MINNESOTA STATE BOARD OF INVESTMENT MEETING
DECEMBER 4, 1985
&
INVESTMENT ADVISORY COUNCIL MEETING
DECEMBER 3, 1985

AGENDA

STATE BOARD OF INVESTMENT
MEETING

Wednesday, December 4, 1985
8:30 A.M.
Room 118

State Capitol
Saint Paul

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2. Executive Director's Report:	
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3. Report from Investment Advisory Council Committees:	
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1. 1986 legislative proposals	
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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
OCTOBER 2, 1985

The State Board of Investment met on October 2, 1985 at 8:30 A.M. in Room 112 of the State Capitol. Governor Rudy Perpich, Chair, Secretary of State Joan Anderson Growe, State Treasurer Robert W. Mattson, State Auditor Arne H. Carlson, and Attorney General Hubert H. Humphrey III were present.

The Board unanimously approved the minutes of the June 5, 1985 meeting.

EXECUTIVE DIRECTOR'S REPORT

Howard Bicker, Executive Director, reviewed the asset allocation and investment performance of the Basic Retirement Funds. The total rate of return for the Basic Retirement Funds for the fiscal year was 26.8%. Mr. Bicker reported that the Basic Retirement Funds outperformed the median of all balanced funds for the fiscal year. The external equity managers outperformed the Wilshire 5000 for the quarter, and slightly underperformed for the year. Mr. Bicker reported that the external bond managers slightly underperformed Merrill Lynch Master Bond Index for the year.

During the year, the POST Retirement Fund grew by over $400 million due to the Rule of 85 and strong capital market performance. He noted that the cash holdings grew substantially at the end of the fiscal year due to the timing of teacher retirements. Mr. Bicker noted that the total assets under management for all funds has grown to $9.2 billion.

INVESTMENT ADVISORY COUNCIL COMMITTEE REPORT

Ms. Mares, Chair of the Investment Advisory Council, presented the Committee reports:

ADMINISTRATIVE COMMITTEE

Ms. Mares outlined the guidelines for Board investment in repurchase agreements. She also stated that the Committee is studying an expansion of the number of investment options available to participants in the Minnesota Supplemental Retirement Fund, and will present recommendations at the next Board meeting. Secretary of State Growe moved adoption of the report. The motion passed unanimously.

ASSET ALLOCATION COMMITTEE

Ms. Mares stated that it appears that a constitutional amendment would not be necessary to change the accounting procedures for the Permanent School Fund.

EQUITY MANAGER COMMITTEE

Ms. Mares reviewed the report on the termination of four equity managers. She also stated that the Committee had begun the search process for a value-oriented manager. In response to a question from Mr. Carlson, Ms. Mares stated that any changes in economic indicators would be considered by the Committee in recommending a manager to the Board.

ALTERNATIVE INVESTMENT COMMITTEE

Ms. Mares outlined the proposal to invest a maximum of $10 million in a $50 million Minnesota Venture Capital Fund managed by Investment Advisers, Inc. The Committee also recommends a $50 million commitment to Kohlberg, Kravis, & Roberts' 1986 Leveraged Buyout Fund. Mr. Carlson moved approval of the recommendation. The motion passed unanimously.

Ms. Mares outlined the Committee's proposal to invest a maximum of $20 million each in two Minnesota Real Estate Funds managed by Northwestern National Life Insurance Company/Union Bank and Trust and First Asset Realty, respectively. The Committee also recommends a $30 million commitment to Heitman Group Trust II. Mr. Carlson moved approval. The motion passed unanimously. In response to a question from Mr. Carlson, Mr. Bicker stated that the Board would have the opportunity to review these investments. Mr. Bicker also noted that the Board's approval is subject to final approval by the Attorney General's Office.

Ms. Mares also presented a proposed $23 million investment in the Apache APC Operating Partnership. Mr. Carlson moved approval. The motion passed unanimously.

COMPANIES THAT DO BUSINESS IN SOUTH AFRICA

Mr. Bicker presented the report issues by the South Africa Task Force. Mr. Humphrey moved a resolution on companies that do business in South Africa and outlined its requirements. Mr. Humphrey stated that the resolution: 1) provides an aggressive divestment statement; 2) is consistent with fiduciary obligations; 3) sets forth a specific timetable; and 4) coordinates efforts throughout the country. Ms. Growe seconded the motion.

Ms. Growe moved an amendment to prohibit new investments in companies that do business in South Africa unless other available alternatives are not consistent with the Board's fiduciary obligations. Ms. Growe stated that the amendment offers a serious statement of the Board's intention to divest while keeping lines open to corporate leaders. Mr. Humphrey seconded the amendment.

In response to a series of questions from Mr. Carlson, Mr. Humphrey and Ms. Growe stated that the resolution did not apply to securities of the United States Government. In response to a question from Mr. Mattson, Mr. Humphrey stated that the resolution covers the latest amplification of the Sullivan Principles. Mr. Mattson moved to amend the resolution to add "as amended from time to time" to the reference to the Sullivan Principles. Mr. Humphrey accepted the amendment. The motion passed unanimously.

Mr. Carlson moved that the Board's Executive Director report to the legislature annually on the financial impact of divestment and the legislature guarantee the pension funds against any losses as a result of the Board's policy decision. Mr. Humphrey seconded the motion for discussion purposes. Mr. Carlson stated that if there are any losses to the pension funds, the people on pensions should not have to pay the cost of the Board's decisions. Mr. Humphrey opposed the amendment, stating the Board is regularly reviewed by the legislature, and does not ask for a guarantee of its other investment decisions. Mr. Carlson stated that the pensions of the members of various political bodies discussing divestment bills, including the Board, the Minneapolis City Council, the University faculty, and the Hennepin County Board were not affected by the proposed divestment action. Mr. Carlson stated his view that the resolution violates the Board's fiduciary responsibility. He stated that the impact of the decision should be born by all Minnesotans and made by the legislature. He requested a roll call vote.

Ms. Growe stated that there are South Africa-free portfolios that have a better rate of return than others. She stated that all Board members in support of the resolution are looking out for the best interests of the retirees and are exercising their fiduciary responsibility. She stated confidence in the staff to find alternative investments and know when to sell the stock.

Mr. Carlson asked why the Board members were not willing to ask for a guarantee of funds against the probability of losses if they are certain there will be no losses. Mr. Humphrey stated that in his private practice he has observed good, constructive, fiscally prudent social investment policies, and it can also happen in the public arena. Mr. Carlson's motion was defeated on a 1-4 vote; Mssrs. Perpich, Mattson and Humphrey and Ms. Growe voting in the negative; Mr. Carlson voting in the affirmative.

The Board heard testimony from proponents and opponents of the resolution. Testifying in favor were: Earl Miller, Pastor of Pilgrim Baptist Church, St. Paul; Henry Lipman; Albert Goins, Council of Black Minnesotans; Daniel Horwitz, Joint Religious Legislative Coalition; Gleason Glover, Minneapolis Urban League; Polly Mann, Women Against Military Madness; and Representative Randy Staten. Testifying in opposition were: James Hacking, Executive Director of the Public Employees Retirement Association; Representative Gil Gutknecht; and Valdemar Xavies, Southeast Retired Educators Association of Minnesota.

Judy Mares, Chair of the Investment Advisory Council, stated that the Council supported the proposal that the Board sponsor shareholder resolutions. She stated that the Council reinforced its long-standing opposition to divestment of securities of companies doing business in South Africa and expanded its position to oppose policies which exclude future investments in companies that are deemed to be doing business in South Africa. Ms. Mares stated that the Council would be willing to review the resolution in detail. Mr. Humphrey expressed hope that the Council would be actively involved with this issue as they are with all other investment strategy considerations.

Mr. Humphrey stated that because there is a cost associated with a change of action, it is not necessarily a loss. He also stated that questions of morality become part of the economic and fiscal prudence analyses. He stated that the funds can make money in the context of this process.

Ms. Growe stated that the proposal under consideration protects the State's investment from the volatile situation in South Africa, and expresses the Board's moral outrage at apartheid. She stated that change is likely to happen in South Africa which would devalue the Board's South African investments.

In response to questions from Mr. Carlson, Mr. Bicker stated that total divestiture would result in the sale of $1.2 billion in stocks. He said the amount affected in each phase and the financial impact on the portfolio are yet to be determined. There will be an independent financial analysis. Mr. Bicker stated the staff costs to implement the resolution is unknown. In response to Mr. Carlson, Mr. Bicker stated that there would be additional costs associated with retaining independent consultants and sponsoring shareholder resolutions. If they could not be absorbed in the Board's budget, he would submit a request to the LAC. In response to questions from Mr. Carlson, Mr. Bicker stated that total divestiture would distort the tracking of the index fund. Mr. Bicker stated that it is difficult to determine the impact of divestiture on investment performance as in some time periods, small capitalization stocks are the best performers, where as in other periods the prohibited companies, generally larger capitalization companies, lead the market. He stated that the transaction costs estimated by staff were based on a study conducted by the Investor Responsibility Research Center. In response to questions from Mr. Carlson, Mr. Bicker stated that the issue of whether full divestiture would be a violation of fiduciary responsibility something would have to be determined by attorneys. In response to questions from Mr. Carlson, Mr. Bicker stated that the pension funds of

Minneapolis/St. Paul/Duluth teachers, Minneapolis Municipal Employees, and a number of police and fire funds would not be affected by the Board's action. Mr. Bicker stated that, to his knowledge, no corporate pension plan has divested. The University of Minnesota has sold some securities from its endowment fund. He stated the retirement funds of the constitutional officers would be affected if the resolution were interpreted to include the short-term portfolio. Mr. Bicker stated that if total divestiture were implemented, Minnesota corporations such as 3M, Honeywell, Control Data, Gelco, and Medtronics would be affected. He stated the impact on banks would depend on the interpretation of the resolution.

Mr. Bicker concurred with Mr. Humphrey's observation that the staff analysis was in response to Mr. Mattson's original proposal, which was substantially different from the resolution. Mr. Bicker stated that the resolution included provisions for an independent consultant to advise the Board on its fiduciary responsibility. Mr. Humphrey stated that the resolution provides mechanisms to ensure that the Board meets its fiduciary obligations and makes safe and profitable investments. He stated that Mr. Carlson's questions clearly identify how involved the public and private communities are involved in the maintenance of an economic system which lends strong support to apartheid.

Mr. Carlson stated that the Board is taking a risk with somebody else's pension money while it is not willing to seek a guarantee of pension benefits. He stated that there had been tremendous gains in investment performance over the last several years, and the Board's job is to invest pension money in a prudent fashion so that employees can retire with a decent standard of living. Mr. Carlson stated that other groups will come to the Board for action on various moral issues, and the Board will be forced into the business of evaluating foreign policy. He stated that American corporations could receive conflicting statements from various States, each with its own foreign policy. Mr. Carlson stated that the United States should speak with one voice, and all citizens should share equally the cost of implementing the country's foreign policy.

The Governor thanked all the Board members for their work on this issue. The Board voted in favor of the amended resolution (attached) with Mssrs. Perpich, Mattson, and Humphrey and Ms. Growe voting in the positive and Mr. Carlson voting in the negative.

The meeting adjourned at 11:00 A.M.

Respectfully submitted,

Howard Bicker

Howard J. Bicker
Executive Director

Attachment

RESOLUTION OF THE
MINNESOTA STATE BOARD OF INVESTMENT

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

NOW, THEREFORE, BE IT RESOLVED THAT:

1. No monies held and invested by the Minnesota State Board of Investment (SBI) shall remain invested in or hereinafter be invested in the stocks, securities or other obligations of:

(a) any foreign or United States company or any subsidiary or affiliate thereof doing business or operating in the Republic of South Africa or Namibia, or

(b) any bank or financial institution which makes loans to the Republic of South Africa or Namibia or a governmental enterprise thereof, or other loans deemed by the SBI to directly support Apartheid, subject to and in accordance with the provisions hereinafter set forth.

2. Foreign and United States companies, and subsidiaries and affiliates thereof covered by Section 1 shall be identified:

(a) by reference to the most recent annual report of the American Consulate General of Johannesburg, entitled "American Firms, Subdivisions and Affiliates - South Africa," or

(b) through correspondence with the United Nation's Office of the Commissioner for Namibia and the United Nation's Center on Transnational Corporations, or

(c) by other procedures satisfactory to the SBI.

3. Banks or financial institutions covered by Section 1 shall be identified:

(a) from the records of the Interfaith Center on Corporate Responsibility, or

(b) from affidavits of such institutions, or

(c) by other procedures satisfactory to the SBI.

4. The divestiture required by Section 1 shall be completed not later than August 3, 1989. Notwithstanding anything contained herein to the contrary, if during the process of divestiture, the SBI determines that completion of divestiture not later than August 3, 1989 would be inconsistent with the SBI's fiduciary obligations, then the SBI shall authorize an extension of time within which to complete divestiture. The SBI shall periodically evaluate the situation in the Republic of South Africa and Namibia and determine whether the divestiture program shall be accelerated, decelerated or otherwise modified, including whether, as a result of lack of improvement in conditions in those countries, or for other reasons, it is necessary to seek complete divestiture of the securities covered by this resolution.

5. During implementation of this resolution, the SBI shall hereafter neither invest funds in the stocks, securities or other obligations of i) foreign and United States companies and subsidiaries and affiliates thereof or ii) banks or financial institutions both of which are described in sections one, two and three of this resolution nor reinvest funds in the stocks, securities or obligations of such entities following the divestment or sale thereof unless:

(a) SBI staff or other persons and entities charged with the day-to-day investment of funds entrusted to the SBI conclude that other available investment alternatives are not as sound from a fiduciary point of view, or

(b) the SBI concludes that the failure to invest or reinvest in such entities would be inconsistent with the SBI's fiduciary obligations.

(c) the entities meet the standards set forth in section 7 of the resolution.

6. The process of divestiture of and limiting new investments in equity securities will be conducted according to the timetable set forth below, consistent with fiscal prudence and so as to minimize financial market disturbance.

(a) Phase One, to be completed within three months of approval of this resolution, will cover equity securities of those businesses covered by Section 1 of this resolution which (i) operate in a manner which directly supports Apartheid; or (ii) are not signatories of the Sullivan Principles, as amended from time to time, and have never exhibited evidence of a similar corporate policy promoting equal treatment and improving the lives of non-white workers in the Republic of South Africa or Namibia. The SBI shall determine which corporate equities are covered under Phase One through evidence gathered by outside groups monitoring corporate behavior in the Republic of South Africa and/or Namibia as well as by corporate responses to their own enquiries a company shall be deemed to be operating in a manner which directly supports Apartheid if:

(i) it provides goods or services to the South African military, police, prisons, the Ministry of Cooperation and Development (which administers the pass laws), or any other governmental agency responsible for the enforcement or maintenance of Apartheid;

(ii) it provides technology or facilities such as energy producing plants that tend to make the Republic of South Africa less dependent on international trade and thus less susceptible to outside pressure for change;

(iii) it provides loans directly to, underwrites securities of, sells gold on behalf of, or otherwise provides financial services to, the government of the Republic of South; or

(iv) its activities in the Republic of South Africa and Namibia are deemed by the SBI to be especially egregious for other reasons.

(b) phase Two, to be completed by August 3, 1986, will cover equity securities of those businesses covered by Section 1 of this resolution which, having signed the Sullivan Principles, as amended from time to time, or having exhibited evidence of a similar corporate policy promoting equal treatment and improving the lives of non-white workers in the Republic of South Africa and Namibia do not subject their behavior in the Republic of South Africa and/or Namibia to monitoring by Arthur D. Little, Inc. or another independent monitor satisfactory to the SBI.

(c) phase Three, to be completed by August 3, 1987, will cover equity securities of those businesses covered by Section 1 of this resolution that did not obtain a performance rating in the most recent Arthur D. Little, Inc. report within the highest category of the Sullivan Principles rating system, or an equivalent thereof.

(d) phase Four, to be completed not later than August 3, 1989, will cover all other equity securities covered by Section 1 of this resolution.

7. Notwithstanding the foregoing, the SBI may authorize the holding of investments covered by Phases Two, Three and Four of this resolution in companies engaging in corporate political, social, and economic activities, in addition to compliance with the Sullivan Principles, as amended from time to time, or a similar corporate policy, that are deemed by the SBI to be of substantial assistance to efforts to eliminate Apartheid.

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

(a) actions to persuade the government of the Republic of South Africa to eliminate Apartheid and to comply with the United Nations Security Council Resolution 435 on Namibia, including tangible opposition to the system of pass laws, influx controls and other fundamental building blocks of Apartheid;

(b) absence of participation and investment in the bantustan/homelands;

(c) formal recognition of and collective bargaining with black trade unions that are independent of government control;

(d) providing specific training and upgrading programs at the work-place and increasing the number of non-whites in technical, skilled, professional and management positions, including positions in which non-whites supervise whites;

(e) payment of a reasonable, livable wage to all employees;

(f) substantial expenditures to raise the level of education and skills of the non-white majority population, including the provision of schooling for workers and children in the community:

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

(h) substantial expenditures to provide health and medical services to workers and their families on a non-discriminatory basis.

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

8. Notwithstanding the foregoing, during Phases Two and Three the SBI may also direct the divestment of equity securities in companies or institutions which have signed and observed the Sullivan Principles, as amended from time to time, or implemented a similar policy, but are nevertheless deeply involved in South Africa and/or Namibia in a way which lends support to Apartheid. Such deep involvement

may be demonstrated by such activities as the expansion of operations in those countries or significant business with agencies or enterprises of the South African government other than agencies described in Phase One.

9. In furtherance of the principles set forth in the resolution, the SBI shall, pursuant to procedure set forth in section 12 of this resolution, seek out and persuade other shareholders to act in a concerted manner to change corporate political, social and economic activities in the Republic of South Africa and Namibia. The SBI, in conjunction with its staff, shall

(a) during Phase One, (i) notify issuers who have never signed the Sullivan Principles, as amended from time to time, or never exhibited evidence of a similar corporate policy promoting equal treatment and improving the lives of non-white workers in the Republic of South Africa and Namibia of the proposals for action by the stockholders of such issuers requiring such issuers to subscribe to the Sullivan Principles, as amended from time to time, (ii) to submit such proposals to such issuers, and (iii) to supply supporting statements for such proposals for inclusion in the issuers' proxy statements;

(b) during Phase Two, (i) notify, issuers who have signed the Sullivan Principles, as amended from time to time, or have exhibited evidence of a similar corporate policy promoting equal treatment and improving the lives of non-white workers in the Republic of South Africa and Namibia but have not subjected their behavior to monitoring by Arthur D. Little, Inc. or another independent monitor satisfactory to the SBI of its intention to present proposals for action by the stockholders to require such issuers to subject themselves to such monitoring (ii) to submit such proposals to such issuers, and (iii) to supply supporting statements for such proposals for inclusion in the issuers' proxy statements;

(c) during Phase Three, (i) notify issuers who have not obtained a performance rating within the highest category of the Sullivan Principles, as amended from time to time, rating from Arthur D. Little, Inc. or an equivalent rating from another independent monitor satisfactory to the SBI of its intention to present proposals for action by the stockholders to require such issuers to modify their behavior in order to obtain such a performance rating, (ii) to submit such proposals to such issuers, and (iii) to submit such proposals for inclusion in the issuers' proxy statements;

(d) during all phases of the divestiture, the SBI shall act in these and other ways to persuade corporations to continually improve their corporate political, social and economic activities in the Republic of South Africa and/or Namibia consistent with the resolution; and

(e) from the date of this resolution, vote the shares held "For" all management or stockholder proposals consistent with clauses (a), (b), (c), and (d) of this section.

10. The SBI directs its staff, upon adoption of this resolution, to write to the companies and institutions identified in Sections 2 and 3 of this resolution to inform them of the adoption of this resolution and its provisions, to give them notice of the actions they should take in order to avoid divestiture, and to provide them an opportunity to describe any actions they may be taking to work for peaceful fundamental change in the Republic of South Africa and Namibia; and further directs that prior to implementing Phases Two, Three and Four of the divestiture program, the SBI staff again communicate with such companies and institutions to provide them an opportunity to describe any changes that have been made in their operations and policies with respect to the Republic of South Africa and Namibia.

11. The SBI shall seek financial and legal advice concerning the divestiture program set forth for consideration in this resolution. Before each stage of the divestiture program, the SBI shall seek advice from financial experts concerning the effect of proposed divestiture program shall be implemented so as to be consistent with the advice received from the SBI's financial and legal advisors.

12. To advise and assist it in implementation of this resolution, the SBI hereby authorizes the formation of an Advisory Taskforce on Divestment composed of a representative selected by each member of the SBI and at least one representative from the Minnesota corporate community, one representative from a Minnesota public

employee labor group and one representative from a public employee retirement group.

13. To assist in implementation of section eight of this resolution, the SBI directs its Executive Director to obtain the consulting services of a representative from the Interfaith Center on Corporate Responsibility.

14. This resolution shall take effect immediately.

Adopted this 2nd day of October, 1985.

Governor Rudy Perpich
Chair, Minnesota State
Board of Investment

AGENDA

INVESTMENT ADVISORY COUNCIL
MEETING

Tuesday, December 3, 1985

2:00 P.M.

Minneapolis Club - Conference Room
729 Second Avenue South
Minneapolis, Minnesota

	TAB
1. Approval of Minutes of October 1, 1985 meeting	
2. Executive Director's Report:	
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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
OCTOBER 1, 1985

The Investment Advisory Council met on Tuesday, October 1, 1985 at 2:00 P.M. in the MEA Conference Room.

Members Present: Judith Mares, Malcolm McDonald, Henry Adams Jr., Ken Gudorf, James Hacking, Richard Hume, Jay Kiedrowski, Gary Norstrem, Joe Rukavina, Ray Vecellio, Jan Yeomans, Harvey Schmidt.

Members Absent: Verona Burton, James Eckmann, Paul Groschen, Mike Rosen, Deborah Veverka.

SBI Staff: Howard Bicker, Jeff Bailey, John Griebenow, Teresa Myers.

Others Attending: Elton Erdahl, Arvin Herman, Mike Ousdigian, Peter Sausen, Rick Scott, Elaine Voss, Robert Whitaker, Betty Wilson.

The minutes of the June 4, 1985 meeting were unanimously approved.

Judith Mares introduced James Hacking, the new Executive Director of PERA.

EXECUTIVE DIRECTOR'S REPORT

Howard Bicker, Executive Director, reviewed the asset allocation and investment performance of the Basic Retirement Funds. The total rate of return for the Basic Retirement Funds for the fiscal year was 26.8%. Mr. Bicker reported that the Basic Retirement Funds outperformed the median of all balanced funds for the fiscal year. The external equity managers outperformed the Wilshire 5000 for the quarter, and slightly underperformed for the year. Mr. Bicker reported that the external bond managers slightly underperformed Merrill Lynch Master Bond Index for the year.

During the year, the POST Retirement Fund grew by over $400 million due to the Rule of 85 and strong capital market performance. He noted that the cash holdings grew substantially at the end of the fiscal year due to the timing of teacher retirements. Mr. Bicker noted that the total assets under management for all funds has grown to $9.2 billion.

ADMINISTRATIVE Committee REPORT

Ms. Mares outlined the Committee's discussion regarding proposed changes for the Minnesota Supplemental Retirement Fund. Mr. Bicker reviewed the guidelines for investment in repurchase agreements. Mr. Gudorf moved approval of the guidelines. The motion passed unanimously. Ms. Mares stated that the Committee was currently conducting its annual evaluation of the Executive Director.

ASSET ALLOCATION Committee

Mr. McDonald reviewed the Supplemental Report on the Permanent School Fund. He stated that the Fund would be structured like an endowment so that both the principle and income would grow over the years. Mr. McDonald stated that further study had revealed that a constitutional amendment would not be required to make the needed accounting changes. The Committee recommended that a legislative proposal be prepared for the upcoming session.

EQUITY MANAGER Committee

Mr. Hume presented the report of the equity manager Committee. Evaluation Associates has been asked to screen potential "value-added" managers. Mr. Hume also reviewed a preliminary staff report on the development of normal portfolios and a report from Wilshire Associates on the process of liquidating the stock from the four terminated equity managers and distributing the proceeds among the remaining managers.

FIXED INCOME MANAGER REPORT

The Committee did not meet during the quarter. In response to a question regarding manager performance, Mr. Bicker stated that Norwest had invested heavily in short maturities and Miller Anderson was invested in mortgage-backed securities. Ms. Mares cautioned against evaluating the managers over a short time period. In response to a question from Mr. Hume, Mr. Bicker stated that the staff is awaiting the SEC's ruling on incentive fees.

ALTERNATIVE INVESTMENT Committee

Mr. Gudorf presented the report of the Alternative Investment Committee. Mr. Gudorf explained while it looks like the Board's venture capital commitments exceed its target, the long take-down periods mean the Board is basically on target in meeting its funding goals. Mr. Bicker outlined the proposed formation of a Minnesota Venture Capital Fund to be managed by Investment Advisers, Inc. The Committee recommends a maximum 20%, or $10 million commitment, in the proposed $50 million fund. Mr. Gudorf also outlined the Committee's recommendation for a $50 million commitment to the Kohlberg, Kravis, & Robert 1986 leveraged buyout partnership.

In real estate, Mr. Gudorf reviewed the Committee's recommendation to commit a maximum of 20% or $20 million each, to two mangers for the formulation of two Minnesota Real Estate Investment Funds. Northwestern National Life Insurance/Union Bank & Trust will focus on development properties, whereas First Asset Realty will concentrate on existing properties. Mr McDonald reviewed the Request for Proposals process. Mr. Gudorf also discussed the Committee's recommendation to commit $30 million to Heitman Group Trust II.

In the resource area, Mr. Gudorf reviewed the proposed $23 million investment with the Apache Corporation. Mr. McDonald moved approval of the Committee's report: a maximum $10 million commitment to the Minnesota Venture Capital Fund managed by Investment Advisers, Inc.; $50 million to the 1986 leveraged buyout partnership managed by Kohlberg, Kravis & Roberts; $30 million to Heitman Group Trust II; a maximum of $20 million each to two Minnesota Real Estate Funds managed by Northwestern National Life Insurance Company/Union Bank and Trust and First Asset Realty, respectively; and $23 million to Apache Corporation's APC Operating Partnership. The motion passed unanimously.

ADDITIONAL BUSINESS

In response to a question from Mr. Rukavina, Mr. Bicker reported that the transfer of assets from the Moorhead Police and Fire Fund to PERA Police and Fire had been completed. In response to a question from Mr. Norstrem, Mr. Bicker stated that the 1986 retiree benefit increase would be approximately 7.8%.

Mr. Norstrem proposed that the Council affirm its position on investments in companies that do business in South Africa. Mr. Kiedrowski inquired whether the Council would support divestment if investments with equal return could be found. Ms. Mares stated that the issue could not be addressed without in-depth study by the Council. Mr. Kiedrowski urged the Council to discuss other alternatives that could be considered by the Board.

Mr. Bicker reviewed the report issued by the South Africa Task Force. Mr. Kiedrowski outlined the South Africa resolution adopted by the New York City Employees Retirement System. Mr. Norstrem stated he would support that portion of the proposal relating to the Board sponsoring shareholder resolutions, and recommended that the Council study the other alternatives. Mr. McDonald moved adoption of the following statement:

> "Because the Investment Advisory Council believes the Board must fulfill its fiduciary responsibility, unless the State Board of Investment finds another action that meets its fiduciary responsibility, the Council states that it:

1) has reviewed the South Africa Task Force Report;
2) agrees with the recommendation that the Board sponsor shareholder resolutions;
3) continues to oppose divestment per se; and
4) adds its opposition to the exclusion of new investments per se in companies doing business in South Africa.

Mr. Gudorf seconded the motion. The motion passed unanimously.

The meeting adjourned at 4:15 P.M.

Respectfully Submitted

Howard Bicker

Howard J. Bicker
Executive Director

Tab A

MINNESOTA STATE BOARD OF INVESTMENT

QUARTERLY INVESTMENT REVIEW

BASIC RETIREMENT FUNDS

September 30, 1985

MINNESOTA STATE BOARD OF INVESTMENT

BASIC RETIREMENT FUNDS

THIRD QUARTER 1985

Summary

ASSETS

Weak performances by the capital markets and continued "Rule of 85" early retirements resulted in a 3.1% decline in the market value of the Basic Retirement Funds' assets in the third quarter. Despite the decline, a strong performance in the first half of the year allowed the Funds' assets to grow 9.6%, as measured year-to-date. Withdrawals from the Funds exceeded contributions by $39.3 million for the quarter, bringing net cumulative withdrawals for calendar year 1985 to $67 million. Early retirements under the "Rule of 85" are expected to occur throughout 1986. However, the magnitude of resulting withdrawals remains uncertain. End-of-period market values for the latest three quarters and five calendar years are presented below.

Calendar Year		Market Value (millions)	Percent Change from Previous Period
1980		$1,962	+ 20.6%
1981		2,148	+ 9.5
1982		2,806	+ 30.6
1983		3,129	+ 11.5
1984		3,265	+ 4.4
1985	1Q	3,479	+ 6.6
	2Q	3,691	+ 6.1
	3Q	3,578	- 3.1

ASSET MIX

The weightings of the Basic Retirement Funds' asset classes changed little during the third quarter of the year. Modest asset class shifts reflected the relative performances of the capital markets and the Funds' gradual move toward their long-term target asset allocations. The cash equivalents component of the Basic Funds' portfolio decreased slightly and the alternative equity component increased as new alternative investment managers were hired and current managers received additional funding. This shift will continue in upcoming quarters as the alternative managers' funding schedule proceeds. The percentages of the Basic Retirement Funds (at market value) invested in the various asset classes for the most recent two quarters are presented below. To facilitate comparison, percentages for third quarter 1984 are displayed as well.

ASSET MIX

	9/30/84	6/30/85	9/30/85
Common Stocks	58.1%	59.9%	58.2%
Bonds	23.9	23.4	25.3
Cash Equivalents*	12.0	9.6	8.0
Alternative Equity Assets	6.0	7.1	8.5
	100.0%	100.0%	100.0%

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

INVESTMENT RETURNS

Third quarter 1985 was characterized by declining stock prices and mediocre bond performance. In this disappointing capital markets environment, the Basic Retirement Funds' total portfolio produced a quarterly return of -2.0%. (Excluding alternative equity assets, the portfolio produced a -2.3% return for the quarter.) Boosted by the portfolio's first half 1985 performance, total portfolio return for the year ending September, 1985 was 15.2%. (Excluding alternative assets, total portfolio return for the year was 15.9%)

For the quarter, the Funds' total portfolio performance lagged that of the median balanced fund manager but roughly matched that of the assigned stock/bond composite. For the most recent year, the Funds' performance was in line with the median balanced fund manager but slightly below that of the compcsite. Total portfolio and asset segment returns for the most recent quarter and year are presented below.

Total Rate of Return	Third Quarter 1985	Year Ending 9/30/85
Common Stocks	-4.5%	14.9%
Bonds	2.7	20.1
Cash	2.0	9.1
Alternative Equity Assets	0.8	6.3
Total Fund	-2.0	15.2

EQUITY PERFORMANCE

The stock market was unable to sustain its outstanding performance of the previous two quarters. During third quarter 1985, the market, as represented by the Wilshire 5000, produced a -4.3% total rate of return. Stock prices in general moved within a moderate trading range throughout most of the quarter before dropping sharply near quarter's-end. The decline in stock prices was fairly broad-based with all of the major industry sectors posting negative returns for the period.

With a -4.5% total return for the quarter, the Basic Retirement Funds' external manager group performed roughly in line with the market. For the year ending September 30, 1985, the managers generated a 14.3% total return versus the Wilshire 5000's return of 14.9%. The index fund once again tracked the performance of the Wilshire 5000. Third quarter return for the index fund was -4.5%; index fund return for the most recent year was 15.0%.

At the beginning of the third quarter, the SBI's external common stock manager group was reorganized. The external manager group is comprised now of seven of the original Basic Funds' external managers plus BMI Capital, Lieber & Co., Peregrine Capital and Waddell & Reed. Further, the SBI investment staff was retained temporarily to manage a portfolio with a value investment style. The internal manager will be replaced in the future when an additional external manager with a similar investment style is retained. In addition to the shifts in the composition of the external equity manager pool, several managers received additional funding. These managers were Fred Alger, Alliance Capital, Beutel Goodman, BMI Capital, Peregrine Capital, and Waddell & Reed.

Industry sector concentrations of the aggregate external manager portfolio remained essentially unchanged from the previous quarter. As a group, the external common stock managers maintained their overweighted positions in the consumer durables, financial, and transportation sectors and underweighted positions in the capital goods, energy, and utilities sectors.

The Basic Retirement Funds' equity manager returns for the latest quarter and year are presented below.

Total Portfolio Returns

	Third Quarter 1985	Year Ending 9/30/85
Fred Alger	-4.6%	11.8%
Alliance Capital	-3.3	21.9
Beutel Goodman	-8.6	14.0
BMI Capital	-2.4	8.0
Forstmann Leff	-4.2	18.8
Hellman Jordan	-5.6	15.3
IDS	-5.9	15.9
Investment Advisers	-7.2	11.0
Lieber & Company	-1.9	19.0
Peregrine Capital	-1.9	13.1
Waddell and Reed	-2.0	11.9
Internal Manager	-5.0	N.A.
Total - External Active Managers	-4.5	14.3
Wilshire Associates (Index Fund)	-4.5	15.0
Wilshire 5000	-4.3	14.9

BOND PERFORMANCE

Following its buoyant second quarter, the bond market turned in a modest performance for the third quarter. The market, as represented by the Merrill Lynch Master Bond Index, produced a 1.9% return for the period. This performance brought the market's return for the most recent year to 20.9%.

During the quarter, the Basic Retirement Funds' external bond managers performed well relative to the market. A 2.7% return for the quarter brought the managers' aggregate return for latest year to 20.7%. The strong third quarter performance allowed the bond manager group to perform roughly in line with the market for the year. The manager group outperformed the TUCS median bond manager from a sample of similar risk managers in the latest quarter. The group matched the performance of the TUCS median bond manager for the last year.

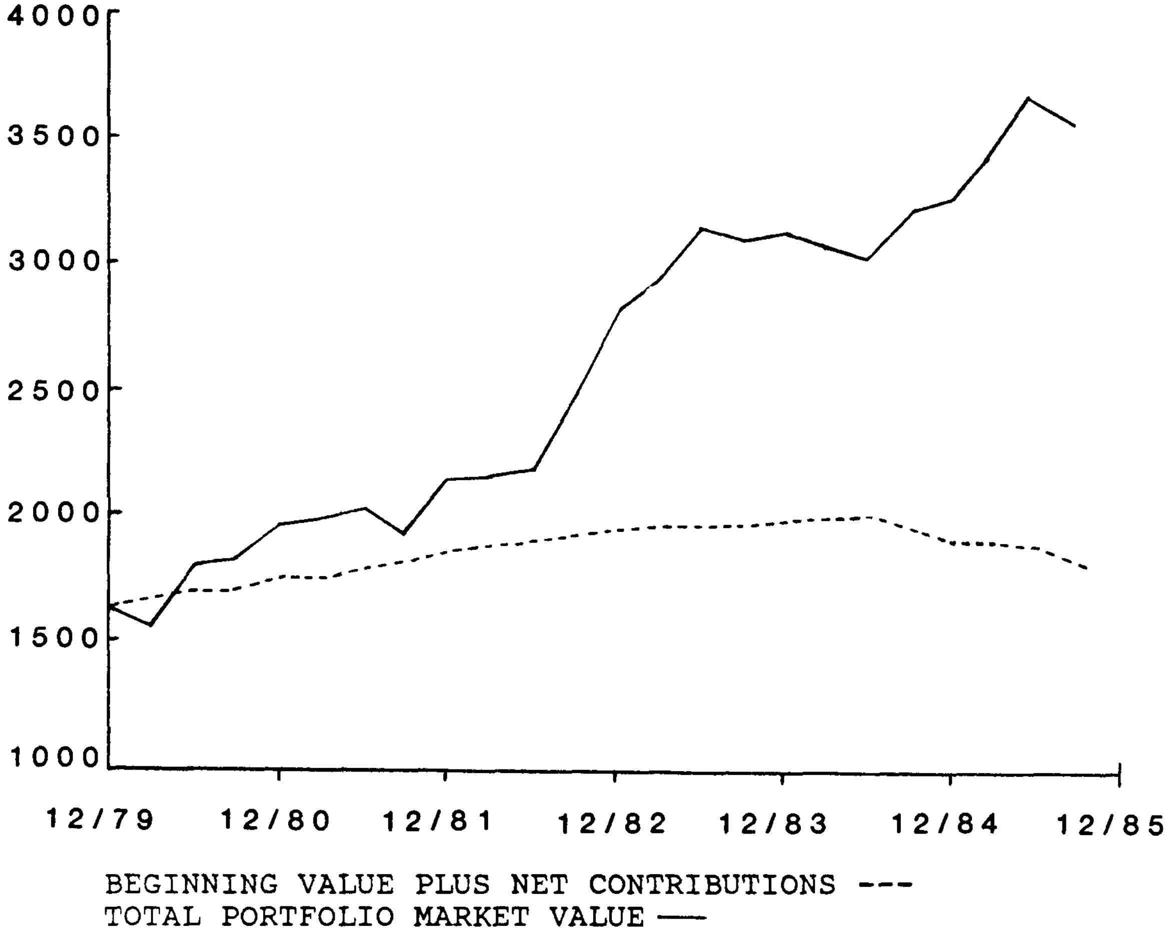
The Basic Retirement Funds' bond manager returns for the most recent quarter and year are displayed below.

	Total Portfolio Returns	
	Third Quarter 1985	Year Ending 9/30/84
Investment Advisers	2.3%	23.8%
Lehman Management	2.1	19.7
Miller Anderson	4.4	20.2
Morgan Stanley	2.4	21.6
Peregrine Capital	3.0	19.1
Western Asset	1.9	21.5
Total - External Managers	2.7	20.7
Merrill Lynch Master Bond Index	1.9	21.0
TUCS Median Bond Manager	2.0	20.7

FIGURE 1

BASIC RETIREMENT FUNDS

ASSET GROWTH



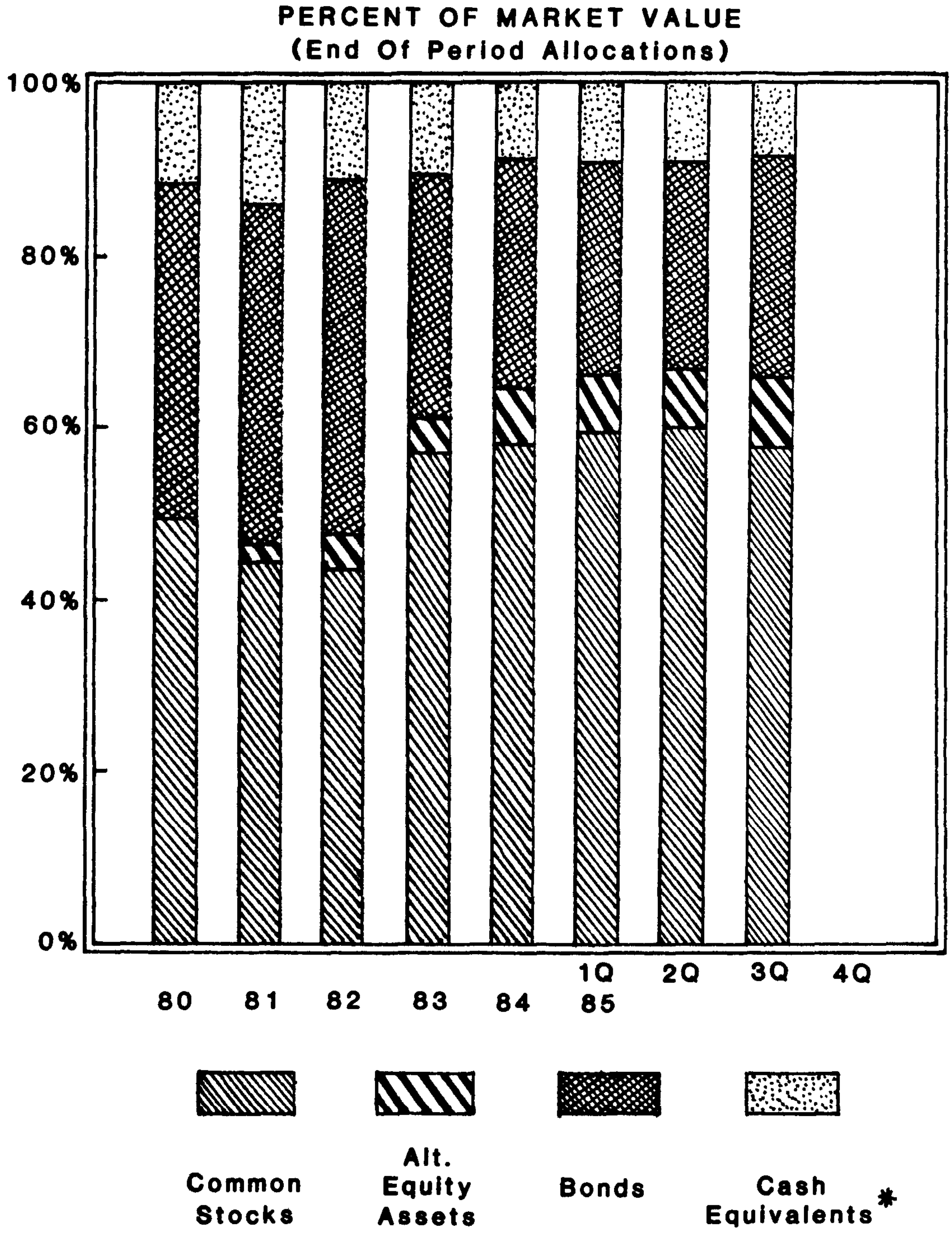
	PERIOD ENDING					
	12/80	12/81	12/82	12/83	12/84	9/85
BEGINNING VALUE	1627.1	1962.0	2148.8	2806.2	3129.0	3265.0
NET CONTRIBUTIONS	122.7	114.9	91.0	40.0	- 77.6	-66.7
INVESTMENT RETURN	212.2	71.9	566.4	282.8	213.6	379.5
ENDING VALUE	1962.0	2148.8	2806.2	3129.0	3265.0	3577.8

(MILLIONS OF DOLLARS)

FIGURE 2

BASIC RETIREMENT FUNDS

ASSET MIX



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

TABLE 1

BASIC RETIREMENT FUNDS

ASSET MIX

PERCENT OF 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
1980		964	49.1	767	39.1	231	11.8	-	-	-	-	-	-
1981		959	44.6	865	40.3	297	13.8	20	0.9	8	0.4	-	-
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		1,887	57.8	847	25.9	308	9.4	178	5.5	23	0.7	22	0.7
1985	1Q	2,055	59.1	845	24.3	335	9.6	194	5.6	25	0.7	26	0.7
	2Q	2,209	59.9	865	23.4	355	9.6	203	5.5	25	0.7	34	0.9
	3Q	2,081	58.2	905	25.3	288	8.0	236	6.6	25	0.7	44	1.2

*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.
1983	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
1984	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	41.7	40	+ 1.7	17.7	20	- 2.3	33.3	25	+ 8.3	5.5	10	-4.5	1.8	5	-3.2
	3Q	42.5	40	+ 2.5	17.9	20	- 2.1	32.6	25	+ 7.6	5.3	10	-4.7	1.7	5	-3.3
	4Q	42.1	40	+ 2.1	18.0	20	- 2.0	32.7	25	+ 7.7	5.5	10	-4.5	1.7	5	-3.3
1985	1Q	43.0	40	+ 3.0	18.3	20	- 1.7	31.4	25	+ 6.4	5.7	10	-4.3	1.6	5	-3.4
	2Q	43.2	40	+ 3.2	18.7	20	- 1.3	30.7	25	+ 5.7	5.6	10	-4.4	1.8	5	-3.2
	3Q	42.8	40	+ 2.8	18.8	20	- 1.2	29.5	25	+ 4.5	6.6	10	-3.4	2.3	5	-2.7

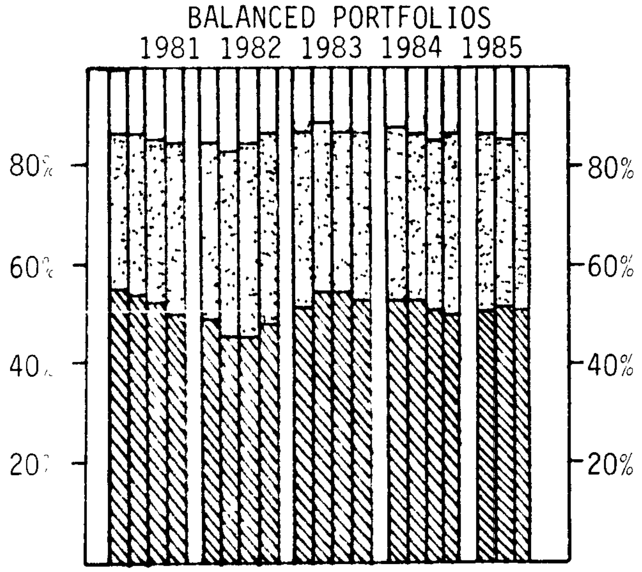
*Includes cash held by external managers in the particular asset class.
**Includes cash uncommitted to long-term assets.

FIGURE 3

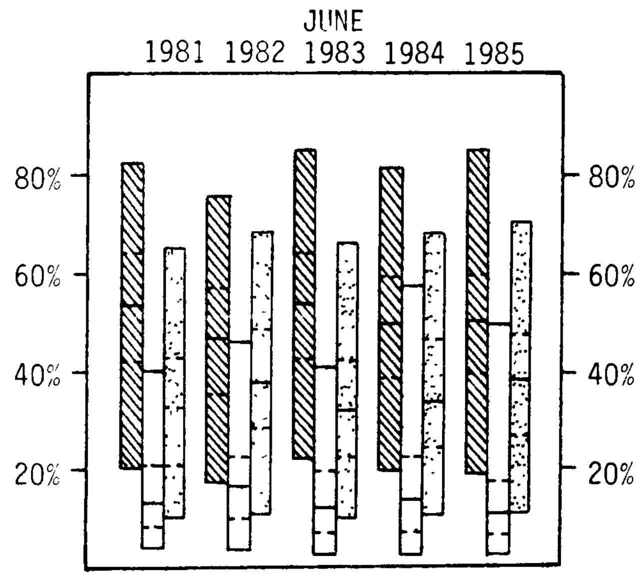
ASSET ALLOCATION PERSPECTIVE

TAX EXEMPT BALANCED PORTFOLIOS

QUARTER-TO-QUARTER
AVERAGE ASSET ALLOCATION



ASSET ALLOCATION
DISTRIBUTION



	SEPTEMBER				
PERCENT EQUITY	1981	1982	1983	1984	1985
5TH PERCENTILE	83	76	86	82	86
25TH PERCENTILE	64	57	64	59	60
MEDIAN	53	46	53	49	50
75TH PERCENTILE	41	34	42	38	39
95TH PERCENTILE	19	16	21	19	18
PERCENT CASH EQUIV					
5TH PERCENTILE	39	45	40	57	49
25TH PERCENTILE	19	21	18	21	16
MEDIAN	11	14	10	12	9
75TH PERCENTILE	6	8	5	6	5
95TH PERCENTILE	2	2	1	1	1
PERCENT FIXED INCOME					
5TH PERCENTILE	65	68	66	68	71
25TH PERCENTILE	42	48	41	46	47
MEDIAN	31	37	31	33	37
75TH PERCENTILE	20	27	21	23	26
95TH PERCENTILE	8	9	8	9	9

Source: Trust Universe Comparison Service

FIGURE 4

PERFORMANCE OF CAPITAL MARKETS

CUMULATIVE RETURNS

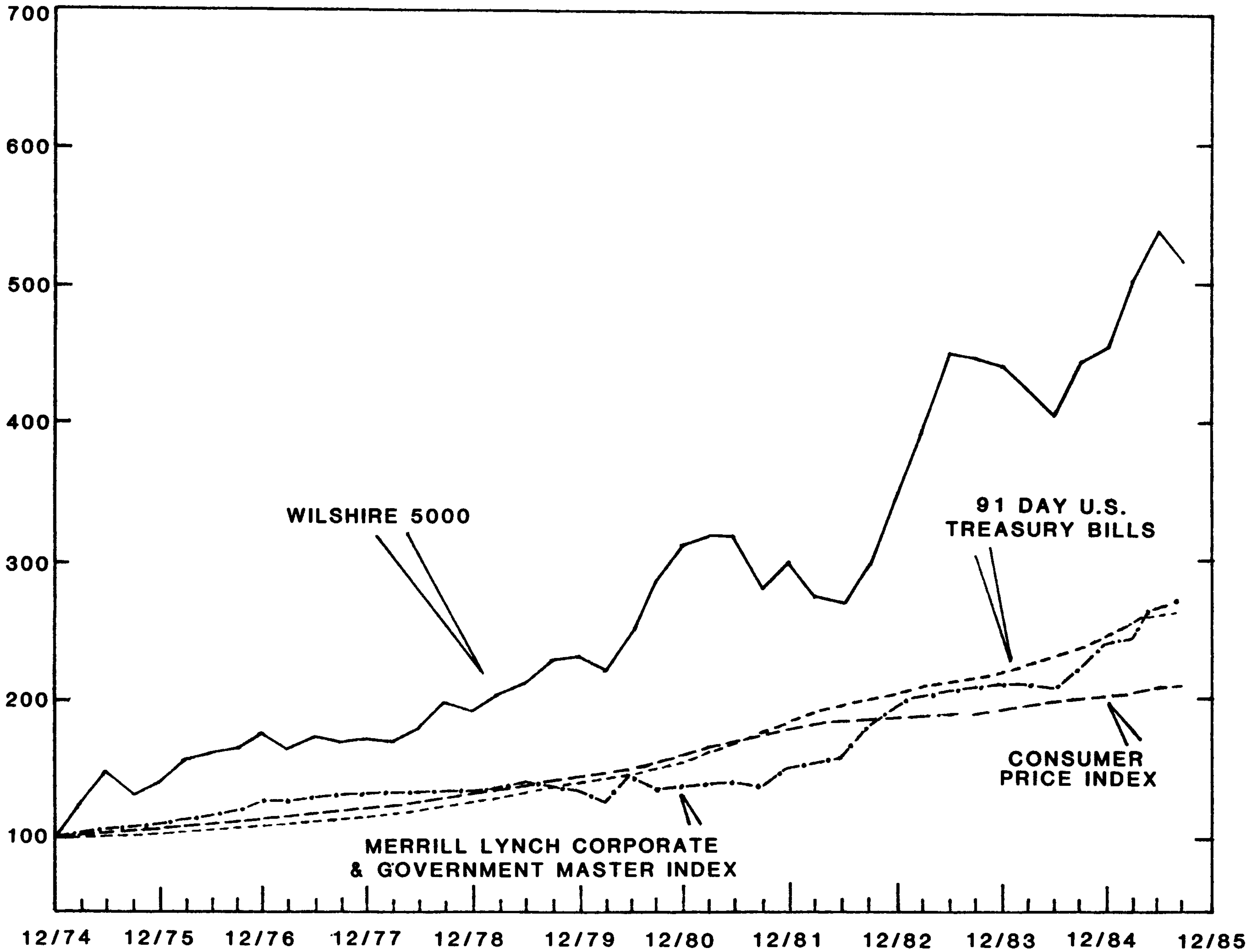


FIGURE 5

BASIC RETIREMENT FUNDS

INVESTMENT RETURNS RELATIVE TO PERFORMANCE STANDARDS

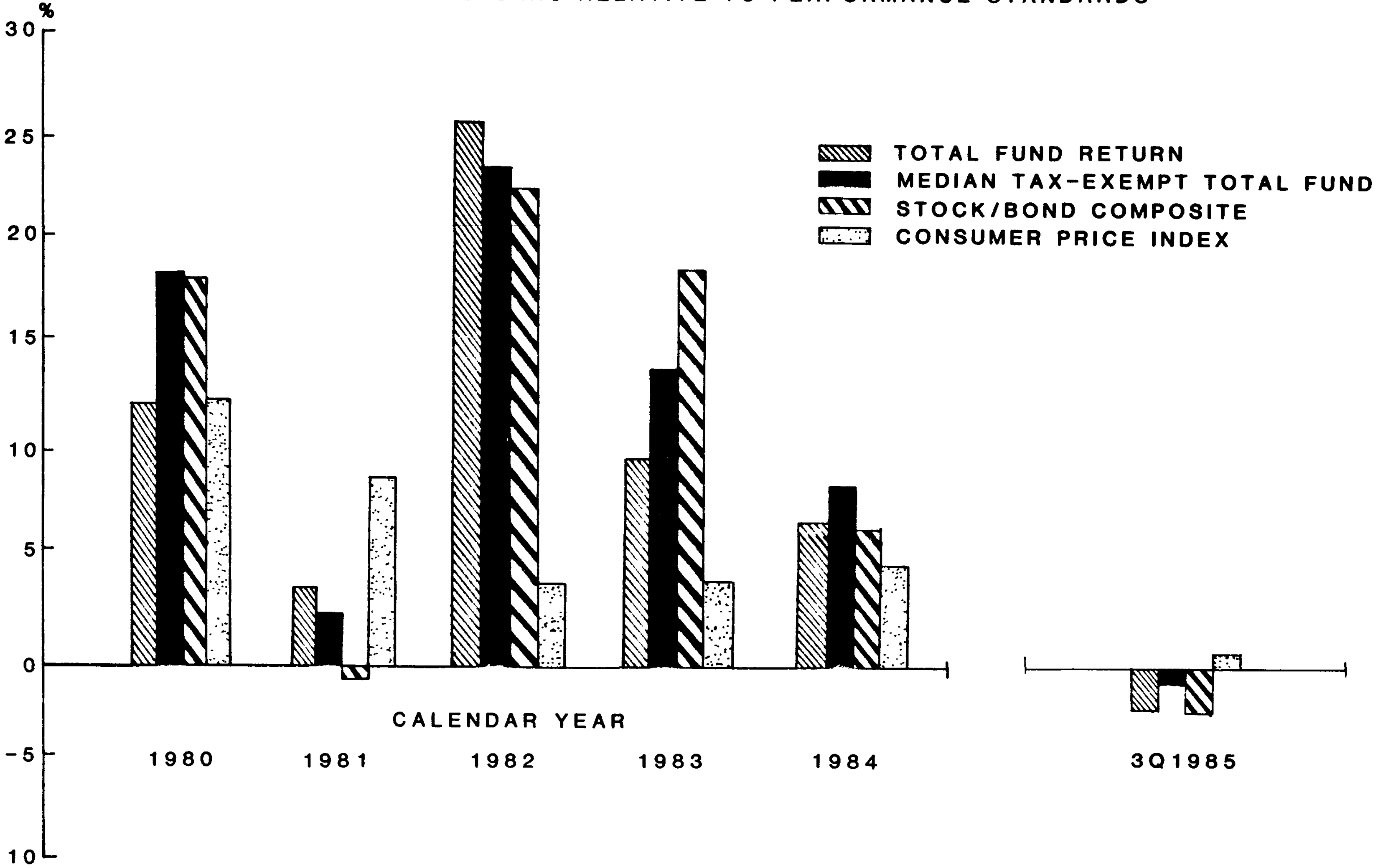


TABLE 3

BASIC RETIREMENT FUNDS

INVESTMENT RETURNS RELATIVE TO PERFORMANCE STANDARDS

Calendar Year		Total Fund Return (exc. alt. assets)	Median Tax-exempt Fund	Stock/Bond* Composite	Inflation	Total Fund Return (inc. alt. assets)
1980		12.4	18.6	18.3	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	10.1
1984		6.8	8.3	6.6	4.0	6.9
1985	1Q	6.9	5.7	7.8	1.0	6.5
	2Q	7.4	6.8	7.8	1.1	7.0
	3Q	- 2.3	- 1.0	- 2.4	0.7	- 2.0
1 Year Through 9-30-85		15.9	16.0	16.8	3.2	15.2
3 Years Annualized Through 9-30-85		14.1	15.8	18.4	3.4	13.8
5 Years Annualized Through 9-30-85		12.5	13.0	13.0	5.2	12.3

*50/50 Wilshire 5000/Merrill Lynch Bond Index Composite Through 6-30-81
70/30 Wilshire 5000/Merrill Lynch Bond Index Composite 7-01-81 through 9-30-85

TABLE 4

BASIC RETIREMENT FUNDS

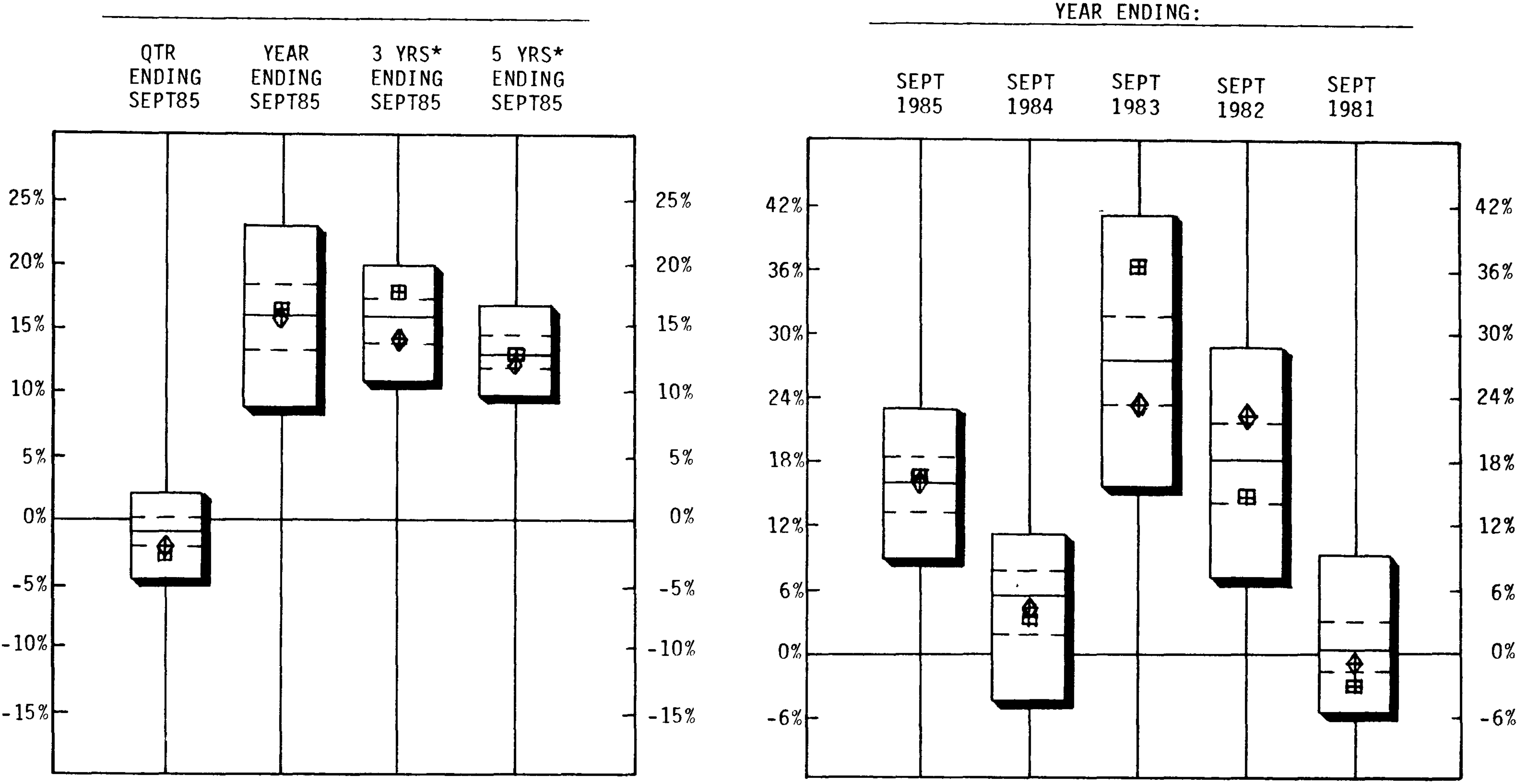
INVESTMENT RETURNS - DETAIL

Calendar Year		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		
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		6.8	2.7	3.1	14.6	15.1	11.8	6.9
1985	1Q	6.9	9.5	10.3	2.1	2.0	1.6	6.5
	2Q	7.4	7.8	7.5	7.7	8.6	1.4	7.0
	3Q	- 2.3	- 4.5	- 4.3	2.7	1.9	0.8	- 2.0
1 Year Through 9-30-85		15.9	14.9	14.9	20.1	21.0	6.4	15.2
3 Years Annualized Through 9-30-85		14.1	15.3	19.7	16.3	14.9	8.0	13.8
5 Years Annualized Through 9-30-85		12.5	11.3	12.5	15.0	14.6	N.A.	12.3

FIGURE 6

DISTRIBUTION OF TOTAL PORTFOLIO RETURNS

TAX EXEMPT BALANCED PORTFOLIOS



⊞ Wilshire 5000/Merrill Lynch Bond Index
◈ Basic Retirement Funds
Source: Trust Universe comparison Service; Merrill Lynch Capital Markets

TABLE 5

DISTRIBUTION OF TOTAL PORTFOLIO RETURNS

TAX EXEMPT BALANCED PORTFOLIOS

					YEAR ENDING:				
	QTR ENDING SEPT 85	YEAR ENDING SEPT 85	3 YRS* ENDING SEPT 85	5 YRS* ENDING SEPT 85	SEPT 1985	SEPT 1984	SEPT 1983	SEPT 1982	SEPT 1981
5TH PERCENTILE	2.0%	23.1%	20.0%	17.0%	23.1%	11.2%	41.1%	28.7%	9.2%
25TH PERCENTILE	0.1	18.5	17.4	14.6	18.5	7.9	31.7	21.6	3.0
MEDIAN	-1.0	16.0	15.8	13.0	16.0	5.4	27.6	17.8	0.3
75TH PERCENTILE	-2.1	13.3	13.9	12.0	13.3	2.0	23.3	14.2	-1.7
95TH PERCENTILE	-4.6	8.9	10.9	9.8	8.9	- 4.3	15.6	7.1	-5.6
WILSHIRE 5000	-4.3	14.9	19.7	12.5	14.9	0.7	48.2	7.7	-2.5
MERRILL LYNCH BOND INDEX	1.9	21.0	14.9	14.6	21.0	9.1	14.9	32.5	-1.5
** STOCK/BOND INDEX	-2.4	16.8	18.4	13.0	16.8	3.2	37.7	14.9	-3.5
BASIC RETIREMENT FUNDS	-2.3	15.9	14.1	12.5	15.9	3.5	23.9	22.8	-1.3

*Annualized

**50/50 Wilshire 5000/Merrill Lynch Bond Index Composite Through 6-30-81
70/50 Wilshire 5000/Merrill Lynch Bond Index Composite 7-01-81 Through 9-30-85

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

STAFF COMMENTS:

The stock market, as represented by the Wilshire 5000, produced a -4.3% return for third quarter 1985. All of the industry sectors produced negative returns for the period. However, the performance of the financial and utilities stocks was especially poor. Market leadership appeared to be rotating away from these interest-sensitive issues and toward more cyclical stocks.

The third quarter market environment was difficult for aggressive common stock managers. For the first time, Wilshire's TUCS service reported the performance of its universe of equity managers by investment style. Of the four aggressive styles reported, only the median value manager was able to match the performance of the market. The TUCS median rotational, growth, and small growth managers underperformed the market. (Returns for the TUCS aggressive manager samples are reported on page 19.)

In this investment climate, the Basic Retirement Funds external stock manager group performed relatively well. The group's aggregate performance roughly matched that of the market for the latest quarter and fell slightly below that of the market for the latest year. The group's performance exceeded the median TUCS performances of all but the value manager sample for both the latest quarter and year.

The characteristics of the aggregate external portfolio remained relatively unchanged. The managers continued to be overweighted in the consumer durables, financial, and transportation sectors and underweighted in the capital goods, energy, and utilities sectors. The aggregate allocation to equities decreased from the previous quarter. The decrease, however, was primarily due to the additional funding of several of the managers with cash. The fundamental risk characteristics of the aggregate portfolio remained essentially the same.

Bond performance in the third quarter was modest. Interest rates moved sideways throughout the quarter, ending the period up only slightly from the previous quarter's end. With bond prices remaining flat for the most part, the bond market, as represented by the Merrill Lynch Master Bond Index, produced a weak 1.9% return for the period. Due to its exceptional performance in the first half of 1985, however, the bond market's return for the most recent year was a solid 20.9%.

With an aggregate return of 2.7% for the period, the Basic Retirement Funds' external bond manager group outperformed not only the bond market but also the median TUCS bond manager from a sample of similar risk managers. The third quarter performance brought the bond managers' aggregate return for the latest year to 20.7%. The annual performance matched that of the TUCS median manager and was roughly in line with that of the bond market.

The characteristics of the average bond external manager portfolio changed very little. There was a slight decrease in the duration of the portfolio and a modest increase in coupon. Average quality rating remained the same.

TABLE 6

BASIC RETIREMENT FUNDS

EQUITY MANAGER PERFORMANCE

TOTAL PORTFOLIO RETURNS

September 30, 1985

Managers	Third Quarter 1985	Year Ending 9/30/85	Two Years Ending 9/30/85 (Annualized)	Since Inception 3/1/83 (Annualized)
Fred Alger	-4.6%	11.8%	3.6%	7.5%
Alliance Capital	-3.3	21.9	9.1	9.3
Beutel Goodman	-8.6	14.0	11.5	13.3
BMI Capital	-2.4	8.0	- 4.4	- 1.9
Forstmann Leff	-4.2	18.8	6.8	9.8
Hellman Jordan	-5.6	15.3	9.2	7.7
IDS	-5.9	15.9	8.7	10.2
Investment Advisers	-7.2	11.0	7.3	8.7
Lieber & Company	-1.9	19.0	9.1	11.0
Peregrine Capital	-1.9	13.1	0.7	7.3
Waddell & Reed	-2.0	11.9	1.9	9.0
Internal Manager	-5.0	N.A.	N.A.	N.A.
Total - External Active Managers	-4.5	14.3	5.6	7.0
Wilshire Associates (Index Fund)	-4.5	15.0	N.A.	N.A.
Performance Standards				
Wilshire 5000	-4.3	14.9	7.6	12.1
TUCS Median Growth Mgr.	-5.8	12.3	4.1	N.A.
TUCS Median Small Growth Mgr.	-6.4	13.0	2.4	N.A.
TUCS Median Rotational Mgr.	-5.3	13.3	6.2	N.A.
TUCS Median Value Mgr.	-4.2	16.2	11.1	N.A.
Inflation	0.7	3.2	3.7	4.0

TABLE 8

BASIC RETIREMENT FUNDS
EXTERNAL EQUITY MANAGER RISK PROFILES

QUARTER-END PORTFOLIO STATISTICS

MANAGER	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
GROWTH MANAGERS											
Fred Alger	49	95	2.5%	13.0	1.23	0.83	+	-	+	+	0
Alliance	36	89	1.9	19.6	1.24	0.73	+	-	0	+	0
Mean SBI Growth Mgr.	43	92	2.2	16.3	1.24	0.78	+	-	+	+	0
Median TUCS Growth Mgr.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0	-	0	+	-
SMALL GROWTH MANAGERS											
BMI Capital	23	28	1.6	14.8	1.40	0.72	+	0	+	+	-
Lieber & Company	108	98	2.5	12.6	1.30	0.80	+	-	+	+	-
Waddell & Reed	58	50	3.4	12.4	1.24	0.85	+	0	+	0	+
Mean SBI Sm. Growth Mgr.	63	59	2.5	13.3	1.31	0.79	+	0	+	+	0
Median TUCS Sm. Growth Mgr.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	+	-	+	+	-
ROTATIONAL MANAGERS											
Forstmann Leff	48	70	2.4	17.3	1.27	0.88	+	+	0	+	+
Hellman Jordan	40	96	3.7	13.1	1.07	0.89	0	0	--	0	+
IDS	47	98	3.3	14.8	1.15	0.86	+	-	-	+	0
Investment Advisers	38	95	3.0	12.3	1.15	0.92	+	0	-	+	0
Mean SBI Rotational Mgr.	43	90	3.1	14.4	1.16	0.89	+	0	-	+	+
Median TUCS Rotational Mgr.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0	0	0	0	0
VALUE MANAGERS											
Beutel Goodman	23	99	4.0	15.2	1.26	0.81	+	+	+	0	+
Peregrine Capital	187	80	4.3	14.4	1.22	0.82	+	++	+	+	0
Internal Mgr.	63	97	5.2	12.6	1.01	0.95	0	+	-	-	++
Mean SBI Value Mgr.	91	92	4.5	14.1	1.16	0.86	+	+	+	0	+
Median TUCS Value Mgr.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	-	+	-	-	0
Composite External Manager	541	83	3.3	14.6	1.19	0.91	+	0	+	+	+
Index Fund Manager	1188	100	4.0	N.A.	1.07	0.95	0	0	0	0	0
Composite All Basic Managers	1346	95	3.8	N.A.	1.10	0.94	0	0	0	0	0

TABLE 9

BASIC RETIREMENT FUNDS

EXTERNAL EQUITY MANAGER SECTOR WEIGHTINGS

SECTOR WEIGHTINGS

MANAGER	CAPITAL GOODS	CONSUMER DURABLES	CONSUMER NONDURABLES	ENERGY	FINANCIAL	MAT. & SERVICES	TECHNOLOGY	TRANS-PORTATION	UTILITIES
GROWTH MANAGERS									
Fred Alger	---%	10.3%	44.4%	2.4%	14.1%	3.1%	14.5%	8.4%	2.8%
Alliance	---	7.5	52.0	---	21.8	---	11.1	7.6	---
Mean SBI Growth Mgr.	0.0	8.9	48.2	1.2	18.0	1.6	12.8	8.0	1.4
Median TUCS Growth Mgr.	4.4	3.4	32.9	2.3	13.6	9.8	17.9	6.3	1.1
SMALL GROWTH MANAGERS									
BMI Capital	10.4	3.4	37.8	---	6.0	4.0	28.9	9.6	---
Lieber & Company	1.6	7.0	21.9	4.5	32.6	14.3	11.8	5.1	1.2
Waddell & Reed	2.0	7.7	18.8	5.1	19.7	22.5	15.6	5.2	3.3
Mean SBI Sm. Growth Mgr.	5.0	6.0	21.2	3.2	19.4	13.6	18.8	6.6	1.5
Median TUCS Sm. Growth Mgr.	3.2	3.9	37.5	0.2	13.8	12.2	14.4	3.0	0.3
ROTATIONAL MANAGERS									
Forstmann Leff	---	9.7	41.6	6.6	20.9	6.4	12.1	2.8	---
Hellman Jordan	---	5.6	17.1	6.9	26.9	17.2	13.8	4.7	7.7
IDS	3.0	2.2	27.1	5.1	13.6	12.7	13.9	12.7	9.7
Investment Advisers	3.2	6.5	8.3	2.9	15.9	20.2	28.3	12.8	1.8
Mean SBI Rotational Mgr.	1.6	6.0	23.5	5.4	19.3	14.1	17.0	8.3	4.8
Median TUCS Rotational Mgr.	3.2	4.2	26.6	5.5	12.9	10.4	15.1	4.3	5.1
VALUE MANAGERS									
Beutel Goodman	2.7	3.7	15.7	---	26.0	24.0	16.6	11.3	---
Peregrine Capital	8.3	8.5	18.3	12.6	4.5	15.7	17.3	3.0	11.2
Internal Mgr.	0.9	3.3	7.8	36.3	7.6	8.0	10.1	6.6	19.5
Mean SBI Value Mgr.	4.0	5.2	13.9	16.3	12.7	15.9	14.7	7.0	10.2
Median TUCS Value Mgr.	5.1	4.1	24.5	11.2	11.9	10.5	13.3	2.2	13.4
Composite External Managers	2.2	6.3	25.4	7.7	17.4	12.4	15.5	7.8	5.5
Index Fund Manager	5.0	4.1	26.9	11.1	11.4	11.2	14.3	3.1	12.9
Composite All Basic Managers	4.3	4.7	26.5	10.2	13.0	11.5	14.6	4.4	10.9
Wilshire 5000	4.7	4.1	26.2	10.6	12.3	11.4	14.0	3.4	13.3

TABLE 7

BASIC RETIREMENT FUNDS

BOND MANAGER PERFORMANCE

TOTAL PORTFOLIO RETURNS

SEPTEMBER 30, 1985

Managers	Third Quarter 1985	Year Ending 9/30/85	Since Inception 6/30/84 (Annualized)
Investment Advisers	2.3%	23.8%	29.6%
Lehman Management	2.1	19.7	23.4
Miller Anderson	4.4	20.2	22.1
Morgan Stanley	2.4	21.6	22.8
Peregrine Capital	3.0	19.1	21.4
Western Asset	1.9	21.5	26.9
Total - External Bond Managers	2.7	20.7	23.7
Performance Standards			
Merrill Lynch Master Bond Index	1.9	21.0	24.4
TUCS Median Bond Manager	2.0	20.7	N.A.

MINNESOTA STATE BOARD OF INVESTMENT

QUARTERLY INVESTMENT REVIEW

POST RETIREMENT INVESTMENT FUND

September 30, 1985

MINNESOTA STATE BOARD OF INVESTMENT

POST RETIREMENT INVESTMENT FUND

THIRD QUARTER 1985

Summary

ASSETS

The assets of the Post Retirement Investment Fund increased in market value by 2.6% during the third quarter. This increase was the result of new contributions to the Fund, as the capital markets provided weak investment returns over this period. Net contributions during the quarter were $84 million, continuing the pattern of strong growth due to early retirements under the "Rule of 85." End-of-period market values of the Post Retirement Investment Fund's assets for the last three quarters and five calendar years are shown below.

Calendar Year		Market Value (millions)	Percent Change from Previous Period
1980		$1,161	+20.2
1981		1,101	- 5.2
1982		1,523	+38.3
1983		1,803	+18.4
1984		2,246	+24.6
1985	1Q	2,352	+ 4.7
	2Q	2,709	+15.2
	3Q	2,779	+ 2.6

ASSET MIX

The cash component of the Post Retirement Investment Fund moved back to its targeted level during the third quarter. An increase in cash equivalents at the end of the second quarter, due to the surge of early teacher retirements, was reversed as cash was reinvested in the Fund's bond portfolio. The common stock component also fell due to the continued growth of the Fund's fixed income assets and the poor relative performance of common stocks during the quarter. The percentage of the Fund (at market value) invested in common stocks, bonds, and cash equivalents over the last two quarters and one year previous is presented below.

ASSET MIX

	9/30/84	6/30/85	9/30/85
Common Stocks	35.5%	27.1%	23.4%
Bonds	58.1	65.7	70.9
Cash Equivalents	6.6	7.2	5.7
	100.0%	100.0%	100.0%

EQUITY PERFORMANCE

The Post Retirement Investment Fund's equity portfolio produced a -6.5% total rate of return during the third quarter. This return fell below both that of the Wilshire 5000 and the SBI external equity pool. The poor relative quarterly performance also brought the most recent twelve-month performance below that of the Wilshire 5000.

The equity portfolio's sector weightings shifted significantly during the quarter. The portfolio assumed a more cyclical stance, increasing holdings in the capital goods, consumer durables, and energy sectors. Holdings in the consumer nondurables, financial, materials & services, technology and utilities sectors were reduced. At the end of the quarter, the portfolio held an overweighted position in the capital goods, energy, financial and technology sectors. The consumer nondurables, materials & services, and utilities sectors were underweighted.

The equity portfolio's returns over the most recent quarter and most recent year are displayed below.

	Third Quarter 1985	Year Ending 9/30/85
Equity Portfolio	-6.5%	12.2%
Wilshire 5000	-4.3	14.9

BOND PORTFOLIO

During the third quarter, the composition of the dedicated bond portfolio was altered slightly. Callable corporate bonds were sold and replaced by various non-callable issues. The swap was designed to improve the portfolio's cash flow predictability. Additional information on these transactions is contained in the IAC Fixed Income Manager Committee section of the Quarterly Report.

The Post Retirement Investment Fund's dedicated bond portfolio, at the end of the third quarter, remained invested in high quality issues. Treasury and Agency issues composed the vast majority of the portfolio. Relevant quarter-end portfolio characteristics are shown on the following page.

TABLE 10

POST RETIREMENT INVESTMENT FUND

DEDICATED BOND PORTFOLIO STATISTICS

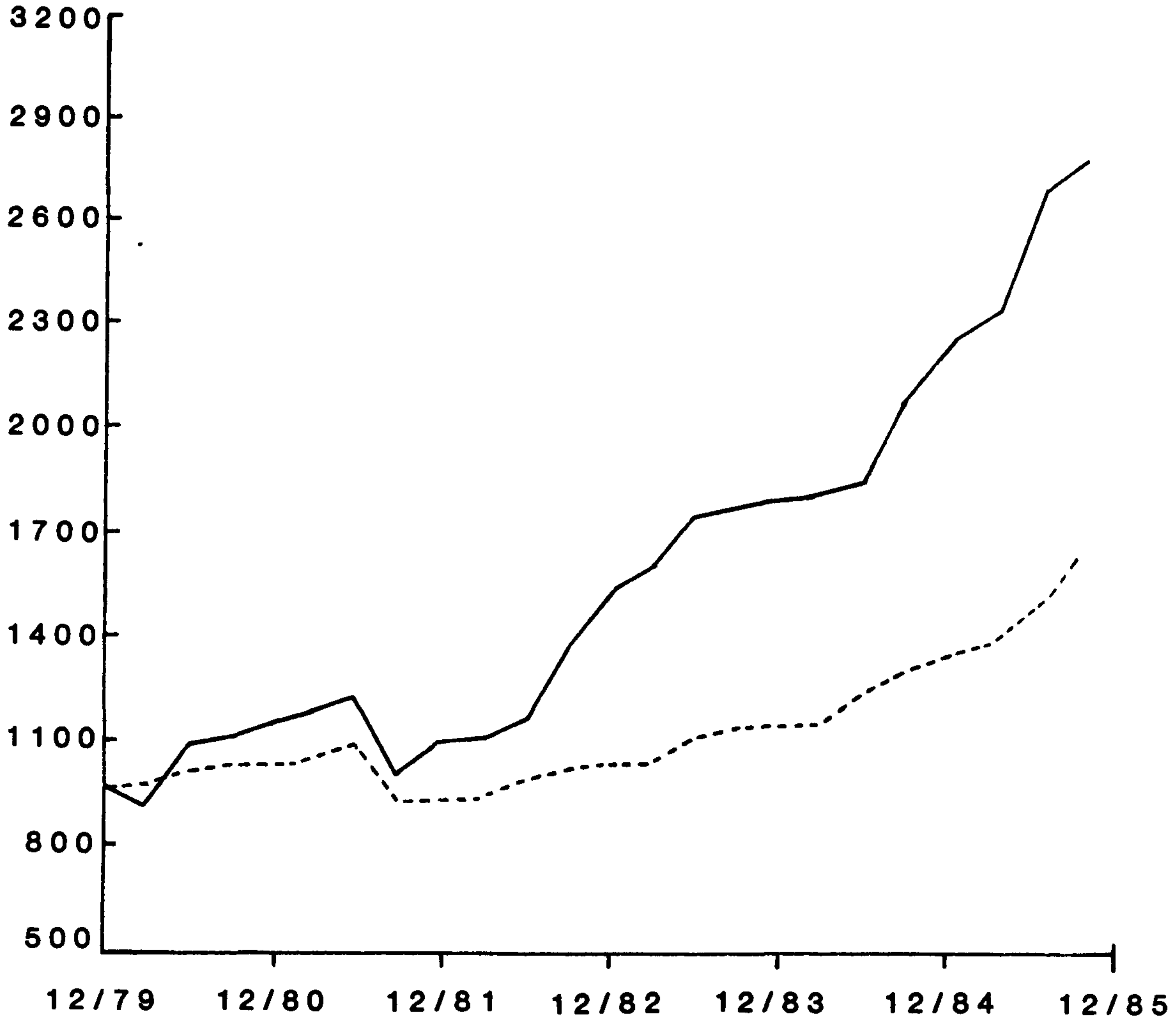
Value at Market	$1,516,073,844
Value at Par	$1,590,621,696
Average Coupon	10.75%
Current Yield	10.95%
Yield to Maturity	10.72%
Time to Maturity	14.09 Years
Average Duration	6.56 Years
Average Quality Rating	AAA
Number of Issues	182

Treasury	56.6%
Federal Agency	8.1
Industrial	11.3
Utilities	10.2
Finance	7.6
Transportation	1.4
Mortgages	0.0
Miscellaneous	4.8
	100.0%

FIGURE 7

POST RETIREMENT INVESTMENT FUND

ASSET GROWTH



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

	YEAR ENDING					
	12/80	12/81	12/82	12/83	12/84	9/85
BEGINNING VALUE	965.6	1161.6	1100.9	1522.9	1802.9	2245.7
NET CONTRIBUTIONS	70.1	-97.8	102.6	109.1	201.0	243.9
INVESTMENT RETURN	125.9	37.1	319.4	170.8	241.8	289.8
ENDING VALUE	1161.6	1100.9	1522.9	1802.9	2245.7	2779.4

(MILLIONS OF DOLLARS)

FIGURE 8

POST RETIREMENT INVESTMENT FUND

ASSET MIX

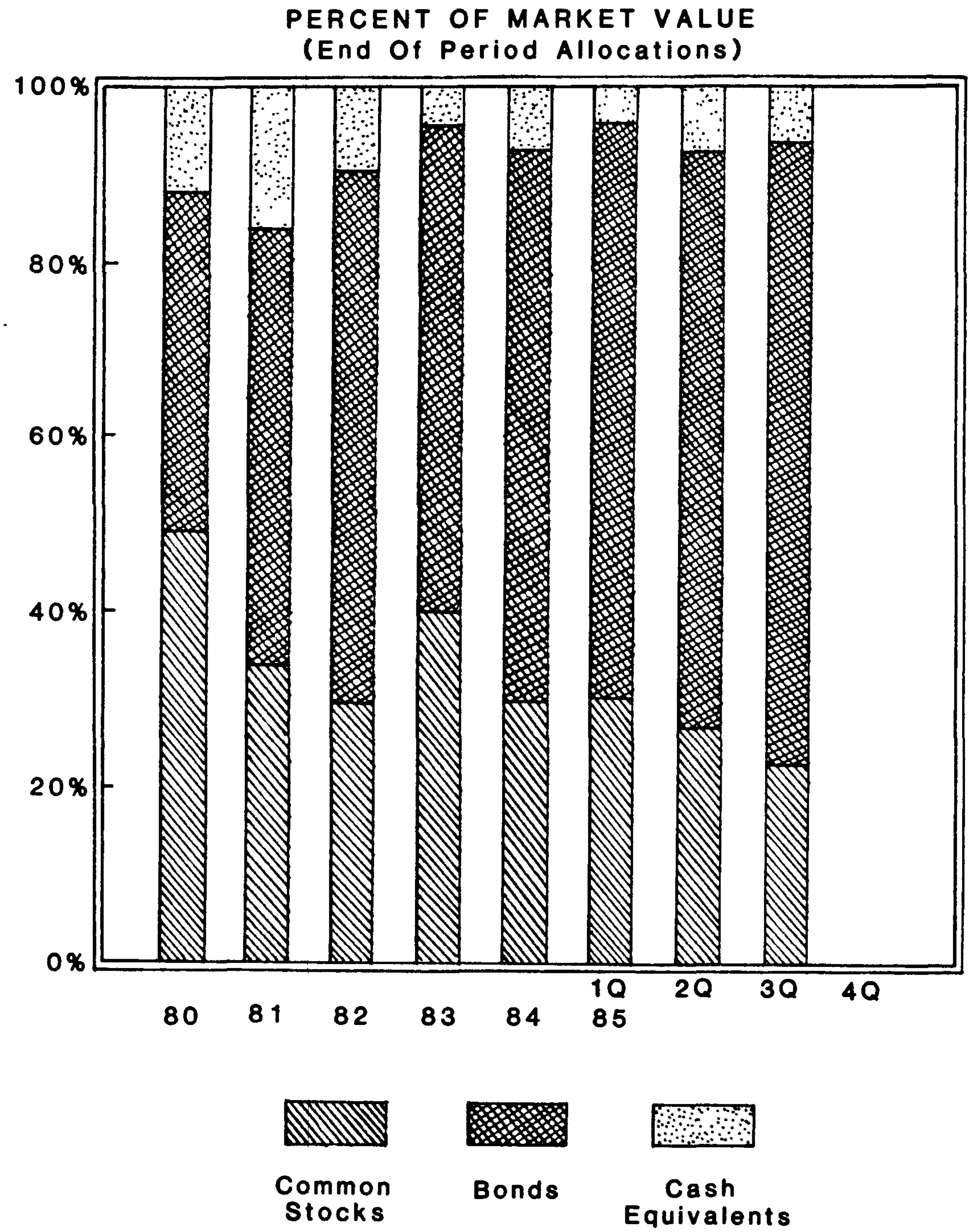


TABLE 11

POST RETIREMENT INVESTMENT FUND

ASSET MIX

PERCENT OF MARKET VALUE

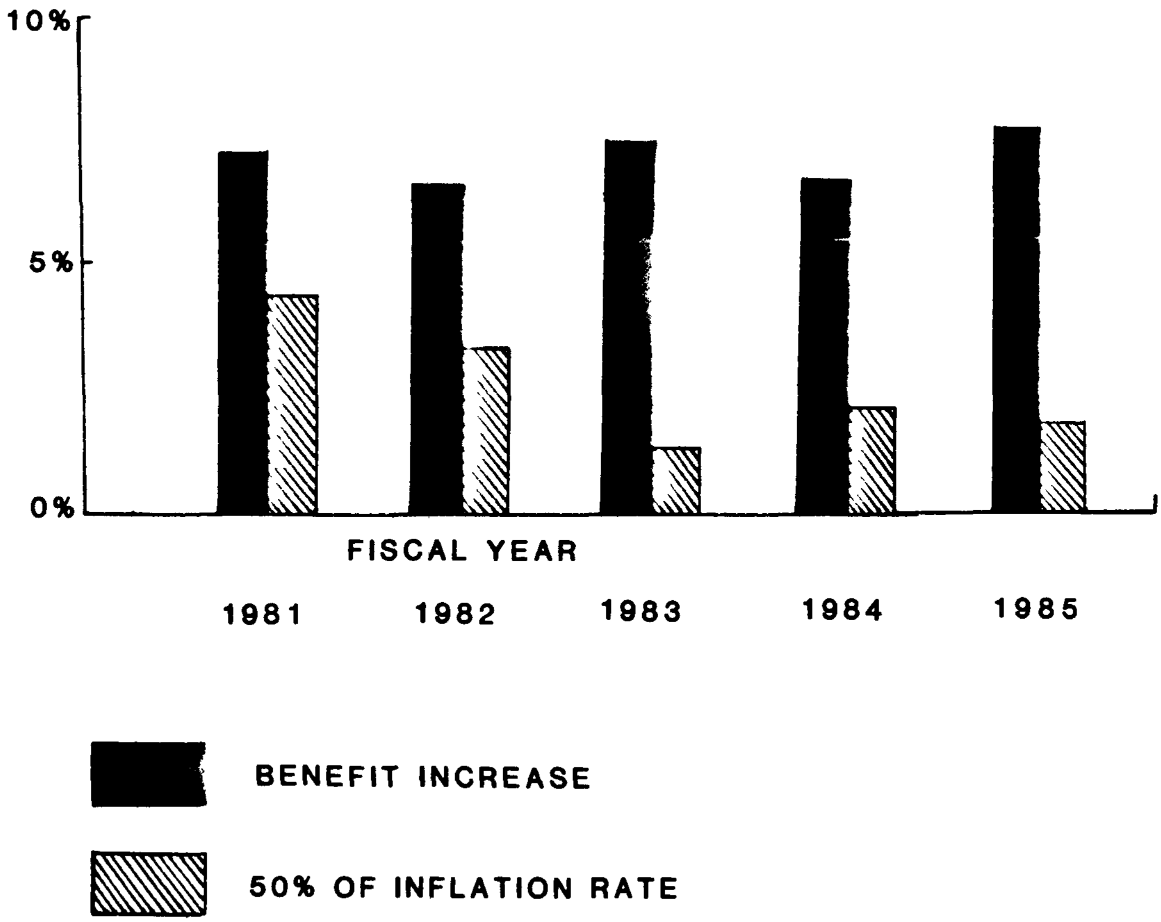
(End Of Period Allocations)

Calendar Year		Common Stocks $Million	Common Stocks Percent	Bonds $Million	Bonds Percent	Cash $Million	Cash Percent
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		674.8	30.0	1,411.4	62.9	159.5	7.1
1985	1Q	715.5	30.4	1,551.8	66.0	85.1	3.6
	2Q	732.6	27.1	1,780.1	65.7	195.9	7.2
	3Q	649.7	23.4	1,970.1	70.9	159.6	5.7

FIGURE 9

POST RETIREMENT INVESTMENT FUND

BENEFIT INCREASES VERSUS INFLATION



	FISCAL YEAR					ANNUALIZED	
	1981	1982	1983	1984	1985	3 Yr.	5 Yr.
BENEFIT INCREASE	7.4%	6.9%	7.5%	6.9%	7.9%	7.1%	6.4%
50% OF INFLATION RATE	4.8	3.6	1.3	2.2	1.9	2.3	3.7

FIGURE 10

POST RETIREMENT INVESTMENT FUND

EQUITY SEGMENT RETURNS

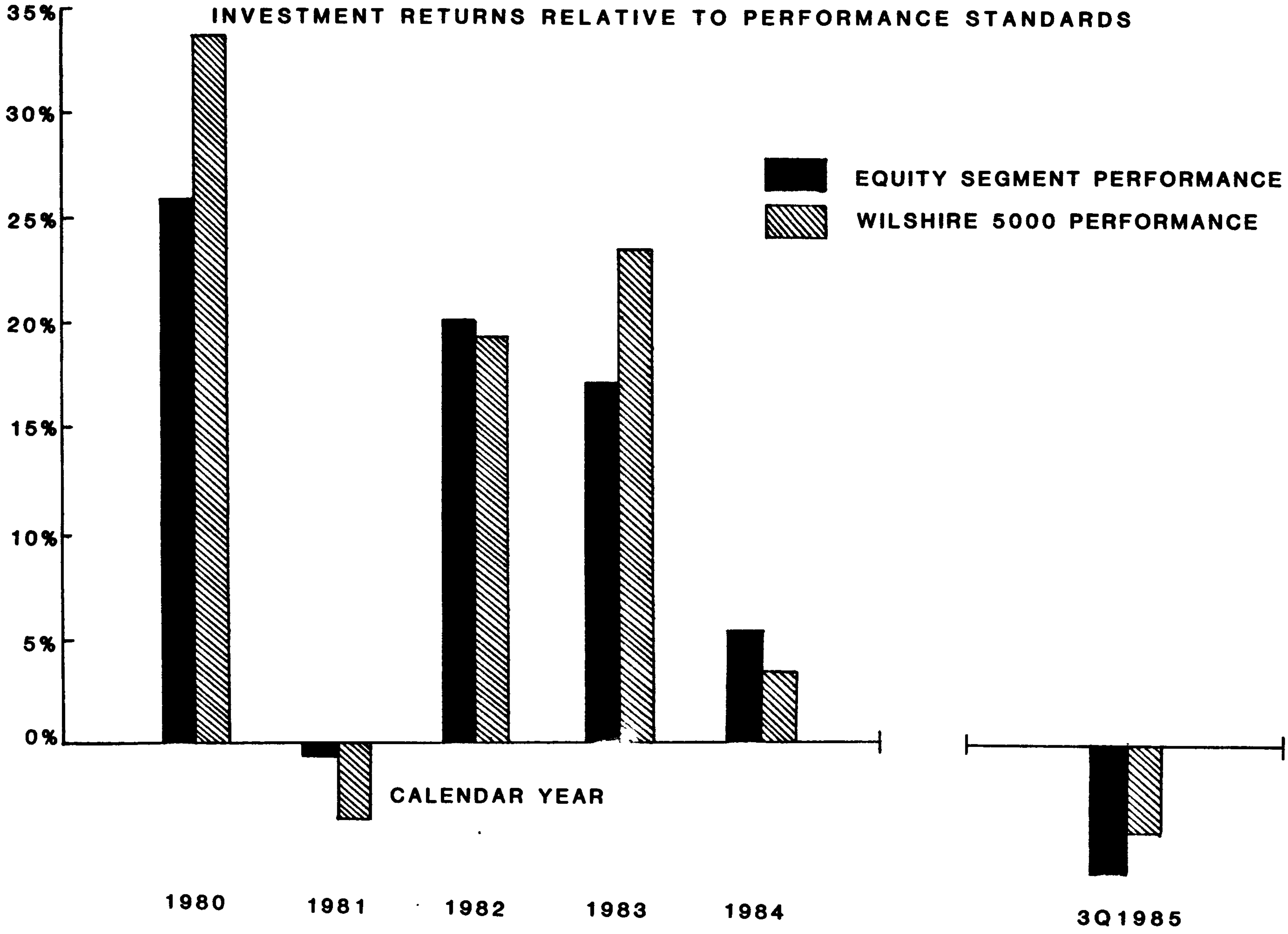


TABLE 12

POST RETIREMENT INVESTMENT FUND

EQUITY SEGMENT RETURNS

INVESTMENT RETURNS RELATIVE TO PERFORMANCE STANDARDS

		Total Returns	
		Post Retirement Fund	Wilshire 5000
1980		25.9%	33.7%
1981		-0.3	-3.6
1982		20.0	18.7
1983		16.9	23.5
1984		5.2	3.1
1985	1Q	9.7	10.3
	2Q	6.9	7.5
	3Q	-6.5	- 4.3
1 Year Through 9-30-85		12.2	14.9
3 Years Annualized Through 9-30-85		16.0	19.7
5 Years Annualized Through 9-30-85		11.7	12.5

TABLE 13

POST RETIREMENT INVESTMENT FUND

EQUITY MANAGER DATA

SEPTEMBER 30, 1985

SECTOR WEIGHTINGS

SECTORS	WEIGHTING INTERNAL MANAGER	WEIGHTING WILSHIRE 5000
Capital Goods	6.8%	4.7%
Consumer Durables	4.9	4.1
Consumer Nondurables	14.1	26.2
Energy	18.8	10.6
Financial	16.1	12.3
Materials & Services	7.5	11.4
Technology	22.2	14.0
Transportation	3.7	3.4
Utilities	5.9	13.3
	100.0%	100.0%

QUARTER-END PORTFOLIO STATISTICS

	# OF STOCKS	EQUITY ALLOC.	YIELD	P/E	MKT VOLTY	DIVERSFN	PORTFOLIO RISK ORIENTATION Earn. Var.	Earn. Success	Size	Growth	Fin. Lever.
Internal Manager	112	100%	4.2%	11.8	1.11	0.95	0	+	0	0	+

MINNESOTA STATE BOARD OF INVESTMENT

QUARTERLY INVESTMENT REVIEW

SUPPLEMENTAL RETIREMENT FUND
(Income Share Account)

SUPPLEMENTAL RETIREMENT FUND
(Growth Share Account)

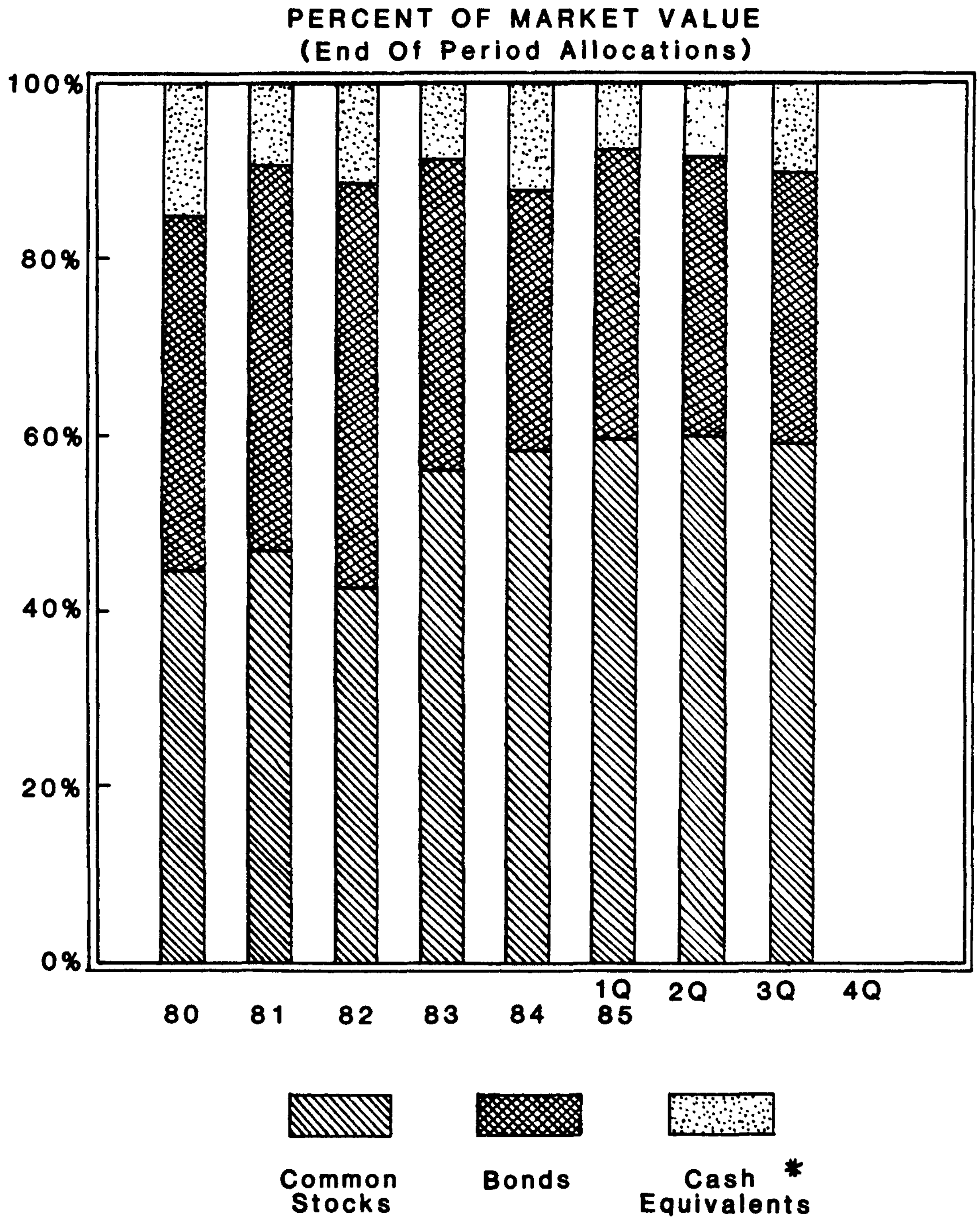
MINNESOTA VARIABLE ANNUITY FUND

September 30, 1985

FIGURE 11

SUPPLEMENTAL RETIREMENT FUND
(Income Share Account)

ASSET MIX



* Includes cash held by the external manager

TABLE 14

SUPPLEMENTAL RETIREMENT FUND
(Income Share Account)
ASSET MIX

PERCENT OF MARKET VALUE
(End Of Period Allocations)

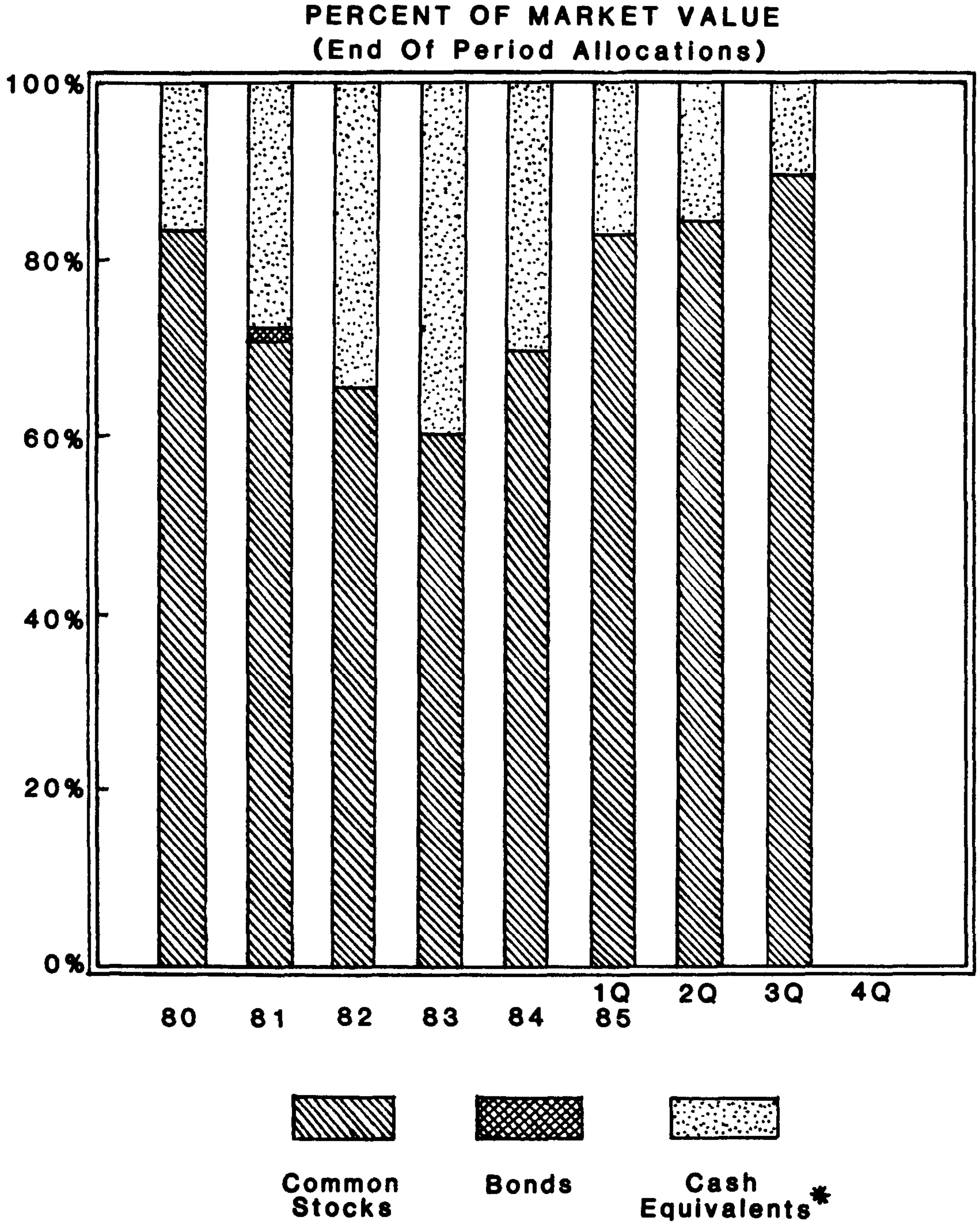
Calendar Year		Common Stocks $Million	Common Stocks Percent	Bonds $Million	Bonds Percent	Cash* $Million	Cash* Percent
1980		33.5	44.5	30.5	40.4	11.3	15.1
1981		35.9	47.1	33.4	43.8	7.0	9.1
1982		42.7	42.5	46.2	46.0	11.5	11.5
1983		63.5	56.2	39.6	35.0	9.9	8.8
1984		74.4	58.0	37.6	29.3	16.4	12.7
1985	1Q	81.9	60.0	44.1	32.3	10.5	7.7
	2Q	87.6	60.7	44.2	30.6	12.6	8.7
	3Q	83.2	59.0	44.2	31.4	13.5	9.6

*Includes cash held by the external manager

FIGURE 12

SUPPLEMENTAL RETIREMENT FUND
(Growth Share Account)

ASSET MIX



* Includes cash held by external manager

TABLE 15

SUPPLEMENTAL RETIREMENT FUND

(Growth Share Account)

ASSET MIX

PERCENT OF MARKET VALUE
(End Of Period Allocations)

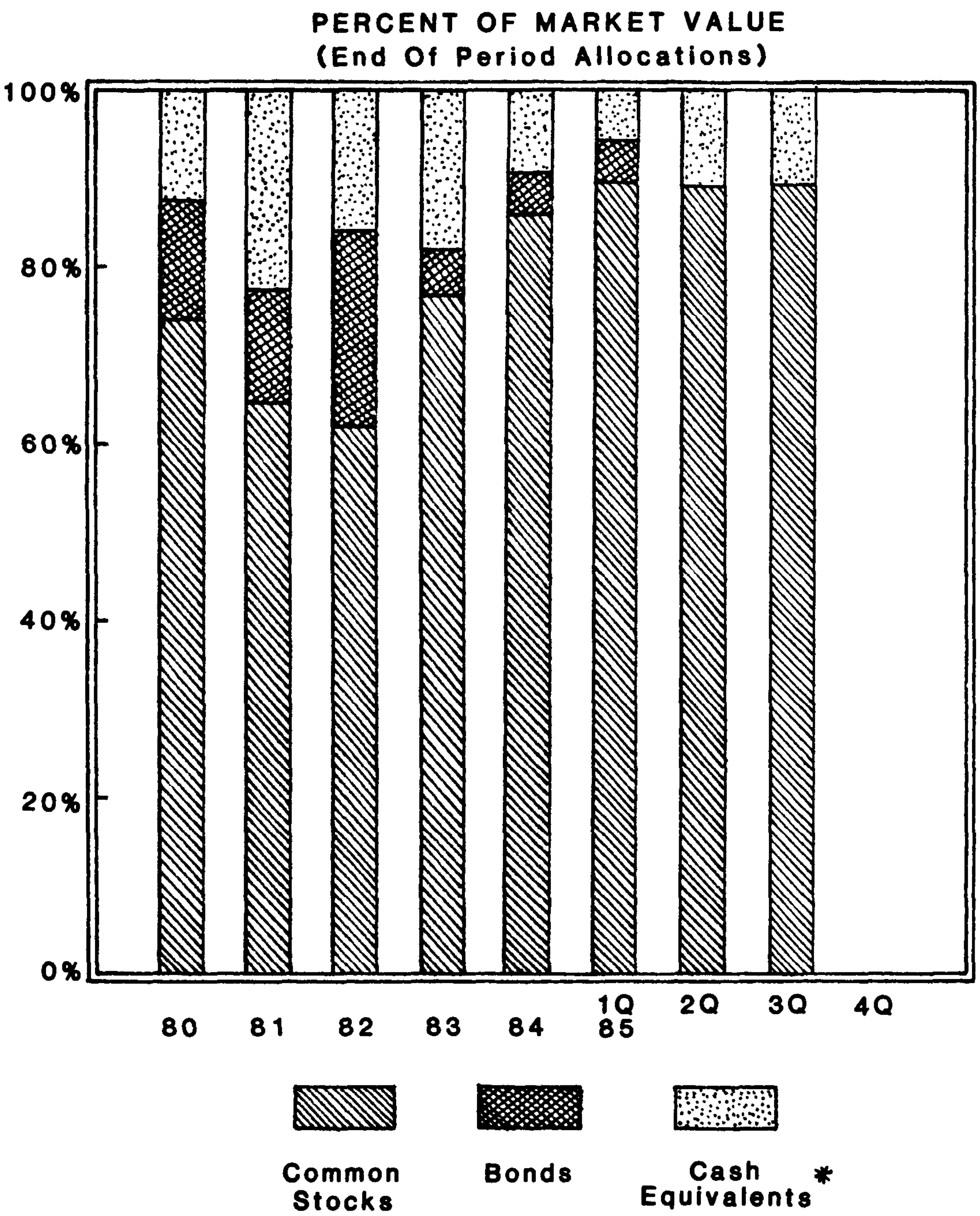
Calendar Year		Common Stocks $Million	Common Stocks Percent	Bonds $Million	Bonds Percent	Cash* $Million	Cash* Percent
1980		29.8	83.0	----	----	6.1	17.0
1981		28.8	71.3	0.5	1.2	11.1	27.5
1982		32.5	65.6	----	----	17.0	34.4
1983		33.7	60.3	----	----	22.2	39.7
1984		41.8	70.0	----	----	17.9	30.0
1985	1Q	52.2	82.0	----	----	11.5	18.0
	2Q	56.3	83.8	0.2	0.3	10.6	15.9
	3Q	56.6	90.3	----	----	6.1	9.7

*Includes cash held by the external manager

FIGURE 13

MINNESOTA VARIABLE ANNUITY FUND

ASSET MIX



* Includes cash held by external managers

TABLE 16

MINNESOTA VARIABLE ANNUITY FUND

ASSET MIX

PERCENT OF MARKET VALUE
(End Of Period Allocations)

Calendar Year		Common Stocks		Bonds		Cash*	
		$Million	Percent	$Million	Percent	$Million	Percent
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		89.4	86.3	5.1	4.9	9.1	8.8
1985	1Q	102.1	90.6	5.2	4.6	5.5	4.8
	2Q	106.5	88.9	---	---	13.3	11.1
	3Q	99.6	89.1	---	---	12.2	10.9

*Includes cash held by external managers

TABLE 17

MINNESOTA STATE BOARD OF INVESTMENT
RETIREMENT FUNDS

INVESTMENT RETURNS RELATIVE TO PERFORMANCE STANDARDS

YEAR ENDING SEPTEMBER 30, 1985

	Total Fund Return	Stock/Bond Composite**	Common Stocks	Wilshire 5000	Bonds	ML Bond Index
SUPPLEMENTAL INVESTMENT FUND						
Income Share Account*	13.0%	16.6%	9.5%	14.9%	22.4%	21.0%
Growth Share Account*	8.7	14.7	10.7	14.9	---	21.0
VARIABLE ANNUITY FUND*	10.7	14.7	11.8	14.9	---	21.0

* Includes performance of both internal and external managers.

** Wilshire 5000/Merrill Lynch Master Bond indices:

Income Account - 65% stock/30% bond/5% cash
Growth Account - 95% stock/ 5% cash
Variable Fund - 95% stock/ 5% cash

MINNESOTA STATE BOARD OF INVESTMENT

QUARTERLY INVESTMENT REVIEW

PERMANENT SCHOOL FUND

September 30, 1985

MINNESOTA STATE BOARD OF INVESTMENT

PERMANENT SCHOOL FUND

THIRD QUARTER 1985

Summary

ASSETS

The Permanent School Fund's assets rose 2.4% in market value during the third quarter. The increase was due to the reinvested interest income flows generated by the Fund's bond portfolio. New contributions for the quarter were essentially zero. End-of-period market values of the Permanent School Fund for the last three quarters and five calendar years are presented below.

Calendar Year		Market Value (Millions)	Percent Change From Previous Period
1980		245	+ 1.7
1981		236	- 3.7
1982		286	+ 21.2
1983		290	+ 1.4
1984		308	+ 6.2
1985	1Q	311	+ 1.0
	2Q	337	+ 8.4
	3Q	345	+ 2.4

ASSET MIX

As discussed in the second quarter investment review, the State Board of Investment has authorized significant changes in the Permanent School Fund's long-run asset allocation. Given the Fund's restrictive accounting provisions and its objective of aiding the financing of state school aid payments, short-run income maximization is be the Fund's investment policy. To implement this policy, the Board has adopted a long-run asset mix allocated completely to fixed income securities.

During the third quarter, the Permanent School Fund's relatively small equity component was gradually liquidated. At the end of the quarter only an insignificant equity position remained, and it too will be sold in the near future.

The proceeds from the equity sales have been reinvested in cash equivalents. The Board will be seeking legislative change during the 1986 session that will effectively remove the Permanent School Fund's restrictive accounting provisions. If enacted this change will allow the Fund considerably more investment flexibility. The cash reserves now being built up will provide a liquid source of financing for a total return, equity-oriented asset mix. In the meantime, the cash equivalents, combined with the Fund's bond portfolio, are earning sufficient interest income to meet budgeted investment income.

The percentage of the Fund (at market) invested in stocks, bonds and cash equivalents over the last two quarters and one year previous is shown below.

ASSET MIX

	9/30/84	6/30/85	9/30/85
Common Stocks	17.2%	17.3%	2.1%
Bonds	65.5	71.4	66.8
Cash Equivalents	17.3	11.3	31.1
	100.0%	100.0%	100.0%

BOND PORTFOLIO

The Permanent School Fund's bond portfolio, at the end of the third quarter, remained invested in high quality, intermediate-to-long maturity issues, selling at a slight discount to par value. Mortgages, both federal and privately insured, made up the largest segment of the portfolio. Relevant quarter-end portfolio statistics are shown on the following page.

TABLE 18

PERMANENT SCHOOL FUND

BOND PORTFOLIO STATISTICS

September 30, 1985

Value at Market	$226,048,879
Value at Par	$239,679,520
Average Coupon	10.30%
Current Yield	10.64%
Yield to Maturity	10.80%
Time to Maturity	12.35 Years
Average Duration	5.71 Years
Average Quality Rating	AAA
Number of Issues	114

Treasury	13.8%
Federal Agency	21.6
Industrial	5.2
Utilities	7.7
Finance	4.3
Transportation	6.7
Mortgages	39.1
Miscellaneous	1.6
	100.0%

FIGURE 14

PERMANENT SCHOOL FUND

ASSET MIX

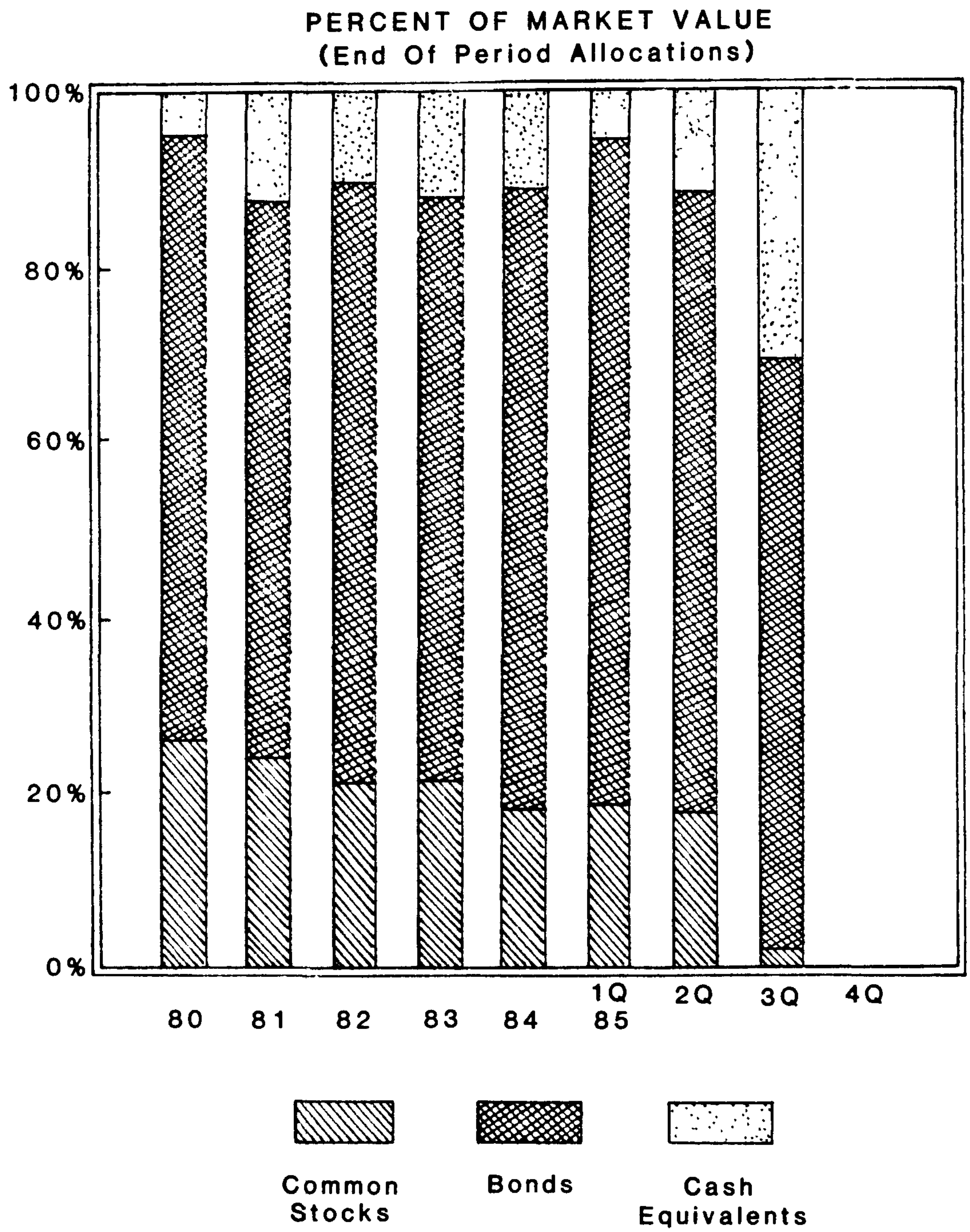


TABLE 19

PERMANENT SCHOOL FUND

ASSET MIX

PERCENT OF MARKET VALUE
(End Of Period Allocations)

Calendar Year		Common Stocks $Million	Common Stocks Percent	Bonds $Million	Bonds Percent	Cash $Million	Cash Percent
1980		63.9	26.1	169.3	69.2	11.6	4.7
1981		56.0	23.7	151.9	64.2	28.5	12.1
1982		59.1	20.7	197.6	69.0	29.5	10.3
1983		60.8	21.0	195.0	67.1	34.4	11.9
1984		54.9	17.8	219.4	71.2	33.8	11.0
1985	1Q	57.6	18.5	235.6	75.9	17.5	5.6
	2Q	58.4	17.3	241.0	71.4	37.9	11.3
	3Q	7.1	2.1	230.4	66.8	107.4	31.1

Tab B

PORTFOLIO STATISTICS

		PAGE
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II.	Cash Flow Available for Investment 7/1/85-9/30/85	2
III.	Monthly Transactions and Asset Summary - Retirement Funds	3

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT
COMPOSITION OF STATE INVESTMENT PORTFOLIOS BY TYPE OF INVESTMENT
MARKET VALUE SEPTEMBER 30, 1985

	CASH AND SHORT TERM SECURITIES	BONDS		STOCKS		ALTERNATIVE ASSETS	TOTAL
		INTERNAL	EXTERNAL	INTERNAL	EXTERNAL		
BASIC RETIREMENT FUNDS:							
TEACHERS RETIREMENT FUND	$ 57,093 3.87%	$ -0-	$385,069 26.07%	$ -0-	$ 904,215 61.23%	$130,407 8.83%	$1,476,784 100%
PUBLIC EMPLOYEES RETIRE. FUND	4,373 0.43%	-0-	276,750 27.04%	-0-	648,797 63.39%	93,519 9.14%	1,023,439 100%
STATE EMPLOYEES RETIRE. FUND	33,350 4.48%	-0-	192,909 25.89%	-0-	453,443 60.85%	65,425 8.78%	745,127 100%
PUBLIC EMP. POLICE & FIRE FUND	12,272 4.44%	-0-	75,694 27.41%	-0-	164,662 59.61%	23,592 8.54%	276,220 100%
HIGHWAY PATROL RETIRE. FUND	1,135 2.16%	-0-	14,752 28.07%	-0-	32,064 61.03%	4,591 8.74%	52,542 100%
JUDGES RETIREMENT FUND	79 2.16%	-0-	1,028 27.99%	-0-	2,244 61.10%	321 8.75%	3,672 100%
POST RETIREMENT FUND	169,599 6.25%	1,898,789 69.94%	-0-	646,596 23.81%	-0-	-0-	2,714,984 100%
MINNESOTA SUPPLEMENTAL FUNDS:							
INCOME SHARE ACCOUNT	11,947 8.59%	42,919 30.85%	-0-	75,074 53.96%	9,187 6.60%	-0-	139,127 100%
GROWTH SHARE ACCOUNT	1,491 2.38%	68 0.11%	-0-	33,207 53.08%	27,797 44.43%	-0-	62,563 100%
FIXED RETURN ACCOUNT	23,247 33.49%	46,175 66.51%	-0-	-0-	-0-	-0-	69,422 100%
BOND ACCOUNT	746 10.25%	6,532 89.75%	-0-	-0-	-0-	-0-	7,278 100%
MINNESOTA VARIABLE ANNUITY	2,605 2.34%	115 0.10%	-0-	51,429 46.13%	57,344 51.43%	-0-	111,493 100%
TOTAL RETIREMENT FUNDS	$ 317,937 4.76%	$1,994,598 29.85%	$946,202 14.16%	$806,306 12.06%	$2,299,753 34.41%	$317,855 4.76%	$6,682,651 100%

PERMANENT SCHOOL FUND	107,387 31.53%	226,067 66.39%	-0-	7,069 2.08%	-0-	-0-	340,523 100%
TREASURERS CASH	883,618 100%	-0-	-0-	-0-	-0-	-0-	883,618 100%
TRANSPORTATION FUNDS	419,885 100%	-0-	-0-	-0-	-0-	-0-	419,885 100%
STATE BUILDING FUNDS	64,080 100%	-0-	-0-	-0-	-0-	-0-	64,080 100%
HOUSING FINANCE AGENCY	169,949 100%	-0-	-0-	-0-	-0-	-0-	169,949 100%
MINNESOTA DEBT SERVICE FUND	126,146 100%	-0-	-0-	-0-	-0-	-0-	126,146 100%
MISCELLANEOUS ACCOUNTS	155,908 100%	-0-	-0-	-0-	-0-	-0-	155,908 100%
TACONITE AREA ENVIR. PROTECTION	8,727 100%	-0-	-0-	-0-	-0-	-0-	8,727 100%
N.E. MINNESOTA PROTECTION	39,291 100%	-0-	-0-	-0-	-0-	-0-	39,291 100%
GRAND TOTAL	$2,292,928 25.79%	$2,220,665 24.98%	$946,202 10.64%	$813,375 9.15%	$2,299,753 25.87%	$317,855 3.57%	$8,890,778 100%

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

For period of
July 1, 1985 - September 30, 1985

Teachers Retirement Fund	$(1,000,000)
Public Employees Retirement Fund	(38,000,000)
State Employees Retirement Fund	(5,000,000)
Public Employees Police and Fire	4,725,000
Highway Patrolmans Retirement Fund	-0-
Judges Retirement Fund	-0-
Post Retirement Fund	84,373,979
Supplemental Retirement Fund - Income	1,851,074
Supplemental Retirement Fund - Growth	(227,696)
Supplemental Retirement Fund - Fixed	(1,234,363)
Supplemental Retirement Fund - Bond	1,931,379
Minnesota Variable Annuity Fund	(708,390)
Total Retirement Funds Net Cash Flow	$ 46,710,983
Permanent School Fund	$(122,924)
Total Net Cash Flow	$ 46,588,059

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

TRANSACTION AND ASSET SUMMARY
RETIREMENT FUNDS

	Net Transactions				Asset Summary (at market)			
	Bonds (000,000)	Stocks (000,000)	Total	Cash Flow	Short-term % of Fund	Bonds % of Fund	Equity % of Fund	Total (000,000) (at market)
September 1983	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
April	(2)	24	22	36	6.1	36.9	57.0	5145
May	4	43	47	40	6.2	37.5	56.3	4993
June	5	(38)	(33)	119	8.7	36.5	54.8	5187
July	151	29	180	34	5.8	40.5	53.7	5247
August	(6)	(16)	(22)	24	6.2	38.4	55.4	5598
September	16	(6)	10	14	6.3	39.0	54.7	5652
October	19	32	51	31	5.8	39.7	54.5	5748
November	(7)	(19)	(26)	18	6.5	40.1	53.4	5760
December	91	(71)	20	12	6.3	41.2	52.5	5864
January 1985	(5)	131	126	20	4.3	42.0	53.7	6188
February	30	(5)	25	27	4.3	41.2	54.5	6177
March	(1)	5	4	26	4.6	41.7	53.7	6213
April	(79)	17	(62)	23	5.9	40.7	53.4	6260
May	(13)	(41)	(54)	32	6.9	40.4	52.7	6602
June	284	118	402	408	6.8	41.2	52.0	6801
July	84	68	153	40	5.2	41.8	53.0	6812
August	79	4	83	30	4.3	43.3	52.4	6867
September	32	(10)	22	31	4.6	44.6	50.8	6751

Tab C

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

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

November 14, 1985

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

FROM: IAC Administrative Committee

SUBJECT: Committee Report

The Committee reviewed staff's proposed 1986 legislative package. Staff is proposing changes in the investment authority of the Permanent School Fund and Supplemental Investment Fund. The proposed relaxation of the Permanent School Fund's restrictive accounting provisions has been endorsed by the Board previously. The Committee continues to support such a change. Staff's proposed changes in the Supplemental Investment Fund are new. The Committee supports staff's concept of expanding the investment options offered by the Supplemental Investment Fund. A staff position paper on the Fund is presented as an attachment to this report.

The Committee also reviewed a draft of the Board's 1985 annual report. The Committee recommends that the Board approve the annual report.

Attachment

EXECUTIVE SUMMARY

The Minnesota Supplemental Investment Fund is a multi-purpose investment program that offers a range of investment options to state and local public employees. A diverse group of retirement groups participate in the Supplemental Investment Fund. These groups are: the Deferred Compensation Plan; local police and firefighter retirement plans; state university and community college teachers; Unclassified state employees; and, Hennepin County employees.

The nature of the retirement programs offered to these groups through the Supplemental Investment Fund varies from group to group. The Fund serves as a tax-sheltered savings program, similar to corporate 401(K) plans, for the Deferred Compensation Plan. For Unclassified state employees, the Fund represents their entire pension plan. For local police and firefighter retirement plans, the Fund serves as a money manager for part of the plans' assets. Finally, for state university/community college teachers and Hennepin County employees, the Fund is a pension supplement.

Because the Supplemental Investment Fund plays many roles for many retirement groups, it should be capable of offering a wide array of investment alternatives. The retirement groups should then be able to select those options that best meet the particular needs and objectives of their participants.

Currently, the Supplemental Investment Fund offers three alternatives. The first option is the Growth Share Account. It is an all-common stock fund which aggressively seeks superior returns through assuming above-average levels of investment risk. The second option is the Income Share Account. It is a balanced fund that holds a diversified portfolio of common stocks, bonds, and cash equivalents. It too seeks superior total returns, but without exposing itself to the volatility of the Growth Share Account. The final option is the Fixed Return Account (for individuals) and the Bond Account (for retirement organizations). These funds buy and hold high quality, short-to-intermediate term debt securities. These funds offer interest bearing, low risk investments to participants.

SBI staff believes that the current set of investment options is neither broad nor well-defined. As such, they do not provide sufficient investment flexibility and diversity to meet the range of participants' investment needs.

Staff believes that a broader, better focused set of investment options will enhance the ability of the Supplemental Investment Fund to meet the participants' specific objectives. Staff proposes that the current set of options be revised. Specifically, staff proposes:

1. The Growth Share Account (all common stocks) and Income Share Account (balanced fund) be retained.

2. The Fixed Return Account be eliminated. It would be replaced by a money market account and a Guaranteed Investment Contract (GIC) account.

3. Two additional options be added: a common stock market index account and a bond market account.

Participating retirement groups would buy shares in investment pools representing the proposed options. Because all of these options, with the exception of the GIC account, currently are made available to the Basic Retirement Funds, administration of this expanded program will be administratively simple. The participating retirement groups could enter or leave the investment pools at their discretion.

INTRODUCTION

The Minnesota Supplemental Investment Fund is a multi-purpose investment program that offers a range of investment options to state and local public employees. Approximately 14,000 individuals participate in the Fund, which had a market value on June 30, 1985 of $287 million. Among the participants are police and firefighter retirement organizations, state university and community college teachers, state employees, and employees of various units of local government. A wide diversity of investment goals exists among the Fund's participants.

To meet these investment goals, most participants currently have a choice of investing in three types of accounts: the Income Share Account; the Growth Share Account; or one of two debt-related accounts, the Fixed Return Account for individuals, or the Bond Account for retirement plans. SBI staff believes that this set of investment options can be improved and expanded significantly. The investment pools utilized by the Basic Retirement Funds can be made available to the Supplemental Investment Fund. The increased investment flexibility, at no additional cost, can enhance the investment services offered to state and public employees.

This paper is divided into six sections. The first section describes the various public employee groups that participate in the Supplemental Investment Fund. The second section reviews the current set of investment options offered to Fund participants. The third section discusses corporate tax-deferred savings plans, which are similar to the Fund in terms of investment objectives and investment management structure. The fourth section presents recommended changes in the available options offered Fund participants. The fifth section considers several retirement group issues related to this proposal. Finally, the sixth section outlines sections of the Minnesota Statutes that would have to be modified for this proposal to be implemented.

FUND PARTICIPANTS

Deferred Compensation

The largest and fastest growing group of participants in the Supplemental Investment Fund are those public employees enrolled in the Deferred Compensation plan. As shown in Table 1, the program's assets make up 30.7% of the Fund's total market value. Like many similar programs sponsored by corporate employers, the Deferred Compensation plan permits eligible employees to invest a portion of their salaries in a tax-deferred savings program, ostensibly for retirement purposes. Participants have a choice of either investing in fixed or variable annuities sponsored by insurance companies; or of investing in the Supplemental Investment Fund. Participation is voluntary and is unrelated to employees' mandatory participation in the statewide retirement programs. Any public employee is eligible to place annually up to the lesser of either 25% of gross salary or $7500 in the Deferred Compensation plan. Withdrawals are permitted only upon retirement, job termination, or financial hardship. Participants in the Supplemental Investment Fund have the choice of shifting annually new and past contributions among the three investment options.

Like many participants in corporate tax-deferred savings plans, participants in the Deferred Compensation plan tend to be risk averse. Among those individuals placing their contributions in the Supplemental Investment Fund, the large majority of their assets (63.8%) are invested in the debt-related option open to individuals, the Fixed Return Account. The remainder is split slightly in favor of the Income Share Account over the Growth Share Account.

Police and Firefighter Retirement Plans

Various local police and firefighter (P&F) organizations make up the second largest group of participants in the Supplemental Investment Fund. Their combined assets represent 29.4% of the Fund, at market value.

Legislation enacted in 1979 closed the local P&F organizations to new membership. All new P&F employees hired after that time become members of the Public Employees Retirement Association. Their retirement assets are invested through the Basic Retirement Funds. However, the P&F employees in service prior to the law's enactment remain members of their respective local retirement organizations.

The local P&F retirement organizations have their own boards of trustees, and make their own investment decisions. Many local P&F organizations have chosen to retain external money managers to invest at least a portion of their retirement assets. State law permits these organizations to retain the State Board of Investment, through the Supplemental Investment Fund, as a money manager, at no direct expense to the P&F funds. Those organizations that use the Fund as a manager can also retain additional managers to invest their assets. In fact, the eight P&F organizations that currently invest in the Supplemental Investment Fund also employ additional external managers.

The financial condition of P&F retirement funds across the State varies from fund to fund. In general, however, local P&F funds have large unfunded liabilities. While many still have positive net contributions, because the funds are closed, almost all are maturing rapidly. Thus, many will soon start to experience net cash outflows. The individual financial circumstances of a particular P&F retirement plan can affect the investment needs and objectives of the plan.

Currently, 71.7% of the total participating P&F assets are invested in the Income Share Account, with the remainder split almost equally between the Growth Share Account and the two debt-related options.

<u>State Teachers</u>

The third largest group of participants in the Supplemental Investment Fund are teachers employed by Minnesota state universities and community colleges (excluding the University of Minnesota). The teachers' assets comprise 23.6% of the Fund. The teachers participate in a tax-deferred savings program similar to the Deferred Compensation program. However, the teachers' program is mandatory. The teachers contribute 5% of gross annual salary, up to a $450 limit. These contributions are matched by their employer, the State of Minnesota. The teachers are only allowed to participate in the Income and Growth Share

Accounts. Further, they are not permitted to shift past contributions among these two accounts, although future contributions can be redirected. The teachers' and the State's contributions to the Supplemental Investment Fund supplement the teachers' benefits received under their basic retirement program. The majority of the teachers' assets, 60.3%, are invested in the Income Share Account.

<u>Unclassified State Employees</u>

The fourth largest group of participants are the heads of state agencies, and employees of the legislature and selected state agencies. These individuals participate in a program referred to as the Unclassified Employees Retirement Program. The assets of this plan comprise 10.1% of the market value of the Supplemental Investment Fund. The Program is a defined contribution retirement plan invested entirely through the Supplemental Investment Fund.

The Unclassified Employee Retirement Program was created to offer retirement benefits to those state employees whose tenure is unlikely to be sufficient to qualify for full benefits under the basic retirement plan. Because the Program is a defined contribution plan, participants' retirement benefits are immediately vested and completely portable. Within specific ranges, participants can direct their employer/employee contributions to either the Income, Growth or Fixed Return options. New contributions can be redirected, but past contributions cannot.

The Income Share Account has been the most popular option among Unclassified employees. It holds 59.0% of the Program's assets. The remainder is divided slightly in favor of the Growth Share Account over the Fixed Return Account.

Hennepin County

The smallest group of participants is composed of Hennepin County employees. This group represents 6.2% of the Supplemental Investment Fund's total value. They formerly were eligible to participate in an employer matching tax-deferred savings program, similar to that offered to state university and community college teachers and Hennepin County employees. That program has since been discontinued, but its participants prior to the termination date are permitted to remain and make new contributions.

CURRENT INVESTMENT OPTIONS

Participants in the Supplemental Investment Fund currently have the option to invest in a combination of three investment options: the Growth Share Account, the Income Share Account, and the Fixed Return Account (for individuals) or the Bond Account (for local P&F retirement funds). The range of options open to a particular participant depends upon the administrative policies of that participant's sponsoring organization. The three investment accounts available to Fund participants are described briefly below.

Growth Share Account

This alternative focuses on above-average capital appreciation primarily through investments in common stocks. Only as a secondary objective does it attempt to generate current income. As such, the Account frequently is exposed to considerably more investment risk than the are the other two options.

The Account is authorized to hold up to 100% of its market value in common stocks. At times, cash equivalents may make up a large portion of the total portfolio, depending on the market outlook of the Account's managers. The Account's policy portfolio calls for a 95%/5% common stocks/cash equivalents mix.

Management of the Account is split between the SBI internal staff and the Investment Board's external equity manager pool. Cash equivalents holdings are managed by State Street Bank in its Short Term Investment Fund (STIF).

Income Share Account

This option offers a balanced, diversified investment approach. The Account attempts to produce superior total returns without exposing itself to the volatility experienced by the Growth Share Account. It does so by holding a portfolio composed of common stocks, bonds, and cash equivalents. While the Account seeks returns through capital appreciation, it also attempts to hedge against disastrous financial environments and protect against excessively volatile long-term performance.

The Account's investment authority allows it to be invested at a maximum 75% in equity assets. The Account's policy portfolio calls for a 60%/35%/5% stock/bond/cash equivalents asset allocation.

Management of the Account on the equity side is split between SBI staff and external equity managers. SBI staff manages all of the Account's bond holdings. Cash equivalents are invested by State Street Bank in its STIF.

Fixed Return Account

This option provides an investment approach that focuses solely on current income. In the past this option was offered to both retirement organizations and individuals. More recently, it has been made available only to individuals. The Account attempts to generate high levels of current income by investing in high quality debt securities. It exposes participants to minimal investment risk by buying fixed income securities and holding them to maturity. Returns to participants come only from the interest income of the Account.

The Account represents a cross between a money market mutual fund and a bond market mutual fund. Investment decisions made in the mid-1970's created a long-maturity bond portfolio that hampered the Account's flexibility as interest rates rose. Because these lower coupon bonds can only be sold at losses that would penalize current participants, they remain in the portfolio. In more recent years, new contributions have been used to purchase shorter maturity issues in order to decrease the Account's duration and make its yield more sensitive to the current interest rate environment.

The Account's bond portfolio is managed solely by the SBI staff. Cash equivalents are invested by State Street Bank.

Bond Account

Like the Fixed Return Account, the Bond Account seeks to earn high levels of current income. This option is available only to retirement organizations. The Account is designed to offer participating organizations a minimum fixed rate of return for a specified period of time. The length of time that this guarantee is in effect depends on the average maturity of the Account's investments, usually in the range of six-to-eight years.

Accounting Considerations

Investments by participants in the Supplemental Investment Fund are accounted for a manner similar to mutual funds. In all of the accounts, shares are purchased with new contributions. The Income and Growth Share Accounts have variable share prices that are based upon the market values of the assets in their respective portfolios. Share values for these accounts are computed monthly. The Fixed Return and Bond Accounts maintain constant share values, as their assets are not marked to market.

The Income and Growth Share Accounts reinvest all interest, dividend and capital gains income. This income is not distributed in the form of new share purchases. Rather, the reinvestment increases the value of outstanding shares. The Fixed Return and Bond Accounts also reinvest all of their interest income. However, they use that income to purchase additional shares for participants at the accounts' fixed share values. New contributions and withdrawals from the Supplemental Investment Fund are permitted once a month based upon the previous month-end share values.

CORPORATE TAX-DEFERRED SAVINGS PLANS

Both in terms of its structure and its investment objectives, the Supplemental Investment Fund bears a strong resemblance to tax-deferred savings programs offered by many U.S. corporations. Therefore, it is useful to review briefly these programs from the perspective of existing types, investment objectives, and investment options. This review will provide insights as to potential modifications in the Supplemental Investment Fund's structure.

Tax-deferred savings plans have become quite popular in recent years. Currently, roughly 75% of the largest U.S. companies, and an increasing number of smaller firms, are making these plans available to their employees. Quite simply, tax-deferred savings plans (commonly called 401(k) plans, after the section of the IRS code which authorized them) permit employees to set aside a portion of their salary for investment in vehicles offered by their employer. Taxes are deferred on the salary set aside. Up to 20% of annual pay, or a maximum of $30,000, can be deferred. In many cases employers will match, in part, the employees' contributions.

Tax-deferred savings plans are similar to Individual Retirement Accounts (IRAs). However, they offer participants much greater savings capacity and withdrawal flexibility than do IRAs. The withdrawal flexibility has been a particularly important factor in the tax-deferred savings plans' popularity. While ostensibly for retirement purposes, contributions to 401(k) plans can be withdrawn by participants for one of four reasons: reach age 59 1/2; loss of job; become disabled; or, encounter financial hardship. Although future IRS regulations may tighten the withdrawal provisions, to date, many companies have allowed withdrawals to finance home purchases, college educations, and other sizable expenditures under the financial hardship exemption.

Corporations have a variety of investment objectives for their 401(k) plans. In an excellent article in Compensation Review (January 1985), John Appleton, of State Street Bank, reviewed the various plan types, objectives and investment options commonly observed among U.S. corporations 401(k) plans. Tables 2-4 are reproduced, in part, from his article.

Referring to the earlier discussion of the participants in the Supplemental Investment Fund, it is apparent that all of the plan types discussed in Tables 2-4 are applicable to at least one group of the Fund's participants. Specifically, the pension substitute plan type applies to the P&F organizations and Unclassified Employees. The pension supplement plan type applies to the state university and community college teachers. The thrift/savings incentive and maximum tax shelter plan types apply to the Deferred Compensation Plan.

Corporate plans usually focus on one plan type with specific, limited objectives. They do not need, nor do they desire, to offer a large number of investment options. On the other hand, the fact that the Supplemental Investment Fund must be capable of meeting several different investment objectives has an important bearing on its desired structure. The Fund should make available a wide range of investment options, even though each group of participants may choose to offer its members only a subset of the

Fund's total options. That choice will depend on the needs and objectives of each group.

PROPOSAL TO EXPAND INVESTMENT OPTIONS

Among the participants in the Supplemental Investment Fund, the P&F retirement plans, the participants in tax-deferred savings programs, and the members of the Unclassified Employees Retirement Program, all have different financial needs and objectives. The current set of investment options available to these organizations and individuals is neither broad nor well-defined. It is not able to offer sufficient investment flexibility and diversity to meet all of the participants investment needs. With a more diverse and better focused set of investment options, the participating groups will have an enhanced ability to meet the participants' specific objectives.

The Investment Board has the ability to offer a wide array of investment alternatives through the Supplemental Investment Fund. Most of these proposed alternatives, described below, already are seasoned components the Basic Retirement Funds' investment management structure. It would be administratively simple to permit the Supplemental Investment Fund's participant groups to invest in these existing alternatives. The Fund could leverage off the economies of scale created by the Basic Retirement Funds' use of these investment alternatives. Thus, the Supplemental Investment Fund could invest at the same low management and administrative fee schedules paid by the Basic Retirement Funds.

Staff proposes that the Supplemental Investment Fund offer the following seven options to its participants:

1. Money Market Fund - would be composed of short-term, high quality fixed income assets. The fund would offer safety of principal and competitive money market returns. It would be managed by State Street Bank as part of the Short Term Investment Fund (STIF) the SBI currently maintains there.

2. Guaranteed Investment Contract (GIC) - would offer a guaranteed fixed return for a specified period of time (e.g., three years). It would be underwritten by an insurance company selected through competitive bidding. The guaranteed return available will depend upon prevailing market yields at the time the GIC is bid, as well as the GIC's specific cash flow provisions. Each year, a new GIC would be offered. At maturity, investments would have to be rolled over into a new GIC (likely at a different interest rate) or placed in another investment option.

3. Bond Fund - would offer active bond management. The fund would be managed by the Basic Retirement Funds' external fixed income managers. These managers attempt to maximize total portfolio returns by moving fixed income assets among varying maturities, qualities, and sectors. This option possesses a degree of investment risk, unlike the previous two fixed income options, in the sense that the fund could suffer declines in principal value. However, it also offers the opportunity for earning considerably higher returns than the other two options can generate.

4. Aggressive Equity Fund - would offer investments in a group of non-diversified common stock portfolios managed by the Basic Retirement Funds' active equity managers. It would be a high risk option with the potential for sharp short-run swings in principal value. However, given the investment risk assumed by the fund's managers, it also offers the possibility of significant long-run growth in principal. The fund would be similar in design to the current Growth Share Account.

5. Index Fund - would offer a second all-common stock investment option. The fund is designed to track the performance of the common stock market. It will produce returns that are less volatile than those of the Aggressive Equity Fund. Nevertheless, its long-run goal, likewise, is significant growth in principal. The fund would be invested by the Basic Retirement Funds' index fund manager, Wilshire Associates.

6. Balanced Fund - would be the same option currently offered under the Income Share Account. It would provide a diversified blend of stocks, bond and cash equivalents investments. It would avoid much, although not all, of the volatility produced by common stock-only options, yet be expected to produce long-run returns superior to the fixed income-only options.

These proposed options would replace the Supplemental Investment Fund's current three options. The Income Share Account would become the balanced fund mentioned above. The Fixed Return and Growth Share Accounts would be terminated. These Accounts' participants, depending on their investment objectives, could switch to either the money market fund or the GIC option. The Growth Share Account would also be ended. It would be replaced by the aggressive equity fund and/or the index fund options.

The only proposed investment option that does not already exist is the GIC option. However, GIC's are common components of corporate tax-deferred savings plans, and are simple in structure. The Board should have no difficulty in implementing this option.

INDIVIDUAL RETIREMENT GROUP ISSUES

This position paper does not attempt to resolve a number of issues that are the domain of the retirement groups participating in the Supplemental Investment Fund. If the proposal described above is adopted by the SBI, the retirement groups will have to deal with these matters.

Most importantly, the retirement groups will have to decide which of the investment alternatives created by this proposal to offer to their members. As discussed above, this decision should be predicated upon the investment needs and objectives of the membership. SBI staff is willing to work with each retirement group in determining an appropriate mix of investment alternatives, if the retirement groups should so desire.

The retirement groups also will have to determine the frequency of shifts among investment options that their members will be permitted to make. The Board is capable of handling shifts as often as monthly in most of the proposed investment options, although it is unlikely that monthly shifts would be practical for the retirement groups. On the other hand, the current structure is very limited in that it permits, at most, annual shifts of past and future contributions. The retirement groups should consider whether a greater frequency of allowed shifts among investment options would be more attractive for their members, at the same time taking into account administrative factors.

Finally, the retirement groups will have to make decisions concerning their plan accounting capabilities. The wider the array of options and the greater the frequency of option shifts, the more sophisticated must be a retirement group's plan accounting system. Plan accounting systems can be operated either internally or externally. Currently, all the retirement groups use internally operated systems. Those systems may have to be enhanced or moved to external operation to accommodate this proposal.

LEGISLATIVE CONSIDERATIONS

The implementation of this proposal will require several changes in Minnesota Statutes. Most importantly, section 11A.17, which creates and governs the Supplemental Investment Fund, will have to be revised. The available options will have to be changed to incorporate the additions, changes, and deletions proposed above. Further, the investment authorizations of the particular options will have to be defined.

The language permitting the various retirement groups to participate in the Supplemental Investment Fund also will have to be altered, pursuant to the wishes of the affected groups. The sections of the Minnesota Statutes relating to those groups investments in the Fund are listed below:

Group	Minn. Statutes Section
Deferred Compensation	352.96
P&F Organizations	69.775
State Universities	136.81
Unclassified Employees	352D.04
Hennepin County	Laws of Minn., 1969 Chapter 450

Staff proposes that each affected group be consulted regarding their desired investment options within the Supplemental Investment Fund. Each group could request legislative permission to establish either broad or narrow investment authority. The requested authorization would be introduced along with the proposed changes in the Investment Board's statutes (Section 11A.17) at the next legislative session.

TABLE 1
SUPPLEMENTAL RETIREMENT FUND
BREAKDOWN BY PERCENT OF TOTAL
AT MARKET VALUE
JUNE 30, 1985

ORGANIZATION	INCOME SHARE ACCOUNT	GROWTH SHARE ACCOUNT	FIXED RETURN ACCOUNT	BOND ACCOUNT	TOTAL
Deferred Compensation	6.1	5.0	19.6	N.A.	30.7
Local P&F Organizations	21.1	4.2	2.3	1.8	29.4
State University Teachers	14.2	9.4	N.A.	N.A.	23.6
Unclassified Employees	5.9	2.3	1.9	N.A.	10.1
Hennepin County	2.9	2.5	0.8	N.A.	6.2
Total	50.2	23.4	24.6	1.8	100.0

TABLE 2

Employee-Contribution Plan Types and Typical Objectives

Plan Type	Objectives
Pension substitute	1. To limit company pension-plan liabilities and costs when the pension plan has been "frozen." 2. To provide a retirement program when there is no current pension plan but employees are pressuring for one.
Pension supplement	1. To preserve a current lower-cost "basic retirement plan" by offering employees the opportunity to obtain more competitive retirement benefits through their own contributions. 2. To provide employees with a way to "inflation proof" their current pensions and Social Security fixed-dollar promises.
Thrift/savings incentive	1. To give employees a tax-favored opportunity for longer-term savings needs. 2. To provide liberal or a better-than-competitive employment package to attract or retain quality staff.
Maximum tax shelter	1. To provide key employees with as much tax shelter for capital accumulation as is possible within plan regulatory limitations. 2. To offer 401(k) income tax reduction opportunities and capital-growth shelter to all employees.

TABLE 3

Typical Investment Provisions Of Various Types Of Employee-Contribution Plans

Plan Type	Typical Investment Provisions
Pension substitute	1. Employees have choice of types of investment funds (usually one or two). 2. Employees have limited transfer rights between investment funds (especially for any company contributions). 3. Withdrawals are not allowed and/or are penalized. 4. Loans are generally not offered.
Pension supplement	1. Employees have a somewhat wider choice of investment fund types than under pension substitutes, and these often include company stock. 2. Employees enjoy more liberal transfer rights between funds (commonly once per year). 3. Withdrawals and loans are generally permissible only for strict "hardship" reasons.
Thrift/savings incentive	1. Employees have greater choice and receive better communication about investment vehicles. 2. Employees enjoy transfer rights as often as quarterly. 3. Withdrawals on "employee money" are available on request. 4. Loans are generally available, with restrictions set only by government regulations.
Maximum tax shelter	1. Employees have a wide choice of investments, sometime including "aggressive" risk-type funds. 2. Transfer rights are liberal. 3. Withdrawals are often available. 4. Loans are perceived as a tax-shelter investment for personal financial leverage.

TABLE 4

Generic Investments Offered by Employee Contribution Plans
(classified by investment risk and type of plan)

Plan Type	U.S. Gov't.	GIC	Money Market	Bonds	Balanced Fund	Conservative Equity	Aggressive Equity
Pension substitute	--	Often	--	--	Some Times	Some Times	--
Pension supplement	--	Often	Some Times	Rarely	Some Times	Some Times	--
Thrift/savings incentive	Some Times	Often	More Often	Rarely	Rarely	Often	Some Times
Maximum tax shelter	--	Often	Some Times	Rarely	Rarely	Often	Often

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

November 14, 1985

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

FROM: IAC Asset Allocation Committee

SUBJECT: Committee Report

The Committee discussed staff's proposed changes in the investment authority of the Supplemental Investment Fund. The Committee supports expanding the investment options made available to participants in the Fund. The Committee believes that the diverse needs of the various groups participating in the Fund can better be met by a broad list of investment alternatives.

The Committee discussed specific aspects of the proposed options. It also discussed which alternatives might be appropriate for the various participating groups. If the Board should support the expansion of the Supplemental Investment Fund's options, the Committee will continue its discussions of these matters.

Tab E

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

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

November 19, 1985

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

FROM: IAC Equity Manager Committee

SUBJECT: Committee Report

The Committee reviewed the performance of the equity managers in the third quarter. The Committee can identify no significant sources of concern regarding manager performance. Continued normal manager monitoring is recommended.

The Committee discussed the issue of performance-based fees. The Securities and Exchange Commission has recently approved the use of the such fees. Staff will present a performance-based fee proposal to the Committee at its next meeting.

The Committee recommends that the search for an additional value-oriented manager proceed after the SBI has made a decision whether to implement performance-based fees.

EAI

STATE OF MINNESOTA

STATE BOARD OF INVESTMENT

EQUITY INVESTMENT MANAGER STATUS REPORT: 6/30/85 - 9/30/85

($ millions)

	EQUITY ASSETS UNDER MANAGEMENT				THIRD QUARTER 1985							
	3/31/83		9/30/85		Gained		Lost					
stment ger	# of Accts	Asset Size	# of Accts	Asset Size	# of Accts	Asset Size	# of Accts	Asset Size	Professional Staff Turnover	Organizational Changes	Investment Style Changes	Comments
Alger	59	$1,645	76	$2,187	1	$ 5.0	2	$ 68.4	Kimberly House, client service representative, joined firm.	-	-	-
ance Capital gement neapolis)	43	$1,095	46	1,868	-	-	-	-	Paul Zosche, V.P., joined the firm.	-	-	-
el, Goodman tal Management	5	$ 104	27	875	2	62.0	-	-	Stephen Pouns, V.P., joined firm. He will be the third principal in the Houston office.	-	-	Houston partners have joint ownership in new London-based firm, Beutel Goodman Int'l. London will operate autonomously in terms of research, structure and management.
Capital Corp.	5	$ 160	16	305	-	-	2	29.2	-	-	-	-
Asset gement	126	$4,800	77	3,333	1	3.0	9	427.4	Fraser Lyle, portfolio manager/analyst, left firm. Barbara Winkler, analyst, joined the firm.	-	-	Three of the lost accounts ($143 million) were the result of plan liquidations.
an Jordan gement	22	$ 440	33	969	1	75.0	-	-	-	-	-	-
dvisory Group	81	$3,361	72	2,933	3	65.6	5	169.2	Tom Brakke assumed responsibilities of associate portfolio manager.	-	-	-
l Equity Advisors			45	2,131	-	-	2	101.7		-	-	-
tment Advisers,	79	$1,001	90	1,528	-	-	-	-	-	-	-	Sold by parent IFG Inc. to Hill Samuel Group of London.
r & Co.	29	$ 389	45	985	3	53.5	-	-	Natalie Kucharski, analyst, joined firm.	-	-	-
green Total Return			25	297								
green Fund			19	677								
green Limited			1	11								

STATE OF MINNESOTA

STATE BOARD OF INVESTMENT

EQUITY INVESTMENT MANAGER STATUS REPORT: 6/30/85 - 9/30/85

($ millions)

	EQUITY ASSETS UNDER MANAGEMENT				THIRD QUARTER 1985							
	3/31/83		9/30/85		Gained		Lost					
Investment Manager	# of Accts	Asset Size	# of Accts	Asset Size	# of Accts	Asset Size	# of Accts	Asset Size	Professional Staff Turnover	Organizational Changes	Investment Style Changes	Comments
Norwest Bank	3	49	5	253	1	100	-	-	Tim Kaspar, portfolio manager, joined firm. Bill Daniels, marketing administrator, left firm.	-	-	-
Waddell & Reed Asset Management Co.	6	471	9	675	-	-	-	-	Bob Bice and David Kerr, analysts, left firm. Nancy Biscanin, analyst, joined firm.	-	-	-

Tab 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

November 22, 1985

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

FROM: IAC Fixed Income Committee

SUBJECT: Committee Report

The Committee reviewed the recent performance of the Board's external fixed income managers. The Committee can find no significant problems that would call for special action by the Board. The Committee is somewhat concerned with the strong pace of account growth at Morgan Stanley and the firm's lack of long-range growth plans. The Committee recommends that staff continue to monitor the situation.

The Committee reviewed the recent transactions made in the Post Retirement Investment Fund's dedicated bond portfolio. The trades were designed to eliminate call risk in the portfolio. A staff memo describing the transactions is attached to this report. The Committee also discussed the upcoming rebalancing of the dedicated bond portfolio based on actuarial data supplied by the retirement systems. The Committee recommends that the current contract with Bankers Trust, who provides the Board with consulting services related to the dedicated bond portfolio, be extended for an additional year.

Finally, the Committee discussed the financial problems of the Federal Farm Credit System. The Committee reviewed a report by staff outlining a proposed strategy for investments in Farm Credit System securities. The Committee endorses the staff report's conclusions. A copy of the report is attached to the Committee's report.

Attachment

November 12, 1985

TO: Roger Henry

FROM: Bob Barman

SUBJECT: Federal Farm Credit System

SUMMARY

The agricultural industry is one of several sectors of the U.S. economy that has not benefitted from the economic expansion over the last three years. Although one can cite a variety of causes for the current problems, the key reasons must include high real interest rates, a strong U.S. dollar, and low product prices. The financial problems of individual farmers combine to create significant concern for the entire farm credit system. It is clear that the U.S. government will have to provide somewhere between $5 to 10 billion additional funds into the system to prevent any defaults on agency payments. As a consequence of these concerns, the interest rate spread between Federal Farm Credit Agency debt and U.S. Treasuries has widened from 20 basis points to a record 100 basis points. While farm agency credits are not explicitly government-guaranteed, the close association of this Federal Farm credit System and the U.S. government implies that the government will support these debt obligations. Our external fixed income managers and our Wall Street contacts unanimously agree with this conclusion.

The first section of this memo contains materials taken directly from special reports prepared by Piper, Jaffray, and Hopwood and Merrill Lynch. We included the appropriate sections from these reports because they provide a useful review of the farm credit problem. The second section summarizes the viewpoints of our external fixed income managers and Wall Street research firms. The final section presents our judgments on the policy and strategy aspects of this issue. We draw the following policy conclusions. First, the U.S. government will back all Federal Farm Credit Agency obligations. Second, there is a very low probability of late interest payments due to delayed action by Congress. Finally, Farm Credit obligations represent prudent investments within the context of a diversified fixed income portfolio. Given the current yield spread of 75 to 100 basis points off the Treasury yield curve, our strategy is to use up to 10% of the portfolio in farm credits. If spreads widen significantly we may increase our positions above 10% of the portfolio.

I REVIEW OF FARM CREDIT PROBLEM

INTRODUCTION [1]

In recent months the daily press and the financial media have been reporting a worsening of financial conditions at the Federal Farm Credit System, the nation's largest lender to farmers, ranchers and farm cooperatives. Credit problems from the prolonged slump in the farm belt have led to varying degrees of liquidity crises at some of the Farm Credit Banks. Because the System requires all Federal Farm Credit District Banks to come to the aid of troubled System members, the depth of agribusiness industry problems in the Great Lakes, Midwest and Northern Plains regions has raised questions as to the financial viability of the entire System.

Farm Credit System debt credit has, among all the federal agencies, enjoyed the highest of investor respect. It has never failed to make interest or principal payments on time since its inception in 1917. Nevertheless, the financial market's concern is evident now. Yield spreads on System three year debt versus comparable treasury debt has ranged from about 13 basis points a year ago to about 110 basis points now. Comparable seven year maturity yield spreads ranged from 17 to 87 basis points and ten year maturity spreads ranged from 21 to 63 basis points.

It is important to note that while the banks are classified as "Government-Sponsored Enterprises" their debt securities have no expressed guarantee of the United States Government and should not be considered U.S. Government obligations. However, in view of the close ties between the Banks and the government going back to 1916, many observers find it difficult to believe that the federal government would not find some form of assistance in case of an inability to repay principal and interest in accordance with the terms of the debt obligations. The general opinion among investors is that the resources of the government will be there in the event of a financial emergency.

ORGANIZATION [2]

The Federal Farm Credit System is the largest lender to the nation's farms, one of the most important segments of our economy. It was not organized to be a lender of last resort but to provide agricultural loans based on sound lending principles. The Federal Farm Credit Banks, established by Congress, consist of 12 Federal Land Banks (FLB), 12 Federal Intermediate Credit Banks (FICB), and 13 Banks for Cooperatives (BC) including a central bank. The Farm Credit Administration regulates and supervises the financial and operational activities of the 37 banks. All of the banks are contractually required to provide financial aid to any individual banks which experiences losses severe enough to impair the equities of its member stockholders or participation certificate holders. The Farm Credit Act requires the Farm Credit Administration to impose repayment requirements on the System's banks in the event of a bank's inability to make interest and/or principal payments on its debt obligations. The Federal Reserve Banks act as clearing agents for the Farm Credit Banks and they may buy and sell FCB securities as part of the open market operations. In addition, the Fed may extend discounting privileges to the FICBs. It has been reported that the Fed is considering allowing the System to have access to its discount window.

The Federal Farm Credit Board is the supervisory organization for the System setting policy and regulations under the laws by which it operates. Twelve members are appointed by the President of the United States with the advice and consent of the U.S. Senate. Another member is appointed by the Secretary of Agriculture and serves at the Secretary's pleasure. Also, revolving funds are maintained with the Secretary of the Treasury in the amount of $112 million for the FICBs and $149 million for the BCs. These funds can only be called upon by the Governor of the Farm Credit Administration for temporary investments in the stock of the two banks and only as a last resort. The Treasury may deposit up to $6 million with the Land Banks if needed. If the System were forced to utilize these funds, it would then come under government control and all which that entails.

The Farm Credit Banks were originally capitalized with government monies but all of this capital has been repaid, the last payment being in 1968. The original intent of Congress in establishing the Federal Land Banks was that they were to be eventually owned by cooperative national farm loan associations. Now most of the capital is raised through the sale of debt securities, the sale of stock and participation certificates to the borrowers, and the retention of earnings. System rules require that all borrowers must acquire an equity position in the System units from which they borrow; a 5-10% mandatory add-on to loan payments purchases equity as a loan is amortized. All loans are fully collateralized by land, buildings and/or equipment.

SCOPE OF THE PROBLEM

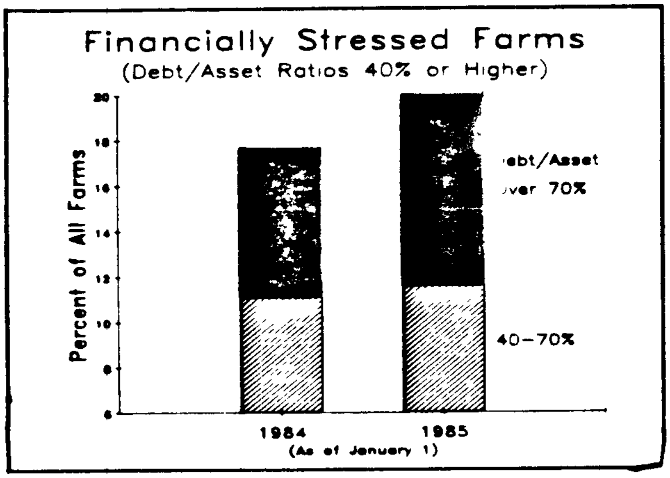
U.S. agriculture is going through its worst period since the Great Depression and the prospects for recovery in the immediate future are not encouraging. A combination of agricultural over-expansion, poor farm policy, lost export markets because of the overpriced dollar and trade embargoes, changing food consumption habits, adverse weather, secular disinflation, poor judgment and bad luck has contributed to a financial problem that goes well beyond the nation's 2.3 million farmers.

Agribusiness is the country's largest industry, accounting for about 30% of GNP, and is the nation's biggest employer. For almost twenty years, it has been the largest positive contributor to the U.S. balance of trade.

Low prices and large debt service requirements have created a very serious cash-flow problem for farmers and ranchers and the industries which serve them. Gross farm income is expected to drop more than 30% this year to $21-$22 billion, adding to concern about farmers' ability to service their $212 billion of debt. According to a recent study by the USDA, more than 80% of all farms have debt to asset ratios of less than 40%-a reasonably comfortable safety margin. But about 20% of farm borrowers, concentrated in certain areas and among larger producers, are carrying enough borrowed capital to be in financial distress. Further, as many as 10% of indebted farmers are in acute financial jeopardy. This group has enlarged significantly in the past year and is growing rapidly.

Table 1 illustrates the financially stressed farm situation.

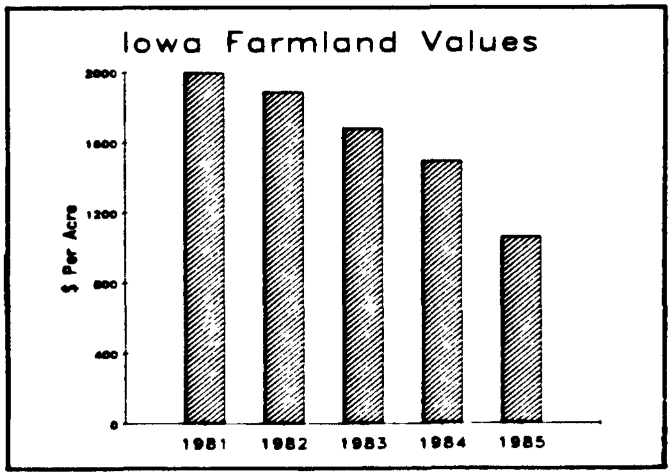
TABLE 1



Farmland has been the collateral for over half of farm debt. Indeed, rapidly rising real estate values and low real interest cost of the 1970's encouraged both farmers and lenders to greatly expand the nation's farm debt total. But farmland prices have receded by 17% nationwide since 1981. In such major agricultural states as Illinois, Minnesota and Missouri, farmland values have sunk as much as 40%, while the declines in Iowa and Nebraska have been in the 50% range since 1981. According to one authority, virtually every farm which entered the 1980's with debt at 50% or more of its capital base is now in serious financial trouble. And the situation is worsening.

Table 2 shows the decrease in farm values.

TABLE 2

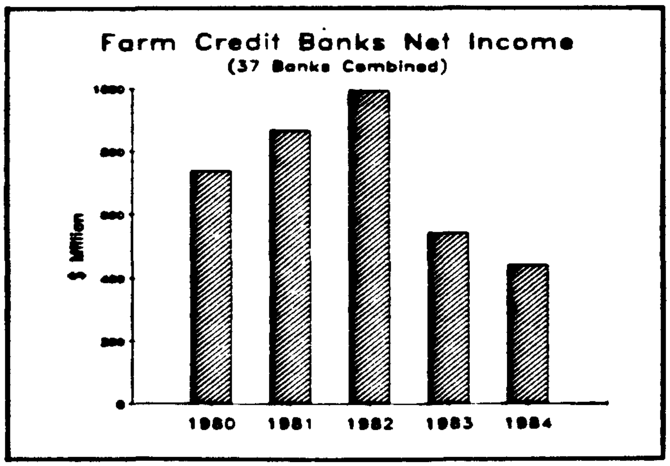


The impact, of course, does not stop with the farmer; it demonstrates a linkage that exists nowhere else in our economy. The fortunes of farmers penetrate deeply into the nation's economic infrastructure. The Kansas City Federal Reserve Bank states that 20% of non-farm businesses in rural communities are experiencing severe financial stress. The Federal Reserve has reported that 39 rural banks have closed in the first half of 1985, compared with 32 for all of 1984 and a total of 20 in the three years prior to 1984. The FDIC says that 334 (36%) of all the nation's "problem banks" are rural banks. It is no surprise that many of the Farm Credit System's 370 regional Production Credit Associations (PCA's) are also in tough shape.

Since 1982 the Farm Credit System's net income has dropped 56%; the second quarter of 1985 showed earnings of only $5.6 million compared with $126.3 million for the same period a year ago.

Table 3 shows the system's net income from 1980 through 1984.

TABLE 3



Last year the PCA entity experienced its first overall loss in its 50 years, and is under more financial stress now than it was during the Depression. So far this year 11 PCA's have been liquidated. Most of these were in the Omaha and Spokane Farm Credit districts, where obligations were covered by the rest of the System. The bailouts of the Spokane and Omaha districts really focused sharp attention on the System's problems. The liquidity shortfalls are being worked out. Other district Farm Credit Banks have come through with a rescue package of $150 million for the Spokane district. A System package of $340 million is proposed for Omaha.

Unquestionably, the Farm Credit system has gotten into real financial trouble. While outside influences such as weather, exports, a strong dollar and ill-focused farm policy have been involved, sloppy System banking controls are also implied. Many of the PCA's are hurting because they were the most aggressive lenders to some of the most aggressive farmers. Analysts have criticized the System for being lethargic regarding its reserving for loan losses, its writing down of bad loans and its generally slow reaction to the secular changes taking place in U.S. agriculture.

At present the System is vulnerable to a liquidity crunch. Its $11.8 billion in capital backs $70 billion plus of outstanding debt securities. One estimate has it that if the Systems; PCA's continue losses at 1985's rate ($110 million) over the next three years, the Federal Intermediate Credit Banks (which fund the PCA's) would have difficulty meeting their obligations. Over the next five years it is estimated the PCA's will need a $1.8 billion capital infusion to break even.

The impact of an insolvent Federal Farm Credit System would extend well beyond its securities holders. There would be heavy implications for the stability of U.S. financial markets and for the borrowing costs of the other federal agencies. The issue goes beyond the interests of System note and bondholders and even beyond the special interests of agribusiness.

The Farm Credit system problems, however, are not going unattended. Restructuring moves are taking place but they have been painful and slow. System costs are being pared by staff reductions, consolidation of operations and other measures. Collections of loan interest and principal have been intensified, and interest rates have been increased. A reorganization plan which emphasizes more centralized functions is under study. Included in it are measures which may broaden the System's service and customer base. Before the benefits of these actions are realized, however, the Farm Credit System may well need interim help - in the event that the cash-flow shortage in the farm belt persists and that the system's liquidity crisis grows more acute.

It is believed the probability is good in the short run that the Administration, Congress and the appropriate federal agencies will move to remove the clouds overhanging the Federal farm Credit System for the following reasons:

1) Although agribusiness is the country's biggest industry, its output is concentrated in a relatively few hands. About 330,000 farms (less than 20% of the nation's total) account for 75% of farm cash receipts and hold over 60% of the country's farm debt. Thirty percent of this same group are the really financially-stressed farm operations and they account for 45% of total debt. This concentration cannot be viewed lightly by policy makers. What happens to these few producers will have a significant impact on the nation's food and fiber output.

2) A collapse of the System would lead to sever dislocations throughout the U.S. economy. The Farm Credit System owns about 36% of all U.S. farm debt. If it were forced to liquidate its loan portfolio, to pay much higher interest rates, or if the market for its securities contracted, the ripple effect on banks and state and local government securities holders could be major. And, since it is questionable whether the private U.S. banking system could alone support the seasonal capital needs of U.S. farming, America's largest industry would be throttled. Such dislocations, depending on their severity, could hardly escape the priority attention of Washington.

3) If the System didn't meet its debt obligations, the costs of operating other U.S. government agencies would go up dramatically. Federal Farm Credit paper has traditionally been regarded as second only to U.S. Treasury securities. If the markets lost confidence in the ultimate security of Federal Farm Credit debt, the credit environment for all federal agency financing would be tainted, and lenders would demand a full U.S. government guarantee. The Treasury would have to directly assume what is now off-budget financing. The negative impact on future federal budgets would be obvious, especially as the U.S. government agonizes over controlling the growth of deficits.

4) In large part, the problems of the Federal Farm Credit System reflect agriculture's own fundamental problems. These are complex difficulties for which the solutions will undoubtedly be long term. U.S. agriculture must find a way to keep prices competitive in world markets while avoiding the ruinous tendency to glut the markets. Recognition of this was made clear by Federal reserve Board Chairman Paul Volcker's statement in June that the Federal reserve was prepared to open its emergency discount window if needed to help bail out the Federal Farm Credit system. Because of the urgency of the situation it is believed the administration will conclude it must act.

The alternative of inaction will be unacceptable. The past decade has seen the U.S. government step in assertively to bail out other troubled private enterprises that were deemed crucial to the nation's economic well-being: Lockheed, Chrysler and Continental Illinois. Considering this, the question is could the United States stand by while an agency it started and now regulates defaults on its debt? The consensus among Wall Street and investors is that it will not.

Table 4 provides selected statistics and ratios for the System.

TABLE 4
FARM CREDIT SYSTEM

SELECTED STATISTICS AND RATIOS ($ Millions)

	1984	1983	1982	1981	1980
Interest Income	9,391	9,098	10,320	9,430	7,195
Interest Expense	8,461	8,195	9,129	8,406	6,248
Loan Loss Provision	121	39	75	104	81
Net Income	442	543	994	868	739
Gross Loans	77,786	79,127	78,511	75,806	66,249
Total Earning Assets	80,266	80.758	80,805	78,504	68,613
Total Assets	84,832	85,050	85,159	82,549	71,623
*Total Bonds & Notes	75,346	75,728	76,220	74,681	65,078
Total Equity and Surplus	9,242	8,969	8,578	7,466	6,190

* includes accrued interest.

Selected Ratios

	1984	1983	1982	1981	1980
Int. exp. as % int. inc.	90.09	90.07	88.46	89.14	86.84
NII as % int. income	9.91	9.93	11.54	10.86	13.16
NII as % avg. earning assets	1.15	1.12	1.49	1.39	1.48
Interest rate on:					
earning assets	11.53%	11.25%	12.83%	12.79%	NA
interest-bearing liabs.	11.41	11.30	12.42	12.35	NA
Interest rate spread	0.12%	(0.05)%	0.41%	0.44%	NA
Income available for interest/interest	1.05x	1.07x	1.11x	1.10x	1.12x
Net loans as % of assets	90.87	91.02	91.45	91.14	91.82
Earning assets as % of total assets	94.62	94.95	94.89	95.10	95.80
Earning assets as % of total liabilities	106.19	106.15	105.52	104.56	104.86
Earning assets + cash as % of total bonds & notes	106.85	106.93	106.26	105.47	105.79
Capital as % of gross loans	11.88	11.34	10.93	9.85	9.34
Capital as % of net loans	11.99	11.58	11.02	9.92	9.41
Non-accrual loans as % of net loans	1.94	1.15	0.60	0.33	0.28
Liabilities as % of liabilities and capital	89.10	89.45	89.93	90.96	91.36
Liabilities to capital (:1)	8.18x	8.48x	8.93x	10.06x	10.57x
Return on avg. assets (%)	0.52	0.64	1.19	1.13	1.12
Return on avg. capital (%)	4.83	6.19	12.39	12.71	13.15

CURRENT STATUS [4]

News that Secretary of the Treasury Baker and Secretary of Agriculture Block have agreed to propose a line of credit for the Farm Credit Banks is significant. Prior to this the administration was viewed as being extremely reluctant to offer any bailout for the System. The suggestion of a line would certainly go a long way towards calming the markets and reducing the funding costs of the Farm Credit Banks.

On October 30 the Farm Credit Administration proposed a $5 billion backup line from congress to support the liquidity of the System. Gene Swackhamer of the Farm Credit Banks also stated that the newly formed Farm Credit System Capital Corp. would act as a warehouse to hold poor loans currently in the farm credit system. Farm Credit Administration officials at the October 30 House Agriculture Committee Meeting also requested Congressional action to allow the Farm Credit Banks to restructure themselves to permit shifting of funds to threatened banks in the system.

No big surprises emerged from the testimony in congress. However, the apparent support for some sort of backup line by James Baker is significant. At this point, final approval rests with the President, but Baker's support will make a solution much easier. The Treasury is trying to send a message that will help reduce the uncertainty in the market.

II EXTERNAL SBI FIXED INCOME MANAGERS' VIEWPOINTS

We contacted each of the SBI fixed income managers to obtain their opinions regarding the current Farm Credit System problem. Their viewpoints follow:

Miller, Anderson, Sherred - They believe the government will bail out the System, but do not know what form it will take. They feel that an agency, which initially has been established by the government, should be helped by the government if the agency consequently gets into financial difficulty. Miller believes the securities will be money good.

Miller does not believe the Farm Credit System will miss any interest payments due bondholders. They do not know what steps the government would take if interest payments were missed, but discount this posibility because other agencies would then have trouble issuing new securities in the future. Miller, Anderson also feels that the government will be sure all note and bond holders do not suffer any financial losses on their holdings if the System did default on their securities. They were not so sure about the equity holders, however.

The firm does have an investment policy allowing the use of any agency security. They have owned various agency securities, from time to time, based on the assumption that the government would back any agency if it got into trouble.

Miller Anderson believes that yield spreads of System securities will widen to over 150 basis points above treasuries within the next year. They would be buyers of these securities at this level and sellers around a yield spread of 50 to 75 basis points. Their maximum position would be five percent of assets. These securities would be purchased for investment purposes rather than for trading purposes. Their investment approach is to buy on the basis of good value and to hold the investment until it becomes rich at which time a sell is considered. Trading purposes to them means buying an item for a specific time period usually less than one year. They currently do not hold any System securities in our account.

Morgan Stanley - Morgan feels the government will bailout the System eventually, but expects the System problems will be made a political football for another year. They believe the Farm Credit System will cause the situation to appear bleaker than it actually is so as to get action quicker from the government. Morgan does believe that all FFCB debt securities will be honored.

The firm does not believe interest payments to bondholders will be missed by the System. They feel the government could not and would not allow that to occur. They also believe the government would make both debt holders and equity holders completely whole in case of a security default.

Morgan's investment policy includes investing in agency securities. However, the yield spreads over treasuries must be around forty to fifty basis points of agencies not having problems. They do not buy them if those spreads are not available.

It is expected that Farm Credit yield spreads would widen to about 100-110 basis points over treasuries over the next year. They believe that all of the bad news is out. They would be buyers of System securities at these spread levels and sellers at levels approaching 50 basis points. Their maximum position would be ten percent of assets. The securities would be purchased for investment purposes rather than for trading purposes; their distinction between the two being that for investment purposes a return equaling the coupon return plus Capital appreciation would be required, while a trading return might be something less and for a shorter time period which was not defined. Morgan does not currently hold these securities in our account.

Lehman Management - Lehman believes the government will come to the aid of the Farm Credit System and that the outstanding securities will be money good.

They see no chance that the government will allow debt interest payments to be missed. Lehman argues that missing interest payments is not a concern since the System does have money for this purpose already. Interest payments are being made on time. In their view, the real problem is the drop in collateral value. The government would not let the System collapse because the financing system for all capital markets would collapse, too. They believe the government would not let debt holders lose on their investments since these investors would be needed for future System financings. Lehman also thought the government might not make the equity holders whole.

Lehman Management does have an investment policy allowing agency security purchases. However, they do not believe agency securities currently are as attractive as other investment opportunities. They expect yield spreads over treasuries to approach a maximum range of 95-100 basis points over the next year. Farm Credit securities comprise five percent of the Lehman, Shearson Bond Index. They feel it is doubtful if they would take a larger position than that. It is more likely, however, that their maximum position would be three to four percent. If they do see themselves as buyers of System securities, it would have to be around the 115 basis point level. They would view buying System securities as a longer term investment opportunity (over a year or so) rather than as a short term trading opportunity (less than a year). They currently hold $8.0 million (4.7%) of these securities in our account.

Western Asset Management - Western Asset believes the government will support the Farm Credit System and honor its debt securities if necessary. They expect that the FFCB system problem will be resolved within a year.

They further believe that it would be a remote likelihood that interest payments on the debt securities would be missed while awaiting congressional action. If it did appear as though that might happen, the government would be forced to take action to stop it from occurring. The government would make bond holders totally whole, but Western was not sure if the same would be true for the equity holders.

The firm's investment policy allows agency investments, but that would change negatively if the government failed to take full responsibility for agency solvency.

Western believes that FFCB yield spreads over treasuries will be around the 90 basis point level in the next six months and about half of that during the following six months. If they were to be buyers of these securities, they would buy them at anything over 100 basis points. Yield spread analysis would be a continuous evaluation process. If they were to buy them, they would take a maximum position of 7 1/2%. Their normal security position is 5%.

Western would buy the securities for investment purposes rather than for trading purposes. Their definition of investment purpose is to be patient until investment expectations fall in place. This has longer term implications. Their definition of trading is to take advantage of a market anomaly quickly. This usually has shorter term implications. Western currently holds $6.0 million (3.6%) of System securities in our account.

Investment Advisers - They also believe, as the other outside managers do, that the government will bail out the System and that the debt securities will be money good.

The firm believes that the chances are low, maybe 5%, that any interest payments will be missed on the outstanding debt securities while waiting for congressional action on this issue. If it appears likely that this will happen, the government will be forced to act quickly to make payment. They also believe that bond holders will be made totally whole and maybe the equity holders.

Investment Advisers' current investment strategy is against buying agency securities. While they currently do not hold any agency securities, they have owned them in the past. They would change their strategy if the quality of agency securities improved and the prospective return increased.

They expect maximum yield spreads over treasuries to approach 100 basis points over the next year. They might purchase these securities if yield spreads reached 150 basis points over treasuries and it appeared a concrete solution appeared near. They would sell the securities when yield spreads approached 50-60 basis points over treasuries. Their maximum position would be 10%-15%. If they bought these securities at 150 basis points over treasuries, it would be for investment purposes and not for trading purposes. Trading is not their style of management. They do not currently hold any of these securities for our account.

Peregrine Capital - Peregrine believes the government would help the Farm Credit System and support its outstanding securities. They also believe that the government will come up with a reflationary solution.

The firm does not believe interest payments will be missed for the next six months since they believe the systems resources are adequate for that time period. After that, they do not know. The government would have to make restitution to investors after that. If not, investors would be dumping all agency securities. They believe the government would make all debt holders whole, but that equity holders may lose something.

Peregrine's investment policy includes buying agency issues, but they currently believe there are more attractive investment opportunities elsewhere. They currently do not hold any agency securities, but they would if they became more attractive.

They believe yield spreads will increase to the 135-140 basis point level over treasuries during the next year. However, if they became buyers, it would be only for issues with maturities of three to six months since they believe the system's resources are only adequate for six months. They would buy with spreads over 100 basis points and sell with spreads at the 50 basis point level. Their maximum position would be 10%. Their investment time horizon would not be over six months in any case. They currently do not hold any Farm Credit securities in our account.

WALL STREET VIEWPOINT

Merrill Lynch - Merrill believes the government will back the Farm Credit System and that the outstanding securities will be money good.

They do not believe there is any chance that interest payments will not be paid by the System. In fact, they have found the Farm Credit System has had the ability to sell discount paper (one week to under one year in maturity) without any problem. This will provide adequate cash flows as needed to operate the System. Also, Merrill says that investors such as insurance companies and money managers have been purchasing System securities with maturities of seven and ten years. They felt that if something did go awry, bond holders would not lose any part of their investment. They were not sure whether equity holders would fare as well.

The firm's attitude toward agency securities, in general, remains favorable. They still recommend them to be purchased by investors. Their attitude would change if a material credit change occurred such as the government saying they would not be responsible for the agencys' securities.

Merrill thinks the maximum yield spreads over treasuries during the next year to be about 100 basis points for short maturities and 130 basis points for longer maturities. It is possible however, that the highs may have already occurred. They would recommend purchases around 85 basis points over treasuries for shorter maturities and 95-100 basis points for longer maturities. They would be sellers inside of 40 basis points for shorter maturities and inside of 60 basis points for longer ones.

Merrill recommends a maximum position of ten percent. They recommend both arbitrage trades and longer term investment positions.

First Boston Corporation - First Boston believes the government will come to the aid of the Farm Credit System. They also believe the outstanding securities will be money good.

The firm believes there is no chance that interest payments will not be paid by the System or by arrangements with the U.S. Treasury. They also felt that debt holders would not lose on their investments but they were not sure about this for equity holders.

The company's policy toward agency securities, generally, is very favorable. The only thing that would change their attitude would be a lack of faith in government support for the agency system.

First Boston expects maximum yield spreads over treasuries to be about 120-125 basis points over the next year. They also think the widest spreads may have already occurred. They would be buyers of System securities at 125 basis points for longer maturities and 90 basis points for shorter ones and sellers of longer maturities at 30-35 basis points and 20-25 basis points for shorter ones.

The firm recommends a maximum position for these securities of ten percent. They suggest they be bought for investment purposes which may be for a holding period period of one to two years.

Salomon Brothers - Salomon believes the government will ultimately support the Farm Credit System and that it's securities will be money good.

They do not see the System missing interest payments while waiting for congressional action to help the Farm Credit Banks. Payments might be delayed, but if that did occur, Salomon would expect that some additional compensation would be paid to debt holders, perhaps at the Federal Funds interest rate. However, they really do not see interest payments even being delayed.

In the unlikely event that the System could not pay interest or redeem bonds, Salomon would expect the government to either pay the necessary funds to the System for payout to investors (most likely) or pay the investors directly. They see debt holders as not losing any money on their investments but they are not sure about the equity holders.

The firm still has a very favorable attitude toward agency securities, generally. They still trade, position and make markets for all agency securities. Their attitude would change negatively if the government would not back the System.

Salomon expects maximum yield spreads of about 100 basis points over the next year. They suggest securities could be bought at around 90 basis points. At current levels, they would suggest buying and selling for trading purposes only. Their definition would regard trading purposes as taking advantage of a market anomaly in a short period of time (one year or less). They recommend a maximum position of 10% and an optimum one of 5%.

Kidder Peabody - Kidder also believes that the government will bail out the Farm Credit System and that its securities are money good.

They see only a small chance that System interest payments will be missed and debt securities not redeemed while waiting for congressional action of help. They see the Treasury stepping in for a total bailout of the System if necessary. They believe bondholders will not be allowed to lose on their System investments but equity holders may lose some amount on theirs.

Kidder has a favorable policy toward agency securities, in general. This would change if the government failed to backup its agencies.

The firm expects maximum yield spreads of 125 basis points over the next year. They would recommend purchase at levels of 100-125 basis points over treasuries and sales at the 60-70 basis point level. Kidder suggests transactions be made for trading purposes only for now (less than a year). Kidder believes that if governmental action to help the Farm System has not been resolved within two years, yield spreads could widen further, perhaps to 200 basis points or more. They would suggest a maximum position of 5-10% of assets.

III INTERNAL VIEWPOINT AND STRATEGY

Historically, the SBI's strategy toward purchase of any agency security was based on the generally accepted concept that these securities would not pose any credit risk threat since the government would ultimately provide financial backup if needed. Since these securities offered yields higher than treasuries, the particular security purchased was frequently the one having market availability, required maturity, coupon and the highest yield.

At the current time the SBI has the following holdings of Farm Credit System debt.

SBI FARM CREDIT HOLDINGS
9/30/85

Funds	Market Value	FFCB Debt Mkt. Value and % of Fixed Income	FFCB Debt as a % of Total Assets
POST			
Equity	$ 649.7 MM		
Bonds	2,000.0	$76.1 MM 3.8%	
Cash	159.6		
Total Fund	$2,799.4 MM		2.7%
PSCH			
Equity	$ 7.1 MM		
Bonds	230.5	$14.3 MM 6.6%	
Cash	107.4		
Total Fund	$ 345.0 MM		4.1%
SRIN			
Equity	$ 84.6 MM		
Bonds	44.4	$ 7.1 MM 16.0%	
Cash	12.0		
Total Fund	$ 140.9 MM		5.0%
FIXED RETURN			
Bonds	$ 47.3 MM	$ 2.5 MM 5.3%	
Cash	23.3		
Total Fund	$ 70.6 MM		3.3%
BOND FUNDS			
Bonds	$ 6.5 MM	$ 0.3 MM 4.6%	
Cash	.7		
Total Fund	$ 7.2 MM		4.2%

The SBI Money Market Fund managed by State Street Bank currently holds three issues of Farm Credit System debt. These issues represent 3.1% of the total fund. The SBI's internally managed cash funds currently hold $198 million in farm credits which represent 23.7% of our short-term holdings.

With the surfacing of the Farm Credit Systems financial difficulties, we adopted a strategy of having a maximum of 10% of total assets in farm credits for each of the internally managed funds. The staff believes that the government will come to the aid of the Farm Credit System and that its securities will be money good. We also believe that the current investment opportunity is attractive for patient investors who are willing to buy these securities at substantially wider historical yield spreads over treasuries and hold them until a more normal spread relationship returns. Since we are not currently buying corporate securities because yield spreads over treasuries are too narrow, this kind of an opportunity could result in an excellent longer term investment. Our strategy is to add to positions in FFCB debt if spreads widen significantly. Our specific spread targets on short-term and long-term debt would depend upon the prevailing corporate/government yield spreads.

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TO: Howard Bicker

FROM: Roger Henry

SUBJECT: Sale of Callable Bonds in the POST Dedicated Portfolio

SUMMARY

When the SBI initiated the dedicated portfolio in the POST fund we kept a group of existing corporate bond investments in the new portfolio to limit fund turnover. Of the $500 million in corporate bonds almost $200 million had call features. If interest rates dropped significantly these bonds would move up in price to a point where it would become advantageous for the issuing company to redeem these bonds. Reinvesting the proceeds at lower interest rates would require additional capital for the POST to meet its actuarial obligations.

During September and October, we completed a bond swap program in the dedicated portfolio to eliminate this call risk. We sold 27 issues generating $173.8 million. We covered the projected liability payments through the purchase of $211 million par value of non-callable corporate and government issues for $168,654,906. This swap program had three notable results. First, it removed all call feature risk from the portfolio. Second it resulted in a slightly higher quality portfolio. Finally, it generated an excess $5.1 million which can be invested the common stock portfolio.

ANALYSIS

Interest rates have dropped sharply since the middle of 1984. As a consequence of this drop in rates several of our callable bonds moved to premium prices at which point it was likely that these bonds would be redeemed by the company. Our analysis of the other callable bonds in the portfolio suggested they would become vulnerable as well if interest rates countinued to decline. The price performance of callable bonds deteriorates as you approach call dates because these bonds typically are redeemable at par. At this point, a bond's yield to call is below its yield to maturity and a yield fund like POST would profit by reinvesting in another bond.

During September we reviewed the callable bond positions with Bankers Trust. They recommended that we eliminate all these bonds in one swap program. While many of the specific issues would not rank as sale candidates on a cross-over-yield analysis, we agreed with Bankers Trust that it was a good idea to get these transactions completed before the year-end rebalancing. The sell program involved 27 issues with a market value of $175 million. We divided the program into seven packages where sales were balanced with an equal amount of purchases. The maturities in each package were similar. We designed these trade packages to lower execution costs and minimize market disturbance while maintaining the same spread relationship. We did encounter difficulty buying long-term, non-callable corporate bonds, however. The available supply of these issues is limited due to widespread use in other dedicated portfolios. As a consequence we substituted additional government issues. The exhibits at the end of this report show the specific bonds in the purchase and sale program.

The final breakdown of the purchase and sales is as follows:

	MARKET	PAR VALUE
Total Sales	$173,755,964	$161,920,000
Total Purchases	168,654,906	211,393,000
Net Take Out	$ 5,101,058	

The total sales proceeds came in slightly less than projected at the start of the program due to price declines in several premium-priced call bonds. We were able to maintain the net take-out of $5 million through the use of additional zero coupon bonds. We purchased a total of $88.6 million par value in zero coupon bonds for $32.6 million. Most of these issues were government bonds.

We achieved several important goals in this swap program. First, we eliminated call risk from the portfolio providing assurance that liabilities will be met in a declining rate environment. Second, we gained useful experience in operating a swap program in the dedicated portfolio. The coordination of the brokerage firms, Bankers Trust, and the SBI staff will be a critical factor in implementing the non-dedicated portfolio swap program later this year. Third, we upgraded the quality of the portfolio by increasing the weighting in government bonds from 65% to a 70% weighting. Fourth, we were able to take out $5 million from the dedicated portfolio while still meeting our expected liabilities. These funds can now be invested in the common stock portfolio. Finally, we learned which Wall Street firms seem best equipped to handle these swap programs for dedicated funds.

BOND SWAP PROGRAM
LIST OF BOND SALES FROM POST-D FUND

			SALES ROUND I						SALES ROUND II	
			PAR VALUE $ MIL.	SUGGESTED PRICE	YIELD TO MAT.	ACTUAL PRICE RECEIVED	YIELD TO MAT.		ACTUAL PRICE RECEIVED	% YIELD TO MAT.
1) Kidder										
Florida Pwr. & Lt.	12.125	11/1/09	3.0	102.50	10.71	102.00	11.871			
Florida Pwr. & Lt.	11.30	5/1/10	2.0	96.75	11.70	96.391	11.751			
MN Pwr. & Lt.	10.50	8/1/05	5.0	92.25	11.50	Sold in Round II	(89.342)	L.F. Rothschild	91.142	11.655
Southern Bell	12.875	10/05/20	3.2	107.50	11.96	105.875	12.149			
Consol. Nat. Gas	12.875	10/1/00	3.5	104.178	12.26	Sold in Round II	(102.75)	L.F. Rothschild	104.00	12.284
2) Goldman										
Union Camp	12.75	10/1/12	5.0	107.875	11.78	Sold in Round II	(105.367)	Thomson & McKinon	106.56	11.931
NY State Elec. & Gas	11.75	4/1/93	2.0	102.625	11.22	101.24	11.497			
NY State Elec. & Gas	12.375	1/1/94	6.5	106.25	11.19	104.50	11.512			
Southern Nat. Gas	11.375	11/15/94	3.15	103.4	10.78	Sold in Round II	(100.406)	L.F. Rothschild	102	11.019
Textronix	11.00	7/15/95	4.0	100.5	10.86	101.00	10.723			
3) Morgan Stanley										
Norwest Finance	12.125	1/1/94	7.0	105.25	11.13	104.125	11.342			
Credithrift Finance	13.875	9/15/92	5.0	110.875	11.57	109.65	11.797			
Honeywell	11.125	11/1/92	5.0	101.00	10.91	101.314	10.854			
Norwest Finance	11.25	7/1/93	2.57	100.875	11.070	100.472	11.157			
) Lehman										
pjohn	14.00	6/1/91	20.0	109.375	11.70	108.891	11.804			
urlington Ind.	11.25	8/1/90	4.2	102.00	10.71	101.25	10.910			
orwest Finance	12.75	7/1/90	2.0	104.75	11.43	104.125	11.596			
) First Boston										
en. Elec. Cr.	13.625	9/15/91	14.0	108.375	11.65	107.92	11.73			
imberly Clark	11.125	10/15/90	10.0	103.00	10.35	103.05	10.322			

			PAR VALUE $ MIL.	SUGGESTED PRICE	YIELD TO MAT.	ACTUAL PRICE RECEIVED	YIELD TO MAT.		ACTUAL PRICE RECEIVED	% YIELD TO MAT.
Merrill Lynch										
W	14.00	10/15/89	15.0	108.704	11.85	109.42	11.674			
IFE	12.00	10/15/89	4.0	103.625	10.88	103.25	10.969			
Salomon										
first Corp.	10.5	6/1/90	4.0	96.00	11.61	95.375	11.83			
llips Pet.	12.875	9/1/92	10.0	104.875	11.83	103.375	12.138			
st Interstate Bk.	10.5	4/15/88	5.0	100.00	10.5	100.375	10.324			
C	11.75	10/15/89	8.8	105.625	10.04	Sold in Round II	(103.375)	Drexel Burnham	103.80	10.541
ston Nat. Gas	11.00	10/15/92	5.0	99.375	11.12	98.75	11.261			
s. Pwr. & Lt.	11.25	6/1/88	3.0	96.00	13.01	Sold in Round II	(93.536)	L.F. Rothschild	98.00	12.162

BOND SWAP PROGRAM
LIST OF BOND PURCHASES FOR POST-D FUND

PURCHASES ROUND I

			FACE AMOUNT	SUGGESTED PRICE	YIELD	ACTUAL PRICE PAID	YIELD TO MATURITY	MATURITY	PRICE	% YIELD TO MAT.	$ MIL. FACE AMOUNT PURCH.
Kidder											
WI Elec. & Pwr.	8.875%	5/15/08	4.555	82.00	11.09	81.477	11.13				
Philadelphia Elec.	9.125	3/15/08	2.777	79.50	11.73	78.094	11.95				
Philadelphia Elec.	9.625	8/1/02	0.355	84.70	11.72	83.28	11.96				
Amoco	9.20	7/15/04	0.809	87.00	10.83	86.152	10.95				
Union Oil	8.625	3/1/06	10.978	11.85	Not Purchased-Sub. in Round II						
CIT Financial	9.625	8/15/09	1.290	84.50	11.24	Not Purchased-Sub. in Round II					
Goldman											
Chrysler Fin.	13.25	10/15/99	4.451	108.00	11.95	Not Purchased-Sub. in Round II					
American Express	11.625	12/1/93	9.973	104.66	10.80	Not Purchased-Sub. in Round II					
CIT Financial	8.80	3/15/93	7.140	90.875	11.20	Not Purchased-Sub. in Round II					
Morgan Stanley											
Tenneco	13.70	9/1/92	11.385	113.430	10.91	112.625	11.045				
World Bank	13.625	9/1/22	5.00	114.291	10.655	114.291	10.655	(Sub. For 5.0 Mil. Tenneco)			
Lehman											
Saskatchewan Prov.	16.375	10/1/91	17.203	124.30	10.68	126.446	10.35				
Fed. Home Loan Bk.	11.45	2/15/92	6.470	103.875	10.59	103.875	10.59				
Private Expt. Fdg.	11.25	2/28/92	6.469	102.98	10.49	Not Purchased-Sub. Fed. Home Loan					
First Boston											
Avco Financial	11 1/8	2/1/90	7.896	103.319	10.158	103.319	10.158				
Chrysler Corp.	12.75	3/1/92	7.904	107.125	11.08	106.234	11.35				
Manitoba Prov.	14.75	7/1/91	4.330	117.50	10.55	117.95	10.51				
Sears	10.25	11/15/88	1.525	102.375	9.10	101.786	9.35				
Private Expt. Fdg.	10.25	5/3/88	1.960	101.50	9.85	101.818	9.44				
American Express	11.50	5/15/89	1.104	105.125	10.55	Not Purchased-Sub. Chevron Cap.					
American Express	11.125	1/15/90	7.896	103.375	10.29	Not Purchased-Sub. Avco					
Capital	11.75	11/1/88	1.104	105.194	9.75	105.194	9.75				

			FACE AMOUNT	SUGGESTED PRICE	YIELD	ACTUAL PRICE PAID	YIELD TO MATURITY	MATURITY	PRICE	% YIELD TO MAT.	$ MIL. FACE AMOUNT PURCH.
errill Lynch											
obil Corp.	8.75	6/15/88	2.150	99.00	9.16	98.50	9.40				
errill Lynch	11.625	10/15/87	0.296	104.00	9.48	104.653	9.00				
MAC	10.375	4/15/88	5.290	102.25	9.81	102.375	9.28				
MAC	12.00	10/1/86	0.269	103.25	8.84	103.318	8.39				
xport Dev. Corp.	14.375	7/15/87	1.777	107.75	9.70	108.625	8.87				
iticorp	9.75	1/11/86	0.318	110.23	8.96	100.525	7.35				
IT Fin.	13.625	8/1/88	1.656	109.75	10.66	110.45	9.31				
orld Bank	7.75	8/1/87	0.482	97.625	9.13	98.174	8.87				
rivate Expt. Fdg.	7.70	3/31/87	0.511	98.25	8.91	98.703	8.65				
iger's #18	0.00	2/15/99	0.250	23.67	11.10	23.337	11.20				
reasury Receipt	0.00	2/15/99	6.000	23.67	11.10	23.337	11.20				
ssoc. Dry Goods	0.00	5/1/89	8.159	68.75	11.86	Not Purchased Sub. J.C. Penney					
.C. Penney	0.00	12/1/88	7.992	70.746	9.96	70.74	9.96				
alomon											
ed. Farm Cr.	14.10	4/22/91	15.00	111.625	10.55	113.125	10.88				
etach CPN Treas.	0.00	4/15/91	1.319	56.700	10.38	Wrong Maturity-Purchased		2/15/91	58.625	10.22	1.308
etach CPN Treas.	0.00	4/15/86	1.309	95.030	8.68	Wrong Maturity-Purchased		2/15/86	97.336	7.70	1.030
etach CPN Treas.	0.00	1/15/87	0.956	88.50	9.43	Wrong Maturity-Purchased		5/15/87	87.158	8.81	0.948
etach CPN Treas.	0.00	7/15/86	0.583	93.110	8.74	Wrong Maturity-Purchased		5/15/86	95.474	7.94	0.578
ATS Ser. Y	0.00	8/15/86	0.448	92.700	8.64	Not Available-Purchased Treas			93.566	8.01	0.448
ATS Ser. U	0.00	8/15/98	24.940	24.850	11.05	Not Available-Purchased Treas			25.731	10.85	24.940
hase Manhat. Cap.	0.00	5/1/92	13.447	49.625	11.28	Not Available-Sub. Archer Daniels					
rcher Daniels	0.00	5/1/92	13.447	50.00	10.86	50.479	10.70				

PURCHASES ROUND II

			FACE AMOUNT	SUGGESTED PRICE	YIELD	ACTUAL PRICE PAID	YIELD TO MATURITY	MATURITY	PRICE	% YIELD TO MAT.	$ MIL. FACE AMOUNT PURCH.
n House Purchased											
ed. Home Loan Bk	12.15	12/27/93	2.515	108.625	10.55	106.25	10.97				
ed. Farm Cr. Bk	13.650	12/2/91	0.665	110.375	11.23	110.625	11.20				
.S. Treas. Note	12.25	9/30/86	0.440	103.625	7.76	103.6406	7.77				
yndication											
merican Can	11.125	10/15/92	13.623	100.00	11.25	99.625	11.20				
.F. Rothschild											
eledyne Inc.	10.0	6/1/04	1.256	87.53	11.65	85.875	11.90				
irst Boston Corp.											
oupon Treas. Rcpt.	0.00	11/15/93	1.734	43.26	10.62	43.447	10.59				
organ Stanley											
oupon Treas. Rcpt.	0.00	2/15/89	0.920	73.21	9.53	73.106	9.73				
oupon Treas. Rcpt.	0.00	11/15/98	0.945	24.96	10.88	24.437	11.09				
azard											
etach Treas. CPN	0.00	11/15/93		43.26	10.62	43.297	10.68				
'RPD Treas Bonds		5/15/06	10.210	10.54	11.09	10.779	11.15				
errill											
gers	0.00	2/15/87	1.400	89.61	8.65	89.485	8.75				
oupon Treas. Rcpt.	0.00	11/15/00	4.821	19.48	11.17	19.683	11.10				
gers	0.00	11/15/00	1.619	19.48	11.17	19.683	11.10				
b. Ser. Elec. Gas	9.75	7/1/09	1.700	86.06	11.47	87.875	11.22				
exel Burnham											
upon Treas. Rcpt.	0.00	2/15/89	0.120	73.21	9.69	73.251	9.68				
tach Treas. Cpns.	0.00	8/15/98	3.264	24.96		25.779	10.88				
				(11/15/98)	10.92						

			FACE AMOUNT	SUGGESTED PRICE	YIELD	ACTUAL PRICE PAID	YIELD TO MATURITY	MATURITY	PRICE	% YIELD TO MAT.	$ MIL. FACE AMOUNT PURCH.
son McKinnon											
on Treas. Rcpt.	0.00	8/15/91	0.250	55.70	10.36	55.869	10.30				
on Treas. Rcpt.	0.00	8/15/91	1.320	55.70	10.36	55.869	10.30				
on Treas. Rcpt.	0.00	8/15/91	0.167	55.70	10.36	56.049	10.25				
h Paine Webber											
on Treas. Rcpt.	0.00	11/15/98	2.325	24.96	10.93	25.049	10.90				
	0.00	11/15/98	0.750	24.96	10.93	25.049	10.90				
man											
ntic Richfield	10.875	7/15/05	2.102	95.015	11.52	97.10	11.24				

BOND SWAP PROGRAM
LIST OF BOND SALES FROM POST-D FUND

			SALES ROUND I						SALES ROUND II	
			PAR VALUE $ MIL.	SUGGESTED PRICE	YIELD TO MAT.	ACTUAL PRICE RECEIVED	YIELD TO MAT.		ACTUAL PRICE RECEIVED	% YIELD TO MAT.
) Kidder										
lorida Pwr. & Lt.	12.125	11/1/09	3.0	102.50	10.71	102.00	11.871			
lorida Pwr. & Lt.	11.30	5/1/10	2.0	96.75	11.70	96.391	11.751			
N Pwr. & Lt.	10.50	8/1/05	5.0	92.25	11.50	Sold in Round II	(89.342)	L.F. Rothschild	91.142	11.655
outhern Bell	12.875	10/05/20	3.2	107.50	11.96	105.875	12.149			
onsol. Nat. Gas	12.875	10/1/00	3.5	104.178	12.26	Sold in Round II	(102.75)	L.F. Rothschild	104.00	12.284
) Goldman										
nion Camp	12.75	10/1/12	5.0	107.875	11.78	Sold in Round II	(105.367)	Thomson & McKinon	106.56	11.931
Y State Elec. & Gas	11.75	4/1/93	2.0	102.625	11.22	101.24	11.497			
Y State Elec. & Gas	12.375	1/1/94	6.5	106.25	11.19	104.50	11.512			
outhern Nat. Gas	11.375	11/15/94	3.15	103.4	10.78	Sold in Round II	(100.406)	L.F. Rothschild	102	11.019
extronix	11.00	7/15/95	4.0	100.5	10.86	101.00	10.723			
) Morgan Stanley										
orwest Finance	12.125	1/1/94	7.0	105.25	11.13	104.125	11.342			
redithrift Finance	13.875	9/15/92	5.0	110.875	11.57	109.65	11.797			
oneywell	11.125	11/1/92	5.0	101.00	10.91	101.314	10.854			
orwest Finance	11.25	7/1/93	2.57	100.875	11.070	100.472	11.157			
) Lehman										
pjohn	14.00	6/1/91	20.0	109.375	11.70	108.891	11.804			
urlington Ind.	11.25	8/1/90	4.2	102.00	10.71	101.25	10.910			
orwest Finance	12.75	7/1/90	2.0	104.75	11.43	104.125	11.596			
) First Boston										
en. Elec. Cr.	13.625	9/15/91	14.0	108.375	11.65	107.92	11.73			
imberly Clark	11.125	10/15/90	10.0	103.00	10.35	103.05	10.322			

			PAR VALUE $ MIL.	SUGGESTED PRICE	YIELD TO MAT.	ACTUAL PRICE RECEIVED	YIELD TO MAT.		ACTUAL PRICE RECEIVED	% YIELD TO MAT.
Merrill Lynch										
)W	14.00	10/15/89	15.0	108.704	11.85	109.42	11.674			
.IFE	12.00	10/15/89	4.0	103.625	10.88	103.25	10.969			
Salomon										
afirst Corp.	10.5	6/1/90	4.0	96.00	11.61	95.375	11.83			
llips Pet.	12.875	9/1/92	10.0	104.875	11.83	103.375	12.138			
rst Interstate Bk.	10.5	4/15/88	5.0	100.00	10.5	100.375	10.324			
AC	11.75	10/15/89	8.8	105.625	10.04	Sold in Round II	(103.375)	Drexel Burnham	103.80	10.541
iston Nat. Gas	11.00	10/15/92	5.0	99.375	11.12	98.75	11.261			
ss. Pwr. & Lt.	11.25	6/1/88	3.0	96.00	13.01	Sold in Round II	(93.536)	L.F. Rothschild	98.00	12.162

BOND SWAP PROGRAM
LIST OF BOND PURCHASES FOR POST-D FUND

URCHASES ROUND I

			FACE AMOUNT	SUGGESTED PRICE	YIELD	ACTUAL PRICE PAID	YIELD TO MATURITY	MATURITY	PRICE	% YIELD TO MAT.	$ MIL. FACE AMOUNT PURCH.
idder											
I Elec. & Pwr.	8.875%	5/15/08	4.555	82.00	11.09	81.477	11.13				
hiladelphia Elec.	9.125	3/15/08	2.777	79.50	11.73	78.094	11.95				
hiladelphia Elec.	9.625	8/1/02	0.355	84.70	11.72	83.28	11.96				
moco	9.20	7/15/04	0.809	87.00	10.83	86.152	10.95				
nion Oil	8.625	3/1/06	10.978	11.85	Not Purchased-Sub. in Round II						
IT Financial	9.625	8/15/09	1.290	84.50	11.24	Not Purchased-Sub. in Round II					
oldman											
hrysler Fin.	13.25	10/15/99	4.451	108.00	11.95	Not Purchased-Sub. in Round II					
merican Express	11.625	12/1/93	9.973	104.66	10.80	Not Purchased-Sub. in Round II					
IT Financial	8.80	3/15/93	7.140	90.875	11.20	Not Purchased-Sub. in Round II					
organ Stanley											
enneco	13.70	9/1/92	11.385	113.430	10.91	112.625	11.045				
orld Bank	13.625	9/1/22	5.00	114.291	10.655	114.291	10.655 (Sub. For 5.0 Mil. Tenneco)				
ehman											
askatchewan Prov.	16.375	10/1/91	17.203	124.30	10.68	126.446	10.35				
ed. Home Loan Bk.	11.45	2/15/92	6.470	103.875	10.59	103.875	10.59				
rivate Expt. Fdg.	11.25	2/28/92	6.469	102.98	10.49	Not Purchased-Sub. Fed. Home Loan					
irst Boston											
vco Financial	11 1/8	2/1/90	7.896	103.319	10.158	103.319	10.158				
hrysler Corp.	12.75	3/1/92	7.904	107.125	11.08	106.234	11.35				
anitoba Prov.	14.75	7/1/91	4.330	117.50	10.55	117.95	10.51				
ears	10.25	11/15/88	1.525	102.375	9.10	101.786	9.35				
rivate Expt. Fdg.	10.25	5/3/88	1.960	101.50	9.85	101.818	9.44				
merican Express	11.50	5/15/89	1.104	105.125	10.55	Not Purchased-Sub. Chevron Cap.					
merican Express	11.125	1/15/90	7.896	103.375	10.29	Not Purchased-Sub. Avco					
apital	11.75	11/1/88	1.104	105.194	9.75	105.194	9.75				

			FACE AMOUNT	SUGGESTED PRICE	YIELD	ACTUAL PRICE PAID	YIELD TO MATURITY	MATURITY	PRICE	% YIELD TO MAT.	$ MIL. FACE AMOUNT PURCH.
rrill Lynch											
bil Corp.	8.75	6/15/88	2.150	99.00	9.16	98.50	9.40				
rrill Lynch	11.625	10/15/87	0.296	104.00	9.48	104.653	9.00				
AC	10.375	4/15/88	5.290	102.25	9.81	102.375	9.28				
AC	12.00	10/1/86	0.269	103.25	8.84	103.318	8.39				
port Dev. Corp.	14.375	7/15/87	1.777	107.75	9.70	108.625	8.87				
ticorp	9.75	1/11/86	0.318	110.23	8.96	100.525	7.35				
T Fin.	13.625	8/1/88	1.656	109.75	10.66	110.45	9.31				
rld Bank	7.75	8/1/87	0.482	97.625	9.13	98.174	8.87				
ivate Expt. Fdg.	7.70	3/31/87	0.511	98.25	8.91	98.703	8.65				
ger's #18	0.00	2/15/99	0.250	23.67	11.10	23.337	11.20				
easury Receipt	0.00	2/15/99	6.000	23.67	11.10	23.337	11.20				
soc. Dry Goods	0.00	5/1/89	8.159	68.75	11.86	Not Purchased Sub. J.C. Penney					
C. Penney	0.00	12/1/88	7.992	70.746	9.96	70.74	9.96				
lomon											
d. Farm Cr.	14.10	4/22/91	15.00	111.625	10.55	113.125	10.88				
tach CPN Treas.	0.00	4/15/91	1.319	56.700	10.38	Wrong Maturity-Purchased		2/15/91	58.625	10.22	1.308
tach CPN Treas.	0.00	4/15/86	1.309	95.030	8.68	Wrong Maturity-Purchased		2/15/86	97.336	7.70	1.030
tach CPN Treas.	0.00	1/15/87	0.956	88.50	9.43	Wrong Maturity-Purchased		5/15/87	87.158	8.81	0.948
tach CPN Treas.	0.00	7/15/86	0.583	93.110	8.74	Wrong Maturity-Purchased		5/15/86	95.474	7.94	0.578
TS Ser. Y	0.00	8/15/86	0.448	92.700	8.64	Not Available-Purchased Treas			93.566	8.01	0.448
TS Ser. U	0.00	8/15/98	24.940	24.850	11.05	Not Available-Purchased Treas			25.731	10.85	24.940
ase Manhat. Cap.	0.00	5/1/92	13.447	49.625	11.28	Not Available-Sub. Archer Daniels					
cher Daniels	0.00	5/1/92	13.447	50.00	10.86	50.479	10.70				

PURCHASES ROUND II

			FACE AMOUNT	SUGGESTED PRICE	YIELD	ACTUAL PRICE PAID	YIELD TO MATURITY	MATURITY	PRICE	% YIELD TO MAT.	$ MIL. FACE AMOUNT PURCH.
n House Purchased											
ed. Home Loan Bk	12.15	12/27/93	2.515	108.625	10.55	106.25	10.97				
ed. Farm Cr. Bk	13.650	12/2/91	0.665	110.375	11.23	110.625	11.20				
.S. Treas. Note	12.25	9/30/86	0.440	103.625	7.76	103.6406	7.77				
yndication											
merican Can	11.125	10/15/92	13.623	100.00	11.25	99.625	11.20				
.F. Rothschild											
eledyne Inc.	10.0	6/1/04	1.256	87.53	11.65	85.875	11.90				
irst Boston Corp.											
oupon Treas. Rcpt.	0.00	11/15/93	1.734	43.26	10.62	43.447	10.59				
organ Stanley											
oupon Treas. Rcpt.	0.00	2/15/89	0.920	73.21	9.53	73.106	9.73				
oupon Treas. Rcpt.	0.00	11/15/98	0.945	24.96	10.88	24.437	11.09				
azard											
etach Treas. CPN	0.00	11/15/93		43.26	10.62	43.297	10.68				
TRPD Treas Bonds		5/15/06	10.210	10.54	11.09	10.779	11.15				
errill											
igers	0.00	2/15/87	1.400	89.61	8.65	89.485	8.75				
oupon Treas. Rcpt.	0.00	11/15/00	4.821	19.48	11.17	19.683	11.10				
igers	0.00	11/15/00	1.619	19.48	11.17	19.683	11.10				
ub. Ser. Elec. Gas	9.75	7/1/09	1.700	86.06	11.47	87.875	11.22				
rexel Burnham											
oupon Treas. Rcpt.	0.00	2/15/89	0.120	73.21	9.69	73.251	9.68				
etach Treas. Cpns.	0.00	8/15/98	3.264	24.96		25.779	10.88				
				(11/15/98)	10.92						

			FACE AMOUNT	SUGGESTED PRICE	YIELD	ACTUAL PRICE PAID	YIELD TO MATURITY	MATURITY	PRICE	% YIELD TO MAT.	$ MIL. FACE AMOUNT PURCH.
homson McKinnon											
oupon Treas. Rcpt.	0.00	8/15/91	0.250	55.70	10.36	55.869	10.30				
oupon Treas. Rcpt.	0.00	8/15/91	1.320	55.70	10.36	55.869	10.30				
oupon Treas. Rcpt.	0.00	8/15/91	0.167	55.70	10.36	56.049	10.25				
lyth Paine Webber											
oupon Treas. Rcpt.	0.00	11/15/98	2.325	24.96	10.93	25.049	10.90				
ATS	0.00	11/15/98	0.750	24.96	10.93	25.049	10.90				
oldman											
tlantic Richfield	10.875	7/15/05	2.102	95.015	11.52	97.10	11.24				

BOND MANAGER UPDATE INTERVIEWS
SUMMARY NOTES

I. STAFF COMMENTS AND RECOMMENDATIONS

Staff believes that the bond manager program is proceeding essentially as anticipated. The managers have consistently implemented their stated investment approaches. Since the retention of the bond managers in July, 1984, the bond market has performed strongly. Prevailing bond market conditions have led the managers to pursue very similar strategies. Their response to declining interest rates and the low level of yield spreads has been to hold largely high quality issues with durations, in aggregate, slightly below that of the market. The managers returns, on average, have lagged the market indices slightly due to their shorter-than-market portfolio durations. The bond managers as a group tend to be pessimistic on the future level of interests rates. They prefer to accept some relative underperformance in a bull market, with the expectation of significantly outperforming the market if, and when, interest rates rise. Staff recommends that no changes or special monitoring be considered at this time.

II. RECENT MEETING DATES

MANAGER	DATE OF MEETING
Investment Advisers	November 18
Lehman Management	November 20
Miller Anderson, Sherrerd	November 20
Morgan Stanley	November 19
Peregrine Capital	November 21
Western Asset	November 25

III. ORGANIZATION

The only significant bond manager organizational change that has occurred since the last set of meetings took place at Investment Advisers. The firm was sold by Inter-Regional Financial Group (IFG) to Hill Samuel Group Plc; a London-based financial services firm.

Staff does not view the sale of IAI as likely to have any adverse effect on the firm's investment management. IAI will continue as a wholly-owned, but independently managed subsidiary. Hill Samuel has no plans to actively participate in IAI management.

In many ways IAI's sale should have a positive effect. IFG has encountered financial difficulties in recent years. IAI was concerned that IFG's financial difficulties might impair the bonus pool out of which IAI's managers are rewarded. Also, many years ago when IAI was smaller, its marketing efforts fit better with IFG's brokerage business. As IAI grew IFG provided fewer business opportunities. In fact, IAI requested that it be permitted to search for a buyer. Hill Samuel provided what IAI considered to be a compatible and financially-strong parent. IAI expects that Hill Samuel will offer a wide range of international business contacts. IAI expects to manage U.S. stock and bond portfolios for Hill Samuel's international clients.

The sale of IAI should be beneficial to the firm's key personnel. They have signed long-term employment contracts with Hill samuel. Their bonus pool is secure and likely to grow. And at some point, Hill Samuel may offer an equity interest in IAI to the top person in the firm.

IV. ASSETS UNDER MANAGEMENT

	JUNE 30, 1984		MARCH 1985		SEPTEMBER 1985	
	NUMBER	MARKET VALUE (MILL.)	NUMBER	MARKET VALUE (MILL.)	NUMBER	MARKET VALUE (MILL.)
Investment Advisers	48	$ 275	49	$ 332	50	$ 387
Lehman Management	36	3,000	38	3,400	45	4,200
Miller Anderson	37	2,184	46	3,179	52	3,810
Morgan Stanley	29	1,040	38	1,935	51	2,782
Peregrine Capital	5	170	6	271	5	261
Western Asset	30	1,599	31	1,830		

Morgan Stanley is the only bond manager whose account growth has been large enough to be of concern to staff. The firm's assets under management have almost tripled in the last five quarters. More importantly, accounts under management have grown by 75%. Only three portfolio managers are handling 51 accounts. The firm has expressed some reservations about account growth, but has yet to develop any specific plans.

Account growth at Miller Anderson also has been strong. However, the firm has stopped actively seeking new accounts. Growth has slowed as a result. At the other firms, account growth has been positive, but not excessive.

V. STAFF

No significant staff changes have occurred at any of the SBI's managers since the last set of update interviews.

VI. INVESTMENT APPROACH

A significant portion of the manager meetings was spent discussing the concept of normal portfolios. A manager's normal portfolio represents the manager's investment approach. It reflects the prominent risk characteristics that the manager's portfolio assumes, on average, over an extended period of time.

Staff explained the rationale for constructing a normal portfolio for each manager. Staff believes that normal portfolios serve a number of functions. Most importantly, they are appropriate benchmarks for performance evaluation.

Staff has done considerable work developing normal portfolios for the Board's equity managers. Staff intends to consider the feasibility of designing normal portfolios for the Board's bond managers. As a first step, the bond managers were requested to supply staff with historical portfolio holdings data on a representative account.

EAI

STATE OF MINNESOTA

STATE BOARD OF INVESTMENT

FIXED INCOME INVESTMENT MANAGER STATUS REPORT: 6/30/85 - 9/30/85

($ millions)

Investment Manager	Fixed Income Assets Under Management 6/30/84 # of Accts	6/30/84 Asset Size	9/30/85 # of Accts	9/30/85 Asset Size	Third Quarter 1985 Gained # of Accts	Gained Asset Size	Lost # of Accts	Lost Asset Size	Professional Staff Turnover	Organizational Changes	Investment Style Changes	Comments
Investment Advisers, Inc.	48	$ 275	50	$ 387	1	$ 13	–	$ –	–	–	–	–
Lehman Management Co. Inc.	36	3,000	45	4,200	4	216	2	97	–	–	–	Reasons for lost accounts: One plan liquidated; the other account changed asset allocation.
Miller, Anderson & Sherrerd	37	2,184	52	3,810	3	179	–	–	–	–	–	–
Morgan Stanley Asset Mgmt. Inc.	29	1,040	51	2,782	4	324	–	–	–	–	–	–
Norwest Bank Mgmt. Inc.	5	170	5	261	–	–	–	–	–	–	–	–
Western Asset Mgt.	30	1,599	30	2,341	–	–	2	1	–	–	–	–

Tab G

EXECUTIVE DIRECTOR
HOWARD J. BICKER

STATE OF MINNESOTA
STATE BOARD OF INVESTMENT

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

November 7, 1985

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

FROM: Alternative Investment Committee

SUBJECT: Alternative Investment Strategy

As a strategy to increase overall portfolio diversification and provide a hedge against inflation, the Investment Advisory Council's Asset Allocation Committee has recommended that 15% or $525 million of the $3.5 billion Basic Retirement Fund be allocated to alternative investments. Alternative investments include real estate, venture capital and resource investments where Minnesota State Board of Investment (SBI) participation is limited to commingled funds or other pooled vehicles.

STRATEGY FOR INVESTMENTS

VENTURE CAPITAL

The venture capital investment strategy is to establish and maintain a broadly diversified venture capital portfolio comprised of investments that provide diversification by industry type, stage of corporate development and location.

To date, the SBI has committed to ten commingled venture capital funds for a total commitment of $147.5 million. These commitments substantially complete the SBI's current venture capital asset allocation.

REAL ESTATE

The real estate investment strategy involves three steps. The first step calls for investment of 30-40% of the real estate portfolio in diversified open-end commingled funds. The second step calls for investment of 30-40% of the real estate portfolio in diversified closed-end commingled funds. The third step calls for investment of 20-30% of the real estate portfolio in less diversified, more focused (specialty) commingled funds.

Currently, the SBI is committed to ten commingled real estate funds for a total commitment of $345.0 million. These commitments substantially complete the SBI's current real estate investment strategy.

RESOURCE FUNDS

The strategy for resource investments requires that investments be made in oil and gas partnerships that focus investment in conservative, lower risk type investments (i.e., proved producing properties and royalties diversified geographically and/or geologically).

Currently, the SBI is committed to four commingled oil and gas funds for a total commitment of $67.5 million or approximately 75% of the SBI's resource asset allocation target. The Alternative Investment Committee is reviewing ways of completing or redirecting the SBI's remaining resource allocation.

FUTURE CONSIDERATIONS

Going forward, the Alternative Investment Committee agenda will include:

-Review the SBI'S alternative investment strategy and asset allocation guidelines.

-Evaluate other commingled funds for possible investment.

-Examine ways of improving performance monitoring of existing alternative investment managers.

-Review methods of handling stock distributions from venture capital limited partnerships.

Recommendations regarding these issues will be made to the SBI when appropriate.

ALTERNATIVE EQUITY INVESTMENTS

FUND	COMMITMENT	FUNDED
REAL ESTATE:		
Equitable	$ 40.0 Million	$ 40.0 Million
Aetna	40.0	40.0
Prudential	40.0	40.0
RREEF	75.0	41.0
Heitman I	20.0	20.0
Heitman II	30.0	0.0
TCW	40.0	20.0
State Street	20.0	5.0
Washington Square	20.0	0.0
First Asset	20.0	0.0
Total:	$345.0 Million	$206.0 Million
Target:	($350 Million or 10% of Basic Retirement Funds)	
VENTURE CAPITAL:		
Norwest	$10.0 Million	$7.0 Million
KKR I	25.0	19.4
KKR II	50.0	0.0
Summit	10.0	5.0
First Century	10.0	2.5
DSV IV	10.0	4.0
Matrix	10.0	2.5
Inman/Bowman	7.5	2.0
Allied	5.0	1.6
Superior Venture	10.0	0.0
Total:	$147.5 Million	$44.0 Million
Target:	($87.5 Million or 2.5% of Basic Retirement Funds)	
RESOURCE:		
Amgo I	$15.0 Million	$15.0 Million
Amgo II	7.0	7.0
Apache I	22.5	0.3
Apache II	23.0	20.0
Total:	$67.5 Million	$42.3 Million
Target:	($87.5 Million or 2.5% of Basic Retirement Funds)	

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME:	Equitable Real Estate Group, Inc.
FUND NAME:	Separate Account #8
CONTACT:	Harry Pierandri
ACCOUNT INCEPTION:	10/81
SBI COMMITMENT:	$40 Million
SBI CURRENT INVESTMENT:	$40 Million

INVESTMENT DESCRIPTION: Equitable Separate Account #8 is an open-end commingled real estate fund formed in August 1973. The Fund invests primarily in existing equity real estate diversified by location and property type. On-site property management is primarily contracted to outside firms or conducted by joint venture partners. The Fund has no termination date although investors have the option of withdrawing all or a portion of their investment.

SEPARATE ACCOUNT #8 CURRENT PORTFOLIO COMPOSITION / INVESTMENT ACTIVITY-LAST QUARTER

PROPERTY MARKET VALUE	# OF PROPERTIES	LOCATION %		PROPERTY TYPE %		ACQUISITIONS $	#	DISPOSITIONS $	#
$2.5 Billion	233	East	28%	Office	40%	$23.0 M	3	$7.0 M	2
		Midwest	19	Retail	35				
		South	31	Industrial	15				
		West	22	Hotel	9				
				Residential	0				
				Other	1				

UNIT VALUE RETURNS

	LAST QUARTER	LAST FOUR QUARTERS	FIVE YEAR AVERAGE
Separate Account #8	2.0%	11.9%	13.8%
EAI Composite Median	2.2	11.3	13.5
CPI (Inflation)	0.7	3.2	5.2

STAFF COMMENTS: For the year ending September 30, 1985, Equitable's 11.9% total rate of return was composed of 7.2% income and 4.7% appreciation. The 11.9% return outperformed the inflation rate and the EAI Real Estate Composite Fund Median. During the quarter, the fund acquired a $7.5 million wholly owned industrial property, and invested $15.5 million in a joint venture R+D facility. The Fund also committed $100 million to a joint venture mixed use development in Boston which will be funded in stages as construction progresses. The Fund sold two small properties with an average holding period of eight years. The Fund currently has a 9.7% cash component.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME:	Aetna Life and Casualty Company
FUND NAME:	Real Estate Separate Account (RESA)
CONTACT:	Tom Anathan
ACCOUNT INCEPTION:	10/81
SBI COMMITMENT:	$40 Million
SBI CURRENT INVESTMENT:	$40 Million

INVESTMENT DESCRIPTION: RESA is an open-end commingled real estate fund formed in January, 1978. The Fund invests primarily in existing equity real estate diversified by location and property type. On-site property management is primarily contracted to outside firms or conducted by a joint venture partner. The Fund has no termination date, although investors have the option to withdraw all or a portion of their investment.

RESA CURRENT PORTFOLIO COMPOSITION

PROPERTY MARKET VALUE	# OF PROPERTIES	LOCATION %		PROPERTY TYPE %	
$1.6 Billion	127	East	19%	Office	43%
		Midwest	9	Retail	20
		South	19	Industrial	29
		West	53	Hotel	7
				Residential	1

INVESTMENT ACTIVITY-LAST QUARTER

ACQUISITIONS $	ACQUISITIONS #	DISPOSITIONS $	DISPOSITIONS #
$16.6 M	2	$8.2 M	3

UNIT VALUE RETURNS

	LAST QUARTER	LAST FOUR QUARTERS	FIVE YEAR AVERAGE
RESA	2.7%	9.4%	12.6%
EAI Composite Median	2.2	11.3	13.5
CPI (Inflation)	0.7	3.2	5.2

STAFF COMMENTS: For the year ending September 30, 1985, Aetna's 9.4% total rate of return was composed of 8.6% income and 0.8% appreciation. This return outperformed the inflation rate and underperformed the EAI Real Estate Composite Fund Median. During the quarter, the Fund invested in an apartment property and an industrial property, both on a joint venture basis. The Fund sold three small properties: two industrials and one retail facility. The Fund has a cash component of 10.5%.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME:	Prudential Investment Management Corporation
FUND NAME:	PRISA I
CONTACT:	Don Davis
ACCOUNT INCEPTION:	9/81
SBI COMMITMENT:	$40 Million
SBI CURRENT INVESTMENT:	$40 Million

INVESTMENT DESCRIPTION: PRISA I is an open-end commingled real estate fund formed in July 1970. PRISA invests primarily in existing properties diversified by location and property type. On-site property management is primarily contracted to outside firms or is conducted by joint venture partners. The Fund has no termination date, although investors have the option quarterly to withdraw a portion or all of their investment.

PRISA CURRENT PORTFOLIO COMPOSITION

PROPERTY MARKET VALUE	# OF PROPERTIES	LOCATION	%	PROPERTY TYPE	%
$5.2 Billion	447	East	25%	Office	53%
		Midwest	14	Retail	18
		South	21	Industrial	15
		West	40	Hotel	8
				Residential	4
				Other	2

INVESTMENT ACTIVITY-LAST QUARTER

ACQUISITIONS $	ACQUISITIONS #	DISPOSITIONS $	DISPOSITIONS #
$0	0	$51.9 M	9

UNIT VALUE RETURNS

	LAST QUARTER	LAST FOUR QUARTERS	FIVE YEAR AVERAGE
PRISA	2.2%	9.6%	8.0%
EAI Composite Median	2.2	11.3	13.5
CPI (Inflation)	0.7	3.2	5.2

STAFF COMMENTS: For the year ending September 30, 1985, PRISA's 9.6% total rate of return was composed of 7.4% income and 2.2% appreciation. This return outperformed the inflation rate and underperformed the EAI Real Estate Composite Fund Median. During the quarter, PRISA made no acquisitions and sold eight small industrial and retail properties and one medium size office building with an average eight year holding period. The Fund's cash component declined from 1.5% at the end of the previous quarter to 1.3%.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME:	Rosenberg Real Estate Equity Funds (RREEF)
FUND NAME:	RREEF USA III
CONTACT:	Paul Sack
ACCOUNT INCEPTION:	4/25/84
SBI COMMITMENT:	$75 Million
SBI CURRENT INVESTMENT:	$41.0 Million

INVESTMENT DESCRIPTION: RREEF USA III is a $773 million commingled real estate Group Trust. Term of the Fund is twelve years with optional extensions. The Fund is investing primarily in unleveraged, wholly-owned, equity real estate diversified by location and property type. On-site property management will be conducted by RREEF employees.

RREEF USA III INVESTMENTS (AT COST)				CASH RETURNS TO SBI		
CURRENT TOTAL #	CURRENT TOTAL $	LATEST QUARTER #	LATEST QUARTER $	LATEST QUARTER	LAST FOUR QUARTERS	CUMULATIVE SINCE INCEPTION
6	$304.8 Million	0	$0.0 Million	$0	$132,357	$132,357

SUMMARY DESCRIPTION OF CURRENT PORTFOLIO
(% OF TOTAL FUND COST)

LOCATION	%	STAGE OF DEVELOPMENT	%	INDUSTRY GROUPS	%
East	0.0%	Fully Developed	100.0%	Office	55.0%
Midwest	22.0	Partially Developed	0.0	Retail	38.0
South	41.0			Industrial	7.0
West	37.0			Hotel/Motel	0.0
				Apartments	0.0
				Other	0.0

STAFF COMMENTS: As of September 30, 1985, RREEF USA III had investments in six properties which together represent approximately 40% of total Fund capital. On October 1, 1985, the Fund acquired a $61.5 million regional shopping mall in a rapid growing suburban area outside Denver, Colorado. RREEF is also considering purchasing for the Fund a $83 million shopping mall outside Houston, Texas. During the fourth quarter of 1985, RREEF will begin offering subscriptions to RREEF MidAmerica/East-V. This will be a $125 million fund for investment in properties during 1986 and 1987.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME:	Heitman Advisory Corporation
FUND NAME:	HAC Group Trust I
CONTACT:	David Glickman
ACCOUNT INCEPTION:	6/14/84
SBI COMMITMENT:	$20.0 Million
SBI CURRENT INVESTMENT:	$20.0 Million

INVESTMENT DESCRIPTION: HAC Group Trust is a $113.0 million real estate Group Trust formed in May 1984. Term of the Fund is fifteen years with optional extensions. The Fund is investing primarily in equity real estate diversified by location and property type. Centre Properties, Ltd., an affiliate of Heitman, manages all 100% owned properties.

HAC GROUP TRUST I INVESTMENTS (AT COST)				CASH RETURNS TO SBI		
CURRENT TOTAL		LATEST QUARTER				
#	$	#	$	LATEST QUARTER	LAST FOUR QUARTERS	CUMULATIVE SINCE INCEPTION
6	$83.5 Million	0	$0.0	$321,698	$1,277,084	$1,345,227

SUMMARY DESCRIPTION OF CURRENT PORTFOLIO
(% OF TOTAL FUND COST)

LOCATION	%	STAGE OF DEVELOPMENT	%	INDUSTRY GROUPS	%
East	7.0%	Fully Developed	100.0%	Office	35.0%
Midwest	47.0	Partially Developed	0.0	Retail	37.0
South	28.0			Industrial	28.0
West	18.0			Hotel/Motel	0.0
				Apartments	0.0
				Other	0.0

STAFF COMMENTS: As of September 30, 1985, the Fund owned interests in six properties representing approximately 74% of total Fund capital. No new properties were acquired for the Fund during the quarter ended September 30, 1985. In the last quarter of 1985, Heitman has a commitment to acquire a shopping center located in Elizabethtown, Kentucky. Another property, a seven story office building near Chicago, is scheduled to be acquired in January 1986. These two pending acquisitions will fully invest Heitman Group Trust I. Heitman Group Trust II, a proposed $200 million successor Fund to Group Trust I, is currently offering subscriptions. The SBI has approved a $30 million investment in Heitman Group Trust II.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME:	Trust Company of the West/Westmark
FUND NAME:	TCW Realty Fund III
CONTACT:	Bruce Ludwig
ACCOUNT INCEPTION:	7/31/85
SBI COMMITMENT:	$40.0 Million
SBI CURRENT INVESTMENT:	$20.0 Million

INVESTMENT DESCRIPTION: TCW Realty Fund III is a $215 million real estate fund formed in July 1985. Term of the Fund is ten years with optional extensions. The Fund will diversify by location and property type with a focus on specialty investment vehicles such as convertible and participating mortgages. Management of the Fund will be a joint venture between Trust Company of the West and Westmark Real Estate Investment Services. On-site property management is primarily contracted to local property management firms.

TCW FUND III INVESTMENTS (AT COST)				CASH RETURNS TO SBI		
CURRENT TOTAL #	CURRENT TOTAL $	LATEST QUARTER #	LATEST QUARTER $	LATEST QUARTER	LAST FOUR QUARTERS	CUMULATIVE SINCE INCEPTION
1	$16.0 Million	1	$16.0 Million	$0	$0	$0

SUMMARY DESCRIPTION OF CURRENT PORTFOLIO
(% OF TOTAL FUND COST)

LOCATION	%	STAGE OF DEVELOPMENT	%	INDUSTRY GROUPS	%
East	0.0%	Fully Developed	100.0%	Office	0.0%
Midwest	0.0	Partially Developed	0.0	Retail	0.0
South	0.0			Industrial	100.0
West	100.0			Hotel/Motel	0.0
				Apartments	0.0
				Other	0.0

STAFF COMMENTS: In the quarter ended September 30, 1985, TCW closed on its first acquisition for the Fund, a $16 million industrial park located in Dallas Texas. TCW also has under contract and study, an acquisition of a shopping center in Westlake, California (San Fernando Valley). The quarter ended September 30, 1985 represents TCW Fund III's first fully operational quarter.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME:	State Street Bank and Trust Company
FUND NAME:	State Street Real Estate Fund III
CONTACT:	Bob Kilroy
ACCOUNT INCEPTION:	8/15/85
SBI COMMITMENT:	$20.0 Million
SBI CURRENT INVESTMENT:	$5.0 Million

INVESTMENT DESCRIPTION: State Street Real Estate Fund III is a $103 million real estate fund formed in August 1985. Term of the Fund is 15 years with optional extensions. The Fund will diversify by location and property type with a focus on specialty investment vehicles such as convertible and participating mortgages. State Street Bank has retained Aldrich, Eastman and Waltch as the Fund advisor. On-site property management is primarily contracted to outside firms or is conducted by joint venture partners.

STATE STREET INVESTMENTS				CASH RETURNS TO SBI		
CURRENT TOTAL		LATEST QUARTER				
#	$	#	$	LATEST QUARTER	LAST FOUR QUARTERS	CUMULATIVE SINCE INCEPTION
1	$11.6 Million	1	$11.6 Million	$0	$0	$0

SUMMARY DESCRIPTION OF CURRENT PORTFOLIO
(% OF TOTAL FUND COST)

LOCATION	%	STAGE OF DEVELOPMENT	%	INDUSTRY GROUPS	%
East	0.0%	Fully Developed	0.0%	Office	100.0%
Midwest	0.0	Partially Developed	100.0	Retail	0.0
South	0.0			Industrial	0.0
West	100.0			Hotel/Motel	0.0
				Apartments	0.0
				Other	0.0

STAFF COMMENTS: During the quarter ended September 30, 1985, State Street closed on the first acquisition for the Fund, a $11.6 million joint venture interest in an office building complex located in Phoenix, Arizona. Properties under contract and further study include a package of neighborhood shopping centers located throughout California, and an office building located in New York City. The quarter ended September 30, 1985 was Fund III's first fully operational quarter.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME:	Norwest Venture Capital Management, Inc.
FUND NAME:	Norwest Venture Partners I (NVPI)
CONTACT:	Dan Haggerty
ACCOUNT INCEPTION:	1/12/84
SBI COMMITMENT:	$10 Million
SBI CURRENT INVESTMENT:	$7 Million

INVESTMENT DESCRIPTION: NVPI is a $60 million venture capital limited partnership formed in January 1984. Term of the Fund is 10 years with optional extensions. Investment focus of NVPI will be on high technology private companies in the early stages of development. The Fund will not invest in leveraged buyouts.

NVPI I INVESTMENTS				CASH RETURNS TO SBI		
CURRENT #	TOTAL $	LATEST QUARTER #	LATEST QUARTER $	LATEST QUARTER	LAST FOUR QUARTERS	CUMULATIVE SINCE INCEPTION
26	$14.6 Million	3	$0.5 Million	$0.00 Million	$0.06 Million	$0.06 Million

SUMMARY DESCRIPTION OF CURRENT PORTFOLIO
(% OF TOTAL FUND COST)

LOCATION	%	STAGE OF DEVELOPMENT	%	INDUSTRY GROUPS	%
East	3.9%	Early Stage Financing	94.8%	Computer Related	74.2%
Midwest	28.2	Expansion Financing	5.2	Machinery/Equipment	0.0
South	5.2	Bridge Financing	0.0	Industrial/Manufacturing	3.9
West	62.7	Leveraged Buyouts	0.0	Consumer Products/Services	0.0
				Communications	8.9
				Energy Related	4.7
				Medical Related	6.2
				Other	2.1

STAFF COMMENTS: During the third quarter, the Norwest general partners completed two new investments and targeted three others for investment in the fourth quarter. The five portfolio companies are geographically disbursed; one is located in Minnesota and the remaining four are in Arizona, California, and Oregon. The companies are in diverse industries as well. The investments include participations in the computer hardware, software, consumer products, and medical/health care industries. In addition to the new investment activity, the general partners continued to fund and assist their current portfolio companies. The partners wrote-down the value of several of their companies which had experienced major difficulties during the year. The partners announced the opening of a new office in Phoenix, Arizona. They anticipate that the new office will facilitate the monitoring of their West Coast investments and the generation of new opportunities.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME: Kohlberg, Kravis, Roberts and Co. (KKR)
FUND NAME: 1984 Investment Partnership (KKR III)
CONTACT: George Roberts
ACCOUNT INCEPTION: March 21, 1984
SBI COMMITMENT: $25 Million
SBI CURRENT INVESTMENT: $19.4 Million

INVESTMENT DESCRIPTION: KKR III is a $1 billion leveraged buyout limited partnership formed in March 1984. The term of the Fund is twelve years with optional extensions. Investment focus of KKR III will be on stable and mature, cash generating, low technology companies with diversified operations.

KKR III INVESTMENTS (AT COST)				CASH RETURNS TO SBI		
CURRENT TOTAL #	CURRENT TOTAL $	LATEST QUARTER #	LATEST QUARTER $	LATEST QUARTER	LAST FOUR QUARTERS	CUMULATIVE SINCE INCEPTION
5	$792.0 Million	1	$248.0 Million	$1,266.0	$1,266.0	$36,736.0

SUMMARY DESCRIPTION OF CURRENT PORTFOLIO
(% OF TOTAL FUND COST)

STAGE OF DEVELOPMENT	%	INDUSTRY GROUPS	%
Early Stage Financing	0	Wholesaling and Specialty Retail	19
Expansion Financing	0	Light Manufacturing and Service	19
Bridge Financing	0	Lodging	12
Leveraged Buyouts	100	Real Estate	3
		Natural Resources	25
		Cable TV and Television	22

STAFF COMMENTS: No new acquisitions were completed during the latest quarter ended September 30, 1985. However, KKR has an offer outstanding to buy Storer Communications. If completed as expected during the fourth quarter of 1985, the Storer acquisition will bring the KKR 1984 Fund to full investment. In anticipation of full investment, KKR is currently offering subscriptions to a successor Fund, KKR 1986 Fund. The SBI has approved a $50 million investment in KKR's 1986 Fund.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME:	Summit Partners, L.P.
FUND NAME:	Summit Ventures, L.P.
CONTACT:	Roe Stamps, Steve Woodsum
ACCOUNT INCEPTION:	12/20/84
SBI COMMITMENT:	$10 Million
SBI CURRENT INVESTMENT:	$5.0 Million

INVESTMENT DESCRIPTION: Summit Ventures is a $93 million venture capital limited partnership. The term of the partnership is ten years plus optional extensions. The partnership was formed in December 1984 by Stamps, Woodsum & Co. of Boston, Mass., the managing general partners of the fund, and Shearson/American Express. Stamps and Woodsum focus on actively generating investment opportunities, targeting portfolio companies that are already profitable yet have not received any venture backing. The fund's investment emphasis will be on high-tech, expansion stage companies. However, the Summit portfolio may include early stage firms and, in addition, will be diversified by industry type and location.

SUMMIT INVESTMENTS				CASH RETURNS TO SBI		
CURRENT TOTAL #	$	LATEST QUARTER #	$	LATEST QUARTER	LAST FOUR QUARTERS	CUMULATIVE SINCE INCEPTION
11	$14.4 Million	4	$7.0 Million	$0	$0	$0

SUMMARY DESCRIPTION OF CURRENT PORTFOLIO
(% OF TOTAL FUND COST)

LOCATION	%	STAGE OF DEVELOPMENT	%	INDUSTRY GROUPS	%
East	18.2%	Early Stage Financing	6.6%	Computer Related	76.2%
Midwest	0.0	Expansion Financing	93.4	Machinery/Equipment	0.0
South	1.0	Bridge Financing	0.0	Industrial/Manufacturing	0.0
West	80.8	Leveraged Buyouts	0.0	Consumer Products/Services	0.0
				Communications	17.3
				Energy Related	0.0
				Medical Related	6.5
				Other	0.0

STAFF COMMENT: Summit's general partners completed four investments during the third quarter, bringing the total portfolio to eleven companies. All of the new portfolio companies are profitable, expansion-stage firms. Further, all are located in California and are in computer-related industries. In addition to the four investments, the general partners committed to several others which will be closed in the fourth quarter. The partners held their first annual meeting in October. At the meeting, the partners, investment staff, and several entrepreneurs reviewed the progress of Summit's portfolio companies. In addition, the partners announced plans for opening a California office in 1986 and a Georgia office in 1987.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME:	Smith Barney Venture Corp. (SBVC)
FUND NAME:	First Century III (FCIII)
CONTACT:	Mike Myers
ACCOUNT INCEPTION:	12/14/84
SBI COMMITMENT:	$10 Million
SBI CURRENT INVESTMENT:	$2.5 Million

INVESTMENT DESCRIPTION: FCIII is a New York based $100 million venture capital limited partnership formed in December 1984. Term of the Fund is 10 years with optional extensions. Investment focus of FCIII will be on high technology private companies in the early stages of development. FCIII is the third venture fund formed by SBVC since 1972.

FCIII INVESTMENTS				CASH RETURNS TO SBI		
CURRENT #	TOTAL $	LATEST QUARTER #	LATEST QUARTER $	LATEST QUARTER	LAST FOUR QUARTERS	CUMULATIVE SINCE INCEPTION
6	$4.5 Million	0	$0.0 Million	$0	$0	$0

SUMMARY DESCRIPTION OF CURRENT PORTFOLIO
(% OF TOTAL FUND COST)

LOCATION	%	STAGE OF DEVELOPMENT	%	INDUSTRY GROUPS	%
East	33.0%	Early Stage Financing	100.0%	Computer Related	56.0%
Midwest	0.0	Expansion Financing	0.0	Machinery/Equipment	0.0
South	27.0	Bridge Financing	0.0	Industrial/Manufacturing	0.0
West	40.0	Leveraged Buyouts	0.0	Consumer Products/Services	0.0
				Communications	0.0
				Energy Related	0.0
				Medical Related	46.0
				Other	0.0

STAFF COMMENTS: During the quarter ended September 30, 1985, no new investments were made for the Fund. Smith Barney currently has investments in six portfolio companies having an aggregate cost of $4.5 million.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME: DSV Management, Ltd.
FUND NAME: DSV Partners IV (DSV IV)
CONTACT: Morton Collins
ACCOUNT INCEPTION: 4/10/1985
SBI COMMITMENT: $10 Million
SBI CURRENT INVESTMENT: $4 Million

INVESTMENT DESCRIPTION: DSV Partners IV, a $60 million venture capital limited partnership, was formed in April, 1985. The term of the Fund will be 12 years with an optional 3 year extension. DSV IV's investment focus will be on start-up and early stage, high-technology portfolio companies. The geographic emphasis of the Fund will be on East and West Coast firms. DSV IV is the fourth venture capital fund formed by DSV Management since the firm's inception in 1968.

DSV IV INVESTMENTS				CASH RETURNS TO SBI		
CURRENT #	TOTAL $	LATEST QUARTER #	LATEST QUARTER $	LATEST QUARTER	LAST FOUR QUARTERS	CUMULATIVE SINCE INCEPTION
4	$1.7 Million	3	$1.5 Million	$0	$0	$0

SUMMARY DESCRIPTION OF CURRENT PORTFOLIO
(% OF TOTAL FUND COST)

LOCATION	%	STAGE OF DEVELOPMENT	%	INDUSTRY GROUPS	%
East	100.0%	Early Stage Financing	100.0%	Computer Related	13.0%
Midwest	0.0	Expansion Financing	0.0	Machinery/Equipment	0.0
South	0.0	Bridge Financing	0.0	Industrial/Manufacturing	0.0
West	0.0	Leveraged Buyouts	0.0	Consumer Products/Services	0.0
				Communications	43.5
				Energy Related	0.0
				Medical Related	0.0
				Other	43.5

STAFF COMMENTS: Third quarter 1985 was DSV IV's first full quarter of operations. During the period, the DSV general partners funded three new investments. All three companies are young, early-stage high-tech firms. Two are in the biotechnology industry and the other is a computer firm. The general partners continued to prepare for the 1986 opening of their Southern California office. The office will be staffed by one of the general partners and a new associate.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME:	Matrix Management Company
FUND NAME:	Matrix Partners II
CONTACT:	Mike Humphreys
ACCOUNT INCEPTION:	8/16/85
SBI COMMITMENT:	$10 Million
SBI CURRENT INVESTMENT:	$2.5 Million

INVESTMENT DESCRIPTION: Matrix Partners II was formed in August, 1985. The Fund is $70 million in size and has a term of ten years. The Fund's investment emphasis is on high-technology firms in the early and expansion stages of corporate development. However, for diversification the Fund's portfolio will include a sizable component of non-technology firms. The portfolio may include several small leveraged buyout investments as well. The Fund is managed by five experienced general partners. The partners have offices in Boston, San Jose, and San Francisco.

MATRIX INVESTMENTS				CASH RETURNS TO SBI		
CURRENT TOTAL #	$	LATEST QUARTER #	$	LATEST QUARTER	LAST FOUR QUARTERS	CUMULATIVE SINCE INCEPTION
2	$1.1 Million	2	$1.1 Million	$0.00 Million	$0.00 Million	$0.00 Million

SUMMARY DESCRIPTION OF CURRENT PORTFOLIO
(% OF TOTAL FUND COST)

LOCATION	%	STAGE OF DEVELOPMENT	%	INDUSTRY GROUPS	%
East	0.0%	Early Stage Financing	100.0%	Computer Related	90.9%
Midwest	0.0	Expansion Financing	0.0	Machinery/Equipment	0.0
South	0.0	Bridge Financing	0.0	Industrial/Manufacturing	0.0
West	100.0	Leveraged Buyouts	0.0	Consumer Products/Services	0.0
				Communications	9.1
				Energy Related	0.0
				Medical Related	0.0
				Other	0.0

STAFF COMMENTS: Matrix Partners II was formed in August, 1985. During the Fund's first quarter of operations, the general partners completed two investments. The general partners invested $1 million in the financing of a telecommunications firm and $100,000 in a semiconductor firm. Both firms are in the start-up phase of development and both are located in California. The Matrix partners were joined in the investments by several California venture firms. The general partners are continuing to generate and review investment opportunities for investment in the upcoming quarters.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME:	Inman & Bowman Management
FUND NAME:	Inman & Bowman
CONTACT:	Kirk Bowman
ACCOUNT INCEPTION:	6/12/85
SBI COMMITMENT:	$7.5 Million
SBI CURRENT INVESTMENT:	$1.875 Million

INVESTMENT DESCRIPTION: Inman & Bowman was formed in June, 1985. The Fund is a $44 million venture capital limited partnership. Its investment focus is West Coast, early-stage, high-technology firms. The majority of the Fund's investments will be in California firms, where the Funds' general partners are based. However, the general partners have worked closely with Rainier Venture Partners, a small Washington venture firm, and expect to make several co-investments with the firm in the Pacific Northwest. At present, this region is one of the fastest growing in the country in terms of venture capital activity.

INMAN & BOWMAN INVESTMENTS				CASH RETURNS TO SBI		
CURRENT TOTAL #	CURRENT TOTAL $	LATEST QUARTER #	LATEST QUARTER $	LATEST QUARTER	LAST FOUR QUARTERS	CUMULATIVE SINCE INCEPTION
1	$1.0 Million	1	$1.0 Million	$0.00 Million	$0.00 Million	$0.00 Million

SUMMARY DESCRIPTION OF CURRENT PORTFOLIO
(% OF TOTAL FUND COST)

LOCATION	%	STAGE OF DEVELOPMENT	%	INDUSTRY GROUPS	%
East	0.0%	Early Stage Financing	100.0%	Computer Related	0.0%
Midwest	0.0	Expansion Financing	0.0	Machinery/Equipment	0.0
South	0.0	Bridge Financing	0.0	Industrial/Manufacturing	0.0
West	100.0	Leveraged Buyouts	0.0	Consumer Products/Services	0.0
				Communications	9.1
				Energy Related	0.0
				Medical Related	100.0
				Other	0.0

STAFF COMMENTS: Inman & Bowman received its first funding in June, 1985. The partners made one investment in their first quarter of business. The new portfolio company, an early-stage Washington firm, produces medical diagnostic equipment. The investor group was comprised of a number of major national venture firms. In addition, the general partners made an investment commitment to another firm and anticipate closing this second investment in the fourth quarter of the year.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME: Allied Capital
FUND NAME: Allied Venture Partnership
CONTACT: David Gladstone
ACCOUNT INCEPTION: 9/17/85
SBI COMMITMENT: $5.0 Million
SBI CURRENT INVESTMENT: $1.7 Million

INVESTMENT DESCRIPTION: Allied Venture is a $40 million venture capital limited partnership formed in September 1985. Allied Venture is based in Washington D.C. Term of the Fund is 10 years with optional extensions. Investment focus of Allied Venture will be on later stage, low technology companies located in the Southeastern and Eastern U.S. Most investments will be made in syndication with Allied Capital, a large publicly-owned venture capital corporation formed in 1958.

ALLIED INVESTMENTS				CASH RETURNS TO SBI		
CURRENT TOTAL #	CURRENT TOTAL $	LATEST QUARTER #	LATEST QUARTER $	LATEST QUARTER	LAST FOUR QUARTERS	CUMULATIVE SINCE INCEPTION
0	$0.0 Million	0	$0.0 Million	$0.0	$0.0	$0.0

SUMMARY DESCRIPTION OF CURRENT PORTFOLIO
(% OF TOTAL FUND COST)

LOCATION	%	STAGE OF DEVELOPMENT	%	INDUSTRY GROUPS	%
East		Early Stage Financing		Computer	
Midwest		Expansion Financing		Machinery/Equipment	
South		Bridge Financing		Industrial/Manufacturing	
West		Leveraged Buyouts		Consumer Products/Services	
				Communications	
				Energy Related	
				Medical Related	
				Other	

STAFF COMMENTS: Allied Venture was recently formed in September 1985 with $40 million in capital. As of September 30, 1985, Allied had not made any investments. The fourth quarter of 1985 will be Allied Venture's first fully operational quarter.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME:	First Reserve Corporation
FUND NAME:	Amgo II
CONTACT:	Jon Hill
ACCOUNT INCEPTION:	February 1983
SBI COMMITMENT:	$7 Million
SBI CURRENT INVESTMENT:	$7 Million

INVESTMENT DESCRIPTION: Amgo II is a $36 million oil and gas limited partnership formed in December 1982. Term of the Fund is 19 years. Investment strategy of Amgo II is to provide a diversified portfolio of investments in terms of geographic locations, geological structures, investment types and operating companies.

AMGO II FUND INVESTMENTS (AT COST)				CASH RETURNS TO SBI		
CURRENT TOTAL #	CURRENT TOTAL $	LATEST QUARTER #	LATEST QUARTER $	LATEST QUARTER	LAST FOUR QUARTERS	CUMULATIVE SINCE INCEPTION
11	$25.3 Million	2	$3.5 Million	$124,500	$401,600	$539,100

SUMMARY DESCRIPTION OF CURRENT PORTFOLIO
(% OF TOTAL FUND COST)

LOCATION	%
Texas	25.5%
Oklahoma	14.0
Louisiana	11.5
Rocky Mtns.	12.0
Gulf Coast	17.0
Other	20.0

INDUSTRY GROUPS	%
Acreage	0.0%
Drilling	0.0
Equity	14.5
Production	17.0
Royalty	14.5
Surface Facilities	0.0
Conv. Note and Preferred	54.0
Other	0.0

STAFF COMMENTS: Similar to Amgo, Amgo II is nearing full investment. To achieve full investment, Amgo II will make pro-rata investments with Amgo in the two new deals under consideration by First Reserve. With full investment of Amgo I and II in sight, First Reserve is actively offering subscriptions to Amgo III.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME: First Reserve Corporation
FUND NAME: Amgo I
CONTACT: Jon Hill
ACCOUNT INCEPTION: July 1981
SBI COMMITMENT: $15 Million
SBI CURRENT INVESTMENT: $15 Million

INVESTMENT DESCRIPTION: Amgo I is a $144 million oil and gas Limited Partnership formed in July 1981. Term of the Fund is 20 years. Investment strategy of Amgo I is to provide a diversified portfolio of investments in terms of geographic locations, geological structures, investment types and operating companies.

AMGO I INVESTMENTS (AT COST)				CASH RETURNS TO SBI		
CURRENT TOTAL #	CURRENT TOTAL $	LATEST QUARTER #	LATEST QUARTER $	LATEST QUARTER	LAST FOUR QUARTERS	CUMULATIVE SINCE INCEPTION
23	$134.0 Million	2	$8.8 Million	$123,500	$535,000	$2,298,000

SUMMARY DESCRIPTION OF CURRENT PORTFOLIO
(% OF TOTAL FUND COST)

LOCATION	%	INDUSTRY GROUPS	%
Texas	21.5%	Acreage	6.5%
Oklahoma	21.5	Drilling	10.5
Louisiana	17.0	Equity	6.5
Rocky Mtns.	13.0	Production	22.0
Mississippi	8.4	Royalty	24.5
California	7.2	Surface Facilities	0.0
Gulf Coast	5.4	Conv. Note and Preferred	29.0
Other	6.0	Other	1.0

STAFF COMMENTS: Although Amgo was largely invested by the end of the quarter ended September 30, 1985, First Reserve is working on two investments for Amgo which would utilize remaining funds. One is an investment in a debt free exploration and acquisition company in Oklahoma. The other is an investment in a gas distribution company. Full investment of Amgo funds should be achieved by January, 1986.

ALTERNATIVE INVESTMENT MANAGER INFORMATION
September 30, 1985

FIRM NAME: Apache Corporation
FUND NAME: 10% Equipment Financing Notes
CONTACT: Charlie Hann
ACCOUNT INCEPTION: May 1984
SBI COMMITMENT: $22.5 Million
SBI CURRENT INVESTMENT: $262,878

INVESTMENT DESCRIPTION: The Apache Corp. 10% Equipment Financing Notes are a $150 million private placement to finance Apache's portion of production facility expenditures under the terms of a series of offshore joint ventures in the Gulf of Mexico organized by Shell Oil Company. In addition to fixed interest payments of 10% per annum, noteholders will receive additional interest of 2% of Apache's share of gross revenues from the joint ventures. Principal and interest on the notes are estimated to be repaid by 1992. The 2% additional interest will be paid to noteholders throughout the life of producing properties.

10% EQUIPMENT FINANCING NOTE INVESTMENTS (AT COST)				CASH RETURNS TO SBI		
CURRENT TOTAL #	CURRENT TOTAL $	LATEST QUARTER #	LATEST QUARTER $	LATEST QUARTER	LAST FOUR QUARTERS	CUMULATIVE SINCE INCEPTION
1	$1.7 Million	0	$0.0 Million	$24,073	$83,416	$95,744

SUMMARY DESCRIPTION OF CURRENT PORTFOLIO
(% OF TOTAL FUND COST)

LOCATION	%	INDUSTRY GROUPS	%
Texas	100.0%	Acreage	0.0%
Louisiana	0.0	Drilling	0.0
Other	0.0	Production	100.0

STAFF COMMENTS: A total of 46 prospects, comprised of 79 leases, have been acquired as of September 30, 1985. Definitive evaluation has been obtained on 15 prospects, nine of which are indicated discoveries and six have been abandoned. Of the nine discoveries, one prospect is producing, three prospects are undergoing development drilling, and the remaining five discoveries are in a pre-development planning stage. Evaluation is continuing or will begin on 31 prospects, of which 14 have undergone one unsuccessful drilling attempt, but will receive additional evaluation prior to further action. Seventeen remaining prospects either have initial drilling started or planned for 1985 or 1986.

Tab H

EXECUTIVE DIRECTOR
HOWARD J. BICKER

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

November 19, 1985

TO: State Board of Investment

FROM: Howard Bicker, Executive Director

Howard Bicker

SUBJECT: Implementation of the SBI resolution on companies that do business in South Africa.

Since the State Board of Investment passed its resolution on October 2, 1985, the South Africa Task Force has been meeting on a regular basis to implement the new policy on companies doing business in South Africa and Namibia. The members of the Task Force are:

Jay Kiedrowski Commissioner of Finance	Governor's Representative
Fred Krohn Deputy State Auditor	State Auditor's Representative
Michael Lucas Senior Vice President Norwest Bank	Private Sector Representative
Robert Mattson State Treasurer	
Mike Miles Assistant Attorney General	Attorney General's Representative
Harvey Schmidt Teachers Retirement Assoc.	Retirement Fund Representative
Rick Scott AFSCME	Public Employee Representative
Elaine Voss Deputy Secretary of State	Secretary of State's Representative

The Task Force has taken the following actions:

Application Of The Resolution

The resolution is being implemented for the common stock holdings in the active manager portfolios. At this time, the Task Force has yet to take action with regard to the application of the resolution to the index fund and the fixed income portfolio.

Identification Of Corporations

Based on the research of the Investor Responsibility Research Center, the Board's long-standing consultant on social responsibility issues, the Task Force identified one hundred-seven companies in the active manager portfolio that do business in South Africa. The Task Force sent a letter to each of these companies with a copy of the resolution (attached). The letter requested information on the companies' policies in South Africa. The Task Force has received responses from forty-seven of the companies.

Retention Of Consultant

In addition to using the resources of the Investor Responsibility Research Center, the Task Force has retained the services of the Interfaith Center on Corporate Responsibility (as directed by the resolution). The Interfaith Center will assist the staff in the preparation of shareholder resolutions for corporate annual meetings. The Interfaith Center, affiliated with the National Council of Churches, has been a sponsor of shareholder resolutions for the past fifteen years. The cost of the service is $5,500 for the period from October 15, 1985 to June 30, 1986.

The Task Force has also retained the services of the Board's existing consultant, Evaluation Associates, as the independent financial consultant required by the resolution. The consultant's fee to perform the additional duties will be $10,000/year through June 30, 1986. Previously, the Board had directed staff to open the bid process for consultant services effective June 30, 1986. The provision of South Africa-related services will be included in the bid process.

Shareholder Resolutions

Nine companies in the active manger stock portfolios have not signed the Sullivan Principles. The SBI has sponsored shareholder resolutions for two of these companies. The SBI cosponsored five resolutions with the General Board of Pensions of the United Methodist Church, and one with the Florida State Board of Administration. A shareholder resolution for the ninth company was sponsored by the American Baptist Church. These nine companies are divided into the following industry groups: Autos and Trucks (2), Chemicals, Hospital Supplies, Oil, Oil Service, Printing, Soaps and Toiletries, and Steel. None of the companies is based in Minnesota.

The Task Force has referred these nine companies to Evaluation Associates for an analysis of the financial impact of potential divestment actions. The Task Force will meet on January 2, 1986 to: 1) review the status of these companies with respect to signing the Sullivan Principles; 2) review the financial and legal impact of selling each company on case by case basis; and 3) direct the staff to divest provided divestiture is in keeping with the Board's fiduciary obligations.

At this time, the Task Force has decided not to release the names of the nine companies due to the number of steps to be completed before divestment occurs and the potential negative market impact that could result from the disclosure of the companies under consideration.