MINNESOTA STATE BOARD OF INVESTMENT MEETING

JUNE 6, 1984

&

INVESTMENT ADVISORY COUNCIL MEETING

JUNE 5, 1984

MINNESOTA STATE BOARD OF INVESTMENT

MEMBERS:

GOVERNOR
Rudy Perpich

STATE AUDITOR
Arne H. Carlson

STATE TREASURER
Robert W. Mattson

SECRETARY OF STATE
Joan Anderson Growe

ATTORNEY GENERAL
Hubert H. Humphrey III

MINNESOTA STATE BOARD
OF INVESTMENT
MEETING

June 6, 1984

&

INVESTMENT ADVISORY COUNCIL
MEETING

June 5, 1984

AGENDA

STATE BOARD OF INVESTMENT

MEETING

Wednesday, June 6, 1984

9:00 A.M.

Room 112

State Capitol
Saint Paul

			TAB
1.	Approval of minutes of March 7, 1984 meeting		
2.	Executive Director's Report		
	A. Quarterly Investment Review		
	1) Basic Retirement Funds		A
	2) Post Retirement Fund and Other Investment Funds		B
	B. Portfolio Statistics		C
3.	Report from Investment Advisory Council	- J. Mares	
4.	Report from Evaluation Associates	- J. Ryan	
5.	Legislative Review	- H. Bicker	D
6.	Legislative Auditor's Review		E
7.	Evaluation Associates Contract	- H. Bicker	
8.	Manager Updates	- H. Bicker	F

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
Room 105, MEA Building
55 Sherburne Avenue
Saint Paul 55155
296-3328

MINUTES
STATE BOARD OF INVESTMENT

March 7, 1984

The State Board of Investment met on Wednesday, March 7, 1984 at 9:00 A.M. in Room 118 of the State Capitol. Governor Rudy Perpich, Chair, State Auditor Arne H. Carlson, State Treasurer Robert Mattson, Secretary of State Joan Anderson Growe and Attorney General Hubert H. Humphrey III were present.

The minutes of the January 11, 1984 meeting were unanimously approved.

Executive Director's Report

Howard Bicker, Executive Director, reviewed recent investment performance. He stated that the external managers closely mirrored the market in aggregate during the fourth quarter though individual performance varied widely. The Board's bond portfolio outperformed the Merrill Lynch Master Bond Index both for the quarter and for the year. In response to a question from Secretary of State Growe, Mr. Bicker stated that the managers were retained to provide a diversity of styles. He stated it is understood that some managers would perform well in certain market cycles whereas others would do well in difficult markets. Mr. Bicker stated that two firms, Herbert Smith and BMI Capital, are being carefully evaluated due to recent personnel changes. He noted that the external managers had outperformed the TUCS universe of aggressive managers.

Mr. Bicker stated that the trade to form the index fund had been completed by Wilshire. Mr. Carlson inquired whether in view of increased concern about a second recession or inflation, staff would recommend a higher cash position. Mr. Bicker stated that the stock managers have the authority to invest 100% of the assets in cash. Mr. Bicker briefly reviewed the portfolio statistics.

External Bond Manager Search

Cliff McCann, Chair of the Bond Manager Search Committee, reviewed the progress of the bond manager interviews. He stated that a list of managers would be recommended to the Board either at its June meeting or a special meeting.

Investment Advisory Council Appointments

Mr. Bicker reviewed the process for selection of Investment Advisory Council Members. The committee recommended Gary Norstrem, Jan Yeomans, and Deborah Veverka. Ms. Growe moved approval of the recommendation. The motion passed unanimously.

Real Estate

Mr. Bicker reviewed the Board's strategy for investment in real estate, and recommended that the Board retain the Rosenberg Real Estate Equity Fund and the Heitman Advisory Corporation as closed-end commingled fund managers. Mr. Bicker discussed each of the six managers interviewed by the staff. He noted that the Investment Advisory Council had reviewed the recommendations. Mr. Mattson moved approval of RREEF and Heitman. The motion passed unanimously.

Venture Capital

Mr. Bicker recommended the Board retain the Kohlberg, Kravis, Roberts & Co. as a leveraged buyout manager for the Board. Mr. Mattson moved approval. In response to a question from the Governor, Mr. Bicker stated that the staff is reviewing venture capital fund managers on a continuous basis. The motion passed unanimously.

Department of Finance Study

Gordon Donhowe, Commissioner of Finance, reviewed the recommendation of the study on the state's retirement funds conducted by Winklevoss & Associates. Mr. Donhowe stated that he is not requesting the Board to take action on the report. Attorney General Humphrey expressed concern about the assumptions regarding investment return and the changes in the Post Retirement Benefit Increase. He stated that it might be advisable for the board to conduct a more lengthy review of the issue in the future.

Investment Seminar

Mr. Bicker reviewed the program of the Investment Seminar on March 8.

Legislation

Mr. Bicker reviewed the progress of HF 1784, the Board sponsored legislation and HF 1291, the constitutional amendment regarding the investment restrictions on the Permanent School Fund.

Mr. Bicker reviewed the potential investment impact of HF 1220, which would prohibit future investment in companies which do business in South Africa or Namibia. Mr. Bicker stated that the bill would affect approximately 229 companies, which equal over 50% of the value of the S&P 500. He stated that approximately 34% of the index fund, 41% of the Basic Fund aggressive common stock manager holdings and over 40% of the Post Retirement Fund common stock holdings would be prohibited. Mr. Bicker stated that the stocks authorized for investment by HF 1220 are smaller, more volatile, and lower quality. He stated that in order to maintain the same level of risk, the Board would have to reduce its stock exposure and increase its bond investments. Due to the historical returns obtained from bonds, Mr. Bicker stated that this change would have a negative impact on fund performance. He stated that a 1% decline in fund's total rate of return would cost $400 million over 10 years. Mr. Bicker stated though the bill is prospective, it will have the same impact as divestiture due to the turnover rate of fund holdings. Mr. Bicker stated that the external managers would have a built-in excuse for poor performance. He also stated it would be very difficult to diversify the portfolios.

Mr. Bicker reported that the author of the often-quoted Trinity study on South Africa-free portfolios has stated that the study's conclusions are invalid for institutional portfolios larger than $50 million. He noted that the Board has voted its proxies to effect change in the companies doing business in South Africa.

In response to a question from Ms. Growe, Mr. Bicker stated that 229 companies out of 5,000 would be prohibited by HF 1220. He stated that the remaining companies are small, under-researched and more difficult and expensive to buy. Ms. Growe noted that good Minnesota companies would still be available, such as Dayton Hudson, International Multifoods and Apache. Ms. Growe stated that she has changed her position from the vote two years ago when the Board unanimously opposed similar legislation. She stated that a fiscal impact study of the bill by the Humphrey Institute will examine whether a socially responsible portfolio can produce a good return. Ms. Growe stated that potential change in South Africa could devalue the Board's investments, and the Board could lose $400 million if it adheres to its present policy. Ms. Growe stated that proxies have not had an impact on the political situation in South Africa. She noted that the Board has adopted a social responsibility policy, and does not make investments in alcohol or tobacco companies or purchase

American Home Products. Ms. Growe stated that the remaining authorized investments may be more volatile, but also may give a greater return. She asked the Board to wait and make its decision after the Humphrey Institute testimony is presented to the legislative committees next week.

Mr. Carlson inquired why only two of the 27 countries found by the United Nations as human rights violators are included in the bill. Ms. Growe stated that South Africa has been condemned worldwide for its racist policies, and Mr. Carlson is free to pursue a policy regarding the other countries. Mr. Carlson stated the Board's role is not to conduct foreign policy, but to achieve the highest return possible to the retirement funds. He stated that the investment policy should not be based on Board members' positions on foreign policy.

Ms. Growe stated that the way to get the highest return may be through investing in socially responsible companies. Mr. Carlson stated that the Board should not tell some of the finest employers in Minnesota, such as Honeywell and Control Data, that they are not good enough to invest in. Ms. Growe stated that studies show that socially responsible companies can deliver a greater return. Mr. Carlson asked to see the studies.

Representative Randy Staten stated that South Africa is the only country in the world that includes apartheid in its Constitution. Representative Staten stated that the State has a responsibility to look at the South Africa question when making investment decisions. He stated that he is concerned about the pensioners and he would not sponsor legislation that would have a negative impact on the retirees. He stated that two years ago testimony from Shearson American Express showed that horror stories about the impact on the fund are not accurate. Representative Staten requested that the Board not take action on the bill as a courtesy to its authors until all the information is available. He stated that he would withdraw the bill if Mr. Bicker's analysis is supported by the Humphrey Institute Study. Representative Staten stated that there is a major difference between divestiture and non-acquisition, and therefore the points outlined in Mr. Mattson's letter are incorrect.

Mr. Carlson asked why the fiscal impact study had not been conducted prior to the bill's introduction. Representative Staten responded that the study was an update. In response to question from Mr. Carlson, Representative Staten stated that legislator's pensions are not affected by the bill. Marcia Greenfield, Administrative Assistant to Senate Committee on Judiciary, explained that legislator's pension contributions are incorporated in the general fund. Mr. Carlson inquired whether Representative Staten would allow the pension fund participants the option to vote on the proposed restrictions. Representative Staten requested that the Board not debate the issue until the information from the Humphrey Institute is available. Mr.

Mattson noted that the Board will not meet for eight weeks. He requested that Representative Staten withdraw the bill so that the Board could have the opportunity to study the issue. Representative Staten stated that his bill was public knowledge upon introduction.

Mr. Humphrey stated that the Board is strongly opposed to apartheid, and the Board actively votes it proxies. In response to a question from Mr. Humphrey, Representative Staten stated that there are no additional transaction costs because the bill does not require divestment. Mr. Humphrey stated that with the substantial turnover of stocks, some additional costs could be incurred due to the restrictions. Representative Staten stated two years ago the investment experts testified that staff's scenario regarding additional risk or costs is not correct. Mr. Humphrey noted that in the past he supported the legislation, and that current information indicates his perspective from the legislature may have not been the best one.

Ms. Growe stated that the view expressed by the author of the Trinity study regarding the impact on large institutional size portfolios was an opinion, not the result of a study. Ms. Growe noted that the Council on Economic Priorities Study for the $18 billion California Retirement Fund concluded that the South Africa restrictions would result in a very small increment of risk and the universe of available securities remains large enough to construct a highly efficient portfolio. Ms. Growe stated that the Humphrey study will directly deal with the state's portfolio. Representative Staten noted that AFSME and other employee organizations support the bill. He stated that Joan Bavaria of Franklin Research would be available next Monday. He stated that Massachusetts has divested, and the concerns raised by staff had not occurred.

Alfred Harrison, Director and Senior Vice President of Alliance Capital, stated that the Board's managers need all the flexibility possible to attain the long run objectives of the funds to lower taxpayer costs and provide benefits to participants. He stated that Alliance Capital is looking to invest in large quality companies with worldwide enterprises. He noted that the LEAP program had urged the steps undertaken by the Board in the last few years. He stated that tying the managers hands is a retrograde step.

Peter Anderson, President of IDS Advisory, stated that the legislation is ill-advised. He stated it would cripple IDS' ability to manage money for the State. He stated that the following industries would be prohibited for investment: banks, autos, airlines, chemicals, oil, paper, and electronics. Because IDS rotates investment among sectors, the bill negates IDS' investment strategy by taking away key industry sectors. He stated that prospective nature of the bill does not lessen the impact. Mr. Anderson also stated that IDS would be forced to own lower quality/lower liquidity issues, which will result in higher transaction costs. Mr. Anderson also stated that IDS believes that the ten year bull market in small capitalization stocks is at a close, and the legislature will force the managers into small capitalization stocks at their peak, and out of large capitalization stocks at their bottom. He stated that he cannot understand why the State of Minnesota would handicap itself with this type of restriction.

Mr. Humphrey recommended that the State explore the possibility of influencing large corporations that do business in South Africa in conjunction with other pension fund investors. He also recommended that the State work to develop cooperative interstate social responsibility policies. He said these actions would not impair the Board's primary responsibility, which is to obtain the highest return on the fund investments.

Ms. Growe says the past social responsibility actions taken by the Board had been opposed by staff, but their warnings had not been realized. She stated that the analysis that this policy is going to harm returns is false. Ms. Growe stated it is possible to support the policy in the bill and still achieve the highest return for the retirement funds.

Mr. Carlson stated that a financial experiment is being proposed, with the future of hundreds of thousands of individuals at stake, and legislators' money will not be included. He stated that the Board is a fiduciary and should not be thrust into foreign policy. Mr. Carlson moved that the Board oppose HF 1220.

In response to a question from the Governor, Mr. Miles, Assistant Attorney General, stated that the Board needs to vote in order to oppose HF 1220. Ms. Growe inquired whether it is in order to make a substitute motion for the Board to delay a formal position at this time. Mr. Carlson stated it would run contrary to his main motion. Mr. Carlson's motion passed on a vote of 4 to 1 with Secretary of State Growe voting in opposition.

Mr. Humphrey moved that the State Board of Investment: (1) aggressively vote its proxies to support shareholder resolutions seeking to approve social investments in South Africa; (2) direct its Executive Director to contact public and private pension funds in other states to explore alternative ways in which the SBI and other funds can join together to strongly encourage companies doing business in South Africa to assist in improving the living conditions and ending apartheid; and (3) further, explore the possibility of joint action to establish common social investing policy standards and criteria. In response to a question from Mr. Carlson, Mr. Humphrey stated that the motion would not require much staff time. Ms. Growe moved to delete the first paragraph, stating that proxies are not effective for achieving change. Mr. Humphrey stated that the Ford Motor Company was the first to recognize black labor unions in South

Africa and stated he hoped the Board's proxies and other efforts would encourage companies to maintain that type of effort. Mr. Humphrey's motion passed on a voice vote.

Manager Updates

Mr. Bicker briefly reviewed the manager update interviews.

Investment Advisory Council

Mr. Bicker announced that Judith Mares had been elected Chair of the Investment Advisory Council and Malcolm McDonald had been elected Vice Chair. Mitzi Malevich is retiring from the Council.

The meeting adjourned at 10:45 A.M.

Respectfully submitted,

Howard Bicker

Howard J. Bicker
Executive Director

AGENDA

INVESTMENT ADVISORY COUNCIL

MEETING

Tuesday, June 5, 1984

7:30 A.M.

MEA Building Conference Room
41 Sherburne Avenue
Saint Paul

			TAB
1.	Approval of minutes of March 6, 1984 meeting		
2.	Executive Director's Report		
	A. Quarterly Investment Review		
	1) Basic Retirement Funds		A
	2) Post Retirement Fund and Other Investment Funds		B
	B. Portfolio Statistics		C
3.	Report from Investment Advisory Council	- J. Mares	
4.	Report from Evaluation Associates	- J. Ryan	
5.	Legislative Review	- H. Bicker	D
6.	Legislative Auditor's Review		E
7.	Evaluation Associates Contract	- H. Bicker	
8.	Manager Updates	- H. Bicker	F

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Room 105, MEA Building
55 Sherburne Avenue
Saint Paul 55155
296-3328

MINUTES
INVESTMENT ADVISORY COUNCIL

March 6, 1984

The Investment Advisory Council met on Tuesday, March 6, 1984 in the MEA Conference Room in St. Paul.

Members Present: Mitzi Malevich, Chair, Gordon Donhowe, Paul Groschen, Ken Gudorf, Phyllis Jones, Malcolm McDonald, Mike McLaren, Judith Mares, Joseph Rukavina, Harvey Schmidt, and Ray Vecellio.

Members Absent: Richard Hume, Michael Rosen.

Staff Attending: Howard Bicker, Jeff Bailey, John Griebenow, Teresa Myers, and Daralyn Peifer.

Others Attending: John Allers, Karen Dudley, Fran Elster, Richard Ennis, Elton Erdahl, Paul Hayne, Andrea Kircher, Bob Larson, John Littler, Cliff McCann, Mike Miles, Mike Ousdigian, Stan Peskar, Peter Sausen and Elaine Voss.

Mitzi Malevich introduced the new Council Members: Gary Norstrem, Deborah Veverka, and Jan Yeomans.

The minutes of the January 10, 1984 meeting were unanimously approved.

Executive Director's Report

Howard Bicker, Executive Director, reviewed recent investment performance. He stated that the external managers closely mirrored the market in aggregate during the fourth quarter, though individual performance varied widely. The Board's bond portfolio outperformed the Merrill Lynch Master Bond

Index for the quarter and the year. Mr. Bicker stated that two firms, Herbert Smith and BMI Capital, are being carefully evaluated due to recent personnel changes. He noted that the external managers had outperformed the TUCS universe of aggressive managers. In response to questions from Mr. McDonald, Mr. Bicker explained the state's short term investment strategies.

Bond Manager Search Update

Mr. Bicker outlined the search process for the selection of external bond managers. He estimated recommendations would be presented to the Board and Council at the regular June meeting or a special meeting. Mr. Bicker estimated that four managers will be retained for $800 million in assets.

Mr. Rukavina requested a seminar be held for new Advisory Council members.

Real Estate

Mr. Bicker reviewed the Board's strategy for investment in real estate, and recommended that the Board retain the Rosenberg Real Estate Equity Fund and the Heitman Advisory Corporation as closed-end commingled fund managers. He reviewed the six managers interviewed by staff. In answer to a question from Mr. Gudorf, Mr. Bicker stated that $75 million would be invested in the RREEF USA Fund III over three years, and $20 million with Heitman over one year. Ms. Mares agreed that Trust Company of the West could be considered a specialty manager due to the concentration in office buildings. She stated she is comfortable with TCW's Equity Equivalent Loan. In response to a question from Mr. Ennis, Mr. Bicker stated that the commitment to Heitman would be subject to the requirement that $100 million is raised by June 30, 1984. In response to a question from Mr. McLaren, Fran Elster, Evaluation Associates, outlined the process for screening potential real estate managers. In response to a question from Ms. Mares, Mr. Bicker stated that the selection process for venture capital and real estate are different from the stock and bond searches because the universe of available real estate/venture capital investments is continually changing, and not all managers accept investments at the same point in time.

Venture Capital

Mr. Bicker recommended that the Board fund the leveraged buyout partnership of Kohlberg, Kravis, Roberts & Co. at $25 million. Mr. Bicker cited the managers' track record, and stated that due to its size, KKR had the advantage of not competing with the many small leveraged buyout funds in the market. Mr. Gudorf expressed concern that KKR may be getting too big. Mr. Griebenow stated that KKR had the controls in place to mitigate problems.

In reponse to a question from Ms. Yeomans regarding successful exits, Mr. Griebenow stated that KKR will typically cash out its investments through a public sale of stock or mergers.

Mr. Gudorf moved that the Investment Advisory Council advise the Board to proceed with the staff recommendation on real estate. The motion passed unanimously. Mr. McDonald moved that the Council advise the State Board of Investment to proceed with the staff's recommendation on venture capital. The motion passed unanimously.

Winklevoss Study

Gordon Donhowe, Commissioner of Finance, reviewed the recommendations of the study of the State's retirement funds conducted by Winklevoss & Associates. In response to a question from Ms. Malevich, Mr. Donhowe stated that though the issues are outside the preview of the Council, it is important that the Council is informed about the current discussions. Mr. McDonald suggested that Council members could individually work with Mr. Donhowe on the issue. Mssrs. Schmidt, Groschen and McLaren expressed reservations about the study.

John Allers expressed concern that the Board would interpret the Council's review of the Winklevoss study as an expression of support for the report. Mr. Bicker stated that the Council's discussion was for informational purposes only.

Selection of Council Chair

Ms. Malevich announced that she is resigning from the Investment Advisory Council, and recommended Judith Mares as Chair and Malcolm McDonald a Vice Chair. Mr. Donhowe commended Ms. Malevich on her distinctive service to the State Board of Investment during a difficult period. Mr. Schmidt moved approval of Judith Mares as Chair and Malcolm McDonald as Vice Chair. The motion passed unanimously.

Legislation

Mr. Bicker reviewed the potential investment impact of HF 1220, prohibiting future investment in companies that do business in South Africa and Namibia. In response to a question from Mr. McDonald, Mr. Bicker stated that the investment management expenses of the staff and external money managers would increase as a result of the substantial decline in available investment opportunities. Mr. McDonald moved that the Council oppose HF 1220. Mr. Allers stated that the issue is emotional, and Mr. Bicker's testimony will need to be supported by others. Ms. Malevich recommended that Mr. Aller's colleagues attend the hearing. Mr. McCann stated that Board action is required in order to take a position. Mr. Rukavina stated that the Council should oppose the bill and communicate its position to the Board.

Mr. Donhowe stated that the Council is not precluded from communicating directly with the legislature. Mr. McDonald's motion passed unanimously. The Council asked Ms. Malevich, Ms. Mares, and Mr. McDonald to present its view at legislative hearings.

The meeting adjourned at 9:40 A.M.

Respectfully submitted,

Howard Bicker

Howard J. Bicker
Executive Director

Tab A

MINNESOTA STATE BOARD OF INVESTMENT

QUARTERLY INVESTMENT REVIEW

BASIC RETIREMENT FUNDS

March 31, 1984

MINNESOTA STATE BOARD OF INVESTMENT

BASIC RETIREMENT FUNDS

FIRST QUARTER 1984

Summary

ASSETS

The Basic Retirement Funds declined 1.8% in market value during the first quarter. The protracted weakness of the capital markets, and in particular the stock market, has left the total market value of the Basic Funds' assets essentially unchanged over the last three quarters. The end-of-period market values of the Basic Funds' assets over the past five years are displayed below:

		Market Value (millions)	Percent Change from Previous Period
1979		$ 1,627	+ 16.5%
1980		1,962	+ 20.6
1981		2,148	+ 9.5
1982		2,806	+ 30.6
1983	1Q	2,944	+ 4.9
	2Q	3,145	+ 6.8
	3Q	3,098	- 1.5
	4Q	3,129	+ 1.0
1984	1Q	3,072	- 1.8

ASSET MIX

Despite a substantial reduction in cash and a concomitant increase in equity holdings by the index fund (which had experienced a temporary cash accumulation at year-end as part of its construction process), the Basic Retirement Funds' common stock asset allocation at first quarter-end remained essentially unchanged from its position at the end of 1983. This situation was the result of the poor relative performance of common stocks over the quarter. During this period, the active equity managers did not significantly alter the cash component within their own portfolios.

Over the quarter, bonds and alternative equity assets increased as a percent of the total portfolio due to their superior returns relative to stocks. In addition, the SBI made its first commitment to venture capital during the quarter. Asset mix data for the end of the first quarter 1984 and fourth quarter 1983 are presented below:

ASSET MIX

	12/31/83	3/31/84
Common Stocks	56.7%	56.8%
Bonds	28.5	29.0
Cash*	10.9	9.9
Alternative Equity Assets	3.9	4.3
	100%	100%

*Includes cash uncommitted to long-term assets plus cash held by all external managers.

INVESTMENT RETURNS

The first quarter total rate of return on the Basic Retirement Funds' investments was -2.2%. The stock market endured its third consecutive quarterly decline and was again the primary contributor to the weak investment returns of the Basic Funds. The relatively stronger performances of the bond and alternative equity assets segments of the total portfolio served to dampen the impact of the decline in common stock values. Asset class segment and total portfolio returns for the most recent quarter and twelve months are displayed below:

Total Return

	First Quarter 1984	Year Ending 3/31/84
Common Stocks	- 5.1%	0.4%
Bonds	2.2	7.3
Cash	2.4	9.5
Alternative Equity Assets	4.1	11.2
Total Fund	- 2.2	2.9

EQUITY PERFORMANCE

The first quarter represented the most difficult period for common stock prices since the bear market began in late June, 1983. Because the Basic Funds' active equity managers hold portfolios which are more aggressive and volatile than the overall stock market, their portfolios, in aggregate, underperformed the declining stock market, as expected. Further, the difficulty of the quarter for aggressive managers was evidenced by the fact that only two of the Basic Fund's active equity managers were able to outperform the broad market averages. Those managers were Beutel Goodman and Hellman Jordan.

The managers' investment strategies, in aggregate, have changed relatively little over the last twelve months. Their portfolios remain overweighted in Financial, Technology, and Transportation stocks. Significant underweightings continue in the Energy and Utility sectors. The SBI's passive manager, Wilshire Associates, completed its index fund construction in mid-February. The index fund tightly tracked its target index, the Wilshire 5000, in February and March.

	Total Portfolio Returns First Quarter 1984	Since Inception 3/1/83
Fred Alger	- 6.9%	4.0%
Alliance Capital	- 9.9	- 4.8
Beutel Goodman	- 0.5	14.3
Forstmann Leff	- 5.9	4.6
Hellman Jordan	- 0.4	0.5
IDS	- 7.2	0.6
Investment Advisers	- 4.8	4.0
Loomis Sayles	- 7.7	- 8.8
Siebel Capital	- 7.6	- 0.6
Herbert R. Smith	- 4.7	-11.3
Trustee & Investors	- 7.3	- 5.2
Total - External Active Managers	- 5.8	- 0.7
Wilshire Associates*	- 4.8	NA
Wilshire 5000	- 4.2	10.0
S&P 500	- 2.4	12.5

*Index fund under construction during the quarter.

BOND PERFORMANCE

The first quarter was a mixed period for the bond market. Rates fell moderately in January and then traveled a steady upward path over the rest of the quarter. The result was that most bond portfolios produced essentially flat quarterly returns, with coupon income roughly offsetting price declines. The Basic Retirement Funds' bond portfolio reacted in a similar manner. However, it produced a reported return exceeding that of the Merrill Lynch Bond Index due to a one-time shift to accrued income performance reporting. Without the change, the Basic Funds' bond portfolio would have produced a -0.5% return. The maturity of the Basic Funds' bond portfolio at quarter-end was 14.3 years versus

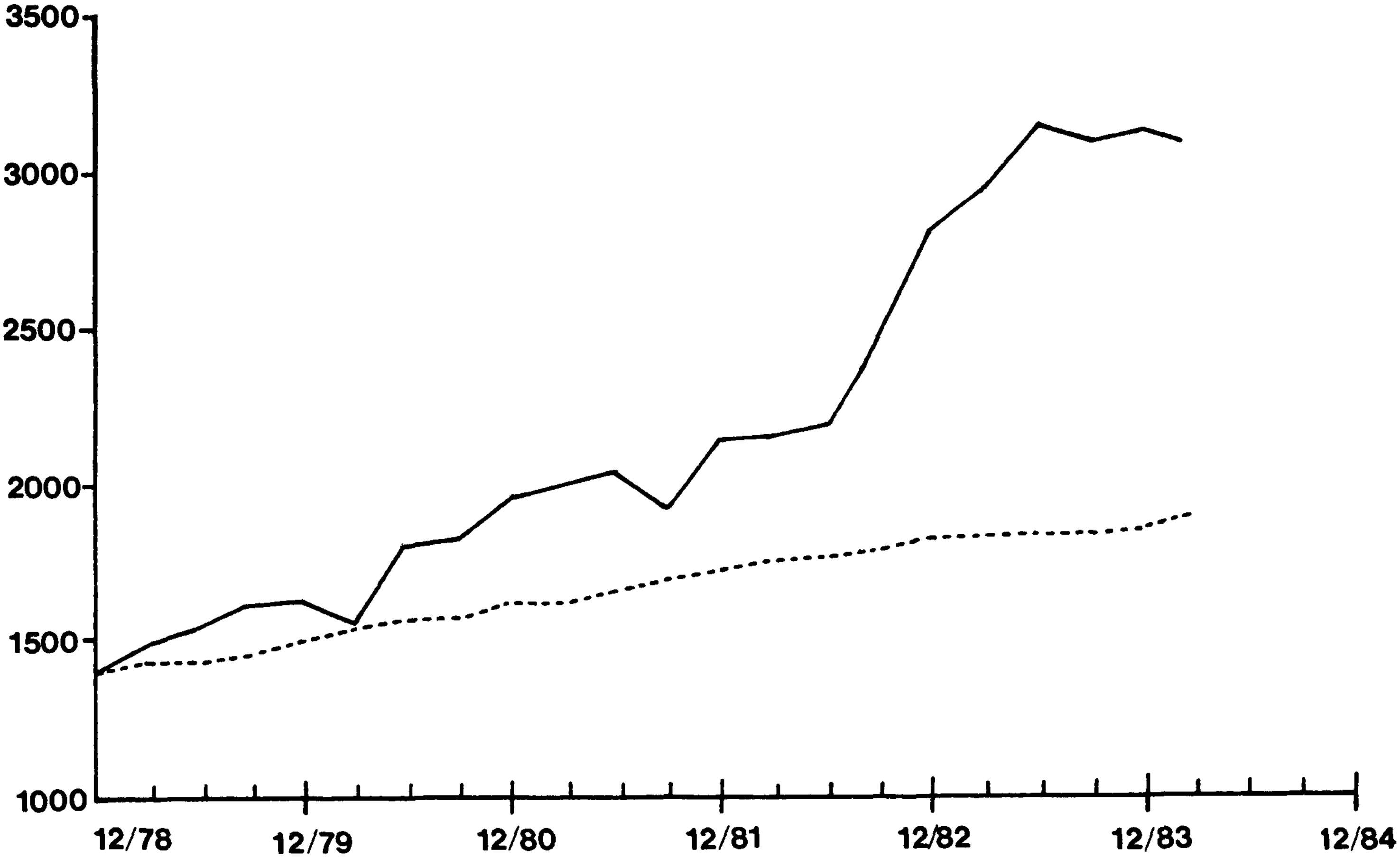
9.5 years for the Merrill Lynch Bond Index.

Total Portfolio Returns

	First Quarter 1984	Year Ending First Quarter 1984
Basic Retirement Funds Bond Return	2.2%	7.3%
Merrill Lynch Master Bond Index	0.8	5.2

FIGURE 1

BASIC RETIREMENT FUNDS
ASSET GROWTH



BEGINNING VALUE PLUS NET CONTRIBUTIONS ---
TOTAL PORTFOLIO MARKET VALUE ——

PERIOD ENDING

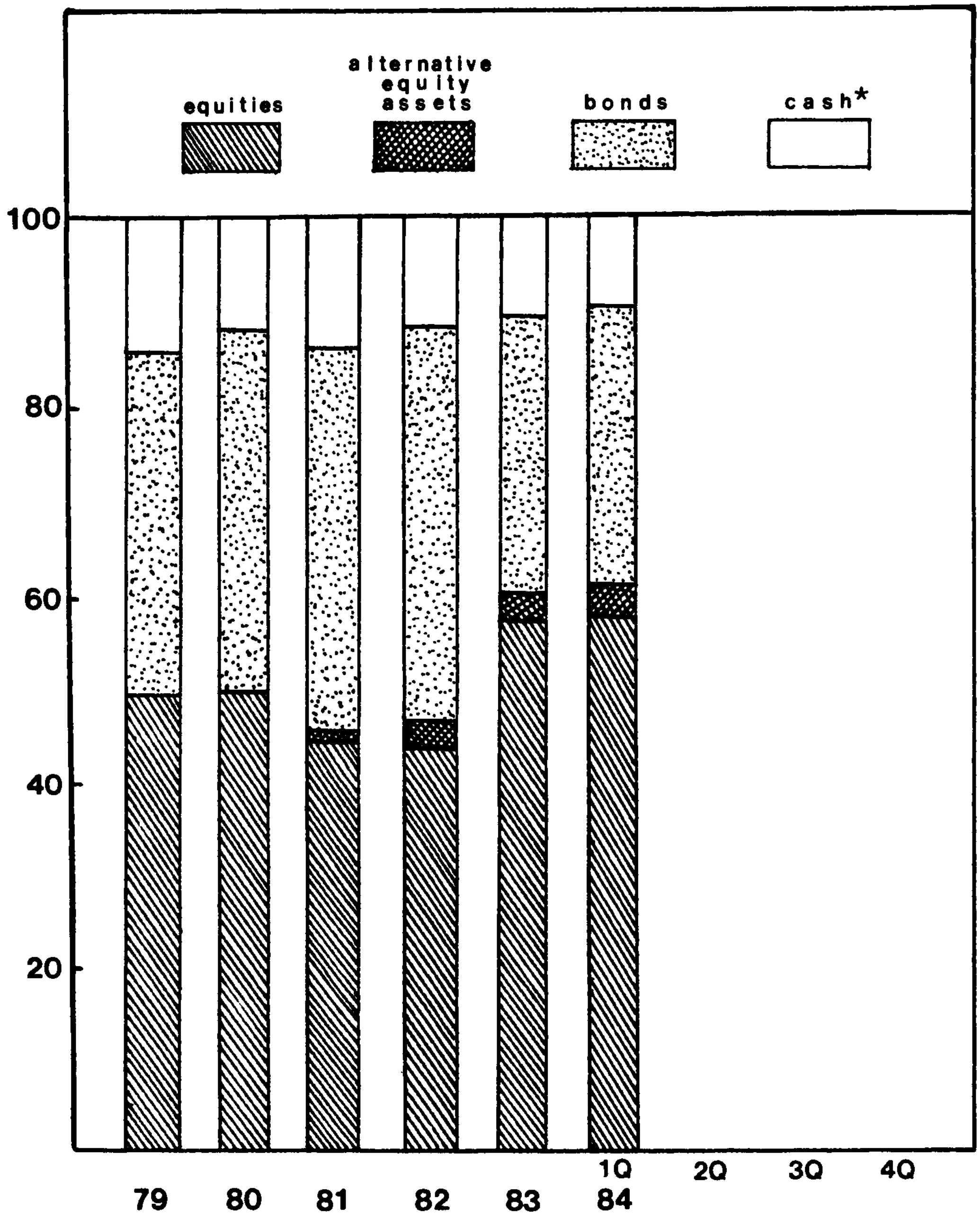
	12/79	12/80	12/81	12/82	12/83	3/84
BEGINNING VALUE	1397.0	1627.1	1962.0	2148.8	2806.2	3129.0
NET CONTRIBUTIONS	103.5	122.7	114.9	91.0	40.0	12.1
INVESTMENT RETURN	126.6	212.2	71.9	566.4	282.8	-69.2
ENDING VALUE	1627.1	1962.0	2148.8	2806.2	3129.0	3071.9

(MILLIONS OF DOLLARS)

FIGURE 2

BASIC RETIREMENT FUNDS
ASSET MIX

PERCENT OF MARKET VALUE
(End of Period Allocations)



*Includes cash uncommitted to long-term assets plus cash held by all external managers.

TABLE 1

BASIC RETIREMENT FUNDS

ASSET MIX

MARKET VALUE

(End of Period Allocations)

		Common Stocks		Bonds		Cash*		Real Estate		Resource Funds		Venture Capital	
		$Million	Percent	$Million	Percent	$Million	Percent	$Million	Percent	$Million	Percent	$Million	Percent
1979		799	49.1	604	37.1	224	13.8	-	-	-	-	-	-
1980		964	49.1	767	39.1	231	11.8	-	-	-	-	-	-
1981		959	44.6	865	40.3	297	13.8	20	0.9	8	0.3	-	-
1982		1,212	43.2	1,165	41.5	317	11.3	93	3.3	17	0.7	-	-
1983		1,773	56.7	892	28.5	342	10.9	101	3.2	21	0.7	-	-
1984	1Q	1,745	56.8	891	29.0	305	9.9	106	3.5	21	0.7	4	0.1
	2Q												
	3Q												
	4Q												

*Includes cash uncommitted to long-term assets plus cash held by all external managers.

TABLE 2

BASIC RETIREMENT FUNDS

ASSET MIX — ACTUAL vs. POLICY

PERCENT OF MARKET VALUE

(End of Period Allocations)

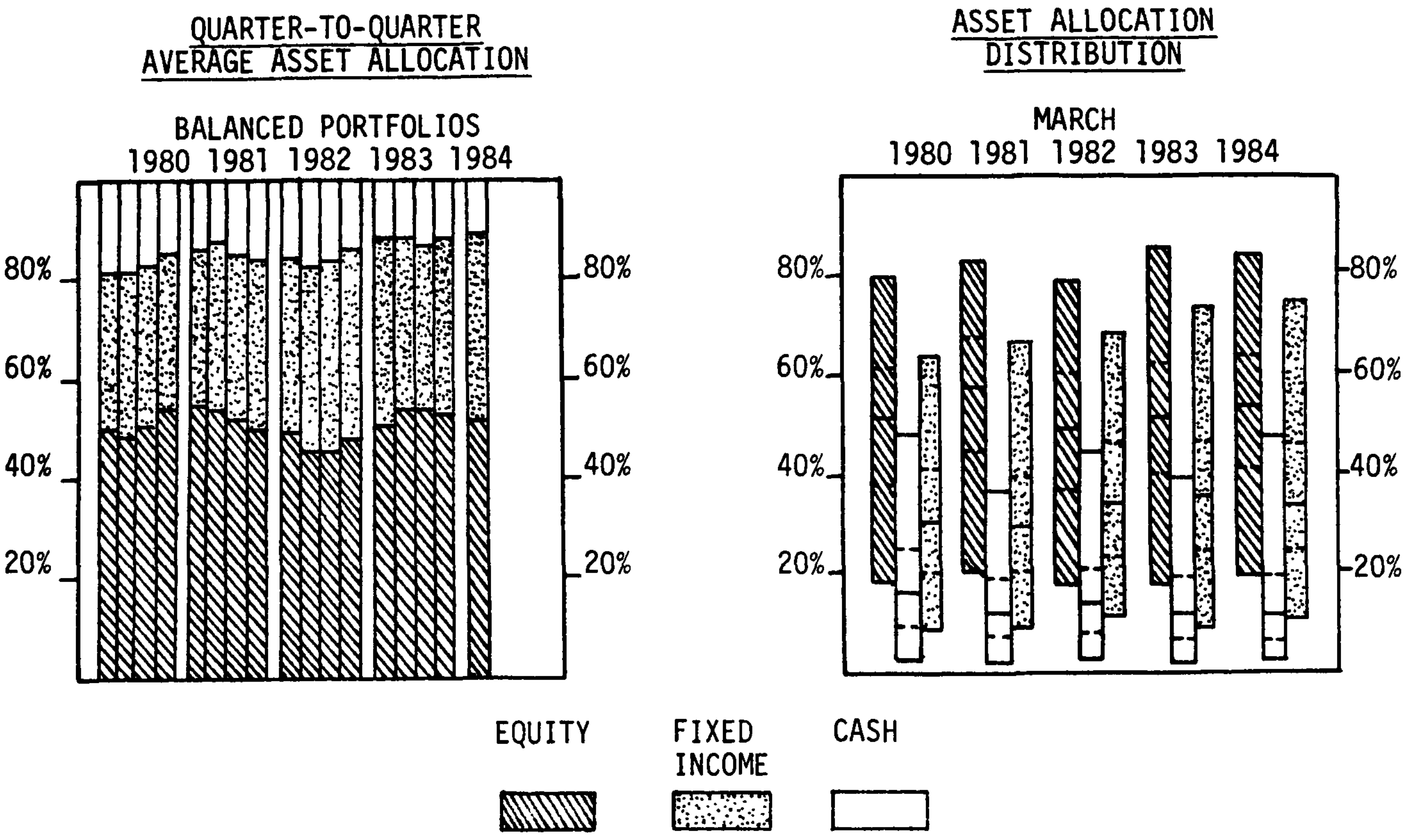
		Common Stocks*						Fixed Income**			Real Estate*			Resource Funds Venture Capital*		
		Passive Management			Active Management											
		Actual	Policy	Diff.	Actual	Policy	Diff.	Actual	Policy	Diff.	Actual	Policy	Diff.	Actual	Policy	Diff.
983	1Q	0	40	-40	57.9	20	+37.9	38.3	25	+13.3	3.2	10	-6.8	0.6	5	-4.4
	2Q	0	40	-40	61.9	20	+41.9	34.5	25	+ 9.5	3.0	10	-7.0	0.6	5	-4.4
	3Q	0	40	-40	63.4	20	+43.4	32.8	25	+ 7.8	3.2	10	-6.8	0.6	5	-4.4
	4Q	43.5	40	+3.5	18.5	20	- 1.5	34.1	25	+ 9.1	3.2	10	-6.8	0.7	5	-4.3
984	1Q	42.2	40	+2.2	17.8	20	- 2.2	35.7	25	+10.7	3.5	10	-6.5	0.8	5	-4.2
	2Q															
	3Q															
	4Q															

Includes cash held by external managers.
Includes cash uncommitted to long-term assets.

FIGURE 3

ASSET ALLOCATION PERSPECTIVE

TAX EXEMPT BALANCED PORTFOLIOS



	MARCH				
	1980	1981	1982	1983	1984
PERCENT EQUITY					
5TH PERCENTILE	80.	83.	79.	85.	84.
25TH PERCENTILE	61.	67.	60.	62.	63.
MEDIAN	51.	57.	49.	51.	53.
75TH PERCENTILE	38.	45.	37.	40.	41.
95TH PERCENTILE	18.	20.	17.	17.	19.
PERCENT CASH EQUIV					
5TH PERCENTILE	48.	37.	44.	39.	47.
25TH PERCENTILE	24.	18.	20.	18.	18.
MEDIAN	15.	11.	13.	10.	10.
75TH PERCENTILE	9.	6.	7.	5.	5.
95TH PERCENTILE	2.	2.	2.	1.	1.
PERCENT FIXED INCOME					
5TH PERCENTILE	63.	66.	68.	73.	74.
25TH PERCENTILE	41.	40.	46.	46.	46.
MEDIAN	30.	29.	34.	35.	33.
75TH PERCENTILE	20.	20.	23.	24.	24.
95TH PERCENTILE	8.	8.	10.	8.	9.

Source: Trust Universe Comparison Service

FIGURE 4

PERFORMANCE OF CAPITAL MARKETS
CUMULATIVE RETURNS

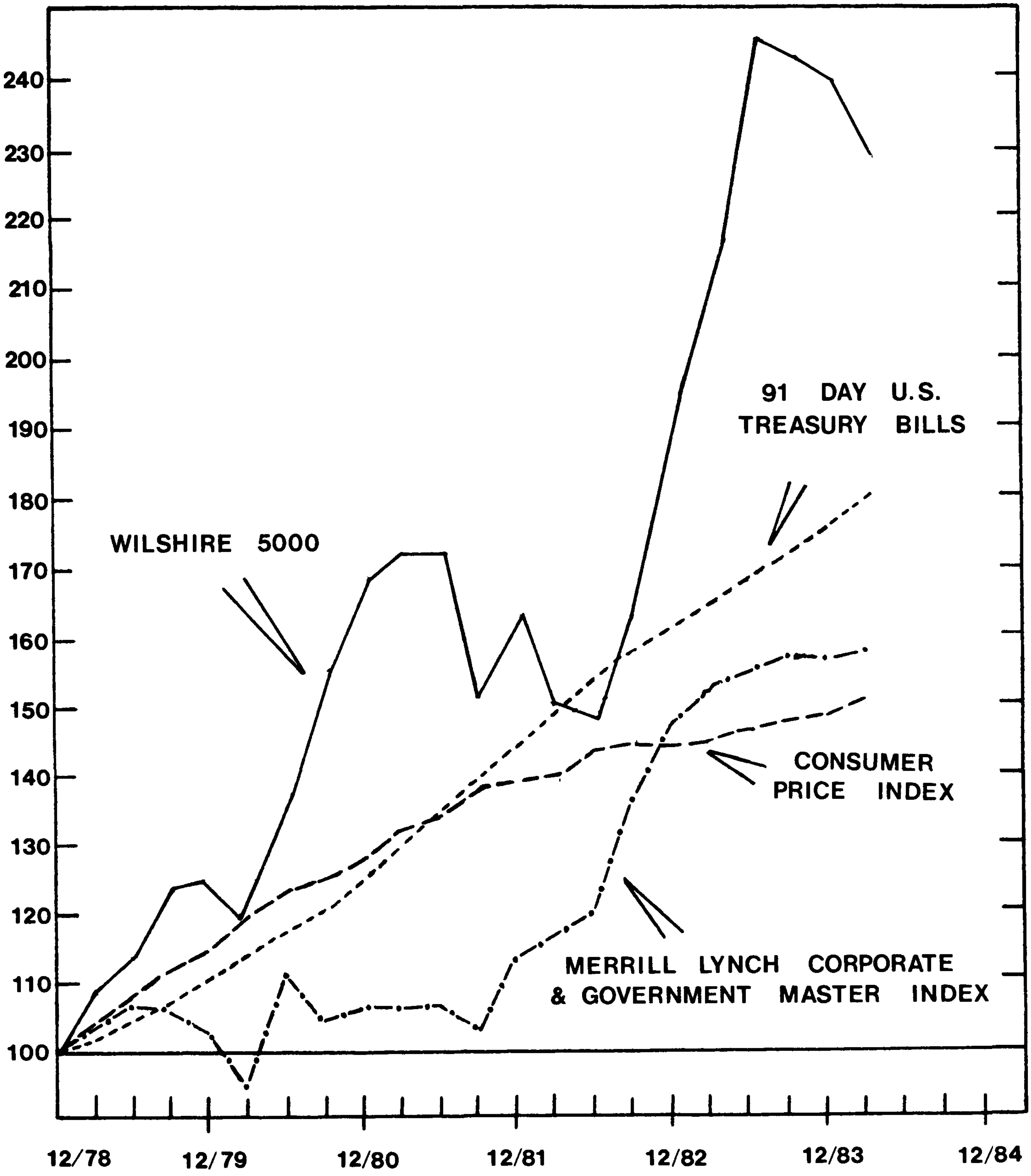
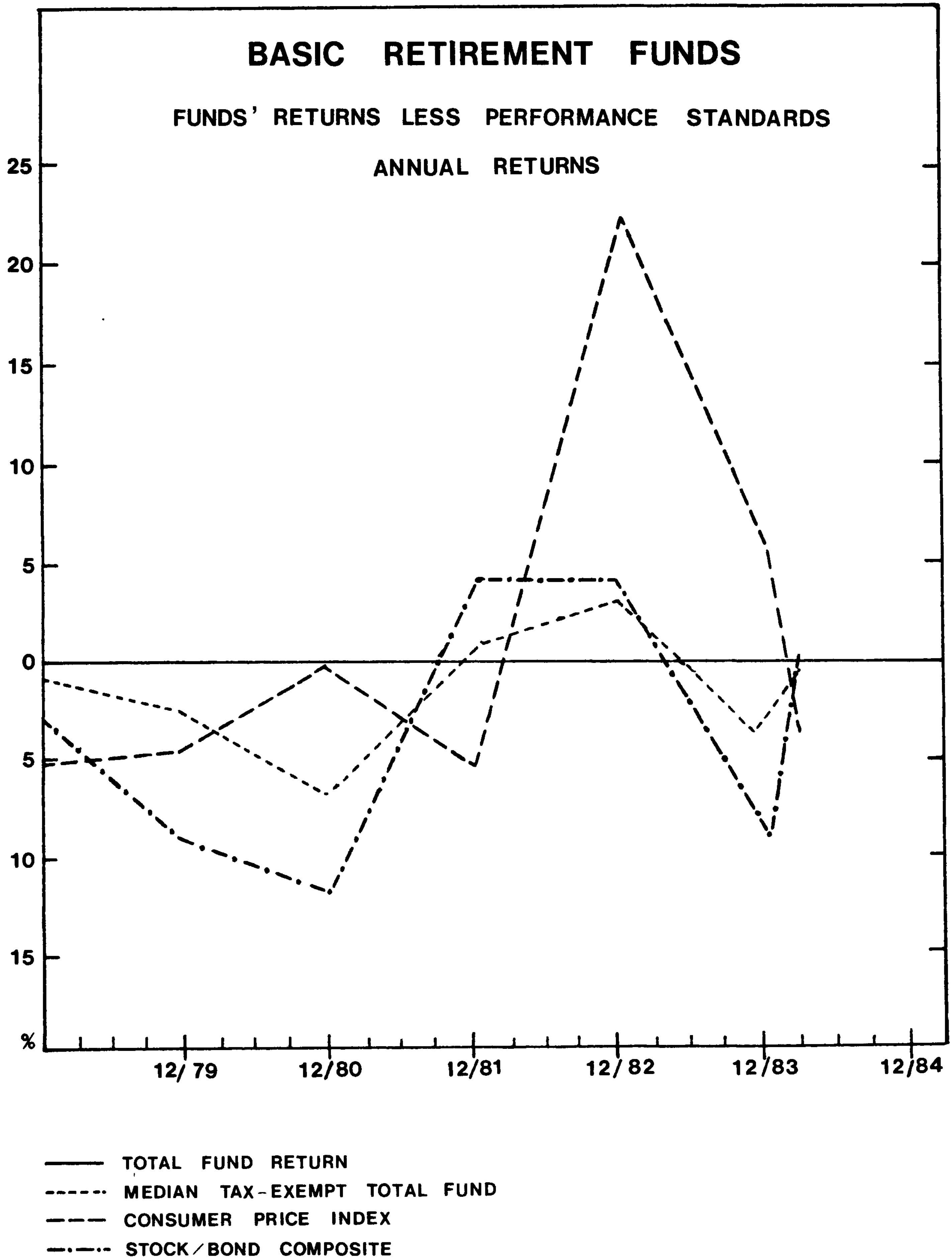


FIGURE 5



BASIC RETIREMENT FUNDS
FUNDS' RETURNS LESS PERFORMANCE STANDARDS
ANNUAL RETURNS
25
20
15
10
5
0
5
10
15
%
12/79
12/80
12/81
12/82
12/83
12/84
TOTAL FUND RETURN
MEDIAN TAX-EXEMPT TOTAL FUND
CONSUMER PRICE INDEX
STOCK/BOND COMPOSITE

FIGURE 6

DISTRIBUTION OF TOTAL PORTFOLIO RETURN

TAX EXEMPT BALANCED PORTFOLIOS

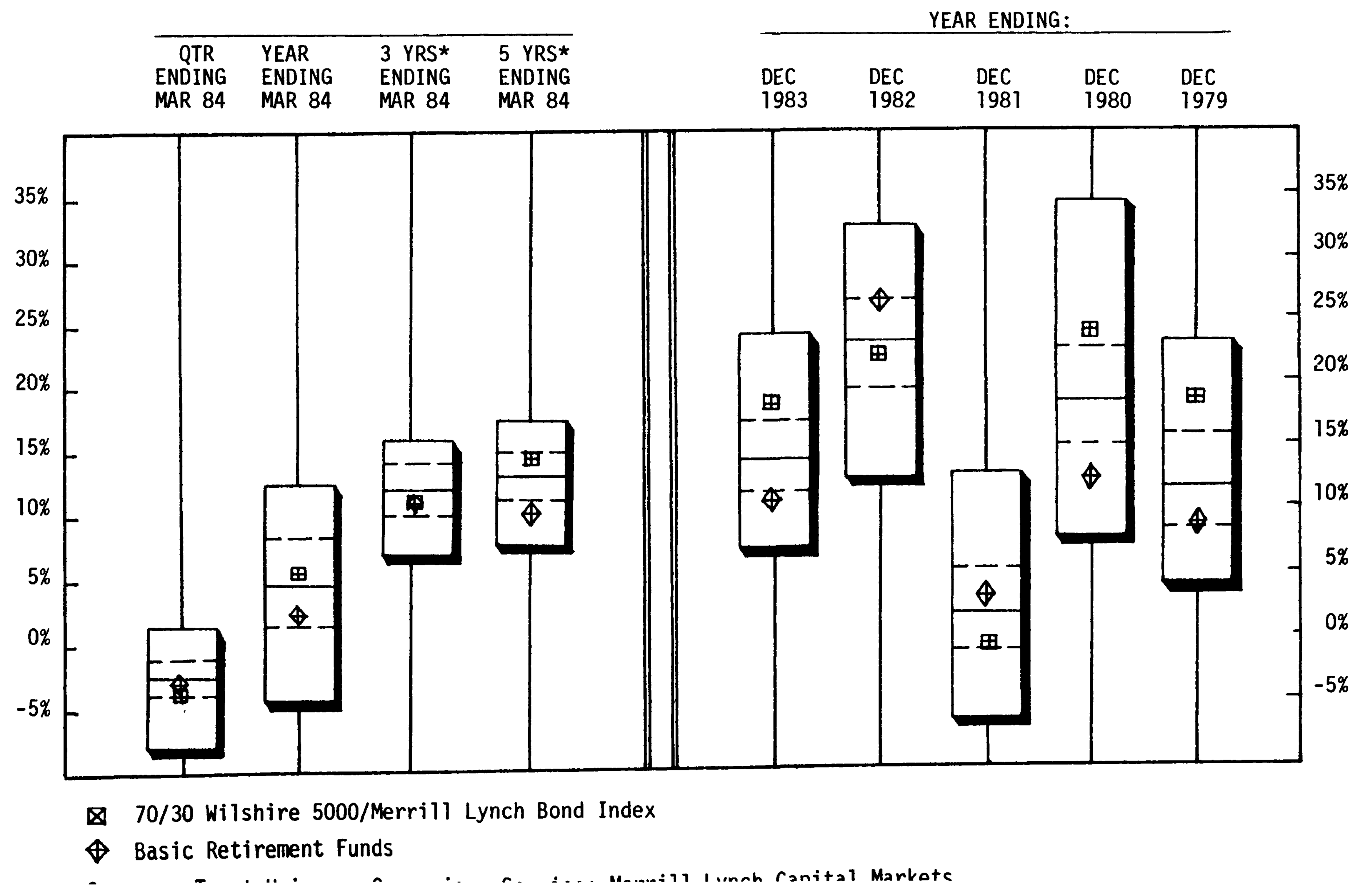


TABLE 3

BASIC RETIREMENT FUNDS

INVESTMENT RETURNS RELATIVE TO PERFORMANCE STANDARDS

		Total Fund Return (exc. alt. assets)	Median Tax-Exempt Fund	70/30 Stock/Bond Composite	Inflation	Total Fund Return (inc. alt. assets)
1979		8.8%	11.6%	18.2%	13.3%	8.8%
1980		12.4	18.6	24.5	12.5	12.4
1981		3.5	2.2	-0.6	8.9	3.5
1982		26.4	23.3	22.4	3.8	25.7
1983		10.3	14.1	18.8	3.8	10.2
1984	1Q	- 2.5	-1.9	-2.7	1.3	- 2.2
	2Q					
	3Q					
	4Q					
1 Year Through 3-31-84		2.6	4.9	6.1	4.7	2.9
3 Years Annualized Through 3-31-84		11.4	12.0	11.5	5.0	11.3
5 Years Annualized Through 3-31-84		10.6	12.7	14.0	8.0	10.5

TABLE 4

BASIC RETIREMENT FUNDS

INVESTMENT RETURNS — DETAIL

		Total Fund Return (exc. alt. assets)	Common Stocks		Bonds		Alternative Equity Assets	Total Fund Return (inc. alt. assets)
			Basics	Wilshire 5000	Basics	ML Bond Index		
1979		8.8	17.4	25.6	- 1.7	2.3	-	8.8
1980		12.4	26.2	33.7	- 0.1	3.3	-	12.4
1981		3.5	0.0	- 3.6	2.0	7.0	-	3.5
1982		26.4	21.6	18.7	38.1	29.8	11.9	25.7
1983		10.3	12.7	23.5	9.3	7.8	7.4	10.1
1984	1Q	- 2.5	- 5.1	- 4.2	2.2	0.8	4.1	- 2.2
	2Q							
	3Q							
	4Q							
1 Year Through 3-31-84		2.6	0.4	6.1	7.3	5.2	11.2	2.9
3 Years Annualized Through 3-31-84		11.4	7.8	9.9	16.8	14.6	NA	11.3
5 Years Annualized Through 3-31-84		10.6	12.7	15.7	8.7	9.2	NA	10.5

TABLE 5

DISTRIBUTION OF TOTAL PORTFOLIO RETURNS

TAX EXEMPT BALANCED PORTFOLIOS

	QTR ENDING MAR 84	YEAR ENDING MAR 84	3 YRS* ENDING MAR 84	5 YRS* ENDING MAR 84	YEAR ENDING: DEC 1983	DEC 1982	DEC 1981	DEC 1980	DEC 1979
5TH PERCENTILE	1.7	12.6	16.3	17.7	24.1	32.8	13.1	34.6	23.3
25TH PERCENTILE	-0.5	8.2	13.8	14.4	17.1	26.8	5.5	22.8	15.9
MEDIAN	-1.9	4.9	12.0	12.7	14.1	23.3	2.2	18.6	11.6
75TH PERCENTILE	-3.7	1.7	10.3	11.3	11.5	19.7	-.7	15.0	8.5
95TH PERCENTILE	-7.8	-4.2	6.7	8.0	7.4	12.7	-6.2	8.0	4.2
WILSHIRE 5000	-4.2	6.1	9.9	15.7	23.5	18.7	-3.6	33.7	25.6
MERRILL LYNCH BOND INDEX	0.8	5.2	14.6	9.2	7.8	29.8	7.0	3.3	2.3
70/30 STOCK/BOND INDEX	-2.7	6.1	11.5	14.0	18.8	22.4	-0.6	24.5	18.2
BASIC RETIREMENT FUNDS	-2.5	2.6	11.4	10.6	10.3	26.4	3.5	12.4	8.8

*Annualized

Source: Trust Universe Comparison Service; Merrill Lynch Capital Markets.

TABLE 6

EQUITY MANAGER PERFORMANCE

3/31/84

Total Portfolio Returns

Managers	Last Quarter	Last Four Quarters	Since Inception (3-1-83)
Fred Alger	- 6.9%	1.2%	4.0%
Alliance Capital	- 9.9	- 6.8	- 4.8
Beutel Goodman	- 0.5	13.3	14.3
Forstmann Leff	- 5.9	1.8	4.6
Hellman Jordan	- 0.4	1.4	0.5
IDS	- 7.2	- 0.8	0.6
Investment Advisers	- 4.8	2.5	4.0
Loomis Sayles	- 7.7	- 9.0	- 8.8
Siebel Capital	- 7.6	- 3.7	- 0.6
Herbert R. Smith	- 4.7	-11.7	- 11.3
Trustee & Investors	- 7.3	- 5.5	- 5.2
Total - External Active Managers	- 5.8	- 2.1	- 0.7
Wilshire Associates*	- 4.8	NA	NA

*Index Fund under construction

Performance Standards	Last Quarter	Last Four Quarters	Since Inception (3-1-83)
Wilshire 5000	- 4.2%	6.1%	10.0%
S&P 500	- 2.4	8.6	12.5
TUCS Median	- 6.2	1.9	NA
Inflation	1.3	4.7	4.8

EQUITY MANAGER PORTFOLIO STATISTICS GLOSSARY

In the following pages, summary descriptions of the individual equity managers' investment philosophy, risk characteristics, and performance data are displayed. Some of the statistics presented are technical in nature. This glossary is designed to aid in understanding the terms that are introduced.

Qtr. Port. Turnover - the manager's total equity asset sales during the quarter divided by the average value of the manager's equity assets over the quarter.

# of Stocks - number of different issues held in the manager's stock portfolio.

Equity Allocation - percent of the manager's total portfolio invested in common and preferred stocks and convertible securities.

Yield - indicated annual dividend of the manager's stock portfolio divided by the market value of the manager's stock portfolio.

P/E - weighted average price per share of the managers' common stock portfolio divided by the weighted average trailing four quarter earnings per share of the manager's common stock portfolio.

Market Volatility - degree to which the returns on the manager's stock portfolio are sensitive to movements in the stock market's return. By definition the market has a market volatility measure (referred to as beta) of 1.0. Portfolios with values greater (less) than 1.0 have above (below) average sensitivity to market moves. The SBI's managers are required, over the long-term to hold portfolios with market volatility levels above 1.10. This measure does not include the impact of cash holdings on total portfolio volatility.

Diversification - extent to which a manager's equity holdings statistically resemble the stock market. Low (high) diversification portfolios will experience returns which are not well (are well) correlated with those of the market. By definition, the market has a diversification measure of 1.0. The less a portfolio is diversified, the lower will be its diversification measure (referred to as R-squared). The SBI's managers are required, over the long-term, to hold portfolios with diversification levels less than .85.

Portfolio Risk Orientation	- the riskiness of a portfolio can be expressed in terms of its market volatility and diversification. A complementary approach is to break down a portfolio's risk into sensitivity to various fundamental factors. These factors, six of which are used in this analysis, are related to various balance sheet, income statement and securities data on the stocks which make up a manager's portfolio. The sensitivity of a manager's portfolio to these factors is rated relative to the the stock market's sensitivity. Thus, the term ++ (--) indicates that a portfolio has a relatively very high (low) exposure to the factor. A + (-) indicates an above (below) average exposure. A 0 indicates no exposure.
Price Variability	- risk related to the historical variability of the prices of stocks in the portfolio. The more variable are the portfolio's securities' prices, the more risky is the portfolio. Items such as current stock price, twelve month price range, trading volume, and beta make up this measure.
Earnings Variability	- risk related to the variability of the earnings of those companies owned in the manager's portfolio. The more variable are the companies' earnings, the more risky is the portfolio. Items such as variance of accounting earnings, variance of cash flow, occurrence of extraordinary accounting items, and the correlation of companies' earnings with U.S. corporate earnings make up this measure.
Earnings Success	- risk related to the extent to which the earnings of companies owned by the portfolio have been recently low or negative. The poorer have been companies' earnings, the riskier is the portfolio. Items including return on equity, earnings growth, book/price ratio, dividend cuts, and tax rate make up this measure.
Size	- risk related to the size and maturity of the companies held in the portfolio. The smaller and younger the companies, the more

risky is the portfolio. Items such as total assets, market capitalization, gross plant/book value ratio, and company age make up this measure.

Growth	- risk related to the growth orientation of companies owned by the manager. The more growth-oriented are the companies, the riskier is the portfolio. Items such as dividend yield, E/P ratio, and growth in total assets make up this measure.
Financial Leverage	- risk related to the extent to which companies held in the portfolio have used debt to finance their operations. The more leveraged are the companies, the riskier is the portfolio. Items such as debt/asset ratio, current asset/current liability ratio, and uncovered fixed charges make up this ratio.
Industry Sector Overweightings	- those sectors of the economy in which the manager has invested a significantly larger percentage of the portfolio than is represented by the stock market.
Industry Sector Underweightings	- those sectors of the economy in which the manager has invested a significantly smaller percentage of the portfolio than is represented by the stock market.
TUCS Median	- the median fund within a subsample of the TUCS universe restricted to aggressive equity managers. The TUCS universe is a universe of over 4000 portfolios custodied by over 30 major banks. For purposes of the SBI's analysis out of the universe have been selected a subsample which includes only those equity managers with risk characteristics (market volatility and diversification) similar to those of the SBI's managers. This provides a group of funds against which valid performance comparisons can be made.

BASIC RETIREMENT FUNDS

COMPOSITE EQUITY MANAGER DATA

3/31/84

SECTOR WEIGHTINGS

SECTORS	WEIGHTING EXTERNAL MANAGER COMPOSITE	WEIGHTING INDEX FUND	WEIGHTING ALL BASIC MANAGERS COMPOSITE	WEIGHTING WILSHIRE 5000
Capital Goods	5.9%	5.7%	5.8%	5.4%
Consumer Durables	5.2	3.8	4.2	3.9
Consumer Nondurables	22.3	23.8	23.4	23.6
Energy	6.3	14.8	12.6	16.1
Financial	14.2	9.8	11.0	9.8
Materials & Services	14.9	12.2	12.9	12.1
Technology	22.2	15.3	17.1	15.3
Transportation	5.5	3.0	3.6	2.9
Utilities	3.6	11.5	9.4	11.1
	------	------	------	------
	100.0%	100.0%	100.0%	100.0%

QUARTER-END PORTFOLIO STATISTICS

	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION Price Var.	Earn. Var.	Firm Success	Size	Growth	Fin. Lever.
Composite External Managers	283	86%	3.3%	13.1	1.22	.93	+	+	+	+	+	0
Index Fund Manager	1070	99%	4.3%	NA	1.10	.97	0	0	0	0	0	0
Composite All Basic Managers	1123	95%	4.0%	NA	1.14	.96	0	0	0	0	0	0

STAFF COMMENTS:

The stock market continued its series of disappointing quarterly performances in the first quarter. As measured by the Wilshire 5000, the equity market produced a -4.2% total rate of return over this period. Following the -0.9% and -1.1% total returns generated in the second and third quarters of 1983, respectively, the Wilshire 5000 has now lost 6.1%, on a total return basis, since its late June 1983 peak.

Actually, the reported -4.2% first quarter return masks a much weaker market environment. A considerable amount of merger activity took place in the Energy sector, which gave strong support to the broad market averages. Ex-Energy, the Wilshire 5000 produceded roughly a -7.0% return for the quarter. Again hard hit were the low yielding, high P/E, small capitalization stocks. In addition, the market's weakness spread to many of the larger capitalization, lower beta issues which had fared relatively well in previous quarters. The Consumer Durables, Technology, and Transportation sectors turned in extremely poor returns.

While the last three quarters all have been difficult periods for aggressive equity managers, the first quarter of 1984 was by far the worst. The Wilshire 5000 outperformed 60% of all equity managers, irrespective of investment approach. Compared to aggressive equity managers, the Wilshire 5000's dominance was even greater. The median aggressive manager, as represented by a subsample of the TUCS universe, earned a poor -6.2% total return in the first quarter.

In aggregate, the Basic Retirement Funds' active equity managers performed approximately in line with the TUCS subsample of aggressive managers. The Basic Funds' active equity managers generated a -5.8% aggregate first quarter total return. Beutel Goodman, with its low P/E orientation, and Hellman Jordan, with its defensive investment posture, were the top performing Basic Funds' managers. Managers with a heavy Technology exposure, such as Alliance, Loomis Sayles, Siebel and Trustee & Investors, experienced particularly weak returns. By far the most important factors negatively affecting all of the Basic Funds managers' returns, relative to the market, were their significant underweightings of the Energy sector. However, one should not be overly critical of their investment decisions regarding Energy as that sector's strong returns were, to a large extent, centered in a few stocks that were the target of takeover bids.

The aggregate stock portfolio of the Basic Funds' managers changed little over the quarter. Minor reductions in Consumer Durables and Nondurables, Technology, and Transportation holdings took place. Positions in the Financial sector were increased. The Energy weighting was doubled, but remained far below that of the market.

Construction of the index fund was completed in mid-February. Almost two billion dollars in total trading took place, as part of the index fund's implementation, at an extremely inexpensive cost. The index fund's return deviated from that of the Wilshire 5000 in January as its construction was not yet complete. In February and March, however, the fund tightly tracked the Wilshire 5000's return.

EXTERNAL EQUTIY MANAGER INFORMATION
March 31, 1984

FIRM NAME: Fred Alger Management

PORTFOLIO MANAGER(S): Portfolio decisions are made by the firm's analysts.

ACCOUNT HISTORY: Start-up 3/1/83 $50.0 million

INVESTMENT PHILOSOPHY: Fred Alger utilizes a microeconomic investment approach, emphasizing individual stock selection rather than industry selection and/or market timing. The firm focuses primarily on two types of companies: Those currently undergoing a positive life cycle change, and those creative companies whose products have high unit volume growth rates. Fred Alger expects these two types of companies to be characterized by substantially above-consensus earnings gains and thus, strong stock price performance. The firm's decision-making structure is relatively unique in that portfolio selections are made by the firm's highly motivated group of analysts. Except on rare occasions, the firm maintains a fully invested posture.

QUARTER-END PORTFOLIO STATISTICS

	QTR. PORT. T/O	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION					
								Price Var.	Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
Fred Alger Mgmt	19%	33	91%	2.8%	14.8	1.19	.86	+	+	+	0	0	0
SBI MGRS (Avg.)	25	41	83	3.1	13.5	1.25	.82	+	+	0	+	+	0
TUCS MEDIAN	NA	NA	92	NA	NA	1.27	.79	+	+	0	+	+	0

INDUSTRY SECTOR OVERWEIGHTINGS: Capital Goods, Materials & Services, Technology

INDUSTRY SECTOR UNDERWEIGHTINGS: Energy, Financial, Transportation, Utilities

PERFORMANCE

	LATEST QUARTER	LAST FOUR QUARTERS	SINCE INCEPTION
Fred Alger Mgmt	-6.9%	1.2%	4.0%
SBI MGR AGGREGATE	-5.8	-1.4	-0.1
TUCS MEDIAN	-6.2	1.9	NA
WILSHIRE 5000	-4.2	6.1	10.0
CPI (Inflation)	1.3	4.7	4.8

STAFF COMMENTS: In the first quarter Fred Alger underperformed both the equity market and samples of aggressive equity managers, as represented by the SBI aggregate manager pool and the median of the TUCS subsample. Portfolio returns were negatively affected by the firm's zero Energy weighting, by its overweighting of the Technology sector, by its overweighting of and selection within the Consumer Durables and Capital Goods sectors, and by its selection in the Financial sector. Performance was aided by selection within the Consumer Nondurables sector, but more importantly, by an uncharacteristically sizable market timing move. The firm raised cash to 21% in mid-January in response to a technical sell signal. Believing the worst of the market decline to be over by mid-February, cash reserves were recommitted to stocks. The market timing strategy was unusual for the firm, but it added over one percentage point to its first quarter return. Also during the quarter Fred Alger trimmed its Consumer Durables, Financial and Technology holdings while increasing its Consumer Nondurables position. The risk composition of the portfolio changed little, but did experience a slight rise in risk associated with earnings success. Over the last year the firm has underperformed the market, and the TUCS subsample median, but has

EXTERNAL EQUITY MANAGER INFORMATION
March 31, 1984

FIRM NAME: Alliance Capital Management (Minneapolis)

PORTFOLIO MANAGER(S): Alfred Harrison
John Koltes

ACCOUNT HISTORY: Start-up: 3/1/83 $50.0 million

INVESTMENT PHILOSOPHY: The Alliance Capital office system employs a macroeconomic investment approach. Investment strategy is developed on two levels. Macroeconomic considerations are analyzed on a centralized basis at the New York headquarters. Committees, composed of members from the regional and New York offices, develop economic forecasts, set asset allocation and industry weightings, and formulate an eligible list of attractive securities. Specific stock selection is conducted at the regional office level. The Minneapolis office tends to focus on companies with favorable ratios of P/E to forecasted earnings growth.

QUARTER-END PORTFOLIO STATISTICS

	QTR. PORT. T/O	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION Price Var.	Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
Alliance Capital (Mpls)	12%	32	92%	1.8%	15.4	1.38	.72	+	+	0	+	++	--
SBI MGRS (Avg.)	25	41	83	3.1	13.5	1.25	.82	+	+	0	+	+	0
TUCS MEDIAN	NA	NA	92	NA	NA	1.27	.79	+	+	0	+	+	0

INDUSTRY SECTOR OVERWEIGHTINGS: Consumer Durables, Consumer Nondurables, Technology, Transportation

INDUSTRY SECTOR UNDERWEIGHTINGS: Capital Goods, Energy, Financial, Materials & Services, Utilities

PERFORMANCE

	LATEST QUARTER	LAST FOUR QUARTERS	SINCE INCEPTION
Alliance Capital (Mpls)	-9.9%	-6.8%	-4.8%
SBI MGR AGGREGATE	-5.8	-1.4	-0.1
TUCS MEDIAN	-6.2	1.9	NA
WILSHIRE 5000	-4.2	6.1	10.0
CPI (Inflation)	1.3	4.7	4.8

STAFF COMMENTS: Alliance Capital experienced a very poor first quarter, underperforming both the equity market and samples of aggressive equity managers. A zero Energy weighting, an underweighting of and poor selection within the Consumer Nondurables and Technology sectors, and an overweighting of the Transportation sector were the primary contributors to Alliance's underperformance. The firm maintained its aggressive, high beta, high P/E, small capitalization risk orientation, tactics which have produced disappointing results over the last three quarters. Risk in the portfolio associated with earnings success and size rose slightly during the quarter. In terms of sector weightings, Alliance eliminated its small Materials & Services position and reduced its Transportation holdings. Consumer Nondurables were increased and a small Energy position was initiated. Over the last four quarters, Alliance has underperformed both the market and samples of aggressive equity managers.

EXTERNAL EQUITY MANAGER INFORMATION
March 31, 1984

FIRM NAME: Beutel Goodman Capital Management

PORTFOLIO MANAGER(S): Robert McFarland
Richard Andrews

ACCOUNT HISTORY: Start-up: 3/1/83 $50.0 million

INVESTMENT PHILOSOPHY: Beutel Goodman utilizes a modified, microeconomic investment style. The firm concentrates on stock selection but is sensitive to the impact of macroeconomic factors on the attractiveness of specific industries and companies. Stocks purchased by Beutel Goodman tend to be either companies whose stock prices are too low in comparison to their tangible book value (as estimated by Beutel Goodman analysts) or companies whose stocks possess low relative P/E's given their investment characteristics and forecasted earnings growth. The firm generally remains fully invested, with cash positions usually resulting from an immediate lack of attractive investment opportunities.

QUARTER-END PORTFOLIO STATISTICS

	QTR. PORT. T/O	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION Price Var.	Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
Beutel Goodman	12%	20	98%	3.8%	11.0	1.16	.79	+	+	+	++	0	++
SBI MGRS (Avg.)	25	41	83	3.1	13.5	1.25	.82	+	+	0	+	+	0
TUCS MEDIAN	NA	NA	92	NA	NA	1.27	.79	+	+	0	+	+	0

INDUSTRY SECTOR OVERWEIGHTINGS: Capital Goods, Financial, Materials & Services

INDUSTRY SECTOR UNDERWEIGHTINGS: Consumer Durables, Energy, Technology, Transportation, Utilities

PERFORMANCE

	LATEST QUARTER	LAST FOUR QUARTERS	SINCE INCEPTION
Beutel Goodman	-0.5%	13.3%	14.3%
SBI MGR AGGREGATE	-5.8	-1.4	-0.1
TUCS MEDIAN	-6.2	1.9	NA
WILSHIRE 5000	-4.2	6.1	10.0
CPI (Inflation)	1.3	4.7	4.8

STAFF COMMENTS: Beutel Goodman again produced an exceptional quarterly return despite maintaining its fully invested position. The firm's investment results exceeded those of the equity market and samples of other aggressive managers. The performances of Beutel's holdings in the Technology, Materials & Services, and Financial sectors were the primary contributors to the firm's superior returns. However, Beutel's zero weighting of the Energy sector hampered first quarter results. The risk composition of the portfolio remained virtually unchanged during the quarter. The firm eliminated its Transportation holdings and reduced positions in the Materials & Services and Consumer Nondurables sectors. Financial holdings were increased. For the latest four quarters, Beutel continues to rank as the SBI's top performing manager, with its cumulative returns far exceeding those of the equity market and samples of other aggressive managers.

EXTERNAL EQUITY MANAGER INFORMATION
March 31, 1984

FIRM NAME: Forstmann Leff

PORTFOLIO MANAGER(S): Richard Walton

ACCOUNT HISTORY: Start-up: 3/1/83 $50.0 million

INVESTMENT PHILOSOPHY: Forstmann Leff uses a macroeconomic investment approach, focusing on industry selection and market timing. The firm attempts to identify social and economic factors impacting the marketplace on a cyclical and secular basis. From this analysis the firm focuses on those sectors that will be positively and negatively affected by these forces. Stock selection is of secondary importance to the firm. Holdings tend to be concentrated in larger capitalization institutional favorites. Forstmann Leff is an active market timer willing to make sizable asset mix shifts at any point in the market cycle.

QUARTER-END PORTFOLIO STATISTICS

	QTR. PORT. T/O	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION: Price Var.	Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
Forstmann Leff	34%	38	71%	3.5%	12.4	1.17	.82	0	+	+	-	0	++
SBI MGRS (Avg.)	25	41	83	3.1	13.5	1.25	.82	+	+	0	+	+	0
TUCS MEDIAN	NA	NA	92	NA	NA	1.27	.79	+	+	0	+	+	0

INDUSTRY SECTOR OVERWEIGHTINGS: Capital Goods, Consumer Nondurables, Technology, Transportation

INDUSTRY SECTOR UNDERWEIGHTINGS: Energy, Financial, Utilities

PERFORMANCE

	LATEST QUARTER	LAST FOUR QUARTERS	SINCE INCEPTION
Forstmann Leff	-5.9%	1.8%	4.6%
SBI MGR AGGREGATE	-5.8	-1.4	-0.1
TUCS MEDIAN	-6.2	1.9	NA
WILSHIRE 5000	-4.2	6.1	10.0
CPI (Inflation)	1.3	4.7	4.8

STAFF COMMENTS: Forstmann-Leff underperformed the equity market in the first quarter, but roughly matched the returns produced by samples of aggressive equity managers. The primary factors behind the firm's poor performance were its underweighting of and selection within the Energy sector, its selection within the Technology and Consumer Nondurables sectors and its overweighting of the Consumer Durables sector. Performance was aided by the firm's asset mix decisions as the firm increased the size of its already above average cash reserves. Some sizable sector weighting shifts were made during the quarter. Consumer Durables holdings were cut back sharply and the firm's Energy position was eliminated. The Capital Goods, Consumer Nondurables, Financial, Materials & Services and Technology sectors were all increased. The risk composition of the portfolio likewise changed. Risks associated with market variability, earnings variability, size, growth and financial leverage were increased. Over the last four quarters Forstmann-Leff has underperformed the market, roughly matched the TUCS subsample median return, and exceeded the return on the SBI aggregate manager pool.

EXTERNAL EQUITY MANAGER INFORMATION
March 31, 1984

FIRM NAME: Hellman Jordan Management

PORTFOLIO MANAGER(S): Gerald Jordan
Edward Heubner
Martin Hale

ACCOUNT HISTORY: Start-up: 3/1/83 $50.0 million

INVESTMENT PHILOSOPHY: Hellman Jordan employs a modified, macroeconomic investment approach, focusing on long-term proprietary, high growth companies that it believes will be positively impacted by the firm's forecasted economic scenarios. The firm attempts to identify long-term trends in the economy and develop investment concepts related to these trends. Stock selection is considered to be of secondary importance to successful asset mix and sector rotation decisions. Holdings tend to be concentrated in large capitalization, high P/E, high growth, low yield issues, although this orientation may vary during a market cycle. While not an active market timer, the firm does make significant asset mix moves gradually over the course of a market cycle.

QUARTER-END PORTFOLIO STATISTICS

	QTR. PORT. T/O	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION Price Var.	Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
Hellman Jordan	30%	34	58%	4.9%	12.9	1.16	.87	+	++	+	--	0	+
SBI MGRS (Avg.)	25	41	83	3.1	13.5	1.25	.82	+	+	0	+	+	0
TUCS MEDIAN	NA	NA	92	NA	NA	1.27	.79	+	+	0	+	+	0

INDUSTRY SECTOR OVERWEIGHTINGS: Consumer Durables, Financial, Materials & Services, Transportation, Utilities

INDUSTRY SECTOR UNDERWEIGHTINGS: Capital Goods, Energy, Technology

PERFORMANCE

	LATEST QUARTER	LAST FOUR QUARTERS	SINCE INCEPTION
Hellman Jordan	-0.4%	1.4%	0.5%
SBI MGR AGGREGATE	-5.8	-1.4	-0.1
TUCS MEDIAN	-6.2	1.9	NA
WILSHIRE 5000	-4.2	6.1	10.0
CPI (Inflation)	1.3	4.7	4.8

STAFF COMMENTS: Hellman Jordan's defensive strategy was again the primary factor allowing it to outperform both the equity market and samples of aggressive equity managers for the second consecutive quarter. Cash reserves were reduced slightly, but with only a 58% equity allocation, the firm has maintained a much higher cash position than most other equity managers. The firm's equity-only portfolio also outperformed the market and other aggressive managers. Hellman's overweighting of and superior selection within the Utilities sector and its underweighting of and positive selection within the Technology sector were the major elements benefiting returns. However, performance was negatively impacted by the firm's underweighting of and selection within the Energy sector and by its selection within the Transportation sector. During the quarter the firm maintained its risk orientation toward larger capitalization, higher yield, lower beta, lower P/E stocks. Consumer Nondurable holdings were reduced, while Materials & Services and Transportation positions were increased. Hellman's strong relative performance over the last two quarters has boosted its twelve month numbers versus performance standards. The firm has now exceeded the return on the SBI aggregate manager pool, although it still trails the market and the TUCS subsample median.

EXTERNAL EQUITY MANAGER INFORMATION
March 31, 1984

FIRM NAME: IDS Advisory

PORTFOLIO MANAGER(S): Mitzi Malevich

ACCOUNT HISTORY: Start-up: 3/1/83 $50.0 million

INVESTMENT PHILOSOPHY: IDS employs a macroeconomic investment approach, focusing on industry selection and limited market timing. The firm attempts to identify industries that will be positively and negatively impacted by forecasted broad economic trends. The firm actively rotates among these affected industries. IDS refers to its asset management approach as the Dual Investment Objectives, which are composed of an annual income and total return targets. IDS believes that this approach provides a built-in purchase and sale discipline that reduces portfolio volatility and enhances total returns. The Dual Objectives force a more defensive posture as market prices rise (and yields fall) and allows for a more aggressive stance as prices fall (and yields rise). The firm tends to make moderate asset allocation moves gradually over a market cycle.

QUARTER-END PORTFOLIO STATISTICS

	QTR. PORT. T/O	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION					
								Price Var.	Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
IDS Advisory	41%	39	82%	4.3%	11.2	1.09	.80	0	+	--	-	--	0
SBI MGRS (Avg.)	25	41	83	3.1	13.5	1.25	.82	+	+	0	+	+	0
TUCS MEDIAN	NA	NA	86	NA	NA	1.19	.79	+	+	0	+	+	0

INDUSTRY SECTOR OVERWEIGHTINGS: Consumer Durables, Transportation, Utilities

INDUSTRY SECTOR UNDERWEIGHTINGS: Consumer Nondurables, Energy

PERFORMANCE

	LATEST QUARTER	LAST FOUR QUARTERS	SINCE INCEPTION
IDS Advisory	-7.2%	-0.8%	0.6%
SBI MGR AGGREGATE	-5.8	-1.4	-0.1
TUCS MEDIAN	-6.2	1.9	NA
WILSHIRE 5000	-4.2	6.1	10.0
CPI (Inflation)	1.3	4.7	4.8

STAFF COMMENTS: IDS underperformed both the equity market and samples of aggressive managers in the first quarter. An underweighting of and poor selection within the Energy sector was the primary factor in the firm's lackluster performance relative to the market. Also hampering portfolio returns were poor selection within the Materials & Services and Utilities sectors as well as an overweighting in Technology. Asset mix decisions helped performance as the firm increased its cash reserves during the quarter. Equity portfolio risk was reduced considerably as IDS lowered its exposure to virtually the entire spectrum of risk sources. In terms of sector weightings, positions in Consumer Nondurables, Materials & Services and Technology were trimmed. Consumer Durables, Energy, Transportation and Utilities holdings were increased. Over the last four quarters IDS has underperformed the equity market and the TUCS subsample median, but has exceeded the return on the SBI aggregate manager pool.

EXTERNAL EQUITY MANAGER INFORMATION
March 31, 1984

FIRM NAME: Investment Advisers

PORTFOLIO MANAGER(S): Kenneth Thorsen

ACCOUNT HISTORY: Start-up: 3/1/83 $50.0 million

INVESTMENT PHILOSOPHY: Investment Advisers utilizes a macroeconomic investment style, with a relatively equal emphasis placed on asset allocation, industry weighting, and stock selection. Through a committee structure, the firm attempts to identify the economy's position within the real economic and credit cycles. Based upon this analysis, Investment Advisers rotates its portfolios among industries and investment characteristics. Stock selection focuses on the recommendations of fundamental valuation and earnings momentum models. Holdings tend to be concentrated in large capitalization institutional favorites. The firm actively conducts market timing to take advantage of cyclical moves in the market.

QUARTER-END PORTFOLIO STATISTICS

	QTR. PORT. T/O	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION: Price Var.	Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
Investment Advisers	21%	40	92%	3.6%	11.1	1.17	.89	0	+	++	-	0	++
SBI MGRS (Avg.)	25	41	83	3.1	13.5	1.25	.82	+	+	0	+	+	0
TUCS MEDIAN	NA	NA	86	NA	NA	1.19	.79	+	+	0	+	+	0

INDUSTRY SECTOR OVERWEIGHTINGS: Consumer Durables, Consumer Nondurables, Financial, Transportation

INDUSTRY SECTOR UNDERWEIGHTINGS: Energy, Materials & Services, Utilities

PERFORMANCE

	LATEST QUARTER	LAST FOUR QUARTERS	SINCE INCEPTION
Investment Advisers	-4.8%	2.5%	4.0%
SBI MGR AGGREGATE	-5.8	-1.4	-0.1
TUCS MEDIAN	-6.2	1.9	NA
WILSHIRE 5000	-4.2	6.1	10.0
CPI (Inflation)	1.3	4.7	4.8

STAFF COMMENTS: Investment Advisers underperformed the equity market in the first quarter, but exceeded the returns produced by samples of aggressive equity managers. At the end of the quarter Investment Advisers was in the process of moving to a fully invested position. Equity portfolio returns were negatively impacted by the firm's underweighting of and selection in the Energy sector, by the overweighting of and selection in the Financial sector, and by poor selection in the Consumer Nondurables (in particular, health care) and Materials & Services sectors. The firm maintained its lower quality, larger capitalization risk orientation. Risk associated with market variability and financial leverage was increased during the quarter. Positions in Materials & Services, Transportation and Utilities were reduced, while holdings in the Consumer Nondurables and Energy sectors were increased. Over the last year, Investment Advisers has failed to meet the SBI's diversification targets. Over this period, while underperforming the equity market, Investment Advisers has outperformed samples of aggressive equity managers.

FIRM NAME: Loomis Sayles & Co.

PORTFOLIO MANAGER(S): Kenneth Heebner

ACCOUNT HISTORY: Start-up: 3/1/83 $50.0 million

INVESTMENT PHILOSOPHY: The Loomis organization employs a macroeconomic investment approach which focuses on asset allocation and industry weightings. Based upon its economic analysis, the firm identifies those industries and companies which are expected to experience significant cyclical or secular earnings gains. Loomis tends to own companies with high historical earnings growth, high ROE, and medium capitalization. The firm's aggressive funds' portfolio selections follow those of the parent organization, but the aggressive funds will take much more concentrated positions in industries and companies. The firm is not an active market timer, but it will make moderate asset mix moves gradually over the market cycle.

QUARTER-END PORTFOLIO STATISTICS

	QTR. PORT. T/O	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION: Price Var.	Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
Loomis Sayles	6%	22	93%	1.9%	13.2	1.37	.66	++	++	--	+	+	+
SBI MGRS (Avg.)	25	41	83	3.1	13.5	1.25	.82	+	+	0	+	+	0
TUCS MEDIAN	NA	NA	86	NA	NA	1.19	.79	+	+	0	+	+	0

INDUSTRY SECTOR OVERWEIGHTINGS: Capital Goods, Consumer Durables, Technology, Transportation

INDUSTRY SECTOR UNDERWEIGHTINGS: Consumer Nondurables, Energy, Financial, Utilities

PERFORMANCE

	LATEST QUARTER	LAST FOUR QUARTERS	SINCE INCEPTION
Loomis Sayles	-7.6%	-9.0%	-8.8%
SBI MGR AGGREGATE	-5.8	-1.4	-0.1
TUCS MEDIAN	-6.2	1.9	NA
WILSHIRE 5000	-4.2	6.1	10.0
CPI (Inflation)	1.3	4.7	4.8

STAFF COMMENTS: Loomis Sayles turned in another disappointing performance in the first quarter. Only the firm's underweighting of and positive selection within the Consumer Nondurables sector added value relative to the market's return. Far outweighing these positive portfolio decisions, however, were the negative impact of the firm's zero Energy weighting, its overweighting of and poor selection within the Technology sector and its overweighting of the Consumer Durables and Transportation sectors. In addition, Loomis chose to recommit cash to the stock market in January, a market timing move which detracted from portfolio returns. The Loomis equity portfolio changed little during the quarter as the firm chose to stay with strategies developed in previous quarters. Portfolio turnover was minimal. The risk composition was virtually unchanged. Technology holdings were increased while Materials & Services and Transportation positions were reduced. Loomis' performance over the last year has been far below that of the market and samples of aggressive managers.

EXTERNAL EQUITY MANAGER INFORMATION
March 31, 1984

FIRM NAME: Siebel Capital Management

PORTFOLIO MANAGER(S): Kenneth Siebel
Ronald Sloan
Walter Harrison

ACCOUNT HISTORY: Start-up: 3/1/83 $50.0 million

INVESTMENT PHILOSOPHY: Siebel employs a modified, microeconomic investment style, concentrating on stock selection, but also considering the effect of macroeconomic factors on the prospects for specific industries and companies. The firm tends to purchase stocks of two principle types of companies: First, seasoned growth companies devising new products or creating new markets for old products which will significantly raise earnings growth. Second, low P/E companies undergoing a potentially profitable redeployment of assets. Siebel is a moderate market timer, willing to alter asset mix at any point in the market cycle.

QUARTER-END PORTFOLIO STATISTICS

	QTR. PORT. T/O	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION					
								Price Var.	Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
Siebel Capital	28%	42	78%	3.1%	11.5	1.25	.88	+	0	+	+	+	0
SBI MGRS (Avg.)	25	41	83	3.1	13.5	1.25	.82	+	+	0	+	+	0
TUCS MEDIAN	NA	NA	86	NA	NA	1.19	.79	+	+	0	+	+	0

INDUSTRY SECTOR OVERWEIGHTINGS: Financial, Technology

INDUSTRY SECTOR UNDERWEIGHTINGS: Capital Goods, Consumer Durables, Energy, Utilities

PERFORMANCE

	LATEST QUARTER	LAST FOUR QUARTERS	SINCE INCEPTION
Siebel Capital	-7.6%	-3.7%	-0.6%
SBI MGR AGGREGATE	-5.8	-1.4	-0.1
TUCS MEDIAN	-6.2	1.9	NA
WILSHIRE 5000	-4.2	6.1	10.0
CPI (Inflation)	1.3	4.7	4.8

STAFF COMMENTS: Siebel's zero Energy weighting, its poor selection within the Materials & Services and Consumer Nondurables sectors and its overweighting of Financial stocks led to first quarter performance below that of the market and samples of aggressive equity managers. The firm increased its cash reserves over the quarter, which added modestly to performance. The equity portfolio's risk composition became more aggressive in terms of market volatility, earnings success, size and maturity, and growth. Siebel increased its Technology holdings and eliminated its Utilities position. For the latest year, the firm lags the performance of both the equity market and samples of aggressive equity managers. Siebel continues to fail to meet the SBI's diversification guidelines over this period.

EXTERNAL EQUITY MANAGER INFORMATION
March 31, 1984

FIRM NAME: Herbert R. Smith

PORTFOLIO MANAGER(S): Herbert Smith
David Bagbee

ACCOUNT HISTORY: Start-up: 3/1/83 $50.0 million

INVESTMENT PHILOSOPHY: Herbert R. Smith utilizes a modified, macroeconomic investment approach. The firm uses its economic and political outlook and its technical analysis of the marketplace to establish the asset mix for its portfolios. The firm is an aggressive market timer, willing to make sizable asset allocation moves at any point in the market cycle. Although asset allocation receives the firm's primary attention, the firm also emphasizes stock selection. Its stock selection is predicated upon both fundamental and technical analysis of individual securities. Herbert Smith searches for stocks with attractive relative P/E's and positive technical patterns.

QUARTER-END PORTFOLIO STATISTICS

	QTR. PORT. T/O	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION					
								Price Var.	Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
Herbert R. Smith	29%	68	84%	3.1%	13.9	1.22	.91	+	+	0	+	+	0
SBI MGRS (Avg.)	25	41	83	3.1	13.5	1.25	.82	+	+	0	+	+	0
TUCS MEDIAN	NA	NA	86	NA	NA	1.19	.79	+	+	0	+	+	0

INDUSTRY SECTOR OVERWEIGHTINGS: Energy, Financial, Transportation

INDUSTRY SECTOR UNDERWEIGHTINGS: Capital Goods, Consumer Durables, Consumer Nondurables, Utilities

PERFORMANCE

	LATEST QUARTER	LAST FOUR QUARTERS	SINCE INCEPTION
Herbert R. Smith	-4.7%	-11.7%	-11.3%
SBI MGR AGGREGATE	-5.8	-1.4	-0.1
TUCS MEDIAN	-6.2	1.9	NA
WILSHIRE 5000	-4.2	6.1	10.0
CPI (Inflation)	1.3	4.7	4.8

STAFF COMMENTS: Herbert R. Smith underperformed the equity market slightly in the first quarter, but outperformed samples of aggressive equity managers. The firm's performance was hampered by an underweighting of and selection within the Energy sector (although Smith began the quarter with the heaviest Energy weighting among the SBI's managers) and by an overweighting of the Technology and Transportation sectors. Performance was aided by an underweighting of and selection within the Financial sector. Smith significantly cut back the risk exposure of the equity portfolio during the quarter. Risk associated with market variability, earnings variability, size and maturity, and financial leverage was reduced. Sizable sector changes also took place as the firm diversified its holdings. Consumer Durables, Technology and Transportation positions were lowered sharply. Financial and Materials & Services weightings were raised. The Energy sector's position was dramatically increased, although the shift occurred too late to significantly affect first quarter results. For the year Smith's performance remains disappointing, trailing far behind the market and samples of aggressive managers.

EXTERNAL EQUITY MANAGER INFORMATION
March 31, 1984

FIRM NAME: Trustee & Investors

PORTFOLIO MANAGER(S): Mason Klinck
Richard Welch
Peter Schaedel

ACCOUNT HISTORY: Start-up: 3/1/83 $50.0 million

INVESTMENT PHILOSOPHY: Trustee & Investors employs a highly disciplined, microeconomic investment approach, emphasizing stock selection rather than industry selection and/or market timing. The firm analyzes potential purchase and sale candidates through the use of computerized data bases which screen such fundamental valuation parameters as price, earnings, and balance sheet and income statement data. Trustee & Investors searches for companies with unrecognized assets or earnings, or companies undergoing cyclical or operational turnarounds. The firm maintains a fully invested position at all times.

QUARTER-END PORTFOLIO STATISTICS

	QTR. PORT. T/O	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION Price Var.	Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
Trustee & Investors	25%	41	98%	3.3%	14.4	1.27	.89	++	+	++	0	+	++
SBI MGRS (Avg.)	25	41	83	3.1	13.5	1.25	.82	+	+	0	+	+	0
TUCS MEDIAN	NA	NA	92	NA	NA	1.27	.79	+	+	0	+	+	0

INDUSTRY SECTOR OVERWEIGHTINGS: Financial, Technology

INDUSTRY SECTOR UNDERWEIGHTINGS: Capital Goods, Consumer Durables, Consumer Nondurables, Transportation

PERFORMANCE

	LATEST QUARTER	LAST FOUR QUARTERS	SINCE INCEPTION
Trustee & Investors	-7.3%	-5.5%	-5.2%
SBI MGR AGGREGATE	-5.8	-1.4	-0.1
TUCS MEDIAN	-6.2	1.9	NA
WILSHIRE 5000	-4.2	6.1	10.0
CPI (Inflation)	1.3	4.7	4.8

STAFF COMMENTS: For a third consecutive quarter, Trustee & Investors' fully invested position and its overweighting of and poor stock selection within the Technology sector caused the firm to underperform both the equity market and samples of aggressive equity managers. Also hindering performance was the firm's selection within the Energy sector. During the quarter risk associated with earnings variability and earnings success increased while risk associated with size and maturity was reduced. Trustee's sector orientation has changed little since inception, as the firm holds to the belief that the long-term values identified at that time remain intact. Technology and Consumer Durables holdings were reduced slightly, while Energy positions were increased. Over the last four quarters, the firm has underperformed both the equity market and samples of other aggressive equity managers. In addition, Trustee continues to fail to meet the SBI's diversification targets.

Tab B

MINNESOTA STATE BOARD OF INVESTMENT

QUARTERLY INVESTMENT REVIEW

- POST RETIREMENT FUND

- SUPPLEMENTAL RETIREMENT FUND
  (Income Share Account)

- SUPPLEMENTAL RETIREMENT FUND
  (Growth Share Account)

- MINNESOTA VARIABLE ANNUITY FUND

- PERMANENT SCHOOL FUND

March 31, 1984

FIGURE 7

POST RETIREMENT FUND

ASSET MIX
MARKET VALUE

(End of Period Allocations)

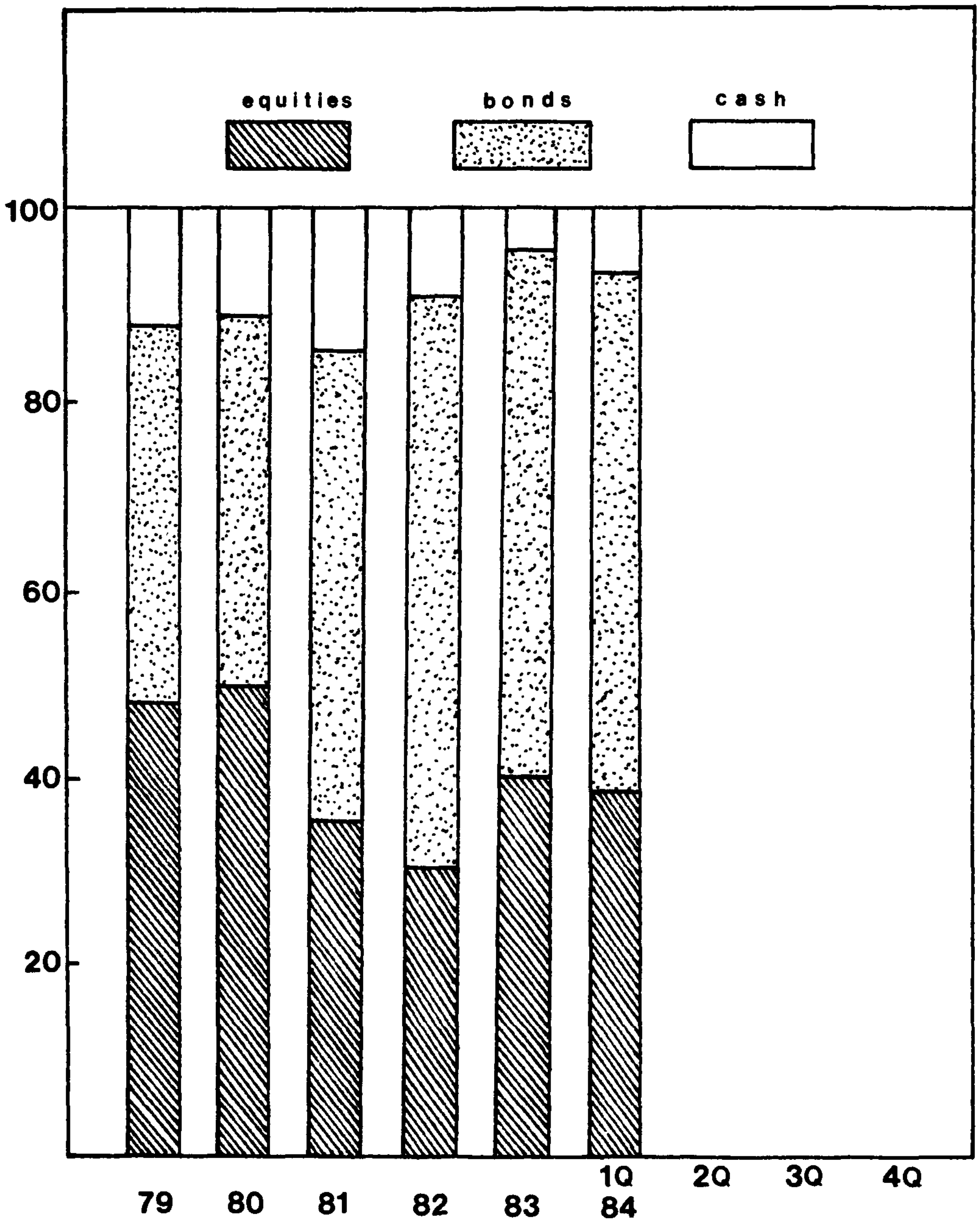


TABLE 7

POST RETIREMENT FUND

ASSET MIX
MARKET VALUE

(End of Period Allocations)

		Common Stocks		Bonds		Cash	
		$Million	Percent	$Million	Percent	$Million	Percent
1979		457.2	47.3	391.1	40.5	117.4	12.2
1980		568.4	48.9	453.0	39.0	140.3	12.1
1981		376.0	34.2	545.5	49.5	179.4	16.3
1982		465.0	30.5	919.9	60.4	138.1	9.1
1983		730.3	40.5	1,002.1	55.6	69.8	3.9
1984	1Q	691.7	38.2	1,009.0	55.6	112.8	6.2
	2Q						
	3Q						
	4Q						

FIGURE 8

SUPPLEMENTAL RETIREMENT FUND
(Income Share Account)

ASSET MIX
MARKET VALUE
(End of Period Allocations)

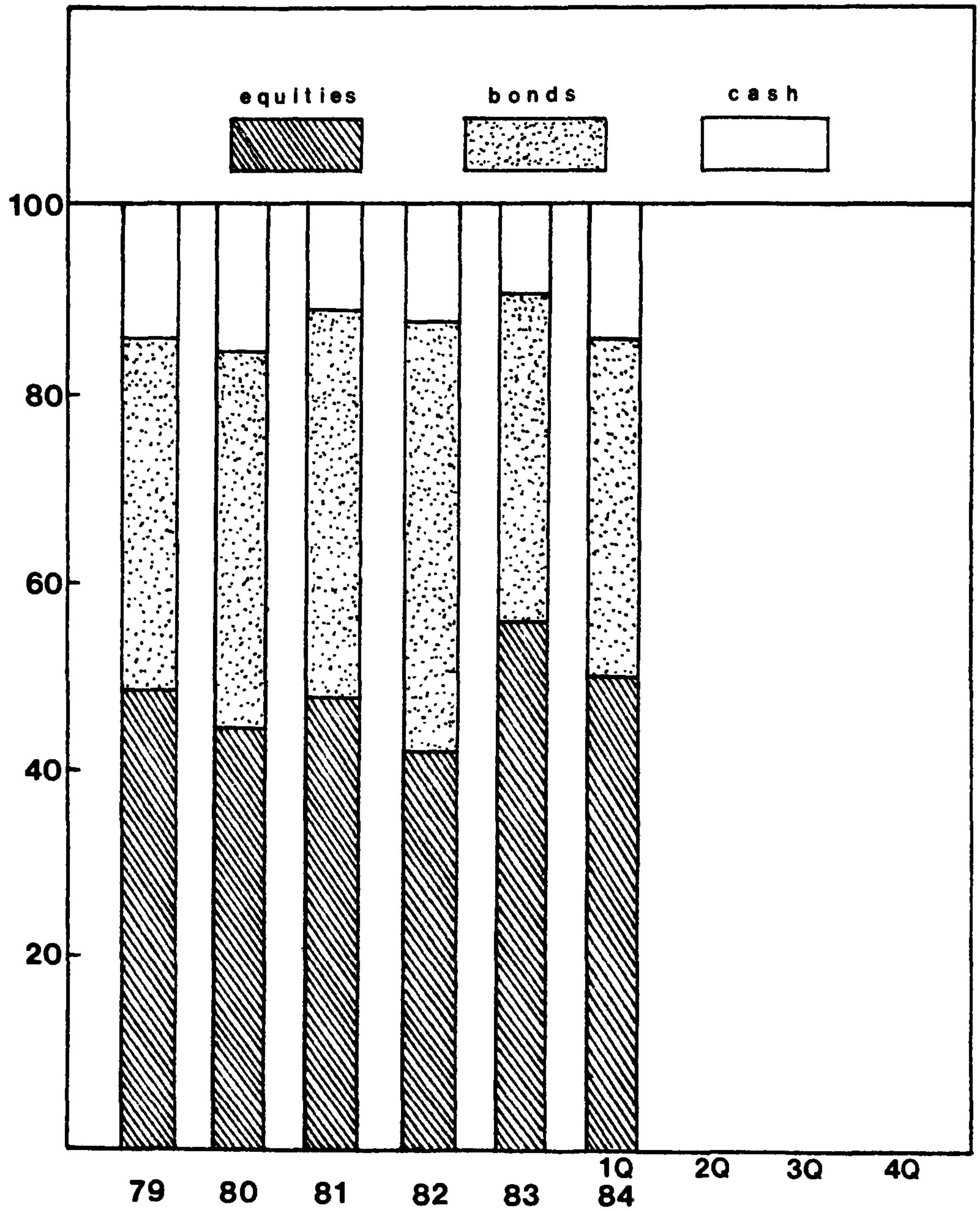


TABLE 8

SUPPLEMENTAL RETIREMENT FUND

(Income Share Account)

ASSET MIX
MARKET VALUE

(End of Period Allocations)

		Common Stocks		Bonds		Cash*	
		$Million	Percent	$Million	Percent	$Million	Percent
1979		30.3	48.6	23.5	37.3	8.8	14.1
1980		33.5	44.5	30.5	40.4	11.3	15.1
1981		35.9	47.1	33.4	43.8	7.0	9.1
1982		42.7	42.5	46.2	46.0	11.5	11.5
1983		63.5	56.2	39.6	35.0	9.9	8.8
1984	1Q	57.2	51.1	39.6	35.4	15.1	13.5
	2Q						
	3Q						
	4Q						

*Includes cash held by the external manager

FIGURE 9

SUPPLEMENTAL RETIREMENT FUND
(Growth Share Account)

ASSET MIX
MARKET VALUE

(End of Period Allocations)

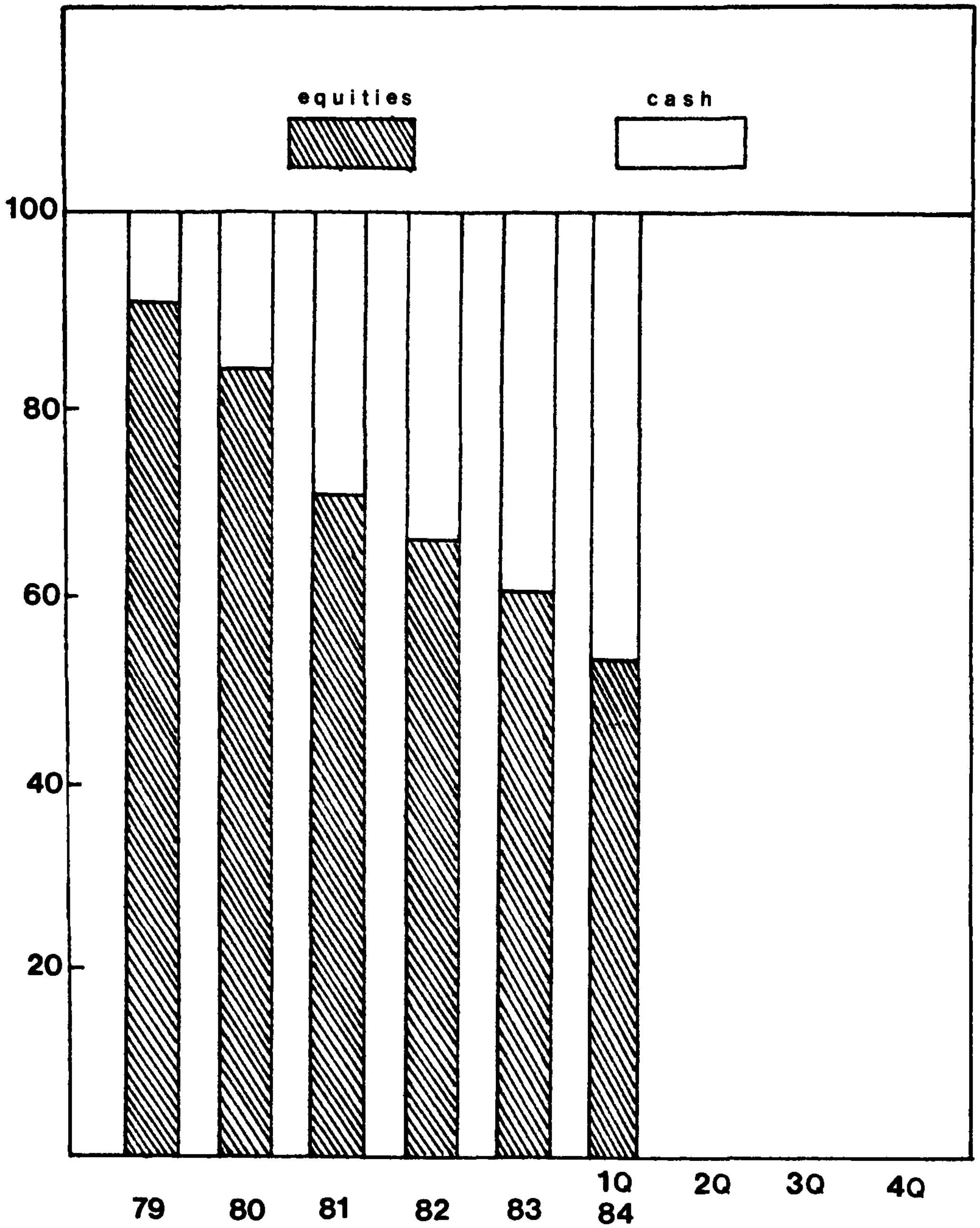


TABLE 9

SUPPLEMENTAL RETIREMENT FUND
(Growth Share Account)

ASSET MIX
MARKET VALUE

(End of Period Allocations)

		Common Stocks		Bonds		Cash*	
		$Million	Percent	$Million	Percent	$Million	Percent
1979		25.3	91.1	-----	-----	2.5	8.9
1980		29.8	83.0	-----	-----	6.1	17.0
1981		28.8	71.4	0.5	1.1	11.1	27.4
1982		32.5	65.6	-----	-----	17.0	34.4
1983		33.7	60.3	-----	-----	22.2	39.7
1984	1Q	29.7	54.2	-----	-----	25.1	45.8
	2Q						
	3Q						
	4Q						

*Includes cash held by the external manager

FIGURE 10

MINNESOTA VARIABLE ANNUITY FUND

ASSET MIX
MARKET VALUE

(End of Period Allocations)

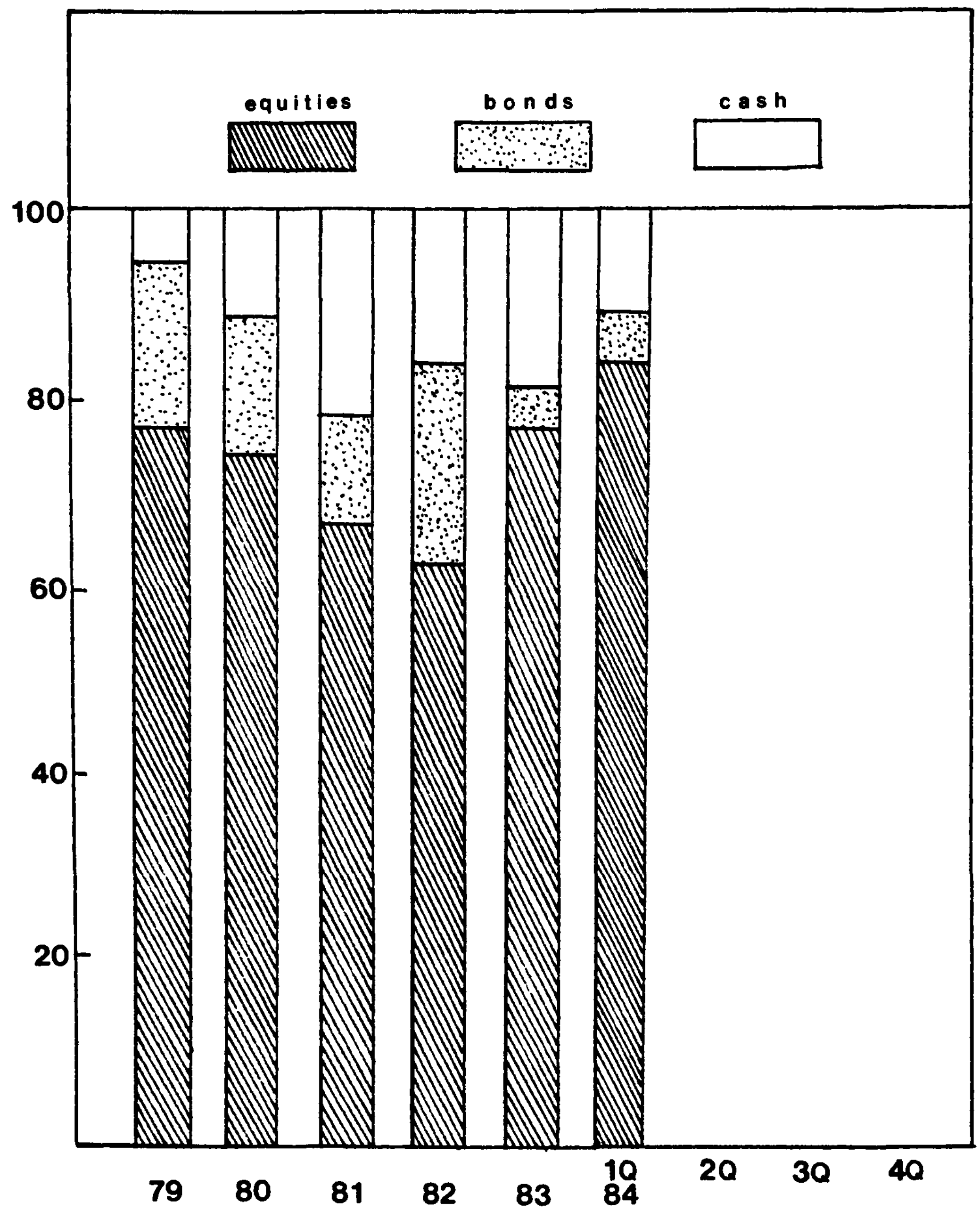


TABLE 10

MINNESOTA VARIABLE ANNUITY FUND

ASSET MIX
MARKET VALUE

(End of Period Allocations)

		Common Stocks		Bonds		Cash*	
		$Million	Percent	$Million	Percent	$Million	Percent
1979		48.6	77.1	11.1	17.7	3.3	5.2
1980		55.2	74.1	9.8	13.2	9.4	12.7
1981		49.6	64.8	9.7	12.7	17.2	22.5
1982		56.7	62.0	19.8	21.6	15.0	16.4
1983		78.9	77.0	5.0	4.8	18.7	18.2
1984	1Q	82.0	84.2	5.1	5.2	10.3	10.6
	2Q						
	3Q						
	4Q						

*Includes cash held by external managers

FIGURE 11

PERMANENT SCHOOL FUND

ASSET MIX
BOOK VALUE

(End of Period Allocations)

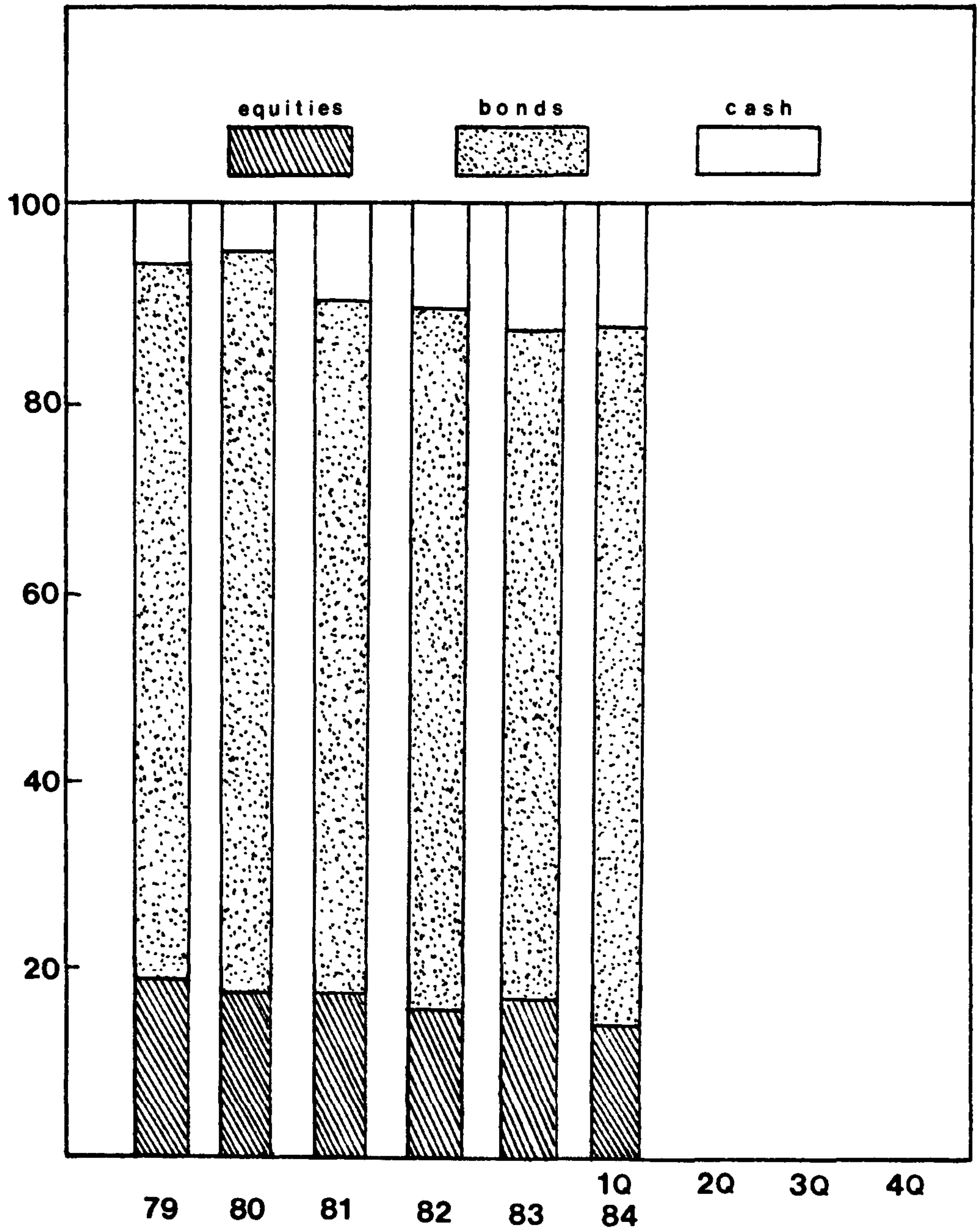


TABLE 11

PERMANENT SCHOOL FUND

ASSET MIX
BOOK VALUE

(End of Period Allocations)

		Common Stocks		Bonds		Cash	
		$Million	Percent	$Million	Percent	$Million	Percent
1979		50.9	18.7	207.1	76.0	14.3	5.3
1980		49.2	17.2	225.4	78.5	12.2	4.3
1981		52.5	17.4	221.2	73.4	27.8	9.2
1982		48.1	15.6	226.6	73.3	34.2	11.1
1983		53.4	16.6	229.5	71.3	38.8	12.1
1984	1Q	48.8	15.0	237.1	73.0	38.9	12.0
	2Q						
	3Q						
	4Q						

TABLE 12

EQUITY MANAGER PERFORMANCE

3/31/84

	Total Portfolio Returns		
	Last Quarter	Last 4 Quarters	Since Inception
Income Share Account			
BMI Capital	-14.3%	-16.3%	-15.6%
Internal Manager	- 3.9	3.5	4.9
Growth Share Account			
Waddell & Reed	- 2.1	12.2	12.3
Internal Manager	- 5.7	- 1.2	1.2
Variable Annuity Fund			
Norwest Bank	- 7.2	0.4	4.6
Lieber & Company	- 7.2	3.6	4.2
Internal Manager	- 5.8	- 0.9	1.9
Performance Standards			
Wilshire 5000	- 4.2	6.1	10.0
S&P 500	- 2.4	8.6	12.5
TUCS Median	- 6.2	1.9	NA
Inflation	1.3	4.7	4.8

EXTERNAL EQUITY MANAGER INFORMATION
March 31, 1984

FIRM NAME: BMI Capital

PORTFOLIO MANAGER(S): James Awad
Jerome Barone

ACCOUNT HISTORY: Start-up: 3/1/83 $10.0 million

INVESTMENT PHILOSOPHY: BMI employs a microeconomic investment approach, emphasizing individual stock selection rather than industry selection and/or market timing. The firm focuses on two types of companies: First, misperceived companies that are in the process of undergoing dynamic change that will cause them to produce materially higher earnings over the near-term, but whose prospects are as yet unrecognized by the market; Second, small-to-medium sized companies that exhibit the potential for rapid future earnings growth. This second type of company dominates the BMI portfolios. The firm tends to take sizable positions in a relatively few stocks. BMI generally maintains a fully invested posture, with any cash positions a result of a lack of attractive investment opportunities.

QUARTER-END PORTFOLIO STATISTICS

	QTR. PORT. T/O	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION: Price Var.	Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
BMI Capital	18%	24	95%	2.7%	17.1	1.32	.80	++	++	0	++	+	--
SBI MGRS (Avg.)	25	41	83	3.1	13.5	1.25	.82	+	+	0	+	+	0
TUCS MEDIAN	NA	NA	92	NA	NA	1.27	.79	+	+	0	+	+	0

INDUSTRY SECTOR OVERWEIGHTINGS: Consumer Durables, Consumer Nondurables, Materials & Services, Technology

INDUSTRY SECTOR UNDERWEIGHTINGS: Energy, Financial, Transportation, Utilities

PERFORMANCE

	LATEST QUARTER	LAST FOUR QUARTERS	SINCE INCEPTION
BMI Capital	-14.3%	-16.3%	-15.6%
SBI MGR AGGREGATE	- 5.8	- 1.4	- 0.1
TUCS MEDIAN	- 6.2	1.9	NA
WILSHIRE 5000	- 4.2	6.1	10.0
CPI (Inflation)	1.3	4.7	4.8

STAFF COMMENTS: BMI's performance in the first quarter was extremely poor relative to both the market and samples of other aggressive equity managers. Once again, the disappointing portfolio returns were attributable primarily to the firm's broadly-based poor stock selection, in particular, selection within and overweighting of the Technology sector. In addition, poor selection and overweighted positions in the Consumer Nondurables and Materials & Services sectors combined with the firm's zero Energy weighting severely hampered portfolio returns. Several significant shifts in sector weightings were made by the firm during the quarter. BMI increased its weighting of the Consumer Nondurables, while trimming its holdings in the Capital Goods sector and closing out its position in the Financial sector. The risk composition of the portfolio changed little. Concomitant to a slight increase in the risk associated with market variability was a decrease in risk associated with earning's success and financial leverage. Portfolio yield rose and P/E declined. For the last four quarters, BMI's performance has consistently trailed not only the equity market but also the TUCS subsample median and SBI aggregate manager pool by

EXTERNAL EQUITY MANAGER INFORMATION
March 31, 1984

FIRM NAME: Lieber & Co.

PORTFOLIO MANAGER(S): Nola Falcone
Stephen Lieber

ACCOUNT HISTORY: Start-up: 3/1/83 $10.0 million
Contribution: 1/1/84 $15.0 million

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

QUARTER-END PORTFOLIO STATISTICS

								PORTFOLIO RISK ORIENTATION					
	QTR. PORT. T/O	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	Price Var.	Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
Lieber & Co.	0%	115	93%	2.6%	12.0	1.37	.85	+	0	--	++	+	-
SBI MGRS (Avg.)	25	41	83	3.1	13.5	1.25	.82	+	+	0	+	+	0
TUCS MEDIAN	NA	NA	92	NA	NA	1.27	.79	+	+	0	+	+	0

INDUSTRY SECTOR OVERWEIGHTINGS: Consumer Durables, Consumer Nondurables, Financial, Materials & Services

INDUSTRY SECTOR UNDERWEIGHTINGS: Capital Goods, Transportation, Energy, Utilities

PERFORMANCE

	LATEST QUARTER	LAST FOUR QUARTERS	SINCE INCEPTION
Lieber & Co.	-7.2%	3.6%	4.2%
SBI MGR AGGREGATE	-5.8	-1.4	-0.1
TUCS MEDIAN	-6.2	1.9	NA
WILSHIRE 5000	-4.2	6.1	10.0
CPI (Inflation)	1.3	4.7	4.8

STAFF COMMENTS: Lieber made few major adjustments to its portfolio during the first quarter. After receiving a $15 million contribution on January 1, Lieber sold the majority of the contributed stocks. Whereas Lieber experienced positive returns during fourth quarter 1983 as a result of broad-based successful stock selection, poor selection in the first quarter contributed to the firm's underperformance of the equity market and samples of other aggressive managers. In particular, poor stock selection and, to a lesser degree, overweighting of the Consumer Nondurables and Materials & Services sectors were the major negative factors influencing portfolio returns. Lieber's performance relative to the market also suffered from the firm's underweighting of the Energy sector. The risk composition of the portfolio has remained virtually unchanged since inception. However, Lieber utilized the proceeds from contributed stock sales to make several sizable sector moves, increasing its positions in the Technology, Energy, and Financial sectors. Although Lieber's weak first quarter performance has caused the firm's four quarter returns to trail those of the equity market, it has continued to outperform both the TUCS subsample median and the aggregate SBI manager pool.

EXTERNAL EQUITY MANAGER INFORMATION
March 31, 1984

FIRM NAME: Norwest Bank, Minneapolis

PORTFOLIO MANAGER(S): Robert Mersky
Paul Von Kuster

ACCOUNT HISTORY: Start-up: 3/1/83 $10.0 million

INVESTMENT PHILOSOPHY: Norwest utilizes a modified, microeconmic investment style. The bank emphasizes stock selection in its aggressively managed funds, although asset mix is set for all bank funds by a strategy committee. The aggressive funds tend to focus on industries and companies experiencing a growing share of GNP, developing new, high growth products, and which are positively influenced by cyclical economic change. This approach leads to a concentration in small capitalization, emerging growth, and technology companies. The bank is a moderate market timer, willing to shift asset mix at any point in the market cycle.

QUARTER-END PORTFOLIO STATISTICS

	QTR. PORT. T/O	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION: Price Var.	Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
Norwest Bank	66%	47	87%	1.7%	19.2	1.28	.82	++	++	--	++	++	-
SBI MGRS (Avg.)	25	41	83	3.1	13.5	1.25	.82	+	+	0	+	+	0
TUCS MEDIAN	NA	NA	92	NA	NA	1.27	.79	+	+	0	+	+	0

INDUSTRY SECTOR OVERWEIGHTINGS: Technology, Transportation

INDUSTRY SECTOR UNDERWEIGHTINGS: Capital Goods, Energy, Financial, Materials & Services, Utilities

PERFORMANCE

	LATEST QUARTER	LAST FOUR QUARTERS	SINCE INCEPTION
Norwest Bank	-7.2%	0.4%	4.6%
SBI MGR AGGREGATE	-5.8	-1.4	-0.1
TUCS MEDIAN	-6.2	1.9	NA
WILSHIRE 5000	-4.2	6.1	10.0
CPI (Inflation)	1.3	4.7	4.8

STAFF COMMENTS: For the second consecutive quarter, Norwest's poor selection in and sizable overweighting of the Technology sector resulted in the bank's underperformance relative to the equity market and samples of other aggressive managers. In addition, although Norwest increased its Energy position significantly, the bank's continued underweighting of that sector relative to the market hindered performance. Further, although the bank added value to the portfolio through its weighting of a number of the remaining industry sectors, the positive returns were largely offset by poor stock selection in those sectors. During the quarter, Norwest decreased its commitment to the Technology sector to just under half the equity portfolio's market value. The bank also trimmed its utility holdings, while increasing to an overweighted position in the Transportation sector. Portfolio performance was hampered by Norwest's recommitment to equities as the bank rebuilt its position in emerging growth stocks. Risks associated with market and earning's variability, size and growth were increased. Although its poor returns over the last three quarters have brought Norwest's four quarter performance below that of the market and the TUCS subsample median, the bank has continued to outperform the aggregate SBI manager pool.

EXTERNAL EQUITY MANAGER INFORMATION
March 31, 1984

FIRM NAME: Waddell & Reed Asset Management

PORTFOLIO MANAGER(S): Henry Herrmann

ACCOUNT HISTORY: Start-up: 3/1/83 $10.0 million
Contribution: 1/1/84 $15.0 million

INVESTMENT PHILOSOPHY: Waddell & Reed, in its aggressively managed funds, employs a microeconomic investment approach. While asset mix decisions are made for all Waddell & Reed funds at a committee level, the aggressive funds focus on stock selection almost entirely. Holdings are concentrated in small capitalization stocks with an orientation toward cyclical companies and immature growth companies, particularly technology companies. The Waddell & Reed organization is an active market timer willing to make significant asset mix shifts at any point in the market cycle.

QUARTER-END PORTFOLIO STATISTICS

	QTR. PORT. T/O	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION Price Var.	Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
Waddell & Reed	35%	21	31%	2.6%	12.6	1.31	.74	+	++	+	+	0	++
SBI MGRS (Avg.)	25	41	83	3.1	13.5	1.25	.82	+	+	0	+	+	0
TUCS MEDIAN	NA	NA	92	NA	NA	1.27	.79	+	+	0	+	+	0

INDUSTRY SECTOR OVERWEIGHTINGS: Consumer Durables, Financial, Transportation

INDUSTRY SECTOR UNDERWEIGHTINGS: Energy, Materials & Services, Utilities

PERFORMANCE

	LATEST QUARTER	LAST FOUR QUARTERS	SINCE INCEPTION
Waddell & Reed	-2.1%	12.2%	12.3%
SBI MGR AGGREGATE	-5.8	- 1.4	- 0.1
TUCS MEDIAN	-6.2	1.9	NA
WILSHIRE 5000	-4.2	6.1	10.0
CPI (Inflation)	1.3	4.7	4.8

STAFF COMMENTS: Waddell & Reed received a $15 million contribution-in-kind from the SBI on January 1. The firm initially delayed in liquidating the stock transfer, but by February it had resumed the defensive posture that it had assumed during fourth quarter 1984, with cash reserves representing 69% of the portfolio. Its bearish stance served Waddell & Reed well in first quarter 1984. The firm outperformed both samples of other aggressive managers and the equity market itself based entirely on its successful market timing. The firm's equity-only portfolio performed poorly. Equity returns were hampered by both the selection in and overweighting of the Financial sector. The firm's zero Energy position and overweighted position in Consumer Durables also hindered performance. Sizable shifts in sector emphasis occurred during the quarter as the firm reduced its positions in the Capital Goods, Financial, and Technology sectors and reinstituted positions in the Consumer Nondurables and Transportation sectors. The risk composition of the portfolio changed as well. Risk associated with earning's success, and financial leverage increased, while that associated with growth, market variability and size decreased. Waddell and Reed continues to rank one of the SBI's top performing equity managers, outperforming the equity market and other aggressive managers by considerable margins over the last year.

TABLE 13

MINNESOTA STATE BOARD OF INVESTMENT PERFORMANCE REVIEW

YEAR ENDING—MARCH 31, 1984

PERFORMANCE GOALS YEAR ENDING March 31, 1984			FUND PERFORMANCE FOR YEAR ENDING March 31, 1984: POST	INCOME*	GROWTH*	VARIABLE*	PERM. SCHOOL
STOCKS	- Wilshire 5000 - S & P 500	6.1% 8.6	3.7%	1.3%	-1.0%	-0.2%	6.6%
BONDS	- Merrill Lynch	5.2	7.0	7.3	-	6.8	5.0
TOTAL FUNDS							
POST	- 40% stock/60% bond:	5.9	5.9				
INCOME	- 50% stock/50% bond:	5.9		4.5			
GROWTH	-100% stock/0% bond:	6.1			5.3		
VARIABLE	-100% stock/0% bond:	6.1				1.9	
P. SCHOOL	- 20% stock/80% bond:	5.7					5.8
INCOME							
Actuarial requirement		5.0	9.0	7.8			8.7
Post benefit increase at least 50% of inflation rate: (Effective January 1985)		2.4	7.0				

*Includes performance of both internal and external managers.

APPENDIX

This appendix contains historical portfolio data pertaining to the SBI's external equity managers from the inception of the SBI's accounts with these managers. Any revisions of portfolio data reported in previous quarterly reviews are contained in this appendix.

TABLE A1

EXTERNAL EQUITY MANAGERS
SECTOR WEIGHTING HISTORICAL PROFILE

MANAGER NAME	DATE	EQUITY MARKET VALUE	EQUITY SECTOR WEIGHTS: CAP GDS	CONS DUR	CONS NDUR	ENER	FINL	MAT & SERV	TECH	TRAN	UTIL
AVG. EXT. MANAGERS	3/31/84	---	5.2	7.6	24.0	5.7	13.2	13.3	22.7	5.1	3.1
AVG. EXT. MANAGERS	12/31/83	---	6.0	6.4	23.5	3.0	12.2	15.1	24.0	6.3	3.5
AVG. EXT. MANAGERS	9/30/83	---	3.6	5.9	28.9	3.1	12.8	13.5	24.2	5.7	2.4
AVG. EXT. MANAGERS	6/30/83	---	3.7	6.1	30.2	3.6	15.1	11.7	21.2	5.8	2.5
AVG. EXT. MANAGERS	3/31/83	---	2.8	4.3	30.6	3.6	15.2	11.4	23.5	4.9	3.8
FRED ALGER	3/31/84	47,128,928	13.3	4.3	28.8	---	3.4	18.3	31.9	---	---
FRED ALGER	12/31/83	52,946,832	13.2	6.6	21.7	---	6.4	18.1	33.9	---	---
FRED ALGER	9/30/83	51,111,552	5.7	6.8	26.9	---	8.4	23.3	29.0	---	---
FRED ALGER	6/30/83	54,488,616	4.9	8.5	35.0	3.5	8.2	18.0	21.9	---	---
FRED ALGER	3/31/83	45,570,864	1.4	7.5	37.0	---	9.0	22.0	23.1	---	---
ALLIANCE CAPITAL	3/31/84	43,569,520	---	8.3	48.0	2.7	5.6	---	25.1	10.4	---
ALLIANCE CAPITAL	12/31/83	48,360,784	0.8	7.5	45.3	---	6.8	2.4	24.2	13.1	---
ALLIANCE CAPITAL	9/30/83	46,238,376	2.8	5.4	45.9	---	9.2	---	24.6	12.1	---
ALLIANCE CAPITAL	6/30/83	52,292,656	2.2	4.7	42.3	---	8.2	7.5	22.7	12.4	---
ALLIANCE CAPITAL	3/31/83	42,650,464	---	3.5	49.9	2.7	6.7	3.6	23.5	10.0	---
BEUTEL GOODMAN	3/31/84	55,989,688	8.9	---	18.6	---	27.2	39.3	6.0	---	---
BEUTEL GOODMAN	12/31/83	54,340,704	9.8	---	20.2	---	11.2	46.2	5.4	7.2	---
BEUTEL GOODMAN	9/30/83	49,526,848	8.8	---	22.0	---	13.1	43.5	4.7	8.0	---
BEUTEL GOODMAN	6/30/83	37,718,496	11.0	---	18.5	---	17.4	42.4	---	10.6	---
BEUTEL GOODMAN	3/31/83	17,272,500	---	---	15.7	---	15.4	52.1	---	16.8	---
BMI CAPITAL	3/31/84	7,916,687	4.3	12.7	39.3	---	---	17.8	25.9	---	---
BMI CAPITAL	12/31/83	9,624,918	7.4	12.1	28.4	---	6.6	19.0	26.4	---	---
BMI CAPITAL	9/30/83	10,288,474	7.6	11.2	37.1	---	6.4	18.6	19.2	---	---
BMI CAPITAL	6/30/83	10,841,948	7.9	12.7	44.2	---	9.8	15.9	9.5	---	---
BMI CAPITAL	3/31/83	5,378,900	10.6	8.1	35.3	---	12.3	22.0	11.8	---	---
FORSTMANN-LEFF	3/31/84	36,876,864	7.6	3.0	37.0	---	6.0	14.5	23.1	6.0	2.8
FORSTMANN-LEFF	12/31/83	44,803,264	5.7	13.6	35.5	5.8	3.9	8.4	18.7	5.3	3.1
FORSTMANN-LEFF	9/30/83	45,402,552	---	14.6	52.3	3.3	4.5	5.3	15.1	4.8	---
FORSTMANN-LEFF	6/30/83	51,882,504	---	12.7	61.4	---	2.7	7.2	11.7	4.3	---
FORSTMANN-LEFF	3/31/83	43,864,960	2.1	4.7	50.7	5.9	4.7	10.3	17.4	4.2	---
HELLMAN JORDAN	3/31/84	29,063,200	---	12.4	19.5	6.4	15.7	15.7	4.3	8.8	17.2
HELLMAN JORDAN	12/31/83	25,662,876	---	14.8	30.0	6.0	16.5	10.4	2.1	3.0	17.2
HELLMAN JORDAN	9/30/83	21,951,440	---	15.0	47.4	---	19.5	3.5	3.3	4.7	6.5
HELLMAN JORDAN	6/30/83	29,343,636	---	3.8	23.3	---	35.9	---	24.8	---	12.2
HELLMAN JORDAN	3/31/83	25,126,680	---	---	15.1	---	33.4	4.6	27.2	---	19.7

EQUITY SECTOR WEIGHTS

MANAGER NAME	DATE	EQUITY MARKET VALUE	CAP GDS	CONS DUR	CONS NDUR	ENER	FINL	MAT & SERV	TECH	TRAN	UTIL
INVESTMENT ADVISERS	3/31/84	47,921,056	5.8	5.4	30.2	8.9	21.5	7.7	15.6	3.9	1.0
INVESTMENT ADVISERS	12/31/83	48,344,680	6.3	6.3	25.0	5.8	21.9	9.7	15.7	6.1	3.2
INVESTMENT ADVISERS	9/30/83	47,976,760	5.8	6.2	30.6	6.0	13.4	9.1	18.3	7.1	3.5
INVESTMENT ADVISERS	6/30/83	42,875,752	6.5	6.6	24.7	11.7	9.7	9.8	16.9	10.3	3.9
INVESTMENT ADVISERS	3/31/83	23,922,748	6.5	9.1	26.0	10.2	7.3	15.0	17.7	5.0	3.2
IDS ADVISORY	3/31/84	40,894,624	4.8	10.1	12.4	9.6	8.7	14.3	15.2	9.5	15.4
IDS ADVISORY	12/31/83	47,862,576	4.9	7.6	18.0	---	8.8	19.0	26.1	6.0	9.6
IDS ADVISORY	9/30/83	46,464,744	---	4.1	24.3	3.4	6.0	19.7	33.8	5.4	3.4
IDS ADVISORY	6/30/83	53,971,480	4.2	12.0	30.5	4.5	4.2	6.7	33.7	4.3	---
IDS ADVISORY	3/31/83	44,555,680	5.4	9.2	30.7	5.4	9.8	6.4	26.3	---	6.6
LIEBER & COMPANY	3/31/84	22,251,096	3.6	6.4	32.3	4.9	17.3	16.8	16.3	1.8	0.7
LIEBER & COMPANY	12/31/83	10,960,476	7.7	4.5	33.7	3.5	16.7	22.3	6.1	5.6	---
LIEBER & COMPANY	9/30/83	10,577,812	6.5	3.5	31.0	4.7	18.0	25.4	5.4	5.5	---
LIEBER & COMPANY	6/30/83	10,257,314	6.4	5.0	33.3	5.0	16.5	23.9	3.3	6.6	---
LIEBER & COMPANY	3/31/83	4,551,125	8.3	---	23.1	3.9	11.6	41.0	5.6	6.4	---
LOOMIS SAYLES	3/31/84	42,183,728	11.2	15.1	3.4	---	5.1	12.8	38.2	14.3	---
LOOMIS SAYLES	12/31/83	39,788,736	11.6	16.1	3.3	---	5.2	14.0	33.5	16.4	---
LOOMIS SAYLES	9/30/83	47,410,504	3.5	14.5	13.3	---	10.6	5.2	44.9	8.0	---
LOOMIS SAYLES	6/30/83	53,405,096	3.1	9.0	12.1	---	34.6	10.8	20.4	9.9	---
LOOMIS SAYLES	3/31/83	49,190,984	---	4.8	19.8	---	25.4	9.1	30.7	10.1	---
NORWEST BANK MPLS	3/31/84	9,028,902	3.6	4.4	23.1	8.5	1.1	7.2	45.5	5.4	1.1
NORWEST BANK MPLS	12/31/83	9,345,248	2.5	1.6	25.5	1.2	3.2	6.0	51.8	1.7	6.6
NORWEST BANK MPLS	9/30/83	10,094,298	1.2	---	31.6	3.3	2.0	8.4	46.1	1.4	5.8
NORWEST BANK MPLS	6/30/83	9,639,524	4.8	---	36.4	5.2	8.9	4.8	33.0	2.9	3.3
NORWEST BANK MPLS	3/31/83	8,671,374	7.0	1.8	47.1	4.2	13.5	---	20.1	6.3	---
SIEBEL CAPITAL	3/31/84	38,370,896	3.6	1.3	26.4	---	25.8	11.4	29.2	2.4	---
SIEBEL CAPITAL	12/31/83	48,239,280	3.6	1.7	27.9	---	24.0	11.7	24.6	2.6	3.8
SIEBEL CAPITAL	9/30/83	44,640,344	3.5	---	32.7	2.8	25.1	7.2	19.3	5.0	4.4
SIEBEL CAPITAL	6/30/83	50,576,296	2.6	---	36.4	1.7	22.6	6.2	20.1	5.4	5.0
SIEBEL CAPITAL	3/31/83	41,487,976	4.6	---	28.8	---	18.5	5.3	30.0	6.7	6.2
HERBERT R. SMITH	3/31/84	36,866,552	3.3	0.2	10.1	28.8	16.9	12.8	18.6	9.1	---
HERBERT R. SMITH	12/31/83	34,931,904	4.4	0.4	15.4	10.6	14.5	8.8	30.2	15.8	---
HERBERT R. SMITH	9/30/83	29,070,740	2.2	0.6	12.7	9.4	22.1	15.6	23.2	9.4	4.8
HERBERT R. SMITH	6/30/83	33,136,424	2.0	0.6	15.5	5.2	17.6	13.9	29.4	7.3	6.7
HERBERT R. SMITH	3/31/83	9,811,300	4.8	---	32.6	---	20.5	---	34.7	7.4	---

EQUITY SECTOR WEIGHTS

MANAGER NAME	DATE	EQUITY MARKET VALUE	CAP GDS	CONS DUR	CONS NDUR	ENER	FINL	MAT & SERV	TECH	TRAN	UTIL
TRUSTEE & INVESTORS	3/31/84	46,276,688	2.5	---	10.0	16.0	17.3	10.1	35.3	---	8.7
TRUSTEE & INVESTORS	12/31/83	50,681,248	2.4	---	12.9	9.3	16.7	9.5	41.4	---	7.7
TRUSTEE & INVESTORS	9/30/83	51,946,664	2.5	---	15.6	10.5	17.1	8.8	38.4	---	7.1
TURSTEE & INVESTORS	6/30/83	56,633,728	2.9	3.2	17.0	11.5	18.9	10.3	29.7	---	6.5
TRUSTEE & INVESTORS	3/31/83	35,630,696	3.6	---	12.2	14.4	24.1	10.2	24.1	---	11.4
WADDELL & REED	3/31/84	7,868,837	5.2	32.1	21.4	---	25.0	---	11.7	4.5	---
WADDELL & REED	12/31/83	3,532,563	12.8	32.4	---	---	33.9	---	20.9	---	---
WADDELL & REED	9/30/83	8,845,024	5.8	13.4	22.5	---	5.1	---	38.2	15.0	---
WADDELL & REED	6/30/83	9,396,500	5.7	13.2	29.2	3.3	5.0	---	31.1	12.5	---
WADDELL & REED	3/31/83	7,912,425	5.5	13.8	15.5	2.5	29.1	---	27.2	6.4	---
WILSHIRE 5000	3/31/84	---	5.4	3.9	23.6	16.1	9.8	12.1	15.3	2.9	11.1
WILSHIRE 5000	12/31/83	---	5.5	4.2	24.0	14.5	9.5	12.2	16.3	2.8	11.1
WILSHIRE 5000	9/30/83	---	5.2	4.0	24.3	14.8	9.4	11.8	16.3	2.9	11.3
WILSHIRE 5000	6/30/83	---	5.3	3.9	24.9	15.0	9.3	11.6	16.3	2.9	10.9
WILSHIRE 5000	3/31/83	---	5.1	3.5	25.2	14.6	9.8	12.3	14.9	2.9	11.8

TABLE A2

EXTERNAL EQUITY MANAGERS
PORTFOLIO STATISTICS HISTORICAL SUMMARY

MANAGER NAME	DATE	QTR. PORT. T/O	# OF STKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVRSFN	PORTFOLIO RISK ORIENTATION: Price Var.	Earn. Var.	Earn. Succ.	Size	Growth	Fin. Lever.
AVG. EXT. MANAGERS	3/31/84	25	41	83	3.05	13.5	1.25	0.82	+	+	0	+	+	0
AVG. EXT. MANAGERS	12/31/83	36	34	84	2.79	16.2	1.23	0.80	+	+	0	+	0	0
AVG. EXT. MANAGERS	9/30/83	32	32	85	2.48	19.4	1.29	0.82	+	+	0	+	+	0
AVG. EXT. MANAGERS	6/30/83	27	32	85	2.44	16.7	1.29	0.81	+	0	-	0	+	+
AVG. EXT. MANAGERS	3/31/83	NA	26	67	2.78	15.0	1.26	0.83	+	+	-	0	+	0
FRED ALGER	3/31/84	19	33	91	2.82	14.8	1.19	0.86	+	+	+	0	0	0
FRED ALGER	12/31/83	23	32	95	2.64	15.9	1.18	0.88	+	++	-	0	0	0
FRED ALGER	9/30/83	27	32	91	2.63	17.5	1.24	0.88	+	++	0	0	0	0
FRED ALGER	6/30/83	8	35	94	2.10	18.7	1.33	0.88	++	++	--	+	+	++
FRED ALGER	3/31/83	NA	35	89	2.31	17.1	1.29	0.87	++	++	--	+	+	+
ALLIANCE CAPITAL	3/31/84	12	32	92	1.75	15.4	1.38	0.72	+	+	0	+	++	--
ALLIANCE CAPITAL	12/31/83	14	33	92	1.47	19.7	1.37	0.72	+	++	-	0	++	-
ALLIANCE CAPITAL	9/30/83	22	27	87	1.55	20.4	1.41	0.75	+	++	-	+	+	-
ALLIANCE CAPITAL	6/30/83	17	30	91	1.72	20.9	1.35	0.77	+	++	--	0	+	0
ALLIANCE CAPITAL	3/31/83	NA	30	84	1.68	20.3	1.40	0.81	++	++	--	+	++	-
BEUTEL GOODMAN	3/31/84	12	20	98	3.84	11.0	1.16	0.79	+	+	+	++	0	++
BEUTEL GOODMAN	12/31/83	15	16	95	3.77	10.3	1.08	0.74	+	+	++	++	0	++
BEUTEL GOODMAN	9/30/83	6	16	99	3.47	10.5	1.14	0.75	+	+	++	++	0	++
BEUTEL GOODMAN	6/30/83	7	12	79	3.29	10.2	1.07	0.75	+	0	-	++	0	++
BEUTEL GOODMAN	3/31/83	NA	6	34	2.98	9.3	1.09	0.71	+	0	++	+	+	++
BMI CAPITAL	3/31/84	18	24	95	2.67	17.1	1.32	0.80	++	++	0	++	+	--
BMI CAPITAL	12/31/83	14	21	98	2.23	20.4	1.29	0.81	+	++	-	++	+	0
BMI CAPITAL	9/30/83	19	19	99	2.14	19.2	1.34	0.81	+	++	-	++	+	0
BMI CAPITAL	6/30/83	0	20	96	2.26	16.6	1.31	0.80	+	0	--	++	+	0
BMI CAPITAL	3/31/83	NA	13	53	2.35	13.7	1.36	0.80	++	++	--	++	++	++
FORSTMANN-LEFF	3/31/84	34	38	71	3.52	12.4	1.17	0.82	0	+	+	-	0	++
FORSTMANN-LEFF	12/31/83	41	39	81	3.23	15.7	1.10	0.70	--	0	++	--	--	--
FORSTMANN-LEFF	9/30/83	46	28	83	2.59	20.7	1.14	0.72	--	0	++	--	0	--
FORSTMANN-LEFF	6/30/83	52	33	93	2.90	15.0	1.08	0.70	--	--	0	--	--	--
FORSTMANN-LEFF	3/31/83	NA	38	85	3.23	14.8	1.09	0.82	0	0	0	-	0	--
HELLMAN JORDAN	3/31/84	30	34	58	4.94	12.9	1.16	0.87	+	++	+	--	0	+
HELLMAN JORDAN	12/31/83	43	23	51	5.31	12.5	1.23	0.74	+	++	++	-	--	++
HELLMAN JORDAN	9/30/83	57	20	47	2.89	21.2	1.34	0.77	+	++	++	0	0	++
HELLMAN JORDAN	6/30/83	38	18	56	2.37	16.1	1.30	0.77	+	++	-	--	0	++
HELLMAN JORDAN	3/31/83	NA	14	53	3.18	15.9	1.30	0.72	+	++	--	--	+	+
INVESTMENT ADVISERS	3/31/84	21	40	92	3.60	11.1	1.17	0.89	0	+	++	-	0	++
INVESTMENT ADVISERS	12/31/83	16	39	89	3.11	13.5	1.13	0.86	--	+	++	--	0	0
INVESTMENT ADVISERS	9/30/83	8	41	89	2.92	15.6	1.13	0.87	--	+	++	--	0	0
INVESTMENT ADVISERS	6/30/83	7	37	78	3.19	15.9	1.08	0.89	-	0	0	--	0	0

MANAGER NAME	DATE	QTR. PORT. T/O	# OF STKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVRSFN	PORTFOLIO RISK ORIENTATION Price Var.	Earn. Var.	Earn. Succ.	Size	Growth	Fin. Lever.
IDS ADVISORY	3/31/84	41	39	82	4.31	11.2	1.09	0.80	0	+	--	-	--	0
IDS ADVISORY	12/31/83	45	36	89	3.13	18.8	1.17	0.86	+	++	-	+	+	0
IDS ADVISORY	9/30/83	79	34	86	2.40	25.0	1.24	0.86	+	++	0	+	+	-
IDS ADVISORY	6/30/83	42	49	94	2.19	19.9	1.30	0.81	+	+	--	-	+	-
IDS ADVISORY	3/31/83	NA	48	88	3.17	15.3	1.19	0.84	+	+	-	--	+	-
LIEBER & COMPANY	3/31/84	0	115	93	2.63	12.0	1.37	0.85	+	0	--	++	+	-
LIEBER & COMPANY	12/31/83	9	60	100	2.77	12.9	1.24	0.83	+	0	-	++	+	-
LIEBER & COMPANY	9/30/83	9	56	97	2.83	11.3	1.30	0.83	+	0	-	++	+	-
LIEBER & COMPANY	6/30/83	2	49	92	2.70	14.0	1.26	0.84	+	0	--	++	+	-
LIEBER & COMPANY	3/31/83	NA	24	45	2.94	15.9	1.20	0.85	+	0	-	++	+	--
LOOMIS SAYLES	3/31/84	6	22	93	1.93	13.2	1.37	0.66	++	++	--	+	+	+
LOOMIS SAYLES	12/31/83	39	19	81	1.79	18.0	1.38	0.70	++	++	--	+	+	0
LOOMIS SAYLES	9/30/83	60	23	95	1.28	28.8	1.53	0.75	++	++	--	+	++	0
LOOMIS SAYLES	6/30/83	49	19	97	1.21	17.3	1.64	0.75	++	++	--	+	++	++
LOOMIS SAYLES	3/31/83	NA	20	98	1.62	18.2	1.44	0.85	++	++	--	0	++	-
NORWEST BANK MPLS	3/31/84	66	47	87	1.65	19.2	1.28	0.82	++	++	--	++	++	-
NORWEST BANK MPLS	12/31/83	92	41	83	1.88	19.0	1.23	0.87	+	0	-	+	+	--
NORWEST BANK MPLS	9/30/83	56	53	85	2.12	21.4	1.27	0.87	+	0	-	+	+	-
NORWEST BANK MPLS	6/30/83	95	42	80	2.53	16.3	1.23	0.88	+	--	-	+	+	--
NORWEST BANK MPLS	3/31/83	NA	35	83	2.94	14.1	1.20	0.90	+	--	-	+	+	--
SIEBEL CAPITAL	3/31/84	28	42	78	3.07	11.5	1.25	0.88	+	0	+	+	+	0
SIEBEL CAPITAL	12/31/83	25	37	90	3.14	12.4	1.16	0.89	0	--	0	0	-	++
SIEBEL CAPITAL	9/30/83	26	35	83	3.28	12.6	1.15	0.88	0	0	++	0	0	0
SIEBEL CAPITAL	6/30/83	27	36	91	3.24	13.5	1.17	0.86	+	0	0	0	0	++
SIEBEL CAPITAL	3/31/83	NA	26	80	3.38	13.5	1.15	0.85	+	0	-	--	0	+
HERBERT R. SMITH	3/31/84	29	68	84	3.12	13.9	1.22	0.91	+	+	0	+	+	0
HERBERT R. SMITH	12/31/83	46	60	80	2.14	18.9	1.33	0.85	++	++	-	++	+	++
HERBERT R. SMITH	9/30/83	40	46	65	2.68	19.4	1.44	0.87	+	++	-	++	+	++
HERBERT R. SMITH	6/30/83	13	48	65	2.36	18.2	1.46	0.83	++	++	--	++	++	++
HERBERT R. SMITH	3/31/83	NA	18	20	2.74	13.7	1.45	0.77	++	++	--	+	+	++
TRUSTEE & INVESTORS	3/31/84	25	41	98	3.30	14.4	1.27	0.89	++	+	++	0	+	++
TRUSTEE & INVESTORS	12/31/83	17	44	99	2.82	18.0	1.25	0.89	+	0	0	+	+	++
TRUSTEE & INVESTORS	9/30/83	9	40	98	3.04	19.8	1.26	0.92	+	0	++	+	+	++
TRUSTEE & INVESTORS	6/30/83	11	34	98	3.09	17.5	1.24	0.93	+	0	-	+	+	+
TRUSTEE & INVESTORS	3/31/83	NA	26	71	3.80	14.4	1.24	0.93	+	0	-	+	0	++
WADDELL & REED	3/31/84	35	21	31	2.63	12.6	1.31	0.74	+	++	+	+	0	++
WADDELL & REED	12/31/83	103	10	31	2.45	17.2	1.36	0.72	++	+	--	++	++	--
WADDELL & REED	9/30/83	9	17	73	1.41	27.4	1.41	0.73	++	0	--	++	+	--
WADDELL & REED	6/30/83	38	16	75	1.51	21.0	1.48	0.74	++	0	--	++	++	+
WADDELL & REED	3/31/83	NA	17	79	2.04	14.9	1.50	0.81	++	+	-	++	+	++

Tab C

PORTFOLIO STATISTICS

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

MARCH 31, 1984
MARKET VALUE

COMPOSITION OF STATE INVESTMENT PORTFOLIOS BY TYPE OF INVESTMENT

	CASH AND U.S. GOV. SHORT-TERM	BANK AND CORPORATE SHORT-TERM	U.S. GOV. AND AGENCY GUARANTEES	CANADIAN GOVERNMENT OBLIGATION	CORPORATE BONDS	COMMON STOCK	OUTSIDE MONEY MANAGERS	ALTERNATIVE INVESTMENTS	TOTAL
BASIC RETIREMENT FUNDS:									
TEACHERS RETIREMENT FUNDS	$ 25,500	$ 85,787	$ 162,305	$23,565	$136,807	$ 523,981	$219,751	$ 47,726	$1,225,422
	2.08%	7.00%	13.25%	1.92%	11.16%	42.76%	17.93%	3.90%	100%
PUBLIC EMPLOYEES RETIRE. FUND	13,561	44,078	118,553	20,813	116,990	414,543	176,244	46,230	951,012
	1.43%	4.63%	12.47%	2.19%	12.30%	43.59%	18.53%	4.86%	100%
STATE EMPLOYEES RETIRE. FUND	20,174	48,874	73,411	12,358	72,604	251,526	105,662	26,477	611,086
	3.30%	8.00%	12.02%	2.02%	11.88%	41.16%	17.29%	4.33%	100%
PUBLIC EMPLOYEES RETIRE. FUND	7,056	17,726	20,864	4,422	29,690	84,777	35,706	9,914	210,155
	3.36%	8.43%	9.93%	2.10%	14.13%	40.34%	16.99%	4.72%	100%
HIGHWAY PATROL RETIRE. FUND	-0-	1,079	3,821	533	7,170	19,678	8,054	2,115	42,450
	0.00%	2.54%	9.00%	1.26%	16.89%	46.36%	18.97%	4.98%	100%
JUDGES RETIREMENT FUND	-0-	281	167	72	512	1,421	546	5	3,004
	0.00%	9.35%	5.56%	2.40%	17.04%	47.30%	18.18%	0.17%	100%
POST RETIREMENT FUND	128,965	20,134	535,920	29,155	377,132	693,102	-0-	-0-	1,784,408
	7.23%	1.13%	30.03%	1.63%	21.14%	38.84%	0.00%	0.00%	100%
MINNESOTA SUPPLEMENTAL FUNDS:									
INCOME SHARE ACCOUNT	14,625	-0-	13,987	2,820	21,378	49,404	8,366	-0-	110,580
	13.23%	0.00%	12.65%	2.55%	19.33%	44.68%	7.56%	0.00%	100%
GROWTH SHARE ACCOUNT	7,164	-0-	-0-	-0-	-0-	21,835	25,834	-0-	54,833
	13.07%	0.00%	0.00%	0.00%	0.00%	39.82%	47.11%	0.00%	100%
FIXED RETURN ACCOUNT	11,543	-0-	20,435	2,337	16,016	-0-	-0-	-0-	50,331
	22.94%	0.00%	40.60%	4.64%	31.82%	0.00%	0.00%	0.00%	100%
BOND ACCOUNT	75	-0-	1,260	-0-	1,442	-0-	-0-	-0-	2,777
	2.70%	0.00%	45.37%	0.00%	51.93%	0.00%	0.00%	0.00%	100%
MINNESOTA VARIABLE ANNUITY	12,470	-0-	-0-	-0-	-0-	50,406	34,646	-0-	97,522
	12.79%	0.00%	0.00%	0.00%	0.00%	51.69%	35.52%	0.00%	100%
TOTAL RETIREMENT FUNDS	$ 241,133	$217,959	$ 950,723	$96,075	$779,741	$2,110,673	$614,809	$132,467	$5,143,580
	4.69%	4.24%	18.48%	1.87%	15.16%	41.03%	11.95%	2.58%	100%
PERMANENT SCHOOL FUND	44,152	-0-	151,754	-0-	35,735	51,076	-0-	-0-	282,717
	15.62%	0.00%	53.68%	0.00%	12.64%	18.06%	0.00%	0.00%	100%
TREASURERS INVESTED CASH	525,701	277,587	-0-	-0-	-0-	-0-	-0-	-0-	803,288
	65.44%	34.56%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
TRANSPORTATION FUNDS	236,503	127,526	-0-	-0-	-0-	-0-	-0-	-0-	364,029
	64.97%	35.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
STATE BUILDING FUNDS	97,311	35,829	-0-	-0-	-0-	-0-	-0-	-0-	[illegible]
	73.09%	26.91%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
HOUSING FINANCE AGENCY	146,735	15,264	-0-	-0-	-0-	-0-	-0-	-0-	161,999
	90.58%	9.42%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
MINNESOTA DEBT SERVICE FUND	155,683	26,340	-0-	-0-	-0-	-0-	-0-	-0-	182,023
	85.53%	14.47%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
MISCELLANEOUS ACCOUNTS	123,102	56,228	510	-0-	-0-	-0-	-0-	-0-	179,840
	68.45%	31.27%	0.28%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
TACONITE AREA ENVIR. PROTECTION	12,427	-0-	-0-	-0-	-0-	-0-	-0-	-0-	12,427
	100%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
N. E. MINNESOTA PROTECTION	44,295	-0-	-0-	-0-	-0-	-0-	-0-	-0-	44,295
	100%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%
GRAND TOTAL	$1,627,042	$756,733	$1,102,987	$96,075	$815,476	$2,161,749	$614,809	$132,467	$7,307,338
	22.27%	10.36%	15.09%	1.32%	11.16%	29.58%	8.41%	1.81%	100%

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
CASH FLOWS AVAILABLE FOR INVESTMENT

For period of
January 1, 1984 - March 31, 1984

Teachers Retirement Fund	$ 9,158,104
Public Employees Retirement Fund	6,583,417
State Employees Retirement Fund	14,442,915
Public Employees Police and Fire	6,121,819
Highway Patrolmans Retirement Fund	(3,712,244)
Judges Retirement Fund	31,492
Post Retirement Fund	43,763,167
Supplemental Retirement Fund - Income	4,708,075
Supplemental Retirement Fund - Growth	2,353,857
Supplemental Retirement Fund - Fixed	2,322,979
Supplemental Retirement Fund - Bond	210,776
Minnesota Variable Annuity Fund	2,917,179
Total Retirement Funds	$ 88,901,536
Deferred Compensation	$ (116,000)
Trunk Highway Fund	44,816,585
County State Aid Highway Fund	(10,820,914)
Municipal State Aid Street Fund	1,470,409
Invested Treasurers Cash Fund	186,740,749
Aeronautics Fund - 22	2,046,519
Taconite Area Environmental Protection Funds	1,374,000
State Building Funds	85,989,549
Housing Finance Agency	6,077,368
Minnesota Debt Service Fund	(31,771,055)
N.E. Minnesota Protection	(3,967,129)
Miscellaneous Accounts	122,915,027
Total State Cash Accounts	$404,755,108
Total	$493,656,644

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

TRANSACTION AND ASSET SUMMARY
RETIREMENT FUNDS
FIRST QUARTER 1984

	Net Transactions				Asset Summary (at market)			
	Bonds (000,000)	Stocks (000,000)	Total	Cash Flow	Short-term % of Fund	Bonds % of Fund	Equity % of Fund	Total (000,000) (at market)
March 1982	25	38	63	47	9.7	46.3	44.0	3482
April	(47)	30	(17)	39	11.0	44.4	44.6	3609
May	(49)	48	1	28	11.8	43.7	44.5	3577
June	13	73	86	93	12.0	42.6	45.4	3576
July	(15)	(5)	(20)	59	13.9	42.8	43.3	3665
August	(14)	(86)	(100)	37	16.3	41.2	42.5	3951
September	58	(10)	48	64	16.2	42.7	41.1	4088
October	124	(17)	107	48	13.6	44.9	41.5	4413
November	137	9	146	41	11.0	47.0	42.0	4537
December	(2)	6	4	45	11.7	46.6	41.7	4605
January 1983	(20)	2	(18)	41	12.8	45.0	42.2	4667
February	(76)	(502)	(578)	26	25.2	43.6	31.2	4770
March	(270)	1098	828	47	8.7	37.2	54.1	4841
April	(6)	(7)	(13)	40	9.3	36.3	54.4	5086
May	52	59	111	34	7.9	36.8	55.3	4996
June	(15)	31	16	83	9.0	34.9	56.1	5177
July	47	154	201	47	6.1	35.2	58.7	5053
August	19	7	26	39	6.3	35.4	58.3	5072
September	22	(103)	(81)	29	8.3	35.9	55.8	5202
October	2	93	95	51	7.5	35.8	56.7	5158
November	18	(20)	(2)	40	6.3	37.4	56.3	5275
December	(1)	22	21	47	5.7	37.9	56.4	5262
January 1984	3	(31)	(28)	45	6.8	38.7	54.5	5267
February	(1)	27	26	31	7.0	38.6	54.4	5170
March	5	19	24	11	5.7	39.0	55.3	5119

Tab D

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Room 105, MEA Building
55 Sherburne Avenue
Saint Paul 55155
296-3328

May 14, 1984

TO: Members, State Board of Investment
Governor Rudy Perpich
State Auditor Arne H. Carlson
State Treasurer Robert W. Mattson
Secretary of State Joan Anderson Growe
Attorney General Hubert H. Humphrey III

FROM: Howard J. Bicker, Executive Director Howard Bicker

RE: 1984 Legislative Session

The following bills which affect the policies of the State Board of Investment were considered by the 1984 legislature:

1) HF 564; SBI Housekeeping

Passed; Chapter 383

Chapter 383 authorizes the State Board of Investment to establish combined accounts for the fixed income portfolio; expands the use of futures contracts to include common stocks; and abolishes the deferred yield adjustment account. The bill was sponsored by the State Board of Investment and supported by the Investment Advisory Council and the retirement funds.

2) HF 1291; Permanent School Fund

Passed; Chapter 482

Chapter 482 proposes a constitutional amendment for the 1984 election to remove the constitutional restrictions on the investment of the Permanent School Fund. Under the law, the Permanent School Fund would be subject to the same restrictions which govern the investment of the State's retirement funds. As a result, the yield earned by the Fund and distributed to Minnesota schools should increase. The bill was supported by the State Board of Investment and the Office of the Legislative Auditor. There was no opposition.

3) HF 1944; African Development Bank

Passed; Chapter 382

Chapter 382 authorizes the State Board of Investment, among other entities, to invest in fixed income obligations issued by the African Development Bank. Established in 1964, the African Development Bank is a regional financial institution whose members include most of the countries of Africa and non-regional countries such as Japan, Canada, and the United States. The Bank makes loans to member African countries in support of agriculture, transportation, public utilities and other projects. The law does not require or compel the Board or any other institution to invest in obligations of the Bank. The bill was sponsored by the African Development Bank and had no opposition.

4) SF 147; Retirement Funds

Passed; Chapter 564

Chapter 564 makes several significant changes in both the benefits and financing of the State's retirement funds. Among the benefit provisions are:

- Establishment of the Rule of 85 with a minimum age of 55 until December 31, 1986 for MSRS, TRA, PERA and 1st Class City Teachers;
- lowering of the early retirement age with a reduced annuity to age 55 with 10 years of service or any age with 30 years of service;
- improved the death benefit for surviving spouse;
- increase in the rate of interest to 5% paid on refunds to employees who terminate state service; and
- reimbursement of supplemental 2% employee contributions paid during the first six months of 1983.

Financing Provisions Include:

- Increase in the actuarial assumptions for active employee funds to 6.5% salary and 8% interest assumptions. The interest assumption for retirees remains at 5%;
- change in amortization schedules for TRA, MSRS, PERA, and 1st Class City Teachers; and
- decrease in employer contribution rates for MSRS and the PERA coordinated plan, increase in employer contribution rates for TRA.

5) HF 1220/SF 1206; Prohibited Investments

Tabled in the House and Senate

HF 1220/SF 1206, prohibiting future investment in companies and financial institutions doing business in South Africa, was heard in the House and Senate Committees on Governmental Operations, respectively, on March 12 and 13, 1984.

Tab E

STATE OF MINNESOTA
OFFICE OF THE LEGISLATIVE AUDITOR
VETERANS SERVICE BUILDING, ST. PAUL, MN 55155 • 612/296-4708
JAMES R. NOBLES, LEGISLATIVE AUDITOR

April 27, 1984

Mr. Howard Bicker, Executive Director
State Board of Investment
105 MEA Building
55 Sherburne Avenue
St. Paul, Minnesota 55155

Dear Mr. Bicker:

Enclosed is a copy of the final management letter resulting from the audit work in your department during our fiscal year 1983 Statewide and Single Audits. We will be distributing copies of the letter to legislators, the Governor, the media and other interested parties during the next week. This public distribution is required by state statutes. Please note that your response to our management letter is attached and is considered to be an integral part of the letter. Accordingly, we will ensure that your response is provided to all persons receiving a copy of the management letter.

We appreciate the cooperation which your agency extended to our audit staff. If you have any questions or comments, please do not hesitate to contact us.

Sincerely,

John Asmussen

John Asmussen
Deputy Legislative Auditor

STATE OF MINNESOTA
OFFICE OF THE LEGISLATIVE AUDITOR
VETERANS SERVICE BUILDING, ST. PAUL, MN 55155 • 612 296 4708
JAMES R. NOBLES, LEGISLATIVE AUDITOR

Howard J. Bicker, Executive Director
State Board of Investment
105 MEA Building
55 Sherburne Avenue
St. Paul, Minnesota 55155

Dear Mr. Bicker:

We have reviewed certain accounting procedures and controls for your department as part of our financial audit of the State of Minnesota's fiscal year 1983 financial statements. The scope of our work has been limited to:

- those aspects of your department which have material impact on any of the state's various funds and account groups; and
- the status of prior audit recommendations.

The main text of this management letter contains both our recommendations developed during this audit and prior recommendations which have not yet been implemented. Prior audit recommendations repeated in this text are denoted under the caption "PRIOR RECOMMENDATION NOT IMPLEMENTED" or "PRIOR RECOMMENDATION PARTIALLY IMPLEMENTED." Attached to your management letter is a summary of the progress on all audit recommendations developed during our financial audit of Minnesota's fiscal year 1982 financial statements.

The recommendations included in this letter are presented to assist you in improving accounting procedures and controls. Progress on implementing these recommendations will be reviewed during our audit next year.

PRIOR RECOMMENDATION PARTIALLY IMPLEMENTED: Documentation provided to user agencies for SBI's computerized investment accounting system is inadequate.

SBI contracts with a private company to provide a computerized investment accounting system for the investments it administers. The system records investment purchase and sale transactions and maintains portfolio listings, accounts for income earned on the investments, and provides a general ledger for each fund or investment account. The system records are updated daily for all investment transactions that occur. SBI prepares monthly transaction reports which are then distributed to each of the agencies that have investments on the system. In addition, during fiscal year 1984, SBI contracted with a private bank to serve as the master trustee for investments of the retirement systems of the state. The trustee also accumulates data on investment transactions for the various investment managers and prepares monthly activity and summary reports. These reports are also distributed to the retirement systems. The agencies rely on these various reports when preparing their financial statements and updating their own investment accounting records and for other analytical purposes.

In our fiscal year 1982 management letter we recommended that SBI develop and provide each user agency with a user's manual for the computerized accounting system. To date, this user's manual has not been provided. A user's manual is a form of system documentation which is necessary for any computerized system and which would serve a number of useful purposes. It would provide a starting point for developing an accurate understanding of the computer system, its objectives and capabilities, and the output available. It would be a valuable tool for new employees if there is staff turnover, either internally or in user agencies. Because of the large number of different types of reports available from different sources, it would be helpful to the user agencies if the information available were organized and explained in one set of documents in order to provide a general understanding of the system.

RECOMMENDATION:

1. SBI should develop and provide each user agency with a user's manual for the computerized accounting system.

<u>The State Board of Investment (SBI) needs to improve their documentation and revise their accounting practices for option transactions</u>.

During fiscal year 1983, SBI began writing covered call options in the Minnesota Post Retirement Investment Fund (MPRIF). A call option is an investment alternative whereby one party, the option writer, grants another party, the buyer, the right to purchase or "call away" a specified amount of the underlying security at a specified price up to a specified date. The price the buyer pays for this right is called the "premium." A "covered" call writer is one who owns the shares of the underlying security covered by the option. There are many forms of options but currently covered calls are the only kind that SBI is writing. During fiscal year 1983 option premiums received totaled $468,474, and at year end the outstanding options had a market value of $232,138.

Options are not recorded in SBI's computerized investment management system, and therefore, are not automatically updated in the general ledger. Instead, options are accounted for manually in a general journal. Monthly summary totals for premiums received and repurchased and exercised options are entered in the general journal. The computerized general ledger is then updated each month from these summary entries. Additionally, SBI has not maintained adequate supporting documentation for the manual entries made in the general journal for options. The entries made are not directly traceable to a subsidiary ledger or detailed listing containing all option transactions. The only documentation available is individual transaction memos, which are filed with all other security transaction memos.

SBI has substantially increased trading in options during fiscal year 1984. For the period July 1, 1983 through October 31, 1983 they had written options for over $1,904,000 in the MPRIF. To properly account for options, there must be adequate supporting documentation. The documentation could best be generated by SBI's investment management system. The system could maintain an inventory of outstanding options at market value, an account for premiums received, and a gain and loss accounting system for all expired, repurchased, and exercised options. At a minimum, a manual subsidiary ledger should be maintained for options until the investment management system can be updated to include them. The subsidiary ledger should have a running total of outstanding options, supported by the individual transaction memos, as well as detail of the options already expired, repurchased, or exercised which flowed through the subsidiary ledger.

RECOMMENDATION:

2. SBI should expand their investment management system to include the recording of option transactions. A manual subsidiary ledger should be put in use for options until the investment management system can be expanded.

<u>SBI has not recorded participant contributions in the Investment Trust Funds on the accrual basis.</u>

For fiscal year 1983, SBI maintained the financial records and prepared financial statements for four Investment Trust Funds: Minnesota Supplemental Retirement Investment Fund, Minnesota Post Retirement Investment Fund (MPRIF), Minnesota Variable Annuity Investment Fund, and the Minnesota Outside Managers Pooled Fund. The assets of these funds consist of member contributions that are transferred to SBI by the various participating retirement systems. Each month the participating retirement systems send SBI written certifications of contribution and withdrawal amounts. SBI updates each fund's participation accounts using information on the monthly certification letters. Some retirement systems occasionally combine prior months accrual adjustments with current month amounts and certify a net amount, with no indication of the composition of the net amount. This practice by the retirement systems does not provide SBI with sufficient information to make accrual entries at year end, and causes the financial statements prepared by SBI to be misstated by the amount of the accruals.

During our audit of the Investment Trust Funds, we found that preliminary statements for two of the four funds were misstated because of accruals that were omitted. The statements were corrected by SBI but the cause for the omissions remains. On the financial statements of the MPRIF, SBI initially failed to show an accrued contribution receivable from all participants totaling $221,448 (excluding mortality gains and losses). However, SBI was unaware of any accruals since the certification letters did not indicate the composition of the net total transfer on the certification letters. The same problem occurred in the MPRIF in prior fiscal years. Contributions of $12,745,278 and withdrawals of $2,596,897 (excluding mortality gains and losses) were not accrued on the financial statements by SBI in fiscal year 1982. For fiscal year 1981, there was a $3,680,019 accrued contribution receivable that was not separately identified on the certification letters for MPRIF, and therefore not recorded by SBI on the financial statements. At June 30, 1983 the Variable Annuity Investment Fund should have shown an accrued withdrawal payable to all participants totaling $375,010. The certification letters did separate the prior year accrual amounts, but some amounts were not reported until four months after fiscal year end. However, SBI did not record any of the $375,010 accrual in their general ledger and did not include the accrual on their financial statements until an audit adjustment was presented to them.

Each of the state's retirement systems prepares financial statements for their respective funds. In order for the participation balances reported by SBI to agree with the amounts reported by the retirement systems, certain adjustments are necessary for the accruals that have been omitted by SBI. To avoid this problem in the future, SBI must receive contribution and withdrawal accrual amounts on a timely basis. The participating retirement systems have the responsibility to certify the amounts to SBI, however, SBI appears to have broad powers to formulate reporting procedures used by the retirement systems when making their certifications.

The most timely and productive way for the retirement systems to report accrued amounts to SBI would be to show the amounts as separate line items on the certification letters for the first few months subsequent to the fiscal year end. This would allow SBI to record the amounts in their general ledger before it is closed and in their financial statements. To facilitate this procedure, a standard certification letter format should be developed by SBI that could be used by all retirement systems. The format could include a separate line for reporting transfers of money pertaining to previous fiscal years. Also, separate inquiries should be made by SBI of all retirement systems participating in the Investment Trust Funds to ensure that all accruals are reported prior to closing the general ledgers.

RECOMMENDATIONS:

3. SBI should work with the participating retirement systems to develop a method of reporting year end contribution and withdrawal accrual amounts. A practical cutoff and procedures for late adjustments should be established.

4. SBI should maintain their general ledgers on the accrual basis of accounting for all accounts to ensure all amounts are properly included on the financial statements.

Thank you for the cooperation extended our staff during this audit.

Sincerely,

James R. Nobles

James R. Nobles
Legislative Auditor

John Asmussen

John Asmussen, CPA
Deputy Legislative Auditor

Attachment

March 9, 1984

STATE BOARD OF INVESTMENT

Attachment

STATUS OF PRIOR AUDIT RECOMMENDATIONS
AND
PROGRESS TOWARD IMPLEMENTATION

The State Board of Investment (SBI) should improve the reliability of the data from their computerized investment system and provide the users with the information necessary to effectively and efficiently use the system.

1. SBI should develop and provide each user agency with a user's manual for the computer system.

   Recommendation Partially Implemented. See current recommendation #1.

2. SBI should notify the user agencies when an error is discovered in a report and prepare corrected reports as soon as possible.

   Recommendation Implemented.

3. SBI should attempt to prioritize the printing and distribution of reports to the user agencies on a more timely basis.

   Recommendation Implemented.

4. SBI should work to eliminate the problems relating to development of the general ledger system for all participating funds.

   Recommendation Implemented.

PRIOR RECOMMENDATION PARTIALLY IMPLEMENTED: The procedures for transferring moneys to and from the Minnesota Post Retirement Investment Fund (MPRIF) for mortality gains and losses may result in an inequitable distribution of income to fund participants.

5. SBI should continue to work with the Legislature and the actuary for the Legislative Commission on Pensions and Retirement to clarify the intent of Minn. Stat. Section 11A.18 regarding the calculation of the actuarially assumed five percent investment income and to determine whether it would be reasonable and practical to require payment of interest on the mortality adjustment transfers.

   Recommendation Implemented.

6. After clarification of the legal and procedural issues, SBI should develop a formal written policy, distributed to all MPRIF participants, which specifies:

   - a due date for transfers for mortality or other actuarial adjustments;

- whether interest will be charged and paid on transfers made after June 30 each year; and
- the amount and/or method of calculating the interest to be paid.

Recommendation Implemented.

SBI should work to improve the content and structure of their annual financial report to provide a more meaningful financial information.

7. If the due date for actuarial calculations as discussed in Recommendation 6 is not early enough so that appropriate adjustments may be made to accurately reflect year-end mortality gains or losses in their financial statements, SBI should consider seeking an extension of the time deadline for publishing their annual report.

   Recommendation Implemented.

8. SBI should revised the structure of their annual financial report to include one set of combining financial statements for all funds, followed by appropriate footnotes.

   Recommendation Implemented.

Small Business Administration loan agreements are not being monitored.

9. SBI in conjunction with the State Treasurer's Office should review all SBA loans and notify the collection bank and lender banks of any discrepancies between the loan payments and the agreements.

10. SBI should develop and implement procedures for monitoring the SBA loan payments.

11. SBI should enter into a written agreement with the collection bank specifying the date payment is due and any additional service charge.

    Recommendations 9-11 Withdrawn. SBI no longer holds any SBA loans.

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

Room 105, MEA Building
55 Sherburne Avenue
Saint Paul 55155
296-3328

March 9, 1984

Mr. James R. Nobles
Legislative Auditor
Veterans Service Building
St. Paul, MN 55155

Dear Mr. Nobles:

In response to your draft management letter and the recommendations contained therein we would like to make the following comments. Recommendations 1 and 2 deal with our computerized investment management system.

1) Users Manuals:

Our computer vendor is still working on the systems manual which should provide much of the information required by user agencies. When this manual is available to our staff it will be supplemented by any additional information required by user agencies.

2) Options Transactions:

A manual subsidiary ledger control system is being implemented for options. This system will be used until the SBI's investment management system can be expanded to include complete control over option transactions.

Responsibility for implementing the recommendations relating to our computer system rests with the Administative Director.

Recommendations 3 and 4 deal with procedural issues relating to certification and reporting of participant balances on an accrual basis.

The SBI's accounting staff will work with representatives of the retirement organizations to design a certification form which provides all the information necessary to properly accrue participant contributions. The SBI staff will positively affirm year end accrual information with the retirement organizations prior to preparation of our year end financial statements.

The SBI disclaims responsibility for the accuracy of the participant information certified to it by the retirement funds. Although the steps listed above will help insure that the participant contribution information reported by the SBI is correct, the final responsibility for the accuracy of the information rests with the retirement funds.

Sincerely,

Howard J. Bicker

Howard J. Bicker
Executive Director

Tab F

STATE OF MINNESOTA

EXTERNAL EQUITY MANAGER UPDATE INTERVIEW

I. INTERVIEW DETAILS

1. Name of manager interviewed   Fred Alger Management

2. Date interview conducted   March 8, 1984

3. Date of last interview   July 15, 1983

4. Representing Minnesota State Board of Investment

   Jeff Bailey - Assistant Executive Director

5. Representing manager

   Fred Alger - Portfolio Manager
   Krista Woodall - Marketing Representative

II. PERSONNEL

1. **Explain any staff departures since last interview**

   None.

2. **Describe and staff additions since last interview**

   None.

3. **Describe any changes in the status of the specific manager(s) assigned to the SBI's account**

   None.

4. **Comments**

   Fred Alger is continuing the extensive computerization of its internal databases. The firm has installed personal computers tied to the main VAX minicomputer, which allows for instantaneously sharing of data among all of its analysts.

III. CLIENT BASE

1. Accounts and dollars under management

Account	March 31, 1983 Number	March 31, 1983 Market Value (Millions)	March 31, 1984 Number	March 31, 1984 Market Value (Millions)
Total Tax Exempt	59	$1,645	76	$1,994

2. List any significant accounts lost since last interview

Litton was recently lost as an account. The stated reason for the dismissal was that the firm wished to move to bonds and several equity managers were let go to accommodate this move.

3. Comments

IV. INVESTMENT STRATEGY

1. Economic outlook

Fred Alger remains extremely optimistic on the outlook for the economy throughout the 1980's. Inflation is expected to remain low and the firm anticipates that interest rates will fall as deficits decline and it becomes apparent that credit is not expanding too rapidly.

2. Financial market outlook

The firm remains very positive on the stock market over the long-term. The pattern of stock price moves is expected to be down in the spring, up in the summer, down at election time, and then surging upwards in 1985 following a Reagan victory.

3. Current and near-term projected asset mix

In early 1984, Fred Alger raised cash levels to 20% quite suddenly. This is an unusual move for the firm as it almost always remains fully invested. The asset mix move was based on strong negative technical signals. The firm expects to reverse its cash position by the end of May.

4. Equity sector emphasis

The firm remains overweighted in consumer nondurables, industrial cyclical and technology stocks. However, some reduction of the overweighting in certain industrial cyclical stocks (e.g. chemicals and autos) has occurred based on the anticipation of a weakening U.S. dollar in foreign exchange markets.

STATE OF MINNESOTA

EXTERNAL EQUITY MANAGER UPDATE INTERVIEW

I. INTERVIEW DETAILS

1. Name of manager interviewed Beutel Goodman

2. Date interview conducted March 8, 1984

3. Date of last interview November 22, 1983

4. Representing Minnesota State Board of Investment

   Jeff Bailey - Assistant Executive Director

5. Representing manager

   Bob McFarland - Portfolio Manager

II. PERSONNEL

1. **Explain any staff departures since last interview**

   None.

2. **Describe and staff additions since last interview**

   None.

3. **Describe any changes in the status of the specific manager(s) assigned to the SBI's account**

   Richard Andrews will be given an ownership interest in the firm in the near future. Andrews works jointly with McFarland in managing the firm's accounts.

4. **Comments**

III. CLIENT BASE

1. Accounts and dollars under management

	March 31, 1983		March 31, 1984	
Account	Number	Market Value (Millions)	Number	Market Value (Millions)
Total Tax Exempt	5	$104	9	$170

2. List any significant accounts lost since last interview

None.

3. Comments

IV. INVESTMENT STRATEGY

1. Economic outlook

Beutel Goodman is expecting continued strong economic conditions throughout 1984, but the economy is seen as moving into the later maturity phases of the business cycle. Interest rates are expected to rise slightly. The firm anticipates that inflation rates will remain subdued, which will permit a continuation of the economic recovery longer than in recent cycles.

2. Financial market outlook

Beutel Goodman is expecting a relatively flat stock market. The firm believes that the peak earnings have been fairly fully discounted. But because no early return to recession is anticipated, the firm is not pessimistic in its market outlook. It believes that many attractively priced issues remain.

3. Current and near-term projected asset mix

The firm's policy generally is to remain fully invested.

4. Equity sector emphasis

The firm remains concentrated in industrial cyclical, financial, and transportation stocks. Its plans call for shifting out of the more economy-sensitive issues toward the middle or end of the year and into more defensive stocks.

STATE OF MINNESOTA

EXTERNAL EQUITY MANAGER UPDATE INTERVIEW

I. INTERVIEW DETAILS

1. Name of manager interviewed — Forstmann-Leff

2. Date interview conducted — April 10, 1984

3. Date of last interview — July 15, 1983

4. Representing Minnesota State Board of Investment

   Howard Bicker - Executive Director
   Jeff Bailey - Assistant Executive Director
   Daralyn Peifer - Investment Analyst
   Jim Ryan - Evaluation Associates

5. Representing manager

   Richard Walton - Portfolio Manager
   Jill Costello - Client Liaison

II. PERSONNEL

1. Explain any staff departures since last interview

Forstmann-Leff has experienced significant turnover in its portfolio manager positions during the past six months. Three portfolio managers left. Two resigned to start their own firm. Steve Reynolds, the SBI's account manager, also left at the request of the firm. The stated reason was dissatisfaction with his investment style.

2. Describe and staff additions since last interview

Forstmann-Leff recently hired one senior portfolio manager, Lang Gerhard. He will serve on the firm's four person Executive Committee which makes asset mix and sector decisions. Gerhard moved to Forstmann-Leff from Oppenheimer Management Corp. where he served as Chief Investment Officer.

3. Describe any changes in the status of the specific manager(s) assigned to the SBI's account

As described above, Steve Reynolds, the SBI's account manager, was let go by the firm. Richard Walton was assigned the SBI's account. Walton has been with the firm for a number of years as a portfolio manager.

4. Comments

Staff clearly is concerned with the disruption created by the turnover in personnel at Forstmann-Leff. However, the firm manages money in much more of a committee structure approach than do most other equity management firms. Individual portfolio managers have control only over issue selection. Asset mix and sector weighting decisions are made at the committee level. Thus, the departure of the SBI's portfolio manager, as well as the two other portfolio managers, is much less likely to adversely affect the account's performance than might occur at another firm. Staff recommends that new cash flow be withheld from Forstmann-Leff until the status of the management structure becomes better defined. However, staff does not recommend withdrawing assets from the firm at this time.

(A comprehensive analysis of the Forstmann-Leff situation, by Evaluation Associates, is attached to this report.)

III. CLIENT BASE

1. Accounts and dollars under management

	March 31, 1983		March 31, 1984	
Account	Number	Market Value (Millions)	Number	Market Value (Millions)
Total Tax Exempt	126	$4,800	118	$4,500

2. List any significant accounts lost since last interview

Since the last interview, Forstmann-Leff has had a sizable turnover in accounts. Nine accounts have been added and fourteen have been lost. The accounts lost are:

A-P-A Transport Corp.
Baker International
Chrysler
Forest Hills Cemetary
Kimberly Clark
Local 142 Office and Professional Employees
Retail Store Employees Union Local 1262
McDermott, Inc.
R.J. Reynolds
Reed Tool
Schlumberger
Sealed Power
United Jewish Charities

3. Comments

Forstmann-Leff lost a number of accounts due primarily to the portfolio manager changes. The firm is still not actively marketing its services and is only accepting accounts from sponsors to which it had made previous commitments.

IV. INVESTMENT STRATEGY

1. Economic outlook

Although the firm's near-term outlook for the economy is favorable, it forecasts a gradual slowing of real GNP growth, a declining dollar, and rising real interest rates over the next year. The firm expects that rising unemployment, a reemergence of inflation expectations, declining real personal income, and inventory accumulation will appear during 1984 as indicators of the decelerating economy.

2. Financial market outlook

Despite its favorable near-term economic outlook, the firm anticipates increasing volatility in the financial markets over the next three to six months. With its prediction of increased volatility, the firm is forecasting a moderate correction in the bond market to be followed by a rally within a bear market for bonds. The firm expects that the bond rally will create a more positive climate for equities as well. Rising real interest rates, however, are expected to bring the bond rally to a halt by year end.

3. Current and near-term projected asset mix

The firm raised its cash position from 20% at the end of fourth quarter 1983 to 30% at first quarter's end. Should the bond rally appear imminent, the firm expects to reduce its cash position and cautiously increase its equity exposure.

4. Equity sector emphasis

Although the firm has trimmed its positions in several pure consumer companies, it remains overweighted in both consumer durables and nondurables. Drug stocks are considered especially attractive at the present. In anticipation of a slowing economy, the firm is strongly underweighting the cyclicals. The firm also remains underweighted in the Financial sector but is currently evaluating the insurance (property and casualty) firms for possible inclusion in its portfolios. The firm intends to retain its underweighted position in the Energy sector.

Evaluation Associates, Incorporated

25 Sylvan Road South, Westport, Connecticut 06880 (203) 226-7864
16 Centre Street, Concord, New Hampshire 03301 (603) 224-5390

May 2, 1984

Mr. Howard J. Bicker
Executive Director
State of Minnesota
Room 105, MEA
55 Sherburne Avenue
St. Paul, MN 55155

Dear Howard:

Senior members of our staff recently visited with the members of Forstmann-Leff's Investment Policy Committee (Tony Forstmann, Joel Leff, Bill Harnisch and Lang Gerhard). The visit was prompted by their relatively weak performance last year, as well as four recent personnel departures, two voluntary and two non-voluntary.

Background - The firm's basic philosophy stresses a risk averse approach, with preservation of capital, through a flexible asset allocation policy based upon the firm's understanding of how various factors affect the capital markets. Portfolios are run with a high level of liquidity in order to position accounts for rapid pullback from the market. Under extreme conditions, the firm would be prepared to liquidate all stocks in portfolios. Portfolio managers have wide latitude in terms of stock selection. Stock positions are generally aggressive, with a market beta of more than 1, since risk will be tempered by the utilization of varying amounts of cash. All portfolio managers must adhere to asset allocation and sector guidelines established by the Investment Policy Committee.

Performance - Within our data base, Forstmann-Leff continues to be a first quartile manager for the five-year period through December 31, 1982 and second quartile over the last three years. However, their 1983 equity composite performance of 14.17% was fourth quartile. 1983 was not a comfortable market environment for active sector rotators, such as Forstmann-Leff. As you know, the market rotated rapidly through several phases and evidenced no clear trend or rationale, especially during the last two quarters. Assuming a fully invested position, a widely diversified inactive portfolio (S&P or a proxy) would have performed in the upper 1/3 of any of the popular data bases, including our own. Also, stocks within the same market sectors, especially the broadly defined ones used by Forstmann-Leff, often evidenced wide performance differences. In hindsight, considering FL's style, perhaps the most expected way the firm might have turned in a superior performance last year would have been to be fully invested for the first two quarters and then raise significant cash for the remainder of the year, since successful sector rotation was so difficult. However, Joel believed interest rates would not increase significantly during the second half of the year, and on that premise, they continued their relatively fully invested position.

In so far as the early part of 1984, Joel believed the year would start out well, since it was an election year and market optimism was building. He had planned to cut back on equity exposure in February, believing the optimism would be short-lived. After an early rally in January, the market suffered a severe pullback during a six-day period, and by the time FL acted, the major damage had been done. They did raise up to 50% in cash in many of their accounts by the end of the month but not in time to help their performance relative to the S&P. Their relative performance in February, March and April improved. FL's problems as a firm were exacerbated by John Hsu and Steve Reynold's reacting slowly to asset allocation policy and also to a lesser degree, sector policy. In addition, their selectivity had been poor during 1983, as well as during the sell-off in January.

Personnel - During the summer of 1983, John Ryan, who was the fourth member of the IPC, and Ed Klein left to start their own firm. Both had been with FL approximately eight years, had been close friends and worked well together. However, their performance was below median within the FL universe during the last year or so before their departure. We do not believe these departures were significant relative to the firm's ability to perform well in the future. It is our belief that Joel is the major influence on asset allocation policy, and Bill Harnisch and Joel, together, are looked to for the major decisions with respect to sector weighting. Klein was strong in the energy area (formerly an energy analyst at Citibank) and apparently effective with client relations. During the first quarter of 1984, both John Hsu and Steve Reynolds were dismissed, primarily as a result of their slow response to asset allocation and sector policy. Also, as mentioned previously, their stock selection for at least the last year had been poor. Both were hired on the perceived basis of being especially strong in the area of stock selection.

Tony and Joel felt it was better to cut their losses early by dismissing Reynolds and Hsu now, rather than waiting for a further indication of their stock selection abilities. They were especially disappointed since both Hsu and Reynolds came from successful investment backgrounds. Hsu trained under Gerry Tsai during the sixties and spent many years at Gulf & Western where he managed Bluhdorn's personal money. He then went on to J.C. Penney where he did well as an in-house manager of their pension fund. His accounts at FL were up 29% in 1982. Reynolds spent eight years with Bob Kirby at Capital Guardian and was highly recommended by Kirby, who is well respected in the investment management community. Reynolds also had a successful stay at IDS prior to joining FL. Bill Harnisch's speculation is that Reynolds may be more effective and comfortable in an institutional type environment.

Lang Gerhard was hired in February as a partner and member of the Investment Policy Committee. Prior to joining FL, he was chief investment officer for Oppenheimer Management Corporation, where he was also executive vice president and member of the executive committee. In this capacity, he had supervisory responsibility for the $7.5 billion in assets currently invested in 24 Oppenheimer mutual funds. For the past 5 years he had direct investment responsibility for the $300 million Oppenheimer Fund (a growth fund) and for the past 2 years, for the $300 million Directors Fund (a capital appreciation fund).

Prior to 1979, Gerhard was vice president at Manufacturers Hanover where he managed a special equity fund (a $250 million commingled fund for pension plans). His performance over time is impressive and is shown below:

	Periods Ending 3/31/83	
	10 Years	5 Years
L. Gerhard	15.2%*	21.1%
S&P 500	10.6	17.4
EAI Equity Median	10.9%	19.3

	1974	1975	1976	1977	1978
L. Gerhard	-36.9%	40.6%	29.2%	13.7%	21.1%
S&P 500	-26.5	37.3	23.7	-7.3	6.6
EAI Equity Median	-22.5	28.1	19.9	-3.9	7.7

	1979	1980	1981	1982	1983
L. Gerhard	38.6%	41.7%	-11.2%	20.9%	23.6%
S&P 500	18.6	32.5	-4.9	21.6	22.5
EAI Equity Median	22.4	30.7	0.0	24.9	22.8

* Performance figures obtained from Lang Gerhard claim an adjusted return of -20.4% for 1974, a year in which he was still restructuring the fund. If this figure were accepted, Gerhard's 10-year annualized return would rise to 17.9%. The figures shown above represent actual performance of the fund.

In addition to assisting with general policy decisions, Lang believes that he can make a major contribution to the firm by offering his perspective, when appropriate, in the more aggressive areas in the market. Joel analyzed his performance over the last several years and feels that if he had been at FL, he would have avoided his major strategy error, which was overstaying energy stocks early in 1981. Lang had an especially strong latter half of 1982. Recently, two additional analysts were hired, John Woodward, from Arnhold Bleichroder, to work directly with Gerhard in stock selection, and David Gasner, brought in from Merrill Lynch by Joel. Gasner's specialty is arbitrage, and Joel believes he can be especially helpful when they are faced with situations similar to the Gulf and Superior Oil type situations of late. They will be adding another portfolio manager shortly.

Organizational Observations - The decision-making process at FL remains the same. The IPC will be responsible for asset allocation and sector policy to which all managers must conform, and each manager will still have discretion in stock selection. When a manager wishes to purchase a stock not owned by the firm, he must receive 3 approvals. Mike Cohen, the research coordinator (former director of research at Loeb Rhoades) must approve the stock as to basic fundamentals. Then the IPC is made aware of the issue to be purchased and any member may object. Finally, John Downey, the head trader, assures that the issue has management approval before execution. Each manager is then responsible for following (with analyst assistance) and selling issues held in his portfolios. Various controls are in place to assist the manager and the IPC in the identification of developing problems such as disappointing price movement, changes in fundamentals, etc.

No formal bonus or incentive programs are in place. Managers and analysts have the possibility of equity in the firm being offered to them. Their contributions are judged subjectively, primarily by Tony and Joel. Compensation levels are well above industry standards. Current speculation is that Gerhard's salary is in excess of $550,000 annually. The firm has ceased marketing and is closed to new business. Tony and Joel want to solidify their current client base (primarily clients who joined the firm within the last 6 to 18 months and do not have a longer experience that would encompass their stronger market years). They admit they are now under a microscope and claim they will not become short-sighted as a result, but continue to manage portfolios in their traditional fashion, incorporating some of the lessons learned over the past year relating to the need to control managers more closely with respect to conformance to major policy decisions. Tony and Joel have both become personally involved with client relations and portfolio management. Many of the former business ventures which created some distraction to the principals of the firm over the last several years have been terminated (Forstmann-Leff-Degnan, fixed income hedging, management buyouts, etc.).

Conclusions

- The departure of Hsu and Reynolds is not of major concern to us. Klein and, to a lesser extent, Ryan's departure was more meaningful. However, Joel Leff continues to exercise major influence over the two most important factors in portfolio management success at FL, asset allocation and sector policy. Bill Harnisch is becoming increasingly influential in all areas and is a strong investment professional. Tony, although he deliberates with the IPC, does not appear to be as strong as Bill and seems to be comfortable with his lesser investment role on that Committee. Gerhard is yet to be heard from. We will closely follow his assimilation within the firm.

- 1983 was the worst performing year for many years, for reasons noted above. However, the firm's longer term record is still well above average.

- Controls with respect to managers' conformance to general policy will be exercised more closely.

- A more intensified effort is being made across the board in the area of stock selection.

- Tony and Joel's pride has been bruised, and they are highly motivated to re-establish the firm's image, which has suffered in a modest way because of recent personnel and performance problems.

- Our confidence in Joel Leff and Bill Harnisch's investment abilities remains high. We are suggesting that our clients view last year's developments as an aberration, and assets need not be moved or reduced at this time.

Please call if any of the above needs further clarification.

Best personal regards,

Jim

James C. Ryan, CFA
Senior Vice President

JCR/sgh

STATE OF MINNESOTA

EXTERNAL EQUITY MANAGER UPDATE INTERVIEW

I. INTERVIEW DETAILS

1. Name of manager interviewed IDS

2. Date interview conducted April 24, 1984

3. Date of last interview October 31, 1983

4. Representing Minnesota State Board of Investment

   Howard Bicker - Executive Director
   Jeff Bailey - Assistant Executive Director
   Daralyn Peifer - Investment Analyst

5. Representing manager

   Peter Anderson - Portfolio Manager
   Mitzi Malevich - Portfolio Manager

II. PERSONNEL

1. Explain any staff departures since last interview

None.

2. Describe and staff additions since last interview

Mitzi Malevich joined IDS as a portfolio manager in late 1983.

3. Describe any changes in the status of the specific manager(s) assigned to the SBI's account

Mitzi Malevich has replaced Peter Anderson as the SBI's portfolio manager at IDS. Malevich served for a number of years on the SBI's Investment Advisory Council. For the past two years, until her resignation in March 1984, she was the IAC's chairperson.

4. Comments

The shift in assignments at IDS was requested by Anderson. He felt that Malevich's familarity with the SBI's investment process would facilitate the account's management. Staff has no objections to this change.

III. CLIENT BASE

1. Accounts and dollars under management

Account	March 31, 1983 Number	March 31, 1983 Market Value (Millions)	March 31, 1984 Number	March 31, 1984 Market Value (Millions)
Total Tax Exempt	81	$3,360	97	$3,400

2. List any significant accounts lost since last interview

Allied Corp. and Wickes Gambol Skogland (together totalling $14 million in assets) were lost as accounts when both firms chose to reduce the number of equity managers that each retained.

3. Comments

IV. INVESTMENT STRATEGY

1. Economic outlook

The firm expects continued growth in the economy through 1985. However, it anticipates that the rate of growth will slow during second quarter 1984 and predicts that inflation will increase at a gradual pace throughout the year to a 6% to 7% level by the end of 1984. With strong corporate profits and cash flow, capital spending is expected to continue to drive the economy during the current year. Consumer spending is expected to increase, albeit at a subdued level. However, consumer debt should increase as well and, along with rising interest rates by mid-year, should contribute to the economic deceleration and eventual end to the recovery.

2. Financial market outlook

The firm is cautiously optimistic about the prospects for an improved equity market in the near term. Moderation in the pace of economic activity and a modest decline in interest rates are expected to generate a significant rally in the bond market. The bond rally, in turn, should spur a moderate, but short-lived, rally in the stock market, ending as interest rates return to an upward trend.

3. Current and near-term projected asset mix

The firm halted its move to a higher cash position in anticipation of a rally in the financial markets. Equity portfolio cash positions are being maintained in the 15% to 20% range. However, if the rally fails to materialize and the market declines, the firm will continue to decrease its cash and could move to a fully invested position.

4. Equity sector emphasis

Forecasting a near-term improvement in the financial markets, the firm is currently emphasizing "late cycle" industrial stocks. However, the firm expects to maintain its present overweighted position in the utility sector. As the rally unfolds, it intends to simultaneously raise cash and shift from the industrial cyclicals to higher-yield defensive groups.

STATE OF MINNESOTA

EXTERNAL EQUITY MANAGER UPDATE INTERVIEW

I. INTERVIEW DETAILS

1. Name of manager interviewed — Norwest Bank Minneapolis

2. Date interview conducted — April 24, 1984

3. Date of last interview — November 11, 1983

4. Representing Minnesota State Board of Investment

   Howard Bicker - Executive Director
   Jeff Bailey - Assistant Executive Director
   Daralyn Peifer - Investment Analyst

5. Representing manager

   Bob Mersky - Portfolio Manager
   Paul Von Kuster - Portfolio Manager

II. PERSONNEL

1. **Explain any staff departures since last interview**

   None.

2. **Describe and staff additions since last interview**

   None.

3. **Describe any changes in the status of the specific manager(s) assigned to the SBI's account**

   Norwest is spinning off an investment subsidiary to manage institutional equity and fixed income accounts. The subsidiary will be headed by Bob Mersky. Together, Bob Mersky and Paul Von Kuster will manage the aggressive equity portfolios, including the SBI's account. No fundamental change in the management of the SBI's account will occur because of the subsidiary's creation.

4. **Comments**

   Staff views the subsidiary's creation as a major positive for the SBI's Norwest account. The subsidiary is structured to allow competitive compensation levels to be paid to its portfolio managers with the goal of retaining superior investment talent.

III. CLIENT BASE

1. Accounts and dollars under management

	March 31, 1983		March 31, 1984	
Account	Number	Market Value (Millions)	Number	Market Value (Millions)
Total Tax Exempt	3	$49	3	$80

2. List any significant accounts lost since last interview

None.

3. Comments

The Norwest subsidiary will be taking several accounts from the bank's trust department. In terms of aggressive equity management, the number of accounts and dollars managed is not expected to change initially.

IV. INVESTMENT STRATEGY

1. Economic outlook

Norwest anticipates a slowing of the economy over the next year. The deceleration is expected to be accompanied by a gradual increase in inflation.

2. Financial market outlook

Norwest's aggressive equity investment philosophy is primarily bottom-up with an emphasis on stock selection. Its major focus is the identification of emerging growth companies and industries. The last half of 1983 was a particularly difficult period for the small-cap, high P/E, high beta companies on which Norwest generally focuses. The bank expects the second quarter of 1984 to be a more favorable climate for emerging growth and, in particular, technology stocks.

3. Current and near-term projected asset mix

Norwest is not an active market timer. With its emphasis on stock pricing, the bank's cash position generally reflects the availability of attractive companies. Currently, it has reduced its cash position from 20% to a 12% level, given the severe deterioration in the prices of emerging growth stocks. The bank expects to remain at or near this cash position until a significant change occurs in the valuation of emerging growth issues.

4. Equity sector emphasis

Norwest is retaining its significant overweighting of the Technology sector. The firm has recently increased its Energy holdings (although it is still underweighted) and has moved to a sizable overweighting in Transportation issues.

STATE OF MINNESOTA

EXTERNAL EQUITY MANAGER UPDATE INTERVIEW

I. INTERVIEW DETAILS

1. Name of manager interviewed — Siebel Capital

2. Date interview conducted — March 8, 1984

3. Date of last interview — September 14, 1983

4. Representing Minnesota State Board of Investment

   Jeff Bailey - Assistant Executive Director

5. Representing manager

   Ronald Sloan - Portfolio Manager

II. PERSONNEL

1. **Explain any staff departures since last interview**

   None.

2. **Describe and staff additions since last interview**

   None.

3. **Describe any changes in the status of the specific manager(s) assigned to the SBI's account**

   Siebel briefly experimented with the assignment of two of its three portfolio managers to each handle one half of the SBI's account on a separate basis. At the request of SBI staff this portfolio management process was discontinued and the firm returned to a consensus management approach, jointly utilizing the ideas of all three of its managers. Staff will continue to monitor Siebel organization closely. Staff recommends withholding new cash flow to the firm until the impact of the investment management structure shifts become clearer.

4. **Comments**

   The firm has made attempts to increase the timeliness of its accounting and reporting process. An additional accountant has been hired and a more efficient pricing system has been installed. Up to this time, Siebel's backroom operations have been less responsive than those of the SBI's other managers.

III. CLIENT BASE

1. Accounts and dollars under management

	March 31, 1983		March 31, 1984	
Account	Number	Market Value (Millions)	Number	Market Value (Millions)
Total Tax Exempt	32	$412	38	$543

2. List any significant accounts lost since last interview

None.

3. Comments

The firm continues to avoid aggressively marketing to large institutions, although it is not turning away business. Marketing to smaller, often taxable, potential clients continues. Conflict among the firm's principals exists as to whether this marketing should also stop.

IV. INVESTMENT STRATEGY

1. Economic outlook

Siebel expects a mini-recession in the second or third quarter caused by an overaccumulation of inventories, some tightening by the Fed, and a cutback in consumer spending as savings rates rise and taxes increase. The mini-recession will be characterized by zero GNP growth. However, it will set the stage for strong growth in 1985 as inventories are worked off, interest rates decline and inflation rates remain moderate.

2. Financial market outlook

Siebel is expecting near-term weaknesses in the stock market, but bullish on the prospects for the market in late 1984 and 1985.

3. Current and near-term projected asset mix

Siebel is currently 85% invested and may go to 80% in the near-term. But by late 1984, it expects to be recommitting a significant portion of its available cash to the stock market.

4. Equity sector emphasis

Siebel remains overweighted in the Consumer Non-durables, Financial, and Technology sectors.

STATE OF MINNESOTA

EXTERNAL EQUITY MANAGER UPDATE INTERVIEW

I. INTERVIEW DETAILS

1. **Name of manager interviewed** Herbert R. Smith, Inc.

2. **Date interview conducted** April 11, 1984

3. **Date of last interview** January 10, 1984

4. **Representing Minnesota State Board of Investment**

   Howard Bicker - Executive Director
   Jeff Bailey - Assistant Executive Director
   Cliff McCann - State Auditor's Office

5. **Representing manager**

   Herbert Smith - Portfolio Manager
   David Bagbee - Portfolio Manager

II. PERSONNEL

1. **Explain any staff departures since last interview**

   None.

2. **Describe and staff additions since last interview**

   None.

3. **Describe any changes in the status of the specific manager(s) assigned to the SBI's account**

   None.

4. **Comments**

   In spring of 1983, Herbert Smith's top fundamental investment analyst left the firm. He was replaced by David Bagbee in mid-1983. Particularly in light of the firm's poor early performance for the SBI, staff has maintained frequent contact with the firm. In SBI's staff's opinion, Bagbee has been a good hire. In addition, Herbert R. Smith has added to its support staff in terms of trading and EDP. SBI staff believes that the firm's organization is sound and not a cause for concern. However due to its poor performance, staff recommends withholding new cash flow from the firm until signs of improvement occur. Staff does not recommend withdrawing assets at this time.

III. CLIENT BASE

1. Accounts and dollars under management

Account	March 31, 1983 Number	March 31, 1983 Market Value (Millions)	March 31, 1984 Number	March 31, 1984 Market Value (Millions)
Total Tax Exempt	24	$152	30	$205

2. List any significant accounts lost since last interview

Kerr McGee was lost as an account after one year due to dissatisfaction with performance.

3. Comments

IV. INVESTMENT STRATEGY

1. Economic outlook

The firm continues to believe that the economy is beginning to slow and move into a sustainable moderate growth stage. The inflation rate is expected to remain moderate on both a cyclical and secular basis. By mid-summer, interest rates are expected to have declined modestly. The outlook for corporate profits in this environment remains excellent, particularly for the larger capitalization, cyclical companies.

2. Financial market outlook

The firm is optimistic about the outlook for the stock market on both a near-term and longer-term basis. Near-term the market technically looks like it is firming. Longer-term the positive secular economic outlook gives the firm confidence that the market will perform will over the next several years.

3. Current and near-term projected asset mix

Herbert Smith is roughly 85% invested and may commit additional cash to stocks based on positive near-term technical signals.

4. Equity sector emphasis

The firm has increased its Energy weighting considerably and is now overweighted in that sector. The firm remains overweighted in Financial and Transportation stocks. Its overweighting in Technology has been reduced to a market weighting. The firm remains significantly underweighted in Consumer Nondurables and Utilities.

STATE OF MINNESOTA

EXTERNAL EQUITY MANAGER UPDATE INTERVIEW

I. INTERVIEW DETAILS

1. Name of manager interviewed — Trustee and Investors Company

2. Date interview conducted — April 29, 1984

3. Date of last interview — December 6, 1983

4. Representing Minnesota State Board of Investment

   Howard Bicker - Executive Director
   Jeff Bailey - Assistant Executive Director
   Daralyn Peifer - Investment Analyst

5. Representing manager

   Mason Klinck - Portfolio Manager
   Richard Welch - Portfolio Manager

II. PERSONNEL

1. Explain any staff departures since last interview

None.

2. Describe and staff additions since last interview

The firm continues to expand its internal EDP capability and has added a computer programmer to assist its EDP Operations Director.

3. Describe any changes in the status of the specific manager(s) assigned to the SBI's account

David Cook, formerly a portfolio manager, is now focusing his efforts in the EDP area. Mason Klinck and Dick Welch will continue to manage the SBI account along with recently hired Peter Schaedel.

4. Comments

III. CLIENT BASE

1. Accounts and dollars under management

Account	March 31, 1983 Number	March 31, 1983 Market Value (Millions)	March 31, 1984 Number	March 31, 1984 Market Value (Millions)
Total Tax Exempt	15	$310	25	$630

2. List any significant accounts lost since last interview

None.

3. Comments

IV. INVESTMENT STRATEGY

1. Economic outlook

The firm anticipates that the economic recovery will extend into 1986. It continues to expect a significant decline in interest rates and forecasts inflation at low levels for 1984. Essentially the firm's economic outlook is unchanged from last summer.

2. Financial market outlook

Trustee continues its bullishly optimistic forecast for the stock market. The firm believes that strong corporate earnings and declining interest rates will spur a rally which will continue throughout the year.

3. Current and near-term projected asset mix

The firm is always fully invested as a matter of investment philosophy.

4. Equity sector emphasis

Trustee continues to hold its overweighted positions in the Technology and Financial sectors and its market-weighted position in the Energy sector.