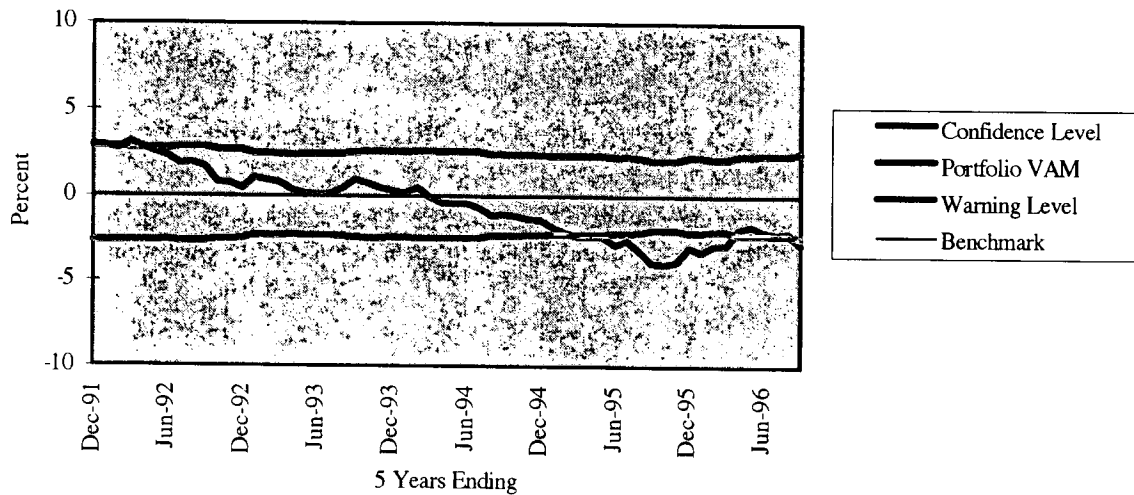
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	-1.8%	2.9%
Last 1 year	15.6	16.5
Last 2 years	20.2	22.3
Last 3 years	13.1	15.9
Last 4 years	N.A.	N.A.
Last 5 years	N.A.	N.A.
Since Inception (7/93)	15.3	16.5

Recommendation

In accordance with the SBI's Manager Continuation Policy, IAI is currently under review by staff and the Domestic Manager Committee because their rolling 5 year VAM line has been below the benchmark line for the last twelve months.

**INVESTMENT ADVISERS INC.
Rolling Five Year Time Periods**



Note: Shaded area includes performance prior to managing the SBI account.
Graph uses 80/20 confidence interval.

IDS ADVISORY
Period Ending 9/30/96

Portfolio Manager: Pete Anderson

Assets Under Management: \$581,872,121

Investment Philosophy

IDS employs a "rotational" style of management, shifting among industry sectors based upon its outlook for the economy and the financial markets. The firm emphasizes primarily sector and industry weighting decisions. After the sector weightings have been determined IDS will select the best companies in those sectors based on fundamental analysis by their in-house analysts to reach the desired weightings. Moderate market timing is also used. Over a market cycle, IDS will invest in a wide range of industries. It tends to buy liquid, large capitalization stocks. While IDS will make occasional significant asset mix shifts over a market cycle, the firm is a less aggressive market timer than most rotational managers.

Qualitative Evaluation
(reported by exception)

Exceptional strengths:

- Investment style consistently and successfully applied over a variety of market environments.
- Familiar with the needs of large institutional clients.

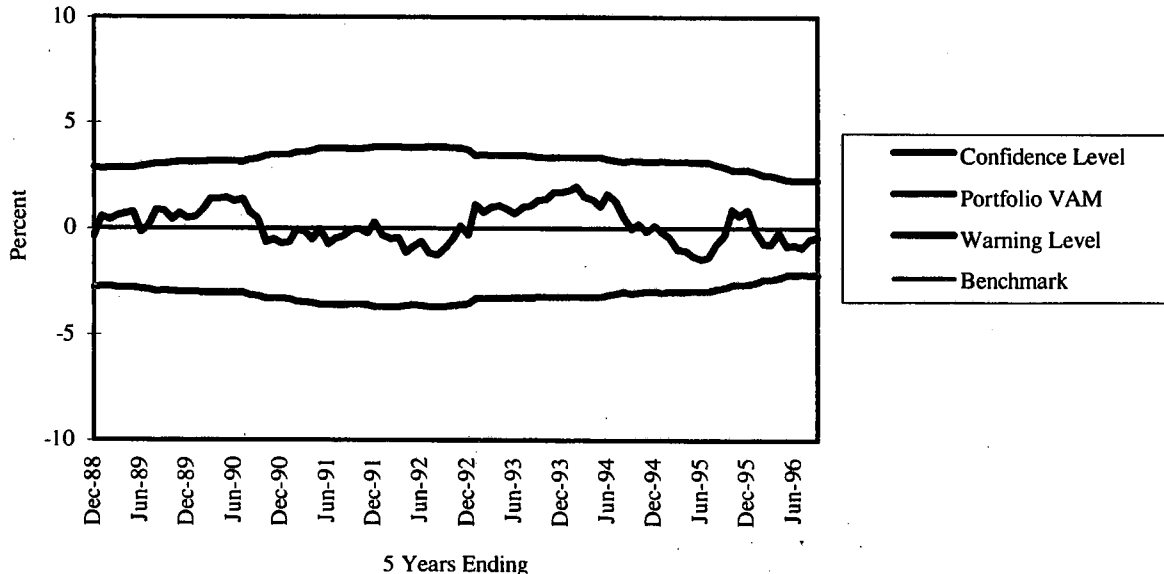
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	7.2%	4.9%
Last 1 year	23.4	21.9
Last 2 years	25.4	26.2
Last 3 years	17.4	18.2
Last 4 years	18.0	18.4
Last 5 years	16.9	17.6
Since Inception (1/84)	15.5	15.3

Recommendation

No action required.

IDS ADVISORY
Rolling Five Year Time Periods



Note: Graph uses 80\20 confidence interval.

INDEPENDENCE INVESTMENT ASSOCIATES
Period Ending 9/30/96

Portfolio Manager: Bill Fletcher

Assets Under Management: \$558,300,033

Investment Philosophy

Independence believes that individual stocks which outperform the market always have two characteristics: they are intrinsically cheap and their business is in the process of improving. Independence ranks their universe using a multifactor model. Based on input primarily generated by their internal analysts, the model ranks each stock based on 10 discreet criteria. Independence constricts their portfolio to the top 60% of their ranked universe. The portfolio is optimized relative to the benchmark selected by the client to minimize the market and industry risks. Independence maintains a fully invested portfolio and rarely holds more than a 1% cash position.

**Qualitative Evaluation
(reported by exception)**

Exceptional strengths:

- Attractive, unique investment approach.
- Highly successful and experienced professionals.

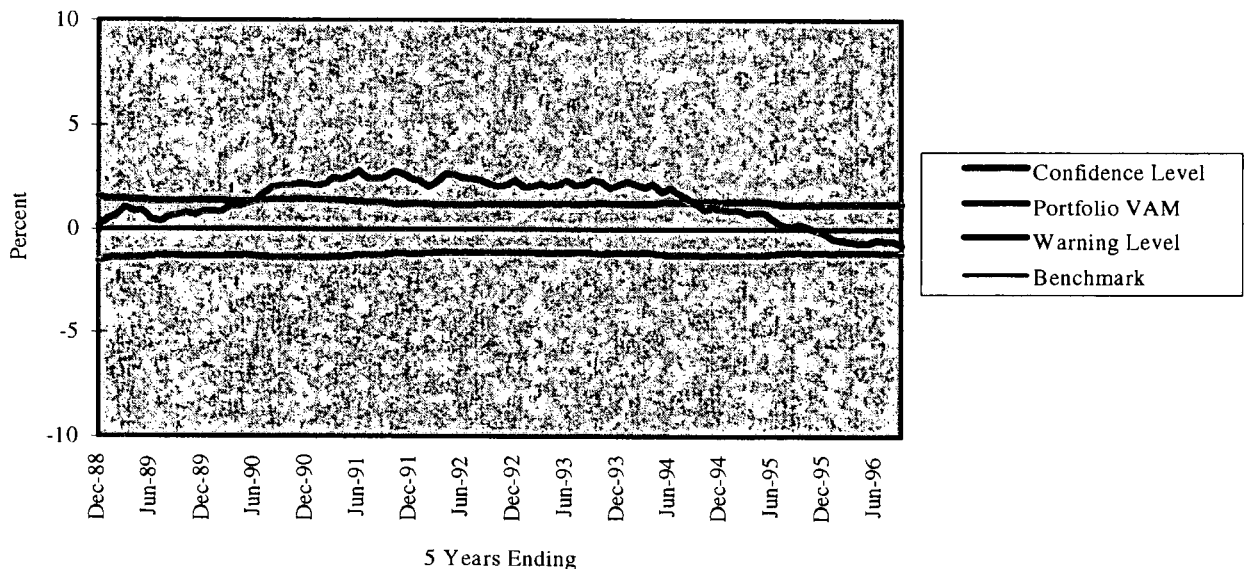
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	1.3%	3.1%
Last 1 year	16.4	20.8
Last 2 years	23.3	25.3
Last 3 years	15.5	17.5
Last 4 years	16.2	16.6
Last 5 years	N.A.	N.A.
Since Inception (2/92)	14.9	15.4

Recommendation

No action required.

INDEPENDENCE INVESTMENT ASSOCIATES
Rolling Five Year Time Periods



Note: Shaded area includes performance prior to managing SBI account.
 Graph uses 80/20 confidence interval.

LINCOLN CAPITAL MANAGEMENT
Period Ending 9/30/96

Portfolio Manager: Parker Hall

Assets Under Management: \$442,916,046

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.

**Qualitative Evaluation
 (reported by exception)**

Exceptional strengths are:

- Organizational continuity and strong leadership.
- Familiar with the needs of large clients.
- Investment style has been consistently applied over a number of market cycles.

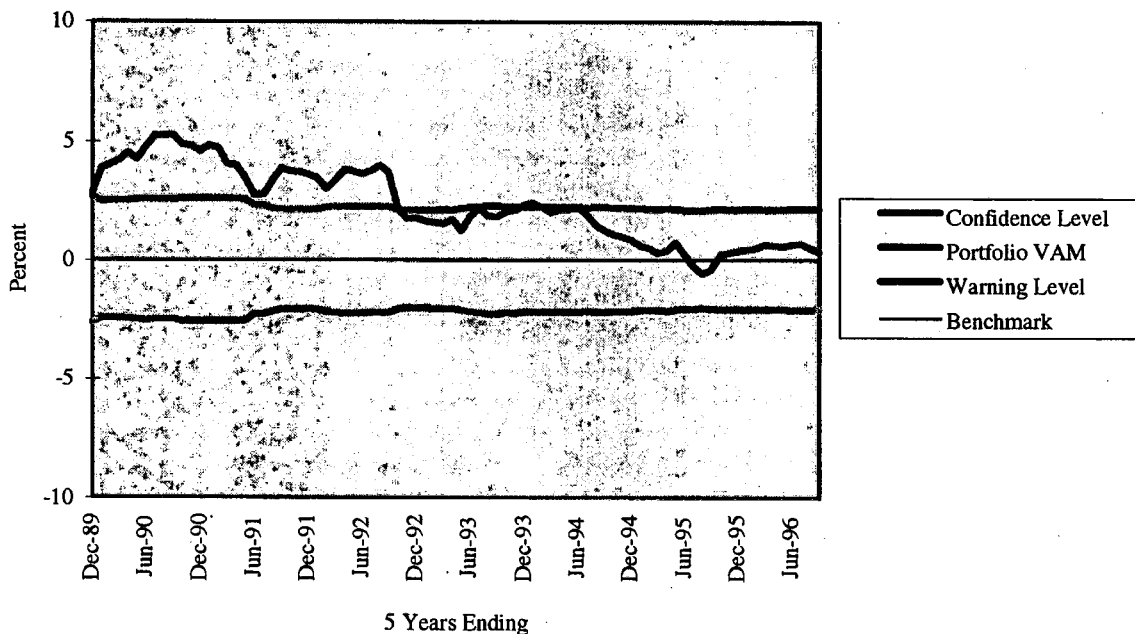
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	4.4%	4.8%
Last 1 year	28.1	24.5
Last 2 years	31.2	27.8
Last 3 years	22.0	20.3
Last 4 years	N.A.	N.A.
Last 5 years	N.A.	N.A.
Since Inception (7/93)	20.4	18.8

Recommendation

No action required.

LINCOLN CAPITAL MANAGEMENT
Rolling Five Year Time Periods



Note: Shaded area includes performance prior to managing the SBI account.
 Graph uses 80/20 confidence interval.

OPPENHEIMER CAPITAL
Period Ending 9/30/96

Portfolio Manager: John Lindenthal

Assets Under Management: \$441,533,153

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.

Qualitative Evaluation
(reported by exception)

Exceptional strengths are:

- Highly successful and experienced professionals.
- Familiar with the needs of large institutional clients.
- Investment style has been consistently applied over a number of market cycles.

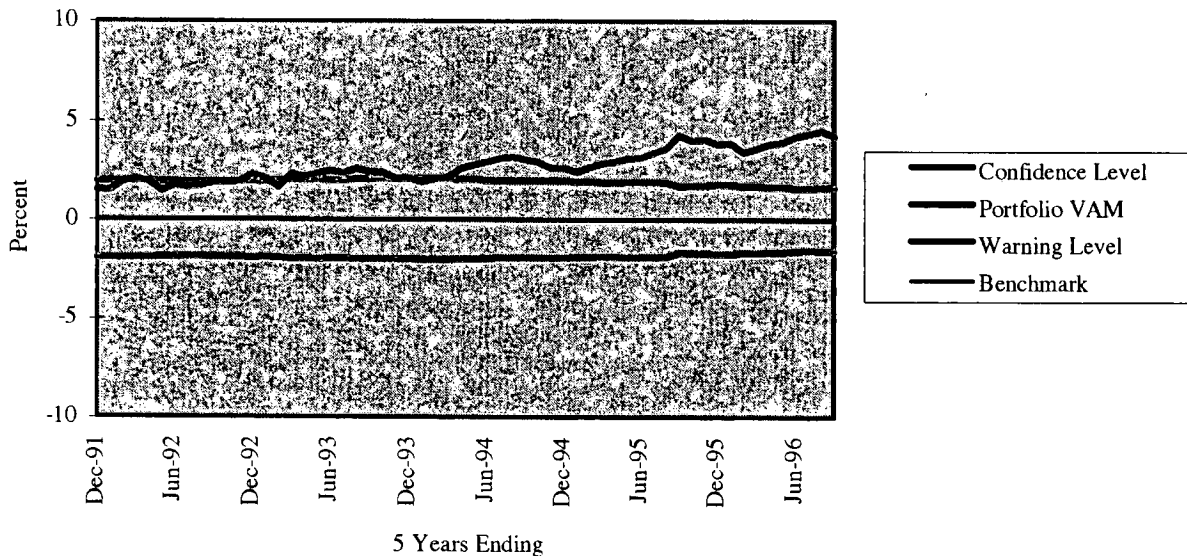
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	5.7%	3.9%
Last 1 year	23.6	20.5
Last 2 years	28.9	23.6
Last 3 years	19.5	16.2
Last 4 years	N.A.	N.A.
Last 5 years	N.A.	N.A.
Since Inception (7/93)	19.4	16.0

Recommendation

No action required.

OPPENHEIMER CAPITAL
Rolling Five Year Time Periods



Note: Shaded area includes performance prior to managing the SBI account.
 Graph uses 80/20 confidence interval.

WADDELL & REED ASSET MANAGEMENT
Period Ending 9/30/96

Portfolio Manager: Henry Herrmann

Assets Under Management: \$439,701,363

Investment Philosophy

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

**Qualitative Evaluation
 (reported by exception)**

Exceptional strengths are:

—Highly successful and experienced professionals.

Current concerns are:

—Significant organizational changes have occurred at the firm in the past year.

—Performance continues to lag expectations.

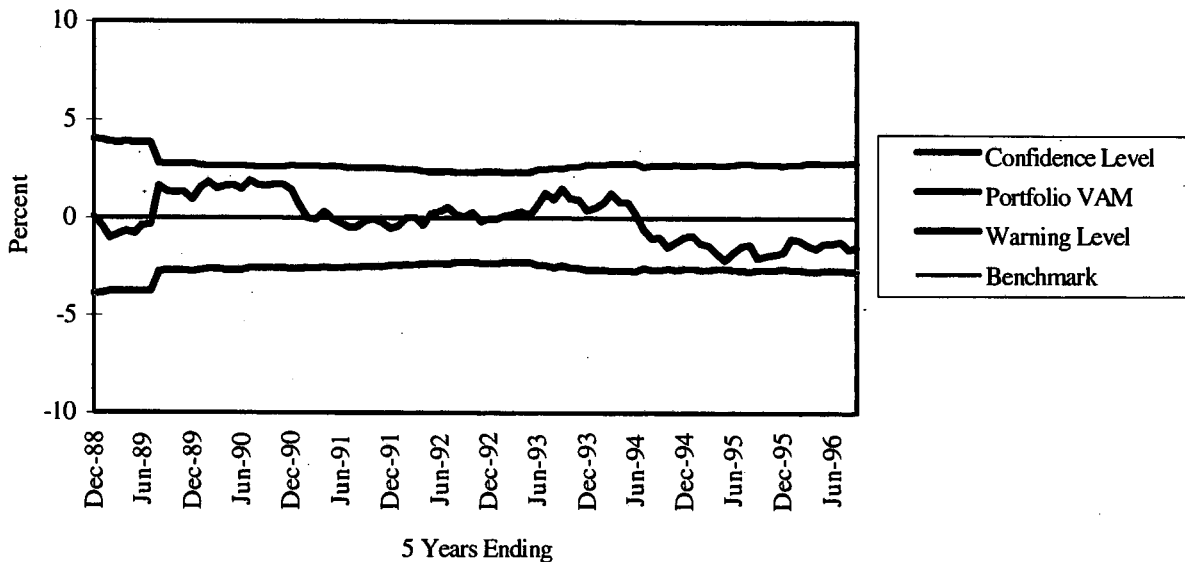
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	3.6%	3.6%
Last 1 year	9.7	14.9
Last 2 years	17.5	21.1
Last 3 years	11.9	16.3
Last 4 years	15.2	18.1
Last 5 years	14.2	16.0
Since Inception (1/84) (1/84)	12.5	12.8

Recommendation

In accordance with the SBI's Manager Continuation Policy, Waddell & Reed is currently under review by staff and the Domestic Manager Committee because their rolling 5 year VAM line has been below the benchmark line for the past twelve months.

WADDELL & REED ASSET MANAGEMENT
Rolling Five Year Time Periods



Note: Graph uses 80/20 confidence interval.

WEISS, PECK & GREER
 Period Ending 9/30/96

Portfolio Manager: Melville Straus

Assets Under Management: \$331,356,339

Investment Philosophy

Weiss, Peck & Greer's dynamic growth process concentrates on small to medium size growth companies that have demonstrated consistent superior earnings growth rates. The process emphasizes companies in new or dynamic, rapidly growing industries where there is a potential for a major acceleration in earnings growth. The firm also believes that superior stock selection can be achieved through in-depth fundamental company research.

**Qualitative Evaluation
 (reported by exception)**

Exceptional strengths are:

- Highly successful and experienced professionals.
- Investment style has been consistently applied over a number of market cycles.

Concerns:

- Performance pattern has been very volatile, over time.

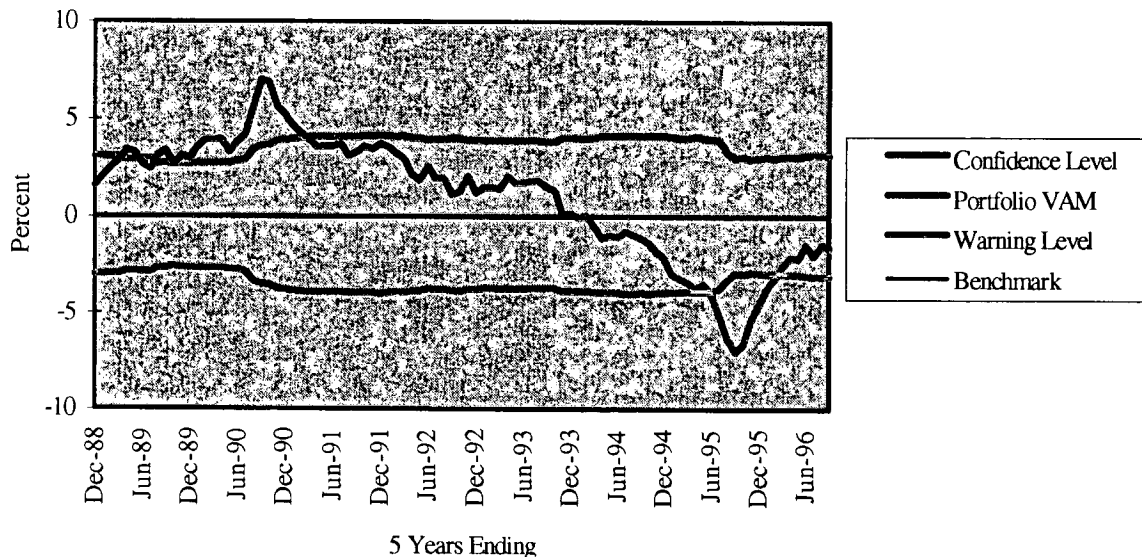
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	0.8%	0.8%
Last 1 year	26.1	9.5
Last 2 years	26.9	22.9
Last 3 years	14.7	15.1
Last 4 years	N.A.	N.A.
Last 5 years	N.A.	N.A.
Since Inception (7/93)	16.5	16.7

Recommendation

In accordance with SBI's Manager Continuation Policy, Weiss, Peck & Greer is currently under review by staff and the Domestic Manager Committee, because their rolling 5 year VAM line has been below the benchmark line for the past twelve months.

WEISS, PECK & GREER
 Rolling Five Year Periods



Note: Shaded area includes performance prior to managing the SBI account.
 Graph uses 80/20 confidence interval.

FRANKLIN PORTFOLIO ASSOCIATES

Period Ending 9/30/96

Portfolio Manager: John Nagorniak

Assets Under Management: \$1,171,358,410

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, 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. They use the BARRA E.2 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.

Qualitative Evaluation (reported by exception)

Exceptional strengths are:

- Familiar with the needs of large institutional clients.
- Firm's investment approach has been consistently applied over a number of markets cycles.
- Highly successful and experienced professionals.
- Organizational continuity and strong leadership.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	2.4%	2.2%
Last 1 year	17.5	18.6
Last 2 years	N.A.	N.A.
Last 3 years	N.A.	N.A.
Last 4 years	N.A.	N.A.
Last 5 years	N.A.	N.A.
Since Inception (1/95)	26.5	27.0

Recommendation

No action required.

* Completeness Fund

VAM graph will be created for period ending 12/31/96.

J.P. MORGAN INVESTMENT MANAGEMENT, INC.
Period Ending 9/30/96

Portfolio Manager: Rick Nelson

Assets Under Management: \$1,211,034,174

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 these 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 sector. Stocks most undervalued are placed in the first quintile. The portfolio includes stocks from the first four quintiles always favoring the highest ranked stocks whenever possible and sells those in the fifth quintile. In addition, the portfolio will closely approximate the sector, style, and security weightings of the index chosen by the plan sponsor. The firm remains fully invested at all times.

Qualitative Evaluation
(reported by exception)

Exceptional strengths are:

- Familiar with the needs of large institutional clients.
- Highly successful and experienced professionals.
- Organizational continuity and strong leadership.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	1.9%	2.2%
Last 1 year	18.6	18.6
Last 2 years	N.A.	N.A.
Last 3 years	N.A.	N.A.
Last 4 years	N.A.	N.A.
Last 5 years	N.A.	N.A.
Since Inception (1/95)	27.3	27.0

Recommendation

* No action required.

* Completeness Fund

VAM graph will be created for period ending 12/31/96.

BARCLAYS GLOBAL INVESTORS

Period Ending 9/30/96

Portfolio Manager: Nancy Feldkircher

Assets Under Management: \$1,218,669,838

Investment Philosophy

Semi-Passive

The Core Alpha Model desegregates individual equity returns for each of the 3500 stocks in their universe into three components (fundamental, expectation, and technical). 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. An alpha is then calculated. The estimated alphas are used in a portfolio optimization algorithm to identify the optimal portfolio.

Qualitative Evaluation

(reported by exception)

Exceptional strengths are:

- Familiar with the needs of large institutional clients.
- Highly successful and experienced professionals.
- Attractive, unique investment approach.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	2.4%	2.2%
Last 1 year	19.2	18.6
Last 2 years	N.A.	N.A.
Last 3 years	N.A.	N.A.
Last 4 years	N.A.	N.A.
Last 5 years	N.A.	N.A.
Since Inception (1/95)	29.3	27.0

Recommendation

No action required.

* Completeness Fund

VAM graph will be created for period ending 12/31/96.

BARCLAYS GLOBAL INVESTORS
Period Ending 9/30/96

Portfolio Manager: Andrew R. Olma

Assets Under Management: \$4,013,166,371

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.

Qualitative Evaluation
(reported by exception)

Exceptional strengths are:

- Familiar with the needs of large institutional clients.
- Highly successful and experienced professionals.

Quantitative Evaluation

	Actual	Benchmark
Last Quarter	3.0%	2.8%
Last 1 year	19.1	18.9
Last 2 years	N.A.	N.A.
Last 3 years	N.A.	N.A.
Last 4 years	N.A.	N.A.
Last 5 years	N.A.	N.A.
Since Inception (7/95)	29.2	29.0

Recommendation

No action required.

Tracking graph will be created for period ending 7/31/97.

GE INVESTMENT MANAGEMENT - Assigned Risk Plan
Period Ending 9/30/96

Portfolio Manager: Gene Bolton

Assets Under Management: \$145,792,453

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. Five portfolio managers with different styles ranging from growth to value are supported by 10 industry analysts. The five 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 prospective.

Qualitative Evaluation
(reported by exception)

Exceptional strengths are:

- Familiar with the needs of large institutional clients.
- Firms investment approach has been consistently applied over a number of markets cycles.
- Highly successful and experienced professionals.
- Organizational continuity and strong leadership.

Quantitative Evaluation

	Actual	Benchmark
Last Quarter	2.5%	3.1%
Last 1 year	19.2	20.5
Last 2 years	N.A.	N.A.
Last 3 years	N.A.	N.A.
Last 4 years	N.A.	N.A.
Last 5 years	N.A.	N.A.
Since Inception (1/95)	27.9	29.1

Recommendation

No action required.

VAM graph will be created for period ending 12/31/96.

INTERNAL STOCK POOL - Trust/Non-Retirement Assets
Period Ending 9/30/96

Portfolio Manager: Mike Menssen

Assets Under Management: \$73,273,658

Investment Philosophy
Environmental Trust Fund

The Internal Equity Pool is managed to closely track the S&P 500 Index. The strategy used replicates the S&P 500 by owning all of the names in the index at the weightings of the index. The optimization model's estimate of tracking error with this strategy is approximately 10 basis points per year.

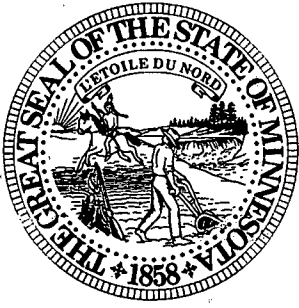
Qualitative Evaluation
(reported by exception)

Quantitative Evaluation

Recommendation

	Actual	Benchmark	
Last Quarter	3.1%	3.1%	No action required.
Last 1 year	20.4	20.5	
Last 2 years	25.0	25.1	
Last 3 years	17.5	17.5	
Last 4 years	N.A.	N.A.	
Last 5 years	N.A.	N.A.	
Since Inception (7/93)	17.0	17.0	

Tracking graph will be created for period ending 6/30/98.



STATE BOARD OF INVESTMENT

Emerging Stock Manager Evaluation Reports

Third Quarter, 1996

EMERGING EQUITY MANAGERS

Period Ending 9/30/96

Current Managers	Quarter		1 Year		3 years		5 Years		Since Inception		Market Value (in millions)	Pool %
	Actual Bmk %	Bmk %	Actual Bmk %	Bmk %	Actual Bmk %	Bmk %	Actual Bmk %	Bmk %	Actual Bmk %	Bmk %		
CIC Assets	2.3	3.7	19.1	20.2					19.3	21.2	\$46.58	10.9%
Cohen, Klingenstein, & Marks	7.3	4.4	26.4	16.0					24.3	19.8	51.72	12.1%
Compass Capital	3.9	5.6	23.8	26.2					21.8	21.3	49.07	11.5%
Kennedy Capital	-2.6	-1.9	18.1	12.0					17.1	15.2	44.51	10.4%
New Amsterdam	6.8	2.9	20.2	14.4					17.3	18.0	44.67	10.5%
Valenzuela Capital	8.0	2.6	24.2	16.6					19.5	18.1	46.87	11.0%
Wilke/Thompson	2.7	0.2	6.9	14.8					20.2	17.5	47.49	11.1%
Winslow Capital	5.3	4.2	15.5	18.2					19.6	20.3	46.88	11.0%
Zevenbergen Capital	8.5	4.0	23.4	17.9					21.1	20.6	48.39	11.4%
											\$426.17	100.0%
Current Aggregate	4.6	2.8 *	19.5	17.5 *					20.2	19.2 *		
Historical Aggregate	4.6	2.8 *	19.5	17.5 *					19.9	19.4 *		

Note:

Inception date for all managers is 4/1/94.

* Weighted average of above benchmarks.

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CIC ASSET MANAGEMENT
Period Ending 9/30/96

Portfolio Manager: Jorge Castro

Assets Under Management: \$46,577,573.53

Investment Philosophy

CIC Asset Management (CIC) uses a disciplined relative value approach to managing 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 analyses.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	2.3%	3.7%
Last 1 Year	19.1	20.2
Last 2 Years	23.8	24.0
Since Inception (4/94)	19.3	21.2

* Custom benchmark since inception date.

COHEN KLINGENSTEIN & MARKS INCORPORATED
Period Ending 9/30/96

Portfolio Manager: George Cohen

Assets Under Management: \$51,718,704.09

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.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	7.3%	4.4%
Last 1 Year	26.4	16.0
Last 2 Years	25.8	22.8
Since Inception (4/94)	24.3	19.8

* Custom benchmark since inception date.

COMPASS CAPITAL MANAGEMENT
Period Ending 9/30/96

Portfolio Manager: Charles Kelley

Assets Under Management: \$49,067,151.34

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 companies whose earnings have grown well 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 hold no utility, bank, deep cyclical (auto companies for example), or oil and gas stocks.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	3.9%	5.6%
Last 1 Year	23.8	26.2
Last 2 Years	25.6	25.3
Since Inception (4/94)	21.8	21.3

* Custom benchmark since inception date.

KENNEDY CAPITAL MANAGEMENT
Period Ending 9/30/96

Portfolio Manager: Richard Sinise

Assets Under Management: \$44,508,140.45

Investment Philosophy

Kennedy Capital Management (KCM) is dedicated to exploiting pricing inefficiencies in under-followed and misunderstood small capitalization stocks. They believe that stocks are efficiently priced where there is a proper distribution of information. However, many emerging growth companies suffer from lack of analytical coverage and information flow, and therefore, are "invisible" to institutional investors. KCM believes it is this lack of information which creates pricing inefficiencies. They anticipate that by closing this information gap they can transform these holdings into attractive institutional candidates. This, in turn, will increase the price of the stock.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	-2.6%	-1.9%
Last 1 Year	18.1	12.0
Last 2 Years	19.5	17.7
Since Inception (4/94)	17.1	15.2

* Custom benchmark since inception date.

NEW AMSTERDAM PARTNERS

Period Ending 9/30/96

Portfolio Manager: Michelle Clayman

Assets Under Management: \$44,665,514.24

Investment Philosophy

New Amsterdam Partners believe 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.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	6.8%	2.9%
Last 1 Year	20.2	14.4
Last 2 Years	22.6	20.2
Since Inception (4/94)	17.3	18.0

* Custom benchmark since inception date.

VALENZUELA CAPITAL MANAGEMENT

Period Ending 9/30/96

Portfolio Manager: Tom Valenzuela

Assets Under Management: \$46,871,709.98

Investment Philosophy

Valenzuela Capital Management's (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 believe 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.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	8.0%	2.6%
Last 1 Year	24.2	16.6
Last 2 Years	22.2	20.6
Since Inception (4/94)	19.5	18.1

* Custom benchmark since inception date.

WILKE/THOMPSON CAPITAL MANAGEMENT INC.
Period Ending 9/30/96

Portfolio Manager: Mark Thompson

Assets Under Management: \$47,485,370.03

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.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	2.7%	0.2%
Last 1 Year	6.9	14.8
Last 2 Years	22.9	20.5
Since Inception (4/94)	20.2	17.5

* Custom benchmark since inception date.

WINSLOW CAPITAL MANAGEMENT
Period Ending 9/30/96

Portfolio Manager: Clark Winslow

Assets Under Management: \$46,883,340.27

Investment Philosophy

Winslow Capital Management (WCM) believes that investing in companies with above average earnings growth provide 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.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	5.3%	4.2%
Last 1 Year	15.5	18.2
Last 2 Years	20.5	23.2
Since Inception (4/94)	19.6	20.3

* Custom benchmark since inception date.

ZEVENBERGEN CAPITAL INC
Period Ending 9/30/96

Portfolio Manager: Nancy Zevenbergen

Assets Under Management: \$48,388,827.59

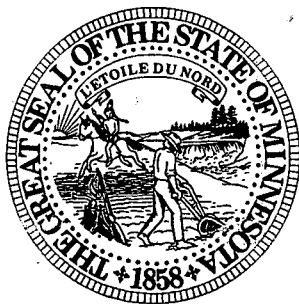
Investment Philosophy

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.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	8.5%	4.0%
Last 1 Year	23.4	17.9
Last 2 Years	26.3	23.5
Since Inception (4/94)	21.1	20.6

* Custom benchmark since inception date.



STATE BOARD OF INVESTMENT

Bond Manager Evaluation Reports

Third Quarter, 1996

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BOND MANAGERS
Period Ending 9/30/96

Current Managers	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		
	%	%	%	%	%	%	%	%	%	%		
BEA	2.2	1.8	6.0	4.9	5.2	5.0			5.7	5.5	\$327.11	4.9%
IAI	1.7	1.8	4.4	4.9	3.7	5.0	7.6	7.5	11.1	11.1	524.39	7.8%
IDS	2.1	1.8	4.0	5.3	4.5	4.9			5.5	5.6	278.05	4.1%
Miller	2.9	1.8	6.7	4.9	5.2	5.0	8.5	7.5	11.4	11.1	596.17	8.9%
Standish	2.5	1.8	6.2	4.9	4.9	5.0			5.5	5.5	533.36	7.9%
Western	2.5	1.8	5.8	4.9	5.7	5.0	8.9	7.5	12.3	11.0	1,016.14	15.1%
Semi-Passive												
BlackRock (2)	2.0	1.8							2.4	2.4	1,093.53	16.3%
Goldman (2)	2.0	1.8	5.4	4.9	5.5	5.0			5.9	5.5	1,186.42	17.7%
Lincoln (2)	1.9	1.8	4.9	4.9	5.1	5.0	7.6	7.5	9.0	9.0	1,166.48	17.4%
											\$6,721.64	100.0%
									Since 7/1/84			
Current Aggregate	2.2	1.8	5.4	4.9	5.1	5.1	8.1	7.6	11.5	11.0		
Historical Aggregate (3)	2.2	1.8	5.4	4.9	5.1	5.0	8.0	7.6	11.0	10.9		
Lehman Aggregate (4)		1.8		4.9		5.0		7.5		10.5		

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

(2) Semi-passive manager.

(3) Includes performance of terminated managers.

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

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BEA ASSOCIATES
Period Ending 9/30/96

Portfolio Manager: Bob Moore

Assets Under Management: \$327,106,888.94

Investment Philosophy

BEA's investment approach focuses on individual bond selection and on sector selection rather than short term interest rate forecasting. BEA keeps the duration close to the benchmark but may be slightly longer or shorter depending on their long-term economic outlook. BEA'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.

**Qualitative Evaluation
 (reported by exception)**

Exceptional strengths are:

- Highly successful and experienced professionals.
- Extensive option analysis capabilities.

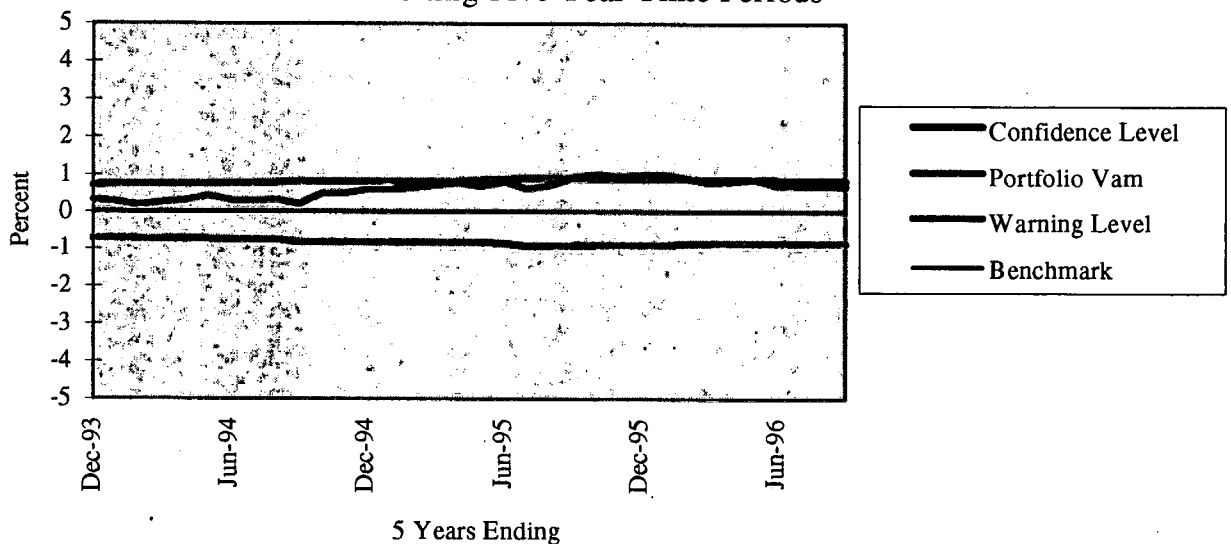
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	2.2%	1.8%
Last 1 year	6.0	4.9
Last 2 years	10.3	9.4
Last 3 years	5.2	5.0
Last 4 years	N/A	N/A
Last 5 years	N/A	N/A
Since Inception (7/93)	5.7	5.5

Recommendations

No action required.

BEA ASSOCIATES
Rolling Five Year Time Periods



Note: Shaded area includes performance prior to managing the SBI account.
 Graph uses 80/20 confidence interval.

INVESTMENT ADVISERS

Period Ending 9/30/96

Portfolio Manager: Larry Hill

Assets Under Management: \$524,386,297.80

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.

Qualitative Evaluation (reported by exception)

Current concerns:

—The manager's duration decisions have added value over the long term. Recently, this strategy has not been as successful.

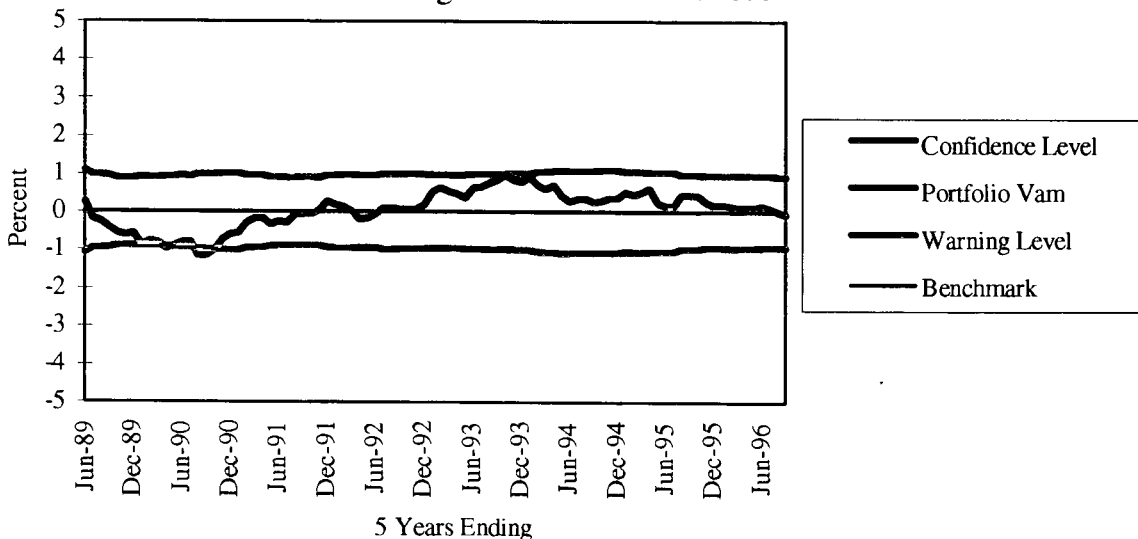
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	1.7%	1.8%
Last 1 year	4.4	4.9
Last 2 years	8.4	9.4
Last 3 years	3.7	5.0
Last 4 years	6.1	6.3
Last 5 years	7.6	7.5
Since Inception (7/84)	11.1	11.1

Recommendations

No action required.

INVESTMENT ADVISERS
Rolling Five Year Time Periods



Note: Graph uses 80/20 confidence interval.

MILLER ANDERSON & SHERRERD
Period Ending 9/30/96

Portfolio Manager: Tom Bennett

Assets Under Management: \$596,165,882.81

Investment Philosophy

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

**Qualitative Evaluation
 (reported by exception)**

- The firms strengths continue to be:**
- Highly successful and experienced professionals.
 - Extensive securities research process.

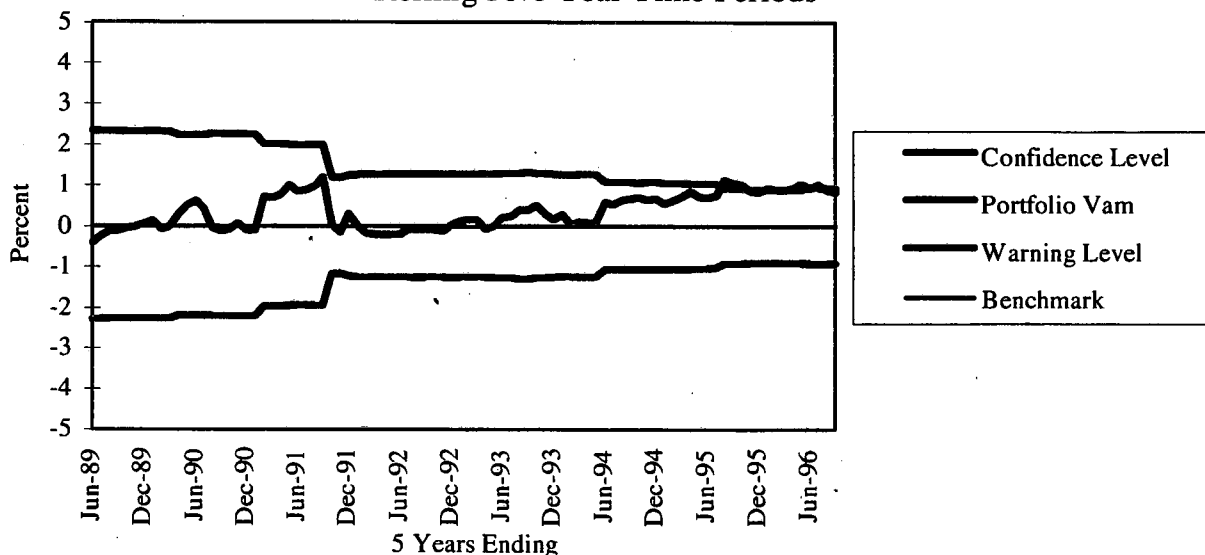
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	2.9%	1.8%
Last 1 year	6.7	4.9
Last 2 years	10.6	9.4
Last 3 years	5.2	5.0
Last 4 years	7.3	6.3
Last 5 years	8.5	7.5
Since Inception (7/84)	11.4	11.1

Recommendations

No action required.

MILLER ANDERSON
Rolling Five Year Time Periods



Note: Graph uses 80/20 confidence interval.

IDS ADVISORY GROUP
Period Ending 9/30/96

Portfolio Manager: Ed Labenski

Assets Under Management: \$278,052,572.72

Investment Philosophy

IDS 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 IDS determine the direction of both short and long-term interest rates which leads to the portfolio duration decisions. After IDS determines duration, they use their extensive corporate research capabilities to determine corporate sector allocation and to select individual issues.

**Qualitative Evaluation
 (reported by exception)**

Exceptional strengths are:

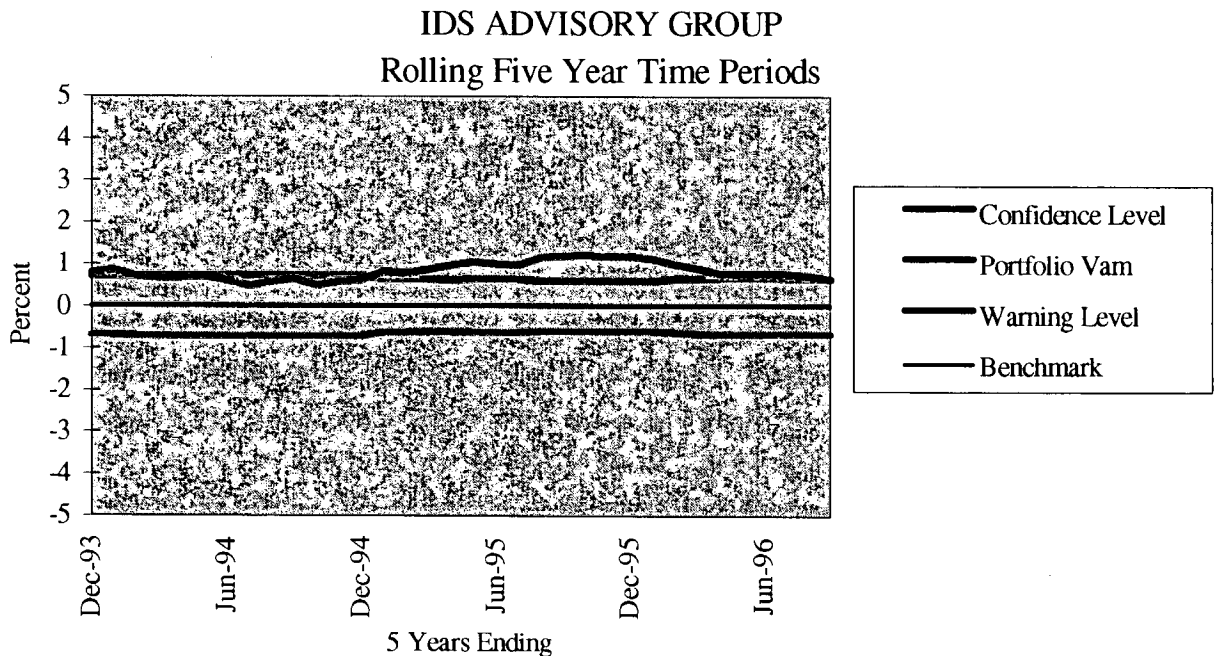
- Highly successful and experienced professionals.
- Extensive corporate research capabilities.

Quantitative Evaluation

	Actual	Benchmark
Last Quarter	2.1%	1.8%
Last 1 year	4.0	5.3
Last 2 years	9.6	9.7
Last 3 years	4.5	4.9
Last 4 years	N/A	N/A
Last 5 years	N/A	N/A
Since Inception (7/93)	5.5	5.6

Recommendations

No action required.



Note: Shaded area includes performance prior to managing the SBI account.
 Graph uses 80/20 confidence interval.

STANDISH, AYER & WOOD
Period Ending 9/30/96

Portfolio Manager: Austin Smith

Assets Under Management: \$533,356,292.77

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.

**Qualitative Evaluation
 (reported by exception)**

Exceptional strengths are:

- Highly successful and experienced professionals
- Extensive corporate research capabilities.

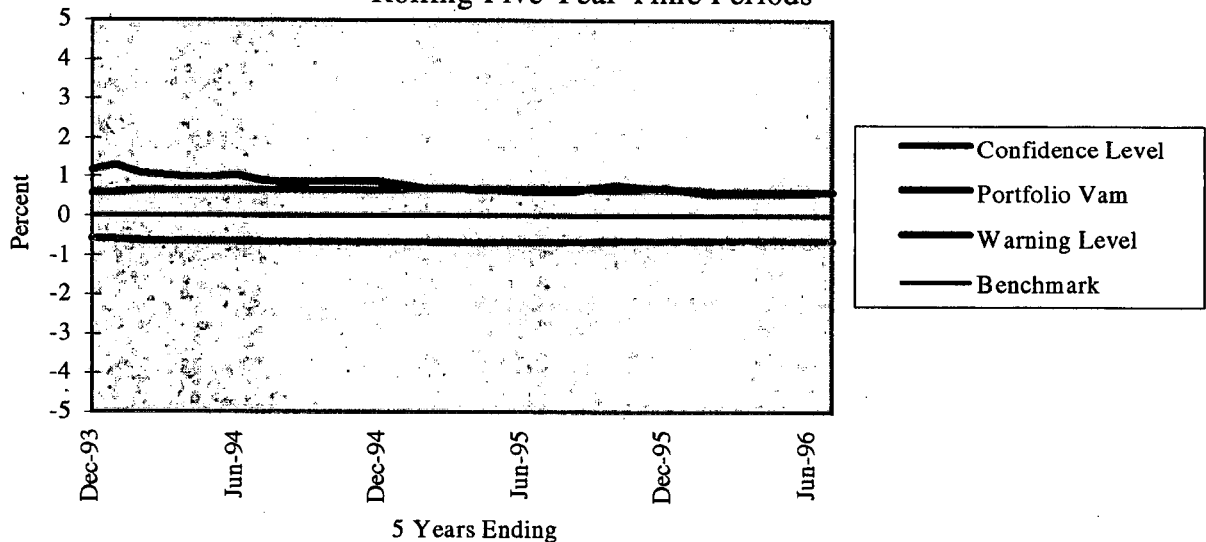
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	2.5%	1.8%
Last 1 year	6.2	4.9
Last 2 years	9.8	9.4
Last 3 years	4.9	5.0
Last 4 years	N/A	N/A
Last 5 years	N/A	N/A
Since Inception (7/93)	5.5	5.5

Recommendations

No action required.

STANDISH, AYER & WOOD
Rolling Five Year Time Periods



Note: Shaded area includes performance prior to managing the SBI account.
 Graph uses 80/20 confidence interval.

WESTERN ASSET MANAGEMENT
Period Ending 9/30/96

Portfolio Manager: Kent Engel

Assets Under Management: \$1,016,142,797.34

Investment Philosophy

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

**Qualitative Evaluation
 (reported by exception)**

The firm's exceptional strengths continue to be:
 —Highly successful and experienced professionals.
 —Extensive securities research process.

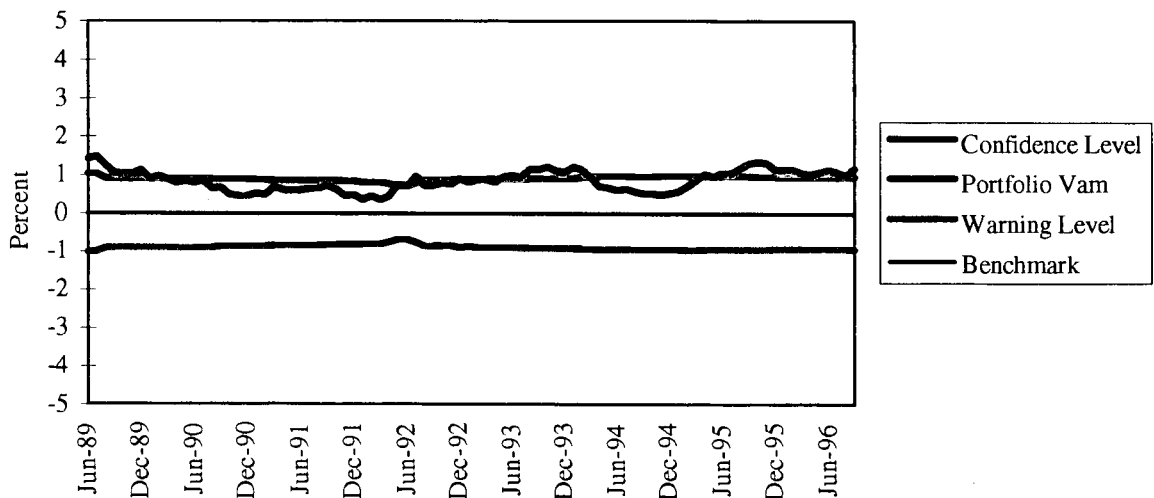
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	2.5%	1.8%
Last 1 year	5.8	4.9
Last 2 years	11.0	9.4
Last 3 years	5.7	5.0
Last 4 years	7.9	6.3
Last 5 years	8.9	7.5
Since Inception (7/84)	12.3	11.0

Recommendations

No action required.

WESTERN ASSET MANAGEMENT
Rolling Five Year Time Periods



5 Years Ending

Note: Graph uses 80/20 confidence interval.

BLACKROCK FINANCIAL MANAGEMENT
Period Ending 9/30/96

Portfolio Manager: Keith Anderson

Assets Under Management: \$1,093,525,620.76

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.

Qualitative Evaluation

(reported by exception)

Exceptional strengths are:

- Highly successful and experienced professionals.
- Strong quantitative capabilities.

Quantitative Evaluation

Recommendation

	Actual	Benchmark
Last Quarter	2.0%	1.8%
Last 1 year	N/A	N/A
Last 2 years	N/A	N/A
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)	2.4	2.4

No action required.

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

GOLDMAN SACHS
Period Ending 9/30/96

Portfolio Manager: Sharmin Mossavar Rahmani

Assets Under Management: \$1,186,424,154.71

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.

**Qualitative Evaluation
 (reported by exception)**

Exceptional strengths are:

- Highly successful and experienced professionals.
- Quantitative capabilities.

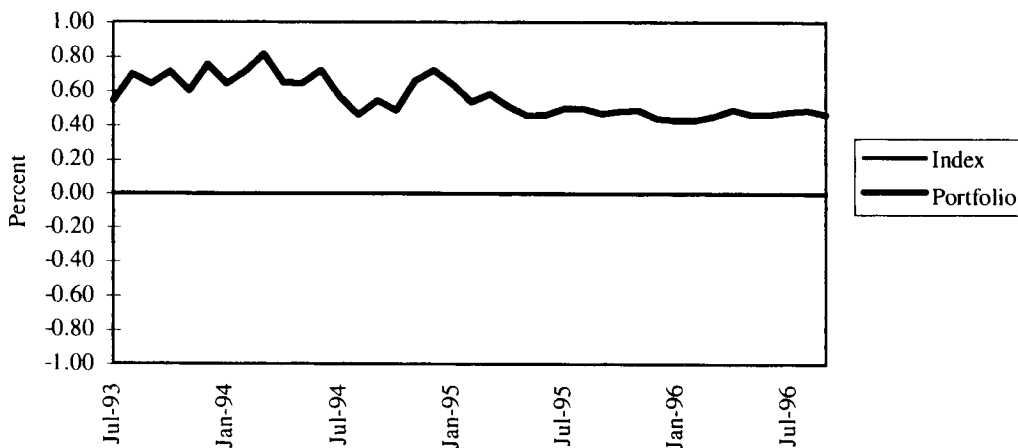
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	2.0%	1.8%
Last 1 year	5.4	4.9
Last 2 years	9.8	9.4
Last 3 years	5.5	5.0
Last 4 years	N/A	N/A
Last 5 years	N/A	N/A
Since Inception (7/93)	5.9	5.5

Recommendations

No action required.

GOLDMAN SACHS
Cumulative Annualized Tracking Report



LINCOLN CAPITAL MANAGEMENT
Period Ending 9/30/96

Portfolio Manager: Andrew Johnson

Assets Under Management: \$1,166,475,558.01

Investment Philosophy

Lincoln is an enhanced index manager that uses a quantitative approach to managing the portfolio. Lincoln calculates the index's expected return for changes in 54 variables. These variables include interest rates, yield curve shape, call features and sector spreads. Lincoln then constructs a portfolio to match the expected returns for a given change in any of the variables. Lincoln relaxes the return tolerances, defined as the difference between the portfolio's expected returns and that for the index, for an enhanced index fund. The portfolio's securities are selected from a universe of 250 liquid issues using a proprietary risk-valuation model. A linear program or portfolio optimizer then constructs the most undervalued portfolio that still matches the return characteristics of the index.

**Qualitative Evaluation
 (reported by exception)**

The firm's strengths are:

- Highly successful and experienced professionals.
- Extensive quantitative capabilities.

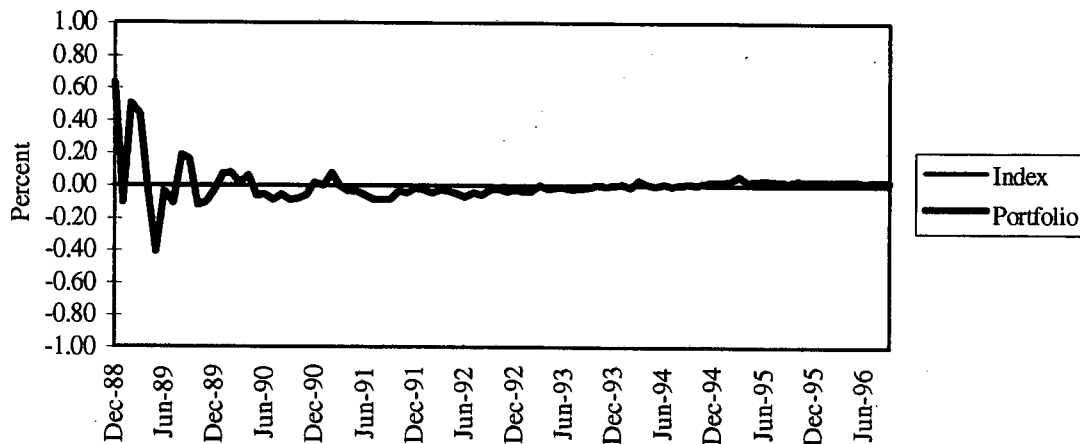
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	1.9%	1.8%
Last 1 year	4.9	4.9
Last 2 years	9.5	9.4
Last 3 years	5.1	5.0
Last 4 years	6.4	6.3
Last 5 years	7.6	7.5
Since Inception (7/88)	9.0	9.0

Recommendations

No action required.

LINCOLN CAPITAL MANAGEMENT
Cumulative Annualized Tracking Report



VOYAGEUR ASSET MANAGEMENT - Assigned Risk Plan
Period Ending 9/30/96

Portfolio Manager: Jane Wyatt

Assets Under Management: \$395,133,171

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.

Qualitative Evaluation
(reported by exception)

Exceptional strengths are:

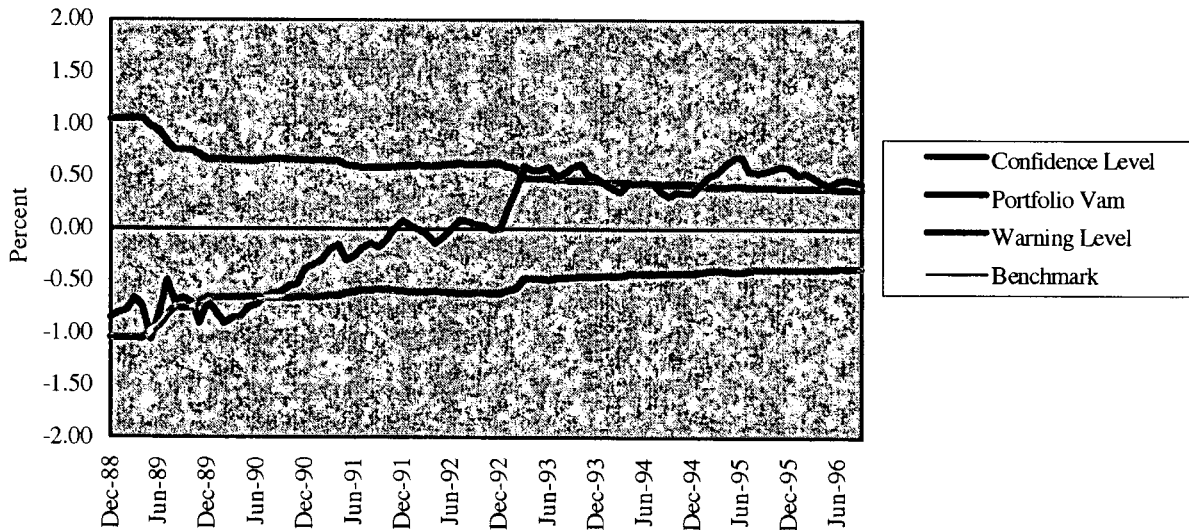
- Familiar with the needs of large institutional clients.
- Firms investment approach has been consistently applied over a number of markets cycles.
- Highly successful and experienced professionals.
- Organizational continuity and strong leadership.

Quantitative Evaluation

	Actual	Benchmark	
Last Quarter	2.0%	1.8%	No action required.
Last 1 year	5.6	5.7	
Last 2 years	8.7	8.3	
Last 3 years	5.6	5.5	
Last 4 years	6.0	5.8	
Last 5 years	7.5	7.0	
Since Inception (5/91)	8.1	7.6	

Recommendation

VOYAGEUR ASSET MANAGEMENT
Rolling Five Year Time Periods



5 Years Ending

Notes: Shaded areas includes performance prior to managing the SBI account.
 Graph uses 80/20 confidence interval.

INTERNAL BOND POOL - Income Share Account
Period Ending 9/30/96

Portfolio Manager: Jim Lukens

Assets Under Management: \$129,630,171

Investment Philosophy
Income Share Account

The current manager assumed responsibility for this portfolio in October 1993. 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 somewhat shorter or longer depending on the economic outlook.

Qualitative Evaluation
(reported by exception)

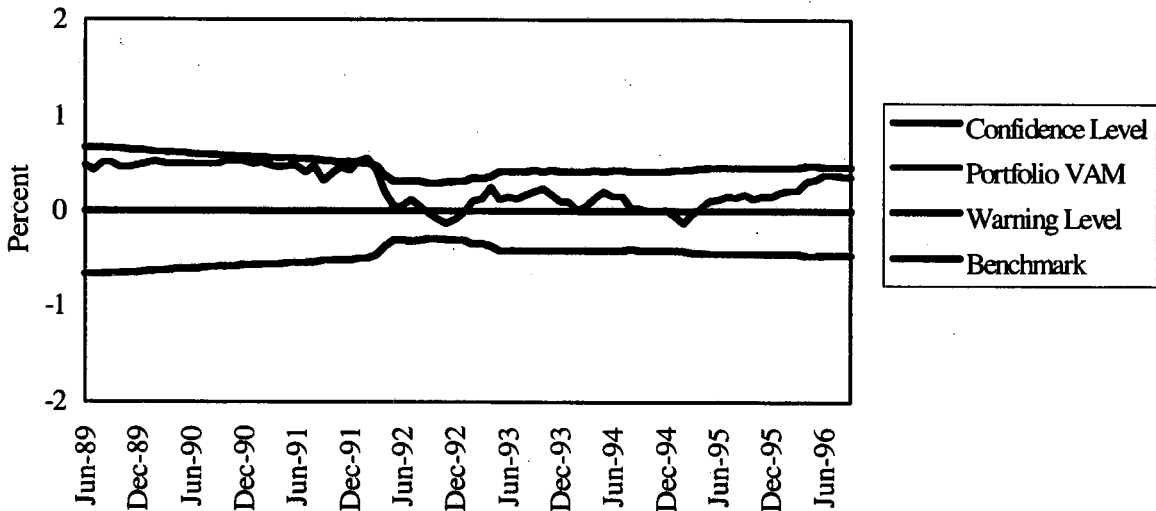
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	2.0%	1.8%
Last 1 year	5.4	4.9
Last 2 years	10.0	9.4
Last 3 years	5.2	5.0
Last 4 years	6.8	6.3
Last 5 years	8.1	7.5

No action required.

Recommendation

INTERNAL BOND POOL - Income Share
Rolling Five Year Time Periods



INTERNAL BOND POOL - Trust/Non-Retirement Assets
Period Ending 9/30/96

Portfolio Manager: Jim Lukens

Assets Under Management: \$480,879,811

Investment Philosophy
Environmental Trust Fund
and Permanent School Trust Fund

Qualitative Evaluation
(reported by exception)

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 somewhat shorter or longer depending on the economic outlook.

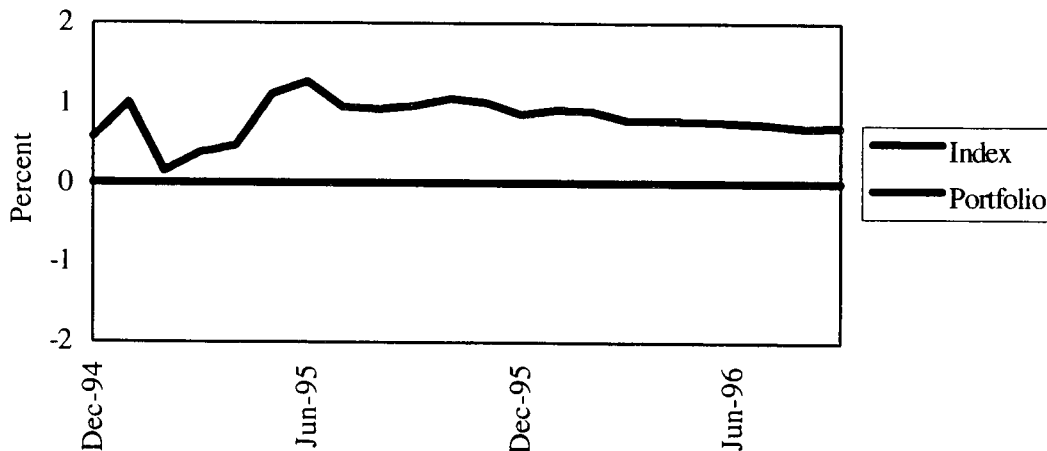
Quantitative Evaluation

Recommendation

	Actual	Benchmark	
Last Quarter	1.9%	1.8%	No action required.
Last 1 year	5.3	4.9	
Last 2 years	10.2	9.4	
Last 3 years	N/A	N/A	
Last 4 years	N/A	N/A	
Last 5 years	N/A	N/A	
Since Inception (7/94)*	9.4	8.6	

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

INTERNAL BOND POOL - Trust/Non-Retirement Assets
Cumulative Annualized Tracking Report



Tab G

COMMITTEE REPORT

DATE: December 4, 1996

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

FROM: International Manager Committee

The International Manager Committee met on November 15, 1996 to review the following agenda items:

- Review of manager performance for the period ending September 30, 1996
- Update on funding of emerging markets managers

No action by the Board is necessary at this time.

INFORMATION ITEMS:

1. Review of manager performance

The international stock program outperformed its composite index by 0.6 percentage point for the quarter ending September 30, 1996. The program outperformed by 2.9 percentage points over the last year and by 1.8 percentage points annualized for the last three years. The program has outperformed by 1.0 percentage point annualized since inception (4 years).

Time Period	Actual	Composite Index*
Quarter	0.2%	-0.4%
1 Year	11.3	8.4
3 Years	9.8	8.0
Since Inception (10/92)	13.3	12.3

* The composite was weighted 90.25% EAFE Free / 9.75 % Emerging Markets Free as of 9/30/96. 100% EAFE Free prior to 5/1/96.

Four of the six active managers outperformed the EAFE Free index for the quarter. The dominant factor in the returns was a manager's decision regarding the Japanese market which performed poorly during the quarter. A manager's decision to explicitly hedge the yen exposure of their portfolio also proved advantageous during this time period.

The newly retained emerging markets specialists both outperformed the Emerging Markets Free index for the quarter.

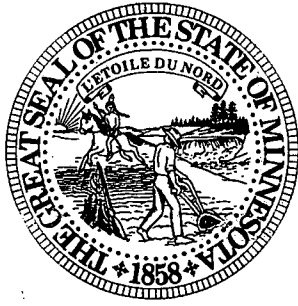
The currency overlay program added value to the EAFE index fund during the quarter (index fund *with* overlay +0.4%; index fund *without* overlay -0.2%). Since the program was initiated in December 1995, the overlay program has added 0.7 percentage point to the return of the EAFE index fund.

Performance evaluation (VAM) reports begin on **page 3**. Manager Commentaries are in **Tab J**.

2. Funding for Emerging Markets Specialists

Staff reported that the funding for the emerging markets specialists is nearly complete. Montgomery Asset Management was fully funded by May-June 1996. Genesis Asset Managers received the final portion of its allocation in November 1996. These managers were allocated \$200 million each.

Funding for the third manager, City of London, began in November 1996. City of London will receive a total of \$100 million.



STATE BOARD OF INVESTMENT

International Manager Evaluation Reports

Third Quarter, 1996

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INTERNATIONAL STOCK MANAGERS
Period Ending 9/30/96

Current Managers	Quarter		1 Year		3 years		5 Years		Since Inception		Market Value (in millions)	Pool %
	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %		
Baring (1)	-0.6	-0.1	11.7	8.7	10.8	8.1			12.7	11.9	\$220.07	6.0%
Brinson (1)	0.5	-0.1	14.4	8.7	10.4	8.1			11.1	11.9	317.63	8.6%
Marathon (2)	-1.4	-0.1	10.8	8.7					10.3	7.2	305.62	8.3%
Rowe Price (2)	0.6	-0.1	13.3	8.7					10.2	7.2	305.70	8.3%
Scudder (2)	0.8	-0.1	15.0	8.7					10.5	7.2	205.05	5.6%
Templeton (2)	1.6	-0.1	14.2	8.7					11.8	7.2	211.61	5.7%
Genesis (3)	-0.3	-3.6							1.1	-3.5	151.91	4.1%
Montgomery (3)	-1.5	-3.6							0.1	-3.5	199.76	5.4%
State Street (4)	-0.2	-0.1	9.2	8.7	8.4	8.1			12.7	12.4	1,758.69	47.7%
Current Aggregate*	0.2	-0.4	11.3	8.4	9.8	8.0			13.3	12.3	\$3,687.29	100.0%

* Includes impact of currency overlay unrealized gain/loss (see below).

Aggregate benchmark weighted 90.25% EAFE Free/9.75% Emerging Markets Free as of 9/30/96.
100% EAFE Free prior to 5/1/96.

(1) Active country/passive stock. Retained April 1, 1993.

(2) Fully active. Retained November 1, 1993.

(3) Emerging markets specialist. Retained May 1, 1996.

(4) Index. Retained October 1, 1992.

Impact of Currency Overlay Program

	.Qtr.	Since Dec. 95
Index Fund**	-0.2	9.1
Index + Overlay***	0.4	9.8

** EAFE index fund managed by State Street Global Advisers.

*** Index fund with currency overlay program implemented by Record Treasury Management.
Program being phased-in from Dec. 95 - Nov. 96.

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BARING INTERNATIONAL INVESTMENT LTD.
Period Ending 9/30/96

Portfolio Manager: Philip Bullen

Assets Under Management: \$220,068,574

Investment Philosophy

Barings manages an active country/passive stock portfolio for the SBI. Barings' strategic policy team is responsible for the country and currency decisions. Country allocation decisions are made using a macroeconomic framework which seeks to identify growing economies as evidenced by positive changes in GDP and interest rates. The team uses multiple inputs including regional specialists, local market valuations and a computer model that functions as an audit of the qualitative valuation process. Currency specialists within Barings provide assessments on flow of funds, currency rates, monetary policy, inflation and interest rates. Barings uses country index funds managed by State Street Global Advisors to implement their country allocations. At Barings' direction, State Street also implements currency/hedging strategies for the portfolio.

**Qualitative Evaluation
(reported by exception)**

Exceptional strengths are:

- Highly successful and experienced professionals.
- Familiar with the needs of large institutional clients.

Current concerns are:

- New ownership by ING effective February 1995.

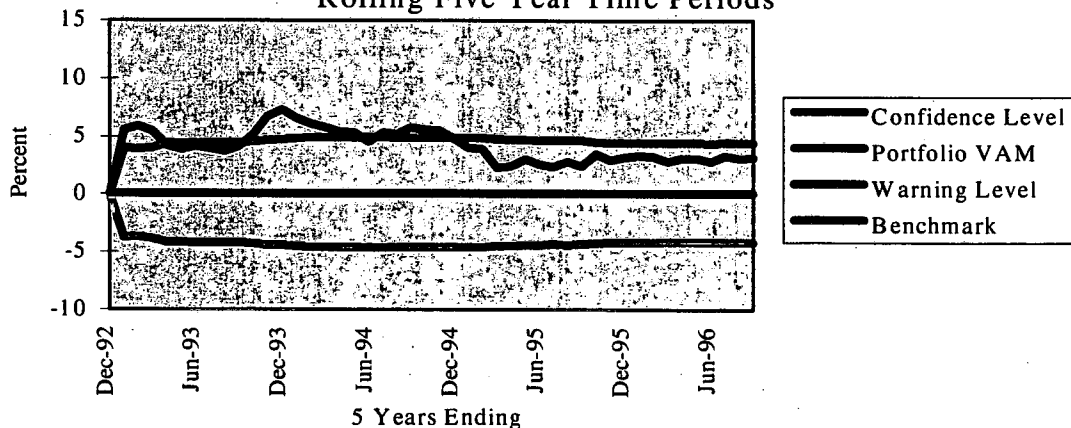
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	-0.6%	-0.1%
Last 1 year	11.7	8.7
Last 2 years	7.1	7.2
Last 3 years	10.8	8.1
Last 4 years	N/A	N/A
Last 5 years	N/A	N/A
Since Inception (4/93)	12.7%	11.9%

Recommendations

No action required.

BARING INT'L. INVESTMENT LTD.
Rolling Five Year Time Periods



Note: Shaded area includes performance prior to managing SBI account.
 Graph uses 80/20 confidence interval.

BRINSON PARTNERS
Period Ending 9/30/96

Portfolio Manager: Richard Carr

Assets Under Management: \$317,629,098

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.

**Qualitative Evaluation
 (reported by exception)**

Exceptional strengths are:

- Highly successful and experienced professionals.
- Familiar with the needs of large institutional clients.

Quantitative Evaluation

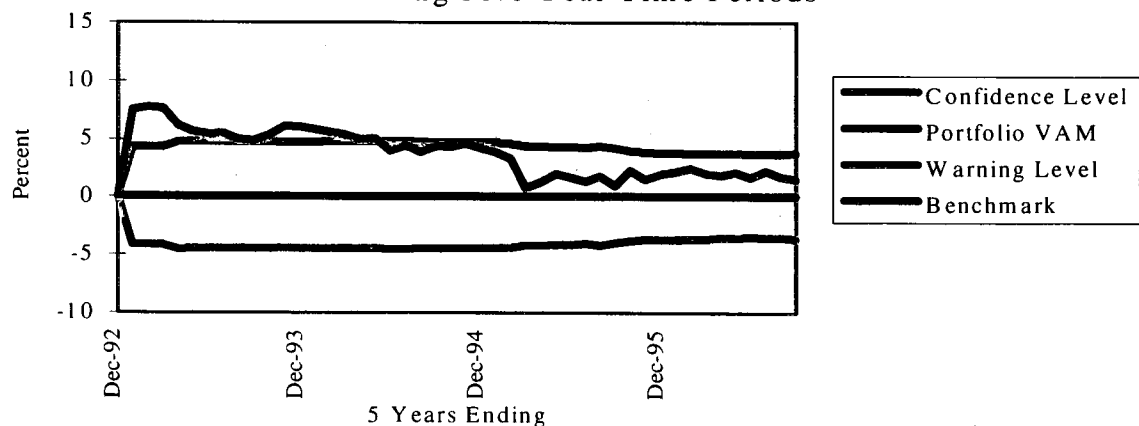
	Actual	Benchmark
Last Quarter	0.5%	-0.1%
Last 1 year	14.4	8.7
Last 2 years	11.7	7.2
Last 3 years	10.4	8.1
Last 4 years	N/A	N/A
Last 5 years	N/A	N/A
Since Inception (4/93)	11.1%	11.9%

Recommendations

No action required.

BRINSON PARTNERS, INC. (INT'L.)

Rolling Five Year Time Periods



Note: Shaded area includes performance prior to managing SBI account.
 Graph uses 80/20 confidence interval.

MARATHON ASSET MANAGEMENT
Period Ending 9/30/96

Portfolio Manager: William Arah

Assets Under Management: \$305,619,143

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.

**Qualitative Evaluation
(reported by exception)**

Exceptional strengths are:

—Attractive, unique investment approach.

Current concerns are:

—The firm has experienced significant client growth over the last three years.

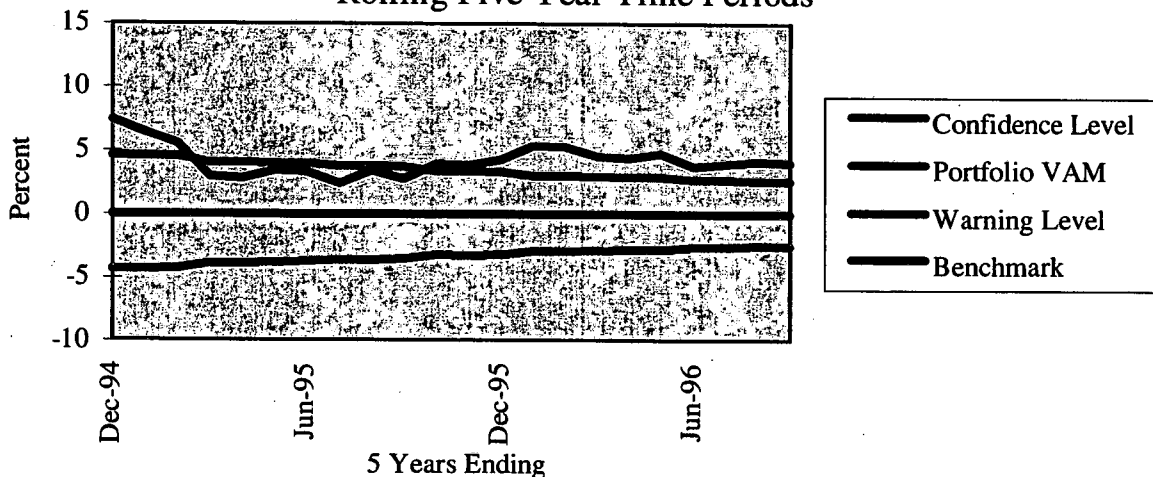
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	-1.4%	-0.1%
Last 1 year	10.8	8.7
Last 2 years	6.7	7.2
Last 3 years	N/A	N/A
Last 4 years	N/A	N/A
Last 5 years	N/A	N/A
Since Inception (11/93)	10.3%	7.2%

Recommendations

No action required.

MARATHON ASSET MANAGEMENT
Rolling Five Year Time Periods



Note: Shaded area includes performance prior to managing SBI account.
 Graph uses 80/20 confidence interval.

ROWE PRICE-FLEMING INTERNATIONAL, INC.
Period Ending 9/30/96

Portfolio Manager: Martin Wade

Assets Under Management: \$305,700,074

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.

**Qualitative Evaluation
(reported by exception)**

Exceptional strengths are:

- Extensive securities research process.
- Successful investment approach which has been consistently applied over a number of market cycles.
- Familiarity with the needs of large institutional clients.

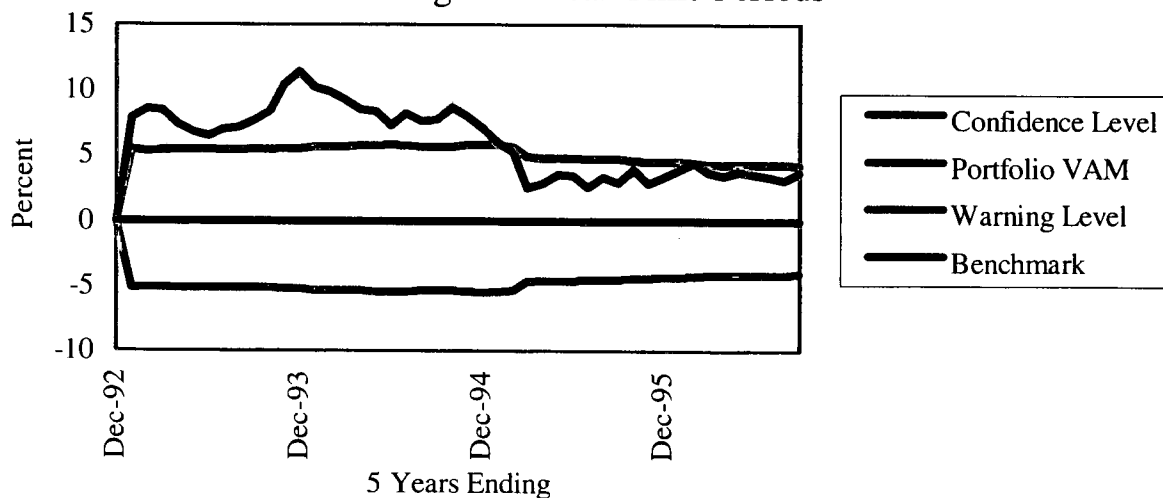
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	0.6%	-0.1%
Last 1 year	13.3	8.7
Last 2 years	9.2	7.2
Last 3 years	N/A	N/A
Last 4 years	N/A	N/A
Last 5 years	N/A	N/A
Since Inception (11/93)	10.2%	7.2%

Recommendations

No action required.

**ROWE PRICE-FLEMING
Rolling Five Year Time Periods**



Note: Shaded area includes performance prior to managing SBI account.
 Graph uses 80/20 confidence interval.

SCUDDER, STEVENS & CLARK
Period Ending 9/30/96

Portfolio Manager: Irene Cheng

Assets Under Management: \$205,050,680

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.

**Qualitative Evaluation
 (reported by exception)**

Exceptional strengths are:

- Strong leadership.
- Extensive securities research capabilities.
- Successful investment approach which has been consistently applied over a number of market cycles.

Current concerns are:

- Growth plan appears aggressive.
- Staffing and organizational changes are being made in response to growth.

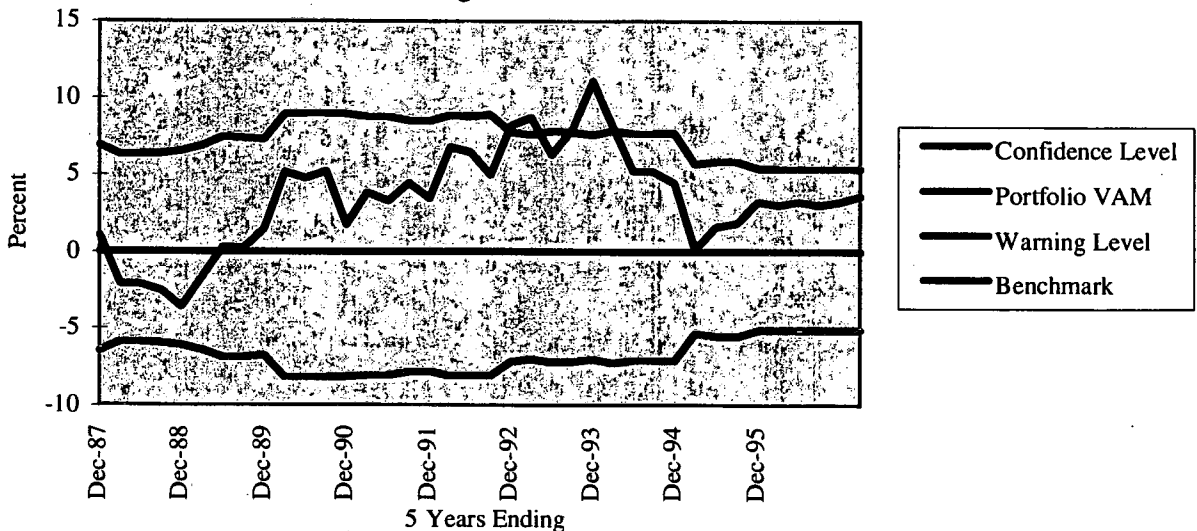
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	0.8%	-0.1%
Last 1 year	15.0	8.7
Last 2 years	12.6	7.2
Last 3 years	N/A	N/A
Last 4 years	N/A	N/A
Last 5 years	N/A	N/A
Since Inception (11/93)	10.5%	7.2%

Recommendations

No action required.

SCUDDER, STEVENS & CLARK
Rolling Five Year Time Periods



Note: Shaded area includes performance prior to managing SBI account. Graph uses 80/20 confidence interval. Uses quarterly returns. Monthly composite returns prior to the inception of the SBI account are unavailable.

TEMPLETON INVESTMENT COUNSEL, INC.
Period Ending 9/30/96

Portfolio Manager: Gary Clemons

Assets Under Management: \$211,607,432

Investment Philosophy

Templeton's goal is to identify those companies selling at the greatest discount to future intrinsic value. The firm takes a long-term approach to investing and believes that, over time, markets are efficient and patience will reward those who have identified undervalued stocks. Stock selection dominates Templeton's investment approach; country, sector and industry weightings are a residual of the stock selection process. Stock ideas are obtained from a worldwide network of research sources and screens of their own global database. From this preliminary list, analysts conduct fundamental analysis to distinguish a "cheap" stock from a "bargain." Templeton seeks stocks that are cheap relative to their own price history, their global industry and their domestic market. Each stock on the resulting "bargain list" has established buy and sell price targets and is purchased and sold accordingly.

**Qualitative Evaluation
(reported by exception)**

Exceptional strengths are:

- Extensive securities research process.
- Successful investment approach which has been consistently applied over a number of market cycles.

Current concerns are:

- Growth plan appears aggressive.
- Staff has been expanded significantly over the last three years.

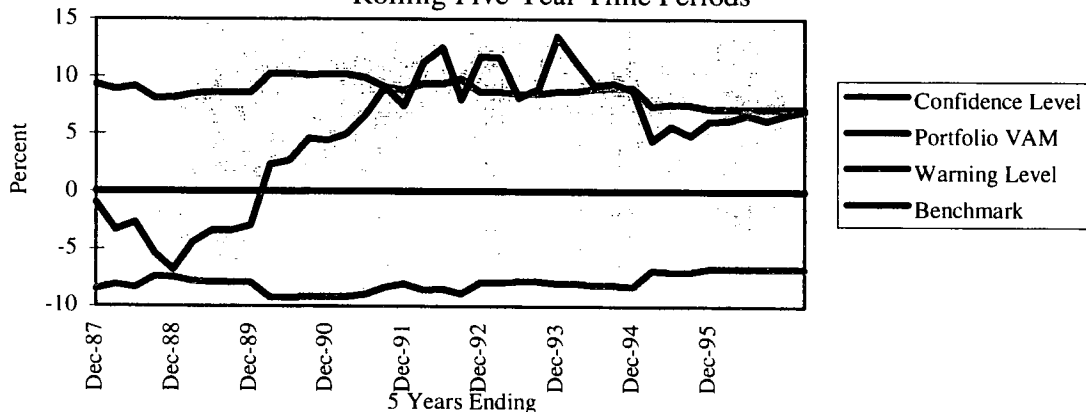
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	1.6%	-0.1%
Last 1 year	14.2	8.7
Last 2 years	12.8	7.2
Last 3 years	N/A	N/A
Last 4 years	N/A	N/A
Last 5 years	N/A	N/A
Since Inception (11/93)	11.8%	7.2%

Recommendations

The SBI terminated its relationship with Templeton in September 1996.

TEMPLETON INVESTMENT COUNSEL, INC.
Rolling Five Year Time Periods



Note: Shaded area includes performance prior to managing SBI account. Graph uses 80/20 confidence interval. Uses quarterly returns. Monthly composite returns prior to the inception of the SBI account are unavailable.

GENESIS ASSET MANAGERS, LTD.
Period Ending 9/30/96

Portfolio Manager: Paul Greatbatch

Assets Under Management: \$151,908,992

Investment Philosophy

Genesis 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.

**Qualitative Evaluation
(reported by exception)**

Exceptional strengths are:

- Highly successful and experienced professionals.
- Investment approach has been successfully applied to emerging markets for nearly a decade.

Quantitative Evaluation

	Actual	Benchmark
Last Quarter	-0.3	-3.6
Last 1 year	N/A	N/A
Last 2 years	N/A	N/A
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)	1.1%	-3.5%

Recommendations

No action required.

VAM Graph will be drawn for period ending 6/30/98.

MONTGOMERY ASSET MANAGEMENT

Period Ending 9/30/96

Portfolio Manager: Josephine Jimenez

Assets Under Management: \$199,758,677

Investment Philosophy

Montgomery 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.

**Qualitative Evaluation
(reported by exception)**

Exceptional strengths are:

- Highly successful and experienced professionals.
- Familiar with the needs of large institutional clients.

Quantitative Evaluation

	Actual	Benchmark
Last Quarter	-1.5	-3.6
Last 1 year	N/A	N/A
Last 2 years	N/A	N/A
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)	0.1%	-3.5%

Recommendations

No action required.

VAM Graph will be drawn for period ending 6/30/98.

RECORD TREASURY MANAGEMENT
Period Ending 9/30/96

Portfolio Manager: Les Halpin

Exposure Included in Overlay: \$1,273,236,529

Investment Philosophy

Record 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. One twelfth of the exposures in the SBI's EAFE index fund will be added to the overlay program 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.

**Qualitative Evaluation
(reported by exception)**

Exceptional strengths are:

- Highly successful and experienced professionals.
- Methodology has been consistently applied for more than a decade.

Quantitative Evaluation

	Qtr.	Since 12/95
EAFE Index Fund (1)	-0.2%	9.1%
Index Fund + Record	0.4	9.8
Five Markets (2)	-1.2	3.6
Five Markets + Record	-0.6	4.6
Five Markets/Currency only (3)	-0.8	-5.9
Record	-0.2	-5.1

Recommendations

No action required.

- (1) Actual unhedged return of the entire EAFE index fund managed by State Street Global Advisers. Includes return of underlying stock exposure. (As reported by State Street Bank)
- (2) Unhedged return of the five markets included in the overlay program using EAFE weights. Includes return of underlying stocks in the EAFE Index. (As reported by Record Treasury)
- (3) Currency only return of the five markets included in the currency overlay program. (As reported by Record Treasury)

Tab H

COMMITTEE REPORT

DATE: December 4, 1996

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

FROM: **Alternative Investment Committee**

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

- Review of current strategy.
- Approval of investments for the Basic Retirement Funds with two new private equity managers, Piper Jaffray Ventures and IAI Ventures.
- Approval of an additional investment for the Post Retirement Fund with an existing private equity manager, Summit Partners.

Board action is requested on the investments with Piper Jaffray Ventures, IAI Ventures and Summit Partners.

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. A chart summarizing the Board's current commitments is 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 open-end and closed-end commingled funds. The remaining portion of the portfolio can include investments in less diversified, more focused (specialty) commingled funds. Currently, the SBI has committed \$606 million to twenty-one (21) commingled real estate funds.
- 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. To date, the SBI has committed \$1.1 billion to thirty two (32) commingled private equity funds.
- The strategy for resource investment requires that investment be made in resource investment vehicles that are specifically designed for institutional investors to provide an inflation hedge and additional diversification. Individual resource investments will include proved producing oil and gas properties, royalties and other investments that are diversified geographically and by type. Currently, the SBI has committed \$158 million to nine (9) 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 employee's 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. Since 1994, the SBI has committed \$203 million to seven (7) yield oriented funds for the Post Fund: Two (2) are in real estate, four (4) are in private equity and one (1) is in oil and gas.

ACTION ITEMS:

- 1) Investment for the Basic Retirement Funds with a new private equity manager, IAI Ventures Inc., in IAI U.S. Venture Fund II, L.P.**

IAI Ventures is seeking investors in a new \$75 million private equity fund, IAI U.S. Venture Fund II, L.P. This Fund is the second fund raised and managed by IAI Ventures Inc. IAI U.S. Venture Fund II, L.P. will focus on a geographically diverse portfolio of venture capital investments but expects to emphasize placements in Minnesota and the Midwest.

More information on the IAI U.S. Venture Fund II, L.P. 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 \$15 million or 20%, whichever is less, in IAI U.S. Venture Fund II, L.P. This commitment will be allocated to the Basic Retirement Funds.

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 IAI Ventures Inc. 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 IAI Ventures Inc. or reduction or termination of the commitment.

2) Investment for the Basic Retirement Fund with a new private equity manager, Piper Jaffray Ventures, Inc. in Piper Jaffray Healthcare Fund II, L.P.

Piper Jaffray Ventures, Inc. is seeking investors in a new \$55 million private equity fund, Piper Jaffray Healthcare Fund II, L.P. This Fund is the second healthcare fund raised and managed by Piper Jaffray Ventures, Inc. Piper Jaffray Healthcare Fund II, L.P. will focus on a geographically diverse portfolio of healthcare venture capital investments. Piper Jaffray Ventures, Inc. believes that its location in Minnesota will provide a strategic advantage because the Twin Cities is a large incubator of new medical device technologies which allows “backyard access “ to attractive companies.

More information on the Piper Jaffray Healthcare Fund II, 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 \$11 million or 20%, whichever is less, in Piper Jaffray Healthcare Fund II, L.P. This commitment will be allocated to the Basic Retirement Funds.

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 Piper Jaffray Ventures, Inc. 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 Piper Jaffray Ventures, Inc. or reduction or termination of the commitment.

3) Additional investment for the Post Retirement Fund with an existing private equity manager, Summit Partners, in Summit Subordinated Debt Fund II, L.P.

Summit Partners is seeking investors in a new \$250 to \$300 million private equity fund, Summit Subordinated Debt Fund II, L.P. This Fund is the second Subordinated Debt fund raised and managed by Summit Partners. The SBI invested \$20 million in Summit Subordinated Debt Fund I, L.P. Like the prior fund, Summit Subordinated Debt Fund II, L.P will focus on geographically diversified private equity investments.

More information on the Summit Subordinated Debt Fund II, L.P is included as Attachment E.

RECOMMENDATION:

The Committee recommends that the SBI authorize the Executive Director, with assistance from the SBI's legal counsel, to negotiate and execute a commitment of up to \$60 million or 20%, whichever is less, in Summit Subordinated Debt Fund II, 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 Summit Partners 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 Summit Partners or reduction or termination of the commitment.

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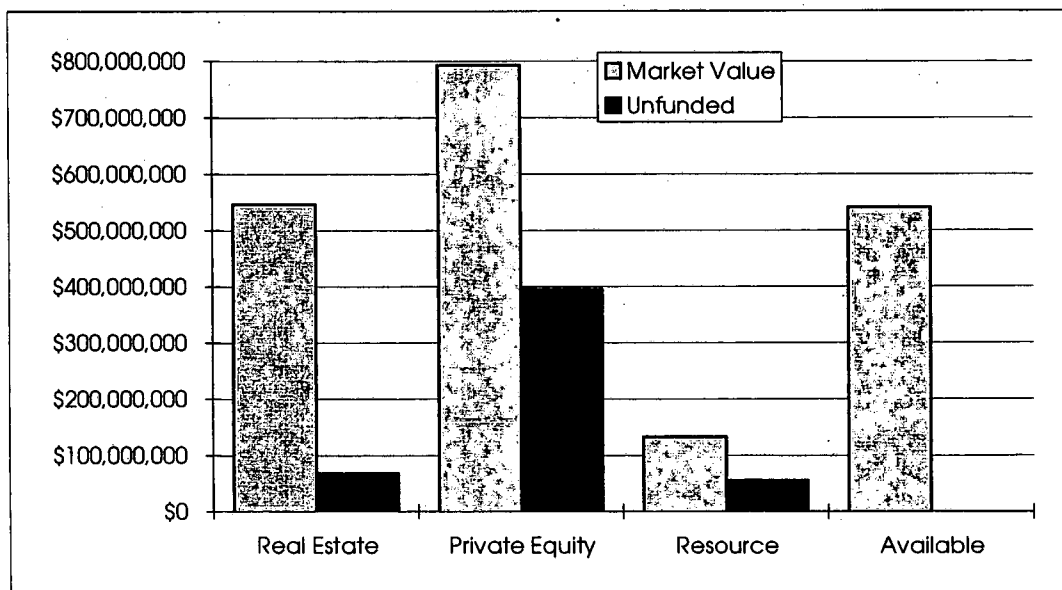
ATTACHMENT A

**Minnesota State Board of Investment
Alternative Investments
Basic Retirement Funds
September 30, 1996**

Market Value of Basic Retirement Funds \$13,401,576,187
Amount Available For Investment \$539,964,782

	<i>Current Level</i>	<i>Target Level</i>	<i>Difference</i>
Market Value	\$1,470,271,646	\$2,010,236,428	\$539,964,782
MV + Unfunded	\$1,987,433,273	\$2,680,315,237	\$692,881,965

Asset Class	Market Value	Unfunded Commitment	Total
Real Estate	\$545,978,029 4.1%	\$68,023,999 0.5%	\$614,002,028 4.6%
Private Equity	\$791,838,845 5.9%	\$393,781,926 2.9%	\$1,185,620,771 8.8%
Resource	\$132,454,772 1.0%	\$55,355,702 0.4%	\$187,810,474 1.4%
Total	\$1,470,271,646 11.0%	\$517,161,627 3.9%	\$1,987,433,273 14.8%



ATTACHMENT B

**STATE OF MINNESOTA
ALTERNATIVE INVESTMENTS - REAL ESTATE
September 30, 1996**

BASIC FUNDS	TOTAL COMMITMENT	FUNDED COMMITMENT	MARKET VALUE	UNFUNDED DISTRIBUTIONS	UNFUNDED COMMITMENT	IRR (%)	PERIOD (YEARS)
AETNA	42,376,529	42,376,529	79,794,197	0	0	5.05	14.4
AEW							
Fund III	20,000,000	20,000,000	13,506,645	5,873,627	0	-0.31	11.1
Fund IV	17,400,000	15,000,000	3,133,561	954,586	2,400,000	-12.47	10.0
Fund V	15,000,000	15,000,000	8,929,665	2,927,134	0	-2.84	8.8
AMERICAN REPUBLIC	1	1	1	0	0	0.00	6.7
COLONY INVESTORS II	40,000,000	19,575,600	17,962,300	230,170	20,424,400	-13.07	1.5
EQUITABLE	40,000,000	40,000,000	76,200,203	0	0	4.75	15.0
FIRST ASSET REALTY	916,185	916,185	466,325	512,868	0	3.03	2.4
HEITMAN							
Fund I	20,000,000	20,000,000	9,103,023	12,638,108	0	1.21	12.2
Fund II	30,000,000	30,000,000	19,979,706	17,117,818	0	2.72	10.9
Fund III	20,000,000	20,000,000	10,666,432	9,101,061	0	-0.17	9.7
Fund V	20,000,000	20,000,000	22,270,540	3,980,208	0	7.19	4.8
LASALLE	15,000,000	14,644,401	15,225,048	1,818,259	355,599	6.27	5.0
REALTY ASSOCIATES III	40,000,000	36,000,000	37,699,988	10,765,102	4,000,000	9.86	2.3
RREEF	75,000,000	75,000,000	64,080,402	36,040,237	0	3.27	12.4
TCW							
Fund III	40,000,000	40,000,000	26,579,265	16,865,769	0	0.94	11.2
Fund IV	30,000,000	30,000,000	19,601,529	6,410,525	0	-1.69	9.9
ZELL/MERRILL LYNCH							
Fund II	40,388,854	40,388,854	60,396,900	2,585,484	0	13.87	4.8
Fund III	50,000,000	44,406,000	45,607,200	755,163	5,594,000	3.11	2.7
Fund IV	50,000,000	14,750,000	14,775,100	11,371	35,250,000	2.86	0.5
TOTAL REAL ESTATE (BASICS)	606,081,569	538,057,570	545,978,029	128,587,489	68,023,999		

POST FUND	TOTAL COMMITMENT	FUNDED COMMITMENT	MARKET VALUE	UNFUNDED DISTRIBUTIONS	UNFUNDED COMMITMENT	IRR (%)	PERIOD (YEARS)
COLONY INVESTORS II	40,000,000	19,575,600	17,962,300	230,170	20,424,400	-13.07	1.5
WESTMARK COMM. MTG. FUND II	13,500,000	12,292,000	12,300,401	701,887	1,208,000	8.26	1.1
TOTAL REAL ESTATE (POST)	53,500,000	31,867,600	30,262,701	932,057	21,632,400		

TOTAL REAL ESTATE	659,581,569	569,925,170	576,240,730	129,519,546	89,656,399		
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**STATE OF MINNESOTA
ALTERNATIVE INVESTMENTS - PRIVATE EQUITY
September 30, 1996**

BASIC FUNDS	TOTAL COMMITMENT	FUNDED COMMITMENT	MARKET VALUE	DISTRIBUTIONS	UNFUNDED COMMITMENT	IRR (%)	PERIOD (YEARS)
ALLIED	5,000,000	5,000,000	1,670,915	4,176,640	0	2.69	11.0
BANK FUND							
Fund III	20,000,000	20,000,000	23,998,170	2,430,456	0	13.14	3.9
Fund IV	25,000,000	6,250,000	6,078,796	10,691	18,750,000	-0.08	0.6
BLACKSTONE PARTNERS II	50,000,000	21,226,102	23,266,292	21,842,261	28,773,898	63.77	2.9
BRINSON PARTNERS							
VPAF I	5,000,000	5,000,000	1,473,802	6,693,480	0	10.97	8.4
VPAF II	20,000,000	17,237,751	7,996,555	20,630,958	2,762,249	23.98	5.8
CHURCHILL CAPITAL PARTNERS II	20,000,000	20,000,000	13,624,012	9,194,694	0	9.51	3.9
CORAL PARTNERS							
IAI Ventures I	1,146,890	1,146,890	301,556	1,291,906	0	16.71	5.6
Fund I (Superior)	7,011,923	7,011,923	3,790,250	4,685,814	0	3.46	10.3
Fund II	10,000,000	9,000,000	22,653,256	1,579,857	1,000,000	25.12	6.2
Fund IV	15,000,000	6,000,000	7,386,785	392,447	9,000,000	20.66	2.2
DSV	10,000,000	10,000,000	10,266,686	6,913,427	0	5.54	11.5
FIRST CENTURY	10,000,000	10,000,000	4,584,914	10,744,097	0	8.28	11.8
GOLDER THOMA							
Fund III	14,000,000	14,000,000	18,373,698	35,747,054	0	31.19	8.9
Fund IV	20,000,000	16,200,000	18,130,072	1,545,804	3,800,000	14.25	2.7
Fund V	30,000,000	0	0	0	30,000,000	0.00	0.1
HELLMAN & FRIEDMAN III	40,000,000	13,014,411	12,287,066	0	26,985,589	-6.04	2.0
IMR PARTNERSHIP	15,000,000	1,524,900	403,058	1,148,997	13,475,100	0.69	4.2
INMAN BOWMAN	7,500,000	7,500,000	3,383,550	6,991,610	0	4.49	11.3
KOHLBERG KRAVIS ROBERTS							
1984 Fund	25,000,000	25,000,000	15,561,071	109,572,756	0	28.75	12.3
1986 Fund	18,365,339	18,365,339	111,767,502	57,856,599	0	28.62	10.5
1987 Fund	145,950,000	145,950,000	233,681,431	172,245,810	0	12.59	8.9
1993 Fund	150,000,000	122,264,910	142,116,678	41,097,124	27,735,090	16.33	2.8
1996 Fund	200,000,000	0	0	0	200,000,000	0.00	0.0
MATRIX							
Fund II	10,000,000	10,000,000	2,053,483	20,249,442	0	14.39	11.1
Fund III	10,000,000	10,000,000	7,505,671	57,928,277	0	73.70	6.4
NORWEST VENTURE CAPITAL	10,000,000	10,000,000	664,274	14,154,594	0	5.23	12.7
SUMMIT PARTNERS							
Fund I	10,000,000	10,000,000	617,871	19,716,354	0	13.20	11.8
Fund II	30,000,000	28,500,000	7,319,808	59,311,533	1,500,000	28.45	8.4
T. ROWE PRICE	112,493,790	112,493,790	35,506,652	124,199,893	0	15.98	8.9
WARBURG PINCUS	50,000,000	20,000,000	19,053,706	179,750	30,000,000	-3.76	1.8
ZELL/CHILMARK	30,000,000	30,000,000	36,321,265	10,659,234	0	9.02	6.2
TOTAL PRIVATE EQUITY (BASICS)	1,126,467,942	732,686,017	791,838,845	823,191,558	393,791,926		

POST FUND	TOTAL COMMITMENT	FUNDED COMMITMENT	MARKET VALUE	DISTRIBUTIONS	UNFUNDED COMMITMENT	IRR (%)	PERIOD (YEARS)
CITICORP MEZZANINE	40,000,000	10,539,968	10,773,914	3,780,548	29,460,032	11.24	1.8
KLEINWORT BENSON	25,000,000	5,549,888	5,549,888	2,523	19,450,112	0.21	1.0
SUMMIT SUB-DEBT FUND	20,000,000	15,000,000	14,963,101	5,090,216	5,000,000	33.13	2.5
TCW/CRESCENT MEZZANINE	40,000,000	7,506,592	4,761,964	2,612,613	32,493,408	-6.01	0.5
TOTAL PRIVATE EQUITY (POST)	125,000,000	38,596,448	36,048,868	11,485,900	86,403,552		

TOTAL PRIVATE EQUITY	1,251,467,942	771,282,465	827,887,712	834,677,458	480,185,477		
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**STATE OF MINNESOTA
ALTERNATIVE INVESTMENTS - RESOURCE
September 30, 1996**

BASIC FUNDS	TOTAL COMMITMENT	FUNDED COMMITMENT	MARKET VALUE	DISTRIBUTIONS	UNFUNDED COMMITMENT	IRR (%)	PERIOD (YEARS)
FIRST RESERVE CORP.							
AMGO I	15,000,000	15,000,000	7,944,428	3,614,536	0	-2.21	15.0
AMGO II	7,000,000	7,000,000	9,378,232	2,325,453	0	5.01	13.7
AMGO IV	12,300,000	12,300,000	15,207,507	7,892,318	0	10.12	8.4
AMGO V	16,800,000	16,800,000	29,138,194	9,182,365	0	16.58	6.4
AMGO VII	40,000,000	3,019,010	3,019,010	0	36,980,990	0.00	0.2
APACHE III	30,000,000	30,000,000	6,408,947	39,692,511	0	11.32	9.8
MORGAN OIL & GAS	15,000,000	15,000,000	15,003,718	1,664,933	0	1.82	8.1
SIMMONS							
OFS II	17,000,000	14,547,829	31,856,723	838,169	2,452,171	26.93	5.2
OFS III	25,000,000	9,077,459	14,498,013	0	15,922,541	71.93	1.3
TOTAL RESOURCE (BASICS)	178,100,000	122,744,298	132,454,772	65,210,285	55,355,702		

POST FUND	TOTAL COMMITMENT	FUNDED COMMITMENT	MARKET VALUE	DISTRIBUTIONS	UNFUNDED COMMITMENT	IRR (%)	PERIOD (YEARS)
MERIT ENERGY	24,000,000	3,326,050	3,801,417	0	20,673,950	189.84	0.2
TOTAL RESOURCE (POST)	24,000,000	3,326,050	3,801,417	0	20,673,950		

TOTAL RESOURCE	202,100,000	126,070,348	136,256,189	65,210,285	76,029,652		
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ATTACHMENT C

PRIVATE EQUITY MANAGER SUMMARY PROFILE

I. Background Data

Name of Fund: IAI U.S. Venture Fund II, L.P.

Type of Fund: Private Equity Limited Partnership

Total Fund Size: \$75 million

Fund Manager: IAI Ventures, Inc.
3800 First Bank Place
Minneapolis, MN 55440-0357
Phone: (612) 376-2802
Fax: (612) 376-2864

Manager Contact: David Spreng

II. Organization & Staff

IAI Ventures Inc., the General Partner, is a Minnesota Corporation and an affiliate of Investment Advisors, Inc. ("IAP"). IAI is an investment management firm founded in Minneapolis, MN in 1947. IAI Ventures Inc., and IAI are part of Lloyds/Hill Samuel Asset Management Group, a London-based investment firm with over \$57 billion under management which is, in turn, a subsidiary of Lloyds TSB Group Plc, a U.K. publicly owned company.

The primary executive officers of IAI Ventures Inc. are David Spreng and Jeff Tollefson. Noel Rahn, CEO of Investment Advisors Inc., acts as the third executive officer. Three other investment professionals assist the executive officers.

III. Investment Strategy

The Fund will invest in a diversified portfolio of venture capital investments. Although the Fund will invest nationally, emphasis will be placed on the Midwest and Minnesota in particular. The Fund will emphasize early stage healthcare, technology and communications companies. Individual portfolio company investments are expected to range between \$1 to \$5 million.

In order to stimulate additional proprietary deal flow in the Midwest, IAI, Vanguard Ventures of California, and Medtronic Inc., a medical device company located in Minnesota have formed and sponsored Itasca Ventures, LLC, a healthcare incubator. Itasca's mission is to identify new investment opportunities in healthcare for its sponsors. Itasca maintains offices at IAI and will

be managed by its CEO, Ron Henriksen and its President, Scott Wolf, both of whom have significant experience in healthcare.

David Spreng is Chairman of the Board of Itasca.

IV. *Investment Performance*

IAI Ventures Inc. currently manages IAI U.S. Venture Fund I, L.P. which closed on December 27, 1995 with \$12.6 million in aggregate commitments. Through September 30, 1996, the fund has made nine investments at a cost of \$4.2 million. In the short time since the initial investments have been made, two companies have had follow-on financings at higher valuations and one company has merged with a publicly traded corporation. Accordingly, the portfolio is currently valued at \$7 million which equates to an annualized internal rate of return of 94.5%.

Excluding IAI U.S. Venture Fund I, L.P., the General Partner's experience in direct venture capital investing dates back to 1982. From June 30, 1982 to September 30, 1996 the combined track records of Messrs. Spreng, Rahn and Tollefson include \$92 million of investments in 75 companies for a combined annualized internal rate of return of 44.6%.

V. *General Partners Investment*

The General Partner will contribute 1% of the Partnership's aggregate capital commitments and, together with IAI and its other affiliates, will contribute an additional amount equal to the lesser of \$3 million or 10% of the Partnership's aggregate capital commitments.

VI. *Takedown Schedule*

Limited Partners will be required to make capital contributions from time to time when called by the General Partner with at least 14 days notice.

VII. *Management Fee*

The Partnership will pay the General Partner an annual management fee equal to 2.5% of committed capital, payable at the beginning of each quarter. Beginning in year seven, the annual management fee will be reduced by 10% per year for the next four years of the Partnership's term.

The Partnership will bear all costs and expenses incurred in connection with its organization up to a maximum of 1% of aggregate capital commitments.

VIII. Term

The Partnership's term will be 10 years, but the term may be extended for up to three additional one-year periods by action of the General Partner to permit orderly dissolution.

IX. Distributions

The General Partner will distribute income and proceeds from dispositions at its discretion, subject to the retention of amounts to fund anticipated investments (including follow-on investments) and amounts which the General Partner deems to constitute prudent reserves to meet actual or estimated liabilities and/or future expenses of the Partnership. All distributions will be made in cash or in freely tradable securities.

To the extent of available cash, distributions will be made annually to all Partners to defray their estimated federal and state income tax obligations attributable to the Partnership's activities.

Other than such tax distributions and distributions upon the liquidation of the Partnership, distributions will be made:

first, to the Partners pro rata in accordance with their respective capital commitments until the Partners have received cumulative distributions in an amount or value equal to 125% of their aggregate capital contributions,

second, to the General Partner, until the cumulative distributions to all Partners are in the proportion of 20% to the General Partner and 80% to the Partners pro rata in accordance with their capital commitments, and

finally, 20% to the General Partner and 80% to the Partners pro rata in accordance with their capital commitments.

If, prior to the time the Partners have received cumulative distributions equal to 125% of their aggregate capital contributions of the Partners, the sum of the cumulative distributions to the Partners plus the NAV of the Partnership (net of any such distributions) exceeds 125% of the aggregate capital contributions of the Partners, the General Partner may elect to distribute cash or other distributable assets so that cumulative distributions from the Partnership are in the proportion of 20% to the General Partner and 80% to the Partners pro rata in accordance with their capital commitments.

X. General Partner Clawback

If upon liquidation of the Partnership, the aggregate amount or value of all distributions made to the Limited Partners during the term of the Partnership does not exceed 125% of the aggregate capital contributions made by the Limited Partners, the General Partner will be required to

contribute to the Partnership the amount of such deficit, which amount shall be distributed to the Limited Partners in accordance with their respective capital commitments. However, the General Partner will not be required to contribute an amount in excess of the aggregate distributions made to the General Partner on the basis of its 20% carried interest.

ATTACHMENT D

PRIVATE EQUITY MANAGER SUMMARY PROFILE

I. Background Data

Name of Fund: Piper Jaffray Healthcare Fund II, L.P.

Type of Fund: Private Equity Limited Partnership

Total Fund Size: \$55 million

Fund Manager: Piper Jaffray Ventures, Inc.
222 South Ninth Street
Suite 1300
Minneapolis, MN 55402
Phone: (612) 342-6335
Fax: (612) 342-1036

Manager Contact: Buzz Benson
Mike Seversen

II. Organization and Staff

The General Partner of the Fund is Piper Jaffray Healthcare Management, a Delaware limited partnership. Piper Jaffray Ventures ("PJV") is the general partner of the Fund's General Partner. PJV is a wholly-owned subsidiary of Piper Jaffray Companies, Inc. Buzz Benson is the President of PJV. Prior to his employment at Piper Jaffray, Mr. Benson was a Partner at Stonebridge Capital and an Investment Officer at Cherry Tree Investments.

PJV employs six professionals and two administrative personnel. Assisting Mr. Benson in the management of the Fund will be Mike Seversen. Messrs. Benson and Seversen will devote substantially all of their time to the Fund, as will one principal who will be hired in the very near future. In addition, the Fund will have one dedicated financial analyst, as well as one half time analyst. The Fund will also have access to 15 professionals in Piper Jaffray's investment banking and healthcare research teams. Key members of these teams will receive a portion of the General Partner's carried interest.

III. Investment Strategy

The Fund will make venture capital investments, primarily equity and equity-oriented securities of privately held companies in the healthcare industry. Areas of focus include medical devices (35-40%), healthcare services (50-55%) and healthcare information systems (5-15%). The Fund may also invest up to 10% of its committed capital in publicly traded securities, as well as 10% in securities of issuers outside the United States.

The Fund intends to invest across a range of early to late stage investments within the targeted healthcare sectors. Characteristics of companies the Fund will target include: unique and proprietary technologies or services; early market entrants; and the potential for number one or number two market share.

The Fund will generate and lead investments or co-invest in venture syndicates led by other private equity firms. In addition, Piper Jaffray's investment banking group and healthcare research team will assist the Fund with industry research, deal flow and due diligence. These professionals are also expected to provide expert assistance with financing and liquidity alternatives.

The Fund has a national investment scope, which is essential to its top-down strategy of pursuing leading emerging growth companies in attractive healthcare sectors, regardless of their location or stage. PJV believes that its location in Minnesota is a strategic advantage because the Twin Cities region is a large incubator of new medical device technologies which allows "backyard access" to attractive companies. It also provides relatively easy access to both coasts.

IV. Investment Performance

Previous healthcare-related fund performance as of September 30, 1996 is shown below:

Fund Name	Inception Date	Total Equity Commitments	Net IRR from Inception
Piper Jaffray Investors Fund VI	10/90	\$ 2.0 million	42.0%
Piper Jaffray Healthcare Fund	11/92	\$12.3 million	21.4%

V. General Partners Investment

The General Partner will contribute 1% of the capital contributed by all Partners.

VI. Takedown Schedule

5% of committed capital upon closing. Thereafter, capital will be called as needed with not less than 15 days' written notice.

VII. Management Fee

The General Partner shall receive an annual fee, payable quarterly in advance and based on the Fund's committed capital, as follows:

Years 1-5:	2.50%
Years 6-7:	2.25%
Year 8:	2.00%
Year 9:	1.75%
Year 10:	1.50%

The management fee will be reduced by options and stock awards received from portfolio companies.

The Fund will pay all organizational expenses, not to exceed \$250,000.

VIII. Term

The Fund will have a term of ten years, with an option to extend for an additional period of two years at the General Partner's discretion. The Fund may be extended for an additional one year period after the two year extension if at least two-thirds in interest of the Limited Partners consent to such extension.

IX. Distributions

Distributions will be made in the form of cash or marketable securities, with the possible exception of distributions pursuant to the dissolution or winding up of the Fund. However, it is anticipated that most distributions will be made in kind.

At the end of each fiscal year or other accounting period, the interest on short-term cash investments of the Fund shall be allocated to all Partners pro rata according to their capital accounts. This amount shall be distributed within 75 days.

As soon as reasonably practicable, cash from the disposition of investments will be distributed to the Partners as follows:

- Cash representing a return of the cost basis of investments shall be distributed in proportion to committed capital.
- Cash representing gains will be distributed 80% to the Partners and 20% to the General Partner. In the event that (a) the value of the Fund's remaining portfolio securities would be less than 115% of the cost basis of such securities and (b) after such cash distribution, the balance in the General Partner's capital account would be less than 20.8% of the remaining partnership capital, than the amount to be distributed to the General Partner shall be retained by the Fund until condition (a) or (b) is satisfied.
- Within 90 days following the end of each fiscal year, the Fund will make cash distributions to all Partners in amounts intended to defray the tax liabilities attributable

to their interests in the Fund (35% of the profit allocated to a Partner's capital account in such fiscal year), to the extent that the cash distributions described above are insufficient.

Marketable securities shall be distributed 80% to the Partners and 20% to the General Partner. In the event that after the in kind distribution, the value of the Fund's remaining portfolio securities would be less than 115% of the cost basis of such securities and the balance in the General Partner's capital account would be less than 20.8% of remaining partnership capital, then the General Partner will either (a) place and hold its portion of such in kind distribution in escrow or (b) cause such in kind distribution to be made to all Partners in proportion to capital commitments. Concurrent with any distribution of marketable securities, the General Partner will contribute to the Fund an amount equal to the cost basis of the portion of the securities distributed to the General Partner (excluding amounts distributed in proportion to capital commitments). Such return of cost basis shall be paid in cash or in the form of a promissory note secured by the securities distributed.

X. *General Partner Clawback*

If upon liquidation of the Partnership, the aggregate amount or value of all distributions made to the General Partner with respect to its 20% interest during the term of the Partnership exceeds 20% of the aggregate distributions of cumulative net profits to all Partners, the General Partner will be required to contribute to the Fund the amount of such excess, which amount shall be distributed to the Partners in accordance with their respective capital commitments. However, the General Partner will not be required to contribute an amount in excess of the aggregate distributions made to the General Partner on the basis of its 20% carried interest, less tax distributions. The clawback will be guaranteed by Piper Jaffray Companies, Inc.

ATTACHMENT E

PRIVATE EQUITY MANAGER SUMMARY PROFILE

I. *Background Data*

Name of Fund: Summit Subordinated Debt Fund II, L.P.

Type of Fund: Private Equity Limited Partnership

Total Fund Size: \$300 million

Fund Manager: Summit Partners
600 Atlantic Avenue
Suite 2800
Boston, MA 02210-2227
Phone: (617) 824-1000
Fax: (617) 824-1100

Manager Contact: E. Roe Stamps, IV
Stephen G. Woodsum

II. *Organization and Staff*

The General Partner of the Partnership is Summit Partners SD II, LLC, a Delaware limited liability company. The Managing General Partners are E. Roe Stamps, Stephen Woodsum and Gregory Avis. Summit Partners ("Summit") was founded in 1984 by Messrs. Stamps, Woodsum and Avis. Both Messrs. Stamps and Woodsum previously were employed by T.A. Associates and First Chicago Investment Corporation. Mr. Avis formerly worked in the corporate finance departments of Goldman Sachs and McDonald & Company. Summit has offices in Boston and Palo Alto to provide a national investment scope and it employs over 30 investment professionals.

Summit Subordinated Debt Fund II (the "Fund") is the sixth fund raised by Summit.

III. *Investment Strategy*

The Fund will emphasize investments in well-managed middle-market companies which are profitable and poised for continued growth. Fund investments generally will be made in connection with an acquisition or recapitalization of a private company or the acquisition of a division/subsidiary of a larger company. Fund capital generally will be invested simultaneously with Summit's equity funds. The availability of a captive subordinated debt

fund to co-invest with Summit's equity funds enhances the Firm's ability to capture more investment opportunities and allows Summit more flexibility in structuring transactions to achieve optimal risk/reward profiles for its funds. Summit may occasionally invest the Fund's capital independently from its equity funds to provide expansion capital to strong emerging growth companies.

To generate above average returns and to minimize risk, it is Summit's strategy for the Fund to be the lead investor; to invest in companies that are profitable at the time of investment; to be the first professional investor; to obtain board seats; and to acquire control positions.

Investments will primarily take on the form of subordinated debt with attached equity securities. Investments will be made in companies in which an affiliate of the General Partner is providing or has provided equity capital. In such cases, the amounts of the subordinated debt will vary, but generally will be from one-third to two times the amount of equity capital provided by the Summit equity funds. The debt generally will (i) be subordinated to bank and institutional indebtedness, (ii) have maturities of up to ten years and (iii) bear interest at a rate equal to at least 150% of the seven year Treasury Note rate.

IV. Investment Performance

Previous fund performance as of September 30, 1996 is shown below. An asterisk (*) indicates a fund in which the SBI has invested. Summit Ventures Funds I, II, III and IV are equity partnerships, as opposed to a subordinated debt fund which is currently being raised.

Fund Name	Inception Date	Total Equity Commitments	Net IRR from Inception
*Summit Ventures I	1984	\$160 million #	13.2%
*Summit Ventures II	1988	\$231 million	28.5%
Summit Ventures III	1992	\$279 million	72.8%
*Summit Subordinated Debt Fund I	1994	\$141 million	33.1%
Summit Ventures IV	1995	\$610 million	110.3%

Includes \$63 million raised in Summit Eurofund C.V. (offshore vehicle).

V. General Partners Investment

The General Partner will make a capital commitment of at least \$5 million.

VI. Takedown Schedule

Capital will be called as needed, with not less than ten days notice. A Limited Partner's failure to pay the full amount of any capital call may result in such Limited Partner's interest being purchased in exchange for a non-interest bearing note in an amount equal to the value of such Limited Partner's capital account and a forfeiture of any unrealized gains on portfolio investments.

VII. Management Fee

During years one through seven, the Fund will pay the General Partner an annual management fee equal to 0.5 percent of the aggregate committed capital of the Partnership plus 1.0 percent of the aggregate capital contributed to the Partnership. In years eight, nine, and ten, the annual management fee will be reduced by 10 percent each year.

The Fund will pay all organizational expenses, not to exceed \$150,000.

VIII. Term

The Fund will have a term of ten years, with an option to extend for two additional periods of two years each in the General Partner's discretion with two-thirds approval of the Limited Partners.

IX. Distributions

The partnership intends to distribute all current net income quarterly, but will distribute current net income at least annually. The proceeds of all dispositions of securities will be distributed as soon as practicable following receipt thereof. It is anticipated that distributions will be made in the form of cash or marketable securities.

The Fund may make distributions to all Partners in amounts intended to defray the tax liabilities attributable to their interests in the Fund, to the extent that the other distributions described below are insufficient.

In general, distributions will be made in the following order of priorities:

- (a) 100% to the Partners in proportion to their paid-in capital contributions until they have received distributions equal in value to a return of 8% per annum, calculated as simple interest from the relevant draw-down dates to the dates of distribution, on their paid-in capital contributions;

- (b) 100% to the Partners in proportion to their paid-in capital contributions until they have received distributions equal in value to the sum of (i) the Fund's cost basis in any investments disposed of at or before the date of distribution, (ii) any write-downs below cost of investments held by the Fund as of the date of distribution, net of any write-ups (determined on a portfolio basis), and (iii) the aggregate amount of paid-in capital contributions used to meet expenses or liabilities of the Fund;
- (c) 100% to the General Partner until it has received additional distributions equal to 20% of the aggregate amounts distributed to Partners other than distributions made to the Partners pursuant to the above clause (b); and
- (d) thereafter, 80% to the Partners in accordance to their paid-in capital contributions and 20% to the General Partner.

X. *General Partner Clawback*

If, after the Fund has made its final liquidating position, (i) the General Partner has previously received any carried interest distributions and any Partner has not previously received aggregate distributions at least equal in value to those required by the above clauses (a) and (b) under "Distributions," or (ii) carried interest distributions previously received by the General Partner exceed 20% of the cumulative net income and gains of the Fund previously allocated to the Partners, the General Partner will return promptly to the Fund an amount equal to the greater of:

- the amount necessary to provide each Partner with the distributions required by the above clauses (a) and (b) under "Distributions" or
- any excess of the General Partner's aggregate carried interest over 20% of the Fund's cumulative net income and gains.

Tab I

**MINNESOTA
STATE
BOARD OF
INVESTMENT**



Board Members:

Governor
Arne H. Carlson

State Auditor
Judi Dutcher

State Treasurer
Michael A. McGrath

Secretary of State
Joan Anderson Growe

Attorney General
Hubert H. Humphrey III

Executive Director:

Howard J. Bicker

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

*An Equal Opportunity
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DATE: December 3, 1996

TO: Members, State Board of Investment

FROM: Howard Bicker

SUBJECT: Update on Tobacco Information

At the request of the Board, staff reported on tobacco holdings and related issues for the June 1996 Board meeting. The background information in that report was updated for the September 1996 Board meeting.

This memo provides information on three issues:

- Actions taken by other states and institutional investors with respect to tobacco since the September 1996 meeting.
- SBI holdings of stock in tobacco-related companies as of September 30, 1996.
- Responses from the SBI's stock managers on litigation risk of tobacco companies.

1. Activity of Other States and Institutional Investors

The following items were brought to staff's attention since the last Board meeting:

- The number of states and cities filing lawsuits against tobacco companies has increased. There are now seventeen states and three cities that have filed lawsuits.
- The Denver Employees' Retirement Fund divested its tobacco stocks as a result of the potential long term impact of the litigation facing the industry.
- Massachusetts Treasurer Joe Malone sent a written request to key legislators to legislate divestiture of tobacco holdings by the Massachusetts pension funds. To date, no legislative action has been taken.

- Participants in the \$94 billion College Retirement Equities Fund (part of TIAA-CREF) rejected a shareholder proposal to sell all the fund's tobacco holdings.

2. SBI Holdings in Tobacco-Related Companies

SBI holdings in stock of tobacco-related companies are shown in **Attachment A**. The companies are those identified by the Investor Responsibility Research Center (IRRC) in Washington, D.C.

As of September 30, 1996, the SBI held 9.5 million shares in 22 companies with a market value of \$281.1 million. Holdings in one company, Philip Morris, comprise 59% of the total with a market value of \$166.6 million.

3. Responses from SBI Managers on Litigation Risk

At their meeting in September 1996, Board members asked staff to gather additional information on the effect that litigation risk may have on investments in tobacco companies.

To address this request, staff asked the SBI's domestic stock managers to provide written responses to the following issues:

- *Discuss the impact that tobacco-related lawsuits have had/may have on prices and volatility of tobacco-related stocks, generally.*
- *Discuss the impact that governmental regulations have had/may have on prices and volatility of tobacco-related stocks, generally.*
- *Which, if any, of the following companies does your firm follow and generate internal research? (American Brands, BAT, Brooke Group, Dimon, Loews, Philip Morris, RJR Nabisco, Standard Commercial, UST, Universal) Summarize your firm's current investment opinion on each. How has the firm quantified the financial impact of litigation and regulatory risk for each? Does your research indicate that the current stock price adequately reflects these risks?*
- *Which, if any, of these stocks do you hold in the SBI portfolio at the present time? What events would precipitate a decision to sell any of these holdings? What events would precipitate a decision to buy a name that you do not currently hold?*

Copies of the managers' responses are in **Attachment B**. Their comments can be summarized as follows:

- **Impact of litigation.** Managers conclude that tobacco-related lawsuits have had a significant impact on the level and volatility of tobacco stock prices. Evidence shows that much of the price volatility is related to changes in investor perceptions of the trend in tobacco litigation. The managers expect that tobacco stocks will continue to trade with a high level of price volatility as litigation events unfold.
- **Impact of governmental regulation.** Managers believe that governmental regulations have also served to increase the volatility of tobacco stock prices, though to a lesser degree than litigation. Since most regulations seek to restrict the use of tobacco, they generally have a negative impact on the tobacco industry's income and thus depress tobacco stock valuations. Some managers stated that labeling requirements have served to benefit the tobacco industry in its litigation battles. Overall, the managers do not expect additional governmental regulation to affect tobacco price volatility significantly.
- **Quantification of litigation risk.** In general, managers believe that current prices include a more than adequate discount for tobacco litigation risks. Each of the managers has its own method for calculating the impact of tobacco litigation. Some compare price-to-earnings ratios for consumer products companies with and without tobacco operations and have determined that tobacco-related stocks show a deep discount. Others estimate future earnings and cash flows based on best and worst outcome scenarios for pending litigation. Those estimates are then used to determine whether the current stock price represents a fair value under the alternative scenarios. Others estimate the value of the business as if there were no tobacco liability to determine the degree to which the market has discounted litigation risk. Finally, some managers assume the tobacco portion of the business has no value and compare the projected stock value under those conditions to the current market price.
- **Current holdings.** Four of the domestic equity managers follow the tobacco industry but do not own tobacco-related stocks at the present time. Eight managers own one or more of the stocks listed above. The predominant holding among the managers is Philip Morris. Most managers believe that this company is fundamentally sound and is significantly undervalued in today's market.

- **Events that would cause a change in opinion.** In general, the managers stated that they would change their position on tobacco stocks if there was a significant change in the uncertainty surrounding litigation risk and tobacco liabilities. Several managers anticipate a legislative solution to the litigation facing the industry and suggest that the industry may accept some measure of regulation and may fund smoking cessation campaigns in exchange for a limit on liability. As with any portfolio holding, managers also state they would reverse their current position if there was a large move in stock price or a change in the fundamentals of a firm.

Attachment A

SBI Stock Holdings in Tobacco Companies Identified by the IRRIC September 30, 1996

Company	Percent Revenue from Tobacco in 1994	SBI Shares 9/30/96	SBI Cost Value 9/30/96	SBI Market Value 9/30/96
Amer Group	8.0%	113,725	\$ 2,116,740	\$ 2,562,495
American Brands	53.4	197,600	8,330,238	8,348,600
American Maize	27.0	0	0	0
BAT	63.2	1,298,363	9,879,577	8,646,947
Brooke Group	97.2	10,200	67,137	54,825
Compagnie Fin.	66.2	57,000	2,054,115	1,539,000
Culbro	47.6	10,600	356,900	588,300
Dimon	74.6	30,699	523,895	587,118
Empresas	55.0	282,500	1,312,098	1,352,274
Glatfelter	n/a	118,300	2,230,883	1,996,312
Hanson PLC	8.3	2,697,924	9,107,734	6,619,183
Imasco Ltd.	16.4	0	0	0
Japan Tobacco	96.0	0	0	0
Loews	14.2	306,200	18,258,543	23,692,225
Philip Morris	44.0	1,856,660	128,164,027	166,635,235
Rembrandt	n/a	156,028	1,352,446	1,410,151
RJR Nabisco	49.9	862,198	13,070,006	11,401,335
Sara Lee	<5	562,405	15,323,078	20,105,979
Schweitzer-Maud.	93.0	16,210	314,388	543,035
SEITA	83.1	19,600	595,254	823,386
Standard Comm'l	64.4	15,040	189,197	187,987
Tabacalera SA	53.3	74,400	2,633,151	3,173,350
Universal Corp.	70.5	256,000	6,562,937	6,528,000
UST	86.5	260,900	7,465,167	7,729,162
Volvo AB	5.1	307,000	5,367,413	6,605,739
Total		9,509,552	\$235,274,925	\$281,130,639

Sources: List of companies and percent of revenue are from "The Tobacco Industry, 1995 Edition," IRRIC, Washington D.C. SBI holdings data are from SBI bank records.

Attachment B

Responses from SBI's Domestic Equity Managers

Alliance Capital

Barclays Global Investors

Brinson Partners

Forstmann-Leff Assoc. (FLA)

Franklin Portfolio

GE Investments

Independence Investment Assoc.

JP Morgan Investment Management

IDS Advisory

Lincoln Capital Management

Oppenheimer Capital

Waddell & Reed



November 27, 1996

The only tobacco stock we hold in the Minnesota State Board of Investment portfolio is Philip Morris for the following reasons: 1) a strong fundamental outlook; 2) a low valuation based on EPS; Price Earnings Ratio / EPS growth rate; and dividend yield; 3) a shareholder oriented management; 4) the elimination of a national financial threat to the tobacco industry through the decertification of the class action status of the Castano case and; 5) the industry's proactive steps taken to limit sales of cigarettes to minors which is closely aligned to President Clinton's current proposal.

Tobacco related lawsuits and the proposal of government regulations have historically caused fluctuations in the relative P/E multiples of the tobacco stocks. While both tobacco litigation and proposed government regulations impact tobacco stock multiples, a study was done that demonstrated Philip Morris relatively outperformed the S & P 500 measured from the time of initial negative multiple impact through the following 12 months. Philip Morris shares significantly outperformed the S & P 500 in the twelve months following each of these events as reduced uncertainty pushed multiples back to prelitigation levels. The study covered three time periods impacted by litigation and government proposals. The events and outperformance relative to the S & P 500 were as follows:

Relative Performance during Heightened Periods of Litigation and Regulation Concern:

<u>Event</u>	<u>Relative Performance to the S & P 500</u>	<u>Relative Performance to the S & P 500: 12 months after</u>	<u>Relative Performance to the S&P 500 from Initial Event thru 12 months after</u>
Cipollone Case 6/88	<10%> 1/88 - 6/88 5 months	+52%	+37%
Cipollone Appeal 1/90	<9%> 10/89 - 1/90 3 months	+44%	+31%
Castano Case/ FDA Regulation/ Excise Tax Concern	<13%> 1/94 - 5/94	+31%	+14%

Despite periods of heightened litigation and proposed government regulations Philip Morris' stock return has averaged 23.7% over the past ten years versus 13.6% for the S & P 500. Philip Morris' stock return has averaged 35.8% over the past three years versus 15.2% for the S & P 500. It should be noted Philip Morris' stock significantly outperformed the S & P 500

Our firm follows and generates internal research on Philip Morris, RJR Nabisco, American Brands, and UST. Philip Morris is the only tobacco stock rated a buy while RJR Nabisco, American Brands, and UST are rated neutral. Philip Morris has the dominant domestic tobacco franchise that continues to exceed expectations and gain market share. We have a neutral rating on American Brands, RJR Nabisco, and UST due to their less dominant tobacco franchises and a weaker fundamental cash flow, and EPS outlook compared to Philip Morris. We do not envision adding the other tobacco companies to the portfolio based on their weaker tobacco franchise and weaker fundamental, cash flow, and EPS outlook. At present we do not envision any fundamental or external factor that would cause us to sell any of our Philip Morris holding. We continue to believe the fundamental, Cash Flow, and EPS outlook for Philip Morris is strong as outlined below and Philip Morris' valuation more than fully discounts current and potential litigation.

Philip Morris has a strong fundamental outlook. Over the next three years Philip Morris is expected to grow EPS at a strong rate of 17%; to grow dividends at a rate at least equal to EPS; and to grow Free Cash Flow at a rate equal to 29%. Cumulative Free Cash Flow after Capital Spending and Dividends over the next 5 years is expected to be \$18.5 billion which equals 25% of their market capitalization. Philip Morris is expected to repurchase at least \$3 billion of their shares outstanding per year for the next 3 years or 4% of their shares outstanding. We would expect Philip Morris to continue to monetize lower margin assets and redeploy the proceeds in share repurchase. In the near term, we would also expect Philip Morris to authorize a new share repurchase program of \$9 billion over the next 3 years since the current \$6 billion share repurchase program announced in 1995 is close to completion. The internal growth dynamics of Philip Morris continues to exceed expectations. Philip Morris continued to gain market share through September 30, 1996. Today Philip Morris' domestic tobacco retail market share is 49.7% versus 41.6% in 1993. In addition, Philip Morris' net operating margin excluding excise taxes at their domestic tobacco unit is 42.8% today versus 31.7% as of June 30, 1993.

The valuation of Philip Morris as measured on a P/E, relative P/E, and dividend yield spread relative to the 30 year Treasury bond yield is trading at the low end of a historic range. Between the time period of 1980 and 1996 Philip Morris' relative P/E multiple has ranged from 1.0 to .60. Today we are at the bottom of the relative P/E valuation range for Philip Morris on 97 EPS at .60. A more reasonable valuation for Philip Morris should be a 15% discount to the market or a relative P/E valuation of .85 which would imply significant upside of approximately 40% for Philip Morris. Philip Morris' current dividend yield is 4.7% which compares with the current S & P 500 dividend yield of 2.1% and the current 30 year Treasury bond yield of 6.4%. Philip Morris' dividend yield spread versus the S & P 500's dividend yield has averaged between a <50> basis point spread to a 300 basis point spread from 1980 to 1996. Philip Morris' spread today of 260 basis points is close to the highest dividend yield spread relative to the S & P 500. The spread today of 170 basis points between Philip Morris' dividend yield and the 30 year Treasury Bond yield is the narrowest spread Philip Morris has traded at during a time of heightened litigation. For example, Philip Morris' yield was 4.2% in 1988 when the Cipollone case went against the tobacco industry while the S & P 500 yield was 3.5% and the 30 year Treasury Bond's yield was 9%.

during the past three years despite significant litigation developments such as the filing of the Castano class action case and state medicaid claims as well as a period of increased government proposals such as FDA regulation of cigarettes, an increase in excise taxes, and Congressional hearings.

In addition, during the first 40 years of tobacco litigation, the industry has had a successful record and has not paid out any monetary awards. The recent Carter decision is currently up for appeal. At today's stock prices Philip Morris is discounting \$25 to \$30 billion of future litigation claims given its current relative P/E multiple and the fact that the market is not fully valuing Philip Morris' domestic tobacco franchise. We have calculated the total financial claims for potential litigation against Philip Morris to be \$10 billion. Therefore, we believe Philip Morris is fully discounting future litigation risk. RJR Nabisco's total financial claims for potential litigation would be \$7.5 billion.

In the event litigation accelerated and the industry was repeatedly losing individual cases, the industry could propose a one time global settlement that would be resolved through legislation and would end litigation risk against the industry. The industry could raise prices to finance the settlement. For example, if the industry agreed to pay \$6 billion to settle all future and current claims, the industry only needs to raise prices on a pack of cigarettes by \$.25 to finance the settlement. This would negatively impact Philip Morris' EPS by \$.25/share and RJR Nabisco's EPS by approximately \$.20/share. The removal of litigation uncertainty as a result of a global settlement would cause sharp multiple expansion to occur. Philip Morris' stock would significantly appreciate by more than 50% assuming Philip Morris would trade at a market multiple at a minimum on 1997 revised EPS of \$8.75. However, we believe Philip Morris' stock can significantly appreciate without a litigation settlement. American Brands no longer has legal exposure to domestic litigation and the U.S. regulatory environment since they sold their domestic operations to BAT. UST has no cases with a class action status pending against them.

We continue to believe the litigation outlook is limited to individuals and individual issues versus a class action status. The class action status of the Castano case was decertified on May 23, 1996 by a Federal Circuit Court of Appeals eliminating the risk of a national case of 50 million smokers and thereby eliminating the highest financial risk to the tobacco industry. In addition, the recent ruling in Florida as it relates to Medicaid recovery claims by states reinforced our belief that Medicaid recovery claims will have to be tried on an individual basis. The state courts in West Virginia and more recently in Washington have dismissed many of the significant claims against the industry in the current Medicaid reimbursement cases in West Virginia and Washington. The recent court ruling in Washington underscores our belief that Medicaid reimbursement claims will have to be tried on an individual by individual basis if the states seek to proceed on personal injury theories. The remaining individual cases against the industry are limited in nature since they pertain to damage claims before 1969. Warning labels were established by Congress in 1969. The warning labels prevent post-1969 injury claims by Plaintiffs. Furthermore, the heightened negative sentiment towards tobacco from a political, legal and regulatory view could result in a resolution by Congress to clear the outlook for the industry.

Barclays Global Investors

45 Fremont Street, San Francisco, CA 94105
P.O. Box 7101, San Francisco, CA 94120-7101
Tel 415 597 2019
Fax 415 597 2011
Net marcia.hayes@bglobal.com

Marcia Hayes

Business Development Officer
Managing Director
Institutional Group - US

November 26, 1996



Ms. Lois Buermann
Manager, Domestic Equities
Minnesota State Board of Investment
Suite 105, MEA Building
55 Sherburne Avenue
St. Paul, MN 55155

Dear Lois:

We received a questionnaire from Mike Menssen dated October 24th regarding investments in tobacco-related stocks. Please find our response below:

1. Discuss the impact that tobacco-related lawsuits have had/may have on prices and volatility of tobacco-related stocks, generally.

As individual rulings are handed down in the multiple pending lawsuits, the volatility of share prices for tobacco related companies is likely to increase. Judgments against tobacco companies will tend to put negative pressure on share prices, while those dismissing plaintiff claims against tobacco firms are likely to trigger a positive share price response. A recent example of this occurred on August 9, 1996 when tobacco share prices experienced steep declines on the back of a ruling in favor of the plaintiff in the *Carter vs. American Tobacco* case. Industry giant Philip Morris' stock price fell \$15 in just one day as a result of perceived liability. However, share prices have rebounded on such news as a Florida judge dismissing all of that state's pre-1994 claims against the tobacco industry on September 17, 1996. The same ruling stated that the state must identify each individual Medicaid recipient and that each case would have to be proved on an individual basis, which will significantly limit the state's ability to exact restitution from the tobacco companies.

It is difficult to determine the net impact of all tobacco-related lawsuits on share price and volatility. The only certainty surrounding these cases is that they will take several years to be completely resolved in the courts. And as in all such lawsuits, the burden of proof lies with the plaintiffs and their representatives to demonstrate that the tobacco companies intentionally deceived the public regarding the dangers of smoking, and that absent the industry's action, he/she would not have chosen to smoke or continued smoking. At least to date, these have been very difficult items to prove in a court of law.

2. Discuss the impact that governmental regulations have had/may have on prices and volatility of tobacco-related stocks, generally.

Government regulation can be expected generally to have a negative effect. At present, most worrying to the tobacco industry is that government, specifically the Food and Drug Administration (FDA), will seek to regulate the nicotine in tobacco as a drug consequently making its access more difficult.

More importantly from a longer term perspective, the myriad of anti-smoking laws/ordinances in cities and states around the country should, over time, reduce the number of smokers/customers as they find fewer and fewer places where they can conveniently light up. Although more weakly enforced in general, a similar trend is beginning to slowly emerge in some western European countries. While these trends are clearly negative for tobacco, it is difficult to quantify their specific impact on share prices.

3. Which, if any, of the companies on the attached list does your firm follow and generate internal research? Summarize your firm's current investment opinion on each. How has the firm quantified the financial impact of litigation and regulatory risk for each? Does your research indicate that the current stock price adequately reflects these risks?

Our firm generates investment expectations on the following tobacco related companies: American Brands, Dimon, Loews, Philip Morris, RJR Nabisco, Standard Commercial, UST, and Universal. Our advanced investment approach seeks to rank each security based on its fundamental attributes and investment return prospects relative to all of the other securities in our selection universe. Based on this relative ranking, we consider the following companies to be attractive purchase candidates: RJR Nabisco, Standard Commercial, and Universal Corp. Our ranking process classifies the following companies as having neutral investment prospects: American Brands, Dimon, Loews, and Philip Morris. The shares of UST Inc. are presently classified as unattractive based on our investment criteria.

A significant component of our investment outlook for a stock is determined by estimates of future earnings that are collected and processed from over 2,500 security analysts. To the extent that the tobacco industry analysts have discounted the potential effects of litigation and regulatory risk in their earnings estimates for tobacco related companies, we feel that we have captured the risk inherent in these events. While difficult to explicitly reflect the impact of potential damage awards being paid by tobacco companies in future earnings estimates, analysts will generally revise their numbers based in part on the environment in which each company will have to operate. Given the highly publicized attention that is being focused on these tobacco related companies, we feel that tobacco industry analysts have indeed factored these risks into their estimates and recommendations.

- 4. Which, if any, of the stocks on the attached list do you hold in the SBI portfolio at the present time? What events would precipitate a decision to sell any of these holdings? What events would precipitate a decision to buy a name that you do not currently hold?**

We presently hold the following tobacco stocks in the SBI portfolio: American Brands, Dimon, Loews, Philip Morris, RJR Nabisco, Standard Commercial, UST, and Universal Corp. There are several events that would precipitate a decision to sell any of these holdings. They include a degradation in expected performance as determined by our investment model. This could result in part from declining earnings expectations, an overvaluation in share price relative to a variety of measures of intrinsic company value, or signals from corporate management decisions that indicate they think their company shares are over valued. Additionally, if the benchmark index weights of tobacco companies were to decline period to period in our custom weighted benchmark, we would consider selling our holdings to reflect these changes.

Our fund currently maintains holdings in each of the tobacco related companies for which we monitor and generate performance expectations (see #3 above). The decision to purchase one of the names we currently do not hold would require both that the name be added to the benchmark index and universe that the SBI strategy follows, and that the fundamental characteristics of these companies as determined by our investment model make them attractive purchase candidates.

Lois, I hope you find this brief discussion useful in your evaluation of tobacco stocks and their impact on the MSBI portfolios at BGI. Should you have any further questions, please feel free to call me.

Sincerely,

Marcia Hayes

Minnesota State Board Tobacco Related Questions

- 1.& 2. We have created graphs that help to illustrate the price movements over the past few years for two of the most prominent U.S. tobacco companies... Philip Morris and RJR Nabisco. On each graph we plotted two lines... a red line that reflects the price movement of the individual company and a blue line that reflects the company's price movement relative to the broad market (S&P 500 Index). We have also noted a dozen or so rather key events that have impacted these companies prices... some positively, some negatively.

Looking at actual price movement, we see somewhat different results from these two companies. Philip Morris advanced from roughly \$75/share to roughly \$100/share while RJR Nabisco declined from roughly \$42/share to roughly \$31/share. However, both companies significantly underperformed the broad market... Philip Morris by 30% and RJR Nabisco by 60%. The events had mostly similar directional affects on the two companies, but the magnitude of the affect differed at times. Clearly the most dramatic price movements resulted not from lawsuits or government regulations, but from the industry price wars that began on Marlboro Friday and lasted roughly seven months. But we did see fairly sharp price movements from the Liggett settlement, the Castano decertification and the Carter verdict. The other events proved to increase price volatility to be sure. We would expect similarly high price volatility from these companies as further events unfold over the next several years.

3. We conduct what we consider to be "A" level research on Philip Morris and RJR Nabisco as well as lesser degree analysis on several of the other companies as part of our industry level work. At current stock prices, we consider both companies to be roughly 20-30% undervalued using a 25% probability that the domestic tobacco operations generate no value whatsoever for the shareholders. We believe that incorporating this downward adjustment to shareholder value adequately considers the legal and regulatory risks.
4. At the present time we hold shares of Philip Morris common stock as well as RJR convertible preferred stock. What drives our decision to own these or any company for that matter is the discrepancy that we perceive between market price and fundamental value. As mentioned earlier, these companies currently appear to be 20-30% undervalued.

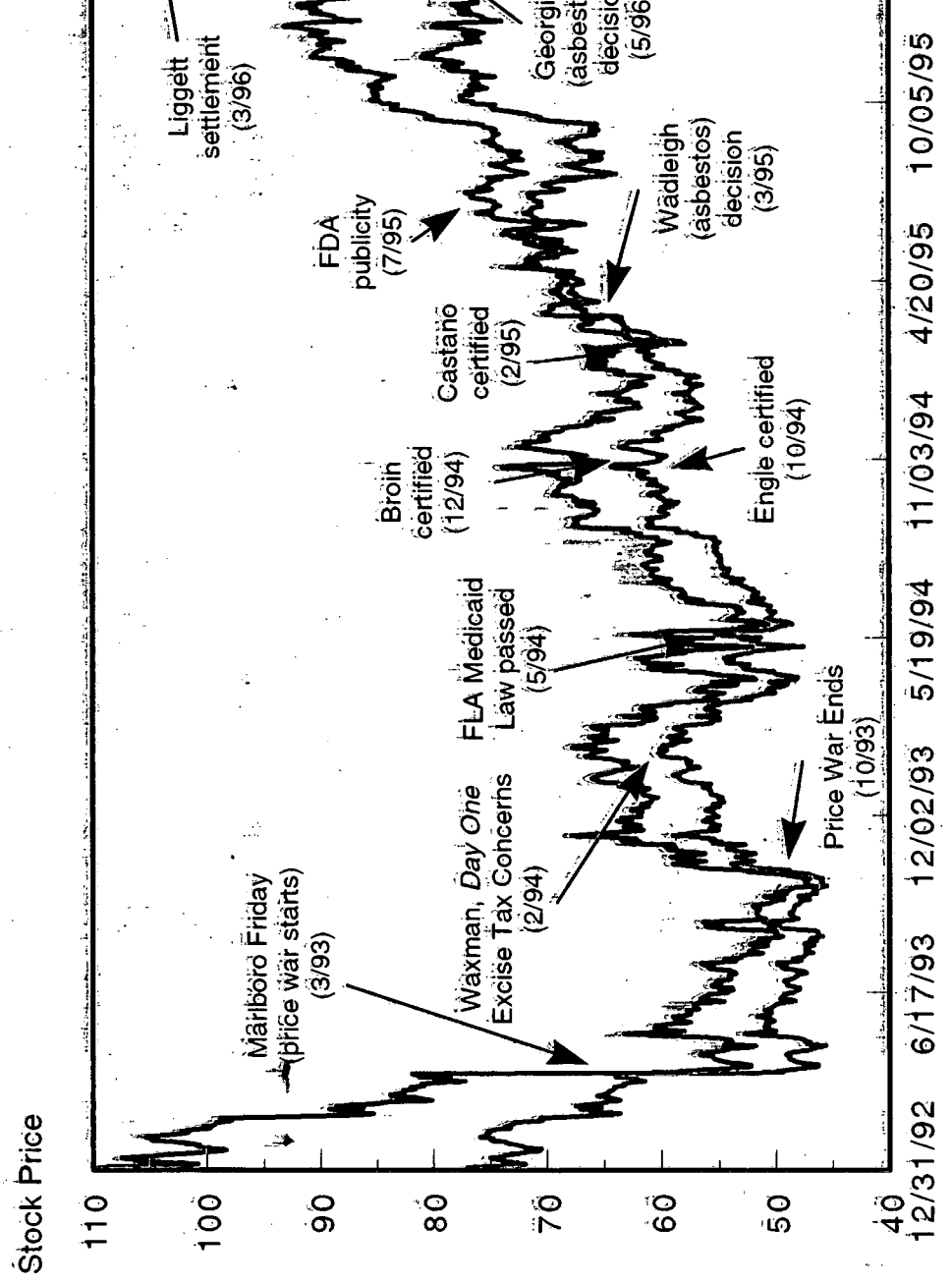
As the price/value discrepancy narrows, either due to rising stock prices or weakening fundamentals we would be inclined to reduce our position. Falling prices or improving fundamentals might cause us to add selectively to our current investments. It is hard for us to forecast, in advance, what particular event might cause movement in the price/value relationship. However, we pay close attention to the fundamental variables and adjust our inputs whenever necessary.

BRINSON PARTNERS, INC.

PHILIP MORRIS Relative Performance vs. S&P 500

— MO Stock Price
 — MO Relative Performance

Relative Performance



Data from 12/31/92 - 11/18/96

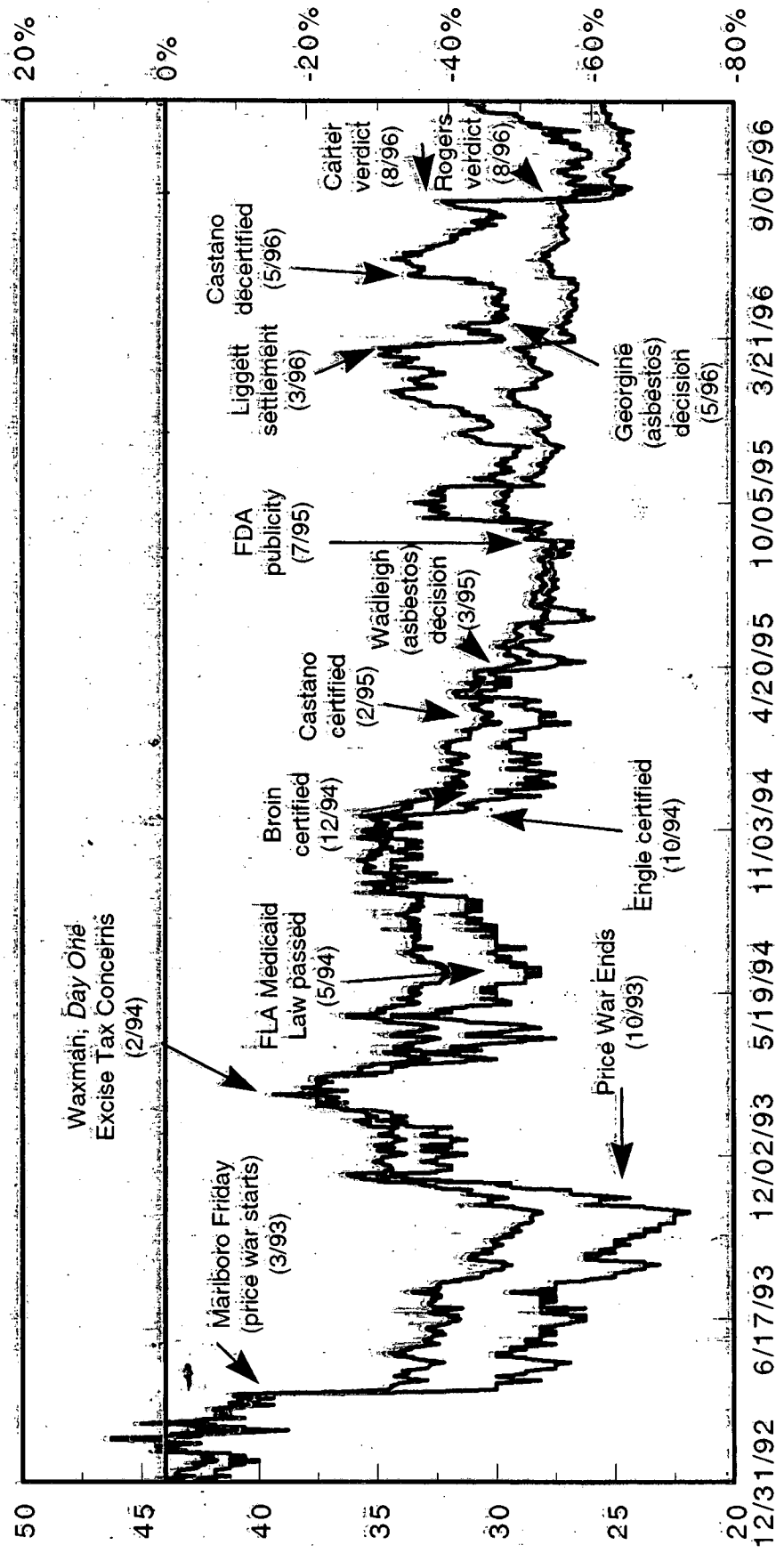
BRINSON PARTNERS, INC.

RJR NABISCO Relative Performance vs. S&P 500

— RN Stock Price
 — RN Relative Performance

Relative Performance

Stock Price



FLA ASSET MANAGEMENT INC.

November 27, 1996

Ms. Lois Buermann
Manager, External Equity Program
Minnesota State Board of Investment
55 Sherburne Avenue
Suite 105, MEA Building
St. Paul, MN 55155

Dear Lois,

I am writing to provide information on the tobacco industry, as requested in Mike's October 24th letter. Our research department, headed by Richard Adelaar, has compiled the following material in response to the questions included in that letter:

1. Discuss the impact that tobacco-related lawsuits have had/may have on prices and volatility of tobacco-related stocks, generally.

Tobacco litigation includes private personal injury cases, class action personal injury cases, Medicaid reimbursement cases brought by state governments and criminal grand jury investigations.

The stock price history of tobacco companies has long been reflective of an unusually wide range of possible outcomes on the litigation, legislative and regulatory fronts. Alternative scenarios range from the companies' being held responsible for only a minor portion of the health costs related to injury from tobacco products to a doomsday scenario in which the industry must be virtually liquidated to cover the full extent of the injuries inflicted. At various times, litigation decisions or the absence thereof, serve to give either the industry's allies or adversaries the temporary advantage in investors' current perception, and the stocks routinely reflect dramatic price reversals closely tied to these litigation events. Tobacco stocks, which would ordinarily be expected to behave as low volatility companies such as other companies in the food industry, have, in recent years, traded with greater volatility than the market. Much of this volatility is clearly associated with perceived changes in the trend of litigation. Philip Morris and RJR Nabisco both have above market betas of approximately 1.5, while a composite of food industry stocks without tobacco exposure has a below-market beta of .8, indicating that the tobacco companies are roughly twice as volatile as the food industry companies. (Food industry stocks make a useful comparison to the tobacco names, largely due to similarities in financial and other characteristics.) Much of this difference in betas is undoubtedly attributable to the litigation risk of tobacco companies, however, it is not litigation alone that accounts for the higher volatility associated with tobacco stocks. This increased volatility is a function of three interrelated risks, i.e. litigation, legislative and regulatory, which together produce the increased relative volatility. Isolation of the litigation impact on volatility is not strictly possible since the course of litigation events may conceivably impact what transpires in the legislative and regulatory arenas, and vice versa. Given that there is little prospect of a definitive resolution of the liability question in the near term (unless the industry obtains a legislative settlement that quantifies and limits the extent of their liability) the likelihood is that tobacco stocks will continue to trade with greater volatility than the market with the direction determined by the trends in jury decisions.

2. Discuss the impact that government regulations have had/may have on prices and volatility of tobacco-related stocks, generally.

Government regulatory initiatives consist primarily of the FDA rule making and the challenges to FDA jurisdiction currently pending in a North Carolina federal court. However, there are numerous other pending or potential government initiatives at both the federal and state levels, including disclosure requirements, smoking location restrictions and age-of-purchase limitations.

In general, personal injury cases against the tobacco companies, including the class actions, are a driving force for social and regulatory change insofar as they draw attention to the enormity of the public health consequences of smoking and to the behavior of tobacco company officials attempting to disguise these consequences. The esteem in which this industry is held has deteriorated badly, and its loss in public stature had preceded a decline in its political power and ability to defend itself against increasingly rigorous limitations imposed by federal and state governments on the industry's freedom to operate.

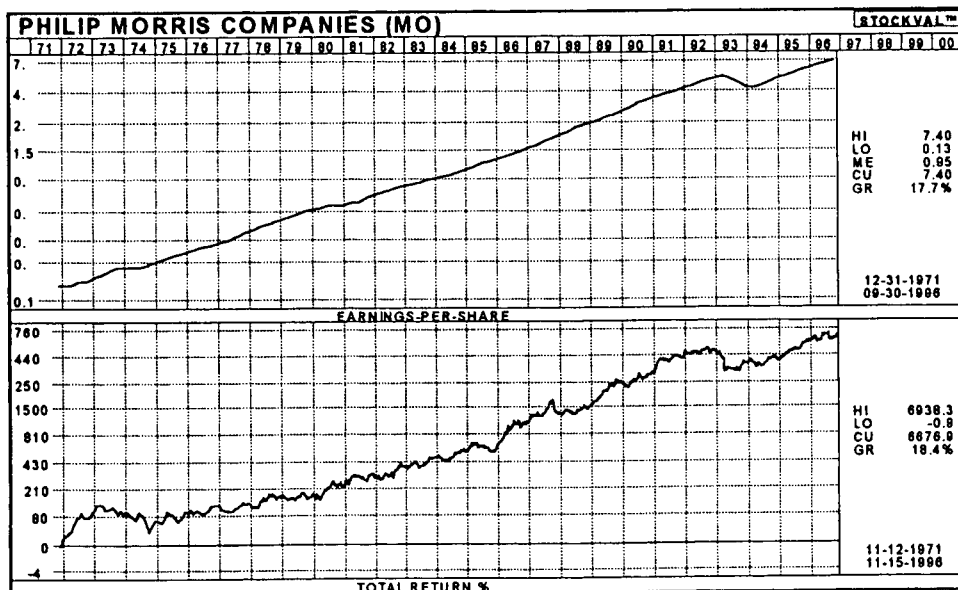
FDA restrictions adopted three months ago are undoubtedly the most extensive restrictions ever imposed on the tobacco industry. At that time, the government proposed regulations apparently designed to phase out cigarettes once and for all over the course of a generation. Although the FDA chose an evolutionary strategy rather than sudden prohibition, the agency had a program of increasingly restrictive measures designed to insure that smoking declines at the intended rate. The unregulated and unrestricted environment in which the industry had operated in the past appears to be gone forever.

The combined effect of both litigation and regulatory threats are presented in an analysis of the market's discounting mechanism, as applied to Philip Morris, (a useful proxy for the industry in general, as its largest and most profitable member) below:

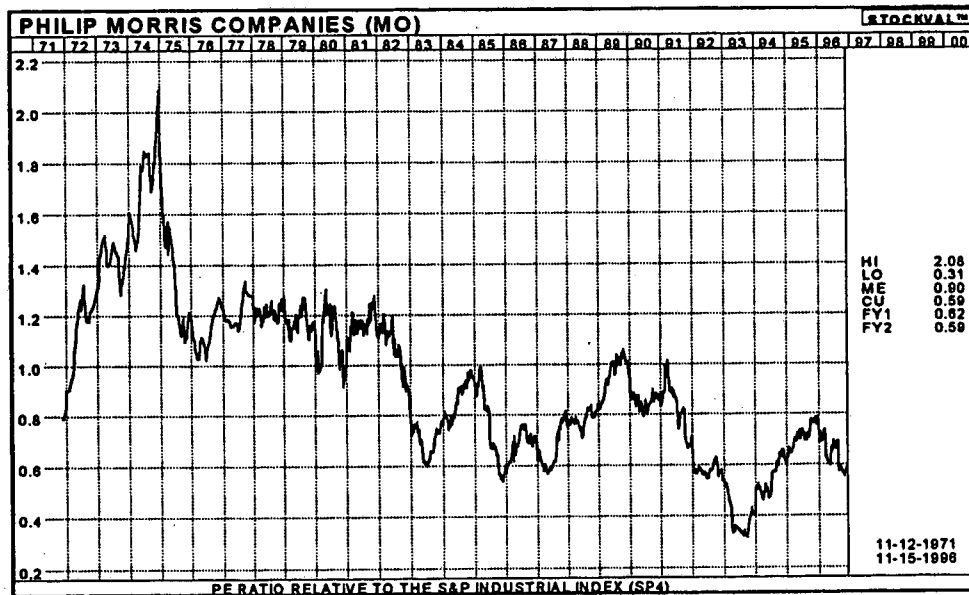
3. Which, if any, of the companies on the attached list does your firm follow and generate internal research? Summarize your firm's current investment opinion on each. How has the firm quantified the financial impact of litigation and regulatory risk for each? Does your research indicate that the current stock price adequately reflects these risks?

Our firm quantitatively monitors valuation on all the companies contained on your list through services such as StockVal and other databases. However, the only company which our analysts follow on a fundamental basis is Philip Morris, the largest and most profitable company in the tobacco industry. At the present time, our opinion is that Philip Morris may represent an attractive longer term investment opportunity, although it is not currently held in our investment portfolios (pending further clarification of the financial risk parameters and outlook for a legislated settlement, discussed below).

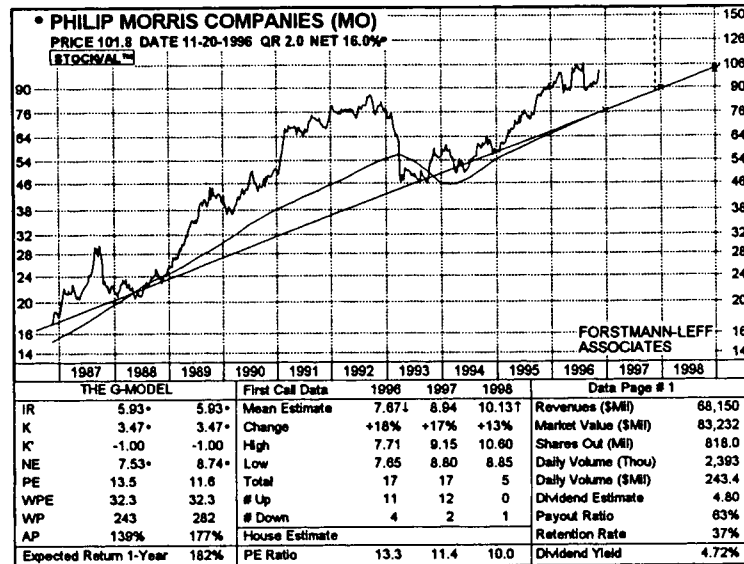
As the graph below illustrates, over the last twenty five years Philip Morris has consistently compounded both its earnings and total return at approximately an 18% annual rate.



Despite this phenomenal long term investment performance, Philip Morris' (MO) stock price has come to reflect a steep discount to allow for the possibility of future health related damage awards. As the graph below shows, prior to 1975, Philip Morris traded with as much as a 200% PE premium to the S&P 400. In the late 1970's this premium eroded to 120%, and, with the advent of more serious legal challenges to the industry, the premium eventually disappeared altogether by the early 1980's. Throughout most of the 1980's, MO averaged a 20% discount to the market multiple reflecting heightened litigation risks, before cheapening briefly to a 70% discount at its most severe low point in 1993. The 1993 low was primarily caused by fundamental concerns over the industry's ability to maintain premium pricing versus generic cigarettes, a concern which has since been dispelled by a strong profit recovery. Since 1993, relative valuation has recovered somewhat to a 40% discount to the S&P, still a rather remarkable discount for a company whose earnings have outpaced the market by a factor of 9X over 25 years.



The current aggregate market value of Philip Morris is \$83 billion, making it the eighth largest company in the S&P 500. However, its PE ratio is currently only 11.4X its 1997 estimated earnings, versus the market PE of 17X. Assuming the consensus forecast earnings growth rate of 16% for MO and no penalty for litigation, legislative or regulatory risk, a company of MO's financial quality would warrant a PE of approximately 32.3X in the currently prevailing low interest rate environment, which would result in a projected share value of \$282, or an aggregate market value of \$230 Billion. Thus one estimate of the discount applied to Philip Morris for potential tobacco liability is \$147 Billion below our calculated fair value of its estimated future earnings growth. The left hand "G-Model" box in the graph below shows the Warranted PE of 32.3X and the Warranted Price of \$282/share on the assumption of a projected 16% growth rate and zero risk of a litigation/legislative/regulatory meltdown.



To illustrate the reasonableness of this 32X target PE, one need look no further than Gillette, which is a multinational of directly comparable financial characteristics growing earnings at an identical forecast growth of 16% and currently receiving a 35X PE multiple.

Our lowest estimate of the litigation/legislative/regulatory penalty would come from an assumption that Philip Morris could only grow future earnings at the rate of a food company like General Mills which is growing earnings at 8% and selling at a PE of 20.5X. This would result in an estimate of a *minimum* litigation risk discount of \$42 billion. Thus, the range of Philip Morris's discount from the fair value of its projected future earnings growth is between \$42 billion and \$147 billion. This discount, however, cannot be associated solely with risks pertaining to litigation, but should be viewed as the combination of interrelated uncertainties in the courts, the legislative and regulatory arenas.

While the industry has recently suffered its first significant setbacks in the courts, it is by no means clear that the industry is in an untenable financial position which would justify so deep a discount. The range of alternative outcomes still appears to include a majority of scenarios in which tobacco remains a highly profitable, multinational growth industry. Even should the industry be required to finance some portion of health related costs associated with tobacco, the relative price inelasticity of tobacco suggests that it should be possible to finance very large contributions from the industry with surprisingly minor impacts upon consumption and profitability. Opponents of the industry suggest depriving the industry of all domestic profits to contribute toward health costs, a figure perhaps as great as \$6 billion per year. Such an annual contribution could theoretically be financed with a \$.25 per pack price increase, even net of the impact of lowered consumption. Were Philip Morris to agree to such a sizable sacrifice in order to clarify their status and put the issue behind them, the present value of the company's 40% share of the annual contribution would be approximately \$28 billion, an amount below the *minimum* \$42 billion litigation/legislative/regulatory discount currently built in to Philip Morris' share price of \$100. Given this enormous pricing flexibility for tobacco products, it is probable that the industry will eventually work out a settlement of some type and that the settlement will be more likely to enhance, rather than detract, from shareholder value. Even using worst case assumptions that industry adversaries win a \$2.4 billion annual contribution from Philip Morris and that Philip Morris' growth rate were impaired down to 8%, Philip Morris should still add \$14 billion in market value due to elimination of the need for a future litigation/legislative/regulatory discount. This implies a minimum fair value for Philip Morris of \$117 per share, 17% above the current share price. Using any set of assumptions which settles these issues on terms more favorable to the industry than the confiscation of all their domestic tobacco products furnishes the opportunity for Philip Morris' stock to potentially double. This theoretically should provide an incentive for Philip Morris and the

Lois Buermann
Page 5.

industry to consider a legislated settlement to enhance shareholder value by resolving the uncertainties impairing the stock price. As congress has been held by Republicans in recent elections and important industry adversaries like David Kessler and Henry Waxman have disappeared from positions of political prominence, the prospects for obtaining a resolution favorable to the industry appear to have increased significantly. We therefore maintain a generally constructive investment opinion on Philip Morris and tobacco related equities in general.

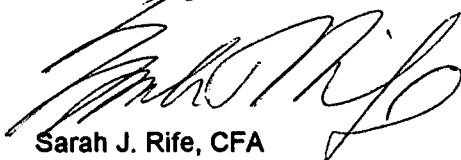
4. Which, if any of the stocks on the attached list do you hold in the SBI portfolio at the present time? What events would precipitate a decision to sell any of these holdings? What events would precipitate a decision to buy a name that you do not currently hold?

Currently, we do not hold any of the stocks on the list in our portfolios.

As discussed above, the industry may seek to arrange a compromise that gives it some breathing room. Such a compromise can possibly be effected on terms that exchange an amnesty from civil and criminal suits for a financial settlement, acceleration of the FDA's phase-out of the industry's most toxic products, and the development of safe tobacco products in a full disclosure environment. The prospects for such a comprehensive legislative settlement may be improving. With tobacco companies paying roughly \$17 billion in taxes annually, or 11% of the government's corporate tax collection, it is unlikely that the government wishes to see these companies disappear altogether. The size of such a settlement may be related to the market's risk premium for these companies, discussed under question 3, above. Whatever the size of a comprehensive settlement, the companies should be able to recover partial offsets in increased prices to the consumer. Our observation of the development of such a settlement would provide the most likely scenario for the purchase of these stocks for our clients' portfolios.

If you would like to discuss the observations contained in this letter, or if you require additional information, please feel free to contact me at (212) 407-9411.

With best regards,



Sarah J. Rife, CFA
Vice President and
Director of Client Liaison

TWO INTERNATIONAL PLACE

BOSTON, MA 02110

PHONE 617.790.6400

November 7, 1996

Mr. Michael J. Menssen
Manager, Domestic Equity Investments
Minnesota State Board of Investment
Suite 105, MEA Bldg.
55 Sherburne Avenue
St. Paul, MN 55155

Dear Mike:

Enclosed are a series of charts showing the price activity of the S&P Tobacco Industry group and the S&P 500 index. Except for the sharp fall in late '92 and early '93, the group has performed remarkably well against the overall market during the 11/84 to 11/96 time period. Since Philip Morris, which dominates the group, has a generous dividend, the total return comparisons would be even more favorable. The chart showing the relative volatility of the tobacco group does confirm an upward drift in recent years. It also shows periodic flare-ups in volatility often related to increased litigation concerns. The significant increase in volatility that occurred in late '92 and early '93 was related to both litigation worries and to price-discounting which caused margin pressures and loss of market share for high mark-up premium bands.

With regard to the impact of government regulation on volatility, I believe that it has had a minor effect and not all negative. Labeling regulations, for example, may have had a slightly positive effect in litigation. For example, juries may have felt less sympathetic toward the plaintiff since he or she ignored the clearly marked warning labels. The one area of regulation that could impact tobacco companies is agency responsibility. If the FDA is given the responsibility to control tobacco as a drug the negative ramifications are obvious. However, I am somewhat more optimistic about the potential future roll of the Federal government in the tobacco controversy. Since tobacco is so economically important and is a source of significant direct and indirect revenue for governments, a political solution to the problem is distinctly possible. The fact that politicians from "tobacco economy" states are in positions of power in Congress enhances the odds that a political solution will be found. The "pound of flesh" for the industry could be in the form of funding anti-smoking education, helping enforce bans on smoking by youths, and possibly fines (a.k.a. settle-

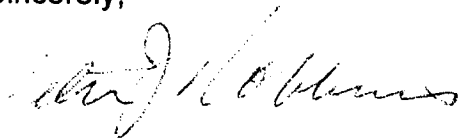
ments) paid to various state governments and citizen groups. Cost is not a major issue if tobacco companies get to put their litigation worries behind them.

We have ranks on all companies on your list except for Brooke Group Ltd. Currently BAT Industries, Dimon Inc., RJR Nabisco, and Universal Corp. are buys. American Brands is a sell and the rest are holds. Our stock ranks are driven by inputs from financial data-bases and as such do not factor in the impact of litigation. Evaluation of issues such as litigation fall into the area of judgment for us. Part of our process has always been to make these judgment calls after the system's buy/sell selections. The types of judgment calls we make include decisions on stocks involved in takeovers, controversial issues such as litigation, and financial problems involving the potential for bankruptcy. Based on these factors, which are not easily quantifiable, we make decisions on whether or not to invest in the stock as well as the extent to which we would be willing to bet on the stock or industry. Our current position is to hold tobacco stocks if they are in the benchmark but to limit the overall bet relative to the benchmark. We recognize that historically and quantitatively derived risk models cannot totally factor in litigation impact.

In the active account we currently own Loews Corp. In the semi-passive account we own Dimon Inc., Philip Morris, RJR Nabisco, and Universal Corp. At this time, our sell decision will be based entirely on stock rank. However, if in our judgment, we become convinced that there is no hope for the industry we could override our ranks and sell. If a political solution is found for these companies we would likely remove our judgmental constraints and rely on risk/return considerations to determine stock bets.

Lastly, from an investment process point of view, we would have no problem adjusting our process to exclude tobacco stocks from both the benchmark and the portfolios.

Sincerely,

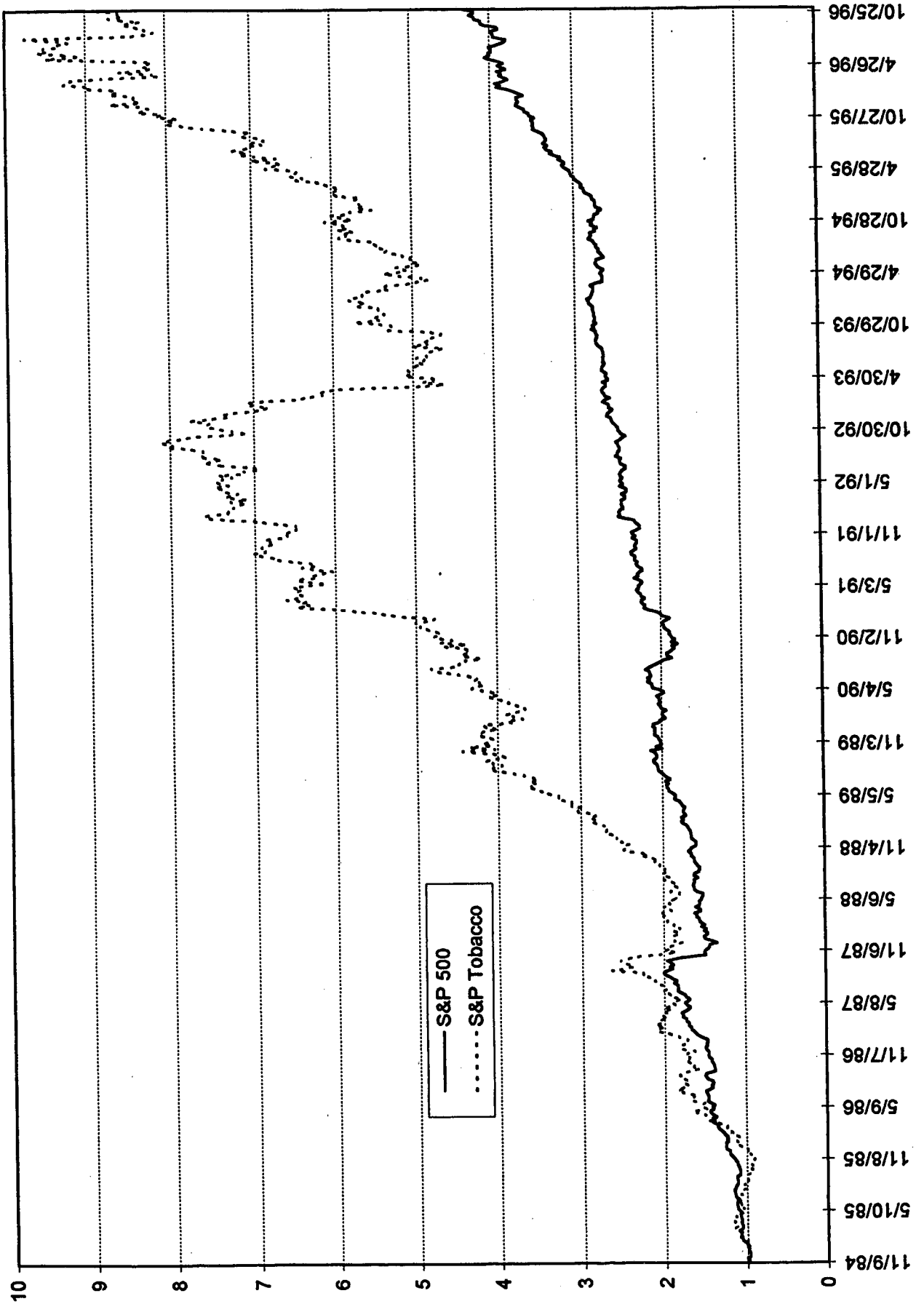


Senior Vice President.

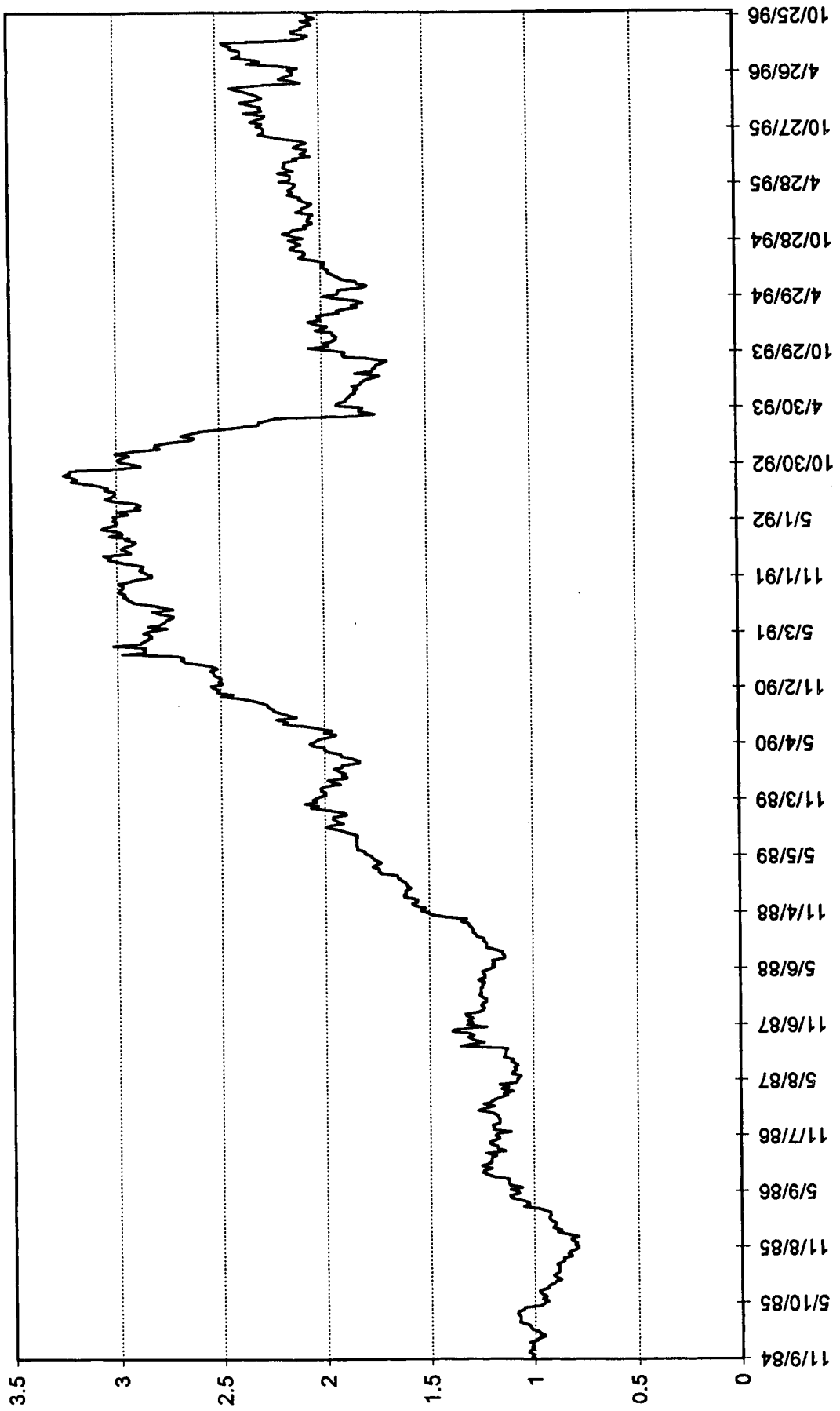
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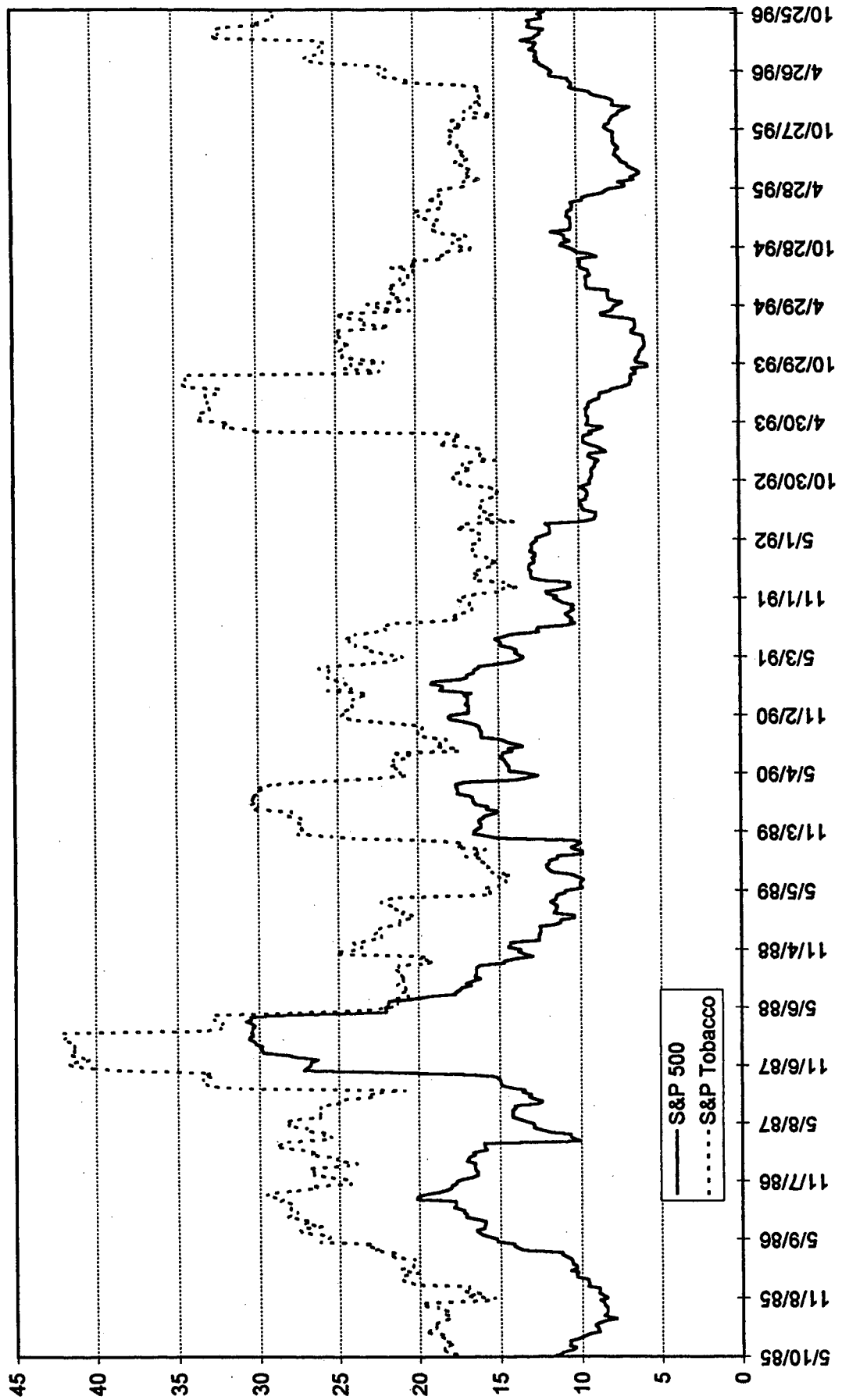
Price Indices For S&P 500 and S&P Tobacco
(Weekly Data 11/9/84 - 11/6/96)



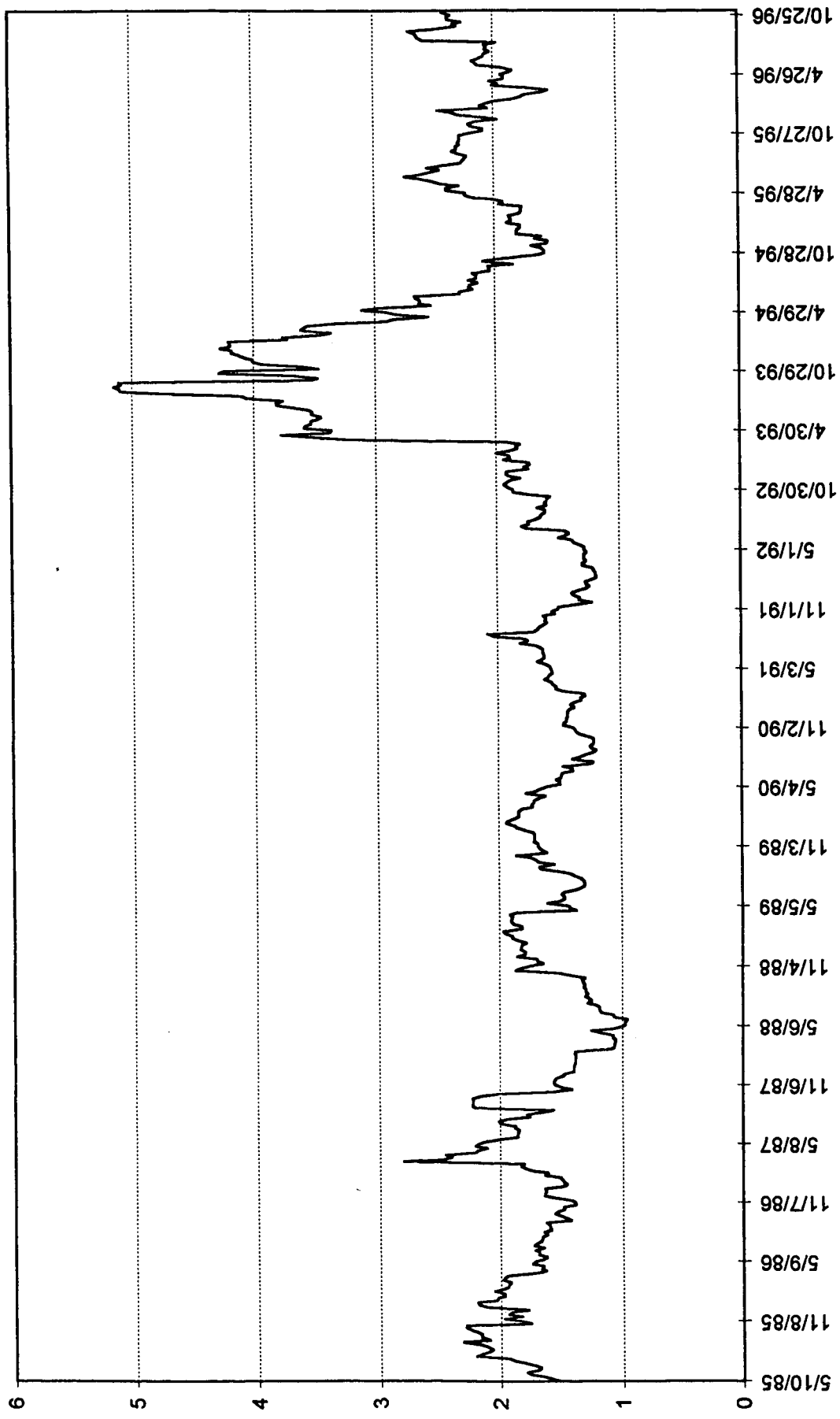
Price Relative S&P Tobacco vs S&P 500



**Annualized Volatility
(rolling 26 week period)**



Relative Volatility Tobacco vs S&P 500





Christopher W. Smith
Senior Vice President
Equity Portfolios

General Electric Investment Corporation
P.O. Box 7900, 3003 Summer Street
Stamford, CT 06904-7900
203 326-2319

November 26, 1996

Mr. Michael J. Menssen
Manager, Domestic Equities
Minnesota State Board of Investment
Suite 105, MEA Building
55 Sherburne Avenue
St. Paul, MN 55155

Dear Michael:

In response to your letter of October 24, 1996 concerning tobacco related investments, we have discussed the issue with our tobacco analyst and the portfolio managers who own tobacco-related stocks in order to provide you with answers to your questions.

1. Discuss the impact that tobacco-related lawsuits have had/may have on prices and volatility of tobacco-related stocks, generally.

Lawsuits have a negative impact on prices of tobacco-related equities because of the uncertainty of the outcome of lawsuits. Investors have difficulty assessing how much of the future cash flows of the companies will be "lost" in court or on any potential future settlement. Over the last couple of years, as the lawsuits have been filed, the stocks have sold off with each subsequent announcement of an additional lawsuit. Presently, the stocks are trading at a relative P/E valuation at or near all time historical lows.

2. Discuss the impact that governmental regulations have had/may have on prices and volatility of tobacco-related stocks, generally.

Presumably, most governmental regulations would seek to restrict the use of tobacco or the consumers' access to tobacco products, and these actions would have a negative effect on the price of the stocks and increase their volatility. The news of increased governmental regulations has also had a depressing impact on prices, however, not to the same extent that news of litigation has had.

3. Which, if any, of the companies on the attached list does your firm follow and generate internal research? Summarize your firm's current investment opinion on each. How has the firm quantified the financial impact of litigation and regulatory risk for each? Does your research indicate that the current stock price adequately reflects these risks?

Our firm follows the large capitalization tobacco companies, specifically Philip Morris, Loews Corp., RJR Nabisco Holdings, and UST. We have Philip Morris rated 2 (on a 1 to 5 rating scale, with 1 being the highest rating). We have Loews Corp. and UST rated 3, while RJR Nabisco Holdings is not owned and currently has no rating. Our valuation approach has been to value the company's non-domestic tobacco operations and then back into the implied valuation that the stock market puts on the domestic tobacco operations. Our research indicates that the market has put a substantial discount on US tobacco operations and in the case of Philip Morris valued such operations at less than zero. Given the present litigation environment as we see it, the stock market has more than adequately discounted for the risks present today in Philip Morris.

4. Which, if any, of the stocks on the attached list do you hold in the SBI portfolio at the present time? What events would precipitate a decision to sell any of these holdings? What events would precipitate a decision to buy a name that you do not currently hold?

Presently our holdings consist of Philip Morris and Loews Corp. We are monitoring the litigation and regulatory events on a day-by-day basis and will take action as the events unfold. Our present inclination is to continue to hold tobacco issues because the current valuations, in our opinion, more than discount the perceived risks. Clearly, if the perception of the risks were to increase, we would take action to substantially lower our tobacco weightings.

Sincerely,



Christopher W. Smith

CWS/lis

cc: Mark A. Dunham

INDEPENDENCE INVESTMENT ASSOCIATES, INC.

1. Tobacco Lawsuit and stock volatility:

Tobacco related lawsuits have significantly determined tobacco stock volatility. Since 1954 there have been close to 1000 product liability cases filed against the tobacco companies. These filings have turned into 25 or so trials and three decisions against the industry. The recent Carter decision against the industry is the only one where a monetary judgment against the industry is possible and that case is under an extended appeal process. The industry clearly has a long history with lawsuits. The major negative effects on the stocks have come with each new wave of litigation. A litigation wave signifies a new legal theory against the industry and because it is new it creates uncertainty. The stock market and individual stocks hate uncertainty.

The first wave of standard product liability suits occurred between 1954 and 1984. The second wave started in 1984 with the Cipollone case which the industry initially lost. This case coincided with the trend of negative press against the industry and the growth of numerous anti-smoking organizations. The tobacco stocks sold at their all low relative P/Es during the 1984-1986 period. Cipollone was overturned on appeal and the industry's preemptive defenses were established. These defenses were eventually affirmed by the Supreme Court.

The third wave of litigation began in 1994 with the filing of the Castano class action suit. Castano had a particularly negative effect on the tobacco stocks because the plaintiffs were represented by a consortium of well financed and high powered tort lawyers. Coincident with the Castano filing came the state Medicaid cases initiated by attorneys-general in several states. Both Castano and the Medicaid cases caused great concern among investors because of their potential for crippling financial judgments against the tobacco companies. Both areas represented new legal theories and tactics against the industry. The theories were crafted to get around the need to prove individual causation which had not worked in the previous two litigation waves. As we are now dealing with an attempt by plaintiffs' attorneys to rewrite established tort law it will likely take many years to adjudicate. The action of the Philip Morris stock over the past few years is representative of the impact from litigation actions. The stock went from \$58 to \$90 in 1995 in a strong market when the threats from class actions stayed in the background. The stock continued its rise to \$102 in 1Q, 1996. The agreement by the industry's weakest and smallest company, Liggett Group, to settle the Castano case caused Philip Morris to drop quickly to \$88 in mid March. The stock stayed at this level until a sharp rise to \$105 by mid-summer. The upward move was spurred by a decision by the Fifth Circuit Court of Appeals to decertify Castano. The easing of this class action suit took pressure off the stock. In mid August the stock dropped to \$90 when Brown & Williamson lost the Carter case. A jury awarded the plaintiff \$750,000 and Philip Morris lost about \$ 4.5 billion in market cap. The industry won its next individual case and received positive preliminary judgments in the Medicaid. Several other cases have been postponed until mid 1997. The lifting of these immediate threats finds the stock moving back to the \$102 level at this writing.

Litigation threats have more effect on tobacco stocks than any other factors. 1996 has been unusual in its volatility. These sharp price movements reflect the uncertainties of facing new and untried legal theories in a market that is highly sensitive to "news". The industry has usually lost its cases in the papers and won them in court. We would expect some losses in future cases as the cost of doing business. However, at this point we see no reason to expect the new tort theories to be any more universally successful than existing tort law.

2. **Government regulations** have not had the impact on the tobacco stocks that has come from litigation threats. Attempts by the FDA to regulate the industry have had short term effects on the stocks but the steps needed by the FDA to regulate haven't been politically possible. It is expected that the industry will eventually work out a voluntary agreement with Congress that will cover most of the FDA's proposals but without regulatory powers. Government bans on smoking in public places have had little effect on consumption patterns.

3. IIA currently follows and generates internal research on Philip Morris, UST Corp. and Universal Corp.

Philip Morris- Investment opinions are made by balancing the risk-reward opportunities on an individual stock. The most attractive opportunities entail some degree of risk. We have noted the major risk factors involving Philip Morris in the prior paragraphs; individual product liability lawsuits, class action lawsuit and state Medicaid cases. The confluence of these issues along with anti-tobacco as a political issue has caused unusual volatility in 1996. We believe that trial calendar will be quiet for several months, the post election environment is favorable and the threat of FDA regulation is lessening. The fundamentals of Philip Morris continue to strengthen.

(a) The Company has recorded upper double digit earnings gains for the past four years and earnings are projected to grow at a 12% growth rate for the next five years (Table 1) The US Tobacco business, which is the only part of the business with litigation risk, represents only 34% of total earnings.

(b) Philip Morris generates a high return to shareholders. In 1997 we expect a \$5.50 per share dividend and a \$3 billion share repurchase or \$3.70 value per share. The Company will be returning \$9.20 to shareholders in dividends and share repurchases

(c) Table 2 compares the current valuation of Philip Morris with other well known consumer product companies with international operations. Philip Morris sells at a substantial discount to the other companies and their long term record and outlook is superior to most of these companies. If Philip Morris sold at the average of this list (ex Coca-Cola and Gillette) the stock would be \$168. That amounts to a \$22 billion discount on their market capitalization. We believe this adequately covers the tobacco industry risk.

UST Corporation- UST is in the smokeless tobacco business and is not a part of the litigation associated with cigarettes. The Company is penalized by association with tobacco but at present has few of the liabilities. The Company has generally sold at a higher valuation than tobacco companies due to its consistent growth rate and absence of litigation. One of its risks is the continued increase in tobacco taxes which raises selling prices and could drive customers to lower priced and less profitable private label products.

Universal Corp. is a procurer and processor of tobacco leaf in all markets where tobacco is grown. Universal sells its product to all cigarette companies worldwide, including both privately held companies and state tobacco monopolies. The Company is not effected directly by any tobacco regulation or litigation. Universal acts like and is analyzed like an agricultural commodity company. World supply and demand conditions for tobacco leaf and price are the main earnings and stock price determinants.

4. Philip Morris and UST are held in the SBI portfolio. The fundamental inputs for these companies are produced through internal research. The IIA valuation models rank all of the stocks followed by internal research. The final ranking system determines the stocks that are either added or deleted from the NIXDEX portfolio.

Why Own Philip Morris?

Table One

<u>Quarterly Change</u>	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>Full Year</u>
1997					15.7E
1996	14.3	18	18	17.6E	16.8E
1995	16.6	17	15.8	14.7	17.9
1994	20.1	18	20.1	19.8	20
1993	-2.9	18.4	28.1	40.2	19

Table Two

Comparison with Consumer Product Companies with International Operations

<u>Company</u>	<u>Current P/E</u>	<u>5 Year Growth</u>
Philip Morris	10.5	12
Coca-Cola	32	17
Kellogg	19.7	10
Heinz	18.0	10
PepsiCo	20.8	14
Sara Lee	18.5	11
Unilever	15.0	10
Colgate	21.1	11
Gillette	28.0	16
P&G	23.0	12
S&P	17	7



Independence Investment Associates, Inc.

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Minnesota State Board of Investment - Tobacco Survey

November 29, 1996

1. Discuss the impact that tobacco-related lawsuits have had/may have on prices and volatility of tobacco-related stocks, generally.

Ongoing litigation against tobacco companies has had a significant impact on both the level and volatility of tobacco stock prices over the last few years. As a group, tobacco stocks have risen and fallen based on the outcome of the latest court case and the amount of upcoming litigation. In general, the companies have been trading at approximately 60% of the market earnings multiple following a legal setback for the industry and as high as 80% when the pending legal calendar is light. Prior to the litigation threat to the industry, tobacco stocks such as Philip Morris and Reynolds traded at market-like earnings multiples.

2. Discuss the impact that governmental regulations have had/may have on prices and volatility of tobacco-related stocks, generally.

The threat of government regulation of the industry has also played a role in the price movement of tobacco stocks. The head of the Food and Drug Administration (FDA), David Kessler, who just this week announced his resignation, has been very aggressive in his attempt to regulate the sale of tobacco as a drug. Dr. Kessler's main objectives have been to restrict access of minors to tobacco products and to control the marketing of these products to minors. His efforts, however, have met vigorous opposition from the tobacco industry and the Republican-led congress. It is believed that Kessler's as-yet-unnamed replacement will not be as aggressive in pursuing regulation. If, however, regulation were to occur, it would certainly hinder domestic tobacco profitability.

3. Which, if any, of the companies listed below does your firm follow and generate internal research? Summarize your firm's current investment opinion on each. How has the firm quantified the financial impact of litigation and regulatory risk for each? Does your research indicate that the current stock price adequately reflects these risks?

American Brands Inc.	B.A.T. Industries PLC	Brooke Group Ltd.
Dimon Inc.	Loews Corp.	Philip Morris Cos. Inc.
RJR Nabisco Holdings Corp.	Standard Commercial Corp.	UST Inc.
Universal Corp.		

Several of the tobacco companies listed above have appeared in the JPMIM large capitalization research universe over the years. Currently, however, only Philip Morris is actively followed by our "consumer stable" (which includes tobacco) sector analyst. At JPMIM, each of our sector analysts has discretion over which companies in his/her sector to follow, recognizing that their performance is measured relative to the performance of their S&P500 sector. Our current investment opinion on Philip Morris (MO) follows.

Philip Morris

The controversy surrounding MO is clearly the potential tobacco litigation liability. It is important to realize that the market has discounted MO's stock price substantially because of the uncertainty regarding the liability. The way we deal with the uncertainty in our valuation model is, in essence, to assume one-third of the value of domestic tobacco disappears. This severe discounting is in recognition of the fact that fear of potential liability can have a meaningful impact on the valuation of the stock. Our analysis of MO focuses on the fundamentals of its core business units and the potential liability from tobacco litigation.

The fundamentals of MO are easiest to understand when you break the company up into its three main divisions. In order of importance, these divisions are International Tobacco, U.S. Tobacco, and Kraft General Foods.

International Tobacco represents 35% of MO's operating income. The business has net sales of \$12.5 billion and operating margins of 33%. Tobacco category growth is flat to declining 1% in the developed markets of Western Europe and Japan. However, the American blend cigarettes that MO sells are growing at a 2-3% rate. Category growth in the developing world, excluding China, is over 6%. Philip Morris International has a high market share in many of the important international markets like Germany (40%), Japan (15%), and Mexico (24%). Its dominant brand is Marlboro, which has the same positive demographic profile as in the US. The pricing environment is basically in line with inflation, constrained by the high excise taxes in many international markets. International Tobacco is expected to grow operating income by 13-15% annually over the next five years. This is MO's highest growth and most attractive business.

Domestic tobacco represents about 34% of total operating income. The business has net sales of \$9 billion and operating margins of 44%. The domestic tobacco category is declining at a 1% rate. This is slowing from the 2-3% rate of decline five years ago. Philip Morris USA has an overall market share of 46%, supported by the 31% share of its powerful Marlboro brand. The company continues to grow share by nearly 1% per year. This growth in share is driven by the premium sector of the category where MO has a 54% share. Pricing has continued to improve recently. The company led a 4.4% price increase in the premium sector and a 6.6% increase in the discount sector in April 1996. The price gap between the premium and discount sectors is not excessive, facilitating a rising share for the premium brands. MO has a very strong franchise in the domestic tobacco market. This is supported by the Marlboro brand, its low cost manufacturer and distributor status, and focused sales force and marketing efforts. MO's domestic tobacco business is expected to grow operating income 8-10% annually for the next five years.

The Kraft General Foods division contributes 28% of operating income. The sales are \$2.5 billion in the U.S. and \$1.3 billion internationally. The operating margins are 16% in the U.S. and 10.5% outside the U.S.. The food business has dominant market shares in cheese, coffee, chocolate (overseas only) and a presence in the U.S. ready-to-eat cereal business. Operating income growth for the U.S. component should average about 7% over the next five years. The international division will grow about 5% over the same time period. These estimates exclude possible acquisitions.

The fundamental analysis of MO would not be complete without discussing the financial component. The company generates \$3.5 billion in free cash flow annually. These funds are dedicated principally to share repurchase, which adds 2-3% annually to the growth rate in earnings per share.

Our view of MO is that it is a very undervalued security based on fundamentals as well as our belief that the 'litigation fear discount' will subside. Some investors believe that a win by the plaintiffs may not be a disaster for the stock. They contend that the valuation discount the stock is carrying is greater than any reasonable estimate of the actual liability. Few are predicting a disaster scenario regarding litigation but of course it is always a risk. We have done an analysis of MO by independently valuing the international tobacco and the food and beverage businesses. We assumed that the remainder of the stock price is the 'value' of domestic tobacco. Our analysis shows that the domestic tobacco business is currently valued by the market at approximately \$10.1 billion. We believe, if there was no tobacco liability, based on earnings and cash flow the business is worth \$27.0 billion. Therefore, the litigation 'discount' is \$16.9 billion or \$33 per share. Of course it may seem that to assume no tobacco liability is unrealistic but in reality MO has never had to pay a tobacco liability claim. Again, the 'disaster' scenario, a major judgment against the company, is possible, therefore the stock could be vulnerable. However, we are comfortable with the risks as well as the strong underlying earnings and cash flow growth of this well managed company.

4. Which, if any, of the companies listed below do you hold in the SBI portfolio at the present time? What events would precipitate a decision to sell any of these holdings? What events would precipitate a decision to buy a name that you do not currently hold?

American Brands Inc.	B.A.T. Industries PLC	Brooke Group Ltd.
Dimon Inc.	Loews Corp.	Philip Morris Cos. Inc.
RJR Nabisco Holdings Corp.	Standard Commercial Corp.	UST Inc.
Universal Corp.		

Currently, we hold American Brands and Philip Morris in the SBI portfolio. American Brands (0.1% of the SBI portfolio) is held strictly for risk control purposes, as it represents 0.4% of the SBI benchmark. The company is not followed by our research group and therefore, any further purchase or sale of American Brands would serve the purpose of adjusting the portfolio's risk relative to the benchmark.

We currently view Philip Morris as a well managed company with tremendous earnings power, that is significantly undervalued. One of the following events would need to occur for us to change our forecasts enough to trigger a sale of our entire position:

- 1) A catastrophic legal event such as proof that the company knew the dangers of smoking over thirty years ago.
- 2) Product pricing flexibility disappears.

We view neither of these scenarios as likely. The technology that existed thirty years ago was not advanced enough to determine with any certainty that cigarette smoking was harmful. Even if the tobacco companies knew of the dangers, the microscope under which they have operated over the last several years would surely have turned up evidence of this knowledge.

Philip Morris has historically had the market share to set the price of cigarettes and, therefore, determine their own profit level. This pricing power is not likely to disappear given their continued dominance of

domestic and foreign cigarette markets. Additionally, management has experimented with pricing in the past (“Marlboro Friday”) and is aware of the inelastic demand for cigarettes.

It is more likely that we “trim” our position in Philip Morris rather than sell it entirely. One of the events outlined above would *not* need to occur to trigger a partial sale of the stock. Rather, a partial sale would more likely be the result of adjusting the portfolio’s risk.

There are two scenarios under which we might purchase one of the above companies that we do not currently hold. First, if one of these companies were added to the SBI benchmark portfolio, there is a possibility that we might purchase the stock for risk control purposes, particularly if the company represents a significant percentage of the benchmark. The other scenario is if our analyst decided that one of these companies was worthy of investment and added the company to her coverage. The list of companies that each analyst covers can change periodically at their discretion.

IDS ADVISORY GROUP

COMMENTS ON THE TOBACCO SECTOR FOR THE STATE OF MINNESOTA

Analyst: Keith J. DeVore

Date: 11/27/96

filename: toba1196

QUESTION 1. DISCUSS THE IMPACT THAT TOBACCO-RELATED LAWSUITS HAVE HAD/MAY HAVE ON PRICES AND VOLATILITY OF TOBACCO-RELATED STOCKS, GENERALLY.

Tobacco-related litigation has clearly depressed the tobacco sector valuations and caused increased volatility. For example, Philip Morris declined more than 10% in absolute value within the first hour after a Florida court awarded damages to a plaintiff in a case in which Philip Morris was not even a named defendant. On a general basis, tobacco stocks are trading near historic low valuation levels based on multiples of earnings and cash flow and on relative yield. (Note: see attached valuation charts provided by Sanford Bernstein on September 3, 1996 titled: a) Philip Morris -- Relative Multiple vs. S&P 500 and b) Philip Morris--Yield Spread vs. S&P 500) The tobacco stocks appear to be getting approximately the same depressed relative valuations as they received during previous periods of time when the market was very concerned about litigation risk.

QUESTION 2. DISCUSS THE IMPACT THAT GOVERNMENT REGULATIONS HAVE HAD/MAY HAVE ON PRICES AND VOLATILITY OF TOBACCO RELATED STOCKS, GENERALLY.

As with litigation, government regulation has and will continue to depress tobacco stock valuations. Unfortunately, quantifying the precise impact of government regulation on the stock valuations is almost impossible because the stocks reflect a variety of investors concerns, such as litigation. In general terms, however, investors are worried about FDA regulation, a trend toward higher excise taxes, restrictions on how tobacco brands may be advertised, restrictions on how the product may be sold and restrictions on where smoking will be tolerated.

QUESTION 3.

WHICH, IF ANY, OF THE COMPANIES ON THE ATTACHED LIST DOES YOUR FIRM FOLLOW AND GENERATE INTERNAL RESEARCH? SUMMARIZE YOUR FIRM'S CURRENT INVESTMENT OPINION ON EACH. HOW HAS THE FIRM QUANTIFIED THE FINANCIAL IMPACT OF LITIGATION AND REGULATORY RISK FOR EACH? DOES YOUR RESEARCH INDICATE THAT THE CURRENT STOCK PRICE ADEQUATELY REFLECTS THESE RISKS?

American Express Financial Advisors generates research from time to time relating to all of the companies on the list. Our current investment opinions by stock are:

American Brands -- market performer

BAT Industries -- likely to underperform the market over 6 and 12 months

Brooke Group -- not currently rated

Dimon -- likely to outperform the market over the next 6-12 months

Loews -- not rated

Philip Morris -- likely to underperform the market over 6 and 12 months

RJR Nabisco Holdings Corp -- likely to underperform the market over 6 and 12 months

Standard Commercial Corp -- not rated

UST Inc -- market performer

Universal Corp -- not rated

Frankly, it is very difficult to quantify the potential financial impact of litigation and regulation because of the many uncertain variables involved. Quantifying the potential financial impact requires making numerous assumptions on such questions as: how many cases might be filed? how many cases might the industry reasonably be expected to lose? how much money might juries be willing to award on average? when might cash outlays actually occur?

We have, of course, studied various efforts to quantify the risk. An analyst at Sanford Bernstein, for example, has constructed a "Doomsday Scenario" which begins with some very negative assumptions from the industry's standpoint and argues that the current stock prices might overdiscount the potential risk from tobacco litigation. Our thinking is that tobacco stock prices probably overstate what the ultimate cash outlays relating to litigation by the tobacco companies will be, but that tobacco stocks may nevertheless underperform from current price levels due to the high level of uncertainty surrounding the litigation and regulatory issues.

QUESTION 4.

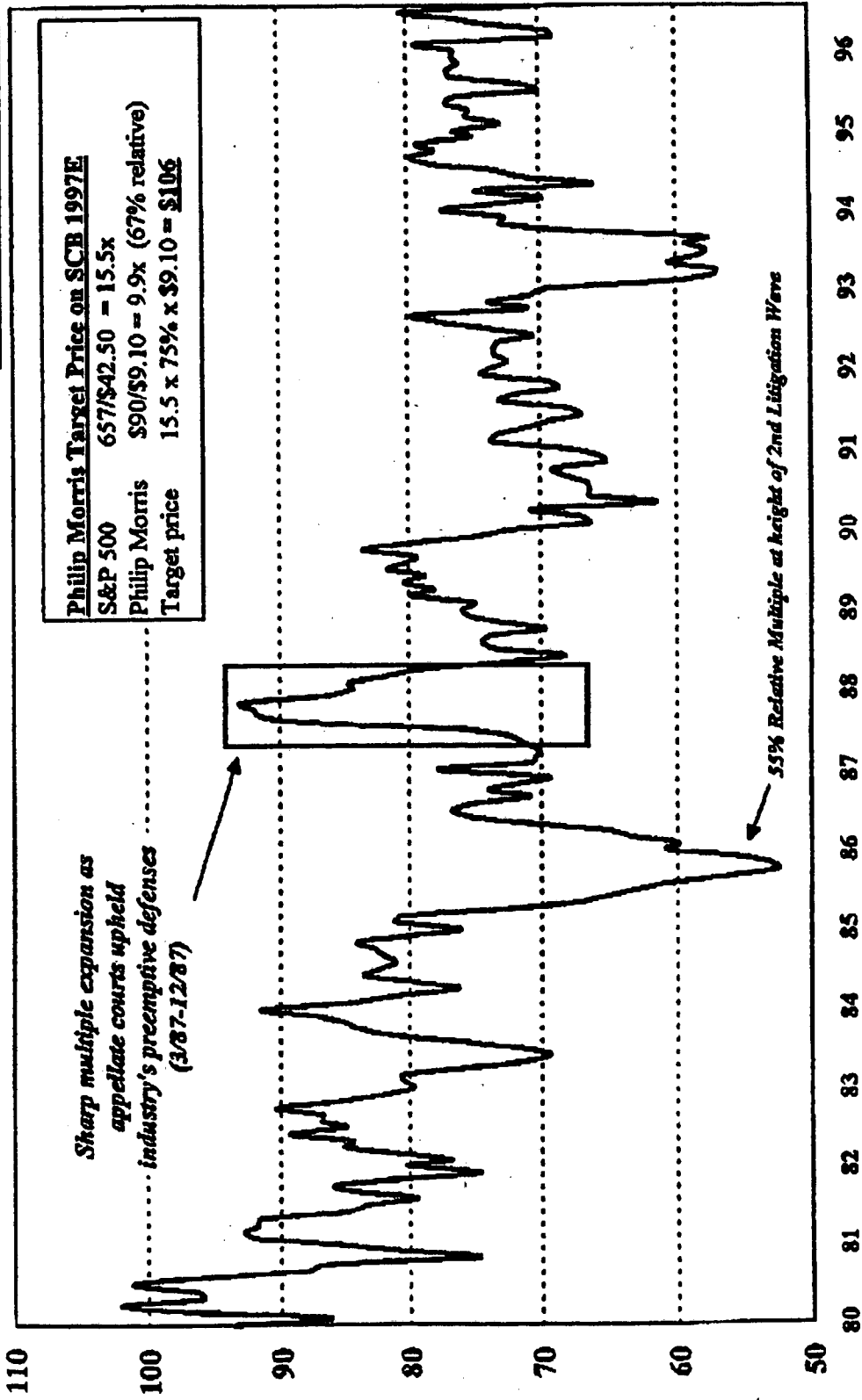
WHICH, IF ANY OF THE STOCKS ON THE ATTACHED LIST DO YOU HOLD IN THE SBI PORTFOLIO AT THE PRESENT TIME? WHAT EVENTS WOULD PRECIPITATE A DECISION TO SELL ANY OF THESE HOLDINGS? WHAT EVENTS WOULD PRECIPITATE A DECISION TO BUY A NAME THAT YOU DO NOT CURRENTLY HOLD.

At the present time, none of the listed stocks are held in the State Board of Investment portfolio. Our view is that the risks presented by tobacco stocks are best evaluated within the context of a total portfolio. As with any stock, any number of events could precipitate a decision to buy or sell tobacco stocks including such factors as: 1) a sharp price change in a specific stock, 2) a change in the overall economic outlook that might make consumer stocks more attractive, 3) a change in the overall market that makes dividend yield relatively more important; and 4) a change in the level of uncertainty related to litigation and regulation.

Philip Morris Relative Multiple vs. S&P 500

Based on 12 Month Forward Consensus Estimates

Average Relative Multiple	90	70	80
Since 1970			
Since 1990			
8/87-9/92			



Philip Morris Yield Spread vs. S&P 500

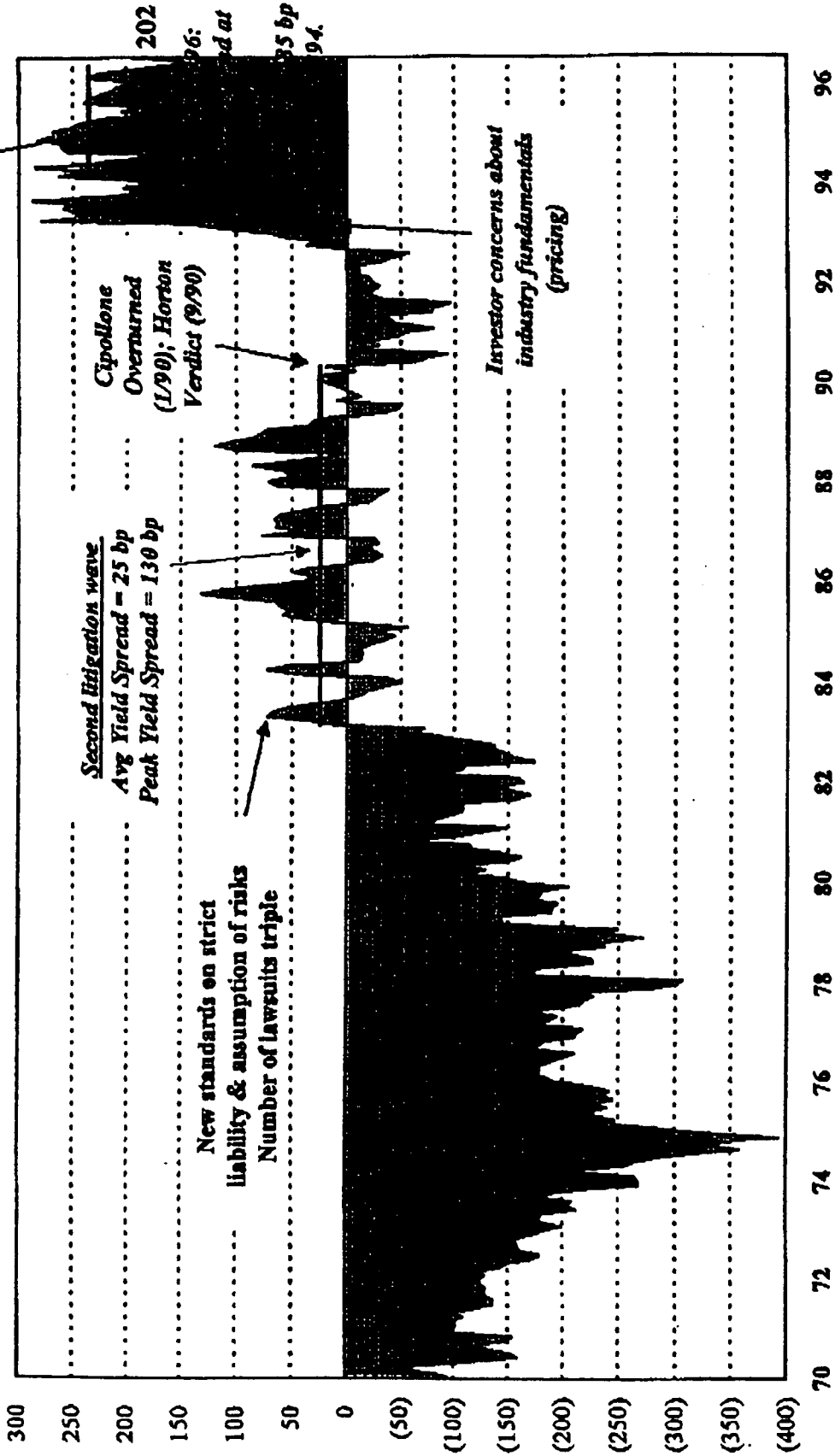
Third Litigation Wave
Average Yield Spread = 230 bp
Peak Yield Spread = 285 bp

Second litigation wave
Avg Yield Spread = 25 bp
Peak Yield Spread = 130 bp

New standards on strict
liability & assumption of risks
Number of lawsuits triple

*Cipollone
Overturned
(1/90); Horton
Verdict (9/90)*

*Investor concerns about
industry fundamentals
(pricing)*



November 26, 1996

TO: Minnesota State Board of Investment

FROM: Lincoln Capital Management

RE: Tobacco Stock Holdings

We own the stock of Philip Morris (MO) in the SBI account. We began our purchase program in January, 1995 at a price of \$56 because we believed the stock was 1) over discounting all known regulatory and litigation risks; 2) not reflecting an earnings per share level and an EPS growth rate which were both higher than the existing Wall Street consensus; and 3) reflecting a near-term peak of bad news and negative publicity. We added to our position during the first half of 1995 but began to sell some of our position during the late summer of 1996 as we realized the Florida courts were more anti-tobacco than we had assumed and as the stock came within 10% of our target price. We are still overweighted in MO relative to the Lincoln Benchmark. We do not own any other tobacco related stocks and are not contemplating purchasing any others at the present time.

TOBACCO STOCK VOLATILITY

Over the past 14 years, the total return offered by Philip Morris has been 2348.5% while the S&P 500 has offered 925.7%. One way to define relative volatility of a stock is by its beta. For MO, RN and UST the betas are respectively 1.43, 1.50 and .96. MO's and RN's suggest moderate to high stock price volatility. However, since the discussion at hand is specifically how tobacco stocks have reacted to major negative exogenous events, we have looked at specific cases and their impact on the stocks instead of using the longer-term and broader measure of beta. We are defining "significant" as a relative move 15% versus the S&P 500 Index. To put this in perspective, many other "high quality" growth stocks such as Disney, Fannie Mae, Merck, Eli Lilly and Microsoft have all had negative relative moves of 16% or more in various 2 to 4 month periods over the past 12 months alone. LLY actually dropped by 16% from \$66 to \$55 twice this year and yet is currently trading at \$72 up 35% year to date. In fact, according to Merrill Lynch, the average S&P 500 stock underperforms or outperforms the S&P Index by over 15% during some period of time every year. By this definition, despite a tremendous amount of press coverage, angst, and public discussion, there have been only 2 legal or governmental events, or combination of events, which have caused a significant negative move in tobacco stock prices over the past 14 years.

- Feb.-Nov. 1985: Judge Sarokin rules federal warning labels do not preempt state claims (Feb. 1985), the number of tobacco lawsuits triples, negative publicity and sentiment build around the RJR-Gilbraith and RJR-Royson trials. Relative impact: -24%. The stocks recovered 92% of their relative value in December 1985 after RJR won both trials. Tobacco stocks subsequently outperformed the market by

over 22% between early 1986 and mid 1987 as the 3rd Circuit Court overturned Sarokin's decision in April 1986 and the 1st, 5th, and 11th Circuit Courts all agreed with the 3rd Circuit between Jan. and Aug. 1987.

- Aug. 1996: Carter verdict and \$750,000 in damages is awarded. Relative impact: - 16% Philip Morris' stock has basically performed in line with the S&P 500 since the decline on the August verdict and has not regained its prior relative valuation.

Other heavily publicized events which actually had remarkably little impact on valuations include:

- July 1982: Courts adopt new provisions on strict liability. Relative impact: -4%.
- Jan. 1988: Pre-Cippollone uncertainty is followed by the \$400,000 negative verdict. Relative impact: -10%. Two months later, MO, RJR and AMB had regained over half of their relative multiple decline.
- Sept. 1990: Negative Horton verdict, no damages awarded. Relative impact: +9%.
- Jan.-May 1994: Castano class action is filed, CBS airs "Day One", Waxman holds Congressional hearings on nicotine, and potential excise tax hikes are linked to the proposed health care reform bill. Relative impact: -13%. MO had regained its relative PE and earlier valuation by July 1994. Between May 1994 and May 1995, MO was up 51% while the S&P 500 was up 17%.
- March 1996: Lebow offers settlement, scientific allegations are raised about nicotine, and the first 6 states file Medicaid suits. Relative Impact: - 14%. By May 24, MO had risen back to, and even exceeded, its March 1996 all-time high and March relative PE. In fact MO beat the S&P 500 by 1000 basis points during that 2 month period.

Currently the potential threats to tobacco valuations include:

- State Medicaid suits - it is our best judgment that most, but not all, will be significantly curtailed or dismissed by state Supreme Courts over the next 12 months. Florida's suit will most probably go to trial, but its claims have been limited to post-July 1994 and to 3 claims, down from 18 (though the three are significant claims). No other state currently has an enabling law like Florida's; we believe passage of similar enabling laws would be very difficult. The State Courts have already dismissed the majority of, and most serious of, the claims against the tobacco industry in Washington and West Virginia. Blue Cross was precluded from pursuing direct causes of action on tort claims and was allowed to seek injunctive relief only on its equity claims.
- 250+ Wilner-litigated product liability cases filed in Florida - it is our understanding that Wilner has already reduced his projected trials from 3 to 0 for the balance of 1996 and from 12 to possibly 3 for 1997.
- Broin and Engle class actions in Florida - as a result of our discussions with several lawyers and litigation consultants, we believe neither is manageable at the trial

stage and that both will bog down for years and eventually be decertified or dismissed.

TOBACCO STOCK VALUATIONS

The relatively low level of severe price volatility due to exogenous legal and governmental events does not mean valuations are not significantly affected by the existence of future potentially serious threats. Global consumer product companies with comparable brand dominance and growth potential (Gillette or Coke, for example) currently trade at 29-31 times 1997 estimated earnings while Philip Morris trades at 11.5 times. Similarly, Coke and Gillette each offer investors a 1% yield while Morris offers a 4.7% yield. We attribute the vast majority of this valuation discrepancy to potential legal or regulatory risks. Without these threats, we would expect Morris to trade at over \$215/share versus the current price of \$104.82, an \$89 billion difference in market capitalization. At Lincoln Capital, we employ another valuation method as well which assesses the cash-on-cash return a company generates on its incremental invested capital and the probable longevity of this cash flow stream and return level. Based on this approach, we believe Morris would be valued between \$200 and \$225. We believe current valuations more than adequately discount all known litigation and regulatory risks. However, because cigarettes are one of very few legal products that are known to cause health risks when used as intended and because the U.S. legal system allows contingency fees and damage awards (most foreign countries' legal codes do not), it is impossible to quantify any and all future risks of litigation. Therefore, unless or until there is some all-encompassing settlement, we believe MO and other U.S. tobacco stocks will continue to trade at 30-40% discounts to the S&P 500 and 60-65% discounts to comparable growth stocks.

QUANTIFYING LITIGATION AND REGULATION RISKS

State Medicaid Claims

Estimated annual smoking-related claims paid by the 50 states is \$5.2 billion. (On average the Federal government pays 61% of state claims and the states 39%.) Tobacco-generated annual state excise taxes total approximately \$6.0 billion, although they are not currently earmarked to offset Medicaid costs. A \$.25/pack tax increase targeted to pay for Medicaid smoking related costs would generate \$5 billion/year and we estimate would result in a decline in consumption of 2-3%, which would reduce Philip Morris' 1997 estimated EPS by \$.25 (\$9.04 to \$8.79). Alternatively, if the states did not raise the excise tax and MO decided to pay for its share of the State claims (45% based on MO's market share) with internally generated free cash flow rather than with its own \$.25 price increase, it would take about \$1.4 billion away from the share repurchase program which would reduce MO's 1997 EPS by \$.14 and its growth rate by about 1.5-1.75% per year. This latter scenario would reduce our projected share price on 1997 estimated EPS by only \$4 - \$6, or \$3.1 billion to \$4.7 billion.

Product Liability Claims

There are currently over 250 claims filed, almost all of them by Mr. Wilner (the successful lawyer in the recent Carter trial) in Florida. It is impossible and also unreasonable to guess the potential costs of losing all the cases which could be filed across the U.S. Since the Carter case is the first and only successful monetary judgment against the tobacco companies in over 400 filed cases and 20 trials, and since the jury in the only post-Carter product liability trial came out unanimously in favor of the tobacco companies (Rogers in Indiana), we do not believe it is reasonable at this point to assume all juries in all states will find for the plaintiffs. One of the key differences between the Carter trial and the Rogers trial was the two states' different constitutional and legal definitions of the assignment of liability and assumption of risk. Florida is one of only 13 states that allows plaintiffs to collect monetary damages if those plaintiffs are deemed to be more than 50% at fault in the injury (for example, by willingly choosing to smoke despite well known and publicized health risks). Of those 13, only 4 have defective product definitions which we believe would allow meaningful plaintiff awards from tobacco companies. Some Wall Street analysts have taken estimates of the smokers in those 4 states, applied a 10-15% probability of smoking-related diseases (less than 10% of smokers ever get lung cancer) and assumed 25% of those afflicted will sue (aggressive as there have been only 400 cases filed and 20 trials since the 1950's) and of that 25%, 25% will win an average payout of \$1MM (again aggressive, as the current win rate is less than 5% of trials, .25% of suits) and have come up with potential liability of \$42 billion for the whole industry over the next 15-20 years. As discussed above, Philip Morris alone is discounting \$98 billion in liabilities. Philip Morris's probable share of the \$42 billion is \$19 billion given MO's market share of cigarettes.

Class Action Suits

It is our best judgment that the Engle and Broin class actions will be deemed unmanageable as they near the trial-plan stage in 1997 or 1998. Should they somehow proceed to trial and achieve a plaintiff win of \$1000/class individual, the two actions could result in about \$100 billion in damages somewhere 5-15 years down the road (\$45 billion to MO presumably). In other class actions, the 5th Circuit Court's recent rationale for decertifying Castano rested largely and very explicitly on the argument that addiction as an injury is too immature a tort case to be appropriate for class certification at this time. Although this ruling is binding only in Federal Courts and not in State Courts, we expect it will be very persuasive and a serious consideration as the State Courts deliberate the several Castano-like state level suits which have been filed. We do not believe there are any meaningful class actions filed or likely to be filed outside the U.S. Therefore, given the status of tobacco class action litigation as it is known today, we estimate MO's downside risk for class actions at \$45 billion.

All-Inclusive Legislative Settlement

Such a settlement is extremely remote at this time given the current political spotlight on tobacco companies. However, the proposal first floated by a group of plaintiff's attorneys, the State Attorneys General and some Congressmen included a ban on vending machine sales (less than 1% of sales), a ban on most cigarette advertising, funding for a \$150M-\$200M/year anti-smoking

advertising campaign and a \$7 billion/year payment by the tobacco companies to cover smoking-related health costs. For this exercise we are assuming that all of this remains in tact, that \$5 billion of the \$7 billion comes from a \$.25/pack tax increase (probably politically desirable as significant price or tax increases have historically been the only successful way to reduce smoking longer-term, especially by minors), that \$2 billion comes out of tobacco companies' cash flow to "punish" them (\$900M to MO), that cigarette demand retains its estimated historic .35 - .40 price elasticity and that the anti-smoking campaign results in a 3.5-5.0% decline in consumption in the two years of 1997 and 1998 (a larger impact than the anti-smoking TV campaign had in 1965-1969). As a result of these assumptions, our Philip Morris' 1998 earnings estimate would be \$8.35 rather than our currently projected \$10.32. However, we believe the stock would achieve a much higher multiple of earnings as the litigation and regulatory risks would be greatly reduced. Assuming a conservative Market PE for MO despite a better-than-average sustainable growth rate of 13%, we estimate MO would trade today at \$140 under such a legislative settlement.

Lincoln Capital currently owns Philip Morris stock in the SBI account at a weighting in excess of the Lincoln Benchmark Portfolio. We estimate that MO will provide investors with 700-1000 basis points of excess total return over the next 9 to 12 months. We would add to our position if an all-encompassing settlement appeared more likely; otherwise we believe the other risks listed above are going to continue to limit the stock's PE multiple. We would sell our position if the stock reached our target price or if Wilner won another seemingly weak case or won two of 1997's 3 planned trials. We have no interest in RJR as we feel the company's brands will continue to struggle for share both domestically and abroad. We would need to see a new marketing focus by UST as well as a significant litigation discount in UST's valuation to warrant a purchase of that stock.

GCL:mam

OPPENHEIMER CAPITAL'S RESPONSE TO TOBACCO RELATED INVESTMENT QUESTIONS

1. Discuss the impact that tobacco-related lawsuits have had / may have on prices and volatility of tobacco-related stocks, generally.

Historically, tobacco-related lawsuits have had a substantial effect on the prices and price volatility of tobacco-related stocks. At periods of peak investor discomfort (1986 would be an example) valuation discounts of nearly 50% versus comparable non-tobacco companies have been seen. The impact appears related both to the number of lawsuits, the number of new lawsuits filed, and to new lawsuits which explore new kinds of claims (e.g., in 1994-6 addiction-related suits and state Medicaid lawsuits).

2. Discuss the impact that governmental regulations have had / may have on prices and volatility of tobacco-related stocks generally.

U.S. government regulation has not changed greatly since the late 1960's, when advertising was restricted and health warnings were required on cigarette packages. Increased taxes do accelerate consumption declines and also stimulate trade-down to lower priced cigarettes from premium cigarettes. Generally these effects have been temporary and stock prices, which decline on announcement, have usually recovered. The prospect of greater regulation in the future could have a significant impact on tobacco-related stocks, and this was seen in the 1994 period. However, in our opinion the final impact of greater regulation on the actual business of selling cigarettes, and so ultimately on stock prices, is likely to be small.

3. Which, if any, of the following companies (American Brands, BAT, Brooke Group, Dimon, Loews, Philip Morris, RJR, Standard Commercial, UST, and Universal) does your firm follow and generate internal research? Summarize your firm's current investment opinion on each. How has the firm quantified the financial impact of litigation and regulatory risk for each? Does your research indicate that the current stock price adequately reflects these risks?

Oppenheimer Capital does not currently follow any of the mentioned companies, and our current investment opinion is that these securities present a level of risk which is too high for most of our clients. We do review Philip Morris from time to time, based on its superior business positions and the possibility that our assessment of risk level may

3. (Continued)

change. Our quantification of litigation risk is that it is substantial in relation to the current market value of the stocks. Although we believe it is unlikely that the risk will in fact become a cash liability, there is a small and tangible risk that it will become a cash liability. It is this risk which we believe is too high for most of our clients. We have not expressly quantified the regulatory risks. We do believe that the regulatory environment will become increasingly hostile, but we also believe that these developments are unlikely to materially impair the business prospects of tobacco-related companies.

4. Which, if any, of these stocks do you hold in the SBI portfolio at the present time? What events would precipitate a decision to sell any of these holdings? What events would precipitate a decision to buy a name that you do not currently hold?

None of these stocks are held in the SBI portfolio at the present time. We would purchase Philip Morris at the current price if we believed that the litigation risks had moved, qualitatively, from our current assessment of 'unlikely' to a lower probability of 'remote'. This reduction of risk could occur based on court outcomes in key cases, or it could occur based on greater confidence that a grand compromise with the federal government appeared likely (where such a compromise would involve legislation limiting the future private litigation risks).



FINANCIAL
SERVICES

November 26, 1996

WADDELL & REED, INC.
INVESTMENT MANAGEMENT DIVISION
6300 LAMAR (ZIP 66202) • BOX 29217
SHAWNEE MISSION, KS 66201-9217
TELEPHONE 913/236-1754
FAX 913/236-1893 • TELEX 434365

Mr. Michael J. Menssen
Manager, Domestic Equities
Minnesota State Board of Investment
Suite 105, MEA Bldg.
55 Sherburne Avenue
St. Paul, MN 55155

Dear Mr. Menssen:

I have been asked by Mr. Jim McCroy to respond to your tobacco-related investments survey. I have followed the tobacco-related bonds since 1988 and the stocks since 1990. I have attached Graphs 1-4 and a Table 1 which address the issues of price volatility with regards to tobacco-related lawsuits and governmental regulations. The data would indicate that both have contributed to increasing the volatility of these stocks. I believe that the lawsuit issues have had the larger impact as can be demonstrated by the substantial price declines caused by the jury decision in favor of the plaintiff in the Carter vs Brown & Williamson trial. Other factors which have contributed to the volatility of these stocks include: the publication of medical studies, the leaking of confidential internal memos, the Presidential Election of 1996, unfavorable media coverage in general, and shareholder attempts to gain Board of Directors control of RJR Nabisco.

We do not own any of the stocks listed in your survey in the SBI portfolio managed by Waddell & Reed Asset Management Co. In the past, I have made **BUY** recommendations on the following stocks: Phillip Morris, RJR Nabisco, American Brands, Dibrell Brothers (now part of DiMon), and Standard Commercial Corp. On a fundamental basis, most of these securities would be considered attractive at current valuations, however they tend to underperform during periods of renewed scrutiny by the press and anticipated courtroom activity. If the industry received one unfavorable decision or more, then I believe that the downside in this group of securities would be 25%-30%. The next twelve-to-twenty four months could see as many as six trials in Florida and even one or more of the state Medicaid cases. As has become customary, I would anticipate that sensitive documents will be leaked and numerous television, magazine, and newspaper stories which should have a negative impact on security prices. I expect these stocks to underperform during 1997. My current recommendation is to **AVOID** the tobacco-related industry.

The stocks have rallied over the past month for several reasons: the delay in several of the Wilner represented trials in Florida, the negative press from the various campaigns has abated, renewed rumors of an industry settlement, some participation in the market rally and the announced resignation of FDA Commissioner David Kessler. I expect Dr. Kessler's replacement to hold a similar view of the tobacco industry. This event should be considered neutral at best, rather than positive. Over the next couple years, I have several concerns which prevent me from recommending these securities. First, it is anticipated that as many as six of over 200 cases represented by Woody Wilner in Florida will come to trial during 1997. Mr. Wilner has convinced one jury to reach a verdict in favor of his clients and could convince one or two others.

I don't believe that the tobacco industry has any incentive to settle on a blanket basis. The industry has lost only the Carter case and has not paid any cash settlement to date. A settlement in the U.S. could also encourage parties in international markets to attempt to extract some form of compensation as well. The cost of retaining legal counsel is still cheaper than a multi-billion dollar settlement. If negotiations were to commence sometime in 1997, the complexities of reaching a deal that involves a cash settlement funded over a multi-year time period and prevents future lawsuits from being filed will require more than twelve months. These discussions would likely spill over into 1998, which is an election year and a settlement would be highly unlikely. The earliest a settlement could be reached is 1999.

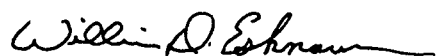
The State Attorney Generals' Medicaid lawsuits are less of a concern than the individual lawsuits at this time. On a long term basis, I believe that the tobacco companies will prevail by either justifying that excise taxes have more than compensated the states for Medicaid expenses or through the cost to the states in delaying these trials. If the states are required to identify all of the parties in the class action and discovery is required for each, it could take years and millions of dollars to come to trial. The Governors of several states are now trying to prevent their Attorney Generals from pursuing these lawsuits.

An increase in excise taxes specifically earmarked for funding the treatment of tobacco related illnesses could be an alternative solution. (Please see Table 2 for current excise tax levels, note Oregon recently increased to \$0.65). Large increases in excise taxes have typically resulted in a 3%-4% decline in consumption (averaging the state that increased taxes and bordering states). The potential for numerous excise tax increases and the resulting decrease in consumption are a greater threat to the tobacco-related companies than the Medicaid lawsuits over the near- and intermediate-term.

The most recent twist to the litigation story is the recent announcement of a pending class action filed on behalf of twelve individuals seeking compensation for smoking related illnesses in the United Kingdom. This case doesn't have much of a chance to come to trial according to early feedback from Wall Street sources. Unlike the U.S., attorneys in the U.K. are not hired on a contingency basis and the loser of a trial must pay the other parties legal costs. A range of \$3-\$6 million in fees and costs have been estimated for bringing this case to trial. None of the members of the class are wealthy individuals. Attention must be paid to developments in this case since it is the first class action to be filed against a tobacco company outside the U.S.

I recommended many of these stocks in the early 1990's under the firm belief that after the Cipollone case was overturned, tobacco litigation would slowly fade away and P/E multiples would expand, however this has not occurred. The one event that would precipitate me to make BUY recommendations on several stocks in this group is tort reform. This would remove the constant cloud that has hung over the industry. If I can be of further assistance to you, please don't hesitate to call me at (913) 236-1826.

Sincerely,

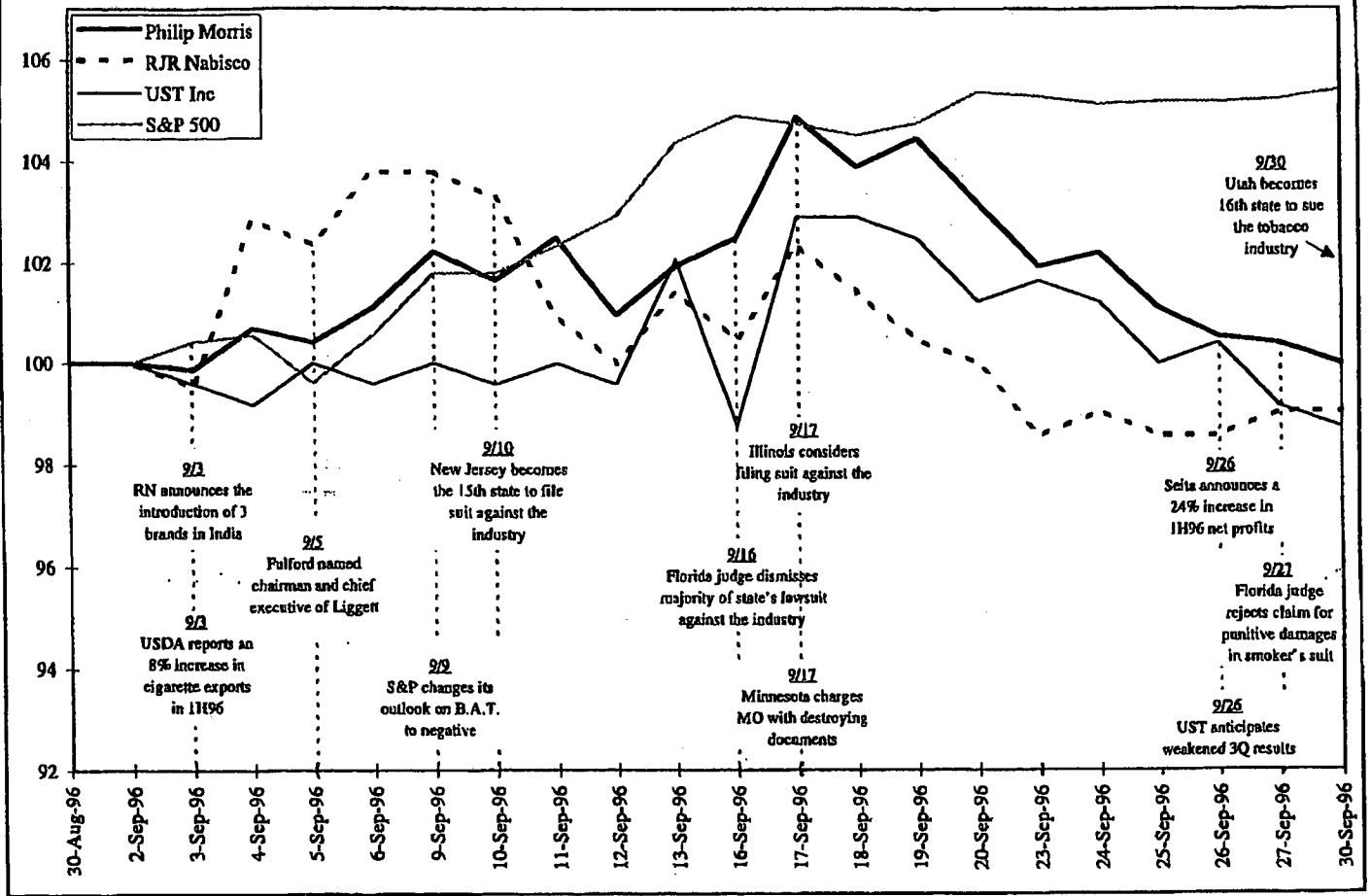


William D. Eshnaur
Assistant Vice President

Attachments

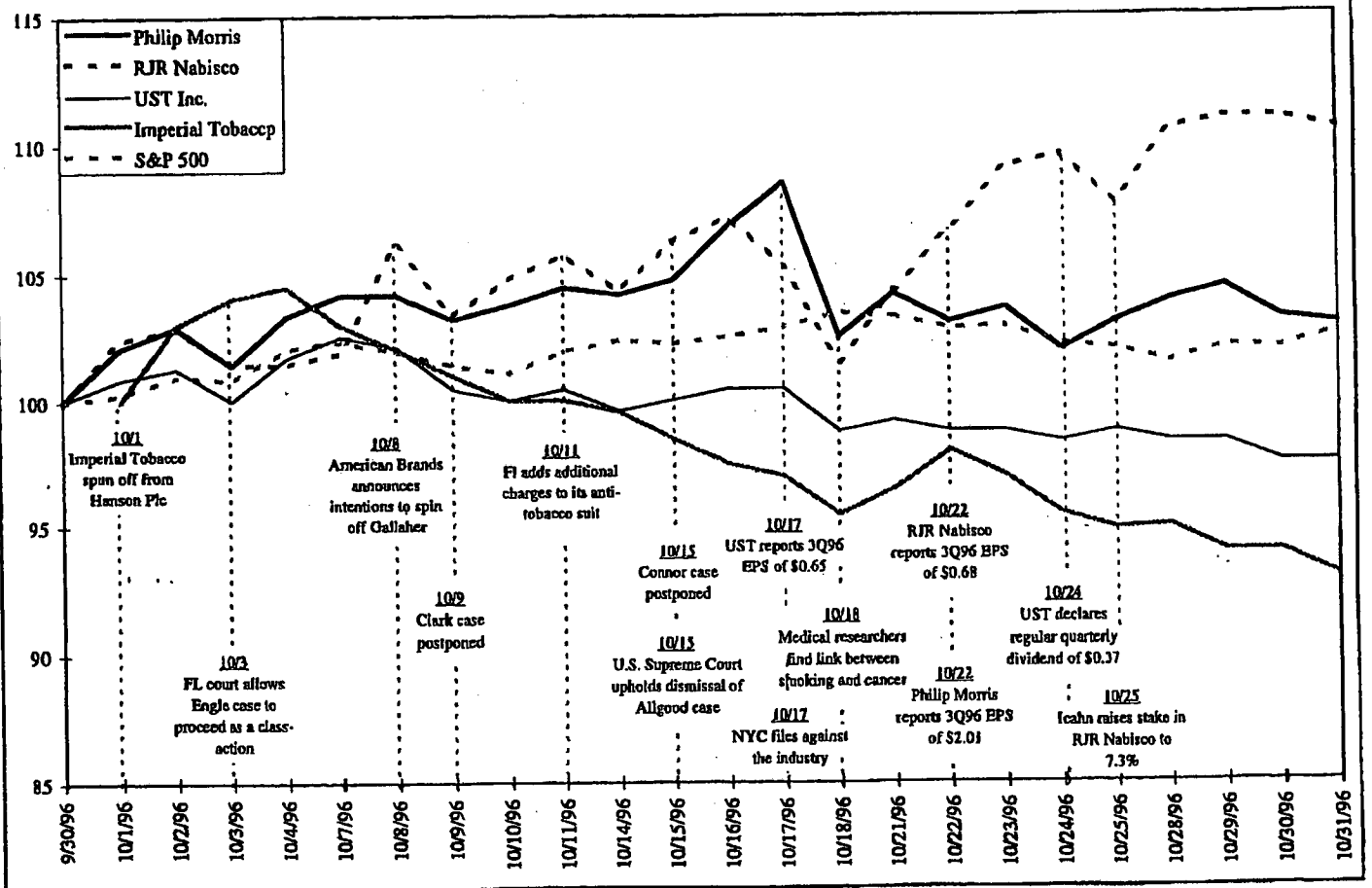
cc: Henry J. Herrmann
Jim McCroy

Stock Performance of Philip Morris, RJR Nabisco and UST from 8/30 through 9/30 (rebased to 100)



Source: Smith Barney

Stock Performance of Philip Morris, RJR Nabisco, UST and Imperial from 9/30 through 10/31 (rebased to 100)

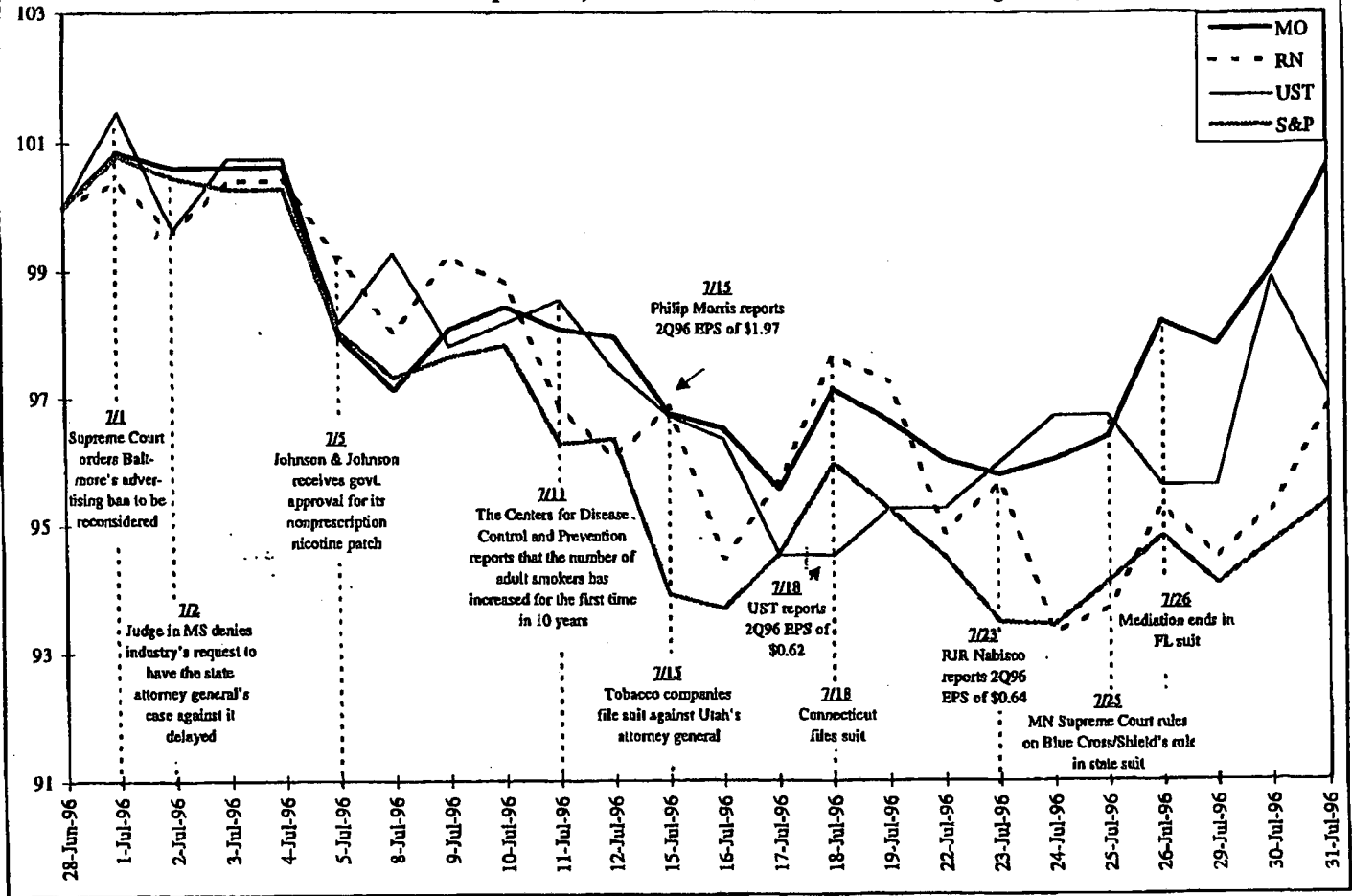


% CHANGE

DATE	CASE (STATE)	EVENT	AMB	BTI	BGL	DMN	LTR	MO	RN	STW	UST	UVV	S&P 500	S&P TOBACCO
02/17/95	Castano (LA)	Class certified	-0.33%	-2.68%	0.00%	-1.32%	0.00%	-2.43%	-1.11%	-2.61%	0.82%	-1.26%	-0.67%	-1.89%
02/22/95	Rogers (IN)	Hung jury	0.00%	0.96%	-3.57%	-1.99%	-1.43%	0.65%	0.00%	-3.57%	-0.84%	0.00%	0.49%	0.43%
02/22/95	ABC libel suit (NC)	Complaint filed												
02/28/95	OSHA	Hearings ended	0.00%	0.47%	-3.57%	2.74%	1.04%	0.41%	0.00%	2.24%	0.00%	0.63%	0.74%	0.33%
03/16/95	ABC libel suit (NC)	Case removed to U.S.D.C. Middle District of NC	0.00%	0.00%	0.00%	-0.65%	0.13%	-1.17%	-2.17%	0.92%	-0.41%	0.64%	0.72%	-0.97%
06/19/95	ABC libel suit (NC)	Case remanded to Superior Court, Forsyth County, NC	-0.32%	1.17%	-2.50%	-0.70%	0.84%	1.02%	2.38%	-1.75%	0.42%	-1.62%	1.00%	0.84%
08/10/95	FDA	FDA Commissioner Kessler issued Notice of Proposed Rulemaking, "FDA has jurisdiction over cigarettes."	0.00%	-1.11%	0.00%	0.75%	-0.68%	0.00%	-0.89%	0.00%	1.34%	0.00%	-0.40%	0.10%
08/10/95	FDA (NC)	Complaint filed												
08/21/95	ABC libel suit (NC)	Voluntary dismissal	0.30%	2.33%	-1.31%	0.76%	1.18%	1.90%	0.00%	1.00%	0.44%	0.00%	-0.20%	1.63%
09/07/95	FDA (NC)	Amended complaint filed	0.00%	-0.78%	0.00%	0.00%	0.47%	0.34%	2.63%	0.00%	0.00%	1.10%	0.02%	0.28%
10/06/95	FDA (NC)	Defendants' Motion to Dismiss filed	-0.29%	0.00%	4.29%	0.00%	0.84%	1.03%	-1.12%	0.00%	0.00%	1.14%	-0.02%	0.84%
02/10/96	Carter (FL)	Complaint filed	-1.32%	1.43%	-1.49%	2.07%	2.40%	1.81%	0.36%	1.53%	1.44%	2.39%	0.77%	1.51%
03/15/96	Castano (LA) and 5 AG Suits (MS, WV, FL, MA and LA)	Liggett settlement	-0.28%	0.00%	-3.90%	5.06%	-0.79%	3.11%	2.30%	0.00%	-1.49%	1.88%	0.09%	2.49%
04/16/96	Aligood (TX)	Fifth Circuit affirms lower court's ruling that plaintiffs claims should be dismissed.	0.59%	2.05%	3.23%	-1.47%	-2.49%	1.82%	0.84%	1.43%	0.00%	1.02%	0.39%	1.59%
05/23/96	Castano (LA)	Fifth Circuit ruling issued.	1.42%	6.45%	12.24%	0.00%	4.45%	6.40%	6.43%	2.94%	5.36%	2.93%	-0.36%	5.92%
06/14/96	Castano (LA)	Class decertified.	0.00%	-0.39%	-1.89%	1.34%	-0.16%	0.96%	-1.85%	1.35%	-1.85%	1.46%	-0.31%	0.70%
06/27/96	PM v. AHCA (FL)	Florida Supreme Court decision ruling that prior to effective date (July 1994) of the state statute, state can only proceed to recover Medicaid costs via subrogation.	0.55%	-0.81%	0.00%	0.66%	2.62%	0.96%	-0.78%	3.53%	-1.08%	0.47%	0.63%	0.79%
07/22/96	Carter (FL)	Trial	-2.22%	-1.60%	0.00%	-1.29%	-0.79%	-0.62%	-2.43%	0.00%	0.00%	0.00%	-0.78%	-0.71%
07/25/96	Humphrey (MN)	Minnesota Supreme Court ruling that any injury suffered by BC/BS is too remote to afford standing to pursue tort claims.	-2.30%	-0.40%	0.00%	-0.65%	0.00%	0.38%	0.42%	2.83%	0.00%	0.45%	0.72%	0.50%
08/05/96	Rogers (IN)	Retrial	-1.08%	-1.14%	0.00%	0.00%	-1.22%	-1.52%	0.00%	-2.70%	-1.45%	-1.32%	-0.34%	-1.48%
08/09/96	Carter (FL)	Verdict (plaintiff)	-3.55%	-1.96%	0.00%	-1.28%	-4.39%	-13.86%	-13.18%	0.00%	-6.27%	-4.44%	-0.07%	-12.54%
08/23/96	Rogers (IN)	Verdict (defense)	0.00%	-0.93%	9.30%	-0.69%	-0.50%	1.44%	1.49%	-1.01%	-0.41%	-2.48%	-0.54%	1.19%
08/29/96	FDA (NC)	Motion to Dismiss denied	-1.78%	-1.79%	2.27%	-1.36%	-0.16%	-1.09%	-0.70%	-2.04%	-0.81%	-0.48%	-1.11%	-1.13%
10/02/96	Engle (FL)	Review denied by Florida Supreme Court	0.59%	0.00%	2.33%	0.66%	1.28%	0.82%	0.47%	-0.51%	0.42%	-0.93%	0.72%	0.77%
10/15/96	Aligood (TX)	Supreme Court denies cert on plaintiffs appeal of the Fifth Circuit's ruling	-0.26%	-1.75%	-2.38%	0.00%	-0.31%	0.53%	1.83%	4.85%	0.42%	1.94%	-0.14%	0.46%
11/12/96	Hodgson (UK)	Class Action filed against Imperial Tobacco and Gallaher	-2.04%	0.89%	-2.33%	0.00%	1.75%	-0.25%	0.00%	-1.80%	-0.41%	0.44%	-0.32%	-0.42%
11/15/96	Carter (FL)	Motion to Reverse Verdict denied	-0.77%	1.74%	8.11%	2.40%	1.87%	0.25%	-1.20%	0.00%	0.39%	0.86%	-0.08%	0.17%
11/15/96	Conner (FL)	Delayed until 04/07/97												

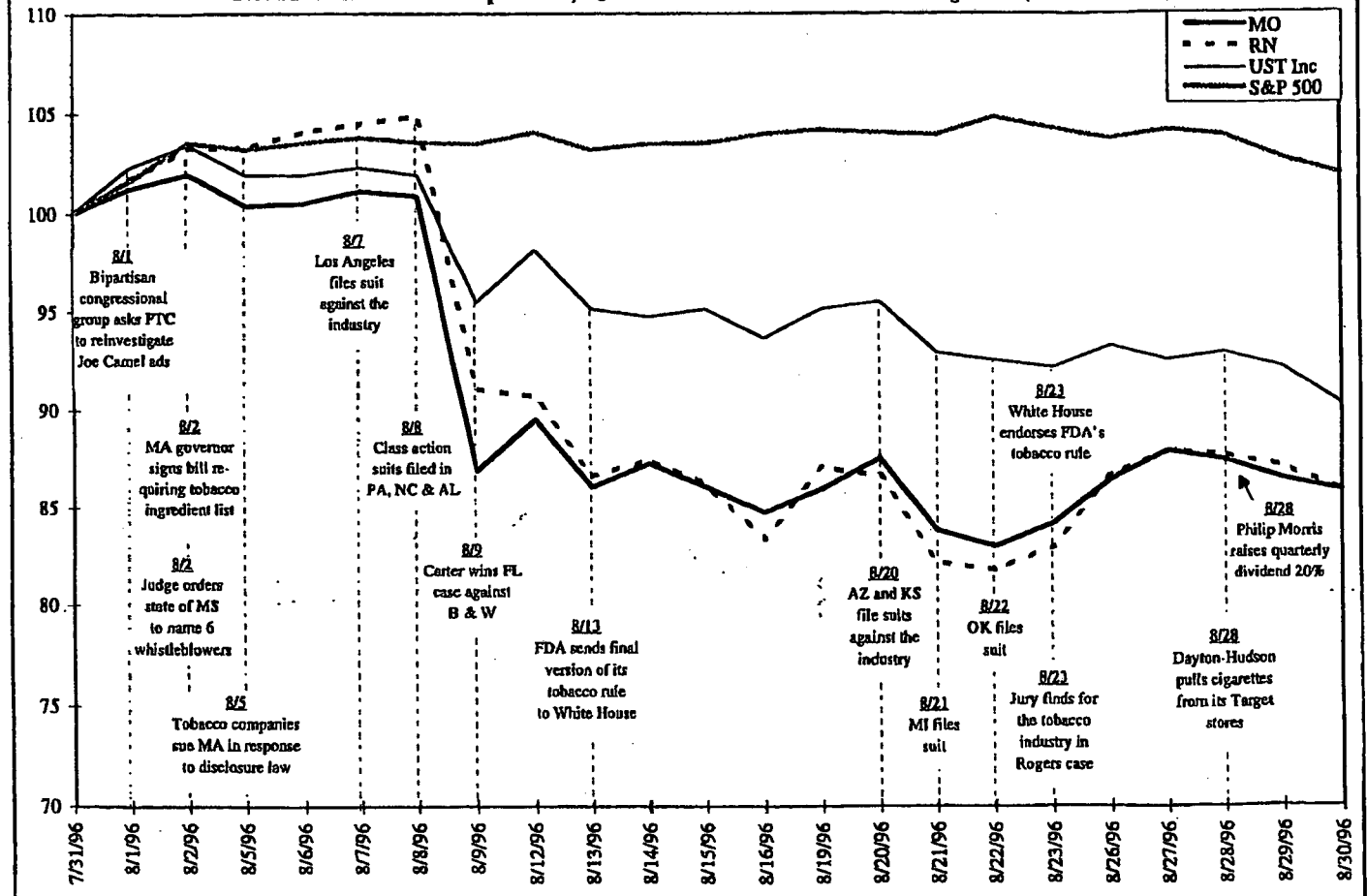
Sources: RJR Nabisco, Bear Stearns, Factset

Stock Performance of Philip Morris, RJR Nabisco and UST from 6/28 through 7/31 (rebased to 100)



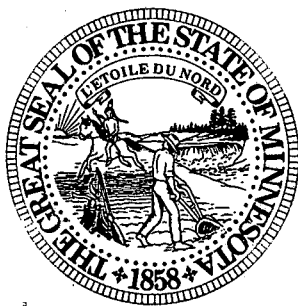
Source: Smith Barney

Stock Performance of Philip Morris, RJR Nabisco and UST from 7/31 through 8/30 (rebased to 100)



State	Date of Last Tax Rate Change	Rate as of January 1 1996
AL	07/01/84	\$0.165
AK	09/10/89	\$0.290
AZ	11/29/94	\$0.580
AR	07/01/93	\$0.315
CA	01/01/94	\$0.370
CO	07/01/86	\$0.200
CT	07/01/94	\$0.500
DE	01/01/91	\$0.240
DC	07/01/93	\$0.650
FL	07/01/90	\$0.339
GA	04/01/71	\$0.120
HI	07/01/93	\$0.600
ID	07/01/94	\$0.280
IL	07/14/93	\$0.440
IN	07/01/87	\$0.155
IA	06/01/91	\$0.350
KS	10/01/85	\$0.240
KY	07/01/70	\$0.030
LA	08/01/90	\$0.200
ME	07/01/91	\$0.370
MD	05/01/92	\$0.360
MA	01/01/93	\$0.510
MI	05/01/94	\$0.750
MN	07/01/92	\$0.480
MS	06/01/85	\$0.180
MO	10/01/93	\$0.170
MT	08/15/93	\$0.180
NE	07/01/93	\$0.340
NV	07/01/89	\$0.350
NH	02/20/90	\$0.250
NJ	07/01/90	\$0.400
NM	07/01/93	\$0.210
NY	06/01/93	\$0.560
NC	06/01/91	\$0.050
ND	07/01/93	\$0.440
OH	01/01/93	\$0.240
OK	06/01/87	\$0.230
OR	01/01/94	\$0.380
PA	06/19/91	\$0.310
RI	07/01/95	\$0.610
SC	07/01/77	\$0.070
SD	07/01/95	\$0.330
TN	06/01/69	\$0.130
TX	07/01/71	\$0.410
UT	07/01/91	\$0.265
VT	07/01/95	\$0.440
VA	09/01/86	\$0.025
WA	07/01/95	\$0.815
WI	09/01/95	\$0.440
WY	07/01/89	\$0.120

Tab J



STATE BOARD OF INVESTMENT

Manager Commentaries

Period Ending September 30, 1996

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Manager Commentary
Alliance Capital Management L.P.

Period Ending:	9/30/96	Returns	Qtr.	1 Yr.
Total Firm Assets Under Management	\$168 Billion	Actual	3.1%	15.6%
Total Firm Assets Managed in this Discipline	\$ 18 Billion	Benchmark	4.6%	19.8%

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

We underperformed the benchmark this quarter, primarily due to specific stock underperformance. Our largest holding, Philip Morris, fell -14% after a negative jury decision in Florida renewed concerns about smoking litigation. Other stocks that revealed disappointing developments in their businesses were Pepsi -20%, ITT -34% and United Healthcare -18%. Cable and cellular telephone companies underperformed again this quarter due to increasing competition. Despite the concern and resulting market volatility surrounding the Federal Reserve's policy on interest rates, our overweighting of finance contributed positively to performance as the sector outperformed the market, +8.5% versus +3.1%. Individual finance names include MBNA +22%, Norwest +17%, First Bank Systems +15% and Citicorp +10%. With the exception of Hewlett Packard -2% and Applied materials -9%, our technology holdings continue to outperform, i.e., Intel +30%, Compaq +31%, Cisco +10% and Microsoft +10%. One final stock, Gillette, was boosted +16% by the market's positive reaction to its announced acquisition of Duracell.

We underperformed the benchmark for the year. Although the business fundamentals across Philip Morris's divisions remain strong, the stock has lagged the benchmark (+7% versus +20%). Our airline overweight has turned negative - most recently due to a spike in jet fuel prices raising concerns about operating margins - with Northwest -17% and United Airlines +11% underperforming the benchmark. Despite the strength of its largest customer Intel +59% in the microprocessor market, the semiconductor capital equipment maker, Applied materials -46%, has suffered from over capacity in the DRAM chip market during the past year. Other core technology positions have outperformed i.e., Cisco +80%, Intel +59% and Microsoft +46% but recent weakness has caused Hewlett Packard +17% to slightly lag the benchmark. As with the quarter, our overweight of finance for the year has contributed positively, particularly First Bank Systems +39% and Norwest +25%. Consumer stocks have performed especially well during the last year with Gillette 51%, Coca Cola +47% and McDonalds +24% outperforming the benchmark.

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

We continue to overweight the finance sector due to the reasonable valuations for double-digit earnings growth, improving balance sheets and high rates of return on equity. We continue to believe that PC demand will propel dominant hardware and software companies. In the consumer sector, we still favor stocks with proven growth records and global competitiveness, and in Healthcare, companies with promising new product lines. We are maintaining our cellular telephone position in Airtouch, but are gradually reducing our cable exposure.

Alliance (con't)

3. *Organizational Issues.* Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.

Won	Lost
Public School Employees of Missouri	None

4. *Other Comments.* Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.

None.

Staff Comments

Staff visited the Minneapolis offices of Alliance Capital on September 19, 1996. The discussion covered many topics including the firm's growth, personnel and organizational changes, future investment strategy and past performance. Comments made by Alliance during the meeting coincide with those made above.

**Manager Commentary
Brinson Partners, Inc.**

Period Ending:	9/30/96	Returns	Qtr.	1 Yr.
Total Firm Assets Under Management	\$57.9 Billion	Actual	3.6%	23.7%
Total Firm Assets Managed in this Discipline	\$14.2 Billion	Benchmark	3.3%	17.5%

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

Active factor exposures contributed modestly to portfolio performance during the third quarter of 1996 and were a modest detraction for the twelve months ending September 30, 1996. During the third quarter of 1996, the portfolio was helped by overweights with respect to earnings variability and financial leverage, both proxies for economic sensitivity. Positive returns to these exposures were partially offset during the third quarter by a negative contribution from underweights with respect to the foreign earnings and relative strength factors. During the last twelve months, the portfolio was hurt by an overweight in stocks with a high degree of earnings variability (economic sensitivity) and liquidity, and from an underweight with respect to relative strength. Underweights in stocks that have a high degree of foreign earnings exposure and price volatility added modestly to portfolio performance during the same period, as did an overweight with respect to financial leverage.

Industry weightings added meaningfully to portfolio performance during both the third quarter and the year ending September. During the third quarter of 1996, positive returns from relative overweights in the aerospace, banks, insurance sectors and from an underweight in electric and telephone utilities more than offset negative contributions to performance from our relative underweights in air transports and leisure. For the latest twelve months, portfolio performance benefited from overweights in aerospace banks, cosmetics and drugs and from an underweight in telephone utilities. Positive returns to these exposures more than offset negative returns to underweights in business machines and international oil along with overweights in railroads, pollution control and papers. Stock selection detracted modestly from portfolio performance during the third quarter and added a positive increment for the year ending in September. Holdings which contributed to positive stock selection during the third quarter of 1996 included Automatic Data, Kimberly Clark, Coca Cola Enterprises and Melville. Holdings which detracted from performance during the third quarter included Citicorp, General Instruments, Goodyear Tire, Schering Plough and Forest Labs.

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

Our process remains focused on identifying those stocks that are most attractive in price/value terms through intensive individual company analysis, which incorporates strategic themes and industry research. The portfolio is relatively market-like in regard to factor characteristics at this time. We find that stocks with high price-to-book and price-to-earnings rank attractively, consistent with the recent underperformance of traditional value stocks relative to growth. The portfolio is also modestly overweighted in stocks with higher earnings variability and financial leverage characteristics. This exposure is due largely to a modest overweight in financials and a moderate underweight in utilities rather than from an unusually high exposure to capital intensive economically sensitive issues.

Brinson Partners, Inc. (con't)

The portfolio underweighted both electric utilities and the traditional telephones; a position that has added meaningfully to portfolio performance during the past two years. We continue to see evidence that the eventual deregulation of power generation is accelerating competitive pressure from lower cost utility and non-utility generators and will increase the purchasing power of larger power users. Competition will also intensify in the telecommunications and cable industries as regulatory barriers between traditional business lines are blurred and the traditional regional telephone companies are pushed toward "cost of service" pricing.

We are neutral weighted in the non-health consumer sector including retail/apparel, durables and discretionary spending stocks. The demographic profiles of U.S. consumer and the pressures from sustained reduction in labor content in many corporations suggest trend growth in this area will continue to be slightly below that of the general economy. Nevertheless, we find a number of individual stocks that appear attractive on a stock specific basis. We are overweight in selected tobacco, cosmetics and leisure related stocks. The portfolio also remains overweighted in health care and drug stocks. While the immediate threat of direct government regulation of health care has now passed, the industry faces a longer-term intensification of competition due to the growing power of health care consumers. Consumers have consolidated their power through buying groups and managed care entities. All of our health care selections are companies with a strong capability for cost effective new products. This position is further supported by the demographics of an aging population and technological advances in previously underserved areas of health care.

We are overweighted in transportation resulting entirely from an overweight in railroads. In general, we believe that secular improvement in railroad industry profitability will continue as regulatory barriers continue to fall, enabling rails to shed excess labor costs and abandon unprofitable routes. The portfolio is modestly underweighted in the basic industries comprised of neutral weights in metals, an overweight in paper stocks and an underweight in chemicals. Market prices for many commodities are below beginning-of-year levels, as a result of slowing economic growth and capacity additions. Finally, the portfolio is overweight with respect to aerospace and defense and underweight in technology and other producer goods. Key holdings include Chase Manhattan, Citicorp, Burlington Northern, Enron, Kimberly Clark, Lockheed martin, Mattel, Schering-Plough, Coca Cola Enterprises and Tyson Foods.

- 3. Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

There have been no significant organizational changes in this past quarter. One new portfolio funded \$30 million. None lost.

- 4. Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None this quarter.

Staff Comments

No comments at this time.

Manager Commentary
Forstmann-Leff Associates Inc.

Period Ending:	9/30/96	Returns	Qtr.	1 Yr.
Total Firm Assets Under Management	\$3.2 Billion	Actual	2.5%	25.1%
Total Firm Assets Managed in this Discipline	\$1.4 Billion	Benchmark	4.0%	18.6%

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

Performance for the third quarter lagged the benchmark largely due to an overweight to the consumer retail segment of the market. This group, which had performed very well in the earlier quarters of the year, gave up a portion of those gains. We expect that these names will regain forward momentum in the fourth quarter. In addition, an underweight in the better performing interest sensitive sector of the market further constrained performance.

Performance for the year was well in excess of the benchmark. Good stock selection was seen in several sectors including the consumer non-durables (particularly among the better performing retailers, such as CompUSA, Borders Group, Barnes & Nobel and Price/Costco), the consumer service group (with an emphasis on the strong hotel/motel area), the medical and related names (largely due to HEALTHSOUTH Rehabilitation and Vivus), technology (key names being Parametric Technology, Symbol Technologies and WorldCom), and energy areas (focused in the profitable equipment and services names). Sector overweights in the consumer non-durables and services groups helped to amplify the effects of stock selection.

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

We have reduced the emphasis on global cyclicals for the near term. Though the farm equipment play has been quite profitable, we have trimmed exposure on weakness in grain prices. These lower prices, however, suggest opportunities elsewhere, such as selected consumer products companies. Positions within the metals have not been as productive, as the inventory cycle has been extended by higher than expected Russian exports. Pricing remains poor, postponing a recovery. Consequently, we have redeployed assets among sectors with better near term prospects.

One beneficiary of this reallocation has been the technology sector, where July's weakness provided opportunities to extend positions in several of our core holdings. Opportunistic purchases were also made in oversold groups such as the chip manufacturers, which netted attractive gains as prices recovered in the latter months of the quarter. The medical sector, where we maintain an overweight to the market, was quite profitable for the quarter. HEALTHSOUTH Rehabilitation, which had lost ground in the second quarter, regained momentum, making new highs by the end of September. The market signaled its approval of a key acquisition, providing a third leg to the company's business. New positions among the pharmaceutical group generated further gains. We are holding key positions in the consumer area, specifically among the mid-cap growth names, many of which have performed phenomenally this year, as well as the hotel/motel area, where we may enjoy another three to four years of advantageous conditions. Exposure was expanded in the interest sensitive area

Forstmann (con't)

on expectations that interest rates will remain stable in a moderating growth environment. Targeted areas included the savings and loan and insurance groups. Finally, we maintain a highly profitable exposure to the equipment and services group within the energy sector, which should continue to benefit from the application of technological advances throughout the industry.

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

There were no significant ownership or personnel changes at the firm over the quarter. One account was lost in this strategy. Marriott International Corp., upon the recommendation of a new consultant, decided to add a value manager to their equity group. As both of their existing managers, FLA and T Rowe Price were considered to be in the growth camp, one had to be let go in order to fund the value slot. As T Rowe Price was also the overall administrator of this 401-k program and had considerable influence over the process, they were retained in the decision. We still manage assets for the Host Marriott Services group.

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

No issues to report at this time

Staff Comments

Staff visited the New York offices of Forstmann-Leff on October 1, 1996. During that meeting, discussions covered many topics including the firm's growth, organizational changes, future investment strategy and past performance. Comments made by Forstmann-Leff during the meeting coincide with those made above. In addition, the firm continues to suffer from analyst turnover. They also discussed plans to market a new mid-cap product to institutional clients.

Forstmann's performance has trailed the benchmark over rolling 5 year time periods for several quarters. Under the Manager Continuation Policy, this triggers a review by the Domestic Manager Committee. Additional information on analysis is included in a separate staff memo.

Manager Commentary
Franklin Portfolio Associates Trust
Active Account

Period Ending:	9/30/96	Returns	Qtr.	1 Yr.
Total Firm Assets Under Management	\$10.2 Billion	Actual	3.7%	15.4%
Total Firm Assets Managed in this Discipline	\$ 0.6 Billion	Benchmark	2.8%	16.4%

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

Last Quarter's Performance:

For the quarter, the account was ahead of its benchmark with a total return of 3.7%, net of fees, compared to 2.8% for the benchmark. For the same period, the S&P 500 produced a return of 3.12%. We estimate that the equal-weighted S&P 500, which is closer in profile to the account's benchmark, had a return of 2.24%. According to our performance attribution analysis, stock selection, industry bets and risk index bets contributed to active return.

Portfolio issues which were strong performers for the account were Foundation Health Co. (35%), Compaq Computer Corp. (31%), Safeway Inc. (29%), Washington Mutual Inc. (25%), and Atmel Corp. (25%). Issues which performed poorly were KLA Instruments Corp. (-18%), Tele-Communications (-14%), Supervalu Inc. (-13%), Bellsouth Corp. (-12%), and Hewlett Packard (-12%).

Risk factor bets which helped performance were - positive tilts on Earnings-to-Price and Variability-in-Markets. A positive bet on Book-to-Price and a negative bet on Leverage had a negative impact on performance for the period. Industries contributing to active return were positive bets on Gas Utilities, Food Stores, and International Oils. Industry bets that hurt performance were negative bets on Retail, Service, and Hotels & Restaurants. Note that our investment process does not specifically target industry groups for over and under weighting. These weights arise out of our selection of individual issues.

Twelve Month Performance:

The twelve month return was strong in absolute terms but behind the benchmark due largely to a performance shortfall in the fourth quarter of 1995. Our performance attribution analysis points to stock selection bets as having contributed to active return over the period. Risk-index bets had a negative impact and industry bets had a neutral effect. Issues in the portfolio which were strong contributors to performance were Safeway Inc. (66%), Cardinal Health (40%), EMC Corp. (36%), Foundation health (35%), and Compaq Computer Corp. (33%). Issues which hurt performance were KLA Instruments (-31%), Ivax Corp. (-25%), Humana Inc. (-25%), Unicom Corp. (-23%), and Digital Equipment (-21%). Positive bets on the Success and Earnings-to-Price risk factors contributed to active return. A positive bet on the Trading factor hurt performance. Positive industry bets that helped performance were Oil Service, Gas Utilities, Miscellaneous Finance, and Thrifts. Underweighting Services, Drugs, Retail and Health (Non-Drugs) hurt performance.

Franklin (con't)

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

As of September 30, 1996, the following significant active bets existed in the account relative to the benchmark:

A. Factor bets (bets stated as standard deviations from benchmark):

Success = 0.11	Earnings/Price = 0.40	Trading = 0.12
Foreign Income = 0.24	Labor Intensity = 0.24	Book/Price = 0.18

B. Industry bets (bets stated as percentage deviations from benchmark weight):

5 Most Positive Bets:

Retail	3.77%
Producer Goods	3.49
Food Stores	3.30
Misc. Finance	3.16
Thrifts	2.81

5 Most Negative Bets:

Services	-4.62%
Chemicals	-3.42
Other Insurance	-3.16
Media	-2.42
Soaps	-2.20

C. Ten largest Stock bets (bets stated as percentage deviation from benchmark weight):

Safeway Inc.	2.73%	Intel Corp.	-0.47%
Travelers inc.	2.38	IBM Corp.	-0.45
Dell Computer	2.08	Gillette Co.	-0.42
Healthsouth Corp.	2.10	Chase Manhattan	-0.41
Brunswick Corp.	2.06	Abbott Labs	-0.41

Active portfolio bets are based on -- (a) the rank of individual issues as computed by Franklin's multi-factor ranking methodology, and (b) the effect of each issue on the "tracking error" or risk of the overall portfolio relative to the benchmark. Our objective is to obtain as high a rank as possible consistent with the residual risk (tracking error relative to the benchmark) objective. As a result of the stock selection bets, the portfolio acquires the industry and risk factor bets as described above. We attempt to maintain a total tracking error of approximately 3% to 3.5% relative to the benchmark. As of quarter-end, the forecast total tracking error for the portfolio was 3.59%.

3. **Organizational Issues.** *Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

There were no significant personnel or organizational changes at the firm since the last quarter. There were no account gains or losses in this discipline during the period. On a firm-wide basis we lost one account and gained one account.

4. **Other Comments.** *Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None.

Staff Comments

No comments at this time.

**Manager Commentary
GeoCapital Corporation**

Period Ending:	9/30/96	Returns	Qtr.	1 Yr.
Total Firm Assets Under Management	\$2.1 Billion	Actual	1.2%	14.3%
Total Firm Assets Managed in this Discipline	\$2.1 Billion	Benchmark	-1.5%	15.2%

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

The following charts highlight our functional bets in the actual portfolio relative to the benchmark along with the performance of each. In total, a new benchmark portfolio was established in early 1996 which we believe more accurately reflects our equity universe in both total liquidity and turnover. The current benchmark portfolio established for the fourth quarter 1996 adds to higher security coverage, (now over 80%). The portfolio numbers in both periods were helped by our increased relative weightings and performance in the technology sector.

	Quarter Ending 9/30/96	Year Ending 9/30/96
Consumer non-durable	Positive Higher weightings/higher returns 44.21% Geo/42.75% benchmark	Negative Higher weightings/lower returns 42.64% Geo/40.98% benchmark
Technology	Positive Higher weightings/higher returns 31.41% Geo/30.43% benchmark	Positive Under weightings/ higher returns 30.09% Geo/33.83% benchmark
Financial	Negative Higher weightings/lower returns 13.97% Geo/11.22% benchmark	Negative Higher weightings/lower returns 15.43% Geo/10.60% benchmark

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

Our strategy continues unchanged from the last quarter's commentary; within the technology sector a greater position in both educational and application software combined with more concentration in data networking. Healthcare continues to decline relative to active positions in the last few years with increases in other consumer non-durable/services areas more than making up the difference (deathcare, retail, lodging). Active financial bets continue above benchmark levels.

GeoCapital (con't)

3. **Organizational Issues.** *Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

No change in personnel.

New account - Service Corp. International Trust Accounts.

4. **Other Comments.** *Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

In the third quarter of 1996, our clients' portfolios outperformed the relevant small capitalization benchmarks. Our investments in technology stocks were strong contributors to the gains in the quarter despite a weak start through the month of July. In general, technology stocks were marked down a good deal in the early part of the quarter, following similar weakness at the end of the second quarter. We believe that much of this weakness was due to investor fears driven by an overheated IPO market early in the year and the typical concerns regarding the traditional summer slowdown for technology companies. August and September saw a return to the early spring highs for many of our technology holdings. In this segment of the portfolio, we continue to focus on and benefit from two key technology-driven trends: (1) growth in the outsourcing of information technology across almost all industries and (2) continued expansion of client/server technology at all levels of the corporate world. In the area of information technology outsourcing, we have focused on a number of systems integration companies, where we are adding to existing positions while continuing to find new ideas. We have emphasized the client/server trend through investments in application software companies which operate on this platform.

We look at the special situation side of the portfolio on a company by company basis. In this regard, the third quarter saw positive developments in a number of these situations as company managements' worked to free up value or create value for shareholders. These situations included such scenarios as developing turnaround stories, restructurings involving spinouts and sales of divisions, and companies involved in consolidating fragmented industries such as death care, finance, and distribution.

Staff Comments

Staff met with GeoCapital in their New York office on October 7, 1996. The discussion covered topics such as the firm's growth, future strategy, past performance and benchmark issues. Comments made by GeoCapital at the meeting match those made above. GeoCapital continues to work with R&T to make their benchmark more relevant to their investment process and correct some of the concerns staff had in the last benchmark analysis report.

GeoCapital's performance has trailed the benchmark over rolling 5 year time periods for several quarters. Under the Manager Continuation Policy, this triggers a review by the Domestic Manager Committee. Additional information on analysis is included in a separate staff memo.

Manager Commentary
Investment Advisers, Inc.
(Domestic Equity)

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$ 16 Billion	Actual	-1.8%	15.6%
Total Firm Assets Managed in this Discipline	\$ 0.8 Billion	Benchmark	2.9%	16.5%

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

For the quarter ended September 30, 1996, the portfolio returned -1.8% versus a benchmark return of 2.9%. The past quarter was very volatile, and our underperformance was largely the result of a very strong September for larger capitalization growth stocks. Given that the portfolio is weighted toward small and middle capitalization stocks, the portfolio did not keep up with an index that was driven by the large capitalization names. The narrow market we had in the quarter was very similar to that of January and February of this calendar year. During that period, we found that the performance of the portfolio more than makes up for the lost ground when the market shows broader participation across all capitalization ranges.

From an industry perspective, financial stocks had a very strong quarter. We have a neutral bet across financials with an equal sector weighting to our benchmark. Our active bet in financials is at the industry level where we are overweighted in Life Insurance and Leasing, and underweighted in Banks and Property Casualty Insurance. For the quarter, Life Insurance (Rehastar, Equitable of Iowa, Guarantee Life Companies) contributed 63 basis points to performance, our strongest sector performance. Both our stock selection and overweighted position aided performance. Our next strongest performing industry was Rental/Leasing where our only holding - Winthrop Resources - added 33 basis points to performance. The positive impact of these overweighted financial industries were offset by our underweighted position in the banks and property casualty insurance.

The strength of financials across the board was indicative of the influence of interest rates on performance for the quarter. All financial industries did well because the general market concern about higher rates in July abated by early September. We believe our active bets in this area continue to be justified.

Other industries where our active bets aided performance were: Telephone communications (MFS Telecommunications which was acquired by Worldcom), Paper (largely Fort Howard), Diversified Electronic Products (we did not own Motorola when it fell from \$63 to \$50), and Railroads (Wisconsin Central and Illinois Central).

Our underperformance was driven by two factors: First, as noted earlier, the strength of the large capitalization names where the portfolio is underweighted; and second, four stocks that reported poor earnings during the quarter. The individual stocks that hurt performance for the quarter were: Idex, Polaris, Aetrium, and Patterson Dental. Each reported disappointing earnings during the quarter but in all cases we maintained our positions in the companies. In fact, we added to our position in Aetrium, Idex, and Polaris when the stock price hit our buy point. In all cases, our fundamental view of the company's business was not altered and consequently we have maintained our holdings.

Investment Advisers, Inc. (con't)

For the latest twelve months, the portfolio is up 15.6% versus 16.5% for the benchmark. The underperformance for the past year was largely contained in the most recent quarter. Strong trailing twelve month relative performance was maintained through the market sell off in July, and the subsequent stabilization in August. It was the sharp move in the market in September, driven by large capitalization growth names, that caused our trailing twelve month performance to turn negative.

Over the past two plus years, we have seen several periods similar to the narrow market move we saw in September. Unfortunately, September of 1996 represented one of the most narrow moves we have seen in the past few years. During these moves, our performance has trailed because we hold a portfolio that is diversified across all sectors rather than one that is invested in one sector of the market.

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

There has been no change in our active industry bets in the Portfolio. Our relative overweights/underweights are virtually identical to last quarter end.

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

None. No accounts gained/lost

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None.

Staff Comments

Staff met with Investment Advisers in their Minneapolis office on August 8, 1996. During the meeting, discussions covered many topics including the investment philosophy, process, future strategy, and organizational changes.

In January of 1996, Mark Hoonsbeen replaced retiring Bing Carlin as portfolio manager. That transition has gone smoothly. The new portfolio manager has a more detailed quantitative style and makes decisions from a bottom up understanding of the companies he invests in. He is building a team of research analysts to assist him in this more rigorous process. Right now he has two analysts working for him and plans to hire one more in the near term to round out the team.

Investment Advisers performance has trailed the benchmark over rolling 5 year time periods for several quarters. Under the Manager Continuation Policy, this triggers a review by the Domestic Manager Committee. Additional information on analysis is included in a separate staff memo.

Manager Commentary
IDS Advisory (IDS Equity Advisors)

Period Ending:	9/30/96	Returns	Qtr.	1 Yr.
Total Firm Assets Under Management	\$30.3 Billion	Actual	7.2%	23.4%
Total Firm Assets Managed in this Discipline	\$ 7.6 Billion	Benchmark	4.9%	21.9%

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

The State of Minnesota account outperformed the Normal Portfolio over the last three months as well as the latest year. Value was added by both stock selection and sector weightings. During the quarter, the portfolio's overweighting in technology generated incremental returns while underweighting in utilities, and consumer cyclicals also provided value added. The marketplace favored large cap, high quality growth oriented securities. This was particularly true in the technology sector where Intel, Compaq, 3 Com, and Cisco shined. In general, our portfolio was focused in precisely the types of securities which the market gravitated to during the quarter. We should also note that the portfolio was plagued by a series of negative earnings surprises during the first six months of the year. Such was not the case in the third quarter when the earnings of the overwhelming bulk of securities within the portfolio met or exceeded street expectations. This absence of negative earnings surprises greatly helped returns.

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

Our sector weights are as follows:

	9/30/95	9/30/96	Benchmark 9/30/96
Technology	9.5	22.0	18.9
Consumer Stable	20.9	23.8	24.2
Consumer Cyclical	10.3	10.1	14.5
Utilities (non electric)	5.8	2.1	5.4
Financial Services	12.4	13.9	16.3
Energy	9.0	1.9	5.9
Industrial Basic	2.8	3.5	4.3
Industrial Growth	8.8	13.8	3.2
Industrial Cyclical	6.6	6.6	7.3
Equity Cash	<u>13.9</u>	<u>2.3</u>	<u>0.0</u>
	100.0	100.0	100.0

During most of 1996, IDS Advisory steadily increased weightings in the technology sector. Given the recent sharp advance in many of these securities, we have recently reduced holdings. This is not a reflection of our fundamental view of this area of the market, but rather results from the explosive price advances of many issues in the sector. We are trimming our sails hoping for an opportunity to re-enter the sector at lower prices. We continue to build exposure in consumer stables. This reflects our belief that corporate profits will be sluggish next year. Therefore, companies capable of posting 12-18% earnings gains will carry unusually high valuations. Within the sector, we have particularly heavy weightings in the drug and consumer products area. We have no holdings in the tobacco and beverage industries. We remain underweighted in utilities reflecting our belief that this sector is likely to experience anemic earnings growth and stiff regulatory challenges. Given our optimistic view on interest rates,

IDS Advisory Group, Inc. (cont')

we expect to increase our weighting in financial services. This is now the single cheapest sector in the market and should enjoy a significant earnings increase again next year assuming a relatively stable interest rate structure. We are currently underweighted in the energy arena. In light of slow but steady increases in energy prices, we are debating the wisdom of this underweighting. Generally, we remain overweighted in industrial growth. Many companies in this sector have significant exposure to overseas market which we believe are likely to experience more rapid growth than our domestic economy during the next 12-18 months. Our economic framework remains unchanged. Over the next 18 months, we expect growth at 2-2 1/2% and inflation of 3 1/2-4%. Interest rates are likely to remain stable over the next three quarters and then begin to rise gently in the latter half of next year. S&P 500 operating earnings should be approximately \$43 next year which would represent an increase of about 5%. It is our belief that the market is likely to advance over the balance of this year while struggling at some point in 1997 as profits stagnate and interest rates advance.

3. **Organizational Issues.** Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.

The following promotions took place over the last quarter:

1) William P. Miller, Senior Vice President and Senior Portfolio Manager, Large Cap Growth Domestic Equities was promoted to President and Senior Portfolio Manager, IDS Equity Advisors; 2) Michael D. Wolf, Senior Vice President and Senior Portfolio Manager was promoted to Executive Vice President and Senior Portfolio Manager, large Cap Growth Domestic Equities; 3) Marion Schultheis, Vice President and Senior Portfolio Manager was promoted to Senior Vice President and Senior Portfolio Manager, Large Cap Growth Domestic Equities.

Product	Gains		Losses	
	# of Accounts	Assets (\$MM)	# of Accounts	Assets (\$MM)
Large Cap Equities	2	23.2	0	0.0
Balanced	1	8.5	0	0.0
International	1	11.0	0	0.0
Research Aggressive	10	185.7	0	0.0

4. **Other Comments.** Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.

None at this time.

Staff Comments

Staff met with IDS in their Minneapolis office on September 11, 1996. Comments made above are consistent with those made during the meeting. With the promotion of William Miller to President of IDS Advisory, it is expected that Pete Anderson will be assuming his superior's (Bill Dudley) responsibilities when he retires. In anticipation of this, Pete Anderson is starting to relinquish his accounts. Staff has been reviewing with IDS alternative investment options for the SBI portfolio and is considering a more quantitative approach that will be discussed in a separate memo to the Domestic Manager Committee.

Manager Commentary
Independence Investment Associates

Period Ending:	9/30/96	Returns	Qtr.	1 Yr.
Total Firm Assets Under Management	\$23.2 Billion	Actual	1.3%	16.4%
Total Firm Assets Managed in this Discipline	\$11.8 Billion	Benchmark	3.1%	20.8%

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

The third quarter was a difficult one. Performance lagged the market as several major holdings (AT&T, Pepsico, Unicom, ITT, Philip Morris) underperformed. Both the quarter and 12 month number reflect this shortfall. The U.S. economy continued to grow at a moderate pace during the third quarter in spite of investor concerns that signs of stronger growth would trigger Fed tightening. In anticipation of high employment and strong economic growth numbers, investors took the S&P 500 down 4.4% in July, only to rebound 7.8% in the August-September period. Inflation and interest rate concerns continued to lie just below the surface with the market extremely sensitive to any economic news.

Stocks in the technology, financial, and healthcare industries outperformed this quarter while utilities, autos, and airlines lagged. Several major shifts in leadership were indicative of the market's high level of volatility. Value and growth were on a similar roller coaster ride with value dominating growth in July and August, then growth staging a comeback in September, leaving growth ahead for the full three-month period. For the third quarter the best-performing stocks in your portfolio included issues such as Medtronic, Abbott Labs and First Bank Systems as well as select technology companies, including, Intel and Compaq. Other large holdings which performed well were Bristol Myers and Texaco. The telephone stocks, notably AT&T, had a particularly adverse impact on performance as did Pepsico, ITT, Unicom and Philip Morris. Major purchases during the quarter included IBM, General RE and Pfizer, while Pepsico, Exxon and Microsoft were eliminated. Turnover in the third quarter was slightly above our historical average of 60% annually. Bristol Myers, Home Depot and Monsanto performed well over the 12 month period while the negative impact of AT&T and Unicom in the third quarter caused them to be among the top underperformers for the year.

Our Cybercode valuation model was not particularly robust in the third quarter with the earnings momentum models working best in July and September and the intrinsic value components outperforming in August. The top-ranked issues - where your holdings and transactions are concentrated - did not add value in the quarter. A few of your large active stock positions which underperformed by a significant margin were, of course, concentrated in the top segment of the valuation ranking.

Independence (con't)

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

Portfolio Characteristics: Within well-defined risk characteristics we intentionally concentrate our active bets in individual stock selection. At quarter end over 80% of the non-market risk in your portfolio was attributed to the collective over and under-weighted individual stock positions. Overall, industry and common factor exposures are maintained close to that of the benchmark. Consistent with our philosophy of investing in “cheap” stocks with improving fundamentals, your account’s P/E ratio of 13.5x is lower than your benchmark’s P/E while its long-term growth rate of 10.1% is higher than your benchmark’s. Your portfolio’s characteristics continue to comply with your investment policy guidelines, which are closely monitored at Independence. We will continue to construct a diversified, benchmark-like portfolio of stocks that are “cheap” and have improving fundamentals.

- 3. Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

Independence Update: There has been no change in our investment staff, our philosophy or our daily implementation. We continue to work hard at our investment process as we have for the last 14 years. The previously announced acquisition of Boston International Advisors, Inc., now Independence International Associates, Inc., is complete. We look forward to introducing you to our new co-workers and some very interesting products.

- 4. Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None.

Staff Comments

Staff plans to meet with Independence this quarter to review their recent acquisition, past performance, personnel issues and business strategy and growth. Staff will report the findings from its meeting next quarter.

Manager Commentary
Lincoln Capital Management Company
(Domestic Equity)

Period Ending:	9/30/96	Returns	Qtr.	1 Yr.
Total Firm Assets Under Management	\$ Billion	Actual	4.4%	28.1%
Total Firm Assets Managed in this Discipline	\$ Billion	Benchmark	4.8%	24.5%

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

Quarter -The portfolio lagged the benchmark by roughly 40 basis points net of fees, of which 20 is attributable to sector (industry) allocation and 20 to stock selection within our industries. For the first quarter in some time, issue selections in consumer non-durables, technology, and health care were modestly detractive, offset partially by good picks in retail, specialty chemicals and finance.

Last 12 Months -The portfolio's return exceeded the benchmark by roughly 3.6%, all of which is attributable to stock selection within our industries. Stock selection was good in specialty chemicals, health care, consumer non-durables, technology and outsourcing (computer services).

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

The key bets are found in the top 10-15 holdings within the portfolio. Currently our individual issue selections accumulate to some reasonably large industry variances. The active portfolio is overweighted in consumer non-durables, health care (mostly pharmaceutical cos.) and specialty chemicals, while underweighted in communications and technology.

The rationale for these active bets is Lincoln's bottom up analysis (both fundamental and valuation) of the individual stocks in these industries.

Lincoln (con't)

3. **Organizational Issues.** *Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

There were no accounts gained or lost during the quarter ending 9/30/96.

The firm has hired Sandy Lincoln as Chief Operating Officer.

4. **Other Comments.** *Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None.

Staff Comments

Sandy Lincoln has two main responsibilities as Chief Operating Officer. First, he hopes to improve Lincoln's internal efficiencies, particularly in the areas of technology image and financial management. Secondly, he will head up business development with the main objective being to investigate new potential products that Lincoln could offer.

Manager Commentary
Oppenheimer Capital

Period Ending:	9/30/96	Returns	Qtr.	1 Yr.
Total Firm Assets Under Management	\$42.6 Billion	Actual	5.7%	23.6%
Total Firm Assets Managed in this Discipline	\$25.2 Billion	Benchmark	3.9%	20.5%

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

For the quarter, the portfolio outperformed the benchmark by 1.8%. From a sector perspective, consumer nondurables made the greatest contribution to outperformance, with the portfolio stocks rising 8.5% versus 3.5% for the benchmark. While the portfolio is underweighted in this sector relative to the benchmark, noteworthy stocks with this group include Avon Products (+10.6%), Becton Dickinson (+10.6%), and Warner Lambert (+20.8%). Finance stocks made the second largest contribution, with Wells Fargo, the portfolio's largest holding, increasing 9.4% and Citicorp up 10.1%. Intel was the best performing stock for the second quarter in a row, rising 30.0% on strong earnings resulting from gross margins expansion due mainly to a surge in microprocessor sales.

The five largest contributors to and detractors from performance were as follows:

<u>Five Largest Contributors</u>		<u>Five Largest Detractors</u>	
Intel Corp.	30.0%	Motorola	(17.7)%
Warner Lambert	20.8	Transamerica	(13.2)
Federal Home Loan Mortgage	14.6	AMR Corporation	(12.5)
Monsanto	12.8	Freeport McMoRan	(11.8)
Wells Fargo	9.4	Sprint	(6.8)

For the year ended September 30, 1996, the portfolio outpaced the benchmark by 3.1% with 65% of the outperformance a result of stock selection. Financial stocks continued to make the largest contribution to the portfolio's outperformance. As in previous periods, both stock selection within the group and overweighting relative to the benchmark had significant positive impact on the portfolio performance. The portfolio's financial holdings, which represented 33% of the portfolio at the beginning of the period, produced returns of 33% versus 23% for the stocks in the benchmark.

The five largest contributors to and detractors from performance were as follows:

<u>Five Largest Contributors</u>		<u>Five Largest Detractors</u>	
Monsanto	85.0%	Nokia	(35.5)%
Wells Fargo (First Interstate)	75.2	Motorola	(32.0)
General Electric	46.0	Arrow Electronics	(18.2)
Federal Home Loan Mortgage	43.5	Champion International	(14.5)
Travelers	41.3	Hercules	(4.1)

Oppenheimer (con't)

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

The investment in financial stocks-banks, insurance companies and financial service companies, represented 37.7% of the portfolio as of September 30, 1996 and is the largest "active bet" in the portfolio. Our investment in these companies does not relate to an interest rate forecast. We have owned a number of companies in this sector that meet our investment criteria, i.e. high and sustainable returns on capital, solid market shares and shareholder orientated managers for several years. We fully realize the risk inherent in a higher interest rate environment but are not overly concerned with this scenario over the intermediate term.

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

There were no changes which impacted the management of the Minnesota State Board of Investment portfolio. However, there have been the following changes in investment professional staff:

Additions:

Ben Maimon - Assistant Equity Portfolio Manager/Analyst

Thomas Scerbo - Equity Portfolio manager/Analyst

Departures:

Charles Webster - International Equity Portfolio Manager

Hideki Shigenobu - International Equity Portfolio Manager

CORE EQUITY ACCOUNTS GAINED/LOST:

Accounts Gained: 5 accounts with \$115.6 million in assets.

Accounts Lost: 0

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None.

Staff Comments

Staff met with Oppenheimer in their New York office on October 10, 1996. The discussion covered many topics including the firm's growth in the investment process, past performance, trading capabilities and the research organization. Oppenheimer's comments above match those made during the meeting. In addition, they have hired a Director of Research, which is a new position at Oppenheimer, created to coordinate and pull together research for all product areas. As to their analysts, they lost 2 analysts who left for opportunities at other firms but have hired 5 junior analysts to build up the analyst staff over the next couple of years.

Recently, Oppenheimer has hired Goldman Sachs to search for a potential buyer of the final 1/3 portion of Oppenheimer capital that is privately held within the firm. They stated they are in no hurry and are looking for a buyer that will allow them to operate as they are currently. Staff at this point is not concerned because Oppenheimer's initial release of 2/3 of the firm that went public went very smoothly. However, staff will continue to monitor their progress. Overall, Oppenheimer has provided good performance through stock selection.

Manager Commentary
Waddell & Reed

Period Ending:	9/30/96	Returns	Qtr.	1 Yr.
Total Firm Assets Under Management	\$24.9 Billion	Actual	3.6%	9.7%
Total Firm Assets Managed in this Discipline	\$ 0.6 Billion	Benchmark	3.6%	14.9%

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

Our performance for the quarter ending September 30, 1996 was 3.6% versus 3.6% for the benchmark. The third quarter was host to a very volatile stock market. Concerns about earnings results sent the market into a steep decline in mid-July. This correction, while dramatic, was also short-lived, with August and September providing a steadily advancing market in which most major market indices achieved all-time high valuation marks. We outperformed the benchmark in July, and slightly underperformed the balance of the quarter.

Compared to the benchmark, the portfolio is overweighted in biotechnology, computer-related, drugs, telecommunications, and energy. Several stocks in the portfolio provided outstanding results in the quarter, particularly, Intel, Computer Associates, Informix, Seagate Technology, Amgen, and MFS Communications. Seventeen stocks held in the portfolio posted gains in the excess of 10% in the period. Some software and computer service stocks performed poorly. Broderbund, Intuit, and America Online were largely disappointing. Both United Healthcare and Motorola had negative surprises relative to consensus estimates for their earnings reported in mid-July.

During the quarter, we made the following changes within the portfolio:

Stocks Purchased	Stocks Increased	Stocks Reduced	Stocks Sold
Amtel Corp.	America Online	Ascend Communications	Beverly Enterprises
Eastman Chemical	Broderbund Software	Cisco Systems	Cerner Corp.
Electronic Arts	Electronic Data Systems	Emeritus Corp.	Comcast Corp.
Johnson & Johnson	Federal National Mortgage	MFS Communications	DuPont E I De Nemours
Oracle	Informix	Motorola	DuPont Photomasks
Royal Dutch Petroleum	Intuit	United Healthcare	Infinity Broad Corp.
Sonat	Wal Mart Stores		Invesco
	Wells Fargo		National Health
	Western Atlas		Physio Control
			Silicon Graphics
			Teradyne Inc.
			Viacom Inc. Class B

For the past twelve months, our performance was up 9.7% relative to a 14.9% return for the benchmark. As we've stated, our underperformance was largely attributable to an overweighting in semiconductor and semiconductor equipment stocks in the last quarter of 1995 and the first half of 1996. Specifically, Silicon Valley Group, Teradyne, Applied Materials, and Motorola were poor stocks in the past year.

Waddell (con't)

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

Underweighted

Basic Industries
Consumer & Service
Financial

Overweighted

Energy
Technology
Utilities (Pipelines)

The economic recovery the U.S. has enjoyed since 1991 has been led by a major reinvestment in capital goods. This reinvestment has been beneficial, especially in the contribution it has made to the nation's competitive position globally. However, we think this capital spending boom is ending. Further, we think that the U.S. consumer is highly leveraged and has limited power to drive the economy forward. We are late in the economic cycle.

Our low weighting in basic industries and consumer-related stocks reflects our concerns about the economy. Technology stocks, generally, have performed well in recent months. As we have stated consistently, we think technology represents the key sector of U.S. market dominance and is the single most important area for long term equity returns in growth portfolios.

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

Mr. Gregory X. Falcon, Investment Analyst, was hired.
Mr. Robert E. Nightingale, Investment Analyst, was hired.
Mr. F. Chace Brundige, Investment Analyst, was hired.
Mr. Derek Hamilton, Economic Analyst, was hired.

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

We have had no significant issues occur in the last quarter that would affect the SBI account.

Staff Comments

Staff met with Waddell & Reed at their office in Kansas City on September 16, 1996. Some topics of discussion included their business strategy, personnel issues, investment performance and future strategy. Comments made above are consistent with those made during the meeting. In addition, Waddell & Reed continues to make improvements to their systems, support staff, and to their analyst compensation program. They also plan to hire 4 more domestic analysts in the next couple of years to bring the analytical staff to 14. These improvements should pay off in better service to clients such as SBI. However, the underperformance of SBI's account relative to the benchmark has been due to cash and sector bets by the portfolio manager that haven't worked. It is staff's concern that even with improvements to other parts of the organization, SBI may continue to see unsatisfactory performance.

Waddell's performance has trailed the benchmark over rolling 5 year time periods for several quarters. Under the Manager Continuation Policy, this triggers a review by the Domestic Manager Committee. Additional information on analysis is included in a separate staff memo.

Manager Commentary
Weiss Peck and Greer

Period Ending:	9/30/96	Returns	Qtr.	1 Yr.
Total Firm Assets Under Management	\$12.8 Billion	Actual	0.8%	26.1%
Total Firm Assets Managed in this Discipline	\$ 1.4 Billion	Benchmark	0.8%	9.5%

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

Strong stock selection within several sectors continued to add value to your portfolio's performance. The holdings in the health care, business services and computer software groups contributed significantly to the outperformance for the 12 month time period. Our continued focus on specific themes within these areas, specifically biotechnology, outsourcing and wide area networking, provided the greatest benefit. Disappointments within the portfolio continue to be within the airline group, due to the turmoil arising from several airliner accidents; semiconductors, which have been hurt by excess supply conditions; and several internet-related stocks impacted by an increasingly competitive environment.

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

The Federal Reserve Board's decision to leave interest rates intact at their last meeting gives added credence to our moderate economic growth scenario. We continue to believe that Small Cap Growth stocks are in the middle innings of a classic up cycle. The ability of the market to snap back from July's downturn is an indication of investors' confidence in the economy. Within the portfolio, our emphasis remains on the areas of business services, technology and health care, as we believe the current economic environment favors continued strong growth in these areas. We have taken profits and reduced weightings in certain stocks that have been big winners for us like Starbucks and Chesapeake Energy, and redeployed the cash to other names within these sectors to capture growth.

Weiss Peck (con't)

3. *Organizational Issues.* Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.

Effective September 1, 1996, Laurence Zuriff joined Weiss, Peck and Greer as a research analyst covering technology for the Small Cap Group. Mr. Zuriff joins WPG from JGD management, a special situations fund. He has a BA from Brown University and an MA from John Hopkins School of International Studies.

4. *Other Comments.* Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.

None.

Staff Comments

Staff met with Weiss, Peck & Greer in their office in New York on October 11, 1996. Some topics of discussion included: organizational update, economic analysis, performance review, current strategy, and benchmark review. Comments made above coincide with those made during the meeting.

Weiss, Peck & Greer's small cap team has suffered the lose of several important members during the past year: the co-portfolio manager and the leading small cap technology analyst. They have hired a new technology analyst, but have chosen not to replace the co-portfolio manager at this time. Instead, they have split those responsibilities among several lead analysts. They have also in the last year hired a healthcare and financial analyst to round out their analysts staff. Staff does not believe this will negatively affect the management of the SBI account, as the primary portfolio manager and the same investment processes are still in place.

Weiss, Peck & Greer's performance has trailed the benchmark over rolling 5 year time periods for several quarters. Under the Manager Continuation Policy, this triggers a review by the Domestic Manager Committee. Additional information on analysis is included in a separate staff memo.

Franklin (con't)

B. Industry bets (bets stated as percentage deviations from benchmark weight):

5 Most Positive Bets:		5 Most Negative Bets:	
Gas Utilities	1.43%	Services	-1.64%
Cosmetics	1.35	Banks	-1.39
Food Stores	0.97	Telephones	-0.97
Retail	0.93	Chemicals	-0.80
Health (Non-Drugs)	0.92	Soaps	-0.77

C. Ten largest Stock bets (bets stated as percentage deviation from benchmark weight):

Safeway Inc.	0.59%	Microsoft Corp.	-0.88%
Archer Daniels	0.56	Intel Corp.	-0.71
Travelers Group	0.55	Minnesota Mining	-0.71
Chase Manhattan	0.55	Wal Mart Stores	-0.68
Raychem Corp.	0.52	Chevron Corp.	-0.67

Active portfolio bets are based on -- (a) the rank of individual issues as computed by Franklin's multi-factor ranking methodology, and (b) the effect of each issue on the "tracking error" or risk of the overall portfolio relative to the benchmark. Our objective is to obtain as high a rank as possible consistent with the residual risk (tracking error relative to the benchmark) objective. As a result of the stock selection bets, the portfolio acquires the industry and risk factor bets as described above. We attempt to maintain a total tracking error of under 1.5% relative to the benchmark. As of quarter-end, the forecast total tracking error for the portfolio was 1.24%.

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

There were no significant personnel or organizational changes at the firm since the last quarter. There were no account gains or losses in this discipline during the period. On a firm-wide basis we lost one account and gained one account.

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None.

Staff Comments

No comments at this time.

Manager Commentary
J.P. Morgan Investment Management, Inc.

Period Ending:	9/30/96	Returns	Qtr.	1 Yr.
Total Firm Assets Under Management	\$167.5 Billion	Actual	1.9%	18.6%
Total Firm Assets Managed in this Discipline	\$ 8.5 Billion	Benchmark	2.2%	18.6%

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

The Return Enhanced Index strategy trailed its benchmark during the third quarter due to specific stock selection decisions in the consumer stable sector. An overweighted position in PepsiCo hurt performance as the company declined as their key bottler in South America suffered huge losses. An underweighted position in Coca Cola detracted from return as the company continued to gain market share internationally and benefited from investors search for earnings stability.

Individual stocks which had large negative impacts included underweighted positions in Boatmens Bancshares and Gillette which rose as investors reacted positively to their respective mergers. Overweighted positions which hurt performance included Philip Morris which plummeted as a jury awarded damages and found liability on a tobacco company's failure to warn pre-1969 about smoking's dangers. The sharp sell off was due to investors fears that this decision was not an isolated event but that it was a significant change in juror sentiment and that the old argument of personal responsibility would no longer stand. Apria Healthcare declined as the company announced an earnings shortfall stemming from difficulty integrating new computer systems.

On the positive side, overweighted stocks which added to return included Warner Lambert, Allied Signal, Procter & Gamble, Service Corporation, IBM, Allegheny Teledyne, and Banc One Corporation.

For the year ending September 30, 1996, the portfolio performed in-line with its benchmark. Performance was mixed with the finance, energy, and transportation sectors adding the most to return while the multi-sector, consumer stable, and utility sectors detracted the most from return.

Most of the relative weakness can be attributed to underweighted positions in Large Cap "Nifty Fifty" stocks such a Coca Cola, Intel, General Electric, Johnson & Johnson, and Microsoft. The relative strength stemmed from individual stock selection decisions such as Service Corporation, Portland General, Eli Lilly, Integra Financial, Southern Company, American Home Products, Allied Signal, and Consolidated Edison.

J.P. Morgan (con't)

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

Our stock selection process buys/holds those stocks within each sector that have the highest DDRs and sells those with low expected returns. Since the portfolio is fully invested, sector neutral, and factor neutral, the only active bets are individual stock over and under weightings.

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

During the third quarter, four new accounts were added, and two accounts were lost due to asset allocation decisions.

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None.

Staff Comments

Staff met with J.P. Morgan in their New York office on October 7, 1996. The discussion covered topics such as organizational changes, growth of assets and staff, past performance, the investment process and trading techniques. The comments above coincide with those made during the meeting. In addition, J.P. Morgan is adding staff to the research analyst team and to the group that services SBI's account.

They have gone from 21 to 25 analysts and increased the number of stocks covered from about 700 to 800. In the next five years they plan to increase the number of U.S. analysts to 30 and allow them to cover additional stocks. World-wide they plan to go from 70+ analysts to about 100 in the next five years. Within the structure equity group, they plan to hire an additional person to help the day-to-day activities of managing the accounts and an additional person in research.

**Manager Commentary
Barclays Global Investors
Semi-Passive Account**

Period Ending:	9/30/96	Returns	Qtr.	1 Yr.
Total Firm Assets Under Management	\$310 Billion	Actual	2.4%	19.2%
Total Firm Assets Managed in this Discipline	\$ 10 Billion	Benchmark	2.2%	18.6%

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

BGI Global Investors' Alpha Tilts Strategy, customized for the Minnesota SBI, outperformed the Minnesota Custom Benchmark by 0.2% in the third quarter of 1996, and outperformed by 0.6% over the last 12 months. This strategy systematically evaluates companies according to a broad set of investment characteristics in order to construct a risk-controlled, index-like portfolio with expected returns in excess of the benchmark. The active risk level of the portfolio is generally maintained at 1.0 - 1.5%; from inception and over the past year the realized active risk was well within this range.

The attribution of added returns in the third quarter is shown in the table below. The portfolio's use of analyst information to identify companies experiencing positive changes in earnings expectations added 0.49% during the quarter. The use of valuation measures to identify stocks trading at attractive prices relative to their underlying economic value added 0.06% in the third quarter. The use of signaling measures, which include corporate financing activity and informed insider trading, contributed -0.01% to active return in the third quarter. As expected, industry weighting differences made only a small contribution to the portfolio's active return (-0.13%), due to the tight risk controls we use in this area. Finally, the portfolio experienced negative security-specific returns in the third quarter, representing the idiosyncratic or residual returns of individual companies that cannot be explained by their industry group, style, size or other common characteristics. Over shorter measurement intervals, the returns attributable to security-specific sources can be relatively large in magnitude, but this source of tracking error risk tends to diversify toward zero over longer holding periods. The Alpha Tilts portfolio minimizes this risk through broad diversification (approximately 800 stocks) and by limiting the active positions taken in individual companies.

Active Return Attribution:

	Quarter	Past Year
Analyst inputs:	0.49%	1.32%
Fundamental value:	0.06	0.00
Signaling inputs:	-0.01	-0.03
Other common factors:	-0.02	-0.18
Industry weights:	-0.13	0.03
Stock-specific	-0.20	-0.59
Total active return:	0.20%	0.55%

Barclays Global Investors (con't)

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

The current Minnesota Alpha Tilts portfolio is similar in structure to the second quarter 1996 portfolio. Our investment process seeks to identify companies for which consensus expectations will be improving, by carefully modeling the linkage between changes in analysts' forecasts and future expectations and returns. Thirdly, we emphasize companies that are trading at multiples (based on earnings and book value) that are below their industry peer group. Finally, we identify companies whose management has "signaled" their view of stock valuation to the market in the form of insider trading activity and corporate financing activity. These areas of emphasis in the portfolio are designed to be relatively consistent over time; we do not make subjective or ad hoc changes to our investment process. The rationale for these bets is based on a combination of economic/investment theory about how markets and investors operate and rigorous empirical testing to validate these ideas and determine the optimal way to incorporate them in highly risk-controlled portfolios. In general, we are seeking to capture systematic return effects that are generally overlooked by traditional investors.

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

No significant ownership or personnel changes took place in the past quarter. We added 8 new clients in our US Alpha Tilts Strategies during the third quarter, with a total funding of approximately \$695 million. There were no lost clients in the US Alpha Tilts Strategies during third quarter 1996.

New Alpha Tilts Clients, Third Quarter 1996:

Gleason Foundation	Swisher International
Valley Hospital	Shell Oil
Marin County	BW/IP
Kimberly Clark	(Confidential client)

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

At this time, there are no special issues pertinent to the management of the SBI account.

Staff Comments

No comments at this time.

**Manager Commentary
Barclays Global Investors
Passive Account**

Period Ending:	9/30/96	Returns	Qtr.	YTD
Total Firm Assets Under Management	\$310 Billion	Actual	3.0%	19.1%
Total Firm Assets Managed in this Discipline	\$ 12 Billion	Benchmark	2.8%	18.9%

1. *Past Performance. Summarize your performance over the last quarter and Year. Specifically, explain the reasons for the tracking error between the portfolio and the index.*

Barclays Global Investors' (BGI) Wilshire 5000 Strategy outperformed the Wilshire 5000 by 0.2% during the third quarter of 1996. The tracking error was due to the security specific misweights in the optimized portion of the portfolio. At the end of the third quarter, the expected annual tracking error of the portfolio was 13 bps.

Tracking error, due to security specific misweights, for the past twelve months has also been positive 0.2%

2. *Future Strategy. Going forward, what strategies, if any, do you plan to implement to control tracking error within expectations.*

We continue to look for opportunities to rebalance the portfolio and use cash flows to minimize the portfolio's expected tracking error. We seek to rebalance on a cross only basis over time to minimize tracking error.

Barclays Global Investors (con't)

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

No significant personnel or ownership changes took place during the last quarter.

However, as of October 15, 1996, BZW Barclays Global Investors, BZW Investment Management and the central services group of BZW Asset Management were integrated under one management and one name: Barclays Global Investors. The new entity will serve clients from offices in the US, UK, Japan, Australia, Hong Kong, and Canada. The integrated firm will focus exclusively on indexing and advanced active strategies.

There were no accounts gained or lost during the quarter.

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

During the third quarter, BGI traded approximately \$32 million (based on trade date prices) in the Wilshire 5000 portfolio. Trades were done to facilitate rebalancing, index changes, and dividend reinvestment. Of the \$32 million traded, \$2.7 million was crossed either with other BGI clients/funds, through Instinet/Posit, or with brokers. The remainder was actively traded through Instinet or traded open market. Assuming that the cross transactions saved Minnesota just one half of the bid/offer spread, the amount saved was \$10 thousand (est 37 bps times the amount crossed).

Staff Comments

No comments at this time.

Manager Commentary
CIC Asset Management, Inc.

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$175 Million	Actual	2.3%	19.1%
Total Firm Assets Managed in this Discipline	\$175 Million	Benchmark	3.7%	20.2%

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

CIC's performance in the third quarter was 2.34% versus 3.66% for the benchmark return. For the last one year, CIC returned 19.05% versus 20.23% for the benchmark. Relative to the Russell 1000 Value Index, CIC returned 2.34% vs 2.91% for the quarter and 19.05% vs 17.95% for the last one year. CIC's underperformance in the quarter came primarily from our underweightings relative to the benchmark in consumer nondurables and technology and our overweightings relative to the benchmark in utilities and energy. On the positive side, we had particularly strong performance in the quarter from IBM (+26.15%), BankOne Corporation (+21.62%), Federal Home Loan Mortgage (+14.60%), PPG Industries (+12.23%), and Union Texas Petroleum (+11.19%).

Portfolio Construction Table: Industry exposure and cash holdings changed as follows:

Sector	Normal Portfolio		
	Benchmark	Portfolio	Portfolio
	9/30/96	6/30/96	9/30/96
Consumer Cyclicals	16.72%	13.02%	6.25%
Consumer Non-Durables	16.33	6.92	12.65
Technology	8.37	7.55	7.95
Energy	7.84	8.59	10.88
Basic Materials	10.36	19.86	21.29
Capital Goods	10.07	5.73	5.66
Utilities	9.26	18.45	12.62
Financials	21.06	13.58	21.38
Cash	0.00	6.29	1.32
TOTAL	100.00%	100.00%	100.00%

CIC Asset Management (con't)

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

During the quarter, we increased our exposure to energy stocks from 110% of the benchmark to 139% as rising oil prices continue to support upward earnings revisions and valuations for energy stocks. New positions added were Ultramar and Kerr-McGee. We also increased our exposure to consumer nondurables from 42% to 77% by adding Schering Plough and increasing our positions in Universal Corporation and Bristol Myers. We significantly reduced our exposure in consumer cyclical stocks from 78% to 37% as we eliminated Reebok and reduced our position in Dana Corporation. Finally, we reduced our exposure to utilities as the yield spread between electric utilities and industrial stocks declined from 340 basis points to below 300. Our utility weight went from 199% to 136% by eliminating Boston Edison and selling part of our Allegheny Power position.

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

None to report.

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

In our recent visit with staff members we indicated that there is a problem in the construction of the normal portfolio which results in sector weights which are not representative of our current investment process. We intend to work closely with BARRA and Richards & Tierney to correct this problem.

Staff Comments

Staff met with CIC at the SBI offices on October 17, 1996. Staff expressed its concern regarding CIC's stagnant asset base. A primary objective of the emerging manager program is to retain managers who have the potential to become an active domestic equity manager who can invest significant funds for the SBI. While staff believes CIC has such potential, staff will closely monitor CIC's business growth.

Manager Commentary
Cohen, Klingenstein & Marks Incorporated

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$506 Million	Actual	7.3%	26.4%
Total Firm Assets Managed in this Discipline	\$506 Million	Benchmark	4.4%	16.0%

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

The account increased by 7.3% (net) during the third quarter of 1996 which compares to a 4.4% gain for the benchmark. Broadly speaking, the account remained aggressive (in the context of the generally conservative large capitalization stocks that we purchase). Relative to the benchmark, we have been overweighted in Interest-Rate Sensitive stocks (reflecting a belief that rates would decline), Growth (reflecting optimism about near and long-term economic growth) and underweighted in Cyclical stocks (though somewhat overweighted relative to the S&P 500). This was true for the entire past twelve months as we did not meaningfully reposition the portfolio over this period. Since Cyclical (particularly some of the Consumer Cyclical) did poorly last quarter (as they have on balance for the past year), this helped the account's performance relative to the benchmark. As for Interest-Rate Sensitivity, our portfolio was heavily weighted in the financial industries (we had 23.4% of the portfolio here versus 13.7% for the benchmark) which was the one bright spot in the Interest-Rate Sector and this furthered our advantage over the benchmark. This was true for the past year as well. The dynamics at play in the Growth area were a bit different; it was our overweighting this outperforming sector that helped vis-a-vis the benchmark (our portfolio was 55.2% Growth versus the benchmark's 37.4%) while this advantage was partially offset by the benchmark's better industry/stock choices. Again, this describes the situation for the past twelve months as well. As we note in our last report, early in the quarter we sold Advanced Micro Devices and U.S. Healthcare, replacing them with Intel and Seagate Technologies. These decisions added approximately 1.5% to relative performance last quarter.

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

We believe that the market is fairly valued based on consensus profit and interest rate expectations. On the other hand, we believe that the consensus is too pessimistic on both rates (which we expect to fall) and profits so that we think the market can rise from current levels. Given our optimism (both near and long-term), and our belief that rates will decline some, the portfolio remains "Growthy," with above-market (i.e., above S&P 500) exposure to Interest-Rate Sensitive stocks. No change in outlook here.

Cohen, Klingenstein & Marks (con't)

3. *Organizational Issues.* Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.

Elizabeth Ryan, recently employed at Brown Brothers Harriman, joined us last quarter. She will assist in various administrative/professional areas (trading, accounting, client service) and provides back-up in anticipation of future growth.

Accounts Gained	Accounts Lost
Thirteen (\$78.5 million)	None

Excludes additions (withdrawals) to (from) existing accounts.

4. *Other Comments.* Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.

None.

Staff Comments

Staff met with Cohen at the SBI offices on October 16, 1996. Staff believes that the firm has progressed significantly since being retained by the SBI. The firm's investment performance has been consistently positive with significant value added for all reporting time periods.

Manager Commentary
Compass Capital Management, Inc.

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$246 Million	Actual	3.9%	23.8%
Total Firm Assets Managed in this Discipline	\$135 Million	Benchmark	5.6%	26.2%

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

Again, the primary driver of investment performance during the past three and twelve month periods, was being fully invested. Since the inception of the relationship, a very small cash position has been held. This has added to investment performance greatly.

Sectors	QUARTER		YEAR	
	Active Bets	Value Added	Active Bets	Value Added
Technology	Underweighted	Did Not Work	Underweighted	Did Not Work
Consumer				
Non-Durables	Underweighted	Worked	Underweighted	Did Not Work
Consumer Durables	Overweighted	Did Not Work	Overweighted	Did Not Work
Capital Goods	Equal	Worked	Equal	Worked
Financial	Overweighted	Worked	Equal	Worked
Basic Industries	Overweighted	Worked	Overweighted	Did Not Work
Transportation	Underweighted	Worked	Underweighted	Worked
Miscellaneous	Underweighted	Did Not Work	Underweighted	Did Not Work
Energy	No Position	No Bnmk. Position	No Position	No Bnmk. Position
Utilities	No Position	No Bnmk. Position	No Position	No Bnmk. Position

Quarter

The portfolio was negatively affected by the under performance of the individual issues in the Consumer Durables sector and the underweighting in the Technology sector. Compass' investment strategy is to trim securities as their individual valuations move from fair value to over valued and purchase additional shares of securities that are under valued. The technology sector valuation is currently high, therefore Compass has been trimming shares and not purchasing additional names within the sector. The opposite is true in the Consumer-Durables sector where valuations look attractive and additional shares have been purchased. It is interesting to note that in the down month of July '96 the individual portfolio outperformed the benchmark. We believe this is attributable to our valuation discipline.

Year

Over the past year the portfolio has outperformed the benchmark and the benchmark outperformed the portfolio on a six month, six month split. In all three months when the benchmark was negative, the portfolio outperformed the benchmark. As the market leadership has been more concentrated, investment managers emphasizing momentum in stock selection have bid up prices on those issues with positive earnings surprises to extraordinary levels. These valuation concerns have kept Compass from participating more in Technology and Consumer Non-durable sectors; examples: Coke at 35x earnings and Gillette at 31x earnings.

Compass Capital Management (con't)

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

The largest overweighted active bets vs. the benchmark are within the Basic Materials and Capital Goods sectors. The largest underweighted active bet to the benchmark is Technology sector.

Compass Capital is a growth stock manager with a strong emphasis on valuation. Therefore, with the high valuations currently carried by the Technology sector, one would expect an underweighting in this sector from us.

The opposite would apply for Capital Goods and Basic Materials sectors. With consumer spending tight and with strong competition, the valuations of these stocks look attractive. Compass is a bottoms up stock selector.

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

No ownership or personnel changes.

No accounts lost.

No new accounts.

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None.

Staff Comments

Staff met with Compass on October 23, 1996 at the SBI offices. Staff believes there are no concerns at this time.

Manager Commentary
Kennedy Capital Management

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$ 1.6 Billion	Actual	-2.6%	18.1%
Total Firm Assets Managed in this Discipline	\$528 Million	Benchmark	-1.9%	12.0%

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

KCM's style is to locate underfollowed stocks and work to make them more visible to other managers who use quantitative screens. Because KCM invests in such small companies, with each stock being relatively risky, the portfolios consist of a large number of positions. (Collectively, the portfolios are stable.) In addition, trading in the small stocks in which KCM invests can be expensive so trading must be done very thoughtfully. Therefore, because of the large number of positions and the need to trade deliberately, our portfolios tend to be stable. During any particular quarter or year, KCM's shifts will seem marginal when compared with other investment managers who are more likely to make macro decisions. For example, on September 30, 1995, KCM had 2.3% of the portfolio in medical supply stocks. A year later that number had risen to 5.2%. A relatively modest change, but still significant for us. One reason for the growth in this area was that we purchased additional shares of Sunrise Technologies during the June-July market correction.

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

On September 30, KCM had 6.6% of the portfolio in cash. That is an unusually high percentage for us. However, we like to enter the October-November period with some significant cash on hand to facilitate "bargain buying." We have typically found that late in the year we can make attractive purchases as others are selling stocks to establish tax-losses or as portfolio managers are "cleaning up" their accounts.

Kennedy Capital Management (con't)

3. **Organizational Issues.** *Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

No significant organizational changes. One account closed.

4. **Other Comments.** *Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None.

Staff Comments

Staff met with Kennedy at SBI offices on October 15, 1996. Staff is concerned that Kennedy may not be able to effectively invest larger amounts of funds in its small cap products. Staff notes that a primary objective of the emerging manager program is to retain managers who have the potential to become an active domestic equity manager who can invest significant funds for the SBI. Staff is concerned that Kennedy will be unable to meet this objective.

**Manager Commentary
New Amsterdam Partners L.P.**

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$315 Million	Actual	6.8%	20.2%
Total Firm Assets Managed in this Discipline	\$295 Million	Benchmark	2.9%	14.4%

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

In the quarter ended September 30, 1996 the return on your portfolio was 6.8%. This compares with 2.9% for our customized benchmark, 3.1% for the S&P 500 Index, 2.9% for the S&P MidCap, 2.7% for the Russell 1000 and 3.5% for the NASDAQ Index. For the last twelve months, your portfolio has returned 20.2%. By comparison, our benchmark gained 14.4%.

Our core strategy remains the same: we use a valuation model to identify stocks with better than average forecast long-term growth and profitability selling at reasonable valuation multiples. Here are the characteristics of the portfolio as of September 30, 1996:

	Minnesota	S&P MidCap	S&P 500
Expected Return	16.5%	13.3%	9.1%
P/E	21.2x	21.5x	20.2x
Price to Book	4.9x	3.9x	3.9x
Yield	1.2%	1.6%	2.2%
Growth	11.4%	11.9%	6.9%
Return on Equity	25.3%	17.2%	20.7%
Wtd Avg Mkt Cap	\$12.8bn	\$2.4bn	\$35.4bn

This quarter, we added value both through sector selection skill and stock picking ability. Our sector selection ability was good. We were overweighted in the best performing areas of the market: Health Technology, Finance, Technology Services and Consumer Non-Durables. At the same time, we were underweighted in two of the worst performing sectors: Health Services and Utilities, and market weighted elsewhere. Our stockpicking ability this quarter was also strong. Our stock selections outperformed their peers in thirteen of seventeen economic sectors. Areas of particular strength included Utilities, Consumer Non-Durables and Technology. Our weak spot lay in Basic Materials where we liquidated one position, Wellman Inc., upon a deterioration of company's earnings outlook.

For the past twelve months, we have added value both in sector selection and strong stock picking ability.

New Amsterdam Partners (con't)

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

We continue to maintain an overweighting in consumer, health and finance stocks but are underweighted in the energy sector, utilities and in cyclical stocks. We remain fully invested in the account and continue to stick to our investment discipline which looks for companies with superior profitability and forecast growth, selling at reasonable multiples.

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

There were no organizational or personnel changes at the firm over the quarter. No accounts were gained or lost.

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

Looking forward, we remain cautiously bullish on the equity markets, expecting the market to post a 15% gain in 1996 and a 9% gain in 1997. Our bullish stance is due to the benign economic environment. We believe that GDP growth over the coming 12 months will be around 2.5% and expect inflationary increases of around 2.9%. We expect interest rates to fall modestly over the balance of the year, with long rates ending at around 6.6%.

Staff Comments

Staff met with New Amsterdam at SBI offices on October 17, 1996. Staff believes there are no concerns at this time.

Manager Commentary
Valenzuela Capital Management, Inc.

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$907 Million	Actual	8.0%	24.2%
Total Firm Assets Managed in this Discipline	\$907 Million	Benchmark	2.6%	16.6%

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

Under our "bottom up" style, each stock pick is an active bet. For the quarter, gains were made throughout the portfolio, with the largest contribution to performance stemming from Eckerd Corporation and Rite Aid (adding 0.84% and 0.71%, respectively), experiencing accelerating earnings gains, and Perkin Elmer (0.57%), where the fundamental outlook is improving. Performance was adversely affected by Foundation Health Corp. (costing 0.12%), as price pressures in the HMO industry impacted the group, Valassis Communications (0.27%), affected by investor concerns about a perceived slowdown in consumer promotions, and Baker Hughes (0.30%), where the stock was correcting after strong performance. For the twelve months, the most significant gains continued from Consolidated Stores and TJX Companies (contributing 1.69% and 1.43%, respectively), continuing to benefit from an improving retail environment, and Perkin Elmer (1.64%) which was strong in the quarter. The poorest performers for the period were Foundation Health (costing 0.39%), James River (0.67%), as declining paper prices impacted earnings, and Kmart (costing 1.14%), due to concern about deterioration in the company's financial liquidity. Realized gains in James River had been taken earlier in the year, and the position in Kmart was sold in the fourth quarter of 1995.

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

Valenzuela Capital applies fundamental value-oriented research to selecting equities. We believe that growth in earnings and cash flow fuel price appreciation and that high price-to-earnings ratios cause volatility and risk. Hence, we try to sell higher P/E stocks and buy stocks in companies whose earnings will grow but whose P/E's are at or below the market. The portfolio was slightly realigned during the quarter. We added to positions we felt still represented good value and trimmed others, largely for reasons of valuation. New investments were initiated in Conseco, Cooper Cameron, Pennzoil Company, Raychem, and Universal Corporation. Realized gains were taken in Baker Hughes and James River. After initiating a new position in American Re, realized gains were taken soon thereafter as the price rose due to a merger announcement. The position in H&R Block was also sold due to disappointing valuation and earnings after the spin-off of the CompuServe subsidiary as an IPO.

Valenzuela Capital (con't)

3. *Organizational Issues.* Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.

There were no organizational or account changes over the last quarter.

4. *Other Comments.* Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.

Solid economic growth continue through the third quarter. As we begin the final quarter of 1996, there are some signs of a moderation in economic activity. Yet, solid employment gains and rising wages are causing many investors to focus on the possibility of accelerating inflation in the coming year. There is fear that the Federal Reserve could increase interest rates at any time in an attempt to head off incipient inflation. Despite this concern, investors at large continue to pour tens of billions of dollars into mutual funds, driving the equity markets to new highs. Corporate earnings have held up very well during this strong economic phase, but it will be difficult for corporate earnings to continue to show double-digit improvement if the economy slows even a little. We continue to concentrate portfolio holdings in those companies that have the highest probability of delivering superior earnings.

Staff Comments

Staff met with Valenzuela at SBI offices on October 16, 1996. Staff believes there are no concerns at this time.

Manager Commentary
Wilke/Thompson Capital Management

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$ 1.6 Billion	Actual	2.7%	6.9%
Total Firm Assets Managed in this Discipline	\$826 Million	Benchmark	0.2%	14.8%

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

The third quarter of 1996 will be remembered as one of the most volatile quarters on record. Despite posting respectable quarterly returns, the S&P 500 as well as the Russell 2000 indices both had major declines followed by significant recoveries during the period. The SBI portfolio followed this same pattern with a decline in July followed by a strong August and September. The source of this volatility can be attributed to fears over interest rates and earnings reports. Many investors feared that the Federal Reserve would raise interest rates during the summer months to combat a healthy economy and potential inflation. Likewise, in late June and July, investors were anticipating the second quarter earnings reports and severely sold off those issues they feared would disappoint. The markets recovered when the Fed failed to raise interest rates and when several companies did report in-line or better-than-expected earnings.

Specifically in the Wilke/Thompson portfolios, the business service and distribution sectors outperformed. These sectors contain companies that enable other companies to operate more efficiently. The smaller healthcare names in the portfolio lagged the overall portfolio. The multi-media/content sector struggled through the quarter as demand for software at the retail level has been soft. Although the SBI outperformed its custom benchmark for the third quarter, it still trails for the first three quarters of 1996.

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

Looking ahead to the fourth quarter, the market will be influenced by a few factors in particular. There is a strong possibility of a post-election interest rate hike by the Fed. Despite being widely anticipated by the marketplace, the magnitude of such a rate increase could impact the market either positively or negatively. The holiday selling season will also be a major factor going forward. Many analysts on the Street have very modest expectations for the holiday season, which leaves the potential for some upside surprises, particularly for retail and software stocks. From a Wilke/Thompson research viewpoint, we will continue to look for solid companies that possess bright long-term prospects and we will be less focused on the short-term issues such as the holiday season sales.

Wilke/Thompson Capital (con't)

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

Wilke/Thompson Capital Management had no ownership or professional personnel changes last quarter.

Wilke/Thompson Capital Management is presently closed to new account relationships in our Small Cap Growth product and is only accepting additional contribution from existing clients. We did not lose any clients during the third quarter.

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

Wilke/Thompson looks forward to continuing to serve the Minnesota State Board of Investment as its money manager.

Staff Comments

Staff met with Wilke/Thompson at SBI offices on October 22, 1996. Staff believes there are no concerns at this time.

Manager Commentary
Winslow Capital Management, Inc.

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$1.2 Billion	Actual	5.3%	15.5%
Total Firm Assets Managed in this Discipline	\$565 Million	Benchmark	4.2%	18.2%

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

In the quarter ending September 30, 1996, the Minnesota State Board of Investment account appreciated 5.3% net of fees. The Russell 1000 Growth experienced a return of 3.60% during the third quarter while the S&P 500 appreciated 3.09%. The benchmark "normal" portfolio constructed by BARRA for Winslow Capital returned 4.2% for the third quarter and 18.2% over the most recent twelve months. This compares with the performance of the SBI account over the last twelve months of 15.5% net of fees versus 21.39% for the Russell 1000 Growth and 20.34% for the S&P 500.

The SBI's Large Cap growth portfolio has experienced few changes over the most recent three month period ending 9/30/96. The portfolio is overweighted in telecommunications, healthcare, consumer services/specialty retail and slightly overweighted in technology versus our benchmark "normal" portfolio. We continue to be underweighted in the financial service, energy and industrial sectors relative to our "normal" portfolio. The investment process we follow is a fundamental "bottom-up" approach that leads us to companies that exhibit above-average earnings growth. In the most recent quarter, the average reported earnings gain for the companies in your portfolio was 31%. We continue to believe these companies have outstanding potential because they meet our strict criteria of high earnings growth at attractive valuations.

In the third quarter of 1996, Winslow Capital outperformed the "normal" by 1.1% net of fees. This outperformance can be attributed to both our stock selection and industry weightings versus the benchmark "normal". The overweighting of telecommunications and the underweighting to financial service companies limited our current quarter outperformance. The portfolio's increased allocation to technology and healthcare enhanced your account performance. Our stock selection was additive with names like Intel, Computer Associates, Oxford Health Plans, MGIC Investment Corporation and MBNA.

While the SBI's portfolio has outperformed the benchmark "normal" portfolio for the first three quarters of 1996, it has underperformed net of fees slightly versus the benchmark "normal" portfolio for the most recent twelve months. This underperformance was experienced mainly in the fourth quarter of 1995 when our underweighting in the slower growing financial service companies and below average stock selection in the telecommunication industry detracted from relative performance. Both of these sectors have performed poorly relative to the benchmark and the relevant market indices. We continue to see sustained growth in the specific companies we own and believe that the long-term results of owning these securities will be additive to performance.

Winslow Capital (con't)

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

In our opinion, the sectors that are likely to exhibit the best earnings growth over the next two to three years will be technology, specialty retail/consumer services, healthcare and telecommunications. These sectors make up a majority of your portfolio because on fundamental, "bottom-up" analysis we have identified specific companies within the aforementioned sectors that are poised to achieve strong future earnings growth. Notwithstanding the portfolio gain in the last year, we are constructive that on an absolute and relative basis, P/E ratios remain attractive. The portfolio is currently forecasted to achieve earnings growth of 25% through 1997, while selling at only 21 times our 1997 estimates.

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

None.

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None.

Staff Comments

Staff met with Winslow Capital at the SBI offices on October 22, 1996. Staff believes there are no concerns at this time.

Manager Commentary
Zevenbergen Capital, Inc.

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$416 Million	Actual	8.5%	23.4%
Total Firm Assets Managed in this Discipline	\$416 Million	Benchmark	4.0%	17.9%

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

	MSBI	Custom Benchmark
Third Quarter 1996	8.5%	4.0%
Sector Outperformance		
Financial Services	16.8%	7.8%
Consumer Discretionary	9.2%	1.4%
Producer Durables	7.8%	4.7%

After July's dismal beginning, performance took a decided turn for the better, after repositioning the portfolio for growth companies exhibiting the best of solid fundamentals, namely, superior revenue and earnings potential. Zevenbergen Capital outperformed all sectors against the custom benchmark for the third quarter of 1996. Quality-of-earnings growth companies are strongly in favor again, as BankBoston Corp. (+17%), First Bank System, Inc. (+16%), APAC Teleservices, Inc. (+44%), Starbucks Corp. (+17%) and Solectron Corp. (+29%) soared to new highs during the quarter.

Solid stock selections were the major catalysts to outperformance. The deliberate avoidance of HMO and health services companies and substitution of biotechnology issues for major drug companies in the health care sector, contributed to positive returns. The financial services sector was significantly overweighted compared to the benchmark, which had the strongest return of any area, with 16.8%.

	MSBI	Custom Benchmark
9/30/95 to 9/30/96	23.4%	17.9%
Sector Outperformance		
Technology	31.5%	14.3%
Health Care	35.0%	23.2%
Producer Durables	29.0%	18.2%
Financial Services	30.2%	19.8%
Sector Underperformance		
Energy/Materials	17.8%	25.9%

Zevenbergen Capital (con't)

Zevenbergen Capital has outperformed six of the eight sectors of the custom benchmark, year-to-date. The greatest relative outperformance came from the Technology (underweighted), Health care (underweighted), Producer Durables (overweighted) and Finance sectors (overweighted) compared to the benchmark. Individual stock contributors in the technology area included Computer Associates International (+112%), Microsoft Corp. (+47%) and Paychex, Inc. (+88%). From the health care sector, American Home Products and Biogen, Inc. returned (+55%) and (+27%), respectively. From the producer durables area, a solid contribution was made by Solectron Corp. with a (25%) return for the year. Finance reported stellar returns, led by the global banking entity, Citicorp (+28%).

As mentioned in the first quarter 1996 commentary, ZCI underperformed the custom benchmark, primarily due to an underweighting in the energy/materials sector. Historically, ZCI (and other growth managers) has not found longer duration growth investments within this sector. Rising oil prices throughout the year have been the driver to performance for this group, which in our view is not a secular trend.

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

Active growth style investing is back in favor, after July's decline refocused the market on "real earnings power". Speculative investing took a back seat to consistent revenue and earnings companies. As always, we focus our research efforts on finding those companies which tend to deliver strong earnings and exhibit relative earnings strength during a slower growth economy.

We remain optimistic about the equity market and about the prospects for fully invested growth portfolios (like ZCI's). We expect earnings increases among our holdings as the third quarter reporting season begins. With a general deceleration in corporate profits, healthy increases in earnings should be recognized by the market through stock price appreciation.

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

There were no personnel issues to report for the third quarter of 1996.

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

Zevenbergen capital has implemented the zero percent (0%) cash level directive in our custom benchmark calculations. The change became effective as of October 1, per SBI's request.

Staff Comments

Staff met with Zevenbergen at the SBI offices on October 15, 1996. Staff believes there are no concerns at this time.

Manager Commentary
BEA Associates

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$31.3 Billion	Actual	2.2%	6.0%
Total Firm Assets Managed in this Discipline	\$ 4.1 Billion	Benchmark	1.8%	4.9%

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

Gross outperformance for the third quarter was 50 basis points. Security selection was the dominant source of incremental return as our success in identifying improving credits added value. Positions in airline bonds (Delta, American), banks (First Nationwide, Citicorp), and select below investment grade issues (Chelsea Realty (Ba1/BB), MFS Communication (B1/B), Long Island Lighting (Ba1/BB) all added value. The decision to overweight mortgages by approximately 5% also enhanced returns. Emerging market debt continued to improve during the quarter and added approximately 10 basis points. Derivative-related strategies had no impact during the quarter.

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

We continue to sell into the strength seen in the non-government sectors of the market. All spread product has rallied this year with corporate and emerging market debt leading the way. This rally, combined with our perception of a broadening sense of complacency regarding credit risk, causes us to exercise caution. Our high grade corporate weighting is index-like, mortgage backs are modestly overweighted, and the below investment grade allocation is very conservatively structured.

BEA Associates (con't)

3. **Organizational Issues.** *Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

None.

4. **Other Comments.** *Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None.

Staff Comments

No comments at this time.

Manager Commentary
IDS Advisory (IDS Fixed-Income Advisors)

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$30.3 Billion	Actual	2.1%	4.0%
Total Firm Assets Managed in this Discipline	\$4.2 Billion	Benchmark	1.8%	5.3%

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

In the quarter ended September 30, 1996, the total return on your portfolio of +2.1% compared with a +1.8% return on the Lehman Brothers Aggregate Bond Index. For the twelve months ended September 30, 1996, your account returned +4.0% as compared to the +5.3% return of the benchmark (the IDS benchmark has been the Lehman Aggregate since January, 1996, prior to then IDS was compared to the Lehman Governmental Corporate Index). High yield securities added value in the third quarter. The total return on high yield securities was +3.90% in the quarter and contributed a positive return on the total portfolio of +0.48%.

The underperformance over the past twelve months is the result of duration levels which were higher than the benchmark during a period of rising interest rates. In late May and early June portfolio duration was lowered to a level closer to that of the benchmark and has reduced portfolio volatility.

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

High yield securities are being maintained close to the 10% permitted in investment guidelines because we believe that the stable economy we are expecting over the next twelve months will cause little change in credit risk. Also, mortgage pass-through holdings were increased from 5% to 11% of assets under management. This change is largely the result of narrow corporate spreads causing mortgage pass-throughs to represent better values.

IDS (con't)

3. **Organizational Issues.** Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.

The following promotions took place over the last quarter:

William P. Miller, Senior Vice President and Senior Portfolio Manager, large Cap Growth Domestic Equities was promoted to President and Senior Portfolio Manager, IDS Equity Advisors.

Michael D. Wolf, Senior Vice President and Senior Portfolio Manager was promoted to Executive Vice President and Senior Portfolio Manager, large Cap Growth Domestic Equities.

Marion Schultheis, Vice President and Senior Portfolio manager was promoted to Senior Vice President and Senior Portfolio Manager, Large Cap Growth Domestic Equities.

There have been no significant personnel departures during the last quarter.

Product	Gains		Losses	
	# of Accounts	Assets (SMM)	# of Accounts	Assets (SMM)
Large Cap Equities	2	23.2	0	0
Fixed Income	0	0.0	0	0
Balanced	1	8.5	0	0
International	1	11.0	0	0
Regional - Pacific/Far East	0	0.0	0	0
Global Ex-Australia	0	0.0	0	0
Latin America	0	0.0	0	0
Small Cap Equities	0	0.0	0	0
Mid Cap Equities	0	0.0	0	0
Research Core	0	0.0	0	0
Research Aggressive	10	185.7	0	0
Global Bonds	1	0.0*	0	0
Structured Fixed Income	0	0.0	0	0

* Assets transferred from an existing portfolio invested in another product, no new assets.

4. **Other Comments.** Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.

None at this time.

Staff Comments

Staff has no comments at this time.

Manager Commentary
Investment Advisers, Inc.
(Fixed Income)

Period Ending:	9/30/96	Returns	Qtr.	1 Yr.
Total Firm Assets Under Management	\$15.9 Billion	Actual	1.7%	4.4%
Total Firm Assets Managed in this Discipline	\$ 4.5 Billion	Benchmark	1.8%	4.9%

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

The portfolio performed in line with its benchmark during the third quarter of 1996. Market yields traded in a range during the quarter, ending at virtually the same level where they began the quarter. The yield curve was virtually unchanged as well. Spread product (i.e., corporates and MBS) outperformed comparable duration U.S. Treasuries.

During the third quarter, we increased our holdings of mortgage-backed securities (MBS). We reduced our exposure to U.S. Treasuries and maintained our weightings in ABS and corporates. We upgraded the quality of the corporate bond holdings by reducing positions in Baa-rated securities.

The portfolio has slightly lagged the benchmark for the trailing 12-month period due to an overweighting in intermediate-maturity issues and due to a more convex, barbell coupon MBS structure.

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

Relative to the benchmark, the portfolio's duration is close to the duration of the benchmark (1/2 year longer). Structurally, the portfolio has a modest bias for a flattening yield curve. Issue selection continues to be critical along the U.S. Treasury yield curve. With regard to sector weightings, the portfolio is overweighted in ABS, underweighted in Treasuries and agencies, and neutrally weighted in MBS and corporates. The portfolio has a seasoned coupon-barbell bias in its MBS positions.

Our rationale for making these active bets is based on several factors. First, we are positioned late in the second phase of the credit cycle. Second, cyclical inflation pressures are likely to re-emerge by mid-1997. Third, corporate profitability remains solid, and there is no recession imminent. Fourth, the Fed is in a reactive, "wait-and-see," policy mode.

IAI (con't)

3. **Organizational Issues.** *Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

There were no changes in organizational structure during the third quarter of 1996.

During the third quarter of 1996, Mark Simenstad, Vice President and a member of IAI's Fixed Income Team, announced his resignation. IAI's fixed income management has always emphasized a team approach, which has many benefits for our clients. Over the past year, we have expanded the fixed income group with the addition of two Research Analysts. We anticipate making future additions to staff as part of our ongoing business strategy. Our fixed income group remains well positioned to successfully meet the multiple fixed income needs of our current and prospective clients.

IAI lost one public account in this discipline in the third quarter of 1996.

4. **Other Comments.** *Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

No additional comments.

Staff Comments

Staff has no comments at this time.

Manager Commentary
Miller, Anderson & Sherrerd

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$37.4 Billion	Actual	2.9%	6.7%
Total Firm Assets Managed in this Discipline	\$23.3 Billion	Benchmark	1.8%	4.9%

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

Over the last quarter, your portfolio provided a return of 2.9% versus a benchmark return of 1.8%. Over the last twelve months, your portfolio provided a return of 6.7% versus 4.9% for the benchmark.

During the quarter, interest rates were essentially unchanged although the Treasury yield curve experienced a slight steepening. We began the quarter with a duration or interest rate sensitivity about three quarters of a year greater than your benchmark and with a modest barbell built into the portfolio. Our strategy was to overweight corporates, mortgages and foreign and to minimize the holdings of Treasury securities within your portfolio.

During the quarter, all of our active sector decisions contributed to superior relative performance. Foreign rates fell relative to U.S. rates, resulting in positive contributions from these securities. Corporate and mortgage spreads also narrowed, which translated into positive relative results.

Over the last year, duration, corporate and foreign securities have added meaningfully to investment results. Mortgages have been neutral to slightly positive over this period. Yield spreads, particularly for medium and lower quality corporate securities, have narrowed significantly relative to comparable duration Treasuries. Your exposure to these securities has had a positive influence on your portfolio.

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

We find the fixed income market place attractive. The level of real interest rates and the steepness of the yield curve are our two primary indicators of value, and these indicators suggest that a neutral to modestly above average exposure to the market is warranted. We began the fourth quarter with a duration of about 5.5 years, about half a year greater than your benchmark. Yields and expected returns on foreign fixed income securities continue to fall relative to the U.S. market. We have cut foreign holdings to 4.6% of the portfolio and expect to hold these positions for the next several months. Corporate securities have become fully valued and we anticipate cutting the portfolio's exposure. Corporates now make up 18.3% of the portfolio, which represents a modest underweighting. Mortgage securities remain attractive on an option-adjusted yield basis and at 54.5% represent our most significant overweighting. Approximately half of your mortgage holdings are in current coupon securities which are fairly valued and represent a tactical holding within the portfolio.

Miller, Anderson & Sherrerd (con't)

3. *Organizational Issues.* Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.

During the quarter, we gained seven investment professionals and lost one.

During the third quarter, we gained four accounts and lost one.

4. *Other Comments.* Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.

None.

Staff Comments

Staff has no comments at this time.

**Manager Commentary
Standish, Ayer & Wood**

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$29.3 Billion	Actual	2.5%	6.2%
Total Firm Assets Managed in this Discipline	\$13.0 Billion	Benchmark	1.8%	4.9%

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

Third Quarter and Year Attribution (Rel. to Lehman Aggregate)

	3RD QUARTER	LAST 12 MONTHS
Duration	0.05	-0.24
Yield Curve	0.05	0.09
Domestic Sectors	0.51	1.47
Non-Dollar	0.27	0.47
Fees	-0.04	-0.17

- Corporates strong; Below investment grade outstanding.
- Overweighting in mortgages positive in 96.
- Non dollar continues very strong. (J.P. Morgan non-U.S. (Hedged) over Lehman Aggregate by 7.41% YTD.)

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

<u>Sector</u>	<u>Weighting Strategy</u>	<u>Rationale</u>
Mortgages	Overweight	Spreads have tightened, have reduced strong overweight.
Corporates	Reduced overweight	High grade industrial spreads very narrow. Reducing some more cyclical credits. Limiting duration in corporates.
International	Average weighting	U.S. has been worst performing market. European convergence trade still very strong as investors embrace EMU.
Treasuries	Underweight	Sector offers no special value, but becomes a holding area when moving away from some very tight spread sectors

Standish (con't)

3. **Organizational Issues.** *Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

Personnel additions:	W. Robert Hagmeier	- Sales Marketing
	Remi Browne	- International Equity, CIO
	Sean Fitzgibbon	- Large Cap Equity Analyst

Departures:	Brit Hutchins	- Small Cap Analyst
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Accounts:	Gained	- None
	Lost	- None

4. **Other Comments.** *Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None

Staff Comments

No comments at this time.

**Manager Commentary
Western Asset Management**

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$22.7 Billion	Actual	2.5%	5.8%
Total Firm Assets Managed in this Discipline	\$1.0 Billion	Benchmark	1.8%	4.9%

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

The portfolio recorded strong performance gains in the third quarter, as most major strategies were rewarded. The portfolio's bullet exposure to maturities benefited from a modest steepening of the yield curve. Overweight exposure to both the corporate and mortgage sector also contributed to performance as spreads narrowed. Selected corporate issues turned in above-average performance as well. The biggest contribution to performance came from the portfolio's exposure to emerging market debt securities, as these registered dramatic performance gains, both nominally and relative to benchmark. The portfolio's overweight duration exposure had little impact on performance, since interest rates were largely unchanged.

Performance over the past year remains ahead of the benchmark. The portfolio's long duration posture over most of this period has been a drag on performance, since interest rates have, on balance, risen over the course of the past twelve months. The success of other major strategies has more than offset the negative impact of rising rates. Yield curve positioning has contributed to overall results, since the portfolio has held a barbell exposure for most of the past year and the yield curve has flattened; more recently, the portfolio's shift to a bulleted yield curve exposure also helped, since the curve steepened. Mortgage underweighting in the latter part of last year was a positive as mortgages trailed other sectors, and moving to an overweight position early this year was rewarded by strong relative performance in the mortgage sector. Corporate overexposure throughout the past year added importantly to returns, particularly the emphasis on the lower end of the investment quality scale, as these issues turned in very strong performances. Emerging market debt exposure has also contributed handsomely to returns.

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

Although interest rates have fallen significantly from their highs of the summer as signs of an economic slowdown have become more evident, they still remain high relative to inflation fundamentals, and they are still much higher than the levels that were necessary to provide stimulus to the economy in previous slowdowns. Meanwhile, market readings of inflationary pressures are remarkably subdued: gold is stable, the dollar is firmer, and commodity prices are mixed to lower. Moreover, growth in the money supply has slowed to a glacial pace, suggesting that the current economic slowdown could be with us for some months to come.

Western Asset (con't)

Consequently, we continue to believe that subdued economic growth and low inflation fundamentals will allow interest rates to decline further. The decline is likely to be led by short and intermediate-term rates, as expectations of Fed tightening gradually give way to speculation that the Fed's next move is apt to be an ease. In the process, the bond market is likely to experience less volatility, as concerns over "too much" growth are assuaged, and positive inflation fundamentals are reinforced.

Despite our bullish outlook for interest rates, the mortgage sector still looks moderately attractive. Relatively wide spreads, a steeper curve, declining volatility, and our emphasis on discount coupons and commercial mortgages should help offset any rise in prepayment risk. The corporate sector, however, has lost much of its luster, as spreads have narrowed to historically low levels. We still find value in longer-dated issues, as well as in the lower range of credit quality. But with little upside potential, and our outlook calling for weaker-than-expected growth, we have scaled back our corporate exposure to broadly neutral levels. We continue to hold a modest and diversified position in emerging market debt, in the belief that improving economic fundamentals should support a further narrowing of spreads.

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

Personnel Additions:

Joseph C. Carieri, Client Service Executive

Accounts Gained:

Three

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None.

Staff Comments

Staff has no comments at this time.

Manager Commentary
BlackRock Financial Management

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$41.9 Billion	Actual	2.0%	N/A
Total Firm Assets Managed in this Discipline	\$ 1.9 Billion	Benchmark	1.8%	N/A

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

During the third quarter, the MSBI Enhanced Index Core Bond Portfolio posted a return of 2.0%, versus 1.8% for the Lehman Aggregate Index. Since its April 1 inception, the Portfolio has returned 2.43% versus 2.42% for the Lehman Aggregate Index. Following is a month-by-month breakdown of performance:

	MSBI	LEHM	DIFFERENCE
April	-0.45%	-0.56%	0.11%
May	-0.23%	-0.20%	-0.03%
June	1.24%	1.34%	-0.10%
July	0.37%	0.27%	0.10%
August	-0.17%	-0.17%	0.00%
September	1.75%	1.74%	0.01%

During the third quarter, we began to reduce our heavy allocation to mortgages. This trade had performed well over the past six months; however, our forecast calls for an increase in interest rate volatility, which would be detrimental to mortgage valuations. Within the mortgage sector, however, we have been buyers of more seasoned product, whose relative prepayment stability makes them less sensitive to increasing volatility.

With July's outperformance and the neutral performance during August and September, the Portfolio finished the quarter 10 basis points ahead of the index. While the gains we took in the mortgage sector benefited the Portfolio, our move to a neutral weighting may have initially impacted performance. Independent of our overall weighting biases, our security selection in both the mortgage and the corporate sectors added value to the Portfolio.

BlackRock Financial Management (con't)

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

Currently, our primary strategies are as follows:

- Maintain a neutral to slightly long relative duration to the benchmark as the long term outlook for economic growth and inflation appears positive to the bond market.
- Maintain a slight flattening yield curve bias in the portfolio by favoring intermediate maturity issues relative to shorter maturity issues, as any negative economic news or market volatility is expected to affect the shorter end of the curve more significantly.
- Maintain a significant overweighting in asset-backed as a corporate alternative, focusing on auto loans, manufactured housing and home equity loan issues while avoiding credit card issues.
- Maintain a neutral to slightly underweight bias towards corporate bonds and focus on non-cyclical, higher-yielding credits. We will look to avoid those credits that offer little in yield and that are non-differentiated in credit.

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

No accounts managed under an Enhanced Index mandate have been gained or lost during the 3rd quarter of 1996.

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None.

Staff Comments

Staff has no comments at this time.

Manager Commentary
Goldman Sachs Asset Management

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$66.2 Billion	Actual	2.0%	5.4%
Total Firm Assets Managed in this Discipline	\$16.2 Billion	Benchmark	1.8%	4.9%

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

In the third quarter, the portfolio outperformed the Lehman Aggregate by 16 bps. This outperformance is due primarily to the corporate, mortgage and emerging market sectors. For the past 12 months, the mortgage sector added about 15 bps to incremental return primarily due to superior security selection. In the third quarter, the mortgage sector added about 6 bps to incremental return, primarily due to spread tightening of the portfolio's CMO securities.

For the past 12 months, term structure detracted about 5 bps from incremental return due to the barbelled portfolio structure during the second half of 1995, and the portfolio's Treasury securities added approximately 4 bps to incremental return due to security selection. Agencies added about 3 bps primarily due to security selection. In the third quarter, the portfolio's term structure detracted approximately 1 bp from incremental return.

For the past 12 months, the corporate sector added about 23 bps to incremental return primarily due to the outperformance of the portfolio's industrial and financial holdings. In the third quarter, the corporate sector added about 9 bps to incremental return, primarily due to spread tightening of the portfolio's industrial and financial securities and sector OAS advantage of the portfolio's industrial and financial securities.

For the past 12 months, the emerging market sector added about 14 bps to incremental return due to their spread over Treasuries combined with continued tightening in EMD spreads. The EMD contribution to incremental performance during 3Q96 was approximately 4 bps on approximately a 5% allocation. Colombian, Chilean, and Mexican bonds were the leading contributions at approximately 8 bps.

3Q96			
Duration/Term Structure/Convexity	-1.3	Emerging markets	3.5
Treasury	2.1	Mortgage	5.8
Agency	0.1	Municipal	0.0
Asset-Backed	1.0	Index Price Mismatch	-1.2
Corporate	8.5	Residual	<u>-2.5</u>
		Total	16.0

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

The duration/term structure of the portfolio is targeted to that of the benchmark. In Agencies, the portfolio is slightly underweighted (-3%) vs. the benchmark in favor of other higher yielding spread sectors.

Goldman (con't)

35% allocation to the mortgage sector (5% overweighting). Neutral allocation to mortgage pass-throughs due to recent tightening. Maintain holdings in slightly seasoned (1992-95) discount and 1996 cusp coupon (7.5%-6.5%) pass-throughs. Underweight higher coupon mortgages due to unattractive spreads relative to cusp coupons. Invested in deep discount long duration CMOs. Hold well-structured, low-risk PAC CMOs. **29% allocation to the corporate sector** (12% overweighting). We are still a little cautious on the corporate sector heading into the fall months as spreads have narrowed over the past two months and are currently at extremely tight levels relative to Treasuries. However, these negative factors are tempered by continuing strong technicals and fundamentals in the market. We continue to overweight the industrial sector which benefits the most from the robust economy, strong export demand and corporate downsizing. **13% allocation to asset-backed sector** (12% overweighting). We are cautiously optimistic on the asset-backed security (ABS) market. Technicals in this market are quite strong. In addition, it appears increasingly likely that U.S. regulators will reduce the risk-weighting for banks on AAA-rated ABS within the next year.

5% allocation to the emerging market sector (5% overweighting). There are few fundamental reasons why the rally should end at the present spread levels. However, the ascent of the market has been so steep that some profit taking or an end-of-year effect could create technical decline in prices. Compared to similarly rated bonds in the domestic high-yield market, the short duration emerging market debt still appears relatively inexpensive. We continue to seek diversification within the EMD short-duration assets. One of the key sectors where investment grade assets have been created in the emerging debt sector is in securitization and we continue to look for this type of asset.

3. ***Organizational Issues.*** Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.

There were two significant personnel additions to the GSAM management team over the quarter. Robert A. Beckwitt joined the division as a Vice President and will serve as co-head of the Emerging markets Equity team. Phil Cooper joined the division as Vice President and will serve as head of Alternative Investments.

U.S. Fixed Income Accounts Gained:

U.S. Clients	4
Non-U.S. Clients	4

U.S. Fixed Income Accounts Lost*:

U.S. Clients	1
Non-U.S. Clients	1

*The reasons for the termination of these accounts were unrelated to portfolio performance.

4. ***Other Comments.*** Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.

None.

Staff Comments

No comments at this time.

Manager Commentary
Lincoln Capital Management Company
(Fixed Income)

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$41.8 Billion	Actual	1.9%	4.9%
Total Firm Assets Managed in this Discipline	\$14.5 Billion	Benchmark	1.8%	4.9%

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

	3rd Quarter 1996		12 Months Ended 9/30/96	
		Value		Value
	<u>Active Strategy</u>	<u>Added</u>	<u>Active Strategy</u>	<u>Added</u>
Mortgages	Overweighted	+0.01%	Overweighted	-0.02%
Corporates	Neutral	0.00	Neutral	-0.02
BBBs	Neutral	0.00	Neutral	0.00
Asset-Backeds	Overweighted	0.00	Overweighted	+0.02
Agencies	Neutral	0.00	Neutral	0.00
Miscellaneous				
Rebalancing Transaction Cost	N/A	-0.01%	N/A	-0.04%
Security Selection	N/A	+0.04	N/A	+0.21
Less Fees		<u>-0.01</u>		<u>-0.04</u>
Total		+0.03%		+0.11%

On a net-of-fee basis, your portfolio outperformed the Lehman Brothers Aggregate Index by 3 basis points for the third quarter 1996 and 11 basis points for the fiscal year ending September 30, 1996.

For the one-year period, the value added from security selection was partially offset by the mortgage overweighting. Year-to-date and for the third quarter, the mortgage overweight has added value of 3 b.p. and 1 b.p. respectively.

High quality, AAA-rated asset-backed securities are overweighted relative to comparable maturity Treasuries; they offer an attractive yield advantage with minimal event or issuer risk. Spread risk is also reduced through the use of short maturity issues. The balance of the corporate sector is market-weighted relative to the index.

Discount mortgage securities are overweighted in the portfolio, resulting in an active exposure of 0.13%. We continue to view this area as attractive for several reasons; on an OAS basis, we believe these securities are cheap, and given that their price is significantly below par, discount mortgages are much less vulnerable to prepayment risk than is the mortgage market as a whole.

Lincoln (con't)

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

Future Strategy	Strategy	Rationale
Resolution Funding Corporation	Overweighted vs Treasuries	1. Government Guarantee 2. Attractive Yield 3. Certain Cash Flow
Asset-Backed	Overweighted vs Treasuries	1. High Quality 2. Attractive Yield 3. Low Event Risk 4. Low Prepayment Risk
Discount Mortgages	Overweighted vs Treasuries	1. Agency Quality 2. Low Prepayment Risk 3. Wide Nominal Spreads

3. **Organizational Issues.** *Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

N/A.

4. **Other Comments.** *Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

There are no issues or developments that would impact the SBI account.

Staff Comments

Staff has no comments at this time.

Manager Commentary
Baring Investment Services

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$12.1 Billion	Actual	-0.6%	11.7%
Total Firm Assets Managed in this Discipline	\$ 2.6 Billion	Benchmark	-0.1%	8.7%

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

The following figures show a breakdown of the returns for the last quarter:

	Total Return	Currency	Market Weighting	Tracking Error
	%	%	%	%
Minnesota State Board	-0.6	0.2	-0.3	-0.1
MSCI EAFE Index	-0.1	-0.4	0.3	—
Relative Return	-0.5	0.6	-0.6	-0.1

Currency (Relative return 0.6%): Your portfolio's hedge out of the yen into the US dollar was the major constituent of return. In addition, exposure to the US dollar through the Hong Kong dollar added marginally. Underweighting sterling detracted slightly from the outperformance in this area as did underweighting the French franc.

Market Weighting (Relative return -0.6%): Four markets accounted for the underperformance in this area. Exposure to non-index South Korea and Thailand along with an underweighting in the UK and the overweighting of Japan more than offset the positive contribution from overweighting Hong Kong and Sweden, both strong markets in local currency terms.

Tracking Error (Relative return -0.1%): A positive effect from France was offset by Japan and Hong Kong.

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

The main features of your portfolio, which changed little during the quarter, are:

- A continued overweighting of Japan and underweighting of the yen.
- A reduction in the overweighting of Hong Kong.
- Initiated a position in Singapore.

Our optimism for the Japanese stock market continues to be based upon a continuation of an easy monetary policy, further weakness of the yen and a mild economic recovery which will lead to a strong rebound in corporate profits. The market has stalled at the 21,000 level but we believe will make further progress in the second half of the fiscal year as profits show an improving trend.

Baring (con't)

In September we moved back into Singapore. The market has performed poorly so far this year, largely as a result of the slowing electronics cycle's impact on overall activity and the contraction of foreign premiums. We believe the concerns are overdone and the market is now selling at an attractive valuation. The addition of Singapore to the portfolio was funded by a small reduction in the overweighting of Hong Kong.

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

During the third quarter, we gained \$84.3 million in new money from our existing active/passive clients. There were no new accounts lost during the quarter.

4. *Other Comments.*

None.

Staff Comments

Performance attribution relative to EAFE for the quarter is shown below:

Jun. - Sep. 1996

Local Returns		Currency Returns	
Country selection	-0.7	Currency effect	-0.2
Stock selection	-0.1	Hedging activity	0.9
Timing	-0.1	Timing	-0.1
Total Value Added to EAFE	-0.4		

Source: State Street Analytics

Staff met with Philip Bullen and other staff members at Barings' Boston office on September 20, 1996. The strategy discussion reflected the manager's comments shown above.

From a business standpoint, Barings Asset Management believes they have successfully weathered the trauma of the Barings Bank bankruptcy; staff turnover has subsided and the firm has received modest additional contributions from existing clients as noted in #3, above.

Barings is expanding their active country/passive stock produce line by offering both more index-like and more aggressive strategies in addition to the product utilized by the SBI. While staff is not prepared to make a recommendation at this time, the new product array merits consideration by the SBI in the future. More information should be available over the next year as the new products are brought on-line.

Manager Commentary
Brinson Partners, Inc.

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$57.9 Billion	Actual	0.5%	14.4%
Total Firm Assets Managed in this Discipline	\$15.0 Billion	Benchmark	-0.1%	8.7%

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

Market allocation was positive in the third quarter and negative for the full year. The portfolio was helped in the quarter by overweights of the Netherlands, Belgium and the U.K. and by underweights in Japan and Singapore. Detracting from quarterly performance were the underweights of Hong Kong and Sweden. Strategic cash had a neutral impact on performance. For the full year, the fund was helped by overweights of the Netherlands, Belgium, Spain and Finland, along with underweights of Singapore, Malaysia and Sweden. The primary detractors for the year were holding strategic cash, overweighting Australia and New Zealand and underweighting Japan, Switzerland and Hong Kong.

Currency strategies once again added significant value, both during the quarter and for the full year, where it played a dominant role in the portfolio's outperformance. The portfolio gained in both periods from the strategy of being overweight the U.S. dollar, while underweight the yen and core DM-bloc currencies. The yen weakened a further 2.73% in the third quarter and has lost almost 16% over the past twelve months. Other important positives for the quarter and the year have been the overweights of various dollar-bloc currencies, Australia, New Zealand, Canada and several peripheral currencies (lira, peseta).

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

The strategic cash allocation of 5% remains unchanged. This is based on our view that most non-U.S. equity markets are overvalued. Japan continues to be the largest underweight, at 6.5% below the benchmark. This market appears overvalued, and we continue to be concerned about the strength of the economic recovery, the low level of corporate profitability, the glacial pace of much-needed regulatory reforms and the massive unresolved problems of the banking sector. We reduced Malaysia to neutral and took profits in the Netherlands, which remains an overweight; proceeds were added to Finland and to a new, underweight, position in Hong Kong. Both Malaysia and the Netherlands have performed well. Bottom-up analysis in Finland suggests good value in several Finnish stocks. The holding in Hong Kong does not reflect a positive view towards this market, but rather the significant uncertainty that surrounds it; the scale of the current underweight had become too large. Current overweights are in the Netherlands, France, Belgium, Spain, New Zealand and Australia; underweights are held in Japan, Malaysia, Hong Kong and Switzerland.

Brinson (con't)

Several currency changes were made. In early August, underweights in several of the DM-bloc and peripheral European currencies were moved closer to neutral. At the same time, the U.S. dollar was reduced by 6% and the yen increased by 8%. These changes reflect the significant price moves experienced by these currencies; as a consequence, the scale of mispricing has been reduced. In mid-September the Swiss franc was eliminated, reflecting that currency's relative strength. The portfolio continues to maintain an important yen underweight and a limited exposure to the DM-bloc currencies. Despite the recent weakness of the yen, because of the very low short-term cash rates in Japan, there is still an advantage holding U.S. cash versus yen cash. We continue to believe, however, that the U.S. dollar offers the most attractive return potential, while the yen and DM-bloc currencies, the portfolio's major underweights, remain least attractive.

3. **Organizational Issues.** *Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

There have been no significant organizational changes in the past year. Two new accounts funded \$140 million. None lost.

4. **Other Comments.** *Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None this quarter.

Staff Comments

Performance attribution relative to EAFE for the quarter is shown below:

Jun. - Sep. 1996

Local Returns		Currency Returns	
Country selection	0.5	Currency effect	-0.2
Stock selection	-0.1	Hedging activity	0.1
Timing	0.1	Timing	0.2
Total Value Added to EAFE	0.7		

Source: State Street Analytics

Manager Commentary
Marathon Asset Management

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$5.6 Billion	Actual	-1.4%	10.8%
Total Firm Assets Managed in this Discipline	\$3.7 Billion	Benchmark	-0.1%	8.7%

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

The portfolio declined 1.4% in the third quarter of 1996 versus a 0.1% fall in the MSCI EAFE Index. Stock and country returns were broadly neutral in both Continental Europe and Asia, but U.K. and Japanese returns (which accounted for 88bp of underperformance between them) both suffered from the relative underperformance of mid capitalization issues. The fund's exposure to Japan was reduced from 41.8% to 34.6% over the quarter, with a corresponding increase in Europe (especially the hard currency centre) from 41.1% to 49.0%.

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

Marathon's European returns over the last two years have been driven by the performance of mid cap, economic sensitives in the U.K. with Continental European exposure heavily underweighted and focused on the growth oriented periphery. Signs are, however, emerging that the hard currency core (notably Germany) is beginning to move towards a more accommodative monetary stance, suggesting that the heyday of the Deutschmark and French Franc may now be over. Against this background we have begun to re-orientate exposure in Europe toward the centre whilst keeping the sectoral bias (towards materials and capital equipment and away from financial and utility interest rate sensitives) broadly unchanged.

Whilst Japan's third quarter performance can be at least partly explained in terms of a necessary consolidation given its 40% bounce from 1995's low, the poor performance of other Asian markets (with the notable exception of Hong Kong) in the quarter has underlined the vulnerability of earnings forecasts and valuation models to slowing growth, banking system concerns and worries over equity supply-demand balance. Over-investment in the region, spurred in particular by high price to book valuations and bullish long term demand forecasts, has left many sectors vulnerable to cyclical slowdowns (particularly in the export markets, where the size and volatility of Chinese demand can swamp other factors). Further disappointment may start to erode the enthusiasm of the international investors for the region in which case markets will have to search for equity valuations that compete with domestic bonds rather than U.S. Treasuries, suggesting that consolidation may last longer than is currently expected.

Marathon (con't)

3. **Organizational Issues.** Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.

Personnel: No changes.

Accounts Gained: 2

Accounts Lost: None

4. **Other Comments.** Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.

None.

Staff Comments

Performance attribution for the quarter relative to EAFE is shown below:

Jun. - Sep. 1996

Local Returns		Currency Returns	
Country selection	0.3	Currency effect	-0.3
Stock selection	-1.2	Hedging activity	0.0
Timing	0.0	Timing	0.1
Total Value Added to EAFE	-1.2		

Source: State Street Analytics

Manager Commentary
Rowe Price-Fleming International

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$27.3 Billion	Actual	0.6%	13.3%
Total Firm Assets Managed in this Discipline	\$20.8 Billion	Benchmark	-0.1%	8.7%

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

Country allocation was a small positive contributor to relative return over the quarter. Value at the country level was primarily added in Japan where your portfolio's substantial underweighting once again proved beneficial. In contrast, value was subtracted in Europe where underweightings in the UK and Germany were unhelpful. Value was also subtracted in the Pacific ex-Japan where overweightings in the Korean and Thai stock markets more than counterbalanced the positive impact of your portfolio's overweighting in Hong Kong. Weightings in Latin America were broadly neutral factors over this period.

Our Stock selection relative to the Index as a neutral factor over the quarter. Most value was added in the Pacific - with reasonable performance in places like Japan, Malaysia and Korea. In Europe, favoured growth stocks corrected after strong outperformance earlier in the year. The inclusion of medium - and smaller-sized companies in your portfolio subtracted value over the quarter with smaller stocks in Japan and the UK particularly disappointing.

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

Current position and outlook

In the third quarter, markets generally consolidated the advances achieved over the first half of the year. At present, the economic outlook world-wide remains good, with recovery now being seen not only in Japan but also in Continental Europe. Corporate profits growth is reasonable and seems likely to surprise positively in a number of equity markets. Bond markets have rallied in recent months providing underpinning to valuations which, while not cheap, are generally acceptable. Japan, which at the broader market level still looks expensive, is the key exception here. Selectively, investment opportunities remain attractive in both Europe and Japan while we remain hopeful that the smaller markets of Asia and Latin America can rise over the remainder of the year.

Rowe Price (con't)

3. **Organizational Issues.** Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.

There have been no changes in the ownership of RPF1.

No accounts were gained or lost during the third quarter of 1996 in the fully international equity discipline.

4. **Other Comments.** Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.

None.

Staff Comments

Performance attribution relative to EAFE for the quarter is shown below:

Jun. - Sep. 1996

Local Returns		Currency Returns	
Country selection	0.6	Currency effect	-0.1
Stock selection	0.2	Hedging activity	0.0
Timing	0.0	Timing	0.2
Total Value Added to EAFE	0.9		

Source: State Street Analytics

Manager Commentary
Scudder, Stevens and Clark

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$108.0 Billion*	Actual	0.8%	15.0%
Total Firm Assets Managed in this Discipline	\$ 10.5 Billion	Benchmark	-0.1%	8.7%

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

During the third quarter of 1996, the Minnesota State Board of Investment portfolio gained 0.8% compared to a -0.1% loss by the EAFE index. World markets began the quarter skittishly, but finished on a bullish stance. European exchanges generally performed better than those of Asia, particularly Japan. Currencies, were tame during the period. Year-to-date, your portfolio is up 11.8%, outpacing EAFE's 4.4% gain.

Your portfolio outperformed the EAFE benchmark during the quarter primarily because of its underexposure to Japan. Tokyo was the weakest major bourse, and the yen was the weakest major currency. Your performance is also attributable to some solid stock picking in several European markets, most notably Germany, Sweden, and the UK. There were no currency hedges in place over the quarter.

The fundamental backdrop has not change over the last few quarters. Major world economies continue to follow different paths. While Japan and Europe waver between modest growth and stagnation, US expansion has continued unabated. Low inflation and relatively easy money continue to provide a very favorable tailwind for global financial assets. The risk to the market may come from a correction in US capital flows, a concerted pick-up in Japanese or European activity, or renewed currency turmoil.

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

The basic investment strategy for your portfolio remains unchanged. Adjustments made during the course of the quarter were stock specific, not major strategic shifts. We took additional profits in a number of more highly valued situations, primarily in Europe, and exited some positions where the investment thesis is no longer valid. The proceeds were reinvested into several less highly-rated, new European restructuring situations. Looking forward, no major portfolio shifts are currently contemplated. With limited visibility into the economic prospect for Japan or the major economies of Europe, we are focusing on company and industry fundamentals and not near-term cyclical trends. In the Japanese portion of your portfolio, some rebalancing of positions is in progress to lessen exposure to domestic cyclicalities. In Europe, our main focus remains on global companies and restructuring candidates.

3. ***Organizational Issues.** Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

Personal Gained, third quarter:

Name	Title	Responsibility
Robert L. Horton	Vice President	Global Equity Research Analyst

Scudder (con't)

Personnel Lost, third quarter:

Name	Title	Responsibility	Reason
Alison Lifland	Principal	Global Industry Analyst	Pursue other opportunities

International Accounts over \$25 million Gained/Lost (in discipline) - third quarter

Gained: 1 account, \$40 million Lost: None.

4. *Other Comments.* Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.

None.

* Data is for 2nd quarter 1996.

Staff Comments

Performance attribution relative to EAFE for the quarter is shown below:

Jun. - Sep. 1996

Local Returns		Currency Returns	
Country selection	0.7	Currency effect	-0.2
Stock selection	0.5	Hedging activity	0.0
Timing	-0.1	Timing	0.1

Total Value Added to EAFE 1.1

Source: State Street Analytics

Staff met with Scudder in their New York offices on September 19, 1996. The full day review covered all areas of the organization: investment process, strategy formulation trading, personnel and growth plans.

Scudder has modified their organizational structure since they were retained by the SBI. Nick Bratt remains Director of the Global Equity Group. Cornelia Small, formerly Director of Global Research, has moved to a new position with the title of Director Global Equity Investments. Irene Cheng remains head of the international group and is the SBI's portfolio manager. Irene and the other regional portfolio teams now report to Cornelia Small rather than to Nick Bratt. Ted Truscott has taken over as Director of Global Research and the analyst team has expanded by about 30% over the last three years.

While staff believes that these changes will have some impact on the firm's decision-making process, it is not possible to determine whether the effect will be positive or negative. Staff believes that the modifications are a reasonable and realistic response to an expanding client and asset base. Staff will monitor the situation closely over the coming quarters.

Manager Commentary
State Street Global Advisors

Period Ending:	9/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management	\$250.0 Billion	Actual	-0.2%	9.2%
Total Firm Assets Managed in this Discipline	\$ 60.0 Billion	Benchmark	-0.1%	8.7%

1. **Past Performance.** *Summarize your performance over the last quarter and year. Specifically, explain the reasons for the tracking error between the portfolio and the index.*

In the third quarter, the portfolio outperformed the benchmark by 0.08%. The outperformance is due to several factors: 1) the portfolio receiving a larger dividend yield than the 12 month average dividend yield which is included in the benchmark calculation, 2) small country misweights of less than 0.10%, and 3) cash and receivables held in the portfolio in July. For the last twelve months, the portfolio outperformed by 0.28% due to SBI's lower dividend withholding taxes than the tax rates used in the calculation of the MSCI EAFE Free Index.

2. **Organizational Issues.** *Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

Organization. State Street Global Advisors (SSgA) introduced a new corporate identity system this summer to help build awareness and understanding of its capabilities in investment markets around the world. The change was implemented in SSgA offices worldwide, and encompasses all internal and external communications materials, including stationery, newsletters, advertising and brochures.

The new design symbolizes the SSgA business strategy, which is to grow the worldwide operation and to integrate all services into a single global resource for investment management. In the logo, the "G" in the SSgA acronym has been replaced with a lower-case "g" surrounding a hand-drawn globe.

Gained and Lost Clients. We gained three accounts in the discipline with total assets of \$166 million. Two accounts were transferred to our country selection fund.

State Street (con't)

3. *Other comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

No changes have been made.

Staff Comments

The discussion of value added in #1 does not correspond to the returns shown in the heading. This is due to currency pricing differences between SSgA and the custodian.

Performance attribution relative to EAFE for the quarter is shown below:

Jun. - Sep. 1996

Local Returns		Currency Returns	
Country selection	0.0	Currency effect	-0.2
Stock selection	0.1	Hedging activity	0.0
Timing	0.0	Timing	0.0

Total Value Added to EAFE -0.1

Source: State Street Analytics

Staff met with SSgA staff on September 20, 1996 in their Boston offices to discuss organizational issues and performance. As a result of the meeting, SSgA has formally designated Eric Brandhorst as the back-up manager for the SBI account.

Staff also discussed SSgA's role as a transition manager for the Templeton portfolio which was transferred to the index fund when Templeton was terminated in September. The Templeton portfolio was re-positioned by SSgA during October 1996 and merged into the SBI's EAFE index fund at the end of that month. SSgA was able to cross approximately \$75 million of the \$210 million.

Manager Commentary
Genesis Asset Management Limited

Period Ending:	9/30/96	Returns	Qtr.	Since Inception
Total Firm Assets Under Management	\$4.5 Billion	Actual	-0.3	1.1%
Total Firm Assets Managed in this Discipline	\$3.8 Billion	Benchmark	-3.6	-3.5%

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

The third quarter of 1996 saw the MSCI Emerging Markets Free Index fall by 3.5%, with only 11 of its 26 components rising. The relatively strong areas were selected Latin American markets (Brazil, Columbia, Mexico, Peru and Venezuela) and the emerging economies of Southern and Eastern Europe. The Asian markets supplied the "black-spots" of the quarter, with the India, Korea and Thai markets being notable losers.

Against this market background \$50 million of additional funding was received. At the start of the second quarter, the portfolio size was \$100 million with investments spread across 25 countries and 55 stocks. By the end of the quarter this had broadened to 30 countries and 74 stocks. The performance of the portfolio was helped by additions of liquidity in a weak market and the remaining \$35 million of cash from the previous large tranche of funding.

In both the quarter and the period since inception the portfolio's relatively light exposure to the weakest Asian markets meant that it was able to avoid the worst losses in that region. Investments in two markets, namely Malaysia and the Philippines actually added value to the portfolio.

The largest country exposure was to Brazil (at almost 14% roughly in line with the MSCI EMF weighting) and the stock selection in this market also helped performance - the large initial weighting that was taken for MSBI in Telebras has fortunately proven successful.

Investments in Eastern and Southern Europe amounting to 10% of the portfolio's value, also helped performance - the MSCI EMF weighting in this area is approximately two thirds of this figure.

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

In terms of country exposure, the geographical spread of the portfolio is almost complete, which means that the remaining liquidity and the final tranches of funding will go towards adding to existing holdings and the establishment of new positions. The shape of the portfolio weightings which has already been established will continue to predominate; a substantially

Genesis (con't)

larger than index weighting in Latin America and emerging Europe and a substantial underweighting in Asia and South Africa. However, in coming months, we anticipate increasing exposure to those Asian markets where corporate values are beginning to reveal themselves - namely Korea and India.

- 3. Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

There were no personnel and ownership changes during the period. The two separate accounts announced in the last Quarterly Manager Commentary initiated their investment performance.

- 4. Other Comments.*

No other pertinent matters arose.

Staff Comments

Genesis' funding is now complete. They received \$100 million between May-June and \$100 million between August-November.

Manager Commentary
Montgomery Asset Management

Period Ending:	9/30/96	Returns	Qtr.	Since Inception
Total Firm Assets Under Management	\$7.2 Billion	Actual	-1.5%	0.1
Total Firm Assets Managed in this Discipline	\$2.2 Billion	Benchmark	-3.6%	-3.5

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

Our continued underweight position in South Africa of 6.2% as of 9/30/96 versus the MSEF Index weight of 11.2% has helped performance as the MSEF South Africa Index declined 6.0% in the third quarter. Also, our stock selection in South Africa was beneficial.

We also continued to make an active bet relative to the benchmark with an overweight to Brazil. This overweight helped performance through country allocation during the third quarter as the MSEF Brazil Index increased 2.8%. However, our stock selection in Brazil detracted from performance. Brazil continues to be the largest allocation in the Portfolio at 15.5% as of 9/30/96 versus the MSEF Index weight of 11.6%. Brazil has benefited from a reduction in interest rates and better than expected earnings results. The overweight in Brazil has been based on our outlook for positive GDP growth momentum, lower inflation and lower interest rates.

Our overweight position in Thailand of 8.3% versus the MSEF allocation of 6.7% hurt performance. The MSEF Thailand Index declined 12.9% during the quarter. Thailand is enduring a period, similar to the Philippines in 1990, where all the information is negative. Prime Minister Barnham dissolved the government, trade is slowing, sentiment is negative and there are concerns about short-term capital flows, which has resulted in credit rating cuts, thus forcing higher interest rates. We believe that this market has the potential for a positive correction and we are maintaining our overweight position.

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

We continue to overweight Brazil, however we have taken profits in several stocks within this market. As we have taken profits, we have been reallocating the proceeds to other markets that we also find attractive. We expect further reforms from the Cardoso team, which should lead Brazil into a period of strong non-inflationary growth. We remain positive on the long-term prospects for the economy and the market.

We remain underweight in Mexico due to concerns about the strength of the economy, political corruption and social unrest. After a recent research trip to the State of Guerrero, seat of the EPR insurrection, we became concerned that the rise in social unrest is indicative of a larger problem that is not being addressed by the PRI. Our Mexico portfolio is defensive emphasizing companies and industries less dependent on the Peso.

Montgomery (con't)

We have increased our allocation to Malaysia, although we are still underweight the benchmark. The economy is slowing, recent UMNO elections should ensure political stability, and the government is undertaking structural reforms which should lead to continued stable economic growth. However, we still remain concerned that foreigners will be the main drivers of this market, as many of the local investors are playing on the speculative "second board" in Malaysia.

Our China/Hong Kong allocation has also increased. Although Hong Kong is outside the benchmark, we are increasingly viewing Hong Kong as an integral part of China. With the general relaxation of credit in China, economic growth is returning. This, along with lower interest rates and excitement about the transition in 1997, has benefited our investments in Hong Kong.

3. **Organizational Issues.** *Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

During the third quarter, we added three individuals to the Emerging Markets team. Frank Chiang was hired to be the portfolio manager responsible for North Asia. Mr. Chiang has over ten years of investment management experience and came to us from TCW Asia Ltd., Hong Kong where he was responsible for TCW's Asian Equity strategy. With Mr. Chiang's addition to the team, Tom Haslett was promoted to Senior Portfolio Manager with an emphasis on global portfolio implementation. Jivko Moutafov was added to the team as an Associate Analyst for Emerging Europe and Africa. Prior to joining Montgomery Asset Management, Mr. Moutafov worked for Robertson Stephens Developing Countries Fund where he was responsible for country and company research in Eastern Europe and the Middle East. Mr. Bajpai was added as an Associate Analyst for South Asia and the Middle East. Mr. Bajpai was an Associate at Lehman Brothers prior to joining Montgomery.

The Philadelphia Municipal Employees Retirement System hired us to manage \$57.5 million in an emerging markets separate account.

4. **Other Comments.** *Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

As of September 30, 1996, the SBI account was successfully invested in 95.03% equities, with total assets being \$200,159,572. The Portfolio is well diversified in 25 countries, 40 industries and 144 companies.

Staff Comments

No comments at this time.

Manager Commentary
GE Investment Management, Inc.
Assigned Risk Plan - Stocks

Period Ending:	9/30/96	Returns	Qtr.	YTD
Total Firm Assets Under Management	\$56.0 Billion	Actual	2.5%	19.2%
Total Firm Assets Managed in this Discipline	\$10.9 Billion	Benchmark	3.1%	20.5%

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

We were helped during the quarter by our overweighting in Capital Goods, particularly by our holdings in Allied Signal and Hubbell. We also benefited from our significant underweighting in Utilities, as that group continued to suffer from competition arising from deregulation. Other stocks that helped in the quarter were Healthcare holdings, including FHP International and Smithkline Beecham, plus IBM, Kimberly Clark and Texaco. The sectors that hurt us were Consumer Stable and Financial. In the consumer area we continued to be negatively impacted by not owning very high PE stocks with steady earnings growth such as Coke and Gillette. Two stocks that we do own in this sector, Pepsi and Budweiser, disappointed in the quarter and were weak performers, but we believe the problems are temporary. In the Financial sector we have been hurt by emphasizing insurance companies rather than banks. Certain stocks such as Travelers, continue to outperform, but others, such as American Express, TIG Holdings and Loews, while doing well fundamentally, have lagged the group.

Over the past twelve months our performance versus the S&P 500 was likewise helped by our overweighting in Capital Goods and our underweighting in Utilities. Our performance continued to be hurt by an underweighting in the Consumer Stable sector, particularly in beverages, as well as the Technology sector. In both cases, we believe valuations of some of the leadership stocks are excessive.

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

We added to our underweighted consumer positions during the quarter by increasing holdings in Budweiser, Bristol Myers, Sears and Disney. We repositioned some Financial stocks by purchasing Bank of Boston, Chase Manhattan and Provident, all companies that should benefit from recent merger activity, while exiting Bay Banks and reducing St. Paul. We reduced some cyclical positions such as AMR, Ford and General Motors, and adjusted some Utility holdings, exiting poorly positioned companies such as Unicom and Public Service of New Mexico and adding to companies that should do better in a competitive environment, such as American Electric Power and GTE.

GE Investment Management (con't)

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

Accounts Lost: Commonwealth Edison

Assets Increased: Air Canada

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

Up until this point, we have not been allowed to own GE stock in client accounts. This has had a negative impact of 9 basis points for the third quarter and 60 basis points for the last twelve months. In late October, we will be adding the S&P 500 Index weighting of GE (about 3%) to your fund which should improve tracking to the index.

Staff Comments

No comments at this time.

Voyageur (con't)

Fed tightening at some point, especially if wage pressures continue to mount). In addition, there has been significant buying of U.S. Treasuries by foreign central banks, lending tremendous support to the bond markets. We expect all of these factors to continue, which should be constructive for rates going forward. On a one-year horizon, Voyageur is currently estimating yields to be slightly lower than current levels.

In our view, for the balance of 1996, the economy, overall, should continue to grow at a modest pace with little in the way of significant, sustainable price pressures. In light of some apparent strength in certain sectors (the consumer, wage gains, potential inventory build-up), we believe the Fed will nudge interest rates higher, consistent with their mandate to contain inflation and support an economic growth pace in the 2.5% area. In this environment, we will remain fully invested, albeit with a somewhat cautious posture towards the market (i.e., we were at 97% of the benchmark at quarter end). Our emphasis will remain on spread product to add value, and we will manipulate duration in a more subtle fashion and only as a reflection of our interest rate views.

3. **Organizational Issues.** Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.

Personnel changes during the third quarter, 1996, are as follows:

Additions:

Doug Nelson, Fixed Income Credit Analyst (10/1/96)

Losses:

None.

Accounts Gained in this discipline:

Tax-Exempt Clients: Michigan Laborers' Health Care Fund
Plumbers Local Union #1, Additional Security Benefit Fund
(added fixed income assets to existing equity account to create new balanced portfolio).
Volunteers for Outdoor Colorado
Wyoming Government Investment Trust

Accounts Lost in this discipline:

Tax-Exempt Clients: Provo City, Utah, School District
(decided to return to state treasurer's investment pool).

4. **Other Comments.** Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.

Mark L. Simenstad, CFA, Senior Vice President, joined Voyageur in July, 1996, as head of taxable fixed income portfolio management. There were no other events occurring which would directly affect the management of the SBI account.

Staff Comments

No comments at this time.

Manager Commentary
Voyageur Asset Management
Assigned Risk Plan - Bonds

Period Ending:	9/30/96	Returns	Qtr.	1 Yr.
Total Firm Assets Under Management	\$ 7.6 Billion	Actual	2.0%	5.6%
Total Firm Assets Managed in this Discipline	\$ 3.3 Billion	Benchmark	1.8%	5.7%

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

The portfolio performed well in the third quarter with a total portfolio return of 1.99 versus the benchmark's 1.85 return. We increased our allocation to the corporate sector, using available cash and swapping out of Treasuries. We also fine tuned the portfolio during the quarter by selling securities which had become expensive relative to their peer group. For example, we sold an asset-backed security in the five-year area which had outperformed Treasuries and bought a slightly longer, new issue piece, picking up both yield and liquidity. We also swapped from several expensive corporate bonds into bonds offering better value and performance characteristics. In the Treasury sector, we transacted only in the short end, taking advantage of the steepness in this part of the yield curve (by extending just one year, we captured 15% of what the entire 3-month 30-year curve implies).

The duration of the portfolio at quarter end was 3.19 years, slightly longer than the benchmark's duration of 3.06 years (104%). Our emphasis, as always, is to add value to the portfolio through sector rotation and security selection, while duration is more a reflection of how we expect the market to perform. This positioning was consistent with our positive view towards interest rates as the quarter came to a close.

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

Because corporate and mortgage securities are at historically tight levels to Treasuries, we will not look to add significantly to these areas, but instead look for opportunities within each sector. At quarter end, corporates and asset-backed combined represented 51% of the portfolio versus the benchmark's weighting of 42%, mortgages were 29% of the portfolio versus a 25% weighting in the benchmark, and Governments were 19% versus the benchmark's weighting of 33%. We will remain overweighted in these "spread sectors" and closely monitor the performance of individual securities as interest rates and prices change. In particular, we will pay close attention to the CMO and asset-backed positions as they are subject to "par compression" as prices rise and interest rates fall (once over \$100, or *par*, prices rise at a slower rate relative to other securities). We will also focus on the Treasury positions, using any further curve steepening as an opportunity to pick up additional yield.

For the remainder of 1996, Voyageur remains mildly constructive on the market. Economic growth appears to be moderating, inflation is tame, and the Fed seems to be on hold for the remainder of the year (we don't, however, rule out the possibility of a

**Manager Commentary
Internal Stock Pool
Trust/Non-Retirement Assets**

Period Ending:	6/30/96	Returns	Qtr.	YTD
Total Firm Assets Under Management	\$73.3 Million	Actual	3.1%	20.4%
Total Firm Assets Managed in this Discipline	\$73.3 Million	Benchmark	3.1%	20.5%

- 1. Past Performance.** *Summarize your performance over the last quarter and year. Specifically, explain the reasons for the tracking error between the portfolio and the index.*

For the quarter, the index fund matched the benchmark. For the year, it had negative tracking error of 0.1%. The negative was due to residual cash and trading costs. Some cash levels will always be maintained in the account because the dollar value is too small to equitize with futures. (Currently one futures contract will equitize \$350,000.) In a strong stock market this will cause some negative tracking error. In addition, trading activity induced by cash flows, dividends or corporate actions will contribute to tracking error. Over time, this activity will generate a small negative bias due to transaction costs.

- 2. Future Strategy.** *Going forward, what strategies, if any, do you plan to implement to control tracking error within expectation.*

In August, staff implemented a \$5.3 million buy program to deploy the cash that was being equitized with futures contracts. However, by the end of September, cash reserves had grown to a point where another futures contract was purchased to reduce the portfolio tracking error.

Internal Stock Pool (con't)

3. **Organizational Issues.** *Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

No other comments.

4. **Other Comments.** *Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None

Staff Comments

No comments at this time.

**Manager Commentary
Internal Bond Portfolios**

Period Ending:	6/30/96	Returns	Qtr.	Year
Total Firm Assets Under Management		Actual	0.7%	5.3%
Assets Managed in this Discipline	\$0.6 billion	Benchmark	0.6%	5.0%

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

Performance, Fourth Quarter '95

The above returns reflect the combined portfolios of the Environmental Trust Fund, the Income Share Account, and the Permanent School Fund. Collectively, the funds outperformed the index returns.

- An underweighted Treasury position and overweighted mortgage position enhanced returns since mortgage securities performed well during the quarter.
- A slightly barbelled portfolio increased returns as the yield curve flattened during the quarter.
- A neutral to underweighted corporate position detracted slightly from performance since corporate securities performed better than treasuries but worse than mortgages.
- A slightly longer duration decreased performance as interest rates increased.

Performance for the Year

Collectively, the funds outperformed the index.

- A slightly longer duration than the benchmark increased performance as interest rates declined during the first six months. After the fourth quarter of 1995, the duration was shortened and maintained returns as interest rates rose.
- A barbelled structure decreased performance as the yield curve steepened.
- An underweighted Treasury position and overweighted mortgage position enhanced returns since mortgage securities performed well during the year.
- A neutral to underweighted Corporate position decreased returns since the corporate sector performed well.

Internal Bond Pool (con't)

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

Yield Curve Strategy

Real US interest rates are higher than they were at the beginning of the year. If you assume that inflation will be 3% next year, the real yield on the ten year Treasury was around 3.7 % on June 30. At this level, bonds are more attractive than at the beginning of the year. At these levels, the portfolio duration will be neutral to slightly longer than the market.

We will move to add more bonds in the middle part of the curve and reduce the barbelled position because we believe there is more value here than at the beginning of the year.

Corporate Strategy

Corporate spreads are still tight and we will remain neutral to underweighted in them. We will look to selectively add corporates to the portfolio throughout the quarter if spreads widen.

Mortgage Strategy

We will remain overweighted in mortgages. With the increase in rates, mortgages have become more positively convex and should perform well if interest rates move in either direction.

3. *Organizational Issues. Describe any significant ownership or personnel changes at the firm over the last quarter. List accounts gained and lost in this discipline over the same time period.*

None.

4. *Other Comments. Highlight any other issues/events that are pertinent to the management of the SBI account at your firm.*

None.

Staff Comments

None at this time.