

**TEACHER RETIREMENT SYSTEM OF TEXAS MEETING
BOARD OF TRUSTEES**

AGENDA

February 15, 2012 – 10:30 a.m.

**Region 17 Education Service Center – Main Hall
1111 West Loop 289
Lubbock, TX**

NOTE: The Board may take up any item posted on the agenda during its meeting on Wednesday February 15, 2012, or during the meeting on the following two days beginning at the time and place specified on this agenda.

The open portions of the February 15-17, 2012 Board meetings are being broadcast over the Internet. Access to the Internet broadcast of the Board meeting is provided on TRS' Web site at www.trs.state.tx.us.

1. Call roll of Board members.
2. Consider and discuss Board administration matters, including the following – R. David Kelly:
 - A. Consider the approval of the December 8-9, 2011 Board meeting minutes.
 - B. Introduce and welcome TRS' new Chief Financial Officer.
3. Provide opportunity for public comment – R. David Kelly.
4. Overview of the theme and agenda for the February 15-17, 2012 TRS Board meeting, a review of TRS' history, structure, operations and recent legislative and organizational accomplishments, and a discussion of agency objectives for Calendar Year 2012 – Brian Guthrie.
5. Receive an overview of financial matters, including a panel discussion on financial valuations, assumptions, and operations – Vin DeBaggis, State Street; Sylvia Bell; Jamie Michels; Scot Leith; Hugh Ohn; and Don Green (moderator).
6. Discuss and consider investment matters, including:
 - A. Overview of Apollo Investment Corporation – Steve LeBlanc and Leon Black, Apollo Investment Corporation.
 - B. Overview of KKR & Co. L.P. – Steve LeBlanc and George Roberts, KKR & Co. L.P.

- C. Review of current market conditions – Henry McVey, KKR & Co. L.P.
- D. Update on TRS’ Emerging Managers Program – Stuart Bernstein.
- E. Historical overview of investment policy and operations prior to 2007 – Brian Guthrie.
- F. Investment, operating, and risk postures in investment matters from 2007 to the present, including changes in asset allocation, delegations to staff, the use of strategic partnerships, and the implementation of risk management – Britt Harris.
- G. Review of services provided by Hewitt EnnisKnupp from 2007 to the present and discussion of services for calendar year 2012 – Brady O’Connell and Steve Voss, Hewitt EnnisKnupp.

NOTE: The Board meeting likely will recess after the last item above and resume Thursday morning to take up items listed below.

Thursday, February 16, 2012 – 8:00 am

7. Provide opportunity for public comment – R. David Kelly.
8. Discuss the submission and response process for in-person and web-cast audience questions on the pension benefit design study and the retirees health benefit program (TRS-Care) study – Brian Guthrie.
9. Discuss legislatively required study on pension benefit design options:
 - A. Receive a presentation on and discuss the status and scope of the pension benefit design study, including a panel discussion on pension design and sustainability issues – Keith Brainard, National Association of State Retirement Administrators; Mary Beth Braitman, Ice Miller, LLP; Joseph Newton, Gabriel, Roeder, Smith & Company; and Rebecca Merrill (moderator).
 - B. Respond to in-person and web-cast audience questions on pension benefit design and sustainability issues – Keith Brainard, National Association of State Retirement Administrators; Mary Beth Braitman, Ice Miller, LLP; Joseph Newton, Gabriel, Roeder, Smith & Company; and Rebecca Merrill (moderator).
10. Discuss the retirees health benefit program (TRS-Care):
 - A. Receive a presentation on and discuss the status of the legislatively required retirees TRS-Care study – Betsey Jones and William Hickman, Gabriel, Roeder, Smith & Company.
 - B. Discuss and consider selecting a pharmacy benefit manager (PBM) for TRS-Care and directing the selected PBM to administer the Employer Group Waiver Plan (EGWP) option – Betsey Jones and William Hickman, Gabriel, Roeder, Smith & Company.
 - C. Respond to in-person and web-cast audience questions on the TRS-Care study – Betsey Jones and William Hickman, Gabriel, Roeder, Smith & Company.
11. Receive a presentation on and consider premiums and plan design for the preferred-provider organization (PPO) plan options under the active employees health benefit program (TRS-ActiveCare) – Betsey Jones and William Hickman, Gabriel, Roeder, Smith & Company.
12. Consider premiums and plan design for health maintenance organizations (HMOs) under the active employees health benefit program (TRS-ActiveCare) – Betsey Jones.
13. Consider the enrollment periods for the 2012-2013 plan year for the active employees health benefit program (TRS-ActiveCare), including presentation of participation data – Betsey Jones.

14. Discuss budget planning, including – Don Green:
 - A. An overview of the state budgeting process.
 - B. A presentation on TRS budget planning and the development of the Legislative Appropriations Request for the upcoming 83rd Session of the Texas Legislature.
15. Review the reports of the Chief Financial Officer – Don Green:
 - A. Review the report under § 825.314(b), Government Code, of expenditures that exceed the amount of operating expenses appropriated from the general revenue fund and are required to perform the fiduciary duties of the Board.
 - B. Quarterly financial reports on TRS programs.
16. Discuss and consider Board operational matters, including the following – Brian Guthrie:
 - A. Discuss the Board meeting agenda planning process, including timelines, frequency of meetings, and the use of Board committees in accomplishing Board business.
 - B. Preview draft agendas for April and May Board meetings and consider canceling the May Board meeting.
 - C. Review Staff's recommendation for electronic Board materials.
 - D. Review the Board training calendar.
 - E. Consider a resolution authorizing staff to make non-substantive corrections to Board items after adoption, including policies and resolutions, for syntax, typographical errors, and formatting and providing that the staff-corrected versions shall constitute the versions adopted by the Board.
17. Discuss and consider authorizing a direct private investment in the restricted equity securities of an investment management company and authorizing staff to negotiate and execute the subscription agreement, investment contracts, and related transaction documents – Jerry Albright and Rich Hall.
18. Discuss personnel issues, including the duties and responsibilities of the Executive Director and provide input to the Executive Director on the duties and evaluation of the Chief Investment Officer – R. David Kelly.

***NOTE:** The Board meeting likely will recess after the last item above and resume Friday morning to take up items listed below.*

Friday, February 17, 2012 – 8:00 am

19. Provide opportunity for public comment – R. David Kelly.
20. Discuss workforce continuity planning, including an update on the TRS staffing profile and the development and implementation of the TRS Leadership Development Program – Brian Guthrie and Ken Welch.
21. Receive an update on the TEAM Program, including organizational structure, achievements of the program since FY 2010, a timeline of upcoming milestones, communications, financial/ HR software update, and an overview of the data management process – Ken Welch; Marianne Woods Wiley; Garry Sitz; Amy Morgan; Jay Masci, Provaliant; Barbie Pearson; and Don Green.
22. Receive a presentation on and discuss TRS' Enterprise Risk Management Program – Jay LeBlanc.
23. Receive a communications update, including the launch of TRS' social media presence, promotion of *MyTRS*, and plans to celebrate TRS' 75th anniversary year – Howard Goldman.
24. Review trustee roles, responsibilities, and fiduciary duties; qualifications for office and standards of conduct; immunities, indemnification, and insurance; and requirements related to trustee ethics, conflicts, and disclosures – Tim Wei; Steve Huff; and Keith Johnson, Reinhart Boerner Van Deuren, s.c.
25. Review the Texas Open Government requirements – Dan Junell.
26. Review the Deputy Director's report, including – Ken Welch:
 - A. Discuss an update on the implementation of legislation authorizing background checks on TRS employees and filling the vacancy for the position of TRS Human Resources Director.
 - B. Consider proposed changes to the Resolution Designating Persons Authorized to Sign TRS Vouchers (Voucher Authority Resolution).
 - C. Provide an update on the January power outage and, if necessary, make a fiduciary finding concerning the purchase of a back-up power generator.
27. Review and discuss the Executive Director's report on the following matters – Brian Guthrie:
 - A. Retirement plan benefits and operations.
 - B. Investment activity and operations.

- C. Health-benefit programs and operations.
 - D. Administrative operations, including financial, audit, legal, and staff services and special projects.
 - E. Member communications.
28. Consult with the Board's attorney in Executive Session on any item listed above as authorized by Section 551.071 of the Texas Open Meetings Act (Chapter 551 of the Texas Government Code) – David Kelly.



Teacher Retirement System of Texas

Minutes of the Board of Trustees

December 8-9, 2011

The Board of Trustees of the Teacher Retirement System of Texas met on December 8, 2011, in the boardroom located on the fifth floor of the TRS East Building offices at 1000 Red River Street, Austin, Texas. The following people were present:

Board trustees:

David Kelly, Chair
Todd Barth
Karen Charleston
Charlotte Clifton
Joe Colonna
Eric McDonald
Chris Moss
Anita Palmer
Nanette Sissney

TRS executives and staff:

Brian Guthrie, Executive Director
Ronnie Jung, Executive Liaison to the Board of Trustees
Ken Welch, Deputy Director
Amy Barrett, Chief Audit Executive
Conni Brennan, General Counsel
Howard Goldman, Director of Communications
T. Britton Harris IV, Chief Investment Officer
Jerry Albright, Deputy Chief Investment Officer
Betsey Jones, Director of Health Care Policy and Administration
Amy Morgan, Chief Information Officer
Dinah Arce, Internal Auditor
Ashley Baum, Chief of Staff, Investment Management Division
Chi Chai, Senior Managing Director – Internal Public Markets
Terry Harris, Compliance Officer
Dan Herron, Communications Specialist
Janis Hydak, Managing Director – Macro, Risk, Quant and Thematic Strategies
Bob Jordan, Director – TRS Health & Insurance Benefits
Dan Junell, Secretary to the Board and Assistant General Counsel
Lynn Lau, Assistant Secretary to the Board and Program Specialist
Steve LeBlanc, Senior Managing Director – External Private Markets
Craig McCullough, Manager of TRS Investment Performance and Analytics
Rebecca Merrill, Special Advisor to Executive Director and Manager of Special Projects
Melinda Nink, Executive Assistant
Hugh Ohn, Director of Investment Audit and Compliance
Rhonda Price, Information Specialist

Charmaine Skillman, Assistant General Counsel
Rebecca Smith, Assistant General Counsel
Sharon Toalson, Assistant to the Chief Investment Officer
Angela Vogeli, Assistant General Counsel

Outside counsel, consultants, contractors, representatives of associations and organizations, and others:

James Simms, Former Board Trustee
Charlsetta Finley, Former Board Trustee
Mary Alice Baker, Former Board Trustee
Robert Gauntt, Former Board Trustee
Steven Huff, Reinhart Boerner Van Deuren, Fiduciary Counsel
Steve Voss, Hewitt EnnisKnupp
Brady O'Connell, Hewitt EnnisKnupp
Jay Masci, Provaliant, Inc.
Bob Solheim, Provaliant, Inc.
Kirstin Carlson, Provaliant, Inc.
Vin DeBaggis, State Street
Craig teDuits, State Street
Tim Lee, Texas Retired Teachers Association
Leroy DeHaven, Texas Retired Teachers Association
John Grey, Texas State Teachers Association
Ted Melina Raab, Texas AFT
Ann Fickel, Texas Classroom Teachers Association
Josh Sanderson, Association of Texas Professional Educators
Beaman Floyd, Texas Association of School Administrators
Pat Del Rio, Aetna
Dave Mildenberg, Bloomberg
Curt Olson, Texas Budget Source
Marcia C. Shelton

Mr. Kelly called the meeting to order at 12:40 p.m.

1. Call roll of board members.

Ms. Lau called the roll. All trustees were present.

2. Consider the approval of the November 4, 2011 Board meeting minutes – R. David Kelly.

On a motion by Ms. Sissney, seconded by Mr. McDonald, the board unanimously approved the minutes of the November 4, 2011 board meeting.

3. Consider excusing Board member absences from the November 4, 2011 Board meeting – R. David Kelly.

On a motion by Ms. Clifton, seconded by Mr. Barth, the board unanimously excused the absences of Mr. Colonna and Mr. McDonald from the November 4, 2011 board meeting.

4. Recognize the service of former trustee Robert Gauntt – R. David Kelly.

On behalf of the board, Mr. Kelly presented a plaque to Mr. Gauntt for his service to the

system. He then read the the following resolution into the record:

Whereas, Robert Gauntt has served as a member of the Board of Trustees of the Teacher Retirement System of Texas (TRS) from March 2008 until August 2011, mindful of his duty as caretaker of a trust to those who teach or otherwise serve our state's children and thereby shape its future; and

Whereas, His obvious preparation for each meeting was commendable and he provided leadership during a time when the retirement system grew from approximately 1.2 million to more than 1.3 million members and annuitants, management controls were strengthened, new investment allocations and procedures were adopted and implemented, the State Auditor's Office reports provided unqualified opinions with no material findings, and TRS annually received the "Certificate of Achievement for Excellence in Financial Reporting" from the Government Finance Officers Association; and

Whereas, He served as chair of the Risk Management and Investment Management Committees, and as a member of the Benefits and Compensation committees and Representative to the Texas Growth Fund; and

Whereas, He helped guide the agency through prudent oversight of trust assets during a challenging period of extreme capital market volatility, including one of the nation's most serious recessions, when the TRS Pension Fund rebounded from \$67 billion in March 2009 to approximately \$107 billion at the end of his term; now, therefore, be it

Resolved, That the Board of Trustees and staff of the Teacher Retirement System of Texas recognize the accomplishments and contributions of Robert Gauntt and express appreciation on behalf of TRS members both present and future, and be it further

Resolved, That a copy of this resolution be presented to Robert Gauntt and entered into the record of the Board for December 8, 2011.

5. Recognize the service of Ronnie Jung – R. David Kelly.

On behalf of the board, Mr. Kelly presented a plaque to recognize Mr. Jung for his years of service to the system. Mr. Kelly read the following resolution into the record:

Whereas, Ronnie Jung joined the Teacher Retirement System of Texas (TRS) in June of 1996 as its chief financial officer; his accomplishments included the successful implementation of a new multicurrency investment accounting system and progress toward the new automated benefits system; he played an important role in strengthening the communication between the retirement system and the Texas Legislature, continuing to work closely with legislative committees; and

Whereas, Mr. Jung was named deputy director of the Teacher Retirement System of Texas in October of 2001, became interim executive director in September of 2003, and began his service as executive director in May of 2004; throughout his years of leadership, he

has maintained the highest standards of professionalism and has consistently proven his skill at management and at resolving complex financial and governmental issues; and

Whereas, He provided critical leadership during a time when the retirement system grew from approximately 800,000 to more than 1.3 million members and annuitants, surpassed \$100 billion in its investment portfolio and doubled that portfolio from \$50 billion to more than \$107 billion, developed and implemented a statewide active member health benefits program, strengthened management controls, adopted and implemented new investment allocations and procedures, received unqualified opinions with no material findings from State Auditor's Office reports, and annually received the "Certificate of Achievement for Excellence in Financial Reporting" from the Government Finance Officers Association; and

Whereas, In addition to his innumerable accomplishments in roles with the Teacher Retirement System of Texas, he served as a member of the task force for higher education financial reporting for the Governmental Accounting Standards Board; he was recognized as the 2002 Administrator of the Year by the Texas State Agency Business Administrators' Association; he served as president of the National Council on Teacher Retirement and as a board member of the National Institute for Retirement Security; and

Whereas, He guided the Teacher Retirement System of Texas during some of its most challenging periods of capital market volatility, including one of the nation's most serious recessions, when the TRS Pension Fund rebounded from \$67 billion in March 2009 to approximately \$107 billion at the end of his service as executive director; and

Whereas, Ronnie Jung is retiring from the Teacher Retirement System of Texas after serving as the retirement system's executive director for seven years, mindful of his duty to those who teach or otherwise serve our state's children and thereby shape its future; now, therefore, be it

Resolved, That the Board of Trustees and staff of the Teacher Retirement System of Texas recognize the accomplishments and contributions of Ronnie Jung during his highly successful career with the retirement system and in prior state service and express appreciation on behalf of TRS members both present and future, and be it further

Resolved, That a copy of this resolution be presented to Ronnie Jung and entered into the record of the Board for December 8, 2011.

Mr. Kelly introduced former trustee and chairman, James Simms. Mr. Simms acknowledged Mr. Jung's service at TRS. He also expressed his appreciation to the board for protecting Texas public school teachers' interests. Mr. Jung then expressed his appreciation to the board for the support he had received during his years of service at TRS. He stated that it was his honor to serve public school teachers and his wish that they continue to receive their retirement benefits for their dedication to public education. Mr. Guthrie also expressed his appreciation to Mr. Jung for his guidance and leadership during his years of service at TRS.

Later at the meeting, former trustees, Mary Alice Baker and Charletta Finley, also acknowledged Mr. Jung's impending retirement.

6. Provide opportunity for public comments – R. David Kelly.

Mr. Leroy DeHaven, retired teacher, expressed his appreciation to the board and staff for their time and effort spent on managing the assets. He expressed his concern that retirees had not received a permanent annuity increase since 2001. He stated that he did not oppose awarding incentive pay to TRS' investment employees for their contributions to the recent investment outperformance. He said that retirees should also benefit from such investment performance. He addressed the plight of retirees who retired a long time ago and reviewed recent legislative attempts to supplement retirees' benefits and related considerations. Mr. DeHaven requested that a discussion item be placed on the agenda of the next TRS board meeting to be held in Austin concerning possible benefit improvements for current retirees. Quoting the proposed TRS mission statement discussed by the board's policy committee earlier on this day, Mr. DeHaven concluded that many of TRS' retirees need TRS to make the positive difference in their lives as mentioned in the statement.

On behalf of Texas Classroom Teachers Association (TCTA), Ms. Ann Fickel expressed her appreciation to Mr. Jung for his service to TRS and its members during his tenure. She recognized his efforts to inform TRS members about matters affecting them and to help them understand different issues. She noted the remarkable service Mr. Jung had provided in leading the system through some very turbulent times. She stated that TCTA members had complete confidence that, under Mr. Jung's leadership, things would be handled well and solely for the benefit of the system and its members. She concluded her remarks by wishing Mr. Jung an enjoyable retirement.

7. Discuss and consider investment matters, including the following items:

A. Review of Pension Plan Structural Trends – Brady O'Connell and Steve Voss, Hewitt EnnisKnupp.

Mr. Brady O'Connell provided an overview of the types of retirement plans that currently exist in the U.S. He highlighted the three main sources of retirement income: social security; personal savings; and employer-sponsored retirement plans. He noted that many TRS members are not eligible for social security. Presenting the data provided by Investment Company Institute (ICI) on the estimated total retirement assets in the U.S., Mr. O'Connell stated that there were about \$18.2 trillion in retirement assets as of the second half of 2011. Those assets, he said, came from personal savings (annuities and IRAs), defined benefit (DB) plans, and defined contribution (DC) plans. He noted that the DB plans represented the largest source of retirement income with \$7 trillion, compared with \$4.7 trillion in the DC plans.

Mr. O'Connell defined and distinguished DC and DB plans. He explained the features of DC plans, which included 401(k) plans, 403(b) plans, employee stock ownership plans, and profit sharing plans, and discussed their pros and cons. Advantages of DC plans, he said, included portability, cost certainty, and full funding. He said that some of the disadvantages were that DC plan participants bore the investment risk, risked outliving their retirement assets, and incurred plan costs that were significantly higher than those for a DB plan. He noted recent

trends to give DC plans some of the advantages of DB plans. Mr. O'Connell stated that fiduciaries for both DB and DC plans had the responsibilities of overseeing the investment lineup, determining plan design features, and maintaining a reasonable cost structure. The major difference between the two, he said, was in education and communication. Fiduciaries of a DC plan would have to focus on communicating to participants and providing them information and resources to help them make better investment decisions.

Mr. O'Connell provided an overview of DB plans. He stated that DB plans include professional management of investments and asset allocation, economies of scale that came with pooling assets, and pooling mortality risk. He pointed out that DB plans faced funding uncertainty and contribution volatility, and they bore more plan risk than their participants.

Mr. O'Connell shared other observations relating to DB plans, including the effects of the Pension Protection Act of 2006. He noted that DB plans often required higher contributions after stock market or economic downturns, when plan sponsors were less able or willing to make those contributions.

Mr. O'Connell compared the costs of DB and DC plans based on the research conducted by the Center for Retirement Research at Boston College ("Boston College research"). As of 2009, he stated that the average administrative cost of DC plans was 0.95 percent, which doubled that of DB plans, and can be attributed to the administrative complexity of DC plans.

Comparing the performance between DB plans and 401(k) plans from 1988 through 2004, Mr. O'Connell stated that DB plans earned about 10.7 percent compared with 9.7 percent returns in 401(k) plans. He stated that the higher returns in DB plans could be due to lower cost structure and professional management of asset allocation for DB plans.

Mr. O'Connell discussed ten important trends and current issues relating to the debate on retirement plan offerings. Concerning the issue relating to the contribution levels and state budgets, Mr. O'Connell presented the data from the Boston College research showing the number of states and the percentage of their budget allocated to pension contributions ranging from one to two percent to 11-12 percent. He noted that in periods of fiscal challenge the states contributing only one to two percent would not face as critical an issue as those contributing 11 to 12 percent. Concerning the impact of the Pension Protection Act (PPA) of 2006, Mr. O'Connell stated that it has significant impact on financial statements and led to contribution uncertainty as a result of shorter smoothing period. Another impact, he noted, was that some corporations closed their DB pension plans to new employees or froze benefit accruals. Responding to a question from Mr. McDonald, Mr. O'Connell stated that the PPA does not affect public pension plans.

Mr. O'Connell addressed the concept of liability-driven investment (LDI). He said that LDI involved investing in long-duration bonds, which reflected the liabilities of plan sponsors. He noted some of the factors that have prevented LDI from being more widely adopted by plan sponsors, including the low interest rates, which make long-duration bonds less attractive, and the underfunded condition of pension plans, which generally requires the plans to maintain some equity exposure to try and close the funding gap.

Mr. O'Connell next addressed the issue relating to the proposed changes of the

Governmental Accounting Standard Board (GASB). He stated that the proposed changes would bring GASB closer to the Financial Accounting Standards Board (FASB), which governed corporate pension plans. He stated that the controversial topics relating to those changes include the requirement to maintain an asset return-based discount rate for funded liabilities, to use a high-quality municipal bond yield as the discount rate for all unfunded liabilities in addition to the rate used to discount the funded liabilities, and to shorten the period allowed for amortizing unfunded liabilities. Mr. O'Connell explained the school of thought, which believes that the discount rate applied in pension benefits should use a long-term Treasury bond rather than standard actuarial return on asset assumptions. As a result of this approach, he said, the anticipated liabilities for public pension plans across the country would be much higher than when using conventional methods of estimating liabilities. Mr. Jung noted the volatility issues of using risk-free rates during the '80s, which led to a significant increase of funding and benefits and a decrease of contributions.

Mr. O'Connell explained the hybrid plans. He stated that hybrid plans come in the form of a lower DB benefit along with a DC plan that a participant controls. He stated that hybrid plans generally have both employees and plan sponsors share some investment risk. He noted that, from a budgetary standpoint, the lower contribution rate of hybrid plans attracts some state plans. Mr. O'Connell also briefly mentioned how DC plans started to adopt some features of DB plans by focusing on helping participants to invest in annuities rather than solely accumulate assets.

B. Performance Review: Third Quarter 2011 – Brady O'Connell and Steve Voss, Hewitt EnnisKnupp.

Mr. Voss presented HEK's performance review of the TRS portfolio for the third quarter of 2011. He noted that the fund faced the European financial crisis and the weak domestic economy during the quarter. He reported that the total fund underperformed its benchmark by 170 basis points, which was caused primarily by the underperformance of the risky assets, including the MSCI US small cap, emerging markets, and stocks. He presented the TRS policy benchmarks at different periods and stated that it was -5.4 percent for the third quarter. He reported that the ending market value was about \$101 billion as of September 30, 2011 with a depreciation of \$7.6 billion during the third quarter. Mr. Voss confirmed that the depreciation was \$2.2 billion more than the benchmark. Presenting the asset allocation, Mr. Voss noted that the performance difficulties during the third quarter could be attributed to the 0.8 percent tactical overweight to emerging markets, the 4 percent underweight to long Treasury bonds, and a 2 percent overweight in credit investments. He stated that the total fund generated a -7.06 percent return at the -5.35 percent policy benchmark, which resulted in a -1.70 percent shortfall.

Based on the BNY Mellon U.S. Master Trust Universe for public pension funds greater than a billion dollars, Mr. Voss reported that TRS' third-quarter performance ranked at the 27th percentile, which outperformed more than a third of other public pension funds. The fund ranked at 20th percentile over one year, 24th percentile over five years, and 32nd percentile over 10 years. He confirmed for Mr. Barth that the fund was in the top third for the trailing one-year, three-year, five-year, and 10-year trailing periods as of September 30, 2011. Responding to a question from Mr. Kelly regarding the asset allocations of other funds, Mr. Voss stated that their asset allocation models are very different from TRS'. Responding to a question from Dr. Brown regarding the method of comparing TRS' performance with its peers, Mr. Voss stated that the

best practice is to look at the total fund performance relative to the fund's policy benchmark, which is the weighted average of all the asset classes. Mr. Voss stated that the universe does indicate whether the asset allocation had contributed to adding value compared with the peers' asset allocation.

Mr. Voss presented the attribution of the -1.70 percent shortfall. Mr. Voss explained how the weighting of the asset class and its market performance factor in the total fund performance and the magnitude of its attribution to the fund performance. He stated that the tactical asset allocation had been working very well until the third quarter when decisions such as overweighing in emerging market and underweighting in Treasury bonds caused underperformance. He noted that it was the most difficult quarter since the third and fourth quarter of 2008. Responding to a question from Mr. Kelly, Mr. LeBlanc stated that valuations for private equity and alternatives are completed on a quarterly basis with a one-quarter lag in the reporting numbers.

C. Review Quarterly Portfolio Performance and market update – Britt Harris.

Mr. Harris presented the quarterly portfolio performance review as of September 30, 2011. He provided a general overview of the market performance and noted the underperformance of equities and overperformance of long Treasury bonds during the third quarter. Despite being underperformed by 1.4%, he said, the fund was in the top 27 percentile of the peer groups with an ending value of \$101.1 billion. He presented the current weighting position of each asset class. He noted that the current diversification premium over 10-year Treasury bonds (excess return over 10-year Treasury bond yield needed to achieve 8 percent) was 6.1 percent, which was at its all-time high compared with the historical 1.7 percent. He noted that although the TRS fund has a relatively lower allocation to Treasury bonds compared with its peers, the fund's bonds have longer duration and higher quality. He stated that the trust was up 3.6 percent over the one-year period. Concerning the total trust value, he stated that it began at \$100 billion and finished at \$101 billion with \$7.4 billion in payouts and \$4.7 billion in contributions. He commented that TRS' historical 2.5 percent payout ratio was very low compared with the average 5 percent ratio. He noted the increase of the payout over the year by \$1.5 billion because of the reduced contributions from the state and members, the additional \$650 million payout due to the increased number of retirees, and the \$200 million early withdrawal ("refund") by members. The additional payout has increased the payout ratio from the historical 2.5 percent to 4 percent. Presenting a peer-group comparison on asset allocation, Mr. Harris stated that TRS has a balanced diversification model and outperformed in all three asset classes: global equity, stable value, and real return. He presented the cumulative one-year alpha rolling from October 2010 to September 2011, which indicated that the underweight in long Treasury bonds had caused the alpha to drop at the end of the period when the long Treasury bonds had a massive rally. Responding to a question from Mr. McDonald, Mr. Harris explained that the TRS fund is relatively more diversified against rising unexpected inflation versus its peers. He explained that it was achieved by giving up some diversification in the stable value zone in order to have more diversification against inflation, and by investing in long-duration, higher-quality stable value. Mr. Kelly stated that it was important to target long-term performance, even though the current decision in underweighting Treasury bonds caused some underperformance. Presenting the detail relating to the alpha in the overall portfolio, Mr. Harris pointed out that the private equity return during the third quarter was 20.9% according to the pureview data, which had accounted for the impact of the Euro depreciation. He noted that the

25.8% return provided by the State Street Private Edge number is calculated as of the end of the second quarter period without being adjusted for the currency impact because its data are lagged by one quarter. He stated that the benchmark data would eventually catch up with the updated data in the fourth quarter. Mr. Harris confirmed for Dr. Brown that adjusting the number for currency impact is a regular practice to provide the most current data. Mr. Harris provided further detail on the attribution to the returns for the quarter. He stated that the allocation effect was minus 110 basis points and the security selection was minus 60 basis points, of which minus 53 basis points were in private equity and real assets. Mr. Voss stated that the majority of the -110 basis points attributed to asset allocation was in emerging markets and long Treasury bonds. He noted that the negative returns could be attributed to the benchmarks being marked-to-market and to the underperformance of the absolute return and hedge fund selection. He concluded that the asset allocation was the major factor for the underperformance for the quarter. Presenting the diversification and correlation in asset classes, Mr. Harris stated that the 1-year rolling correlation has reduced from below zero to 0.8 in 2010. He noted a big shift in the diversification effect from equities to U.S. Treasury bonds over the last decade. He concluded that the transition diversification program has been completed, and it has shown relative outperformance against other peer funds.

Mr. Harris discussed the major political and economic events from January 2010 until December 2011 and their impact on the market performance and the sovereign debt in U.S., Japan, Germany, and Italy. He presented the actual GDP growth versus the expectations forecasted for 2011 in the U.S., Japan, Europe and China. There was a discussion about the Chinese economy and the reliability of their data. He presented the current inflation versus the inflation expectations as of December 31, 2010 and June 30, 2011, which shows that the expectations were higher than the actual inflation rates in both the U.S. and the U.K. With all kinds of political uncertainty, he stated that corporations, despite having high profits, chose to keep their cash flow without investing in new projects, acquisitions, or employment. He stated that the U.S. unemployment rate was still high and would rise further and housing delinquencies continue to drag down economic growth. Concerning the earnings growth in 2011 versus their expectations in different countries and regions, Mr. Harris stated that the actual growth in the U.S. was very close to its expectations while in EAFE, emerging markets, and Japan, the actual growth had been affected by different factors and turned out to be lower than expectations. He stated that the public market price-to-earnings (P/E) ratio was about 13, which is historically inexpensive. He noted that the EAFE and emerging markets had a lower P/E ratio. He stated that the U.S. productivity rate was still the highest among Japan, the U.K., and Europe at approximately 110, while current China productivity was at 166. He noted that China was able to sell their products at a very low price because of their currency exchange policy, which provides them a massive advantage in their exports. He presented the monetary policy conditions in various countries, which shows that emerging-market countries are growing fast and trying to slow down their economy, while developed-market countries are trying to increase their economic growth. Presenting the GMO 7-year asset class return forecasts as of December 31, 2000, and December 31, 2008, Mr. Harris emphasized that valuations of different asset classes change dramatically over time but the long-term projections tend to be accurate. Presenting the historical ability to produce 8 percent investment return, Mr. Harris stated that currently the fund would need to make an extra 6.1 percent investment return to reach 8 percent. He concluded that the diversification program has worked well. He noted that the low-interest rate environment would require increased benefits from both alpha and diversification going forward. There was a discussion relating to the current asset allocation in response to a question from Mr. McDonald

regarding its relative ability to reach the 8 percent investment return in 10 years. Responding to a question from Mr. Colonna regarding the current position of the gold portfolio, Mr. Harris stated that the fund currently has about \$700 million in gold, which was invested about two years ago in order to reach some diversification against a systemic break-down. He stated that the Gold Portfolio had grown significantly and staff would maintain its allocation at approximately \$700 million until there is a bubble signal.

D. Review the report of the Investment Management Committee on its December 8, 2011 meeting – Todd Barth.

Mr. Barth, Committee Chair, presented the following report of the Investment Management Committee:

The Investment Management Committee met on December 8, 2011. An overview of the portfolio strategy and execution team was presented first. Curt Rogers reviewed tactical asset allocation. Dr. Mohan Balachandran presented the strategic asset allocation and tilt activities. Lastly Jase Auby reviewed the risk management group. Dr. Nigel Lewis provided a high level review of the strategic research and quantitative analysis projects.

8. Review the report of the Policy Committee on its December 8, 2011 meeting, and consider adoption of the following – Todd Barth:

- A. A trustee position description and a revised trustee ethics policy.**
- B. A TRS vision statement and revised mission and goal statements.**

Mr. Barth, Committee Chair, presented the following report of the Policy Committee:

The Policy Committee met on December 8, 2011. After consideration of the November minutes, the committee authorized public comment publication in the *Texas Register* of proposed amendments to TRS rule section 41.4.

Then staff presented the proposed vision, mission and goal statements. The committee recommended that the board adopt the proposed statements as presented by staff.

Finally, the committee discussed the proposed trustee ethics policy and trustee position description. Staff presented two alternatives for addressing gifts in the ethics policy. The committee recommended that the board adopt the ethics policy with alternative number one and include a staff recommendation that paragraph 6 of the policy be amended to clarify that trustees shall not privately communicate or meet with representatives of an investment opportunity on the subject of the investment during the decision-making period. The committee also recommended that the

board adopt the trustee position description as recommended by staff.

On a motion by Mr. Barth, seconded by Ms. Sissney, the board unanimously adopted the proposed vision, mission, and goal statements as recommended by the Policy Committee.

On a motion by Mr. Barth, seconded by Mr. McDonald, the board unanimously adopted the trustee ethics policy and trustee position description as recommended by the Policy Committee and authorized staff to make non-substantive corrections to the ethics policy and trustee position description for syntax, typographic errors and formatting, with staff's corrected version be the final version adopted by the board.

After a brief recess at 3:20 p.m., the meeting reconvened at 3:30 p.m.

9. Discuss the agenda for the February 2012 Board meeting – Brian Guthrie.

Mr. Guthrie presented an updated outline of the February 15-17, 2012 board meeting. He laid out the meeting structure and key topics under three main categories: "strategic initiatives and board priorities," "operational planning," and "trustee education." Mr. Guthrie presented the regular training topics and other training opportunities available to the trustees. He stated that he would provide at the February meeting a calendar that identifies training opportunities for trustees to pursue on their own or as a group. Concerning the topic relating to the board agenda planning process, he stated that staff would discuss with the board the possibility of delivering board materials electronically in order to speed up the delivery process. He stated that some time-sensitive materials may need to maintain the current delivery schedule to ensure the timeliness of the data. He noted that staff also planned to provide draft agendas for the upcoming board meetings for trustees to review in advance.

Mr. Guthrie provided an overview of the strategic initiatives and board priorities for 2012, which would be discussed at the February board meeting. He said that the board will receive a historical overview of TRS investment policy and its implementation and hear presentations by TRS' strategic partners and other presenters. Mr. Guthrie stated that the board will have a discussion about the DB/DC study. He noted that staff planned to have an interactive web session to accept questions from the public via the internet regarding DB/DC issues. Mr. Guthrie clarified for Ms. Sissney that the board will discuss at the February meeting the outline of the DB/DC study derived from staff's internal discussions. He stated that the board will also discuss the operational benchmarking studies and the health care trust study, which will focus on the sustainability issues involved in TRS-Care and the available options. Mr. Guthrie noted that a Risk Management Committee (RMC) meeting will be conducted on Friday, February 17, the first RMC meeting after the Enterprise Risk Management team is incorporated into the RMC. At that meeting, Mr. Guthrie said, the committee will review the enterprise risk matrix and discuss the program in detail. He presented the educational topics that will be presented at Friday's meeting. Per Mr. Kelly's request, staff will move the discussion of TEAM to be the first item on Friday's agenda. Mr. Kelly encouraged trustees to provide further feedback to Mr. Guthrie to finalize the February board meeting agenda.

10. Receive an update on the TEAM Program, including an introduction of the TEAM Program manager vendor – Amy Morgan and Jay Masci, Provaliant.

Mr. Guthrie stated that Provaliant had been selected as the program management vendor (PMV) for the TEAM Program. Ms. Morgan introduced Mr. Jay Masci, Mr. Bob Solheim, and Ms. Kristin Carlson of Provaliant. Responding to a question from Mr. Moss relating to the definition of program management in the TEAM context, Mr. Masci stated that the TEAM program management initiatives would include data cleansing, budgeting, independent verification and validation (IV&V) oversight for the line of business (LOB), and business training procedures. He stated that he and his associates are committed to TEAM for the next six to seven years. Responding to a question from Mr. Kelly relating to the potential failure and delay, Mr. Masci stated that the sponsorship from internal staff and staff planning are critical to avoid those issues. Mr. Guthrie recapped that a total of 15 full-time equivalents (FTEs) will be available for and committed to TEAM and further staff planning on the existing staff would be conducted to meet the needs of TEAM. He emphasized the goal to minimize disruption to the existing operation. Concerning the evaluation of the program management, Mr. Masci mentioned the following indicators for performance: communication with the internal staff, problem solving, project status, and risk assessments. Mr. Guthrie stated that the Executive Steering Committee will receive a weekly report on the TEAM progress and will respond to Mr. Masci relating to any unresolved problems or delays in schedule. Responding to a question from Mr. Kelly regarding how to judge success and failure, Mr. Masci stated that it would be determined by whether the project is completed on time, on budget, and the product is delivered according to the contract. He noted that the current process might need to be modified contingent to the legislative changes in the course of the project. Mr. Guthrie stated that Mr. Masci would assist in planning, managing tasks and monitoring the progress of the project to ensure it is on schedule. He stated that the LOB vendor would engage in ensuring the success of the project. Responding to a question from Mr. Kelly regarding which party oversees change orders and monitoring, Mr. Guthrie stated that the Executive Steering Committee, which comprises a core management team with internal staff, will monitor the day-to-day operations, and any significant or major change orders will be submitted to the committee for review and approval. He noted that Amy Barrett, Chief Audit Executive, is a non-voting member of the committee who will oversee the auditing of the project. Per Mr. Moss' request, staff will provide the layout as well as a detailed program timeline for the next 12 to 18 months at the February meeting. Mr. Guthrie recapped that an RFO will be awarded for data cleansing, LOB, oversight, and financial system upgrade, respectively. Mr. Kelly opined that the board at a certain level should be involved in monitoring change orders. Per Mr. Kelly's request, the change order policy will be discussed at the February meeting. Ms. Morgan stated that during this planning stage, staff is trying to streamline the governance process. She stated that the resources that Provaliant provided have helped to move the project along and identify problems and solutions. She noted that the Legislative Budget Board (LBB), State Auditor's Office (SAO), and Texas Department of Information Resources (DIR) have started monitoring TEAM. She stated that the staffing plan that Provaliant is working on will be for the next five to seven years, which will include both the existing staff and the fifteen FTEs for TEAM. She stated that Provaliant has also started to look at the financial upgrade and planning with the assistance of the TRS project manager and business analysts. Responding to a question from Mr. Moss regarding Provaliant's view on the oversight role, Mr. Masci stated that Provaliant's perception on the oversight role would be based on the decisions made by the Executive Steering Committee.

11. Review the reports on the Historically Underutilized Businesses (HUB) and consider related goals, as appropriate, for fiscal year 2012 – John Dobrich.

Mr. Dobrich provided an overview and history of the Historically Underutilized Business (HUB) program. Presenting a detailed overview of HUB usage, Mr. Dobrich highlighted that the HUB usage in commodities was only 0.1 percent below the 50 percent goal and was the best in the state in that area. Concerning the usage in the professional services area, he stated that it continued to be a challenge and the more complex services have fewer HUB vendors qualified for providing the service. He noted that actuarial service, healthcare consulting, investment advising, and outside counsel contracts are typically awarded to non-HUB national or international firms due to the complexity of those services. He explained the distinctions between “local” and “global” purchases. He reported that excluding the large-dollar purchases for equipment and specialized services that must be posted to the Electronic State Business Daily, TRS’ HUB utilization (26.2%) was among the best in the state in FY 2011. He noted that out of 35 global purchases, which accounted for more than 40 percent of the funds spent, only 6 percent of the fund were spent on HUBs, which indicates that the performance of TRS’ HUB program is impacted by TRS’ needs for professional services.

Mr. Dobrich stated that TRS continues to educate HUB vendors about the Texas procurement process and resources available to help them research and identify business opportunities. He laid out TRS’ various outreach initiatives to increase utilization and success of HUBs, including subcontracting and attending HUB Economic Opportunity Forums and encouraging vendor participation in TRS’ Mentor-Protégé Program. Responding to a question from Mr. Kelly regarding reporting of expenditures on specialized services, Mr. Welch stated that professional fees would only be reflected as an out-of-pocket cash disbursement. Since a lot of investment fees are handled as part of the investment transactions, Mr. Welch said, they would not be reflected in the HUB report. Mr. Welch noted that certified Texas HUBs via subcontracting on contracts are also non-reportable but can be disclosed in the report.

Mr. Dobrich concluded that since the program began, TRS’ HUB percentages have gradually increased from 1.25 percent in FY 1992 up to a high point of 25.83 percent in FY 2000. He noted that the FY 2011 percentage was 18.3 percent.

After the presentation, on a motion by Ms. Sissney, seconded by Mr. Moss, the board unanimously adopted the following resolution setting the TRS HUB goals for fiscal year 2012:

Whereas, TRS employees comprising the TRS Historically Underutilized Business Committee (“TRS HUB Committee”) conferred on the 2011 HUB Program Annual Status Report to be presented to the TRS Board of Trustees (Board);

Whereas, The TRS HUB Committee developed proposed HUB goals for fiscal year 2012 for the Board to consider; and

Whereas, The Board has received and discussed the HUB expenditure reports, and the Board desires to adopt TRS’s HUB goals for fiscal year 2012; now, therefore, be it

Resolved, That the Board hereby adopts the following HUB expenditure goals for fiscal year 2012:

Category	TRS FY11 Goals	TRS FY11 Actual	TRS FY12 Goals
Special Trade	25%	22.2%	25%
Professional Services	5%	8.6%	5%
Other Services	20%	10.7%	20%
Commodity Purchases	50%	49.9%	50%

12. Review the report of the Benefits Committee on its December 8, 2011 meeting, and consider appointments to the Retirees Advisory Committee – Charlotte Clifton.

Ms. Clifton, Committee Chair, presented the following report of the Benefits Committee:

The Benefits Committee met on December 8, 2011 to receive a report on the TRS-ActiveCare pharmacy drug rebate operations audit, to consider making a recommendation for Retirees Advisory Committee (RAC) appointments, and to receive reports on various benefit services and websites statistics.

Bob Jordan and staff from Clifton Gunderson, LLP, presented an audit report on rebates certified to TRS-ActiveCare by Medco Health Solutions, the plan's pharmacy benefit manager. The report covers fiscal years 2009 and 2010. The results of the audit are positive and establish that manufacturer rebates are being processed and administered by Medco in accordance with the terms of the TRS contract with Medco.

The committee reviewed and discussed the candidate information concerning appointments to the RAC.

Based on the committee's recommendation, on a motion by Ms. Clifton, seconded by Mr. Barth, the board unanimously voted to appoint the following four individuals to four-year terms on the RAC from February 1, 2012 to January 31, 2016 in the following positions:

Donnie Breedlove for the position of retired school administrator;
Sunday McAdams for the position of active teacher;
Glenna Purcell for the position of retired teacher; and
Sarah Hobbs for the position of active auxiliary employee.

Ms. Clifton expressed her appreciation to the outgoing members of the RAC: Bill Barnes for his eight years of service, Gary Willis for his four years of service, and Elise Warrens for her eight years of service. She then provided the rest of the committee report:

Marianne Woods Wiley presented current and historical information on some of the activities of the Benefits Services Division, including benefit processing and counseling. She reported that overall benefit service production and delivery have been very good this past fiscal year.

Ms. Clifton referred board members to the information behind Tab 4 of the Benefits Committee book for additional details on those activities.

Lastly Ms. Clifton reported:

Howard Goldman presented an overview of TRS website activity during fiscal year 2011. He also reviewed current and upcoming website initiatives.

Upon completion of the report of the Benefits Committee, the board meeting was recessed at 4:54 p.m. on December 8, 2011.

The Board of Trustees of the Teacher Retirement System of Texas reconvened on December 9, 2011 at 9:03 a.m. in the boardroom located on the fifth floor of the TRS East Building offices at 1000 Red River Street, Austin, Texas. The following people were present:
Board trustees:

David Kelly, Chair
Todd Barth
Karen Charleston
Charlotte Clifton
Joe Colonna
Eric McDonald
Chris Moss
Anita Palmer
Nanette Sissney

TRS executives and staff:

Brian Guthrie, Executive Director
Ronnie Jung, Executive Liaison to the Board of Trustees
Ken Welch, Deputy Director
Amy Barrett, Chief Audit Executive
Conni Brennan, General Counsel
Howard Goldman, Director of Communications
T. Britton Harris IV, Chief Investment Officer
Jerry Albright, Deputy Chief Investment Officer
Betsey Jones, Director of Health Care Policy and Administration
Amy Morgan, Chief Information Officer
Marianne Woods Wiley, Chief Benefit Officer
Bob Jordan, Director – TRS Health & Insurance Benefits
Dan Junell, Secretary to the Board and Assistant General Counsel
L. Lynn Lau, Assistant Secretary to the Board and Program Specialist
Rebecca Merrill, Special Advisor to the Executive Director and Manager of Special Projects
Rhonda Price, Information Specialist
Jimmie Savage, Manager – Member Data Services

Sharon Toalson, Assistant to the Chief Investment Officer
Tim Wei, Assistant General Counsel

Outside counsel, consultants, contractors, representatives of associations and organizations, and others:

Steven Huff, Reinhart Boerner Van Deuren, Fiduciary Counsel
Steve Voss, Hewitt EnnisKnupp
Brady O'Connell, Hewitt EnnisKnupp
Carole Buchanan, Texas Retired Teachers Association
Leroy DeHaven, Texas Retired Teachers Association
Tim Lee, Texas Retired Teachers Association
John Grey, Texas State Teachers Association
Ted Melina Raab, Texas AFT
Ann Fickel, Texas Classroom Teachers Association
Josh Sanderson, Association of Texas Professional Educators
Adriana S. Garza, Caremark
Dana Merry, Caremark
Dave Mildenberg, Bloomberg
Don Green, Lieutenant Governor's Office
Chuck Hempstead, Texas Association of College Teachers

1. Call roll of board members.

Ms. Lau called the roll. All trustees were present

13. Review the report of the Chief Benefit Officer, and consider related matters – Marianne Woods Wiley:

A. Approve members qualified for retirement.

Ms. Woods Wiley presented the list of members and beneficiaries receiving initial benefit payments during the period from September 1, 2011 through November 30, 2011. She referred the board to the detailed list of payments made available for their review.

On a motion by Mr. Barth, seconded by Ms. Sissney, the board unanimously approved the list of members and beneficiaries who qualified for retirement, disability, DROP, PLSO, survivor, or death benefits initiated during the period from September 1, 2011 through November 30, 2011.

B. Review report of status of retired payroll.

Ms. Woods Wiley reported on the status of the aggregated retired payroll comparing the last month of fiscal year 2011 (August 2011) with September, October, and November of 2011 and a detailed monthly payroll report for November 2011.

C. Approve minutes of Medical Board meetings.

Ms. Woods Wiley presented the minutes of the July 12, 2011 and September 13, 2011 Medical Board meetings. On a motion by Ms. Sissney, seconded by Mr. Moss, the board approved the minutes of the Medical Board meetings as presented, thereby ratifying the actions of the Medical Board reflected in those minutes.

14. Review the report under § 825.314(b), Government Code, of expenditures that exceed the amount of operating expenses appropriated from the general revenue fund and are required to perform the fiduciary duties of the Board – Ken Welch.

Pursuant to section 825.314(b) of the Government Code, Mr. Welch presented a report of the expenditures paid during the month of October that were required to perform the fiduciary duties of the board. He reported the pension trust fund disbursed a total of about \$6.4 million for administrative operations, which included approximately \$3.7 million for salaries and other personnel costs. He highlighted the significant expenditure items: about \$589,194 for renewal of the Director and Officer (D&O) insurance, which was reduced from over \$780,000 from two years ago. Other significant expenditure items, he noted, were mailing of annual statements to members and postage for the TRS newsletter.

15. Review and discuss the Deputy Director's report on the following matters – Ken Welch:

A. A communications update, including a review of the TRS Report Card Tour meetings.

Mr. Welch provided an update on the TRS Report Card Tour conducted in Belton, Austin, and College Station. He expressed his appreciation to Ms. Clifton, Ms. Palmer, Ms. Charleston, Mr. Moss, Mr. Kelly, and Mr. Barth for their participation at those meetings. He noted that 161 people attended in person and over 700 participated online. He also noted that the meeting conducted in Austin included a live interactive broadcast. He stated that staff would re-assess the timing of the FY 2013 Report Card Tour to increase attendance and would continue to expand the application of the interactive webcast.

B. An update on the enrollment and use of *MyTRS*.

Mr. Welch provided an update on the use of *MyTRS*, an individual specific access web portal to communicate with TRS members and provide them self-service applications via the Internet. He stated that in November 2011, 35 percent of the employers sent out e-mails to their employees regarding *MyTRS* and 18,000 new registrations were received during the first 10 days. He stated that on December 7, 2011, 66,600 employees of the University of Texas System were notified of *MyTRS*. He stated that in January 2012, the remaining employers will be requested to forward an e-mail to their employees regarding the *MyTRS* registration. Responding to a question from Mr. Kelly, Mr. Welch stated that the registration outreach was making good progress and the goal was to achieve about 280,000 registrations. Responding to a question from Mr. Kelly, Ms. Woods Wiley stated that the call volume has not yet been reduced despite the increase of *MyTRS* registrations.

Mr. Welch recapped the plan to have an interactive session at the February 2012 meeting to accept questions via the Internet regarding DB/DC issues. He also mentioned that staff planned to add questions regarding the utilization of *MyTRS* to the annual membership telephone survey conducted by TRS Communications. Responding to a question from Mr. Kelly, Mr. Welch agreed that it would be useful to have a series of focus groups in the DB/DC discussion.

16. Review the report of the Audit Committee on its December 9, 2011 meeting – Christopher Moss.

Mr. Moss, Committee Chair, presented the following report of the Audit Committee:

The Audit Committee met on Friday, December 9, 2011. Representatives from the State Auditor's Office provided the results of the audit of TRS Comprehensive Annual Financial Report (CAFR) for the year ending August 31, 2011. TRS received an unqualified opinion, and no material weaknesses in internal controls were identified by the auditors.

A representative from State Street provided an overview of the compliance monitoring and reporting activities conducted by State Street and internal audit staff presented the results of the audit of investment compliance calculations performed by State Street.

Internal audit staff presented the results of three projects in the areas of investment policy compliance, benefit payments, and information security. They also reported on the status of outstanding recommendations.

An investment management division representative provided a report on the status of outstanding recommendations from the independent fiduciary review of investments, including derivatives, hedge fund and external managers. Internal Audit staff presented the 2011 internal audit annual report and routine quarterly reports.

17. Review and discuss the Executive Director's report on the following matters – Brian Guthrie:

- A. Personnel update, including filling the position of Chief Financial Officer.**
- B. The Board agenda development process and a possible transition to electronic Board documents.**
- C. Investment activity and operations, including payments under the performance incentive pay plan.**
- D. Enterprise Risk Management program.**
- E. Retirement plan benefits and operations.**
- F. Health-benefit programs and operations.**
- G. Administrative operations, including financial, audit, legal, and staff services and special projects.**

Mr. Kelly announced that the board would go into executive session on agenda item 17 under section 551.074 of the Government Code, including the employment and duties of the Chief Financial Officer and as necessary, to receive legal advice from the board's legal counsel under section 551.071 of the Government Code. All members of the public and staff not needed for the executive session are required to leave the meeting room. Whereupon, the open session recessed at 9:29 a.m.

The meeting was reconvened in open session at 10:30 a.m.

Mr. Guthrie provided the Executive Director's report. He announced that Mr. Don Green has been hired as the new Chief Financial Officer. He introduced Mr. Green. Mr. Green also provided a brief self-introduction.

Mr. Guthrie discussed staff realignment. He recapped the most significant topics facing the fund: funding for TRS-Care, funding of the pension fund, the defined benefits/defined contribution (DB/DC) discussion, and TEAM. He explained the importance of those topics and their significant impact on the fund. Mr. Guthrie stated that his goal was to proactively manage each of those priorities to ensure that TRS is engaged and involved in those issues and to optimize existing staff resources to address those priorities without increasing the number of FTEs. He stated that he had transferred the management of TRS-Care and TRS-ActiveCare programs from the Benefits Division to be under Betsey Jones, who has been re-designated as the Director of Health Care Policy and Administration. He stated that Ms. Jones' main responsibilities would be conducting the legislative study and identifying all of the potential options in solving the financial issues faced by TRS-Care and TRS-ActiveCare. He noted that Ms. Jones would continue overseeing the Cost Effectiveness Measurements (CEM) benchmarking study. Mr. Guthrie stated that he has also transferred Rebecca Merrill from Legal Services to the Executive Office with a new title of Special Advisor to the Executive Director and Manager of Special Projects. He stated that Ms. Merrill would continue to be the lead on agenda development and will be the chief liaison for the chair of the Policy Committee. Mr. Guthrie stated that Ms. Merrill would also lead an internal task force on the pension sustainability study, and prepare the legislative report due on September 1, 2012. In addition, he noted, additional responsibilities on some special projects, which were formerly assigned to Ms. Jones, may be transferred to Ms. Merrill as needed. Mr. Guthrie also discussed the transfer of the TEAM business analyst role from Ms. Jones to Ms. Woods Wiley in light of the needs of the role for studying all of the member benefits processes. He stated that Ms. Woods Wiley has been providing critical input to TEAM as a member of the Executive Steering Committee. He noted that the new Chief Financial Officer, Don Green, will also take up an active role on the Executive Steering Committee. Responding to a question from Mr. Kelly regarding the responsibilities of TEAM business analysts, Mr. Guthrie stated that their primary responsibility is to review the existing processes and systems in each operation area and to make recommendations on the best way to improve them in accordance with the goals of TEAM. He confirmed for Mr. Kelly that the benchmarking data for the LOB vendor will be provided timely. Mr. Welch noted that staff would utilize the study by CEM on project and system implementation as a reference for TEAM. Ms. Woods Wiley stated that the business analysts have been planning the processes and are ready to lay out the functional requirements of the LOB, which will be included in the LOB RFO. Responding to Mr. Kelly's question regarding who would succeed Mr. Guthrie to be the new leader of TEAM, Mr. Guthrie responded that Mr. Welch will lead TEAM.

Mr. Guthrie discussed the meeting agenda preparation. He stated that staff would like to re-evaluate two electronic tools previously available to trustees for accessing board agendas and materials: a password-protected web page available only to trustees to access board materials in advance of the meeting and a laptop uploaded with meeting materials provided for trustees at the board meetings. Mr. Guthrie mentioned that there are shipping and printing costs involved in providing hard-copy materials. He invited board members to provide suggestions and opinions on improving the delivery of board materials. He stated that the purpose of providing the materials electronically was intended to expedite the availability of the materials for trustees to review prior to the meeting and possibly to reduce production costs. Mr. Colonna suggested that staff consider using the DROP BOX or iCloud technology. Mr. Kelly commented that he would like to preserve the note-taking function in the materials. Mr. Barth and Ms. Sissney concurred with Mr. Kelly's comment. Ms. Palmer then shared her experience serving at another board in which the meeting materials were saved in a flash drive and mailed to the members prior to the meeting and trustees would bring the flash drive to the meeting and use it on a computer provided at the meeting. She noted that trustees were required to return the flash drive after each meeting. She also confirmed for Ms. Sissney that note-taking and highlighting functions are available in electronic format. Mr. Kelly suggested that staff present at the February meeting a proposal regarding the timeline of generating board meeting materials and the means of material delivery with cost comparison of different options. Ms. Charleston also requested that staff provide the estimated cost of printing the materials at home.

Mr. Guthrie discussed the current and proposed meeting agenda preparation process with board members. He stated that the proposed process was intended to expedite the delivery of board meeting materials. He stated that the requirements under the Open Meetings Act is to post the agenda seven full days prior to the meeting and the current process for delivering meeting materials to board members typically takes about seven to nine days. The proposed timeline will expedite the delivery to be 14 days prior to the meeting except for time-sensitive items. He stated that the proposal is to move the deadline for internal management review from ten days to 21 days prior to the meeting. Concerning agenda preparation, he stated that staff is planning to provide the proposed agendas for upcoming meetings to the board in advance in order to keep the process proactive. After Mr. Guthrie's presentation, Mr. Harris noted the considerable amount of time and effort required to produce board materials and staff would need to reorganize their time and effort in order to expedite the process accordingly.

18. Review the report of the General Counsel on pending or contemplated litigation and responding to subpoenas, including updates on the following litigation matters: the Bank of America securities class action; the Countrywide securities litigation; other securities litigation, including class actions; and litigation involving benefit-program contributions, retirement benefits, health-benefit programs, and open records – Conni Brennan

Ms. Brennan introduced the staff attorneys who would present the pending or contemplated litigation to the board in the closed session: Dennis Gold, Tim Wei, Rebecca Smith, and Dan Junell. Ms. Brennan presented a memo, which provides an overview of three basic types of litigation that usually appear in the litigation report: securities litigation, open records litigation, and benefits matter litigation. She explained what kind of claims security litigation involve and the options TRS has in realizing on those claims, including filing a claim as a class member, participating in a securities class action as a lead plaintiff, and pursue a

separate “opt-out” lawsuit. As those claims are treated as trust assets, she said, staff will pursue recovery in an efficient and cost-effective manner. Ms. Brennan discussed the administration and processing of securities class action claims. From January 1, 2011 through October 31, 2011, she stated that staff determined that TRS had class-period transactions in 265 out of 727 potential new claims. During the same time period, she stated that staff had also recovered a total of about \$8 million for the fund. She stated that being a lead plaintiff had never been TRS’ focus and so far TRS had opted to be a lead plaintiff only once. She noted that studies had shown that, when a large investor such as TRS is involved as a lead plaintiff, the recoveries are generally greater and the attorneys’ fees are reduced.

Ms. Brennan explained the opt-out option. She stated that TRS engages two law firms to assist in monitoring the securities cases and recommending the best option for those cases. She explained the reasons for choosing to opt out. Ms. Brennan also addressed the difficulty in bringing claims on transactions made through a foreign exchange after the Supreme Court’s decision in the Morrison case in 2010. She stated that those claims had to be brought in a foreign court, and TRS faced different laws and procedures for securities fraud actions. Ms. Brennan stated that staff had started to develop relationships abroad and with American firms that can assist TRS with cases outside the U.S.

Ms. Brennan provided an overview of the open records litigation and benefits matter litigation. She stated that when TRS is concerned by the ruling of the Attorney General (AG) on disclosing certain information requested by the public, the Public Information Act (the “Act”) allows TRS to file a suit against the AG to have a court review the matter. She also discussed benefits litigation. She noted an increase in the number of suits to garnish the pension benefits of criminal defendants or the spouses of criminal defendants who owe the restitution. She stated that the U.S. Department of Justice is authorized to enforce restitution for certain crimes. Ms. Brennan explained that TRS’ role is not to challenge the judgment for criminal restitution but to ensure that the order authorizing the garnishment of TRS pension funds to enforce restitution is in compliance with the Federal Debt Collection Procedures Act and with the terms of the TRS pension plan. Finally, Ms. Brennan noted the considerable amount of activity going on in the TRS Legal department involving subpoenas.

Before the board went into closed session, Ms. Brennan responded to Mr. Barth’s reminder that he will need to recuse himself if the Bank of America (BoA) litigation is discussed. Ms. Brennan suggested that the BoA litigation be taken up at the end of the closed session so that Mr. Barth can recuse himself then and leave the closed session. Mr. Barth then disclosed that his sister-in-law works for Merrill Lynch, which is owned by BoA. To avoid any potential conflict, he stated that he will recuse himself from any discussions about BoA. Responding to a question from Mr. Kelly, Ms. Brennan stated that staff interpreted the connection Mr. Barth had with BoA as an appearance issue rather than an actual conflict of interest.

Mr. Kelly announced that the board would go into executive session on agenda items 18 and 19 under the Texas Open Meetings Act and to receive legal advice from the board’s legal counsel under section 551.071 of the Government Code. All members of the public and staff not needed for the executive session are required to leave the meeting room at this time.

Whereupon, the open session recessed at 11:35 a.m.

The meeting was reconvened in open session and adjourned at 12:15 p.m.

SIGNED: _____ ATTEST: _____
Chairman, Board of Trustees Executive Director
Teacher Retirement System of Texas Teacher Retirement System of Texas

A P O L L O

***Teacher Retirement System of Texas Board Presentation – February
15th, 2012***

The information in this document is presented as of September 30, 2011, unless otherwise noted. It should not be assumed that investments made in the future will be profitable or will equal the performance of the investments in this document. One-on-one presentation. This presentation is distributed by Apollo Global Securities, LLC (“AGS”), a broker dealer registered with the US Securities and Exchange Commission and a member of FINRA. Not for distribution, in whole or in part, without the express consent of Apollo Global Management, LLC.

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Unless otherwise noted, information included herein is presented as of the dates indicated and may differ from the terms and provisions respecting an investment in the Funds which will be more fully set forth in the relevant PPM and the applicable corresponding limited partnership agreements or such other applicable constituent governing documentation of the Funds. This presentation is not complete and the information contained herein may change at any time without notice. Apollo does not have any responsibility to update the presentation to account for such changes.

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Information contained herein may include information respecting prior investment performance of one or more Funds or investments including gross and/or net internal rates of return (“IRRs”). Information respecting prior performance, while a useful tool in evaluating the Fund’s investment activities, is not necessarily indicative of actual results that may be achieved for unrealized investments. The realization of such performance is dependent upon many factors, many of which are beyond the control of Apollo. Further, there can be no assurance that the indicated valuations for unrealized investments accurately reflect the amounts for which the subject investments could be sold. Unless otherwise noted, all IRR amounts described herein are calculated as of the dates indicated. Gross IRRs are computed prior to management fees, carried interest and expenses; net IRRs give effect to management fees, carried interest and expenses.

Past performance is not indicative nor a guarantee of future returns. Investment losses may occur.

Certain information contained herein may be “forward-looking” in nature. Due to various risks and uncertainties, actual events or results or the actual performance of a Fund may differ materially from those reflected or contemplated in such forward-looking information. As such, undue reliance should not be placed on such information. Forward-looking statements may be identified by the use of terminology including, but not limited to, “may”, “will”, “should”, “expect”, “anticipate”, “target”, “project”, “estimate”, “intend”, “continue” or “believe” or the negatives thereof or other variations thereon or comparable terminology.

Additional information may be available upon request.

Apollo Management Overview

- Founded in 1990 by Leon Black, Josh Harris and Marc Rowan
- Apollo is a contrarian, value-oriented investor with the ability to invest in all economic environments
- We have approximately \$65.1 billion of assets under management⁽¹⁾
- Integrated *private equity*, *capital markets*, and *real estate* investment platform with significant experience in *commodities/natural resources*
- Longstanding credit expertise and ability to execute creative and difficult transactions
- Our Managing Partners have worked together for more than 20 years
- Approximately 188 investment professionals and 540 total employees⁽¹⁾ located in New York, Los Angeles, London, Singapore, Frankfurt, Luxembourg, Hong Kong and Mumbai



(1) As of September 30, 2011. Includes offices of Apollo Global Management, LLC and its subsidiaries.

Apollo Global Platform

Apollo Global Management, LLC

➤ *Since 1990 Apollo has operated an open platform investing across the capital structure*

Private Equity

Traditional buyouts
 Distressed buyouts & debt investments
 Corporate partner buyouts
Most Recent Fund VII: \$14.7 billion of committed capital

AUM: \$34.8 billion⁽¹⁾

Capital Markets

Senior credit funds
 Mezzanine funds
 Distressed & event-driven hedge funds
 Non-performing loan fund

AUM: \$22.4 billion⁽¹⁾⁽²⁾

➤ *More recently, Apollo has integrated Real Estate and Natural Resources into its platform*

Real Estate

Private equity investments in distressed debt and equity recapitalization transactions
 CMBS and commercial mortgage funds and separate accounts

AUM: \$7.9 billion⁽¹⁾

Natural Resources

Global private equity in metals and mining, energy and select other natural resources sub-sectors

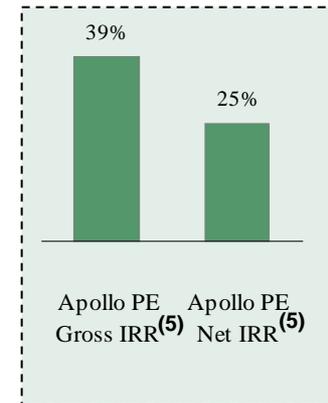
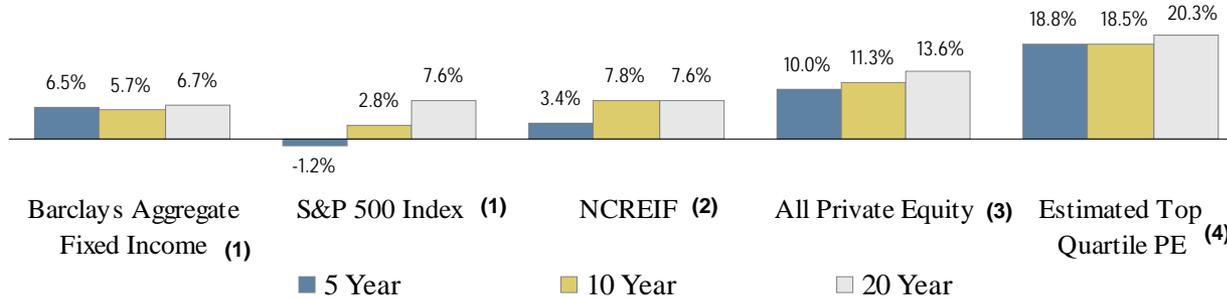
AAA/Strategic Investment Accounts – Generally invests in or alongside certain Apollo funds and other Apollo-sponsored transactions

(1) Data as of September 30, 2011. The chart does not reflect legal entities or assets managed by former affiliates.

(2) Includes three funds that are denominated in Euros and translated into U.S. dollars at an exchange rate of €1.00 to \$1.34 as of September 30, 2011.

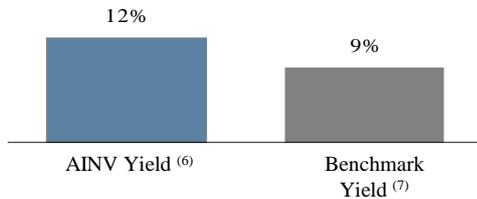
We Have Performed Well over a Long Period of Time

Historical Returns for Selected Asset Classes



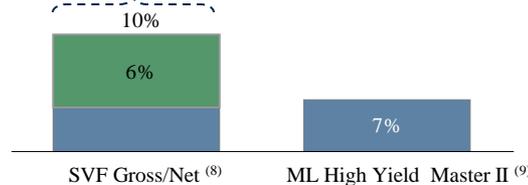
Mezzanine

AINV Subordinated Debt Portfolio

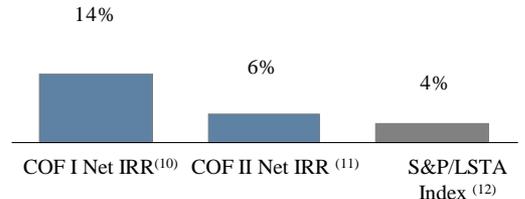


Non-Control Distressed

SVF Annualized Since Inception



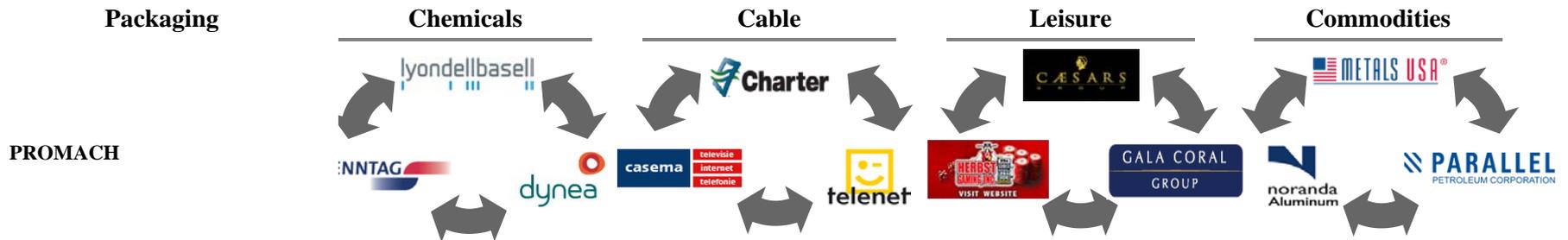
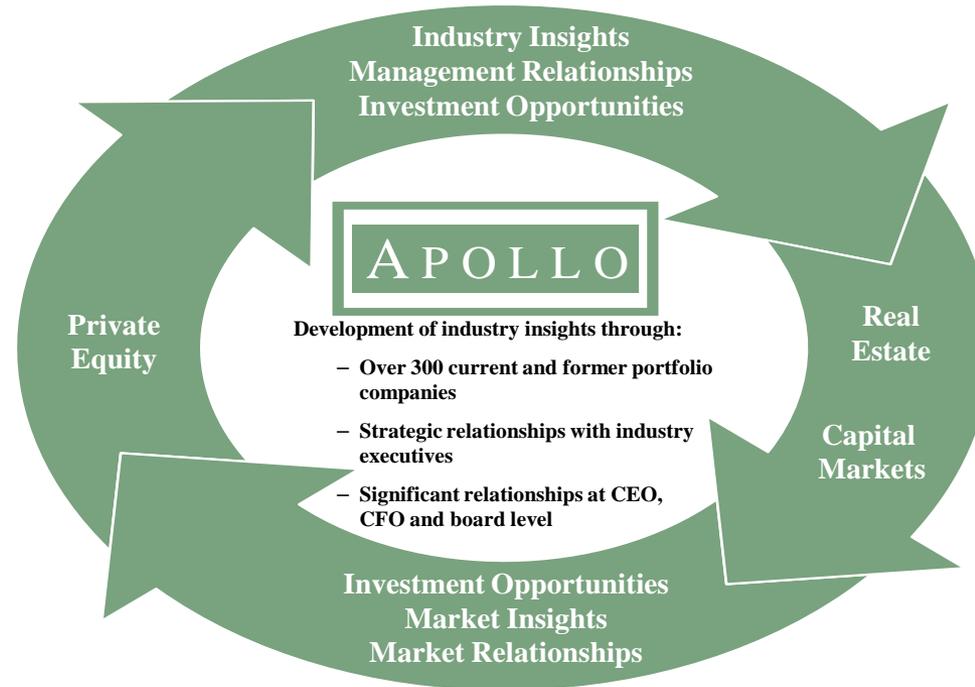
Levered Loans



Note: Past performance is not indicative of future results. (1) Data as of September 30, 2011. See slide 21 for an "Important Note Regarding the Use of Indices in this Presentation." (2) National Council of Real Estate Investment Fiduciaries ("NCREIF") as of September 30, 2011. (3) Cambridge Associates LLC U.S. Private Equity Index and Benchmark Statistics, June 30, 2011, the most recent data available. Returns represent End-to-End Pooled Mean Net to Limited Partners (net of fees, expenses and carried interest) for all U.S. Private Equity. (4) Cambridge Associates LLC U.S. Private Equity Index and Benchmark Statistics, June 30, 2011, the most recent data available. Estimated Top Quartile PE numbers are calculated by taking the 5 year, 10 year and 20 year return metrics as described above and adding the average of the delta between Top Quartile IRRs and the Pooled Mean Net to Limited Partners for each vintage year in the selected timeframe. (5) Represents returns of all Apollo Private Equity funds since inception in 1990 through September 30, 2011. (6) Represents weighted average yield of AINV's subordinated debt portfolio as of September 30, 2011. Does not account for realized and unrealized losses, the effect of management fees, incentive compensation, certain expenses and taxes. (7) Represents current yield as of September 30, 2011 of the average of the Bank of America Merrill Lynch US High Yield CCC and Lower Rated index and the Bank of America Merrill Lynch US High Yield B rated index, both subsets of the ML High Yield Master II index. (8) SVF returns are inclusive of Apollo Strategic Value Master Fund, L.P. (which is comprised of Apollo Strategic Value Fund, L.P. and Apollo Strategic Value Offshore Fund, Ltd.), but exclude memorandum account assets. Represents returns of SVF on an annualized basis since inception in June 1, 2006 through September 30, 2011. (9) Represents returns for most applicable benchmark to SVF, Merrill Lynch High Yield Master II, on an annualized basis from June 1, 2006 through September 30, 2011. (10) Represents COF I net IRRs from inception in April 2008 through September 30, 2011. (11) Represents COF II net IRRs from inception in April 2008 through September 30, 2011. (12) Represents annualized returns for the S&P/LSTA Index for inception to date performance for the COF funds.

Integrated Platform of Information

➤ Apollo's fully integrated business model creates knowledge sharing and idea generation that is shared by each business platform



Note: The listed companies are a sample of Apollo private equity and capital markets investments across certain core industries. The list was compiled based on non-performance criteria. It contains companies which are not currently held in any Apollo portfolio. There can be no guarantees that any similar investment opportunities will be available or pursued by Apollo in the future.

Apollo Has a Flexible Investment Mandate

	Recession 1990 - 1993	Recovery 1994 - 1997	Expansion 1998 - 2000	Recession 2001 - 2003 3Q	Recovery 2003 4Q - 2005	Expansion 2006 - 2007 2Q	Recession 3Q07 - Current
Liquidity	Low	High	High	Low	High	High	Low
Valuation	Low	Low-Medium	High	Low	Medium	Medium-High	Low
Typical private equity firm	Inactive	Active	Inactive or paid high prices	Inactive	Active and paid high prices	Active and paid high prices	Inactive
Apollo	Focus on distressed buyout option	Traditional buyouts	Seeks to reduce acquisition price through complex buyouts and corporate partners	Focus on distressed buyout option	Traditional buyouts using industry expertise to reduce acquisition price	Seeks to reduce acquisition price through complex buyouts and corporate partners	Focus on distressed investments, strategic acquisitions and creative structures
Apollo's traditional and corporate partner buyouts ⁽¹⁾	\$490	\$1,297	\$3,107	\$596	\$2,393	\$5,845	\$6,516⁽²⁾
Apollo's distressed buyouts and debt investments ⁽¹⁾	\$2,907	\$113	\$50	\$1,025	\$846	\$3	\$11,471⁽²⁾
	Funds I, II and MIA 47% gross/ 37% net IRRs			Fund V 61% gross/ 45% net IRRs			Fund VII 23% gross/ 15% net IRRs

Note: Characterization of economic cycles is based on our management's views. Past performance is not indicative of future results. Please see important information regarding internal rates of returns ("IRR") on slide 2.

(1) Dollars in millions. Amounts set forth above represent capital invested by our private equity business.

(2) Amounts are through September 30, 2011.

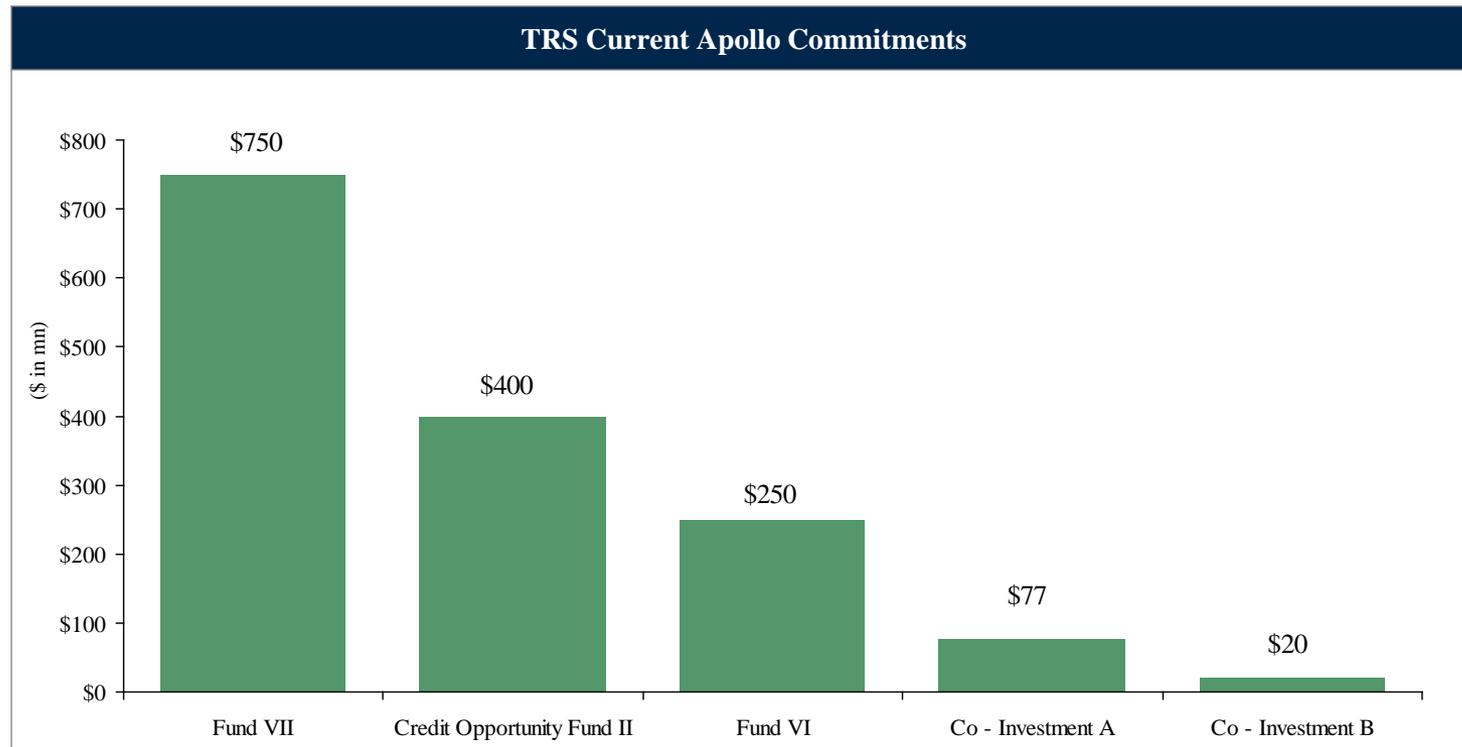
Apollo's Core Industry Expertise

Chemicals	Consumer & Retail	Distribution & Transportation	Financial & Business Services	Manufacturing & Industrial	Media, Cable & Leisure	Packaging & Materials	Satellite & Wireless	Commodities

Note: The listed companies are a sample of Apollo private equity and capital markets investments across certain core industries. The list was compiled based on non-performance criteria. It contains companies which are not currently held in any Apollo portfolio. There can be no guarantees that any similar investment opportunities will be available or pursued by Apollo in the future.

Teacher Retirement System of Texas' Apollo Allocations

- TRS has invested approximately \$1.5 billion with Apollo as of September 30, 2011

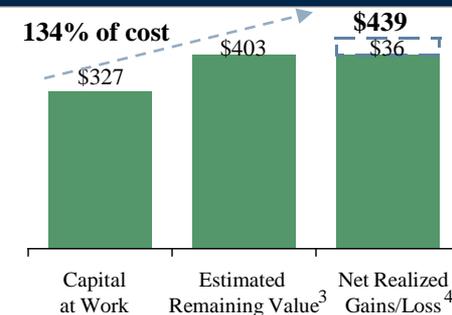
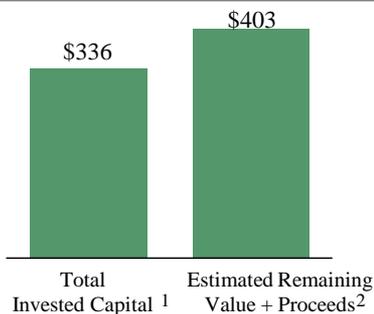


Performance Overview

Fund VII

Fund Overview

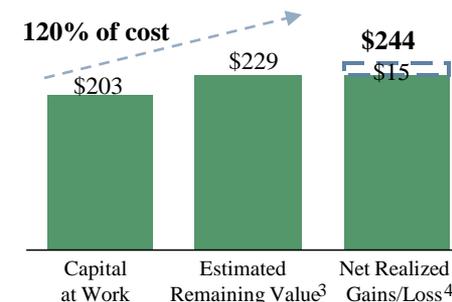
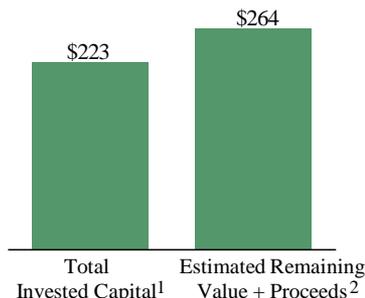
- Vintage: 2008
- Fund Size: \$14.7 billion
- TRS Commitment: \$750 million
- Net IRR: 14.6%



Fund VI

Fund Overview

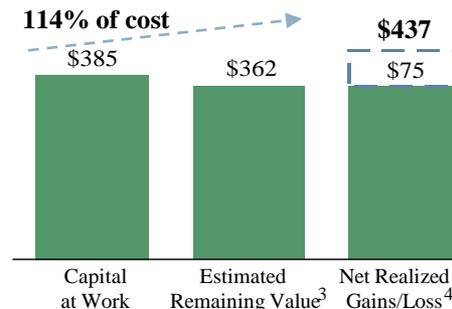
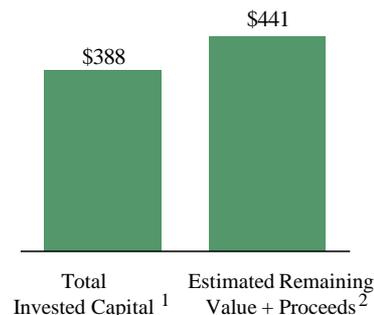
- Vintage: 2006
- Fund Size: \$10.1 billion
- TRS Commitment: \$250 million
- Net IRR: 4.7%



COF II

Fund Overview

- Vintage: 2008
- Fund Size: \$1.6 billion
- TRS Commitment: \$400 million
- Net IRR: 5%



Expected Benefits of Establishing Strategic Partnership

Expected Benefits to Teacher Retirement System of Texas (“TRS”)

- **Customized structure** with downside protection and **enhanced economics**
- **Tailored portfolio** across Apollo’s integrated platform
- Enhanced **flexibility** and streamlined process we believe enables TRS to be **more opportunistic** than most pension plans
- **First-hand access** to investment process and approach which will help SPN evaluate risk/reward across the TRS portfolio
- **Senior-level dialogue** that generates cross-platform communication with respect to TRS and Apollo
- **Insight from four broad sectors** of the economy we believe will enable TRS to implement a consistent and informed view of risk/reward
- Opportunity for investment education through rotational **training programs** where TRS employees work within Apollo offices

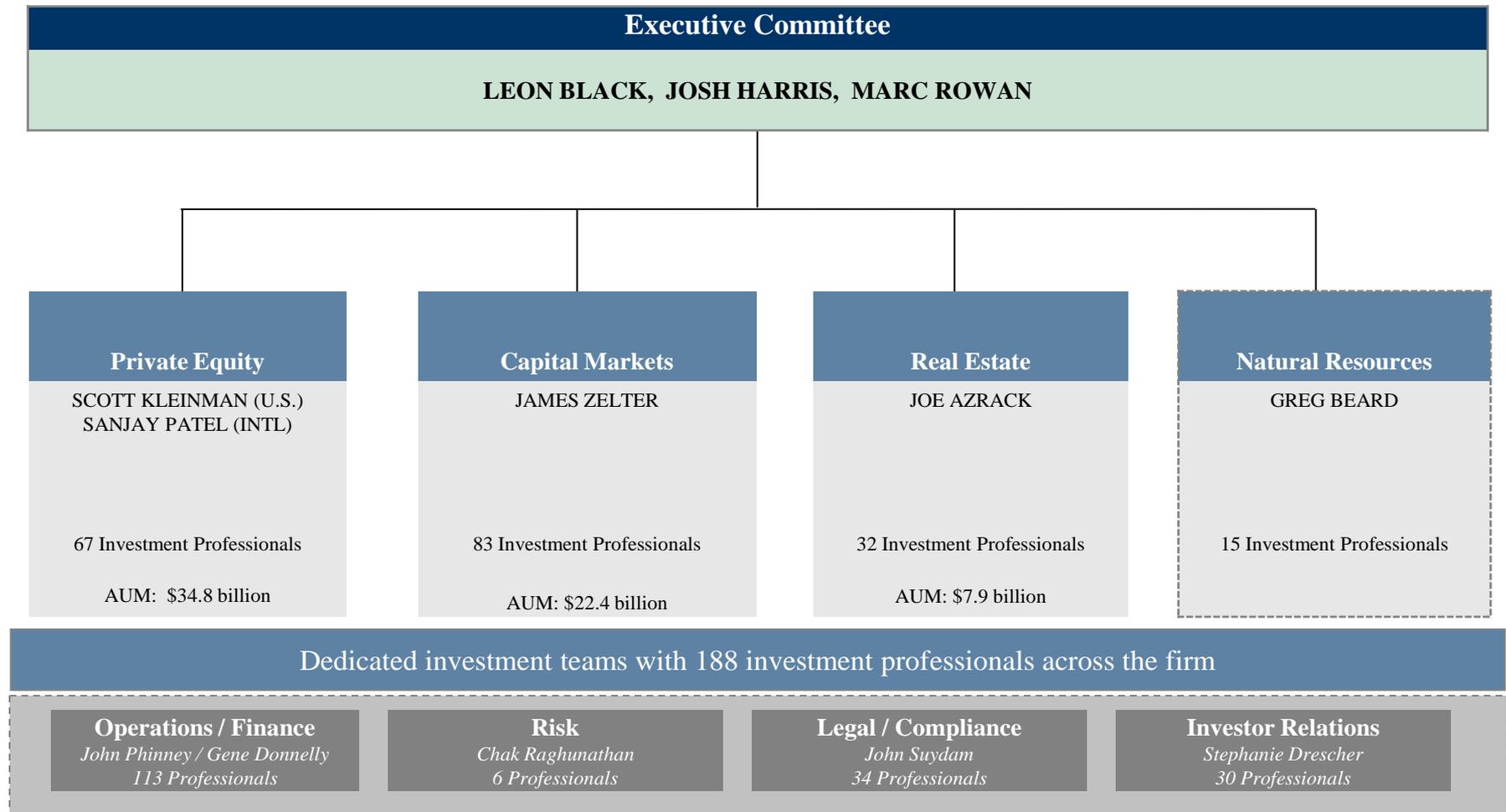
Formalized Strategic Partnership



Expected Benefits to Apollo

- Partnership with a **leading LP** that provides insights into the changing investment landscape
- **Scale and duration** of capital that can be leveraged in securing opportunities or driving term negotiations
- **Access to TRS' people and culture**, enabling us to learn how we can better meet the needs of our most significant investors
- **Appreciation of the thought process** and responsibilities focused on fiduciary returns to maximize value for pensioners
- A partner that **shares many of our cultural traits** such as a commitment to integrity, work ethic, opportunity and transparency

Ability to Leverage Apollo's Global Platform



As of September 30, 2011.

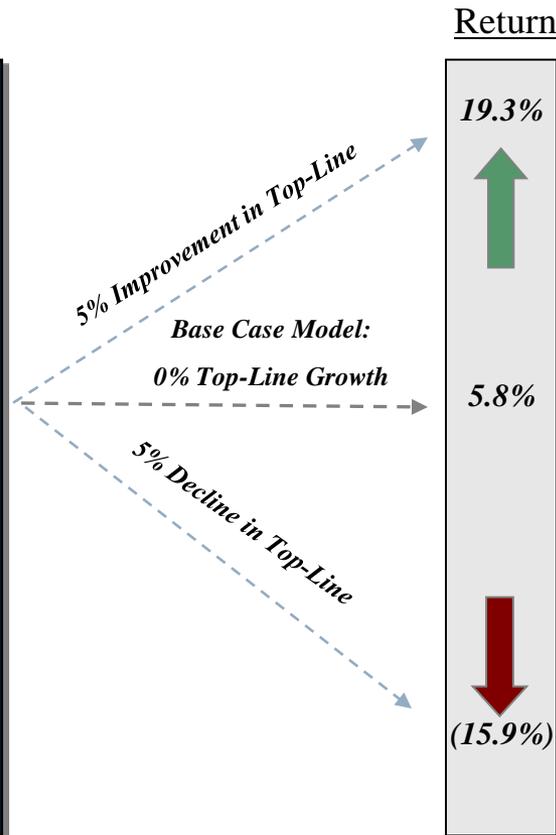
Note: Certain of Apollo's Private Equity investment professionals are utilized within our Natural Resources business; thus, the sum by business unit exceeds the total number of investment professionals for the firm.

Typical Leveraged Buyouts Don't Work in a Volatile Market

- In an uncertain economic environment, we do not believe that putting equity at the bottom of a capital structure makes much sense

Typical LBO Assumptions

- Implied EV/LTM EBITDA entry multiple of **8x**
 - No multiple expansion
 - **5 year** hold period
- Transaction Enterprise Value of **\$1 billion**
- Transaction financed with **70% leverage**
- Cost of debt: **9%**
- Entry Free Cash Flow multiple of **11x**
- **Constant margins**
 - EBITDA: 20%
 - CapEx: 5.5%



Apollo Approach: Invest Differently

- *Hedged Natural Resources*
- *Europe*
- *Distressed / Idiosyncratic Investments*
- *Emerging Market Credit*
 - *India*
- *Opportunistic Real Estate*
 - *US*
 - *Asia*

Notes on Portfolio Performance Calculations

An Important Note Regarding the Use of Indices in this Presentation

The indices used herein are included for illustrative purposes only and have limitations when used for comparison or other purposes due to, among other matters, volatility, credit or other material characteristics (such as number and types of securities) that are different from the Fund. It may not be possible to directly invest in one or more of these indices and the holdings of the Fund may differ markedly from the holdings of each index to which an Apollo Fund's performance is compared in terms of levels of diversification, types of securities or assets represented and other significant factors. Indices are unmanaged, do not charge any fees or expenses, assume reinvestment of income and do not employ special investment techniques such as leveraging or short selling. Accordingly, comparing any Apollo Fund's results to the indices may be of limited use.

- The Barclays Aggregate Bond Index is a broad-base market capitalization-weighted index representing most U.S. traded investment grade bonds.
- The S&P Index is composed of the 500 leading companies in leading industries of the U.S. economy, capturing 75% coverage of U.S. equities.
- The NCREIF Property Index is a quarterly time series composite total rate of return measure of investment performance of a very large pool of individual commercial real estate properties acquired in the private market for investment purposes only.
- The Merrill Lynch US High Yield Master II Index is a commonly used benchmark index for high yield corporate bonds.
- The S&P/LSTA U.S. Leveraged Loan 100 Index is designed to reflect the largest facilities in the leveraged loan market. It mirrors the market-weighted performance of the largest institutional leveraged loans based upon market weightings, spreads, and interest payments.

An investment in a Fund entails substantial risks, including, but not limited to, those listed below. Prospective investors should carefully consider the following summary of risk factors and carefully read the applicable Fund's PPM for additional risk factors in determining whether an investment in a Fund is suitable:

- **Potential loss of investment** – No guarantee or representation is made that a Fund's investment program will be successful. An investment in a Fund is speculative and involves a high degree of risk. Investors must have the financial ability, sophistication/experience and willingness to bear the risks of an investment in a Fund. An investment in a Fund is not suitable for all investors. Investors could lose part or all of an investment and the Fund may incur losses in markets where major indices are rising and falling. Only qualified eligible investors may invest in a Fund. Results may be volatile. Accordingly, investors should understand that past performance is not indicative nor a guarantee of future results.
- **Use of leverage** – A Fund may utilize leverage and may also invest in forward contracts, options, swaps and over-the-counter derivative instruments, among others. Like other leveraged investments, trading in these securities may result in losses in excess of the amount invested.
- **Regulatory risk** – The Funds are not registered under the Investment Company Act of 1940. As a result, investors will not receive the protections of the Investment Company Act afforded to investors in registered investment companies (e.g., "mutual funds"). The Funds' offering documents are not reviewed or approved by federal or state regulators and the Funds' privately placed interests are not federally or state registered. In addition, the Funds may engage in trading on non-U.S. exchanges and markets. These markets and exchanges may exercise less regulatory oversight and supervision over transactions and participants in transactions.
- **Valuations** – The net asset value of a Fund may be determined by its manager, adviser or general partner, as applicable, or based on information reported from underlying portfolio companies. Certain portfolio assets may be illiquid and without a readily ascertainable market value. Valuations of portfolio companies may be difficult to verify.
- Valuations for unrealized investments have many inherent limitations. Unlike actual performance, it does not represent actual realization events. Since realization events have not actually occurred, results may under-compensate or over-compensate for the impact, if any, of certain market factors, such as lack of liquidity, and may not reflect the impact that certain economic or market factors may have on the realization events. Actual performance may differ substantially from the unrealized values presented. These differences may be due to different cash flows, expenses, performance calculation methods, size and composition, strategy constraints, and other factors. There can be no assurance that a Fund or any investment will achieve profits or avoid incurring substantial losses.
- **Fees and expenses** – The Funds are subject to substantial charges for management, performance and other fees regardless of whether a Fund has a positive return. Please refer to the applicable Fund's PPM for a more complete description of risks and a comprehensive description of expenses to be charged to that Fund.
- **Lack of operating history** – The Funds have little or no operating history.
- **Reliance on key persons** – Apollo and/or its affiliates have total trading authority over the Funds and may be subject to various conflicts of interest. The death, disability or departure of certain individuals affiliated with Apollo may have a material effect on the Funds.
- **Concentration** – The Funds may hold only a limited number of investments, which could mean a lack of diversification and higher risk.
- **Counterparty and bankruptcy risk** – Although Apollo will attempt to limit its transactions to counterparties which are established, well-capitalized and creditworthy, the Funds may be subject to the risk of the inability of counterparties to perform with respect to transactions, whether due to insolvency, bankruptcy or other causes, which could subject the Funds to substantial losses.
- **Limited liquidity** – Investments in the Funds are illiquid and there are significant restrictions on transferring interests in the Funds. No secondary public market for the sale of the Funds' interests exists, nor is one likely or expected to develop. In addition, interests will not be freely transferable.
- **Tax risks** – Investors in the Funds are subject to pass-through tax treatment of their investment. Since profits generally will be reinvested in the Funds rather than distributed to investors, investors may incur tax liabilities during a year in which they have not received a distribution of any cash from the Funds.
- **Possible Delays in Reporting Tax Information** – Each Fund's investment strategy may cause delays in important tax information being sent to investors.
- **Volatile markets** – Market prices are difficult to predict and are influenced by many factors, including: changes in interest rates, weather conditions, government intervention and changes in national and international political and economic events.

KKR Introduction

February 2012

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References to “assets under management” or “AUM” represent the assets as to which KKR is entitled to receive a fee or carried interest. KKR’s calculation of AUM may differ from the calculations of other asset managers and, as a result, KKR’s measurements of its AUM may not be comparable to similar measures presented by other asset managers. KKR’s definition of AUM is not based on any definition of AUM that is set forth in the agreements governing its private funds or any KKR products or calculated pursuant to any regulatory requirements.

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References in this presentation to “Gross IRR” and references to “Gross MOIC” or “gross multiple” are to the internal rate of return or multiple of invested capital, respectively, calculated at investment level, and thus do not take into consideration the payment of applicable management fees, carried interest, transaction costs, and other expenses borne by the relevant KKR Product, which will have a material impact on returns. In the case of unrealized investments, the gross returns are based on internal valuations by KKR of unrealized investments as of the applicable date. The actual realized returns on such unrealized investments will depend on, among other factors, future operating results, the value of the assets, and market conditions at the time of disposition, any related transaction costs, and the timing and manner of sale, all of which may differ from the assumptions on which the valuations used in the prior performance data contained herein are based. Accordingly, the actual realized return of these unrealized investments may differ materially from the returns indicated herein. References to “Net IRR” and references to “Net MOIC” or “net multiple” are to the internal rate of return or multiple of invested capital, respectively, calculated at fund level, after payment of applicable management fees and carried interest and other applicable expenses; however, where net returns and net multiples are shown at the investment level, net returns and net multiples are before management fees, as management fees are applied only at the fund level. Internal rates of return are computed on a “dollar-weighted” basis, which takes into account the timing of cash flows, the amounts invested at any given time, and unrealized values as of the relevant valuation date. Multiples of invested capital referred to in this presentation have been calculated based on figures for the cost and total value of KKR fund investments that have been rounded to the nearest \$100,000.

Existing KKR private equity funds may temporarily provide debt or equity financing to companies to facilitate permanent investments therein by such fund (otherwise known as “Bridge Financing”). The principal amount of a Bridge Financing returned within 18 months is considered “recyclable capital” which is restored to the unused commitments of the investors in the relevant fund, and the interest paid thereon is distributed pro rata. If a Bridge Financing is not refunded within 18 months, it is considered to be a permanent investment in the company from the date of the original investment. In addition, commencing with KKR European Fund II, any portion of a permanent investment returned within 13 months is considered “recyclable capital” and is restored to the unused commitments of the investors in the relevant fund. For the purposes of calculating the internal rates of return and multiples of invested capital herein, “recyclable capital” (both principal repaid for Bridge Financings and permanent investments returned with 13 months) and any related interest income has been disregarded.

In some cases, performance shown in this presentation is compared to the performance of the S&P 500 and/or Russell 3000 broad-based securities indices. The market indices returns assume that dividends are reinvested and that on the day a portfolio investment is made, a hypothetical investment in a matching amount is made in the given index. For each date on which either a portion or all of the portfolio investment is sold, a hypothetical index multiple (factor) is calculated by comparing the change in index value between the two dates. The cost of the investment sold (or portion of cost sold) is multiplied by this factor, resulting in a hypothetical index value. The return is calculated using these dates of investment and hypothetical value(s) generated. Broad-based securities indices are unmanaged and are not subject to fees and expenses typically associated with investment funds.

Investments cannot be made directly in a broad-based securities index. The risk/return profile of the S&P 500 and Russell 3000 are materially different from those of the Fund and any other KKR Product, and an investment in the Fund is not comparable to an investment in the securities that comprise the S&P 500 or Russell 3000 indices. The S&P 500 and Russell 3000 are not used or selected by KKR as an appropriate benchmark to compare relative performance of any KKR Product, but rather are included herein solely because they are well-known and widely-recognized indices. Investors should be aware that private equity funds such as the Fund may incur losses both when major indices are rising and when they are falling.

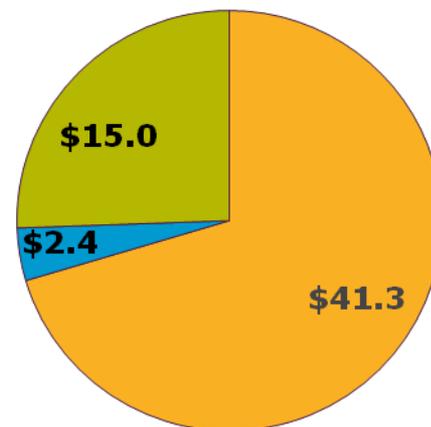
Who Are We?

Established in 1976, Kohlberg Kravis Roberts & Co. L.P. ("KKR") is a leading global investment firm with industry-leading investment experience, in-depth industry knowledge, sophisticated processes for growing and improving businesses, and a strong culture committed to teamwork

- ➔ **Leading investment firm**
*Private Equity, Infrastructure & Natural Resources,
Credit & Mezzanine, Public Equities, Real Estate*
- ➔ **Global presence**
Offices in 14 major cities in 9 countries across 4 continents
- ➔ **"One-firm" culture that evolves, learns, and innovates**
Adaptive to change
- ➔ **Relationship-driven approach**
*Sourcing investment opportunities
Partnering with clients*
- ➔ **Aligned with our partners**
*"Eat our own cooking"
Economic incentives driven by results
Focused on managing stakeholder interests*

Assets Under Management

*As of September 30, 2011
(\$ in billions)*



■ Private Equity ■ KNR/Infrastructure ■ Credit

Note: Please see "Important Information" for a description of Assets Under Management calculation.

KKR

KKR's Investment Strategies and Capabilities

KKR Products, Strategies and Investment Options

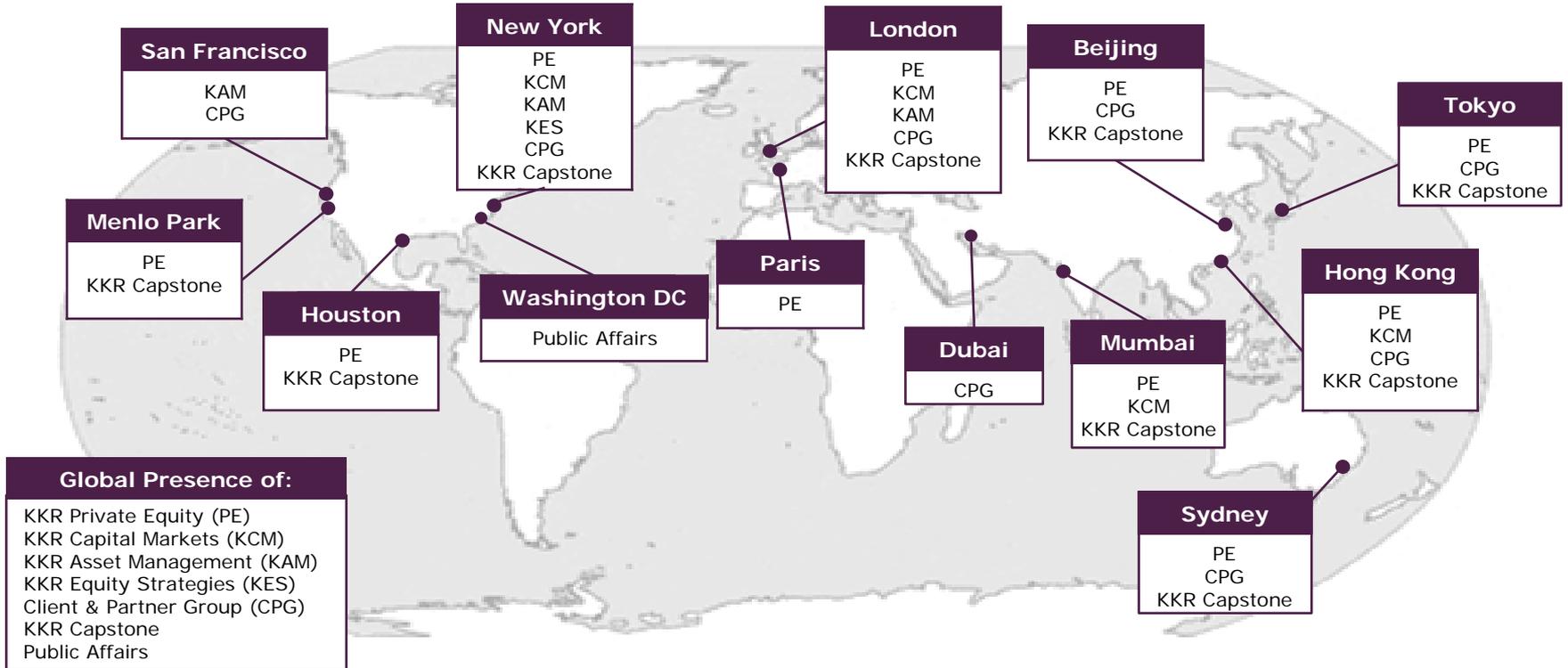
Private Markets Products and Strategies	Public Markets Products and Strategies	
Global Private Equity North America, Europe, Asia, China Growth	Bank Loans	High Yield
Global Infrastructure	Mezzanine	Opportunistic Credit
Natural Resources	Special Situations	Direct Lending
Real Estate	Public Equities	

Additional KKR Teams and Capabilities

KKR Capstone <i>Accelerates operational change in KKR's portfolio companies and creates significant additional value for our investments</i>	KKR Capital Markets <i>Facilitates and adds expertise around investment structuring, financing and all capital markets-related issues</i>
Client and Partner Group <i>Develops and services KKR's global network of investors and clients</i>	Stakeholder Management <i>Navigates increasingly complex issues around increased attention, regulation and scrutiny from governments and stakeholders</i>

Our Global Presence

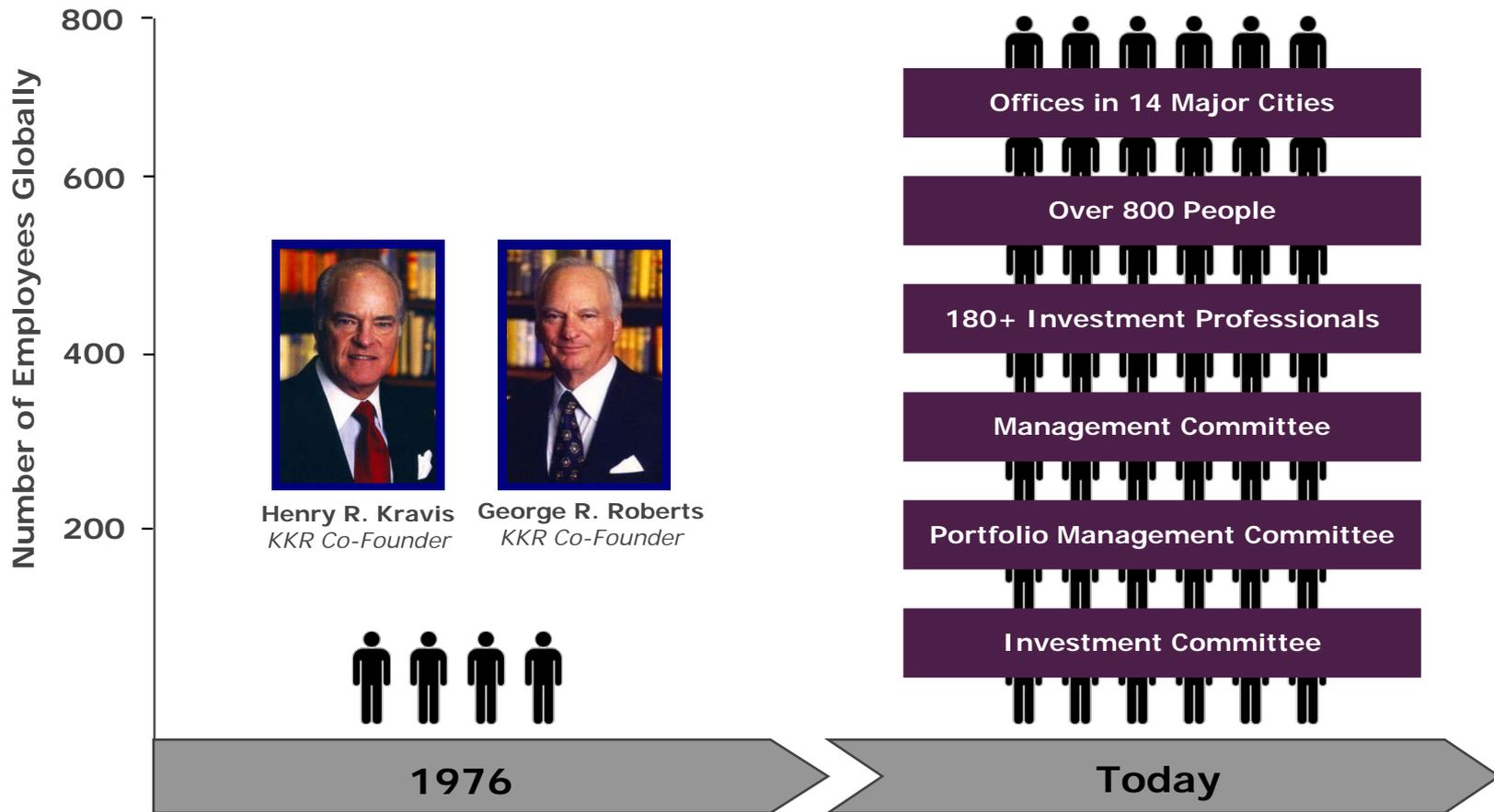
- ➔ Over 300 executives around the globe
 - ~150 in private equity
 - ~60 in credit, mezzanine and equity strategies
 - ~80 in capital markets and client service
 - ~60 operations executives in KKR Capstone



Note: PE designation includes private equity, infrastructure, and natural resources executives.

A Growing Institution

While KKR maintains the strength of a “founder culture,” we have grown with a focus on creating a lasting institution. We are proud to have a deep bench of experienced leaders and investors.



KKR Current Global Private Equity Portfolio⁽¹⁾

- Strong portfolio of high quality franchises across all active private equity funds
 - 74 portfolio companies currently held in our private equity funds with more than \$210 billion of annual revenues and nearly 900,000 employees
 - Well diversified by industry and geography

North America



Europe



Asia



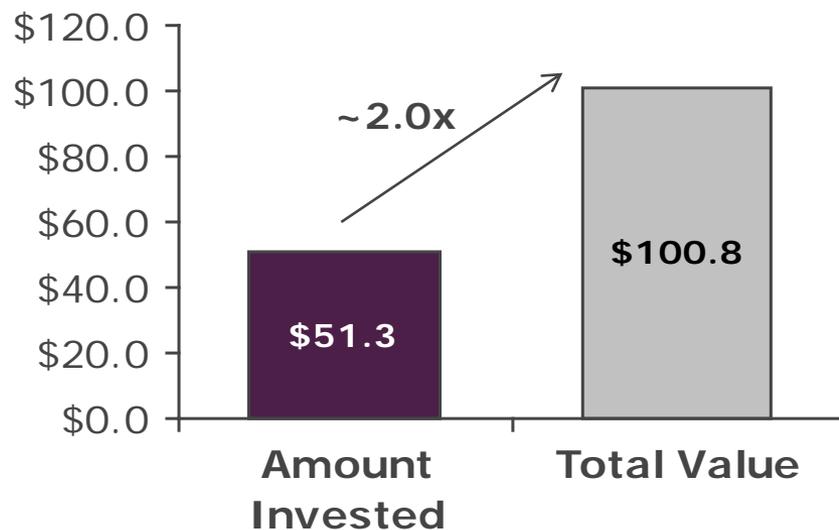
Note: The specific companies identified are not representative of all of the companies in KKR's current or historical North American private equity portfolio, and it should not be assumed that an investment in the companies identified was or will be profitable. At the time of investment and currently from a KKR monitoring standpoint, Aricent and Avago are classified as North American investments based on specific criteria; given the companies however have significant operations in Asia we also include the companies in our Asian private equity portfolio.

(1) As of September 30, 2011. Excludes transactions closed after that date. Hilcorp and Texas Crude were exited post September 30, 2011.

KKR Private Equity Composite Track Record

As of September 30, 2011, \$ in billions

KKR has a 35-year track record of investing in private equity, having completed over 200 transactions with approximately \$455 billion of total enterprise value in 25 industries



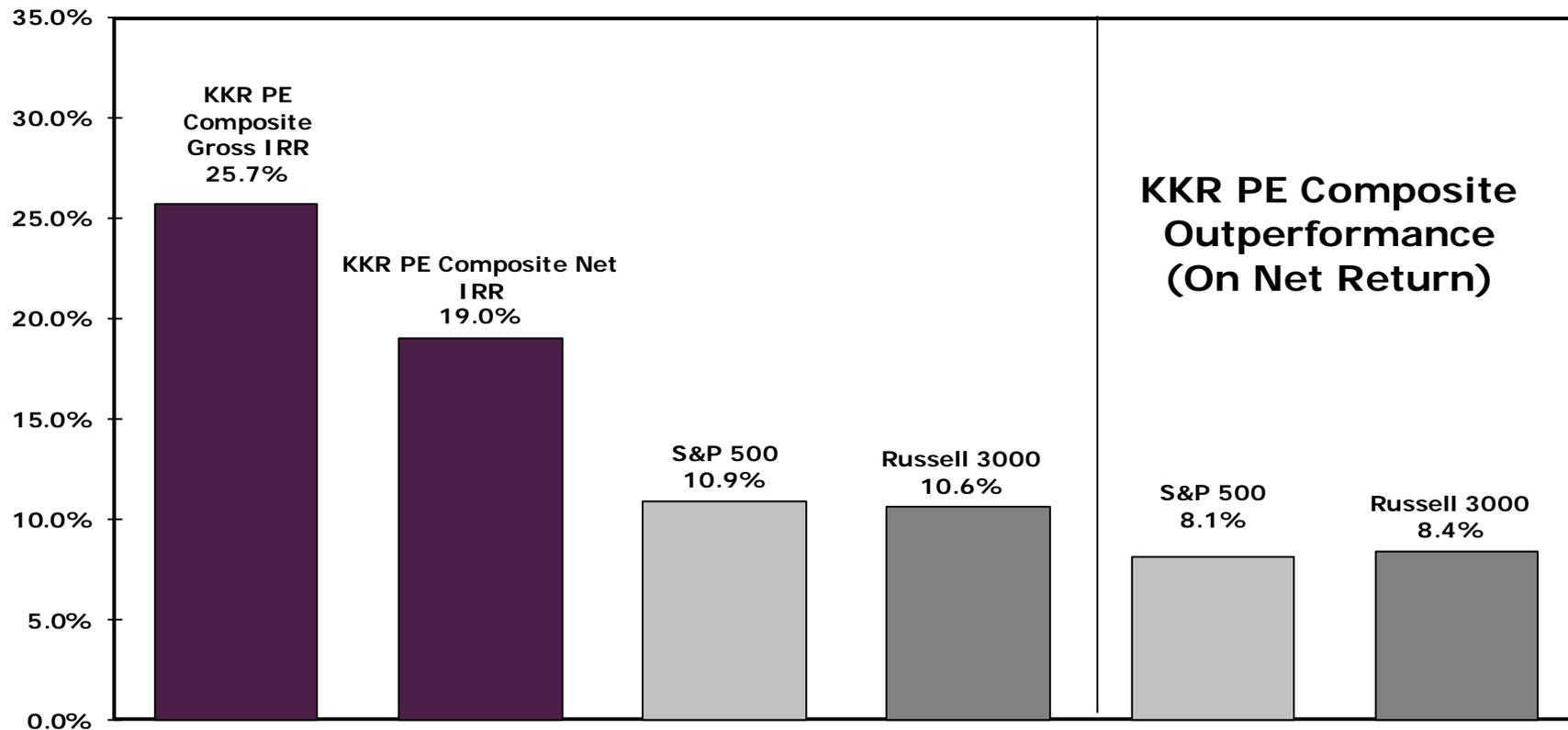
■ Unrealized Value
■ Realized Value

Note: Includes all realized and partially realized investments of KKR's eight realized and substantially realized North American private equity funds from inception (1977) to September 30, 2011. Past performance is no guarantee of future results.

KKR Overall Private Equity Composite Returns⁽¹⁾ vs. Market Indices

KKR Private Equity Composite returns have historically outperformed the market indices

From Inception to September 30, 2011:



Note: Past performance is no guarantee of future results. See Important Information for how our performance is calculated and details regarding indices presented as benchmarks. Date of inception is April 7, 1977.

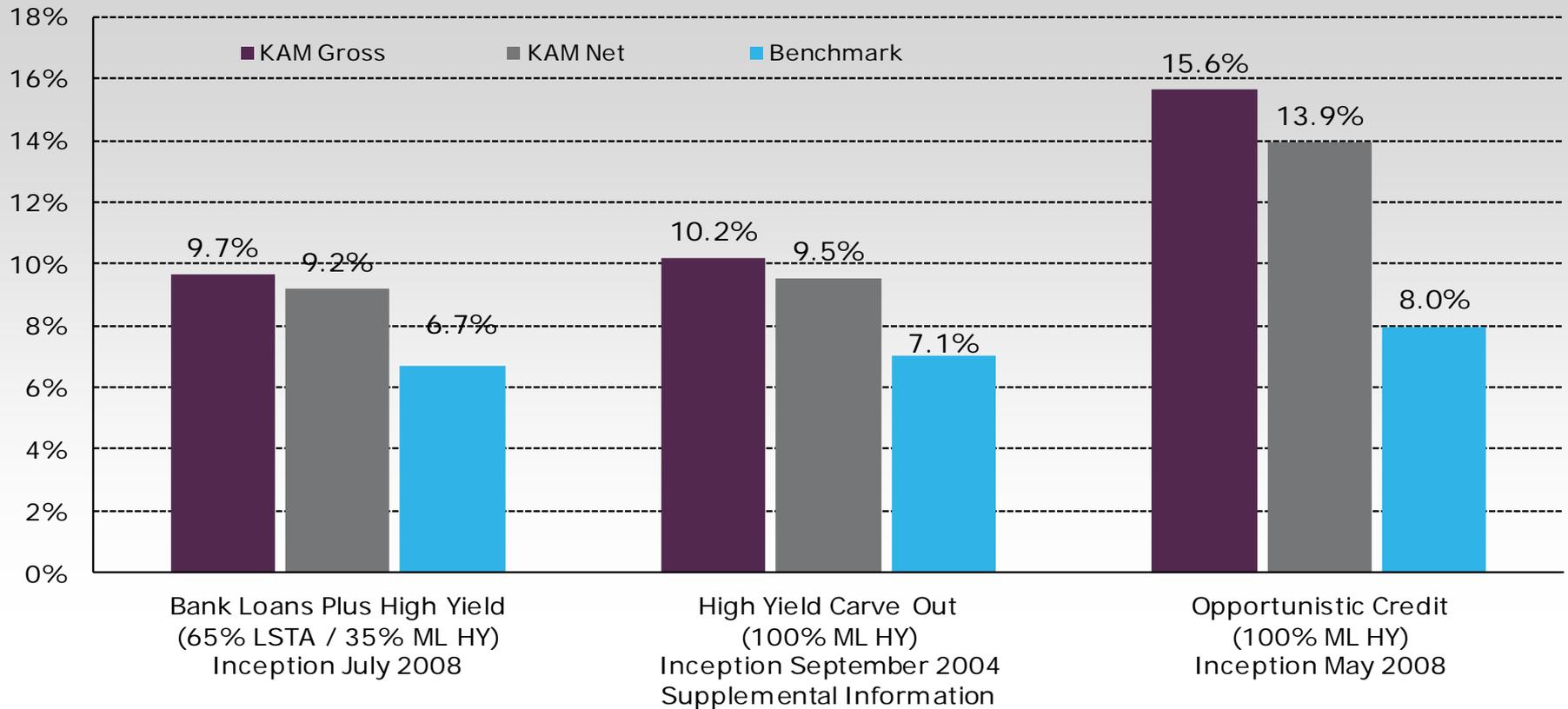
(1) The KKR gross IRR, net IRR, and market indices are calculated based on our first 14 private equity funds which represent all of our private equity funds that have invested for at least 36 months prior to September 30, 2011. Neither the E2 Investors or China Growth Fund had been investing for at least 36 months as of September 30, 2011. We have therefore not calculated gross IRRs and net IRRs with respect to those funds.



KKR Performance History for Marketable Securities Strategies

As of September 30, 2011

Inception-to-Date Annualized Performance vs. Benchmark by Strategy



Note: Past performance is not indicative of future results and there can be no assurance that comparable results will be achieved in respect of such strategies going forward or that investors in any KAM fund, vehicle or account will receive a return of capital.

How TRS & KKR Have Invested Together

TRS has committed or invested approximately \$2.5 billion with KKR as of September 30, 2011



*The Credit Partnership has been substantially redeemed with \$8.2 million of remaining unrealized value as of September 30, 2011.

KKR Portfolio Construction: How the Proposed SPN Fits in TRS' Existing Portfolio

Strategies	Comment
Private Equity	
<ul style="list-style-type: none"> • North America 	<ul style="list-style-type: none"> • Diversify vintage year exposure in large US buyouts (67% of current TRS exposure to 2006-2008 vintages)
<ul style="list-style-type: none"> • Asia 	<ul style="list-style-type: none"> • Increase exposure to emerging markets (TRS underweight emerging markets in PE)
<ul style="list-style-type: none"> • Europe 	<ul style="list-style-type: none"> • Maintain international developed market exposure
Other Real Assets	
<ul style="list-style-type: none"> • Natural Resources 	<ul style="list-style-type: none"> • Provide attractive current income, inflation protection and some commodity exposure
<ul style="list-style-type: none"> • Infrastructure 	<ul style="list-style-type: none"> • Provide current income, portfolio diversification and inflation protection
Credit	
<ul style="list-style-type: none"> • Mezzanine 	<ul style="list-style-type: none"> • Provide current income and portfolio diversification
Opportunistic	
<ul style="list-style-type: none"> • Special Situations 	<ul style="list-style-type: none"> • Exploit current market opportunity (especially Europe today) for attractive returns
<ul style="list-style-type: none"> • Opportunistic Pool / Real Estate / Other Natural Resources 	<ul style="list-style-type: none"> • Flexibility to adapt to market changes

Why the Strategic Partnership Makes Sense For:

TRS

- Flexible capital positioned to capitalize on best investment ideas
- Greater transparency and alignment with core partners
- Differentiated research and training opportunities
- Reaffirms TRS' position as a thought leader in the industry

TRS' Beneficiaries

- Helps TRS achieve strong investment returns within established risk parameters
- Leverages TRS' resources by providing differentiated access to high quality global investment managers
- Improves alignment of interests with TRS' investment managers

The Private Markets Business

- Sets a new standard of partnership in the Alternative Assets industry
- Creates stronger, more lasting partnerships between top-tier LPs and GPs
- Most efficient structure for accessing best ideas of a global investment manager
- Simplifies investment process

KKR

- Provides a flexible, long-duration pool of capital to take advantage of market opportunities
- Creates a stronger, more transparent relationship with TRS
- Enables us to seed new businesses
- Aligns two very similar cultures in a differentiated partnership

2012 Outlook Board Presentation for TRS

February 15, 2012

Henry H. McVey

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The investment strategy and themes discussed herein may be unsuitable for investors depending on their specific investment objectives and financial situation. Please note that changes in the rate of exchange of a currency may affect the value, price or income of an investment adversely.

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I. Key Beliefs

Key Beliefs

- **The Big Picture: Phase III Is Still Upon Us.** Our big picture thought is that we have entered the third and final phase of a debt-driven deleveraging cycle. Whereas Phase I of the Great Debt Unwind began at the turn of the century and was related to excessive valuations and corporate deleveraging (e.g., Enron, Worldcom, and Tyco) and Phase II in 2007 was tied to excess housing-related leverage on both Wall Street *and* Main Street (e.g. Lehman, Citigroup, and Countrywide), *Phase III is already inextricably linked to the mountainous levels of sovereign debt that we now see straining developed economies like Europe and the United States.* During Phase III we expect shorter economic expansions (30-40 months versus 100+ in the 1990s and early 2000s) and heightened volatility in the capital markets.
- **The Rise of the Emerging Market Consumer: Here and Now.** Besides deleveraging in the developed economies, we believe that the rise of the emerging market consumer is the single biggest force driving change across today's global capital markets. Not surprisingly, we recommend emerging equities and fixed income as core holdings, particularly given that they represent somewhat of a 'foil' to what we are currently see in the developed markets.
- **We Expect Global Economic Growth To Continue Slowing In 2012.** We use a 7 factor model to predict that S&P 500 earnings growth may be flat to negative in 2012 versus a current consensus forecast of up 12%. In terms of GDP, we believe that 1.8% is a reasonable target. Our international earnings growth models suggest a similar slowdown, though they vary by region.
- **Our 2012 Asset Allocation Framework Tells Us to Focus on the Opportunity to Arbitrage Yield Differentials.** We suggest overweighting 'spicy' credits globally at the expense of global government bonds. Developed government bonds are our largest underweight, highlighting our conviction in this area. **We also suggest overweighting real assets and alternatives**, using allocations from cash and global public equities to 'pay' for these positions.

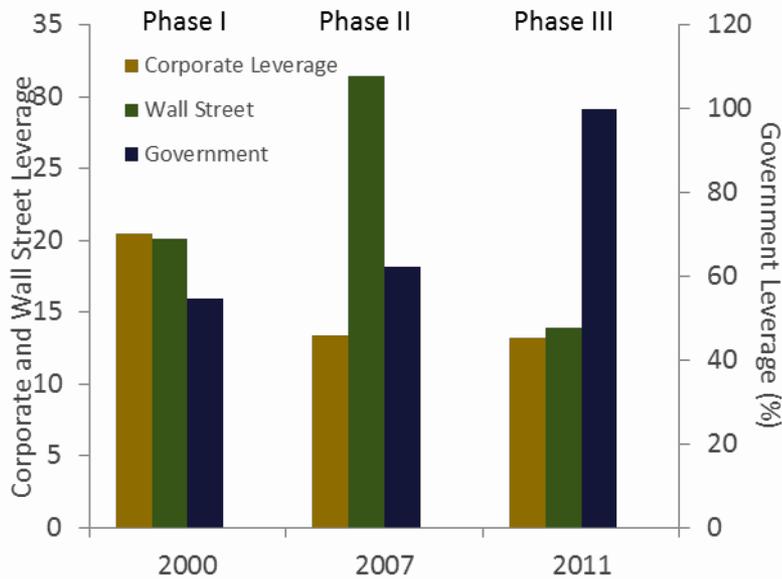
Please refer to www.kkrinsights.com for access to our previous Global Insights Macro thought pieces which discuss in greater detail the themes highlighted here: See our papers entitled "*Phase III: The Last Stage of a Bumpy Journey*," October 2011; "*Swing Factor: Asia's Growing Role in the Global Economy*," November 2011; "*Brave New World: The Yearning for Yield Across Asset Classes*," December 2011; and "*Where to Allocate in 2012*," January 2012.

II. Macro Framework & Key Themes

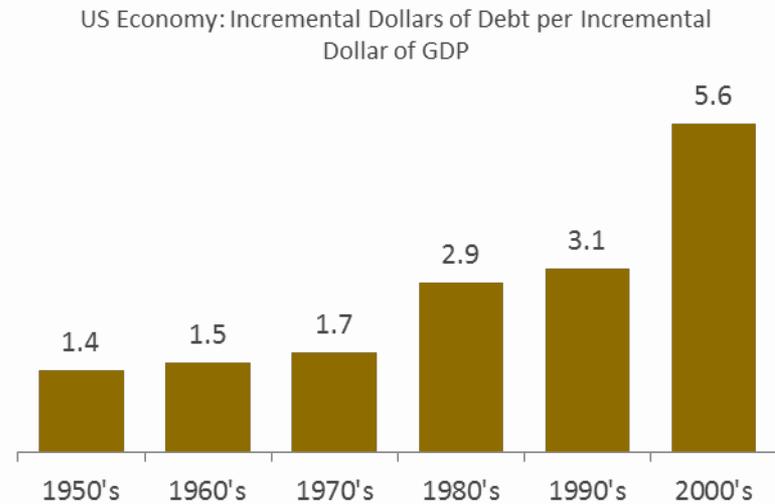
In Our View, Debt Overhang Is Now Linked to Government Excess in a Phase III Environment

Corporate Balance Sheets (ex-Financials) In Better Shape Than Government Balance Sheets

Now, More Than Ever, It Takes Money To Make Money



Corporate Leverage = S&P 500 ex-Financials Net Debt-as-a-%-of-Assets; Wall Street Leverage = Average Assets-to-Equity for Goldman Sachs and Morgan Stanley; Government Leverage = United States: General Government Gross Debt % of Gross Domestic Product (GDP). Source: IMF WEO, Factset, S&P. As at September 30, 2011.

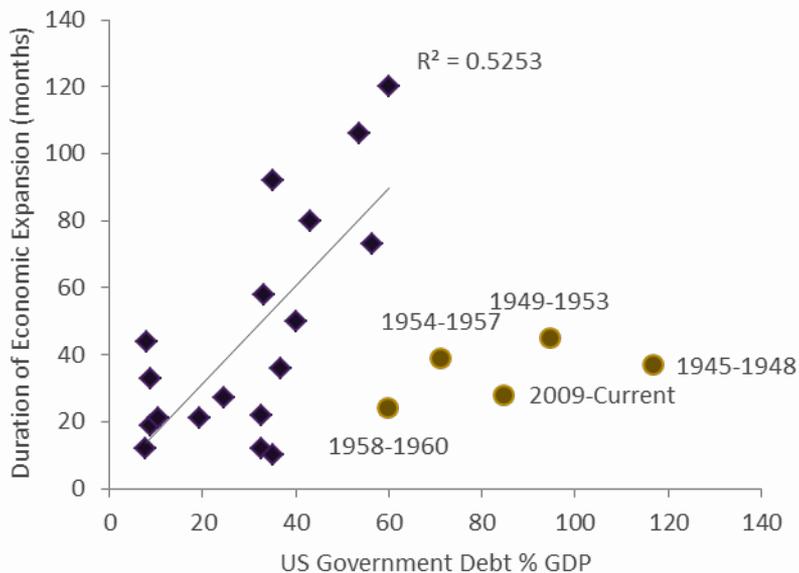


GDP = Gross Domestic Product. 2000's = 1999 to 2009. Source: BEA, Federal Reserve, Bloomberg.

...Which May Lead to Shorter Economic Cycles and Affect Valuations in Some Instances

Economic Expansions Are Likely To Be Much Shorter Going Forward, Reminiscent Of The Pre-1960 Era

Expect Shorter And More Volatile Economic Cycles When Government Debt Load Is Higher



Economic expansions from 1900 to 2011; Debt to Gross Domestic Product (GDP) is at the start of the expansion. Source: NBER, BEA, US Treasury, KKR. As at September 30, 2011.

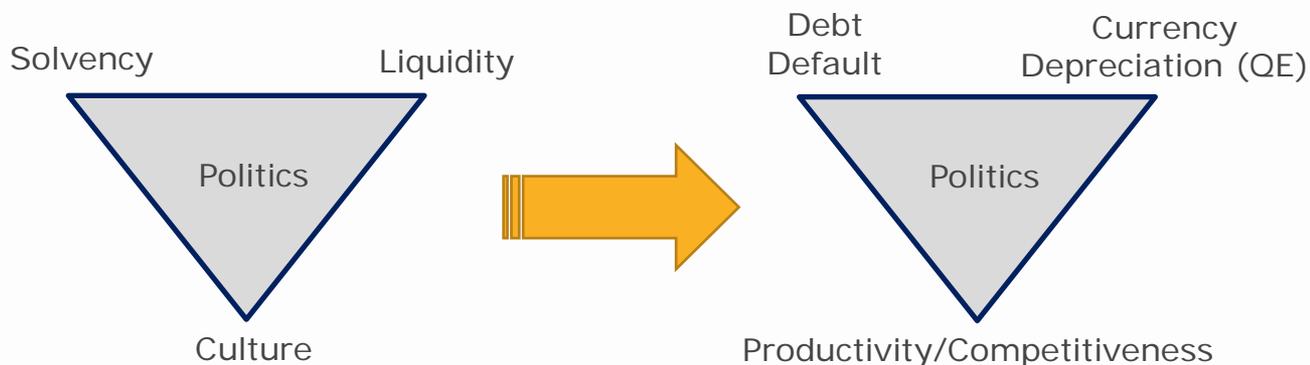
Debt Loads Affect Equity Valuations Too



GDP = Gross Domestic Product; P/E = Price to Earnings Ratio. Source: IMF WEO, Factset. NTM = Next 12 Months. As at September 30, 2011

Creating a Framework For Europe

1. Deleveraging in developed markets is typically disinflationary, not inflationary, unless there is a war-related spike in debt.
2. **We can't just look at debt to GDP in isolation.** Countries can typically run with high debt/GDP for long periods of time with little consequence. **So, we also need to look at debt held aboard, primary surplus/deficit, and growth/ competitiveness.**
3. There is a human element to this; countries like Greece have a history of defaulting (Greece has been ½ of all high debt (where Debt/GDP exceeds 100%) and developed market defaults since 1800¹).
4. To get out of a high debt situation, **we believe you need at least one of three – currency devaluation, bond default, or wages deflation – in the near-term.** **Ultimately, though, we believe you need nominal growth over time to grow your way out.**



¹Please see page 36 of our European Debt Crisis presentation for a review of case studies pertaining to Developed Market countries with debt to GDP ratios greater than 100% and the incidence of default. The work of Reinhart and Rogoff shows that Greece has been a serial defaulter and has spent 60% of the time in sovereign crisis since 1800. Source: KKR Global Macro and Asset Allocation team analysis of annual data from 1800 -2010 available on reinhartandrogoff.com

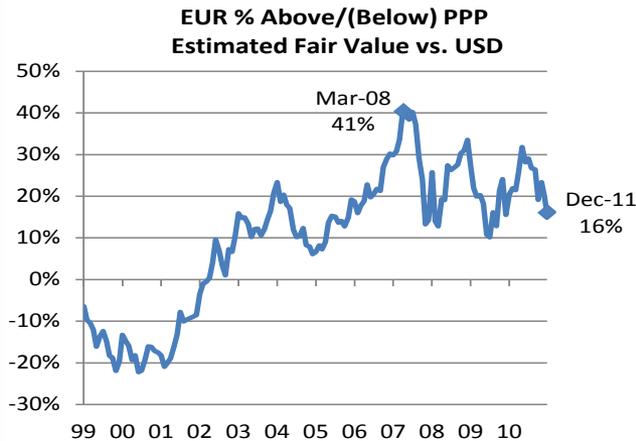
Using Our Framework, We Do Not Yet See the 'Required' Signs of Change in Europe to Believe The Situation May Improve

Debt Continues to Rise

General Government Gross Debt as a % of GDP								
	Spain	Germany	France	EMU	Portugal	Ireland	Italy	Greece
2007	36%	65%	64%	66%	68%	25%	104%	105%
2008	40%	66%	68%	70%	72%	44%	106%	111%
2009	53%	74%	79%	80%	83%	65%	116%	127%
2010	60%	84%	82%	86%	93%	95%	119%	143%
2011e	67%	83%	87%	89%	106%	109%	121%	166%

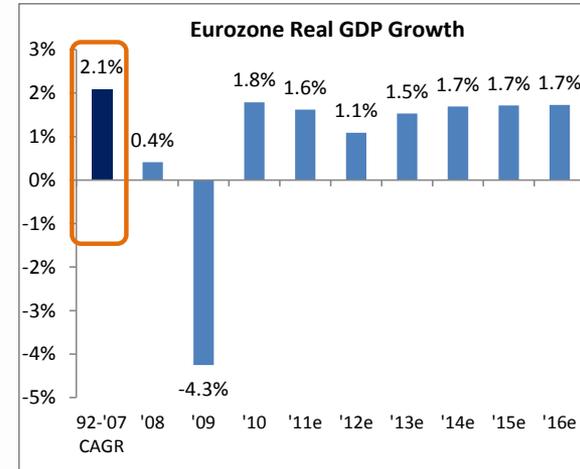
e = Estimate; Source: IMF World Economic Outlook as of September 20, 2011.

Currency Not Yet a Tailwind



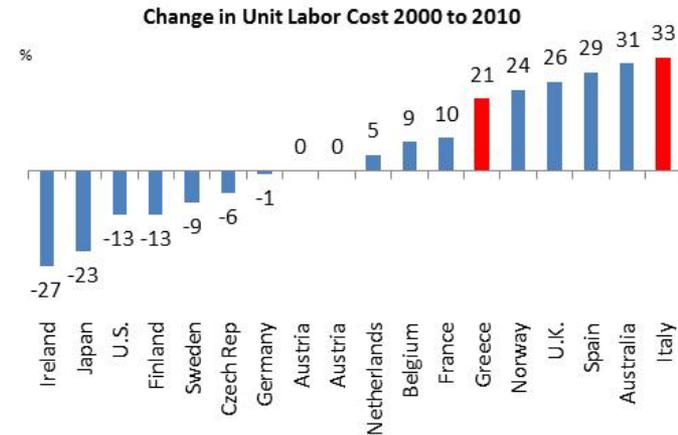
PPP = purchasing power parity. Source: Bloomberg data and PPP estimates as of December 23, 2011. To calculate PPP's, Bloomberg uses a long-run averaging methodology to estimate PPP values based on inflation and exchange rates relative to their January 1982-June 2000 average values.

Growth Persistently Below Historical Average



E = Estimate; Source: IMF World Economic Outlook as of September 20, 2011.

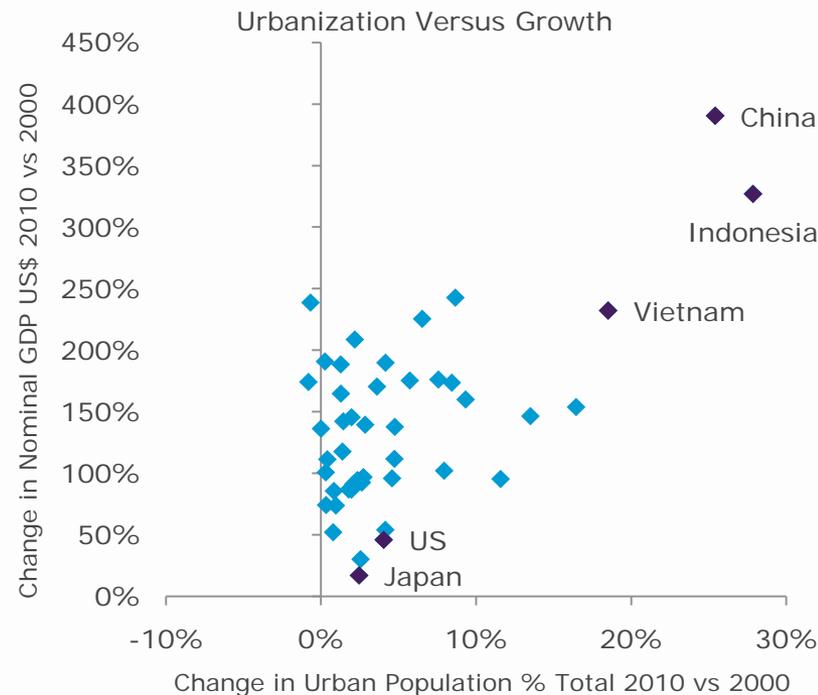
Wage Deflation Has Only Just Begun



Source: OECD data as of June 8, 2011.

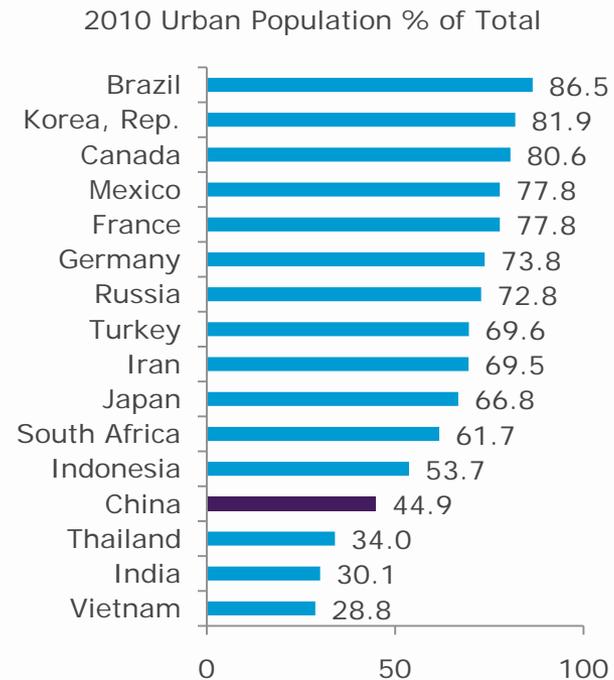
In Our View, Urbanization Is a Huge Driver of Change in Global Economies, China in Particular

Urbanization is a Strong Driver of Growth...



Data as at December 31, 2010. Source: IMF, World Bank.

...And China Has A lot More To Go



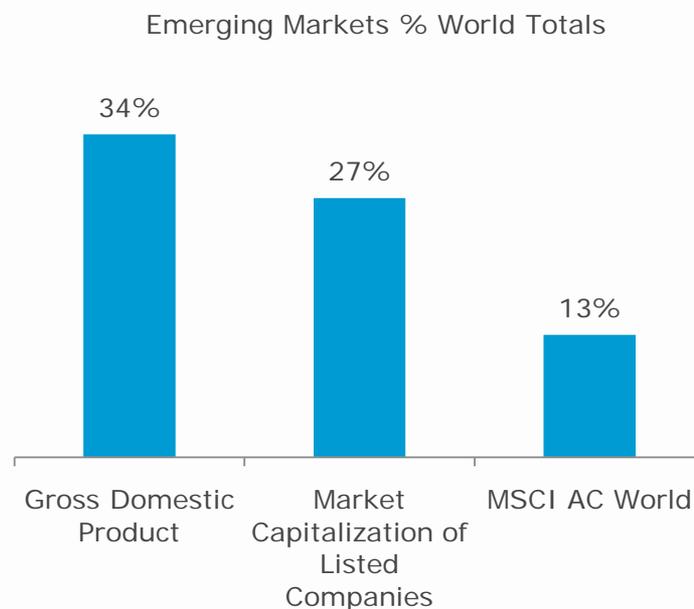
Data as at December 31, 2010. Source: IMF, World Bank.

We Believe Emerging Markets are Now Fiscally Attractive, But Capital Markets Have Yet to Catch Up with GDP Contribution

Emerging Markets Are More Attractive In Many Respects

	Developed Economies	Emerging Economies
2011E Debt % GDP	103.7	36.2
2011E Government Expenditure % GDP	43	29.5
2011E Fiscal Deficit % GDP	-6.5	-1.9
2011E Current Account % GDP	-0.3	2.4
2011E Real GDP Growth	1.6	6.4
Forward P/E	11.1	9.7
Forward P/B	1.5	1.4

Emerging Capital Markets Have Yet to Catch Up With GDP Contribution

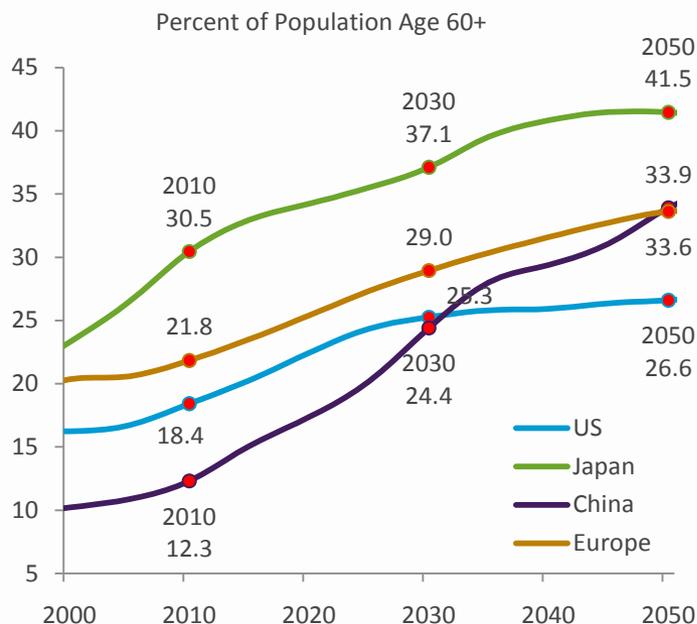


BRL E = IMF Estimate; GDP = Gross Domestic Product; P/E = Price-to-Earnings Ratio; P/B = Price-to-Book Ratio. Forward P/E and P/B as at October 31, 2011. IMF Definition of Emerging and Developed Economies can be found at <http://www.imf.org/external/datamapper/index.php>. Source: IMF World Economic Outlook, Bloomberg.

Data as at December 31, 2010. Source: World Bank, MSCI, IMF World Economic Outlook September 2011.

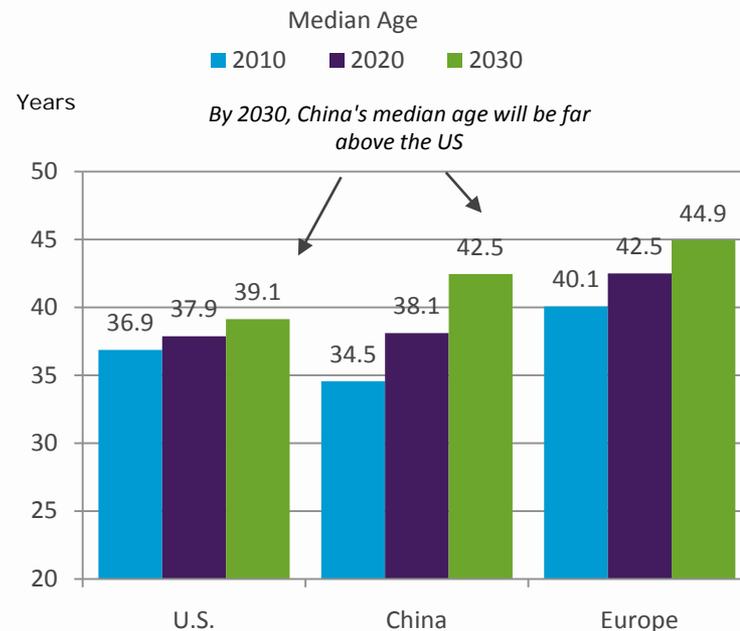
Our Research Shows That Aging Demographics are Crucial For Identifying Evolutions in Markets Trends and Investors' Asset-class Preferences

Rapidly Aging Populations are Global in Nature



Data as at May 31, 2011. Source: United Nations World Population Prospects.

By 2030, China's Population Will Be Older Than The U.S.

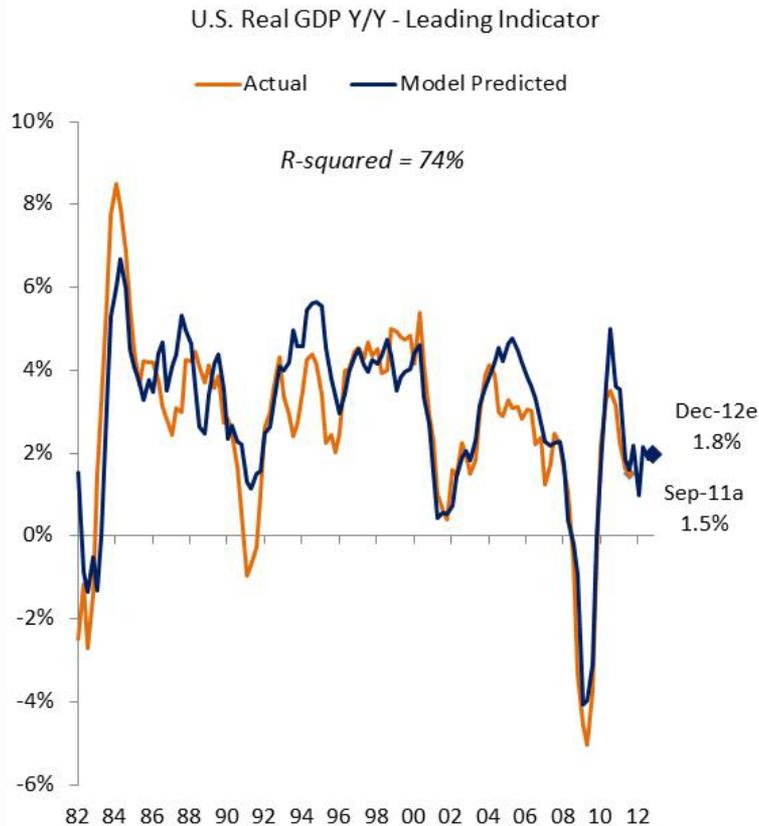


Data as at May 31, 2011. Source: United Nations World Population Prospects.

III. 2012 Outlook & Beyond

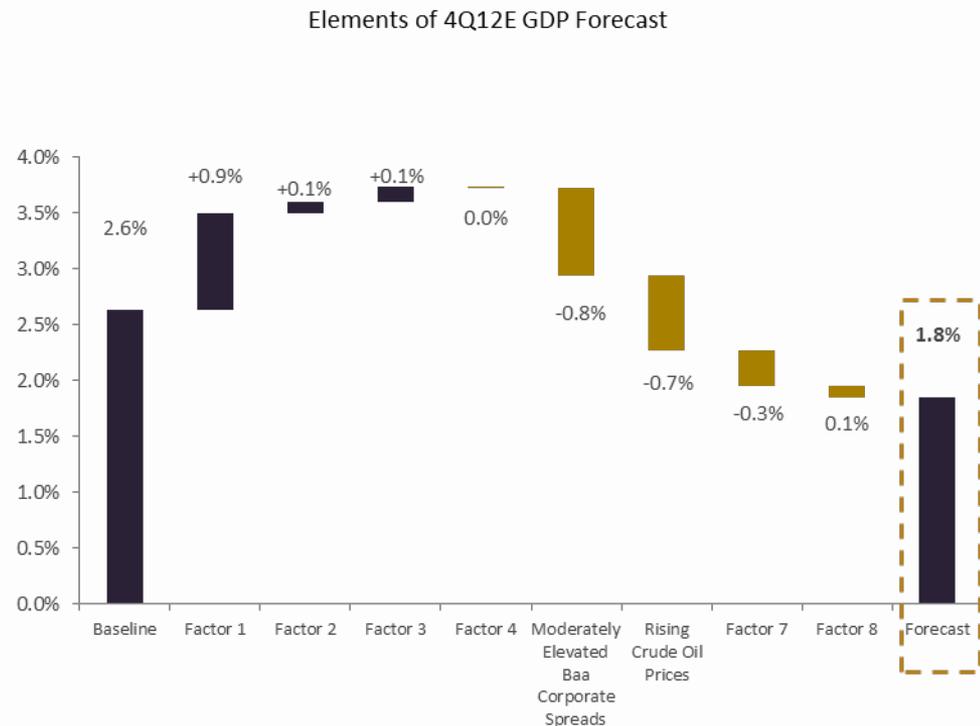
We Believe US GDP Is Poised To Decelerate In 2012

Our New Leading Indicator Forecasts US Real GDP Growth of 1.8% in 2012



Our GDP Leading Indicator contains eight variable inputs that contribute meaningfully to the forecast. A = Actual; E = Estimate; GDP = Gross Domestic Product. Data as at December 31, 2011. Source: Bloomberg, Haver, KKR.

Widening Credit Spreads and Lackluster Growth Are Key Drivers of the Forecast

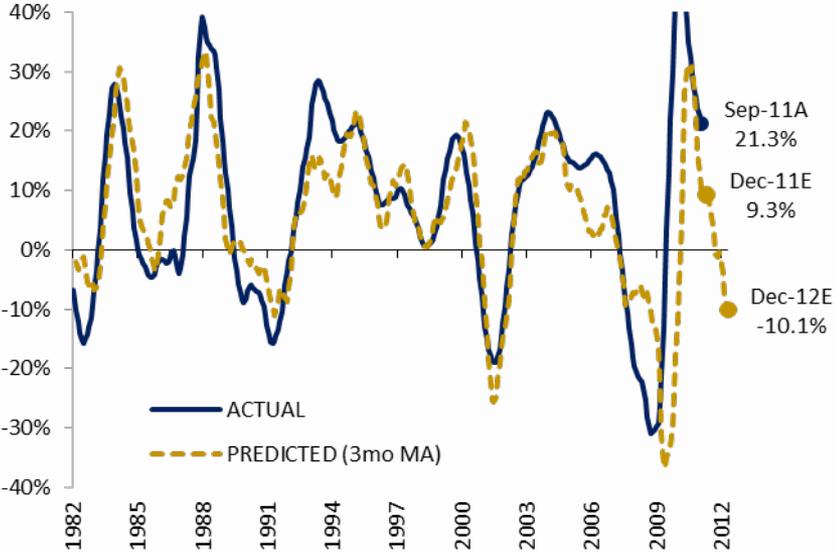


Our GDP Leading Indicator contains eight variable inputs that contribute meaningfully to the forecast. E = Estimate. Data as at December 31, 2011. Source: Bloomberg, Haver, KKR.

Our Quantitative Models Suggest Slower Corporate Earnings

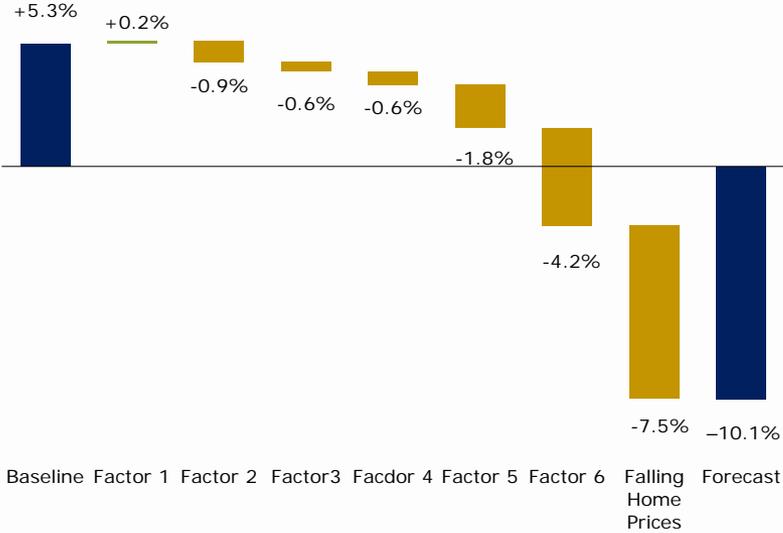
Our Models Suggest EPS Growth Is About To Slow

S&P 500 EPS Growth: 12-Month Leading Indicator



S&P 500 Earnings Growth Leading Indicator

Components of December 2012 Forecast



The Earnings Growth Leading Indicator (EGLI) is a statistical synthesis of seven important leading indicators to S&P 500 Earnings Per Share. Henry McVey and team developed the model in early 2006 at Morgan Stanley. A = Actual; E = Estimated. As of December 31, 2011. Source: KKR, Bloomberg.

The Earnings Growth Leading Indicator (EGLI) is a statistical synthesis of seven important leading indicators to S&P 500 Earnings Per Share. Henry McVey and team developed the model in early 2006 at Morgan Stanley. A = Actual; E = Estimated. As of Jan 9, 2012. Source: KKR, Bloomberg.

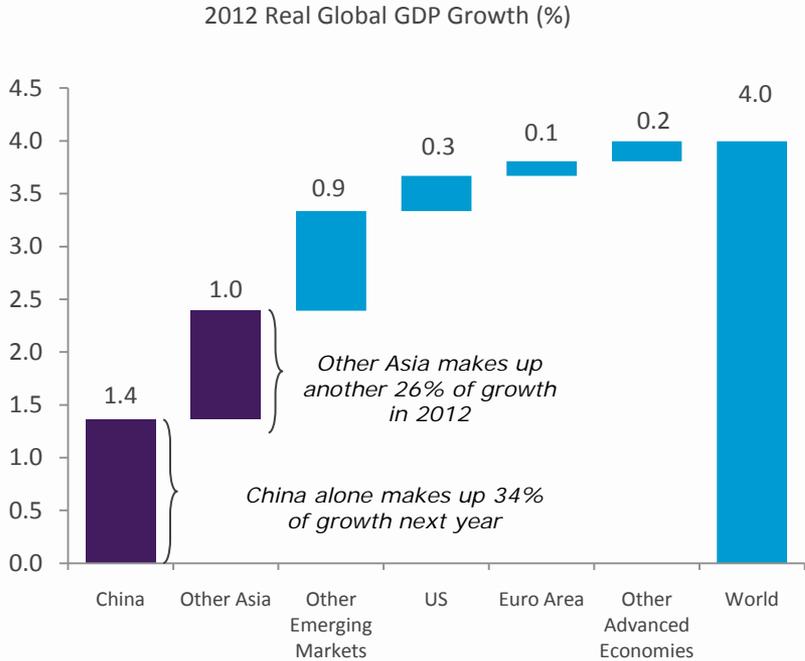
Pulling It All Together: Asia Has Emerged As the Engine of Growth

Our 2012 Regional Outlook

2012 Growth & Inflation Estimates		
	Real GDP	Inflation
US	1.5 to 2.0%	1.75 to 2.25%
Europe	-0.5 to -1.0%	1.5 to 2.0%
China	7.5 to 8.0%	Below 4.0%

GDP = Gross Domestic Product. Estimates as at December 31, 2011 and based upon our US GDP Indicator, forward looking indicators like Chinese and European PMI and quantitative and fundamental research. Source: KKR Global Macro and Asset Allocation.

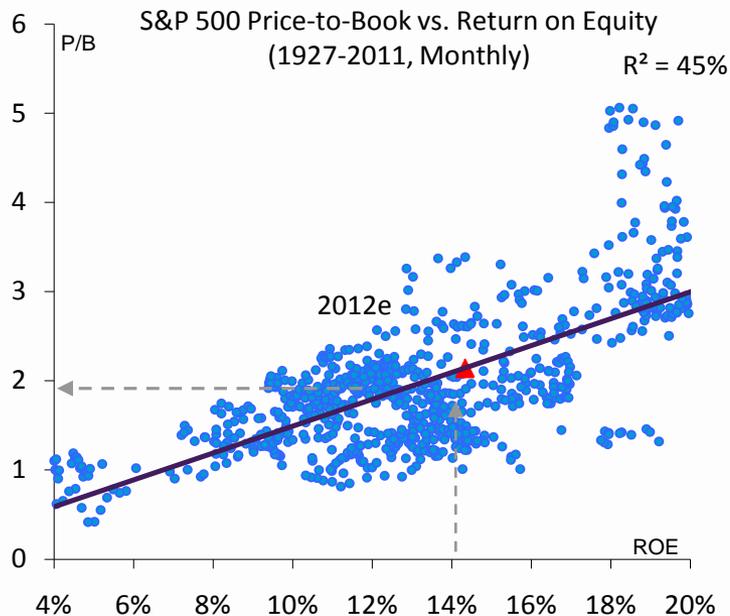
China Makes Up A Third Of Global Growth



Data as at September 30, 2011. Other Asia includes emerging Asia ex-China, Hong Kong, Korea, Singapore, Taiwan and Japan. Other Emerging Markets are all emerging markets excluding Asia and emerging countries within the Eurozone. Other Advanced Economies are the residual of countries not picked up by the other five categories. Source: IMF WEO Sep 2011.

Historical Comparisons Indicate Stocks Are Modestly Undervalued, But We Expect A Bumpy Ride In The Near-Term

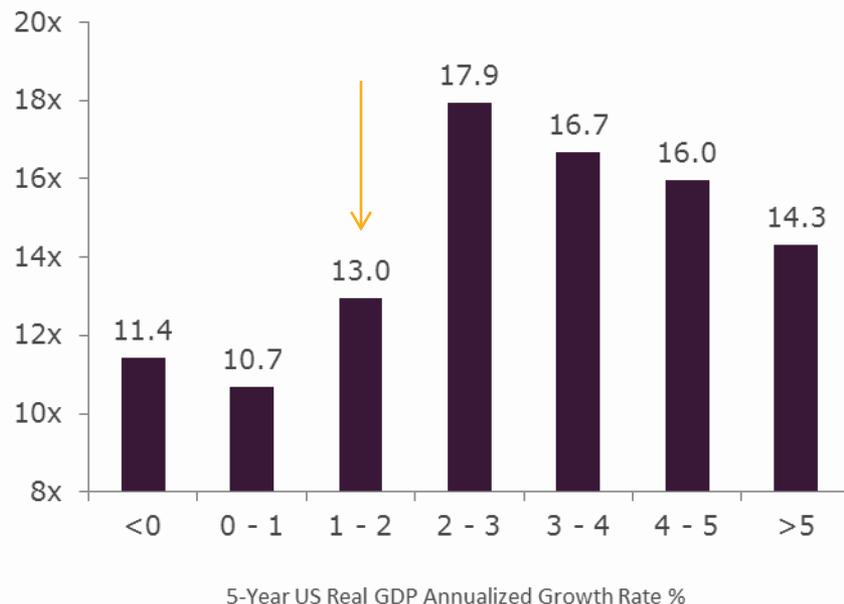
Adjusting for Financials, Fair Value for the S&P 500 Is Roughly 1325



Price-to Book	1.8x	1.98x	2.1x
Book Value	665	670	675
S&P 500 for BVPS of \$625 *	1197	1327	1418

Data as at December 31, 2011. Excluding outlier periods around 1950 and 1980. E = Estimate; * KKR estimated BV PS at year end 2012. Source: S&P, Factset, Ned Davis.

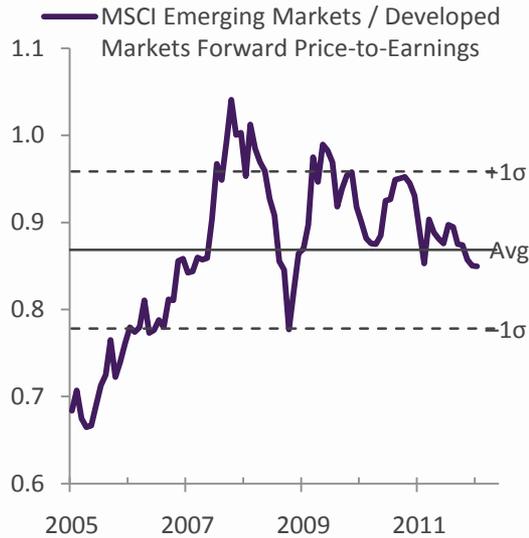
Median S&P 500 Normalized Price-to-Earnings For Various Growth Environments



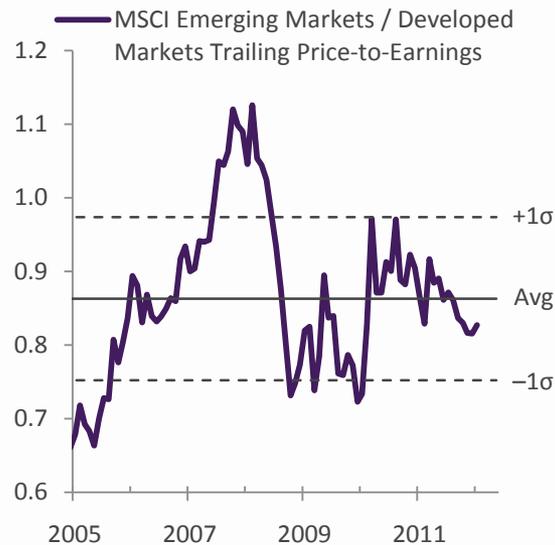
Normalized Price-to-Earnings valuation ratio = Price divided by average of past 5 years EPS. Study from 1900 to 2011. Source: BEA, Historical Statistics of the United States, Factset, S&P, Bloomberg, Stock Market Data Used in "Irrational Exuberance" by Robert J. Shiller.

Our Valuation Research Suggests EM Equities Are Becoming Attractive Again

0.2 Sigma Below Average



0.3 Sigma Below Average



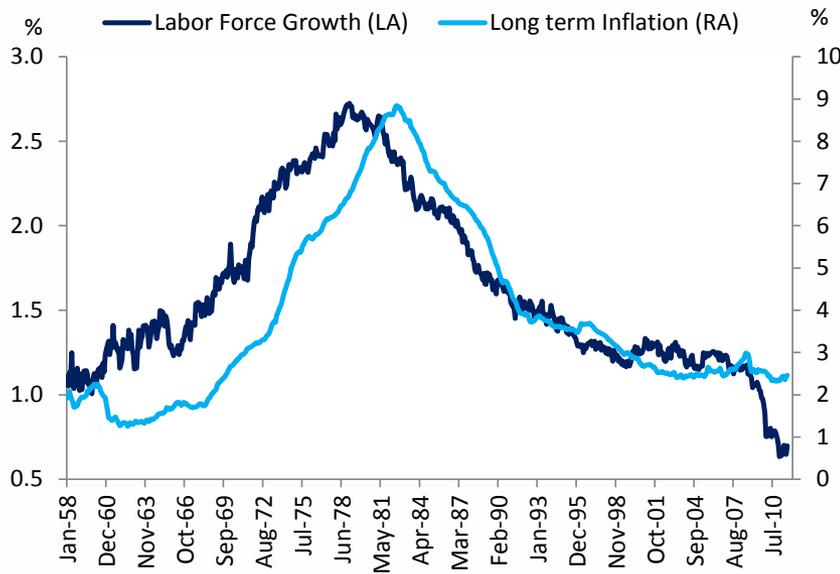
0.1 Sigma Below Average



As of Jan 10, 2011. Average from 2005 to current. Source: MSCI, Factset.

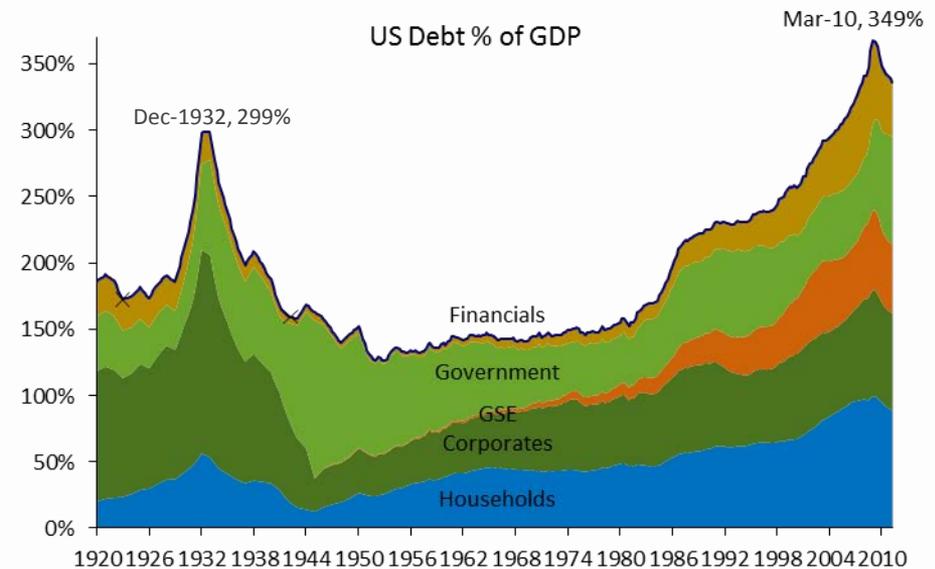
We Tend To Favor Disinflation Because Of Demographics And Deleveraging

Slowing Employment Growth Implies Lower Inflation



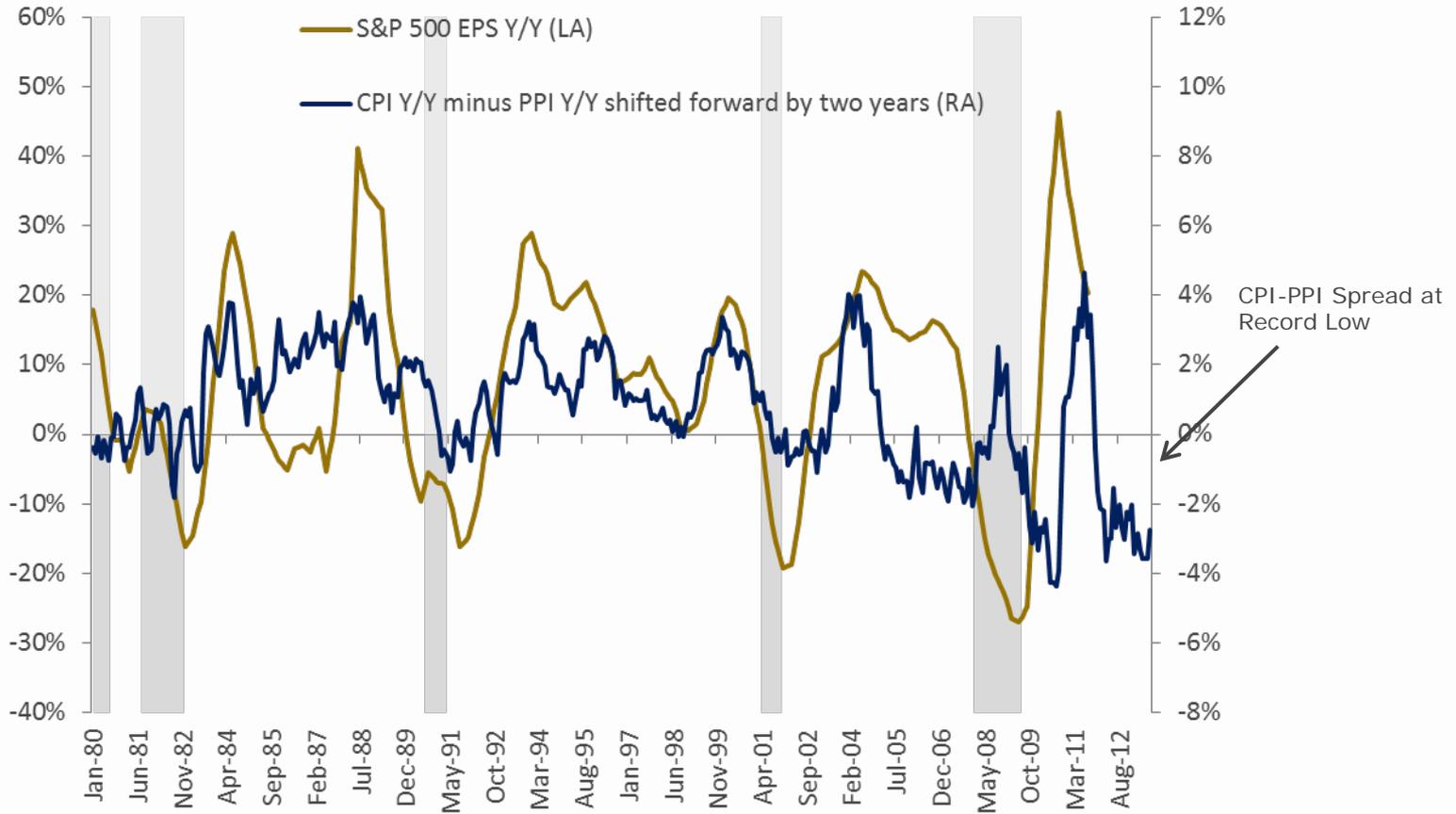
LA = Left Axis; RA = Right Axis. Long Term Inflation and Labor Force Growth Represented as 10-yr Annualized Growth. Source: Bureau Of Labor Statistics. Through August 31, 2011.

The Elephant In The Room: US Debt % Of GDP



GDP = Gross Domestic Product; GSE = Government Sponsored Enterprises. Data Through 2Q2011. Source: BEA, Federal Reserve, Morgan Stanley Research And "The Statistical History Of The United States" by Ben Wattenberg.

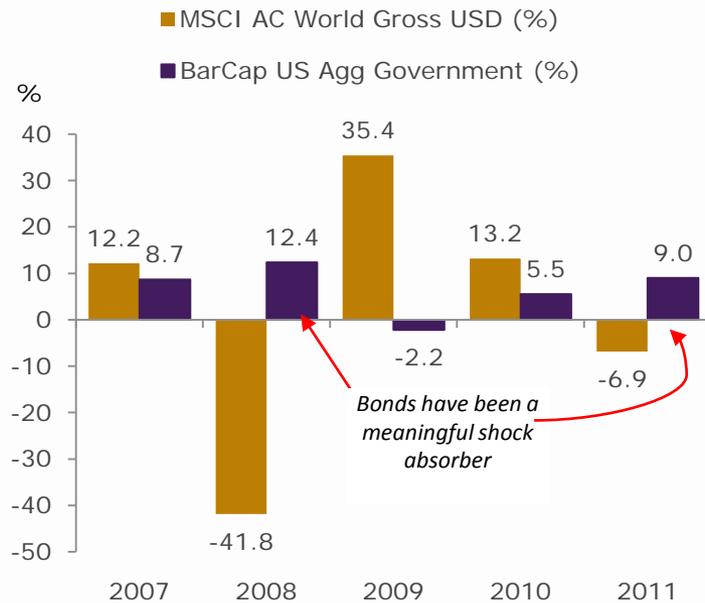
However, We Believe This Inflation Cycle May Be A Mix Of The 1930s And 1970s. We Suggest Focus On Pricing Power



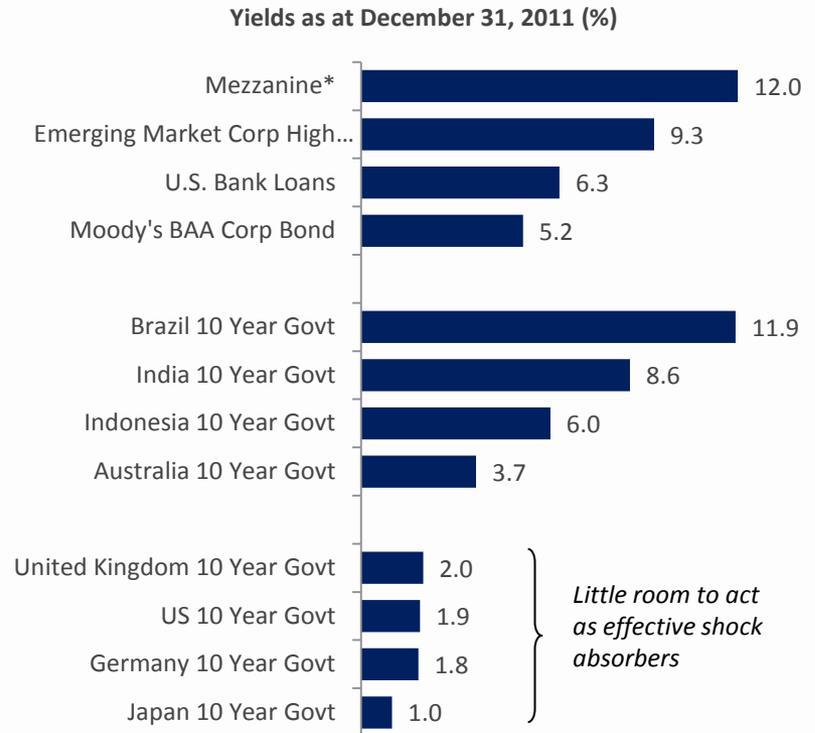
LA = Left Axis; RA = Right Axis; EPS = Earnings Per Share; CPI = Consumer Price Index; PPI = Producer Price Index. Shaded areas indicate periods of US recessions. Source: S&P, Bloomberg, FactSet. As at January 7, 2012.

We Anticipate That Non-Traditional Fixed Income Could Emerge As The Asset Class Of Choice In 2012

U.S. Government Bonds Have Been A Meaningful Shock Absorber In Good Markets And Bad



Corporate Market Appears To Offer Better Yields And Potentially Less Risk

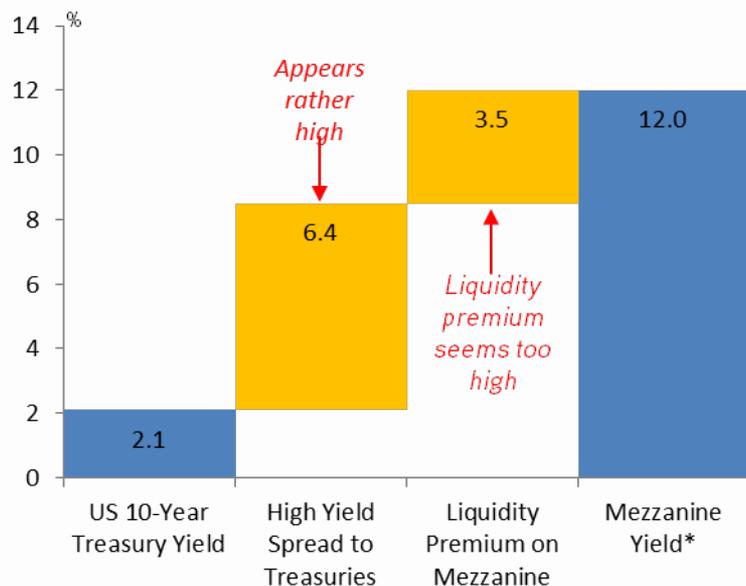


As of December 31, 2011. Source: Bloomberg.

* = KKR Estimated. Data as of December 31, 2011. Source: Factset, KKR.

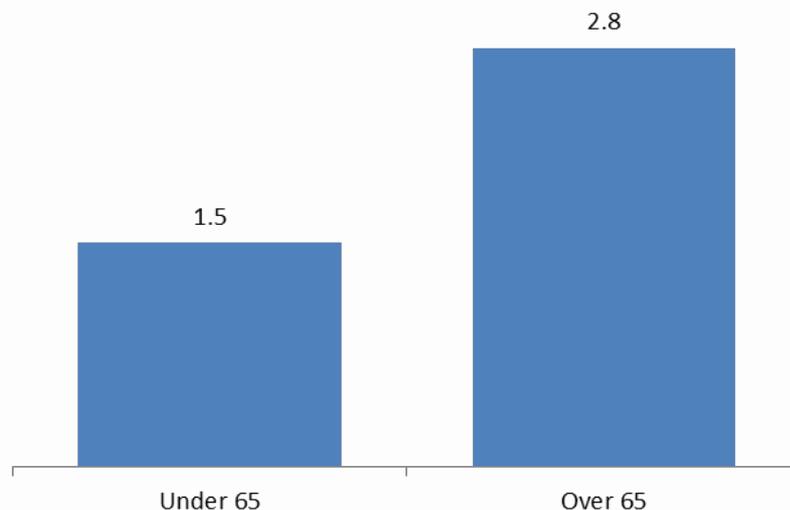
We Believe Both the Default and Liquidity Premium Look High in a Yield-Hungry Environment

Does a 350 Basis Point Liquidity Premium Make Sense in a Zero Real Rate Environment?



Retirees Appear To Have a Strong Appetite for Dividend Yield

Estimated Dividend Yield of Equity Portfolios, By Age of Head of U.S. Household, 2007 (%)

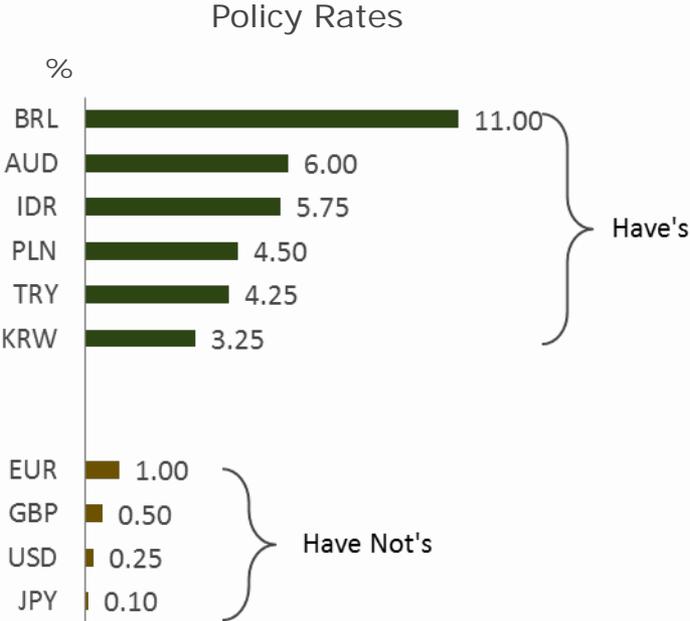


* KKR estimated. Data as at November 30, 2011. Source: Bloomberg, KKR.

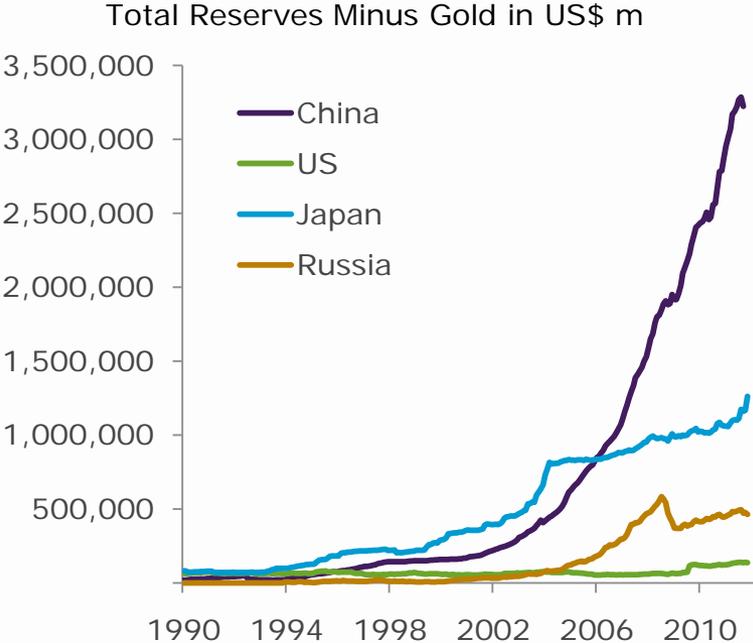
Data as at December 6, 2011. Dividend yield calculated using dividend income as reported by the IRS Statistics of Income Division and equity holdings as reported by the Federal Reserve Survey of Consumer Finances. Our estimate includes an assumption that roughly half of privately held businesses pay some form of dividend. Source: IRS, Federal Reserve, KKR Global Macro and Asset Allocation estimates.

Currencies: Emerging Into A World of Have's & Have Not's

Haves vs. Have Not's



China Reserves Are at Record Levels

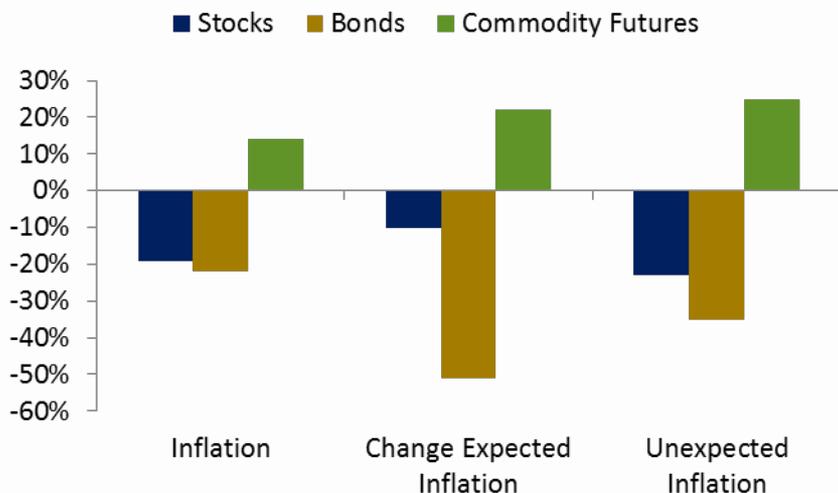


BRL = Brazilian real; TRY = Turkish lira; IDR = Indonesian rupiah; AUD = Australian dollar; PLN = Polish zloty; KRW = South Korean won; EUR = euro; GBP = British pound; USD = US dollar; JPY = Japanese yen. Data as of January 6, 2012. Source: Bloomberg.

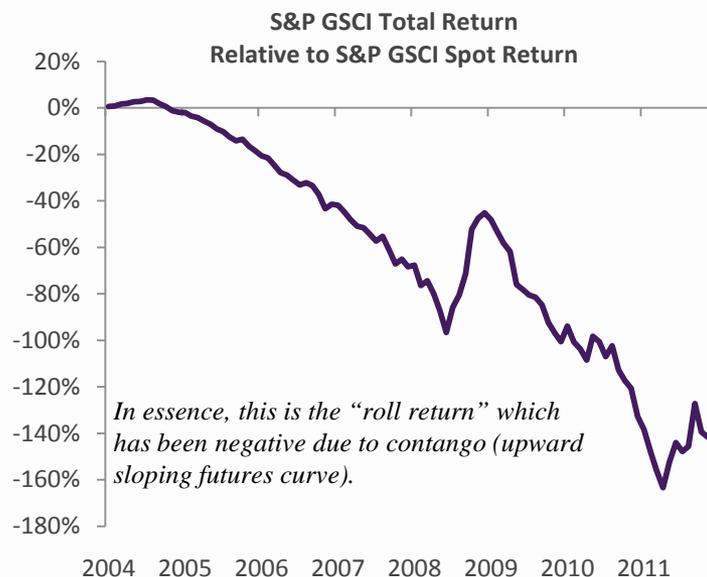
Data as at November, 2011 except China where latest data is as of September 2011. Sources: IMF, Bloomberg.

Our Views On Real Assets: Yes, But Think Outside the Box

Correlation Of Asset Classes With Inflation*



GSCI Total Return Swap Since Has Not Created Any Value for Investors Since 2004



*Historically, the correlation of commodities with inflation as well as changes in inflation is positive; by comparison, stocks and bonds typically have a negative correlation with inflation and changes in inflation expectations. Inflation: Y/Y% Consumer Price Index (CPI); Expected inflation: T-bill rate as proxy; Unexpected inflation: Inflation - Expected inflation. For additional information regarding the chart and basis for the data shown, please refer to Page 19 Table 6 within Facts and Fantasies about Commodity Futures. Data is quarterly from July 1959 through 2004. Source: Gorton & Rouwenhorst, Facts and Fantasies about Commodity Futures Draft: February 28, 2005.

The GSCI total return index measures the returns accrued from investing in fully-collateralized nearby commodity futures, while the GSCI spot index measures the level of nearby commodity prices. Data as at December 31, 2011. Source: Goldman Sachs, Bloomberg.

IV. Asset Allocation Summary

KKR Global Macro & Asset Allocation (GMAA) Target Allocation

Overweight Credit, Real Assets, and Other Alternatives; Underweight Govt. Bonds

Weight (%)	KKR GMAA Target Asset Allocation	Benchmark	Difference
Global Listed Equities	50	53	-3
Global Govt Bonds	5	20	-15
Global Credit	20	10	10
Real Assets	10	5	5
Other Alternatives	15	10	5
Cash	0	2	-2

KKR GMAA Target Asset Allocation

Asset Class	Weight (%)
Public Equities (50%)	
U.S.	20
Europe	12
All Asia	12
Latin America	6
Fixed Income (25%)	
Global Govt	5
Mezzanine	5
High Yield	5
High Grade	5
EMD	5
Real Assets (10%)	
Real Estate	3
Energy/Infrastructure	5
Gold/Corn/Other	2
Alternatives (15%)	
Traditional PE	5
Distressed & Special Sits	5
Other	5

Allocation as at December 30, 2011. Source: KKR Global Macro and Asset Allocation.

Allocation as at December 30, 2011. Source: KKR Global Macro and Asset Allocation.

Investments

TRS Emerging Manager Program

Board of Trustees Meeting
February 2012

Agenda

- Introduction to the Emerging Manager (EM) Program
- Review EM Direct Program
- Discuss Stated Guidelines and Requirements
- Making the Most of Our Emerging Manager Direct Program

Largest Pension Funds by Assets

Minority Manager Universe (\$ in billions)

As of July 2010

Pension Plan	Assets Under Management	Assets Dedicated to Minority Managers	Assets as a % to Minority Managers
CalSTRS	\$138.6	\$3.9	2.8%
Texas Teachers	\$92.3	\$2.1	2.3%
New York State Teachers ¹	\$80.3	\$1.6	2.0%
Verizon	\$46.5	\$0.8	1.7%
AT&T	\$80.2	\$1.2	1.5%
New York City Retirement ¹	\$111.7	\$1.6	1.4%
Boeing	\$71.1	\$1.0	1.4%
New York State Common ¹	\$125.7	\$1.6	1.3%
CalPERS	\$198.8	\$2.2	1.1%
IBM	\$77.3	\$0.8	1.0%
General Motors ²	\$99.2	\$0.8	0.8%
North Carolina	\$70.8	\$0.5	0.7%
Florida Retirement System	\$114.7	\$0.7	0.6%
General Electric ²	\$58.3	\$0.2	0.3%
Wisconsin Investment Board	\$73.1	\$0.0	0.0%
New Jersey	\$68.7	\$0.0	0.0%
Lockheed Martin	\$40.7	N/A	0.0%
Ford Motor	\$47.7	\$0.0	0.0%
Alcatel-Lucent	\$38.1	\$0.0	0.0%
Northrop Grumman	\$35.7	\$0.0	0.0%

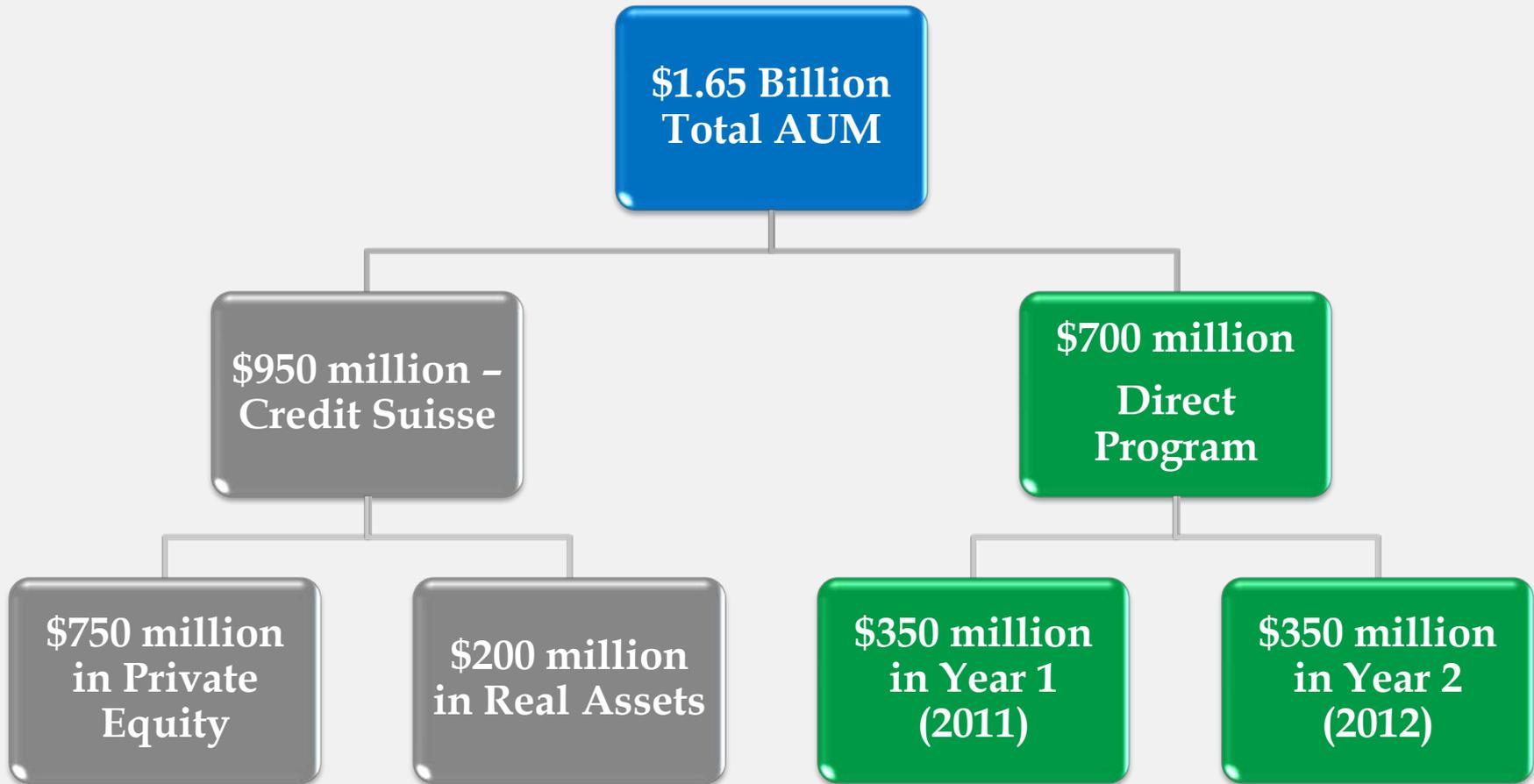
- Since July 2010, TRS has increased its allocation to Emerging Managers by \$1.1 billion.
- As of December 2011, total assets dedicated to Emerging Managers are \$3.2 billion, roughly 3.2% of the Trust.

¹New York combines multiple pension plans, including those not listed, to invest a combined \$6 billion with minority managers

²Value representative of Emerging Manager investments

EM Program

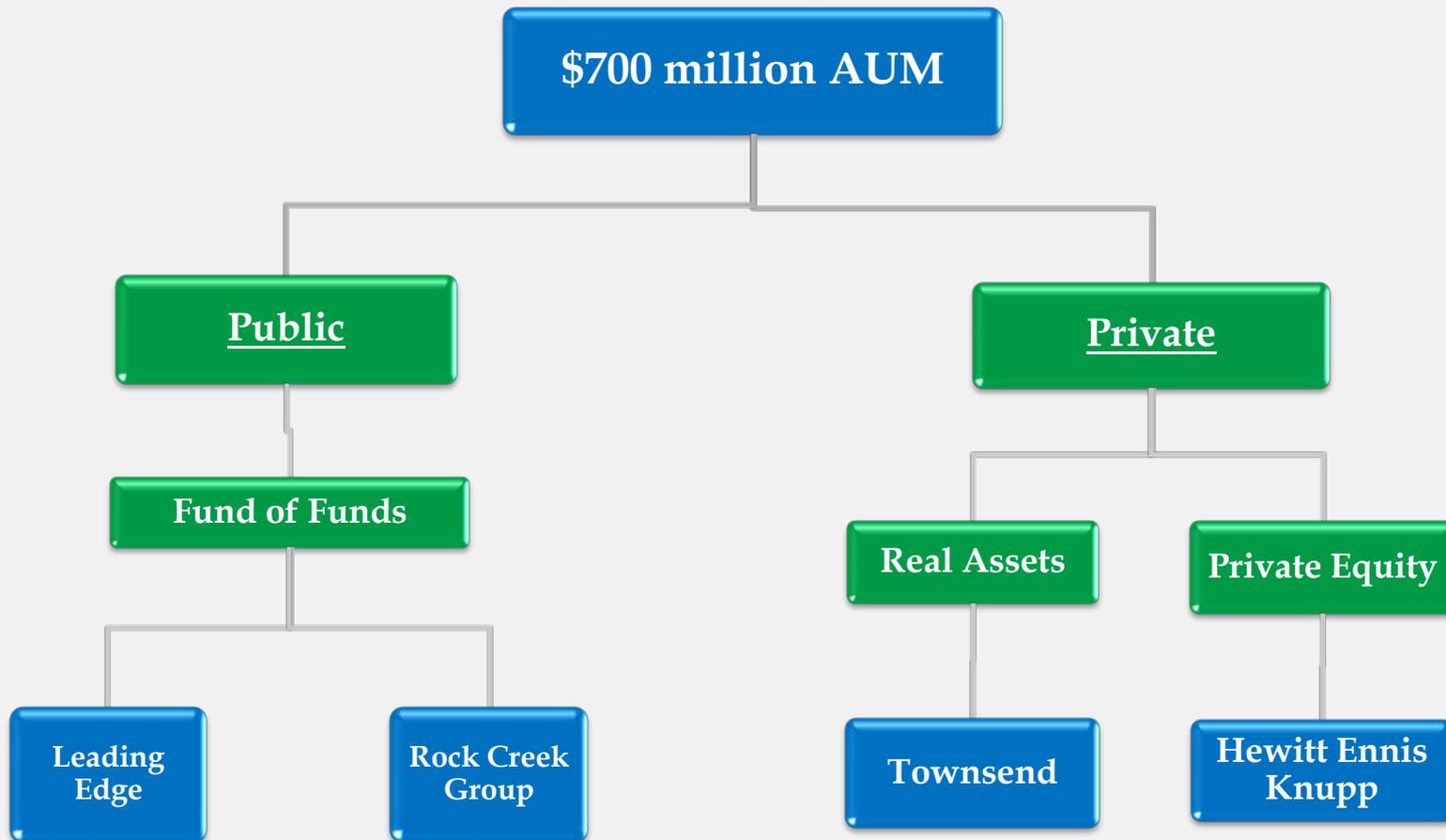
2005 - Present



EM Direct Program

Evaluators

- EM Allocation for 2011 thru 2012



EM Direct Program

Managers and Dollar Amounts

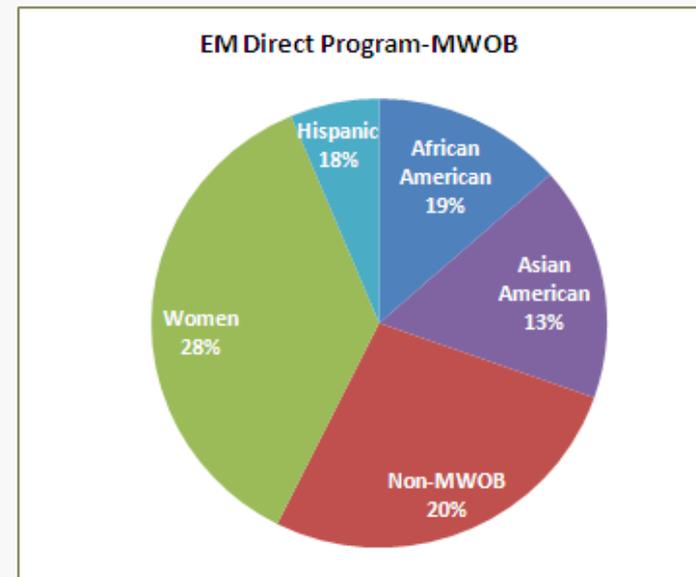
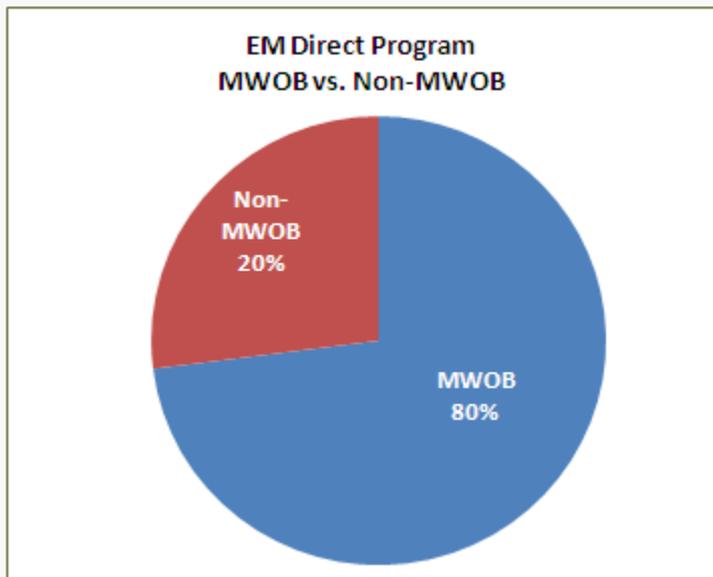


<u>Direct Program 2011-2012</u>	
<i>External Public Managers (\$400 Million)</i>	
Mar Vista Partners	\$17
Brookmont Capital Management	\$17
Nicholas Investment Management	\$ 9
Phocas Financial	\$10
Chilton Capital Management	\$17
Affinity Capital Management	\$17
Matterhorn	\$13
Total:	\$100
<i>External Private Managers</i>	
<i>Private Equity (\$50-\$100 Million)</i>	
Live Oak Venture Partners	\$15
LaSalle Captial Group	\$15
Gen X 360	\$15
Frontier Capital	\$15
Navigation Capital Partners	\$15
Palladium Equity Partners	\$15
Total:	\$90
<i>Real Assets (\$200-\$300 Million)</i>	
Berkeley	\$15
Divco West	\$15
Chess Agriculture	\$15
Hawkeye Partners	\$50
CityView Southwest Partners	\$15
Admiral Capital	\$15
Total:	\$125

EM Direct Program

Diversification

- Emerging Manager Direct – MWOB* Breakdown



Stated Guidelines & Requirements



Expand asset classes and establish Evaluator firms

- ✓
 - Private Equity (HEK)
 - Real Assets (Townsend)
 - Public Markets (Leading Edge, Rock Creek Group)
- ✓ Expand Beyond Credit Suisse Programs
- ✓ Involve HEK at some level
- ✓ Funds are received “Direct” from TRS
- ✓ Allow GP/manager to leverage TRS commitment by gaining credibility in the market place
- ✓ An “Evaluator” will be selected to handle staff constraints, referrals, tracking, due diligence, documented declines, etc.
- ✓ “Evaluator” will bring all allocation considerations to the IIC for approval

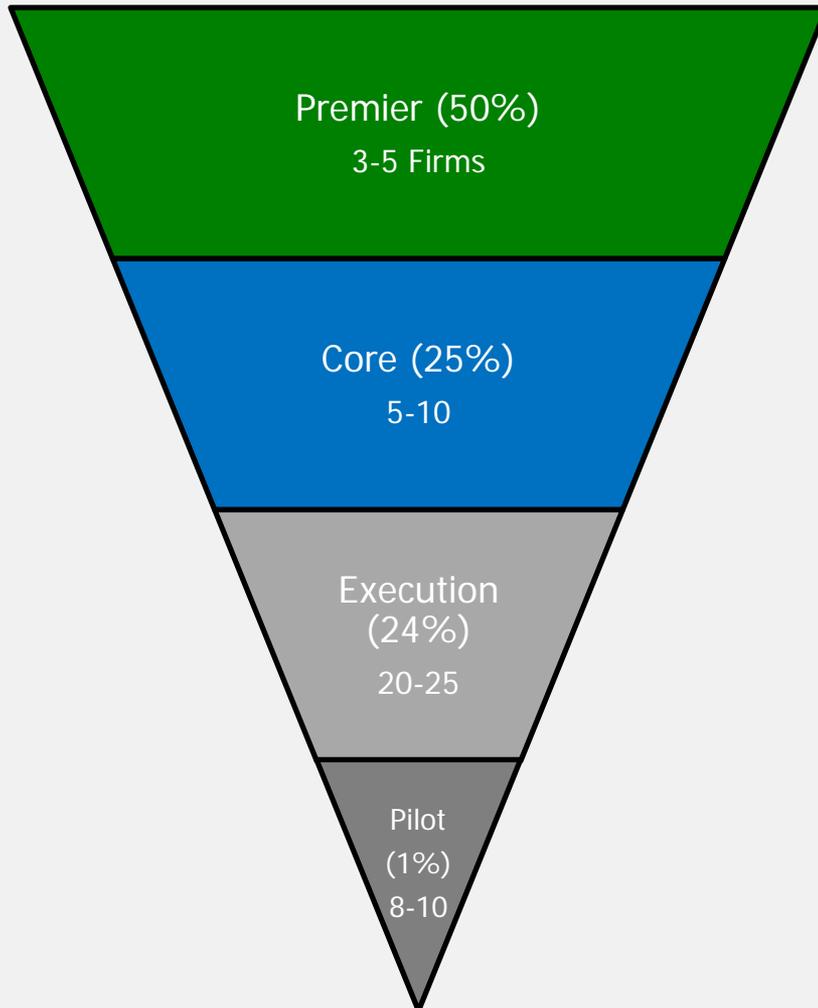
Black = presented to IIC in Jan 2011, Gray = completion

Making the Most of Our EM Program



- Approve allocation early in the fund raising cycle
- Advocate on behalf of our investments
- Work with the manager on structure, terms and marketing
- Develop relationships with other EM investors, Fund of Funds and consultants
- Provide Key Introductions
- Publicly promote TRS Direct Program for greater deal flow, credibility and transparency

External Trading Network



4 Firms

- Able to deliver focused and high capacity relationships globally and across all asset classes
- Highly integrated with TRS trading, risk management, administrative systems, etc.
- Leading providers of investment services – TRS is a preferred client, receiving the highest level of service available

6 Firms

- Well established firms with overall world class global services capabilities
- World renowned for research and technology
- Best-of-breed product process development

24 Firms

- Includes firms who have a specialty in finding liquidity for hard-to-trade names or firms who have a niche in electronic trading
- Firms who have a core competency of trading internationally in particular regions are also included

10 Firms

- All newly approved firms begin in the Pilot group. This is the stage where we evaluate the execution quality of the firm and determine if the firm provides enough value to be promoted to the execution, core or premier group.

MWOB Firms Commission from



(January 1, 2009 to December 31, 2011)

Name	Type MWOB	External Network Category	Commission CY			
			2009	2010	2011	TOTAL
Bley Capital	Texas Woman	Execution	\$ 146,428	\$ 73,728	\$ 75,587	\$ 295,743
BOE Securities	African American	Pilot	\$ 47,850	\$ 48,964	\$ 17,762	\$ 114,576
Cabrera Capital	Hispanic	Pilot	\$ 122,397	\$ 55,730	\$ 8,794	\$ 186,921
Guzman & Company	Hispanic	Execution	\$ 83,166	\$ 85,010	\$ 54,866	\$ 223,042
Loop Capital	African American	Execution	\$ 157,705	\$ 130,682	\$ 39,780	\$ 328,167
Mischler Financial	Disabled Veteran	Pilot	\$ -	\$ 79,680	\$ 134,258	\$ 213,938
M.R. Beal	African American	Execution	\$ 20,697	\$ 118,667	\$ 85,718	\$ 225,082
Mogavero, Lee, & Co.	Woman	Execution	\$ 89,293	\$ 73,689	\$ 6,656	\$ 169,638
Penserra Securities	Hispanic	Pilot	\$ 37,758	\$ 71,409	\$ 84,797	\$ 193,964
Williams Capital	African American	Execution	\$ 89,137	\$ 97,285	\$ 9,424	\$ 195,846
		TOTAL	\$ 794,431	\$ 834,844	\$ 517,642	\$ 2,146,917

Investable Emerging Manager Universe

U.S. Based Managers with Minority Ownership

Minority Manager Universe



Private Equity					
<u>Total Universe</u>		<u>TRS Commitment</u>		<u>Investable Universe</u>	
Number of Firms	231		11	Firms with > \$1B AUM	22
Combined AUM	\$84.5B		\$121M	AUM > \$1B	\$39.4B
Average AUM	\$0.4B			Average AUM	\$1.8B
Median AUM				Median AUM	
Real Estate					
<u>Total Universe</u>		<u>TRS Commitment</u>		<u>Investable Universe</u>	
Number of Firms	62		4	Firms with > \$1B AUM	7
Combined AUM	\$16.5B		\$400M	AUM > \$1B	\$12.6B
Average AUM	\$0.3B			Average AUM	\$1.8B
Median AUM				Median AUM	
Hedge Funds					
<u>Total Universe</u>		<u>TRS Commitment</u>		<u>Investable Universe</u>	
Number of Firms	21		3	Firms with > \$0.7B AUM	7
Combined AUM	\$21B		\$370M	AUM > \$1B	\$18.1B
Average AUM	\$1.0B			Average AUM	\$2.6B
Median AUM				Median AUM	
Long-Oriented					
<u>Total Universe</u>		<u>TRS Commitment</u>		<u>Investable Universe</u>	
Number of Firms	155		2	Firms with > \$1B AUM	46
Combined AUM	\$301.7B		\$1.2B	AUM > \$1B	\$281.1B
Average AUM	\$1.9B			Average AUM	\$6.1B
Median AUM				Median AUM	
All Minority Managers					
<u>Total Universe</u>		<u>TRS Commitment</u>		<u>Investable Universe</u>	
Number of Firms	469		20	Firms with > \$1B AUM	82
Combined AUM	\$423.7B		\$2.1B	Total AUM of Firms with >\$1B	\$347.1B

U.S. PE Based Managers with Minority Ownership

Minority Manager Universe



Private Equity			Concentration %		
<u>African American Managers</u>		<u>TRS Commitment</u>	<u>Investable Universe</u>		
Number of Firms	56	6	Firms with > \$1B AUM	6	11% of universe
Combined AUM	\$20.4B	\$74M Invested	AUM of Firms with > \$1B	\$9.7B	48% of universe
Average AUM	\$0.4B		Average AUM	\$1.6B	11 firms < 500m
Median AUM			Median AUM		32 firms < 250m
<u>Hispanic Managers</u>		<u>TRS Commitment</u>	<u>Investable Universe</u>		
Number of Firms	31	2	Firms with > \$1B AUM	4	13% of universe
Combined AUM	\$12.5B	\$21M Invested	AUM of Firms with > \$1B	\$6.5B	52% of universe
Average AUM	\$0.4B		Average AUM	\$1.6B	8 firms < 500m
Median AUM			Median AUM		15 firms < 250m
<u>Women Managers</u>		<u>TRS Commitment</u>	<u>Investable Universe</u>		
Number of Firms	63	1	Firms with > \$1B AUM	6	10% of universe
Combined AUM	\$28.7B	\$15M Invested	AUM of Firms with > \$1B	\$15.7B	55% of universe
Average AUM	\$0.5B		Average AUM	\$2.6B	11 firms < 500m
Median AUM			Median AUM		34 firms < 250m
<u>Asian Managers</u>		<u>TRS Commitment</u>	<u>Investable Universe</u>		
Number of Firms	26	1	Firms with > \$1B AUM	3	12% of universe
Combined AUM	\$9.5B	\$8M Invested	AUM of Firms with > \$1B	\$4.4B	46% of universe
Average AUM	\$0.4B		Average AUM	\$1.5B	5 firms < 500m
Median AUM			Median AUM		15 firms < 250m
<u>Other</u>		<u>TRS Commitment</u>	<u>Investable Universe</u>		
Number of Firms	55	0	Firms with > \$1B AUM	3	5% of universe
Combined AUM	\$13.4B	\$0 Invested	AUM of Firms with > \$1B	\$3.2B	24% of universe
Average AUM	\$0.2B		Average AUM	\$1.1B	4 firms < 500m
Median AUM			Median AUM		21 firms < 250m

U.S. Based Real Estate Managers with Minority Ownership

Minority Manager Universe



Real Estate			Concentration %		
<u>African American Managers</u>			<u>Investable Universe</u>		
		<u>TRS Commitment</u>			
Number of Firms	19	4	Firms with > \$1B AUM	4	21% of universe
Combined AUM	\$7.8B	\$400M Invested	AUM of Firms with > \$1B	\$6.6B	85% of universe
Average AUM	\$0.4B		Average AUM	\$1.7B	0 firms < 500m
Median AUM			Median AUM		14 firms < 250m
<u>Hispanic Managers</u>			<u>Investable Universe</u>		
		<u>TRS Commitment</u>			
Number of Firms	12	0	Firms with > \$1B AUM	2	17% of universe
Combined AUM	\$6.1B	\$0 Invested	AUM of Firms with > \$1B	\$5.0B	82% of universe
Average AUM	\$0.5B		Average AUM	\$2.5B	2 firms < 500m
Median AUM			Median AUM		8 firms < 250m
<u>Women Managers</u>			<u>Investable Universe</u>		
		<u>TRS Commitment</u>			
Number of Firms	12	0	Firms with > \$1B AUM	0	0% of universe
Combined AUM	\$0.9B	\$0 Invested	AUM of Firms with > \$1B	\$0.0B	0% of universe
Average AUM	\$0.1B		Average AUM	\$0.0B	1 firms < 500m
Median AUM			Median AUM		11 firms < 250m
<u>Asian Managers</u>			<u>Investable Universe</u>		
		<u>TRS Commitment</u>			
Number of Firms	10	0	Firms with > \$1B AUM	0	0% of universe
Combined AUM	\$0.5B	\$0 Invested	AUM of Firms with > \$1B	\$0.0B	0% of universe
Average AUM	\$0.1B		Average AUM	\$0.0B	1 firms < 500m
Median AUM			Median AUM		9 firms < 250m
<u>Other</u>			<u>Investable Universe</u>		
		<u>TRS Commitment</u>			
Number of Firms	9	0	Firms with > \$1B AUM	1	11% of universe
Combined AUM	\$1.2B	\$0 Invested	AUM of Firms with > \$1B	\$1.0B	83% of universe
Average AUM	\$0.1B		Average AUM	\$1.0B	0 firms < 500m
Median AUM			Median AUM		8 firms < 250m

U.S. Based Hedge Fund Managers with Minority Ownership

Minority Manager Universe



Hedge Funds			Concentration %		
<u>African American Managers</u>			<u>Investable Universe</u>		
		<u>TRS Commitment</u>			
Number of Firms	1	0	Firms with > \$0.7B AUM	0	0% of universe
Combined AUM	\$0.5B	\$0 Invested	AUM of Firms with > \$1B	\$0.0B	0% of universe
Average AUM	\$0.5B		Average AUM	\$0.0B	1 firms < 500m
Median AUM			Median AUM		0 firms < 250m
<u>Hispanic Managers</u>			<u>Investable Universe</u>		
		<u>TRS Commitment</u>			
Number of Firms	0	0	Firms with > \$0.7B AUM	0	0% of universe
Combined AUM	\$0.0B	\$0 Invested	AUM of Firms with > \$1B	\$0.0B	0% of universe
Average AUM	\$0.0B		Average AUM	\$0.0B	0 firms < 500m
Median AUM			Median AUM		0 firms < 250m
<u>Women Managers</u>			<u>Investable Universe</u>		
		<u>TRS Commitment</u>			
Number of Firms	11	0	Firms with > \$0.7B AUM	0	0% of universe
Combined AUM	\$2.1B	\$0 Invested	AUM of Firms with > \$1B	\$0.0B	0% of universe
Average AUM	\$0.2B		Average AUM	\$0.0B	3 firms < 500m
Median AUM			Median AUM		8 firms < 250m
<u>Asian Managers</u>			<u>Investable Universe</u>		
		<u>TRS Commitment</u>			
Number of Firms	8	3	Firms with > \$0.7B AUM	6	75% of universe
Combined AUM	\$16.0B	\$369M Invested	AUM of Firms with > \$1B	\$15.6B	98% of universe
Average AUM	\$2.0B		Average AUM	\$2.56B	0 firms < 500m
Median AUM			Median AUM		2 firms < 250m
<u>Other</u>			<u>Investable Universe</u>		
		<u>TRS Commitment</u>			
Number of Firms	0	0	Firms with > \$0.7B AUM	0	0% of universe
Combined AUM	\$0.0B	\$0 Invested	AUM of Firms with > \$1B	\$0.0B	0% of universe
Average AUM	\$0.0B		Average AUM	\$0.0B	0 firms < 500m
Median AUM			Median AUM		0 firms < 250m

U.S. Based Equity Managers with Minority Ownership

Minority Manager Universe



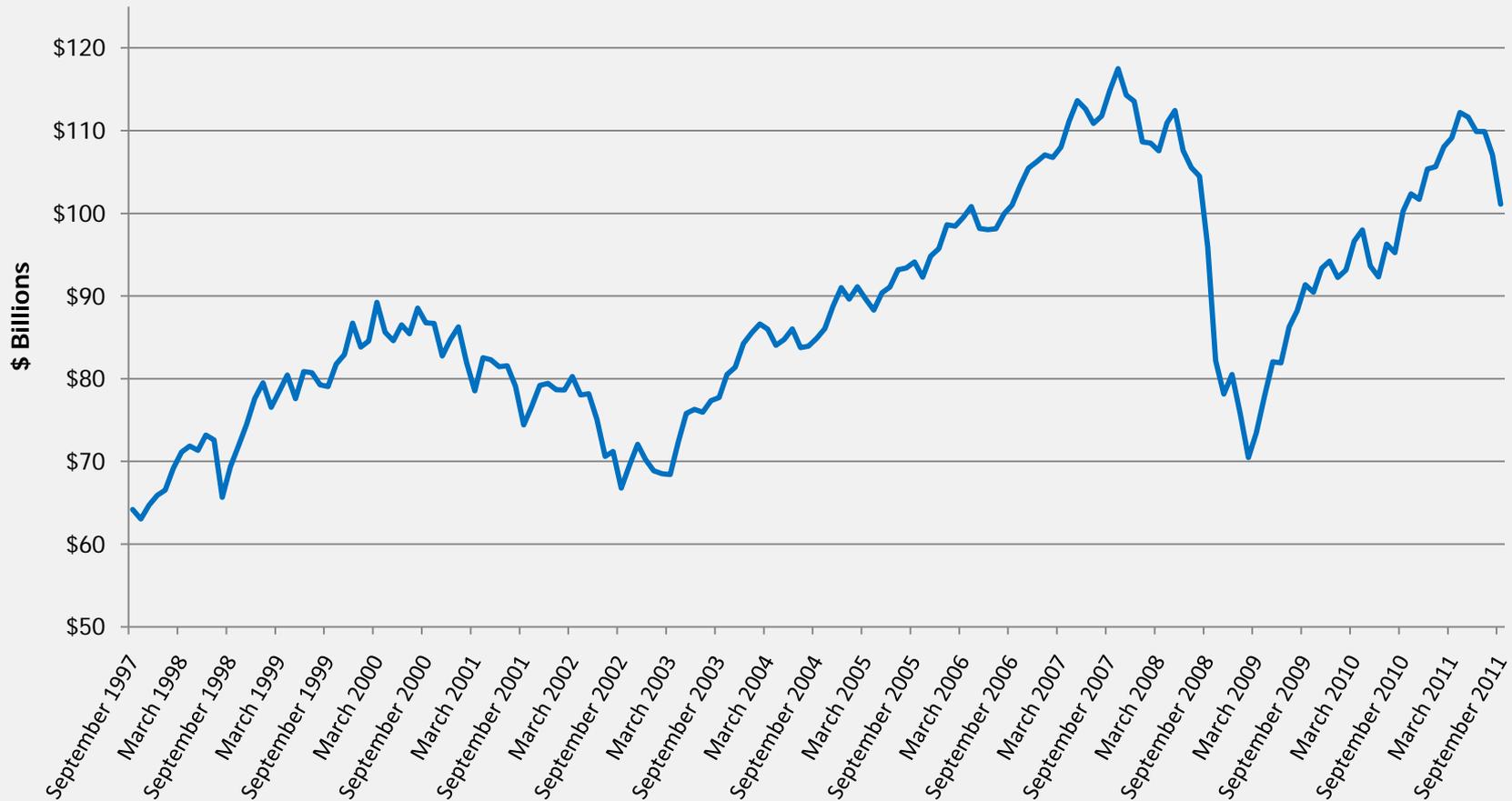
Long-Oriented			Concentration %		
African American Managers		<u>TRS Commitment</u>	<u>Investable Universe</u>		
Number of Firms	37	0	Firms with > \$1B AUM	14	38% of universe
Combined AUM	\$97.1B	\$0 Invested	AUM of Firms with > \$1B	\$90.6B	93% of universe
Average AUM	\$2.6B		Average AUM	\$6.5B	2 firms < 500m
Median AUM			Median AUM		15 firms < 250m
Hispanic Managers		<u>TRS Commitment</u>	<u>Investable Universe</u>		
Number of Firms	17	0	Firms with > \$1B AUM	5	29% of universe
Combined AUM	\$13.5B	\$0 Invested	AUM of Firms with > \$1B	\$12.5B	93% of universe
Average AUM	\$0.8B		Average AUM	\$2.5B	1 firms < 500m
Median AUM			Median AUM		11 firms < 250m
Women Managers		<u>TRS Commitment</u>	<u>Investable Universe</u>		
Number of Firms	70	2	Firms with > \$1B AUM	20	29% of universe
Combined AUM	\$115.7B	\$1.2B Invested	AUM of Firms with > \$1B	\$107.5B	93% of universe
Average AUM	\$1.7B		Average AUM	\$5.4B	6 firms < 500m
Median AUM			Median AUM		41 firms < 250m
Asian Managers		<u>TRS Commitment</u>	<u>Investable Universe</u>		
Number of Firms	18	0	Firms with > \$1B AUM	4	22% of universe
Combined AUM	\$65.9B	\$0 Invested	AUM of Firms with > \$1B	\$62.7B	95% of universe
Average AUM	\$3.7B		Average AUM	\$15.7B	2 firms < 500m
Median AUM			Median AUM		9 firms < 250m
Other		<u>TRS Commitment</u>	<u>Investable Universe</u>		
Number of Firms	13	0	Firms with > \$1B AUM	3	23% of universe
Combined AUM	\$9.6B	\$0 Invested	AUM of Firms with > \$1B	\$7.8B	81% of universe
Average AUM	\$0.7B		Average AUM	\$2.6B	1 firms < 500m
Median AUM			Median AUM		8 firms < 250m

Investments

History and Context: Investment Division

Board of Trustees Meeting
February 16, 2012

Total Pension Trust Fund Value (1997 – 2011)



History of TRS Investments 1937-1966



- 1937 - Investments limited to bonds of the U. S. government, the state of Texas, and counties, cities, or school districts within Texas
- 1957 - Constitutional amendment broadened investment authority to allow TRS to invest its funds in any securities authorized for investment by the Permanent University Fund or for the Permanent School Fund.
- 1966 - Constitutional amendment freed TRS from the-tie-that-binds relationship with UT's Permanent University Fund and invoked the "prudent man" rule for TRS investments. However, the amendment added specific restrictions, such as:
 - a) No more than 1% of TRS total assets could be invested in voting stock of any one corporation;
 - b) TRS couldn't own more than 5% of the voting stock of one corporation;
 - c) stocks purchased had to be from companies incorporated in the U. S.;
 - d) companies in which TRS invested must have paid cash dividends for 10 consecutive years or longer immediately prior to date of purchase and, except for bank and insurance stock, they had to be listed on an exchange registered with the Securities Exchange Commission or its successors; and,
 - e) if less than \$500 million of the TRS fund were invested in government and municipal securities listed in the amendment, then TRS couldn't invest more than one-third of the fund in common stocks at any one time.

History of TRS Investments 1975-1999



- 1975 - Constitutional amendment authorized the Board to invest funds according to the “prudent person” rule. However, based on an attorney general’s opinion, TRS could not own real estate.
- 1983 - Real Estate Investments added to Investment portfolio
 - Direct commercial participating mortgages
 - Board approval was required for all mortgage loan commitments, loan restructures and sales by TRS or its title-holding subsidiaries of property or other interests in the real estate portfolio.
- 1991 - Constitutional amendment created the Texas Growth Fund and authorized TRS and other state entities to invest in the Fund. Any Texas Growth Fund commitments had to be approved by the board.
- 1993 - TRS Invests in International Equities
- 1999 - After an Attorney General opinion stating otherwise, Legislation expanded the definition of securities to include limited partnerships. This expansion allowed TRS to begin diversifying its portfolio by adding alternative assets such as private equity and real estate partnerships to its portfolios.

History of TRS Investments 2000-2004



- 2000 -
 - 1st official policy allocation to Private Equity (3%) and Hedge Funds (1.5%)
 - Board abolished Equity Approved Universe (EAU) – a listing of publicly traded securities that the Board approved at least quarterly that governed equity and fixed income investment decisions. Companies whose securities were not on the EAU had to be written up and presented to the Board for separate authorization.
 - Board pre- approved a list of Hedge Fund managers staff could select from.
- 2002 - State Street bank replaces Northern Trust as Custodian.
- 2004 - Board delegated to staff authority to make follow-on Private Equity investments up to 1.5 times the original commitment. Prior to that, Board approval required for all private equity investments.

History of TRS Investments 2005-2006



- 2005
 - New official policy allocation to Real Estate
 - Real Estate fundings did not begin until 2006
 - Board delegated to staff authority to make private equity investments up to \$50 million and follow-on investments up to 1.5 times the original commitment.
 - Board approval required for all real estate investments.
 - Board authorized co-investments subject to the board's approval.

- 2006
 - Board delegated authority to make private equity investments increased to \$150 million.
 - Staff authorized to make co-investments up to \$150 million without board approval.
 - Board approval required for all new real estate investments but staff was authorized to make follow-on investments up to \$150 million or 1.5 times the original commitment.
 - First TRS Incentive plan began
 - Britt Harris joined TRS as Chief Investment Officer

History of TRS Investments 2007-2008



- 2007 - Legislation authorized TRS to use external managers and derivatives.
 - Authority for these tools was set to expire in 2012.
 - Legislation capped externally managed assets at 30% of the portfolio and hedge funds at 5% of the portfolio.
 - After the 2007 Legislature granted authority to use external managers, the Board authorized staff to fund individual external managers up to 0.5% of the total assets of the fund and follow-up investments up to 1% of the total assets of the fund.

- 2008
 - Board authorized the selection of four external managers as Strategic Partners, each of which were allocated \$1 billion in publicly traded securities.
 - Board authorized CIO and the Executive Director may make an investment up to \$1 billion in the Special Investment Opportunities requiring a rapid response.
 - Internal Investment Committee (IIC) established
 - IIC authorized to commit up to 0.25% of the total assets of the fund to new private market and hedge fund managers, 0.5% of the total assets of the fund to second investments with the same manager and follow-up investments up to 1% of the total assets of the fund to subsequent investments with the same manager organization.
 - IIC authorized to investments up to 0.5% of the total assets of the fund to new external public managers and follow-up investments up to 1% of the total assets of the fund to subsequent investments with the same manager organization.

2009-present

- 2009
 - IIC authorized to commit up to 0.5% of the total assets of the fund to new private market and hedge fund managers and follow-up investments up to 1% of the total assets of the fund to subsequent investments with the same manager organization.
 - IIC authority for external public managers did not change.

- 2011 - Legislation extended the authority to use external managers and derivatives until 2019.
 - This legislation left the externally managed assets cap at 30% of the portfolio but increased the “hedge funds” cap to 10% of the portfolio

Investments

- Evolution of Board Decision making

Investment rate Assumptions

School Year	Assumption	Risk-Free Rate *
1969-1970	4.00%	6.6%
1970-1973	4.75%	5.4%
1973-1975	5.00%	6.9%
1975-1978	5.50%	5.8%
1978-1980	6.00%	9.6%
1980-1981	6.75%	7.4%
1981-1986	7.25%	9.6%
1986-2011	8.00%	3.8%

* 30 day T-Bill Trailing Annualized Returns over time periods
 Source: HEK

Board Adopted Asset Allocations



	Public Equity	Fixed Income	Private Equity	Hedge Funds	Real Assets	Other Real Return	Short-Term
1990	50.0%	38.0%			10.0%		2.0%
1995	60.0%	34.0%			4.0%		2.0%
2000	65.5%	29.5%	3.0%	1.5%			0.5%
2004	63.40%	30.41%	4.12%	1.55%			0.52%
2005	61.50%	29.50%	4.00%	1.50%	3.00%		0.50%
2006	60.31%	30.41%	4.12%	1.55%	3.09%		0.52%
2007	55.0%	26.0%	5.0%	4.0%	5.0%	5.0%	1.0%
2008	53.0%	26.0%	7.0%	4.0%	6.0%	4.0%	1.0%
2009	52.0%	26.0%	8.0%	4.0%	8.0%	4.0%	1.0%
2010	50.0%	24.0%	10.0%	4.0%	8.0%	4.0%	1.0%
2011	45.0%	19.0%	12.0%	9.0%	13.0%	2.0%	1.0%

Investments

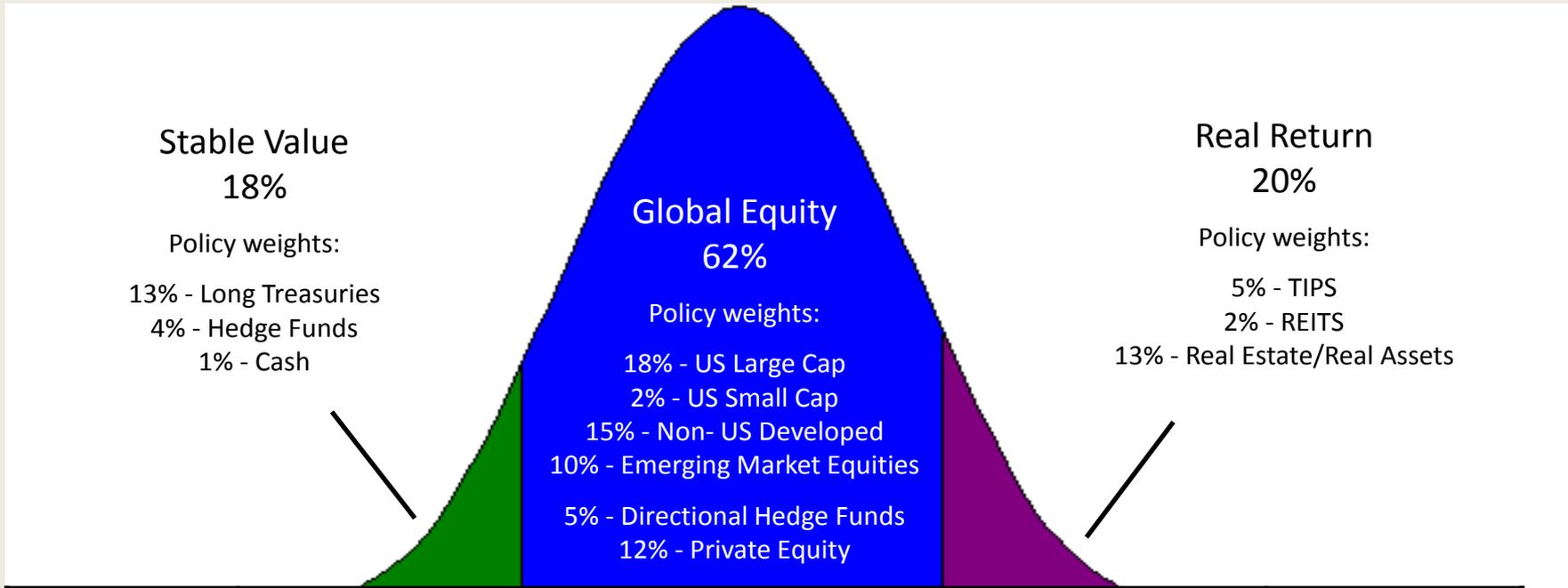
- Investment Management Division

Portfolio Diversification

As of November 30, 2011



Effective Risk Allocation Across Economic Scenarios



Stable Value
18%

Policy weights:
13% - Long Treasuries
4% - Hedge Funds
1% - Cash

Global Equity
62%

Policy weights:
18% - US Large Cap
2% - US Small Cap
15% - Non- US Developed
10% - Emerging Market Equities
5% - Directional Hedge Funds
12% - Private Equity

Real Return
20%

Policy weights:
5% - TIPS
2% - REITS
13% - Real Estate/Real Assets

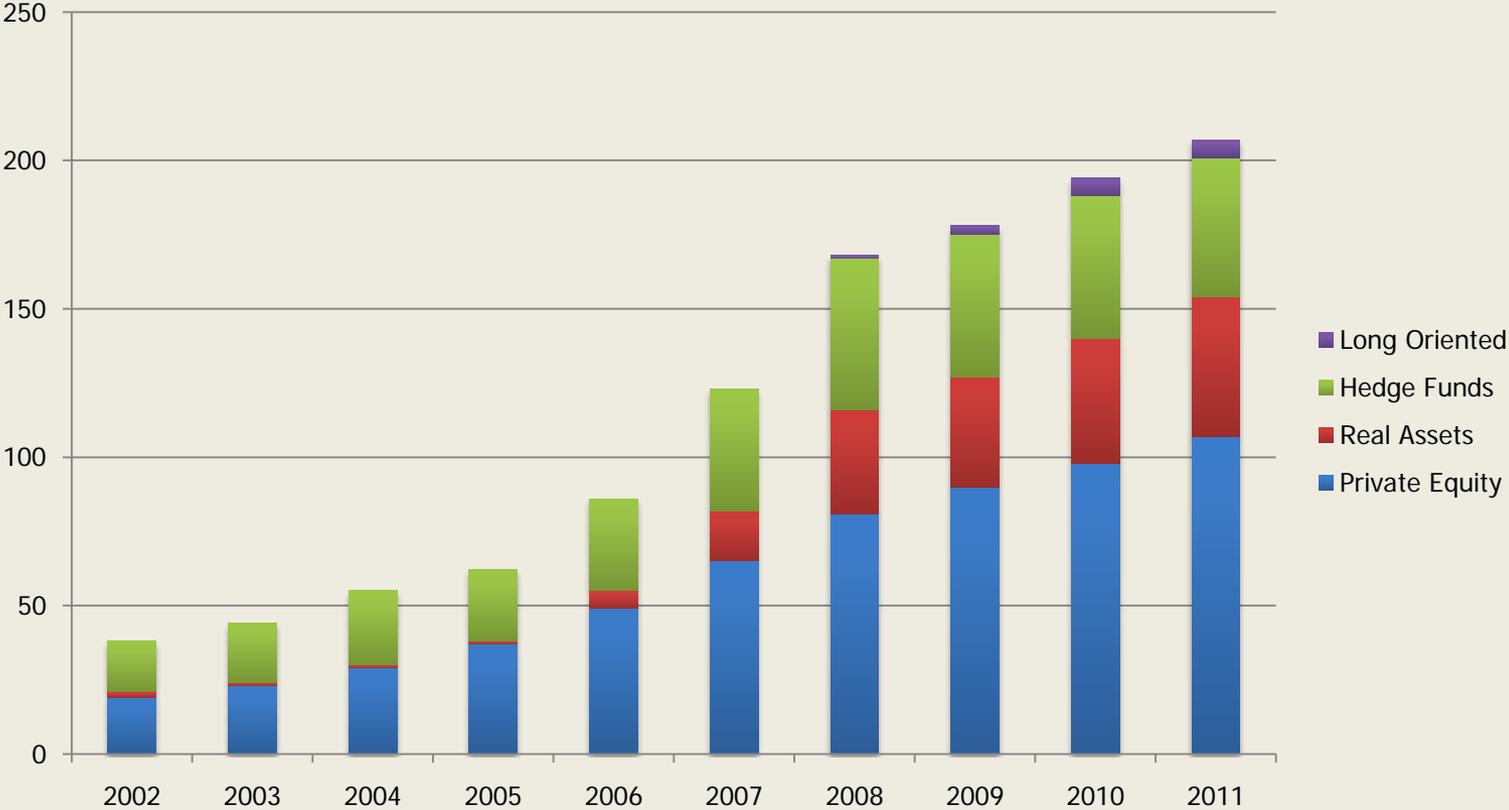
QTD Return	-0.7%	5.4%	3.7%	3.8%
1 Year Return	13.2%	0.3%	12.4%	5.7%
Ending Value	\$20.8B	\$62.8B	\$20.7B	\$104.3B
Period	Stable Value	Global Equity	Real Return	Total Trust

Diversification Required a Mind-Set Change



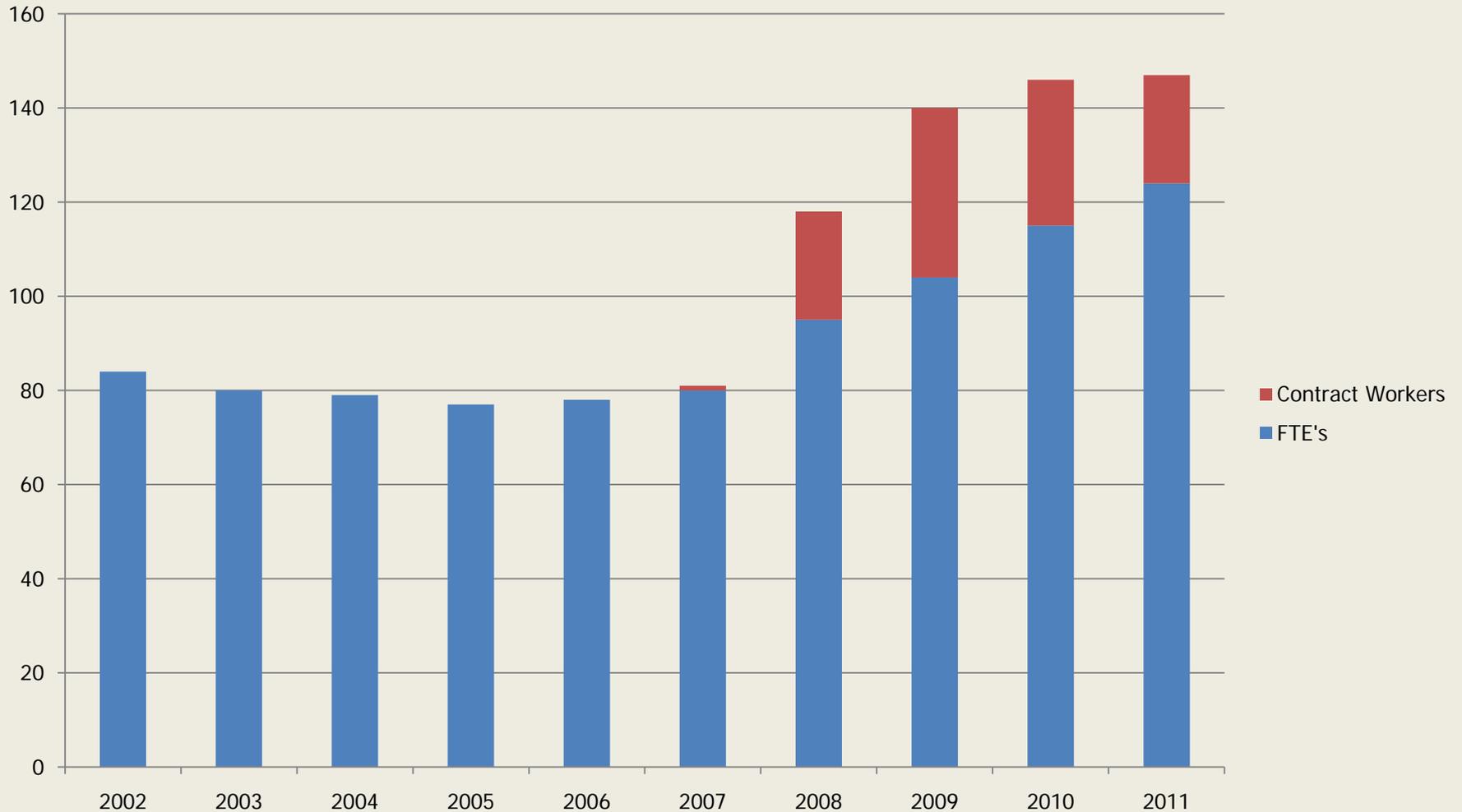
- TRS investment expenses tracked well below the national average for institutional investors
- To achieve new outcomes, the following was needed:
 - New relationships
 - Additional staff
 - Additional funding
- As a result of the transition, TRS investment expenses are now just above the national median

Number of Partnerships



IMD Staffing Levels

Includes Investment Accounting prior to FY 2007



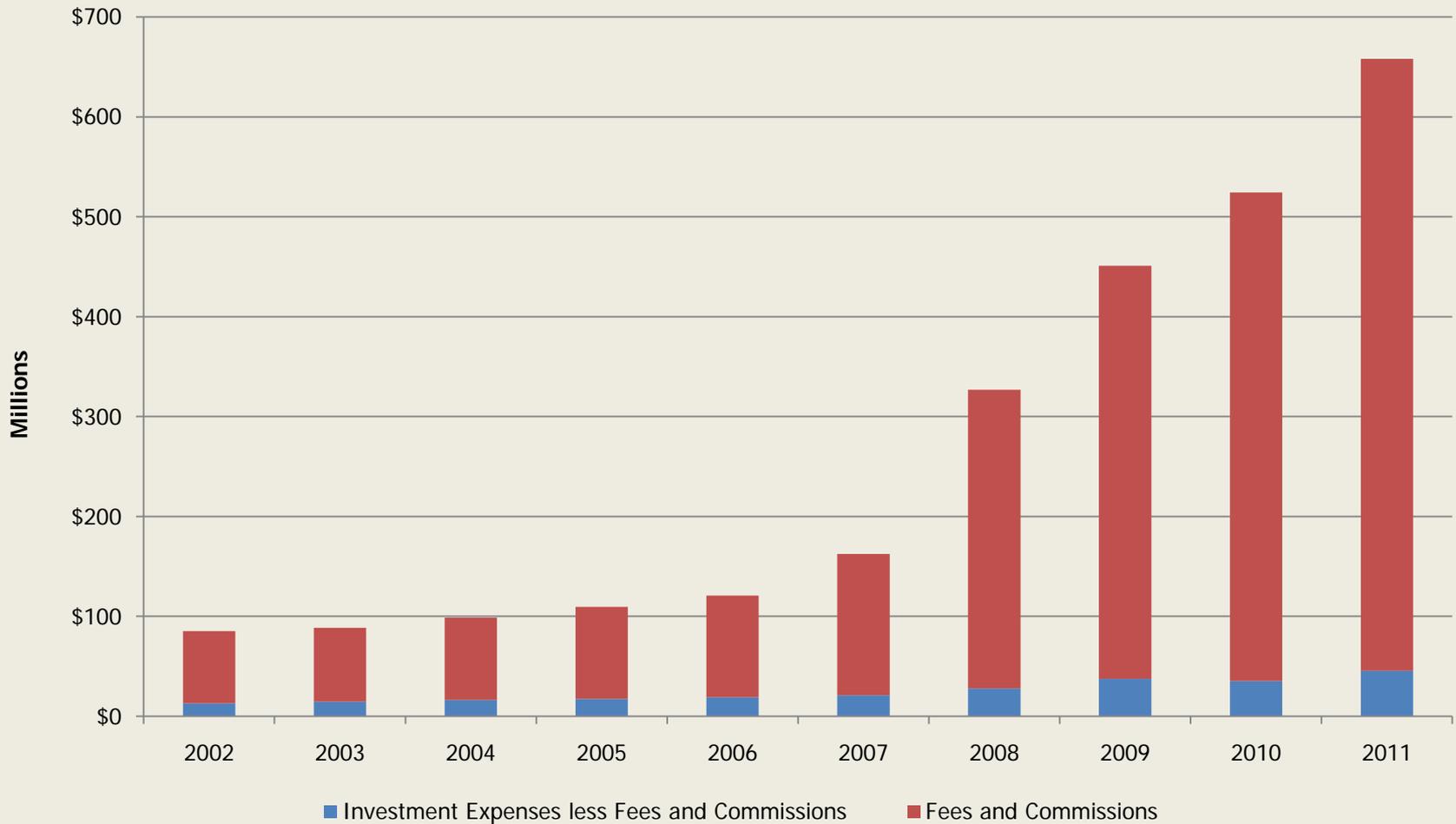
Investment Expenses *

2002 - 2011

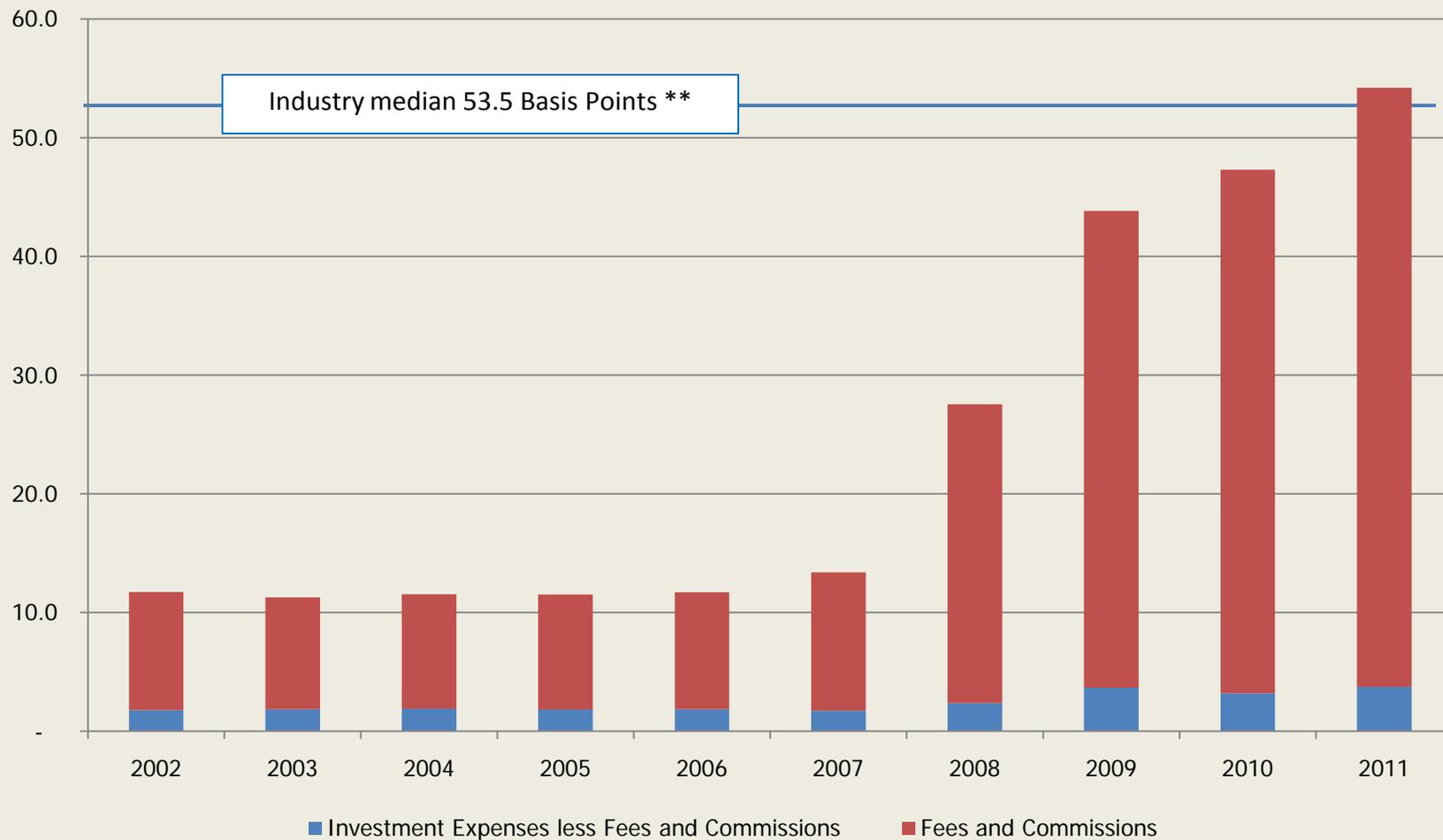


	Investment Expenses less Fees and Commissions		Fees and Comissions *		Total Investment Expenses *	
	\$ Millions	Basis Points	\$ Millions	Basis Points	\$ Millions	Basis Points
2002	\$12.9	1.8	\$72.3	10.0	\$85.2	11.7
2003	\$14.6	1.9	\$74.1	9.4	\$88.7	11.3
2004	\$16.3	1.9	\$82.4	9.6	\$98.6	11.5
2005	\$17.4	1.8	\$92.0	9.7	\$109.4	11.5
2006	\$19.1	1.8	\$101.8	9.8	\$120.9	11.7
2007	\$20.9	1.7	\$141.5	11.7	\$162.4	13.4
2008	\$28.0	2.4	\$298.9	25.2	\$326.9	27.5
2009	\$37.6	3.7	\$413.4	40.2	\$451.0	43.8
2010	\$35.3	3.2	\$489.0	44.1	\$524.4	47.3
2011	\$45.4	3.7	\$612.6	50.5	\$658.1	54.2

Total Investment Expenses in Dollars *



Total Investment Expenses in Basis Points *



Investments

- **Transition to Current Asset Allocation**

Policy Allocations

	Policy Asset Allocation: April 2006 – September 2007 (without opportunistic Allocation)
Domestic Equities	46.9%
International Equities	13.4%
Fixed Income	30.4%
Private Equity	4.1%
Hedge Funds	1.5%
Real Estate	3.1%
Short-Term	0.5%
TOTAL	100%

	Current Policy Allocation
US large Cap Equities	18%
US Small Cap Equities	2%
Non-US Developed Equities	15%
Emerging Market Equities	10%
Directional Hedge Funds	5%
Private Equity	12%
TOTAL GLOBAL EQUITY	62%
Long Treasuries	13%
Stable Value Hedge Funds	4%
Short-Term	1%
TOTAL STABLE VALUE	18%
TIPS	5%
Real Assets	13%
Commodities	0%
REITS	2%
TOTAL REAL RETURN	20%
TOTAL	100%

Expectation of Current Allocation



- Generate an additional 1.19% in annual returns over ten years by...
 - Increasing fund allocations to alternative assets
 - Hiring External Managers where appropriate
 - Effectively using derivatives

Value Added Over Old Policy Allocation Since Transition

as of September 30, 2011



	1 Year	2 Years	3 Years	4 Years
Actual Total Fund Return	3.64%	8.01%	4.56%	-0.53
Old Total Fund Policy Benchmark Return	1.18%	5.76%	4.16%	-0.60%
Value Added	2.46%	2.24%	0.40%	0.07%
Expected Value Added	1.19%	1.19%	1.19%	1.19%

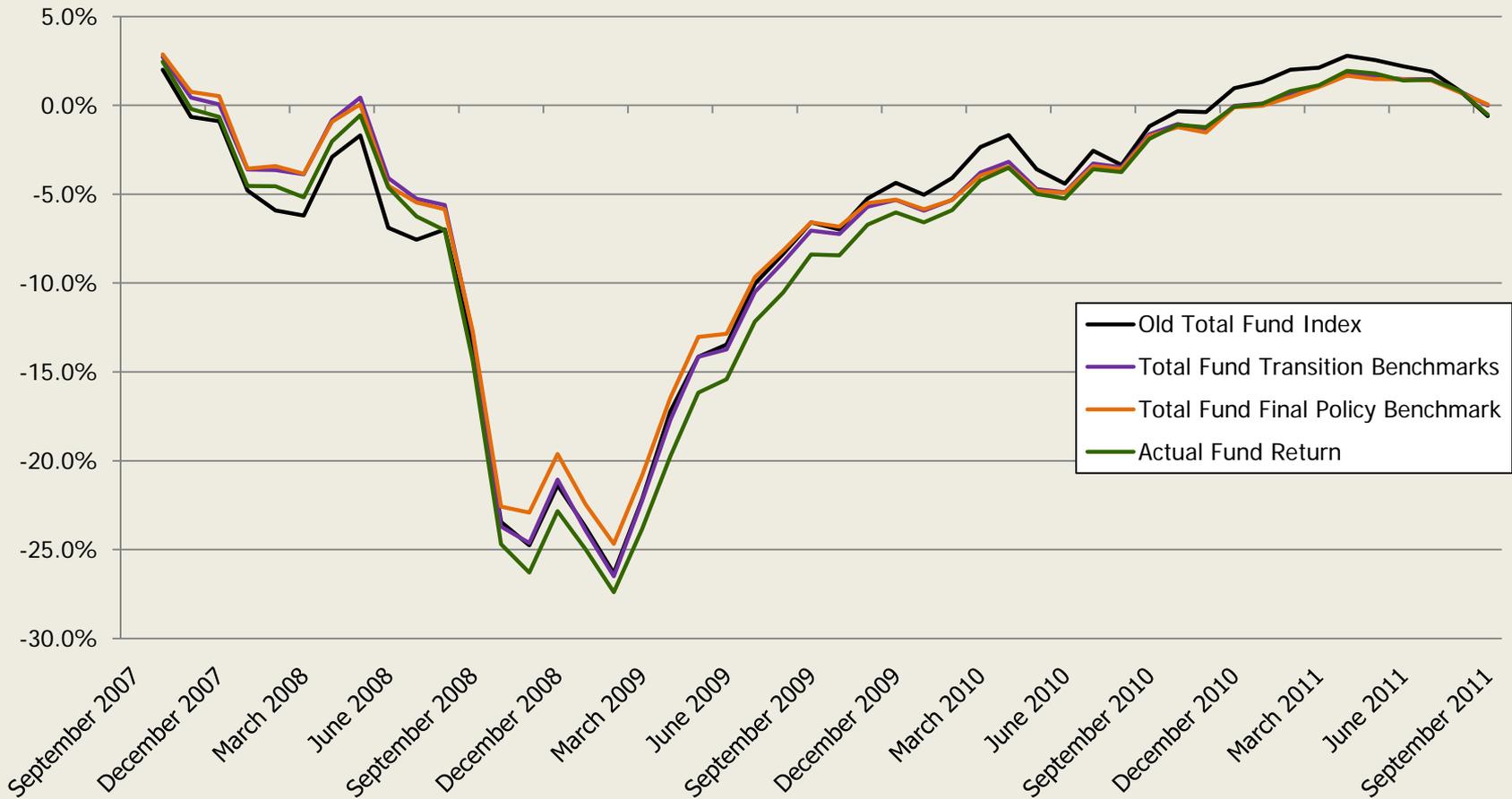
Value Added Over Old Policy Allocation

Year to Year

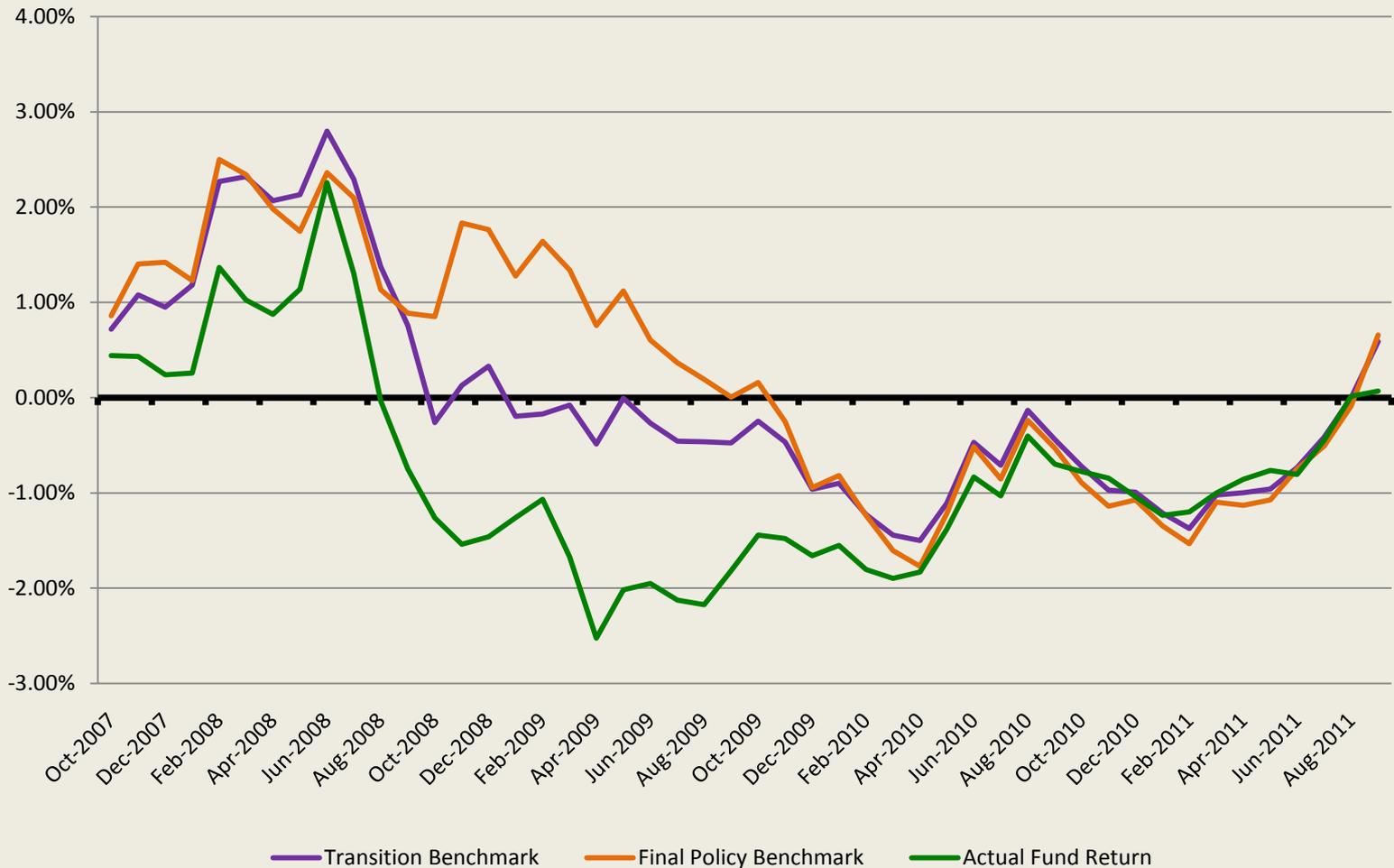


	Actual Total Fund Return	Old total Fund Policy Benchmark	Value Added
Transition Year 1: Oct 2007 – Sept 2008	-14.37%	-13.62%	-0.75%
Transition Year 2: Oct 2008 – Sept 2009	-2.01%	1.03%	-3.04%
Transition Year 3: Oct 2009 – Sept 2010	12.57%	10.56%	2.01%
Transition Year 4: Oct 2010 – Sept 2011	3.64%	1.18%	2.46%

Cumulative Returns since policy transition



Cumulative Excess Return vs. Old Policy Benchmark:



Investments

Investment Management Division

**Board of Trustees Meeting
February 2012**

Successes Since 2007



- Built Strong Investment Division
- Executed Portfolio Restructuring
- Established Emerging Manager Program
- Created sound and transparent investment process
- Produced Top Quartile Investment Returns

TRS Investment Returns



Periods Ended August 31 and September 30, 2011

Return Summary as of 8/31/11 (Fiscal Year)	1 Year	2 Year	3 Year
Old TRS Investment Policy	14.00%	10.46%	3.53%
New Investment Policy (Transition Benchmark)	14.45%	11.00%	3.02%
TRS Actual Performance	15.47%	13.07%	3.56%

Return Summary as of 9/30/11 (Calendar Year)	1 Year	2 Year	3 Year
Old TRS Investment Policy	1.18%	5.76%	4.16%
New Investment Policy (Transition Benchmark)	4.99%	7.57%	4.68%
TRS Actual Performance	3.64%	8.01%	4.56%

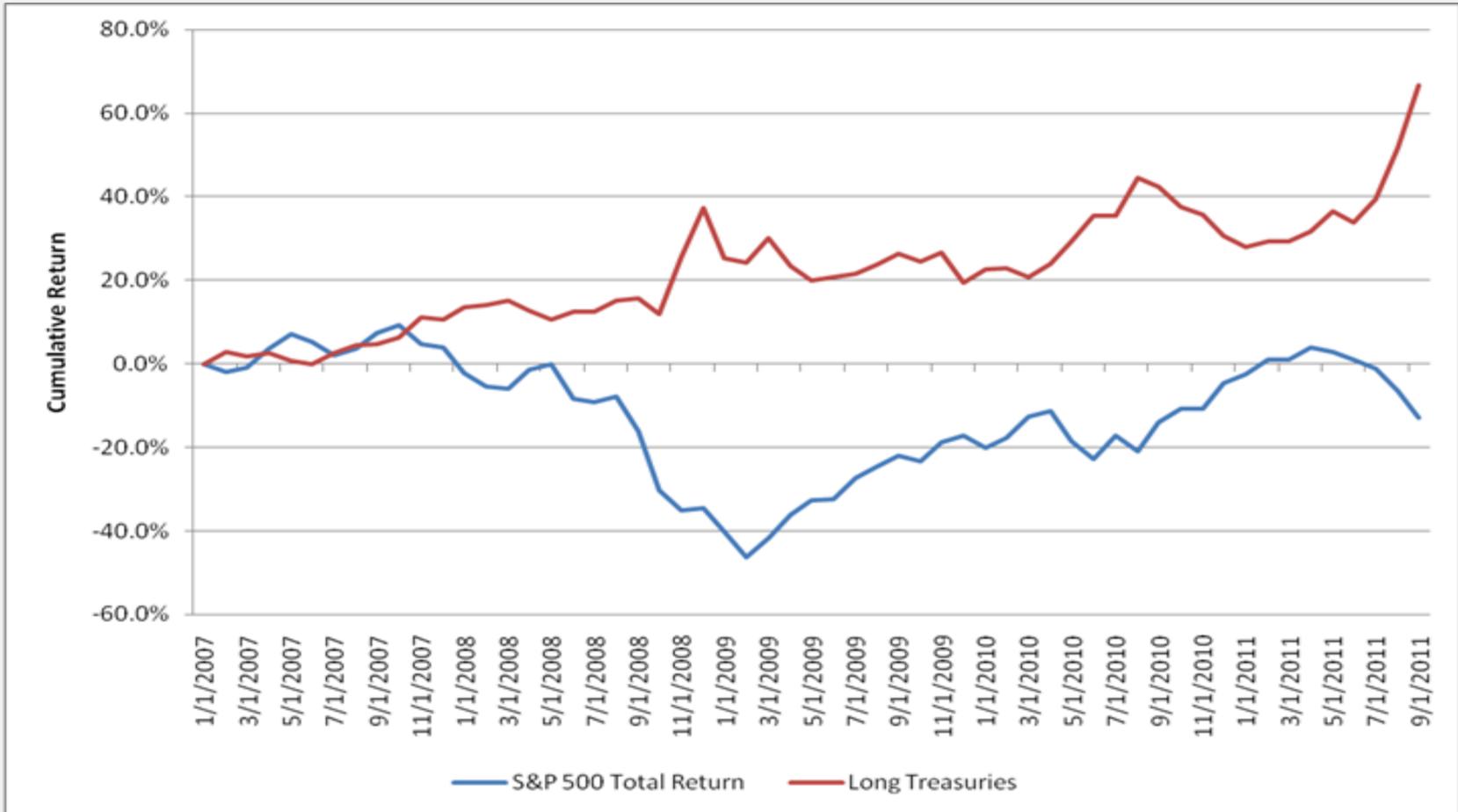
Competitive Rank (Percentile)	1 Year	2 Year	3 Year
Old Policy	83%	80%	37%
New Policy	14%	16%	16%
Actual Performance	29%	14%	21%

Challenges

- Did Not Produce 8% Return
- Did Not Produce Alpha of 1%

Investment Environment

December 29, 2006 thru September 30, 2011



Agenda

- Investment Management Division Historical Summary
 - Investment Management Division
 - Investment Management Policy
 - Legislative Authority
 - The Board and the IMD

Leadership History

CIO History



John E. Young



R. Jack Cooper



Martin J. Walker



John Peavy



James Hille



Ronnie Jung



Britt Harris

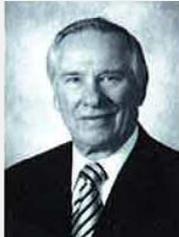
Timeline

George Reagan Interim 1990	John Young CIO 1991-1996	Jack Cooper Interim 1996 - 1997	Marty Walker CIO 1997-1998	John Peavy Interim 1999 CIO 2000-2002	James Hille Interim 2002 CIO 2003-2005	Ronnie Jung Interim 2006	Britt Harris CIO 2006 to Current
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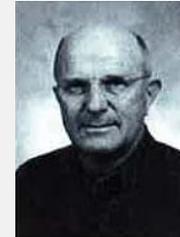
Board of Trustees in 2007



Jarvis V. Hollingsworth
Chairman,
2007
Sugar Land
Partner, Bracewell &
Giuliani, L.L.P



Linus Wright
Vice Chair,
2011
Dallas
Retired



Terence (Terry) Ellis
2005
New Ulm
Private Investor and
Rancher



John Graham, Jr.
2009
Fredericksburg
Financial Advisor,
Ameriprise Financial



Mark Henry, Ed.D.
2009
Galena Park
Superintendent,
Galena Park ISD



James H. (Jim) Lee
2007
Houston
Private Investor



Philip Mullins
2011
Austin
Power Plant Operator,
University of Texas



Greg Poole, Ed.D.
2007
Mont Belvieu
Superintendent,
Barbers Hill ISD



Dory A. Wiley
2009
Dallas
Managing Director,
SAMCO Capital
Markets

Board of Trustees in 2011



R. David Kelly,
Chairman,
2017 Plano
*Managing Partner,
Straight Line Realty
Partners*



T. Karen Charleston,
2017 Houston
*Space Management
Assistant,
Prairie View A&M
University*



Christopher Moss,
2015 Lufkin
*Vice President,
The Advanced Financial
Group*



Charlotte Clifton,
Vice Chair,
2013 Snyder
*Teacher,
Snyder ISD*



Joe Colonna,
2013 Dallas
Private Investor



Anita Smith Palmer,
2017 Wichita Falls
*Former Texas Public
School Teacher,
Administrator and
University Adjunct
Professor*



Todd Barth,
2015 Houston
*President, Bowers
Properties Inc.*



Eric C. McDonald,
2013 Lubbock
*Owner and CIO,
McDonald Capital
Management*

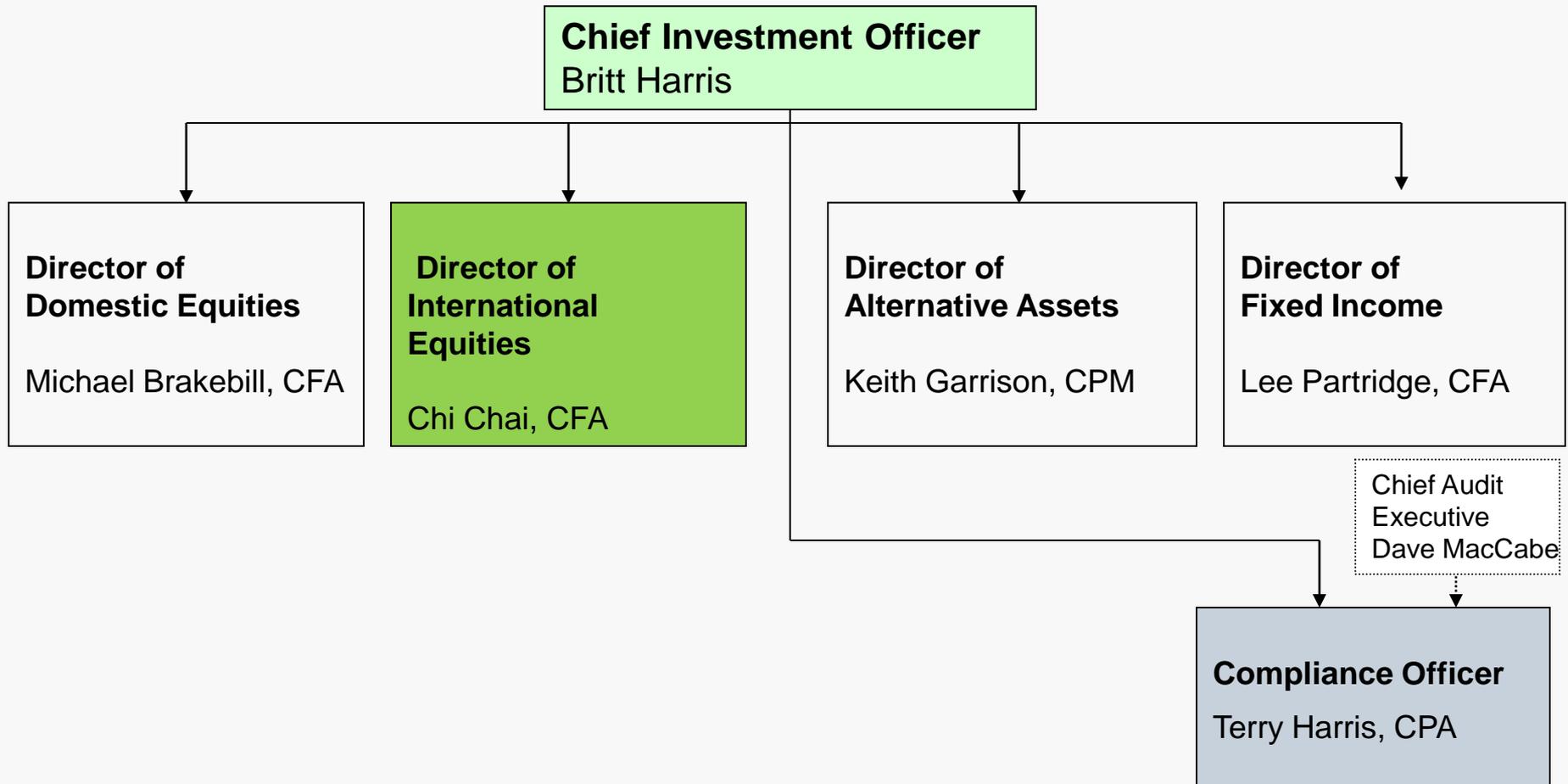


Nanette Sissney,
2015 Whitesboro
*School Counselor,
Whitesboro ISD*

Investment Management Division Organizational Structure

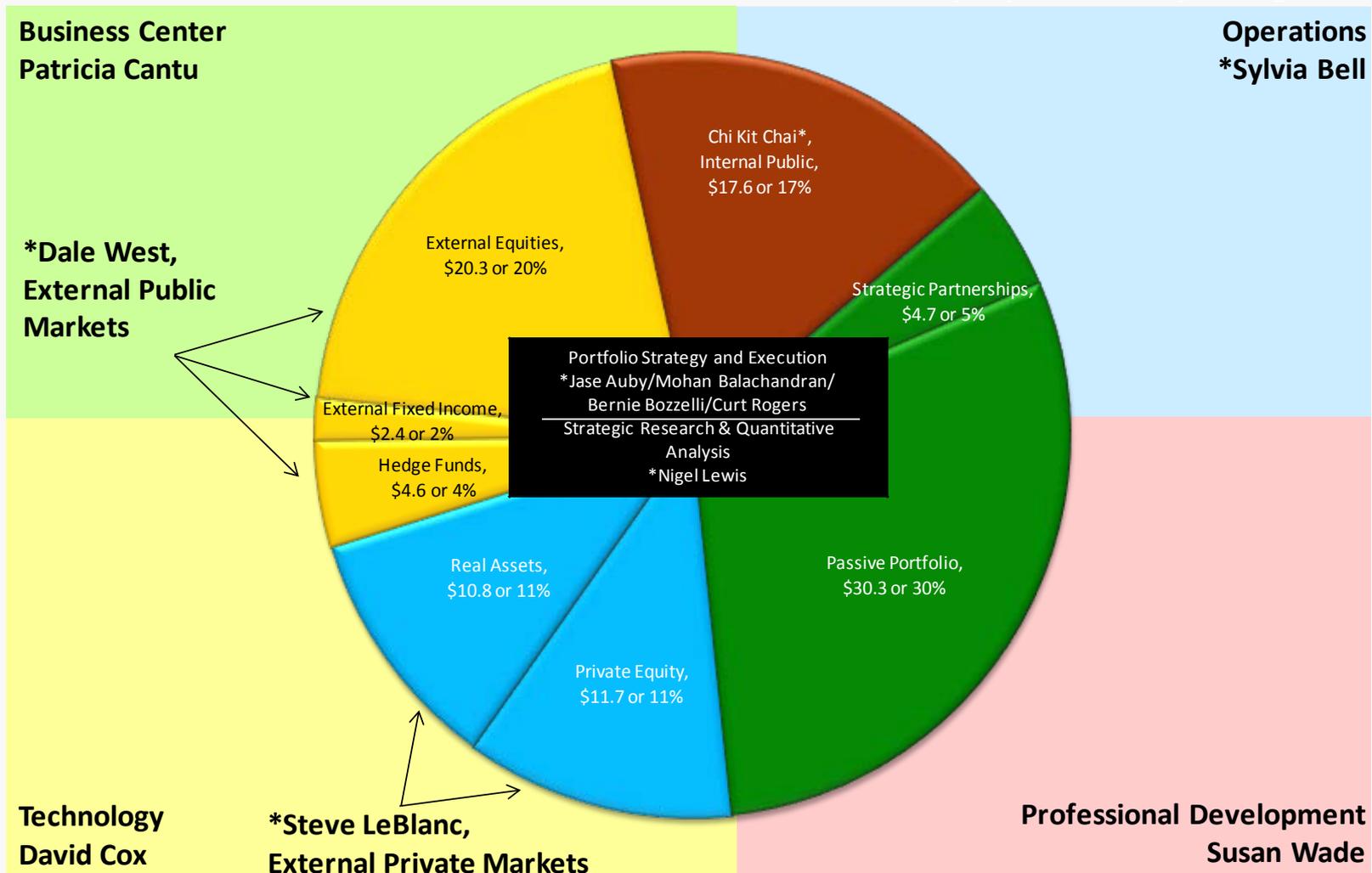
IMD Organization

As of February 2007



IMD Organization Structure

As of September 31, 2011



Internal Investment Committee

2011



Britt Harris
Chief Investment Officer
BA Finance, Texas A&M
Prev. employers: Bridgewater Associates and Verizon Communications
30 years investment experience



Jerry Albright
Deputy Chief Investment Officer
Economics, Texas A&M
Prev. employers: banking
29 years investment experience



Steve LeBlanc
Sr. Managing Director,
Private Markets
BS Business, UT Austin
Prev. employers: Lincoln Property and Summit Properties
31 years investment experience



Chi Kit Chai, CFA
Sr. Managing Director,
Internal Public Markets
MS Economics, UT Austin
Prev. employers: American Airlines and Burlington Northern Railway
16 years investment experience



Nigel Lewis, PhD
Managing Director,
Strategic Research &
Quantitative Analysis
PhD Statistics, Cambridge
Prev. employers: Principal Financial Group
15 years investment experience



Jase Auby, CFA
Chief Risk Officer
BS, Electrical & Computing System Engineering, Harvard
Prev. employers: Barclays Capital and Goldman Sachs
14 years investment experience



Dale West, CFA
Managing Director,
External Public Markets
MBA, Stanford
Prev. employers T.Rowe Price
10 years investment experience



Sylvia Bell, CPA
Director, Investments
Operations
MS Accounting, University of Florida
Prev. employers: JP Morgan, Oracle and Deloitte and Touche
17 years investment experience



Brian Guthrie
Executive Director
MS Public Affairs, LBJ School of Public Affairs, UT Austin
Prev. employers: Legislative Budget Office, Lieutenant Governor's Office and Governor's office

PSE Missions and Portfolios

Missions

Tactical Asset Allocation (TAA)

- “Classic” TAA
- Strategic Partnership Management
- New Alpha Strategies
- Derivatives Management

Strategic Asset Allocation (SAA) and Tilts

- Strategic Allocation
- Valuation Tilts
- Fixed-Income & Commodities
- Portfolio Management
- Liquidity Management
- Securities Lending
- Cross-Division Investing

Risk

- Managing
 - Risk Signals
 - Budgeting
 - Strategies
- Monitoring
 - Compliance
 - Monitoring
 - Certification

Portfolios

Active

Classic TAA

Strategic Partners

Directional HF Replication

Tilts

US Long Treasuries

US TIPs

Commodity Strategies

Research & Development

QVF

Dynamic Factor

Risk Strategies

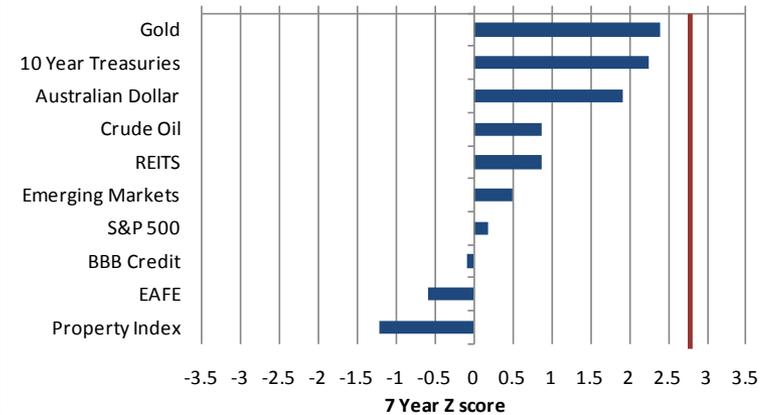
Risk Parity

Currency

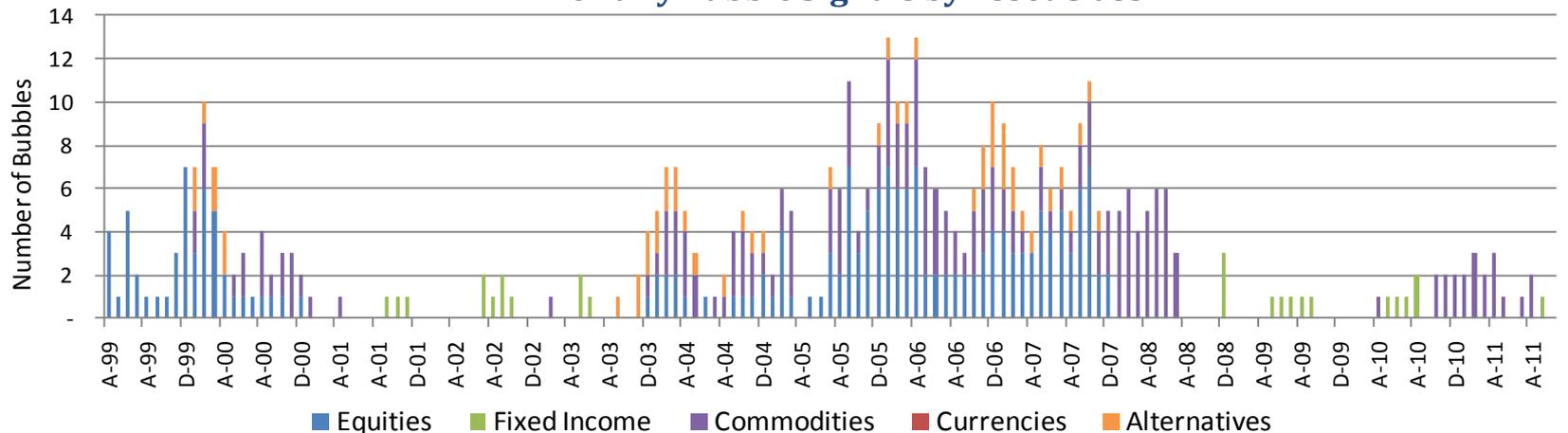
Risk Signals

- 100 different assets monitored monthly
- 3 Factor model:
 - Relative index change, correlations, absolute change
- Most recent bubbles have been in commodities and fixed income

Bubble Level Monitor: October 2011



Monthly Bubble Signals by Asset Class



IMD Employees Recruited Since 2007



Team	Employees
IIC (6)	Steve LeBlanc, Nigel Lewis, Jase Auby, Sylvia Bell, Dale West, (Ashley Baum)
Senior Management (2)	Mohan Balachandran, Rich Hall
CIO Office (4)	Marina Salazar, Sharon Toalson, Susan Wade, Susan White
PSE/Risk Management (8)	Grant Birdwell, JB Daumerie, Tim Jones, Brandon Kunz, James Nield, Matt Talbert, Mark Telschow, Tony Yiu
Internal Public (9)	Jeremy Aston, John DeMichele, Jon Hook, Amit Kumar, Stacey Peot, Marshall Reid, Tayyib Shah, Daniel Steinberg, John Watkins
External Private (16)	Brian Baumhover, Stuart Bernstein, Andrew Cronin, Chase Hill, Michael Lazorik, Gracie Marsh, Cynthia Mendoza, Michael Pia, Scott Ramsower, Neil Randall, Craig Rochette, Molly Rose, Grant Walker, Jennifer Wharton, Ross Willmann, Nathan Zinn
External Public (7)	Todd Centurino, Rachel Clark, Susanne Gealy, Rusty Guinn, Jon Klekman, Lulu Llano, Joe Tannehill
Trading (3)	Jared Morris, Steve Peterson, Komson Silapachai
Operations (13)	Kendall Courtney, David Cox, Barbara Forssell, DC Gunnia, Roy Kurian, Steven Lambert, Jelena Melesenko, Maribel Nesuda, Kelly Newhall, Hugo Rangel, Babette Ruiz, Jared Simpson, Irma Zavaleta-Castillo

IMD Culture Statement*



Here at the Teacher Retirement System of Texas Investment Management Division (IMD), we believe in a strong and clearly identified set of core values focused on four concepts:

Creative Construction is driven by openness, candor, a meritocracy of ideas, the continual reexamination and constant striving for improvement, innovation, and the ruthless elimination of bureaucracy.

Personal Fulfillment We develop our “personal genius” and recognize the success gained for an organization when individuals balance their work and life pursuits. This belief comes with the understanding that respect is something that is earned as much as it is given, and that our senior leadership must provide role models of both professional and personal success for all TRS employees.

Passion, Energy, and Motivation to Outperform We believe that great outcomes are the result of doing something that we believe in, truly enjoy, and are willing to make sacrifices for. These outcomes require a supportive and positive environment that is also a challenge to work in, a passionate belief in our cause, as well as, the respect and admiration for those with whom we work. Working in one of the most competitive industries, we are motivated by our duty as fiduciaries, being entrusted with protecting the financial futures of teachers of Texas and other members of the TRS organization. We are making a difference in the lives of over one million people.

Collaboration and Teamwork We encourage and accept individual accountability, but also understand that everything we do resides in a larger context and is done for a greater collective cause. Through a partnership of trust, we have established a relationship where all are on the same team, in the same boat, rowing in the same direction. Our lives and our outcomes are intertwined, for the good of all.

Technology

Trading

As of September 31, 2011



Old Trading Desk



New Trading Desk



New Trading Desk has state of the art technology and its new layout has improved communication.

IMD Compensation Philosophy



“To remain competitive in its efforts to attract and retain high caliber investment Division staff, the TRS strives to offer a competitive compensation package.

Performance incentive pay is an industry standard practice in the private sector investment arena and is rapidly becoming a standard practice in the public sector. By offering both a competitive base salary and performance incentive pay, TRS enhances its ability to fulfill the mission to ‘prudently invest and manage the assets held in trust for members and beneficiaries in an actuarially sound system administered in accordance with applicable fiduciary principals.

Therefore, pursuant to the laws governing TRS, the TRS Board of Trustees has determined that establishing and expending funds for this Performance Incentive Pay Plan is required to perform the fiduciary duties of the Board in administering the retirement system.”

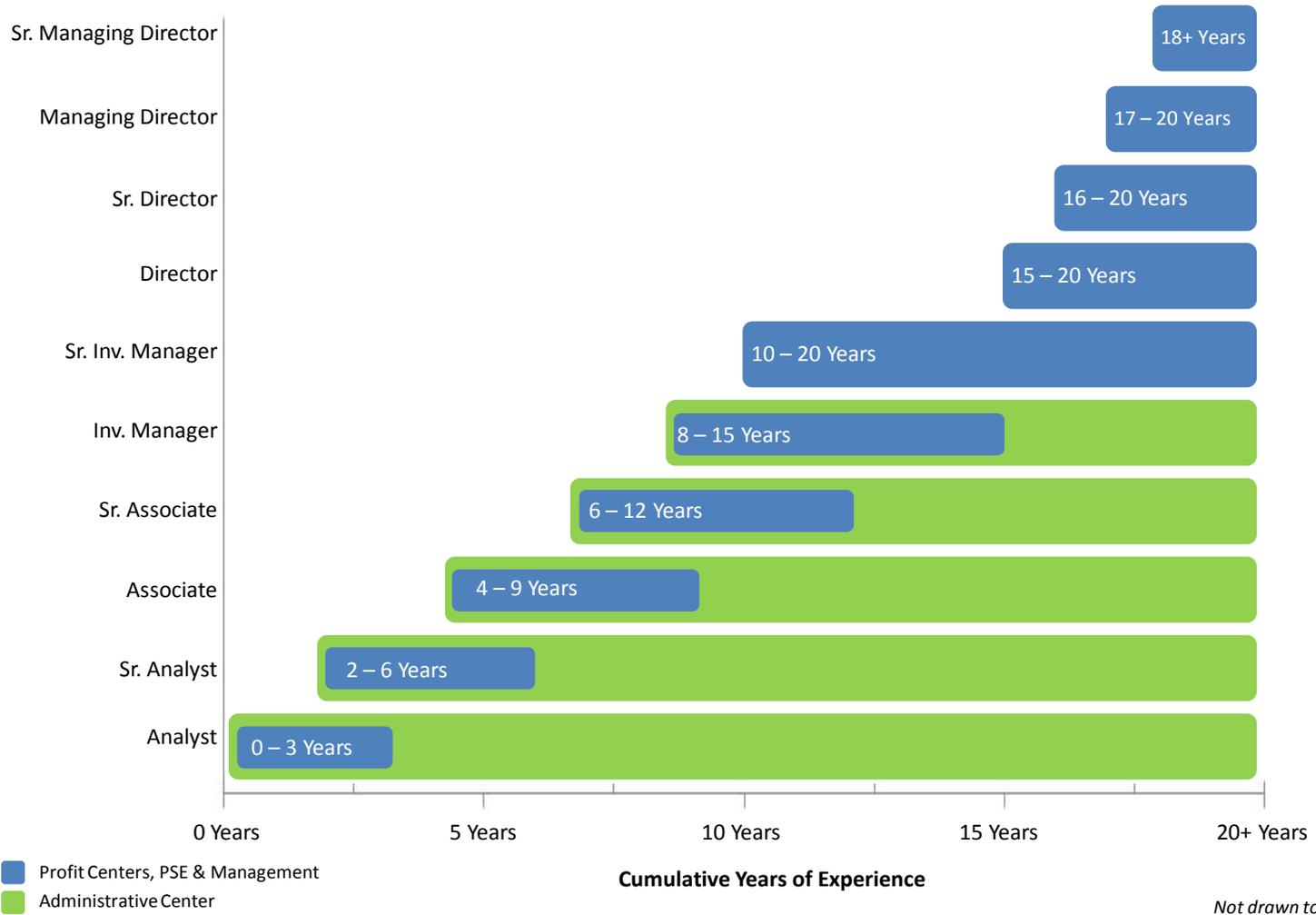
- Investment Incentive Compensation Plan,
Plan Purpose and Authorization Adopted by
TRS Board of Trustees

- In 2007, compensation targets were recommended to the Board based on the results of an Investment Management Compensation study conducted by McLagan (the nation’s leading financial sector compensation consultant) to:
 - Recommend a compensation strategy that would allow TRS to attract and retain a talented investment organization
 - Establish a long-term compensation philosophy in the IMD
- McLagan’s 2011 Public Fund Roundtable compensation presentation showed indications that TRS’ plan is one of the best designed in the U.S. for large public funds.
 - Unlike many other public funds, TRS’ incentive opportunities approach private sector norms – which is critical given that TRS primarily competes with the private sector for talent.
 - TRS’ incentive deferrals are meaningfully sized and balanced relative to cash compensation.

Adopted Compensation Philosophy	
Base Pay	1 st quartile for Public Funds
Performance Pay	4 th quartile for Private Funds

Performance Pay
<ul style="list-style-type: none"> ▪ Total alignment with TRS members ▪ 33% on 1-year results ▪ 67% on 3-Year results ▪ 80% investment returns/20% individual rank ▪ Paid only when: <ul style="list-style-type: none"> ▪ Trust Returns are positive ▪ Return exceeds market ▪ Return exceeds peers

IMD Career Path



IMD 360° Review

- Measures the culture and behaviors associated with top-performing investment teams:



- Conducted twice a year
 - Mid-year (February/March), to help staff stay on track; and
 - Annual (August), with results used to assess each individual's overall contributions.
- Results delivered in October each year

IMD 360° Review Process

- Placement vertically is determined by the employee's overall performance level: Exceptional, Satisfactory, or Unacceptable.
- Placement horizontally within each category is determined by the employee's performance within that category: (low, medium, or high). For example, an employee who has overall satisfactory performance and whose contribution is at maximum for that category would be in Box 6 (Satisfactory, High).
- Satisfactory is not a pejorative term. Dependable, satisfactory performers may not be ready to advance in their roles yet (or ever), but are still valued contributors.
- Unacceptable performers must be addressed (that is, no year over year of unacceptable performance should continue).
- For those new to the IMD or to their role, where no previous performance is available, performance will be considered stable.
- Dispersion of performance on each team exists and should be reflected.

Qualitative Ranking

		Profit Center:			Manager:		
		3. Exceptional 80%		2. Exceptional 90%		1. Exceptional 100%	
CURRENT PERFORMANCE	+						
	0	6. Satisfactory 20%		5. Satisfactory 40%		4. Satisfactory 60%	
	-	9. Unacceptable 0%		8. Unacceptable 0%		7. Unacceptable 0%	
		Low		Medium		High	
		PERFORMANCE					

IMD Professional Development

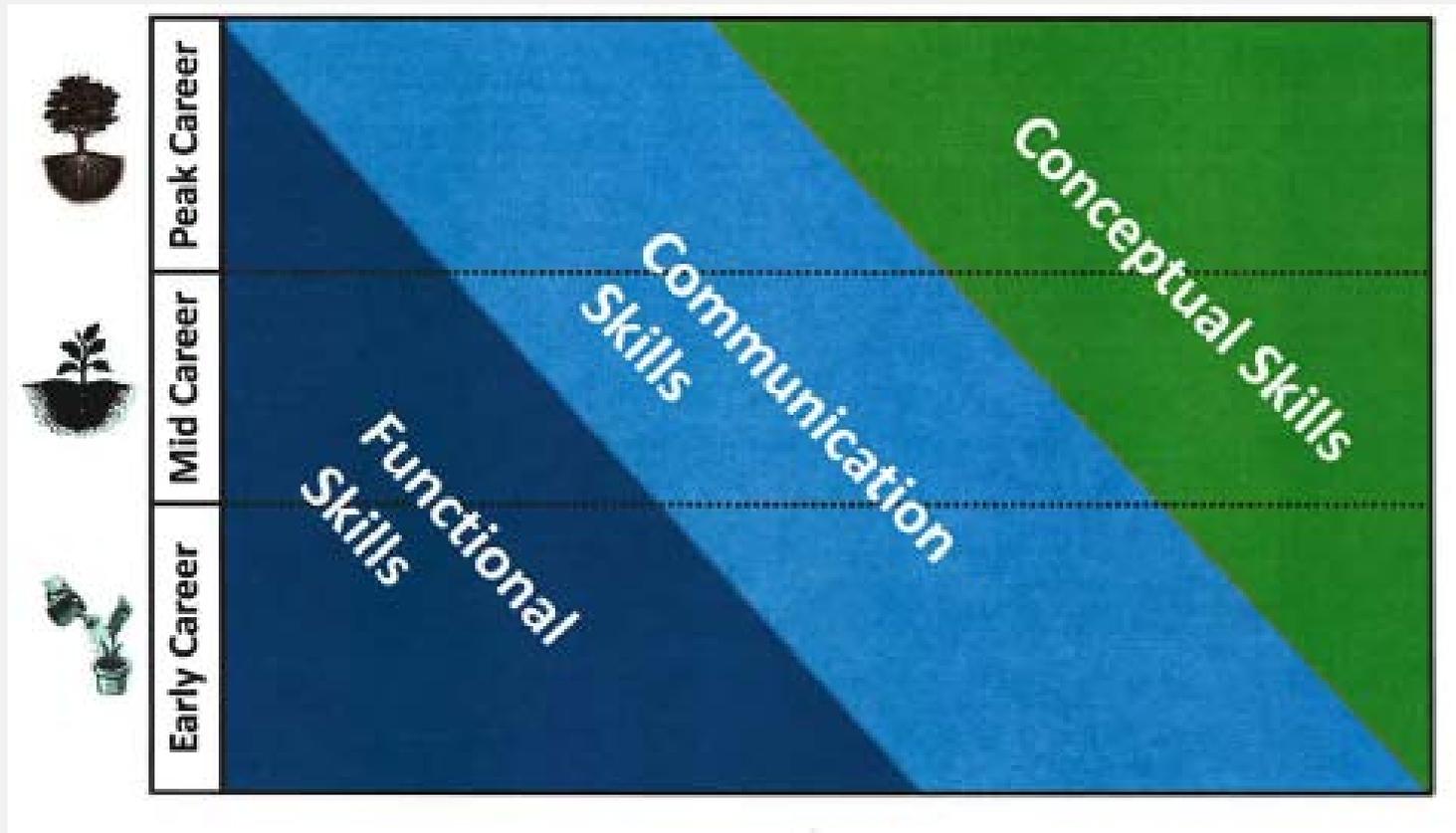


Ongoing professional development is a top priority in the IMD:

- 50 hours per year required for each employee
 - Incentive compensation reduced if goal is not met
 - In fiscal year 2011, more than 99% of staff attained the goal
- Training and Development offerings include on-site, online, partner-provided and external sources
 - 30 on-site classes presented in calendar year 2011
 - Average rating across all classes given in 2011: **8.4** out of a possible 10
- Professional development is a key factor in attracting and retaining top talent
- Building each employee's area of "personal genius" raises engagement, satisfaction and productivity

IMD Professional Development

- Model for career-phased focus of IMD professional development



IMD Recent Awards

- 2011
 - Nominated for aiCIO Industry Innovation Award – Public Pension
- 2010
 - TUCS Highest One Year Return for Funds Greater Than \$10 Billion
 - North American LP of the Year in Real Assets
 - Nominated for North American Deal of the Year for GGP Investment
- 2009
 - Public Plan of the Year
 - Honored at Emerging Managers Summit
 - Plan Sponsor of the Year
 - Honored by Alties Public Plans
 - Star Awards Recipient – Senator Royce West
 - Dr. Emmett J. Conrad Leadership Program Service Awards
 - Limited Partner of the Year in North America for Real Assets
- 2008
 - Public Fund Investor of the Year
 - Honored by Institutional Investor

Investment Management Policy

Review of Asset Allocation



	Nov-06	Oct-11	
	Old Policy	Current Policy	Change
US Large Cap	36.1%	18.0%	-18.1%
US Small Cap	10.8%	2.0%	-8.8%
Non-US Developed	12.4%	15.0%	2.6%
Emerging Markets	1.0%	10.0%	9.0%
Directional Hedge Funds	1.5%	5.0%	3.5%
Private Equity	4.1%	12.0%	7.9%
Total Global Equity	66.0%	62.0%	-4.0%
US Treasuries		13.0%	13.0%
US Investment Grade Debt	28.4%		-28.4%
US High Yield	2.1%		-2.1%
Cash	0.5%	1.0%	0.5%
Stable Value Hedge Funds		4.0%	4.0%
Total Stable Value	30.9%	18.0%	-12.9%
TIPS		5.0%	5.0%
REITs		2.0%	2.0%
Real Assets	3.1%	13.0%	9.9%
Total Real Return	3.1%	20.0%	16.9%
TOTAL FUND	100.0%	100.0%	0.0%

2006 Asset Allocation

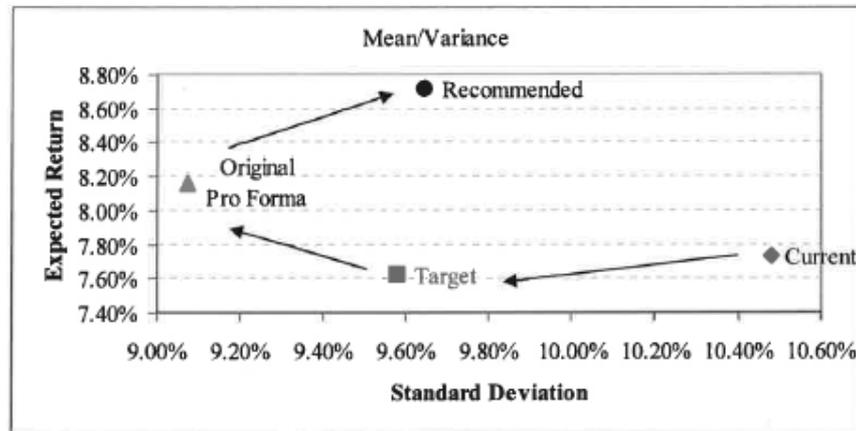
- More than 90% of TRS Risk Isolated on One Factor — US Equity
- Diversifying Assets Largely Absent
 - Long Treasury Bonds
 - Treasury Inflation Protected Securities (TIPS)
 - Hedge Funds
 - Real Assets
- Little Protection Against Either Deflation or Inflation
- Long-Term Higher Return Assets Largely Missing
 - Emerging Markets
 - Private Equity

Assumptions Using 2006 Expectations

	Dec-06	Oct-11	Change
Long Term Expected Return*	7.6%	8.2%	0.5%
Standard Deviation*	9.6%	8.8%	-0.7%
Downside Risk**	8.6%	6.0%	-2.6%
Sharpe Ratio	0.33	0.42	0.09

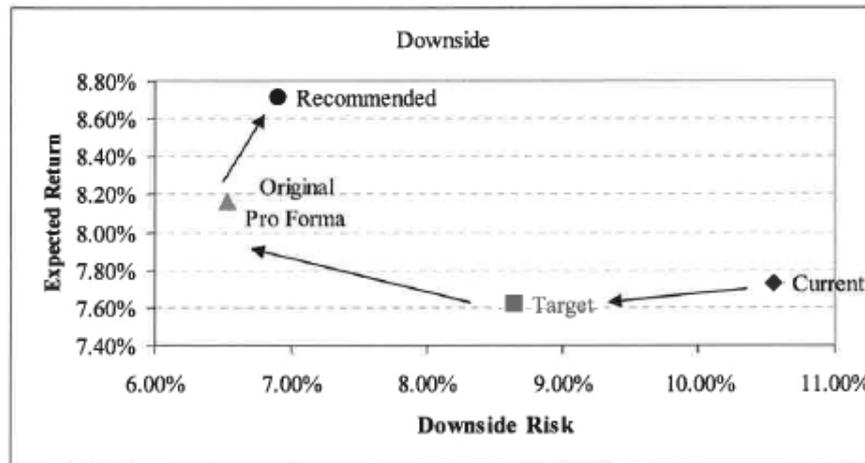
Portfolio Construction

2007 Board Decision



Recommended Portfolio

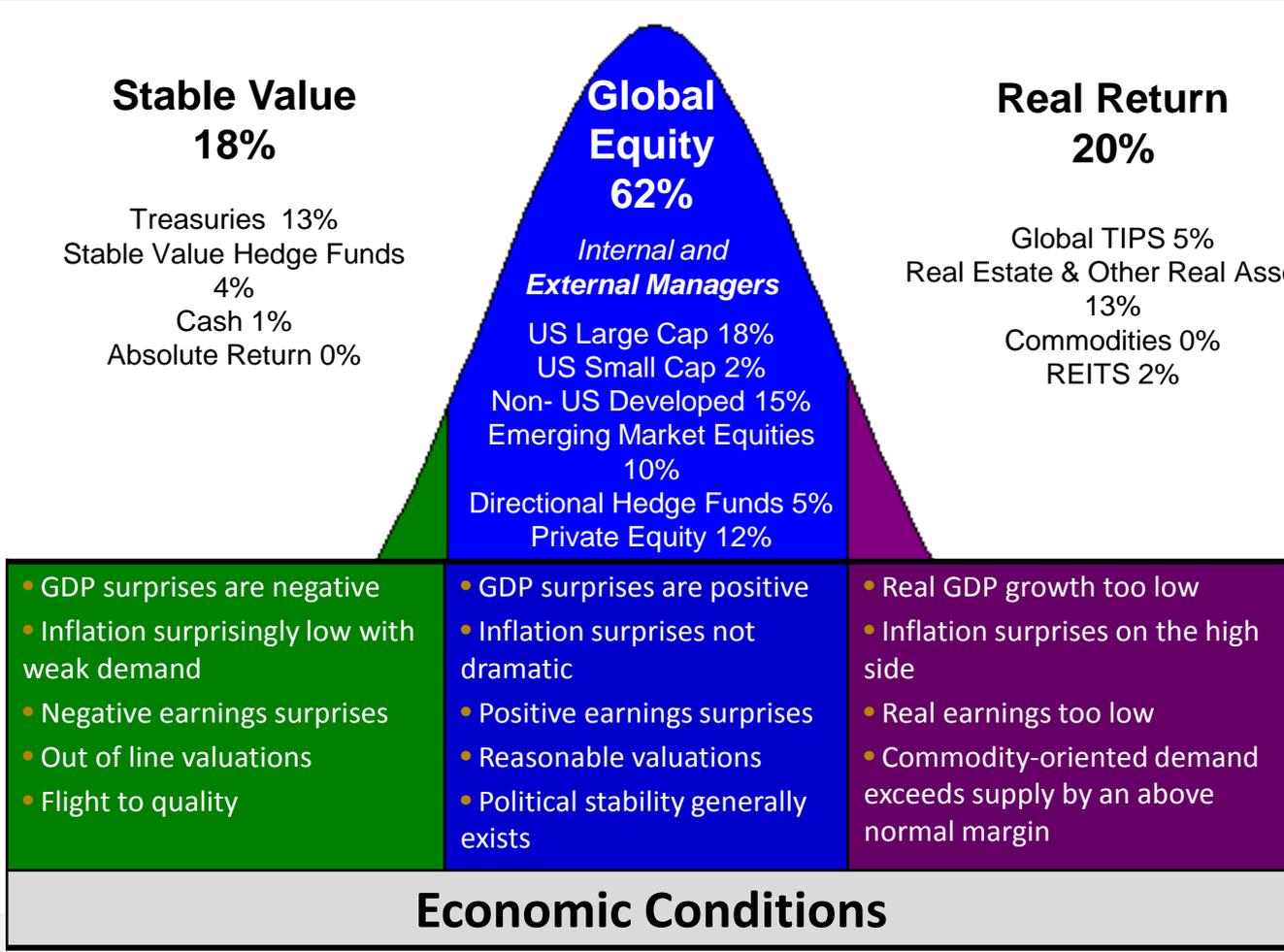
- Return: +1%
- Risk: No Change



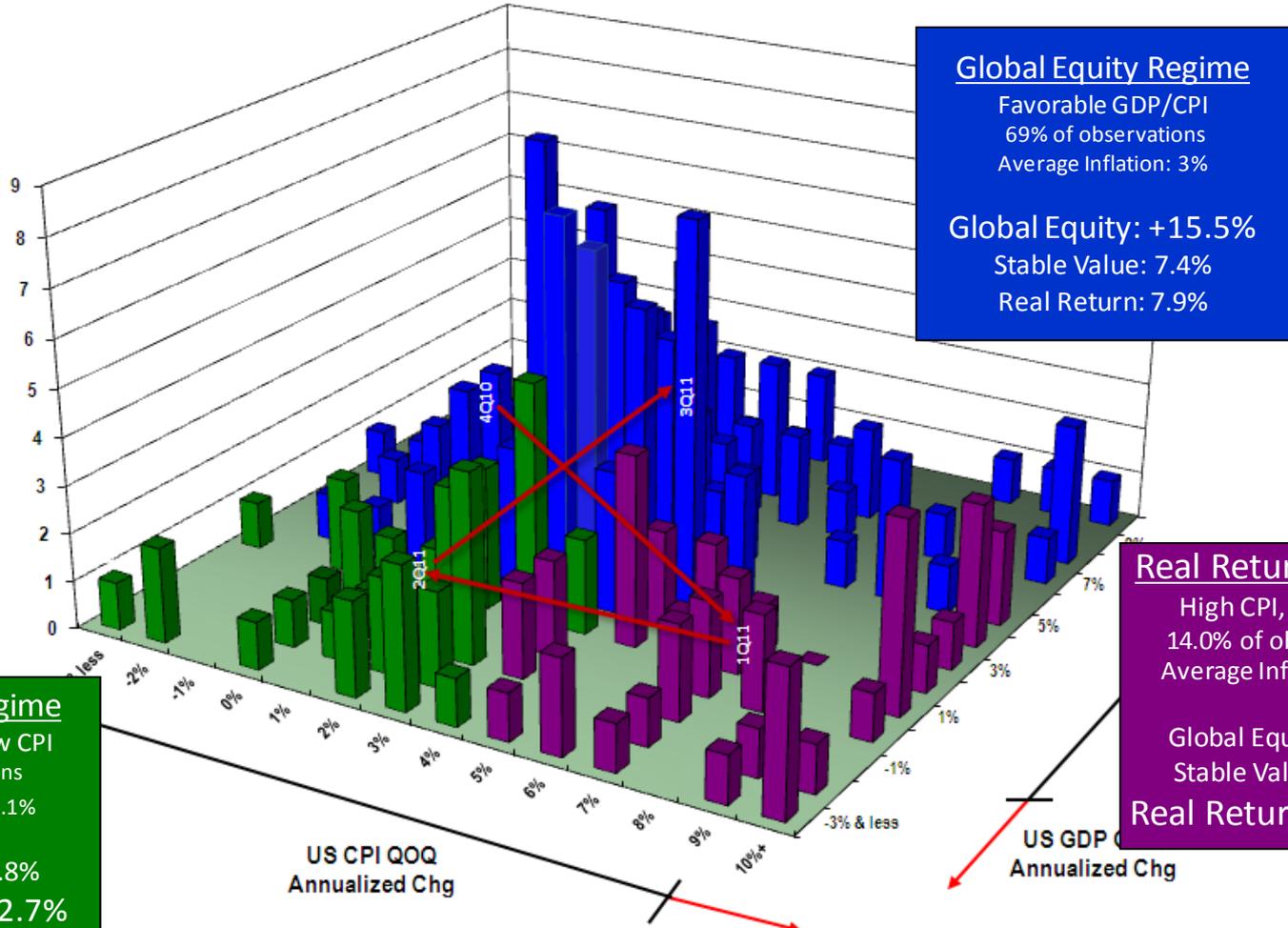
Downside Risk Reduced
from 8.63% to 6.89%

Downside risk is the probability of losing 5% over 1 year. Methodology based on the Ibbotson-Sinquefeld simulation.

TRS Diversification Framework



Portfolio Diversification in Different Market Conditions



Global Equity Regime
 Favorable GDP/CPI
 69% of observations
 Average Inflation: 3%

Global Equity: +15.5%
 Stable Value: 7.4%
 Real Return: 7.9%

Stable Value Regime
 Stagnant GDP & Low CPI
 17% of Observations
 Average Inflation: 1.1%

Global Equity: -3.8%
 Stable Value: +12.7%
 Real Return: 1.1%

Real Return Regime
 High CPI, Low GDP
 14.0% of observations
 Average Inflation: 8.1%

Global Equity: +2.7%
 Stable Value: +7.2%
 Real Return: +13.5%

Source: Data from Bureau of Labor Statistics (CPI) and Bureau of Economic Analysis (GDP). Graph depicts year-over-year quarterly observations from 1948 to date. Market returns based on 2011 TRS policy, dependent on QOQ inflation and GDP prevailing since 1990.

Trust Risk Ranges

- Risk parameters reduced in new plan (range of asset allocation)

	December 2006 Asset Allocation ⁽¹⁾				October 2011 Asset Allocation			
	Target	Min	Max	Range	Target	Min	Max	Range
US Large Cap	35% ⁽²⁾	32%	42%	-3/+7%	18%	13%	23%	+/-5%
US Small Cap	11% ⁽²⁾	7%	18%	-4/+7%	2%	0%	7%	-2/+5%
Non-US Developed	11% ⁽³⁾	8%	14%	+/-3%	15%	10%	20%	+/-5%
Emerging Markets	2% ⁽³⁾	2%	3%	+1%	10%	5%	15%	+/-5%
Directional Hedge Funds	2%	1%	2%	-1%	5%	0%	10%	+/-5%
<u>Private Equity</u>	<u>4%</u>	<u>2%</u>	<u>6%</u>	<u>+/-2%</u>	<u>12%</u>	<u>7%</u>	<u>17%</u>	<u>+/-5%</u>
Global Equity	64%	61%	78%	-3/+14%	62%	55%	69%	+/-7%
US Treasuries					13%	0%	20%	-13/+7%
Absolute Return/Credit	30% ⁽⁴⁾	20%	40%	+/-10%	0%	0%	20%	+20%
Stable Value Hedge Funds					4%	0%	10%	-4/+6%
<u>Cash</u>	<u>1%</u>	<u>0%</u>	<u>3%</u>	<u>-1/+2%</u>	<u>1%</u>	<u>0%</u>	<u>5%</u>	<u>-1/+4%</u>
Stable Value	30%	20%	40%	+/-10%	18%	13%	23%	+/-5%
Global Inflation-Linked Bonds					5%	0%	10%	+/-5%
Real Assets	3%	1%	4%	-2/+1%	13%	5%	20%	-8/+7%
Commodities					0%	0%	5%	+5%
<u>REITS</u>					<u>2%</u>	<u>0%</u>	<u>5%</u>	<u>-2%/+5%</u>
Real Return	3%	1%	4%	-2/+1%	20%	15%	25%	+/-5%
Opportunistic	3%	0%	5%	-3/+2%				
Total	100%				100%			

⁽¹⁾ 2006 allocations are rounded to nearest percent -- totals may not sum

⁽²⁾ 2006 S&P classifications are converted to MSCI

⁽³⁾ 2006 13% target for "International Equity" split into 11% Non-US Developed and 2% Emerging Markets based on benchmark weighting

⁽⁴⁾ 2006 target of 30% is 28% Investment Grade Credit and 2% High Yield Credit

Proposed Transition Plan

As Presented in September 2008



	Current Position	Stage 1 3/31/08	Stage 2 9/30/08	Stage 3 3/31/09	Stage 4 9/30/09	Stage 5 3/31/10
US Large Cap	43.3%	30.0%	27.0%	25.0%	23.0%	20.0%
US Small Cap	3.6%	5.0%	5.0%	5.0%	5.0%	5.0%
EAFE	12.0%	15.0%	15.0%	15.0%	15.0%	15.0%
EM Equity	1.4%	5.0%	7.0%	8.0%	9.0%	10.0%
Private Equity	4.1%	5.0%	6.0%	7.0%	8.0%	10.0%
Total Global Equity	64.4%	60.0%	60.0%	60.0%	60.0%	60.0%
Intermediate Gov/Corp	28.4%	5.0%				
High Yield	2.1%					
Long Treasuries		10.0%	15.0%	15.0%	15.0%	15.0%
Cash	0.5%	1.0%	1.0%	1.0%	1.0%	1.0%
Absolute Return	1.5%	4.0%	4.0%	4.0%	4.0%	4.0%
Total Stable Value	32.5%	20.0%	20.0%	20.0%	20.0%	20.0%
Global Inflation – Linked	0.0%	10.0%	8.0%	6.0%	5.0%	5.0%
Core Real Estate	3.1%	3.0%	4.0%	5.0%	5.0%	5.0%
Opp Real Estate	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%
Other Real Assets	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%
Commodities		3.0%	3.0%	2.0%	1.0%	
REITS		2.0%	1.0%	1.0%	1.0%	
Total Real Return	3.1%	20.0%	20.0%	20.0%	20.0%	20.0%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

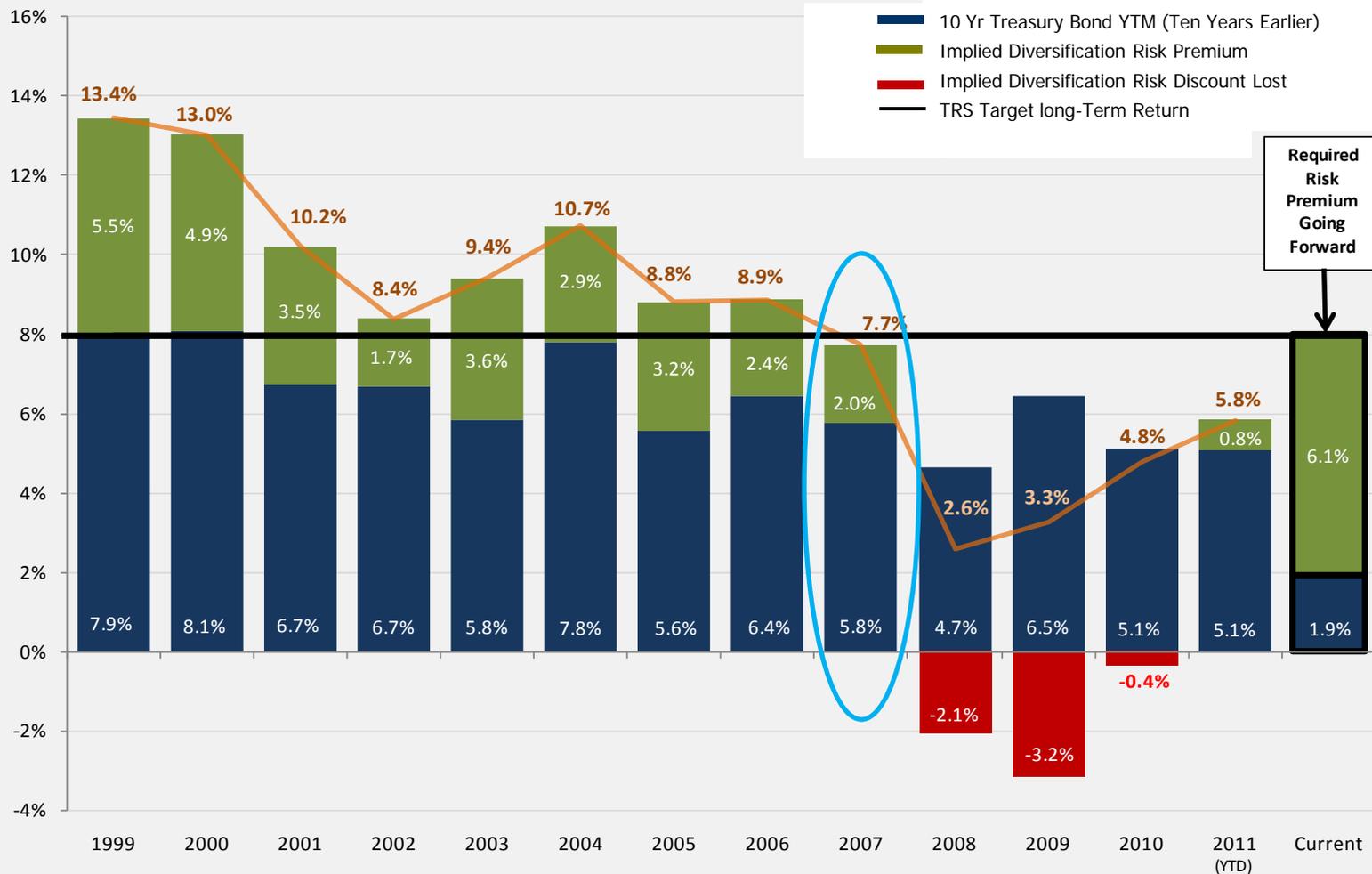
Transition Plan

- 3 – 5 Year Plan
- Controlled scenario risk first
- Within Global Equity, US Large Cap moved systematically to Emerging Markets and Private Equity
- Stable Value completed quickly
- Real Return required longest transition
 - Used TIPs, REITs and Commodities as proxies

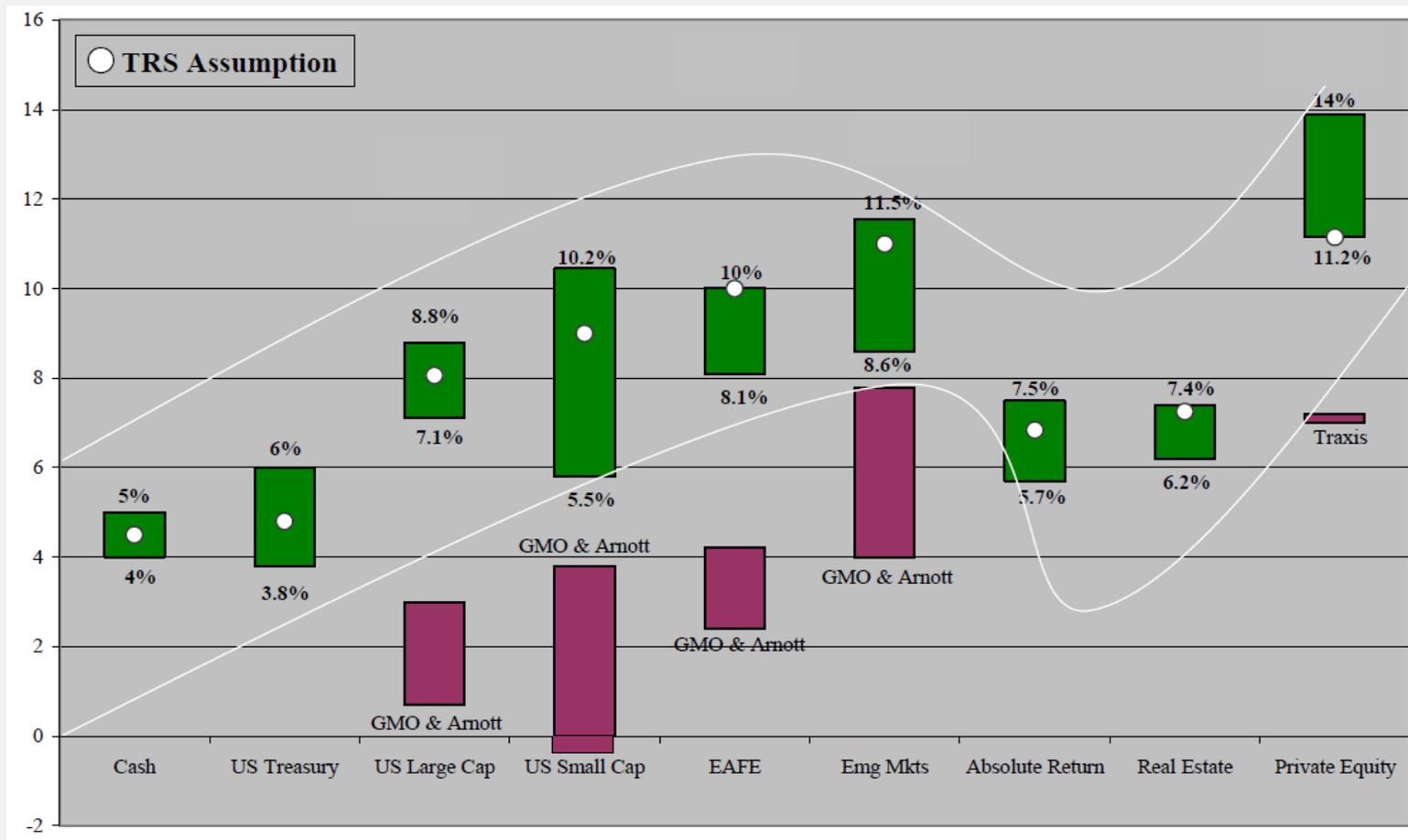
Historical Ability to Produce 8% Investment Return



- As of September 30, 2011



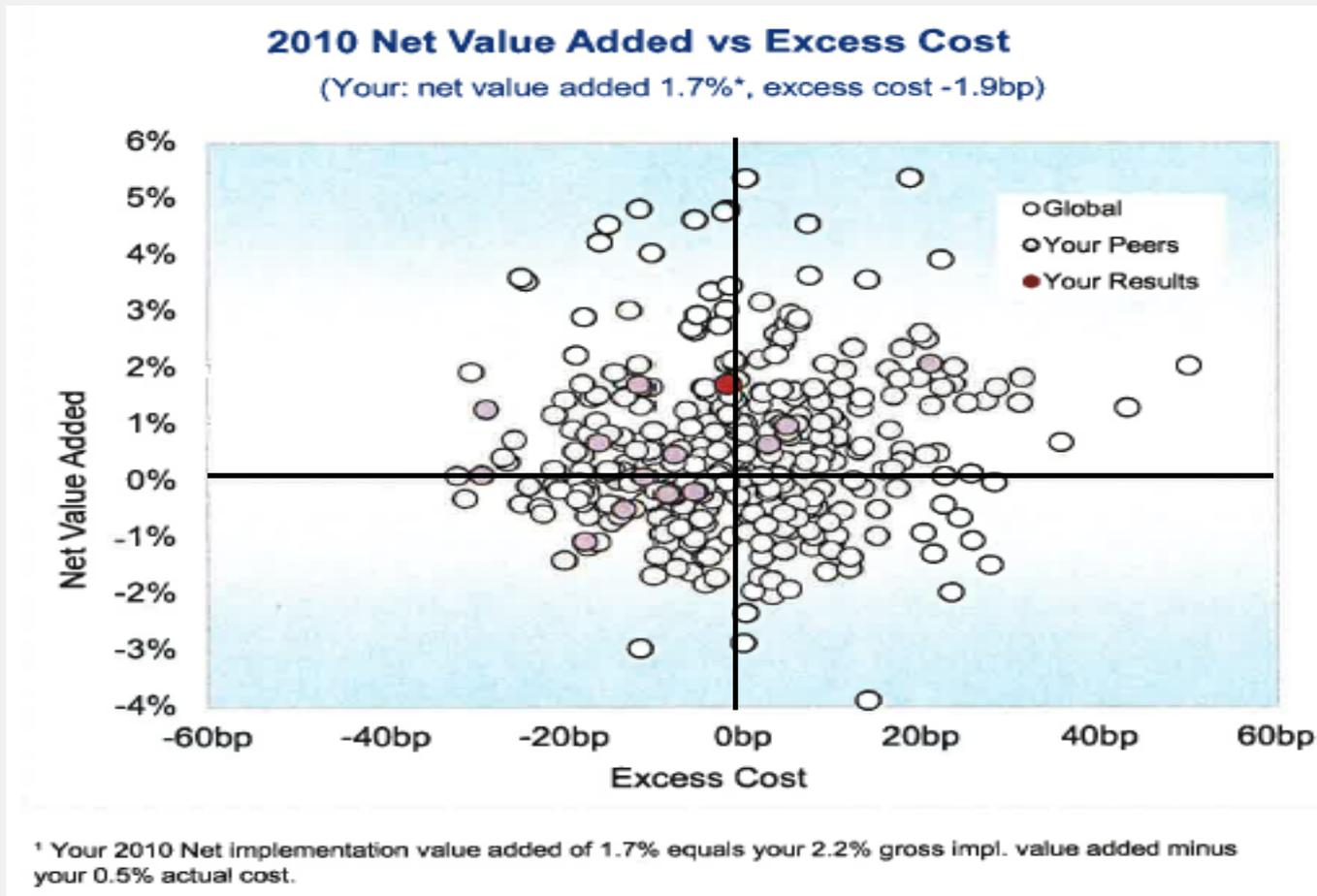
Expected Long-Term Returns Used in 2007



CEM Benchmarking Results

2010

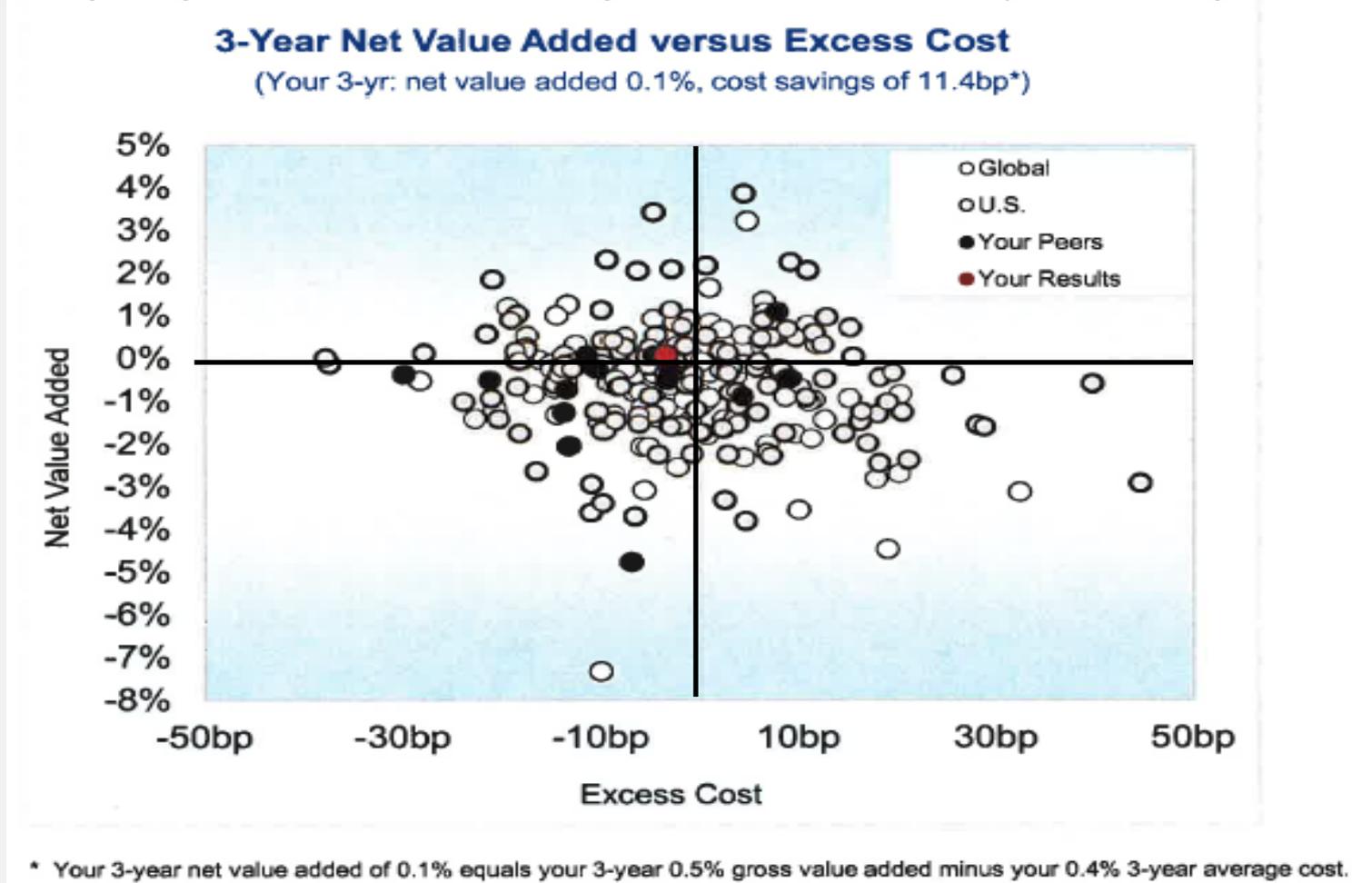
- For 2010, TRS was in the positive net value added, low cost quadrant of the cost effectiveness chart.



CEM Benchmarking Results

3-Year Performance

- TRS 3-year performance is in the positive value added, low cost quadrant



2006 to 2011 Policy Comparison Using Current Forecasts

- GMO's estimate process ([Forecast 1](#)) emphasizes current valuations
- JP Morgan's estimate process ([Forecast 2](#)) emphasizes historical risk premiums

	Allocation		Forecast Returns		Forecast Risk	Return Survey			Risk Survey	
	2006	2011	Forecast 1	Forecast 2		GMO	JP Morgan	Consultant	JP Morgan	Consultant
US Large Cap	36.1%	18.0%	3.9%	9.7%	19.5%	3.9%	9.7%		19.5%	
US Small Cap	10.8%	2.0%	2.0%	11.2%	25.0%	2.0%	11.2%		25.0%	
Non-US Developed	10.0%	15.0%	8.6%	10.4%	24.8%	8.6%	10.4%		24.8%	
Emerging Markets	3.4%	10.0%	9.3%	13.9%	30.5%	9.3%	13.9%		30.5%	
Directional HF	1.5%	5.0%	9.0%	9.0%	11.0%		8.5%	9.0%	12.8%	11.0%
Private Equity	4.1%	12.0%	13.8%	13.8%	15.1%		13.6%	13.8%	34.3%	15.1%
US Treasuries	0.0%	13.0%	2.7%	2.7%	13.8%		2.7%		13.8%	
Abs. Return/Credit (2)	30.4%	0.0%	2.9%	4.6%	7.5%	2.5%	4.6%		7.5%	
Stable Value HF	0.0%	4.0%	7.0%	7.0%	6.0%		6.5%	7.0%	7.3%	6.0%
Cash	0.5%	1.0%	2.0%	2.0%	0.5%	1.8%	2.0%		0.5%	
Global Inflation-Linked	0.0%	5.0%	1.0%	3.7%	7.0%	1.0%	3.7%		7.0%	
Real Assets	3.1%	13.0%	6.3%	6.3%	7.0%		7.4%	6.3%	12.0%	7.0%
REITs	0.0%	2.0%	2.4%	9.9%	25.8%	2.4%	9.9%		25.8%	
2006 Total	100.0%		4.6%	8.5%	14.4%					
2011 Total		100.0%	6.6%	8.9%	13.0%					

	Forecast 1		Forecast 2			Historical Returns	
	2006	2011	2006	2011		2006	2011
Return	4.6%	6.6%	8.5%	8.9%	3Q2011	-9.1%	-4.9%
Risk	14.4%	13.0%	14.4%	13.0%	GE Regimes (32 quarters) (4)	2.1%	2.4%
Sharpe Ratio	0.18	0.36	0.45	0.53	SV Regimes (10 quarters) (4)	-2.6%	-2.0%
Downside Risk (3)	24.2%	17.0%	15.7%	12.5%	RR Regimes (9 quarters) (4)	3.0%	3.9%

(1) Forecast return is from either GMO or JP Morgan as noted and forecast risk is from JP Morgan except for alternative asset classes both return and risk are from consultants (Albourne for Hedge Funds, Hamilton Lane for Private Equity, Townsend for Real Assets). Correlation is from JP Morgan.

(2) Absolute return is a blend of investment grade (GMO or JP Morgan estimate) and high yield (JP Morgan estimate).

(3) Probability of a one year loss greater than 5%.

(4) Average quarterly returns with one quarter lead during GE, SV or RR regimes in the period 6/30/99-12/31/11

Legislative Authority

TRS needed to obtain legislative authority for:

1. 30% External Management
2. Expansion of Hedge Fund Allocation
3. Use of Exchange-Traded Derivatives

External Public Markets Group



Dale West, CFA* (MBA, Stanford)

Previous employer: T.Rowe Price, 10 yrs experience

EXTERNAL PUBLIC MARKETS
MANAGEMENT COMMITTEE*
Susanne Gealy, Brad Gilbert,
Katy Hoffman, Matt Strube, Joe Tannehill, Dale West

CONSULTING PARTNERS

Hewitt EnnisKnupp
Albourne
Investcorp
Rock Creek Group

EXTERNAL MANAGER PORTFOLIO (Long-Oriented Equity)

Susanne Gealy, CAIA* (MBA, U Chicago)

previous employer: Investcorp, 15 yrs experience

Rusty Guinn (BSE, Wharton)

previous employer: Credit Suisse, 8 yrs experience

Katy Hoffman* (MBA, Vanderbilt)

previous employer: JP Morgan, 11 yrs experience

Lulu Llano (BBA, UT Austin)

previous employer: Merrill Lynch, 3 yrs experience

Mikhael Rawls (BA, Harvard)

*previous employer: Public Financial Management, Inc.,
1 yr experience*

HEDGE FUNDS

Todd Centurino, CFA (MBA, Rice)

*previous employer: Fidelity Investments, 11 yrs
experience*

Rachel Clark (BA, UT Austin)

3 yrs. experience

Brad Gilbert, CFA, CAIA* (BBA, UT Austin)

previous employer: Unum Inc., 13 yrs experience

Matt Strube, CAIA* (MBA, U Chicago)

*previous employer: Cargill Investor Services, 13 yrs
experience*

Thomas Albright (BA, Dartmouth)

1 year experience

OTHER ABSOLUTE RETURN (Dislocated Credit)

Brad Gilbert, CFA, CAIA* (BBA, UT Austin)

previous employer: Unum Inc., 13 yrs experience

Katy Hoffman* (MBA, Vanderbilt)

previous employer: JP Morgan, 11 yrs experience

MONITORING AND ANALYSIS

Joe Tannehill, CFA* (MBA, UNC Chapel Hill)

*previous employer: Columbia Management, 23 yrs
experience*

Courtney Yarbrough (BBA, UT San Antonio)

Patty Steinwedell (BA, North Carolina State)

previous employer: Aetna Capital Management

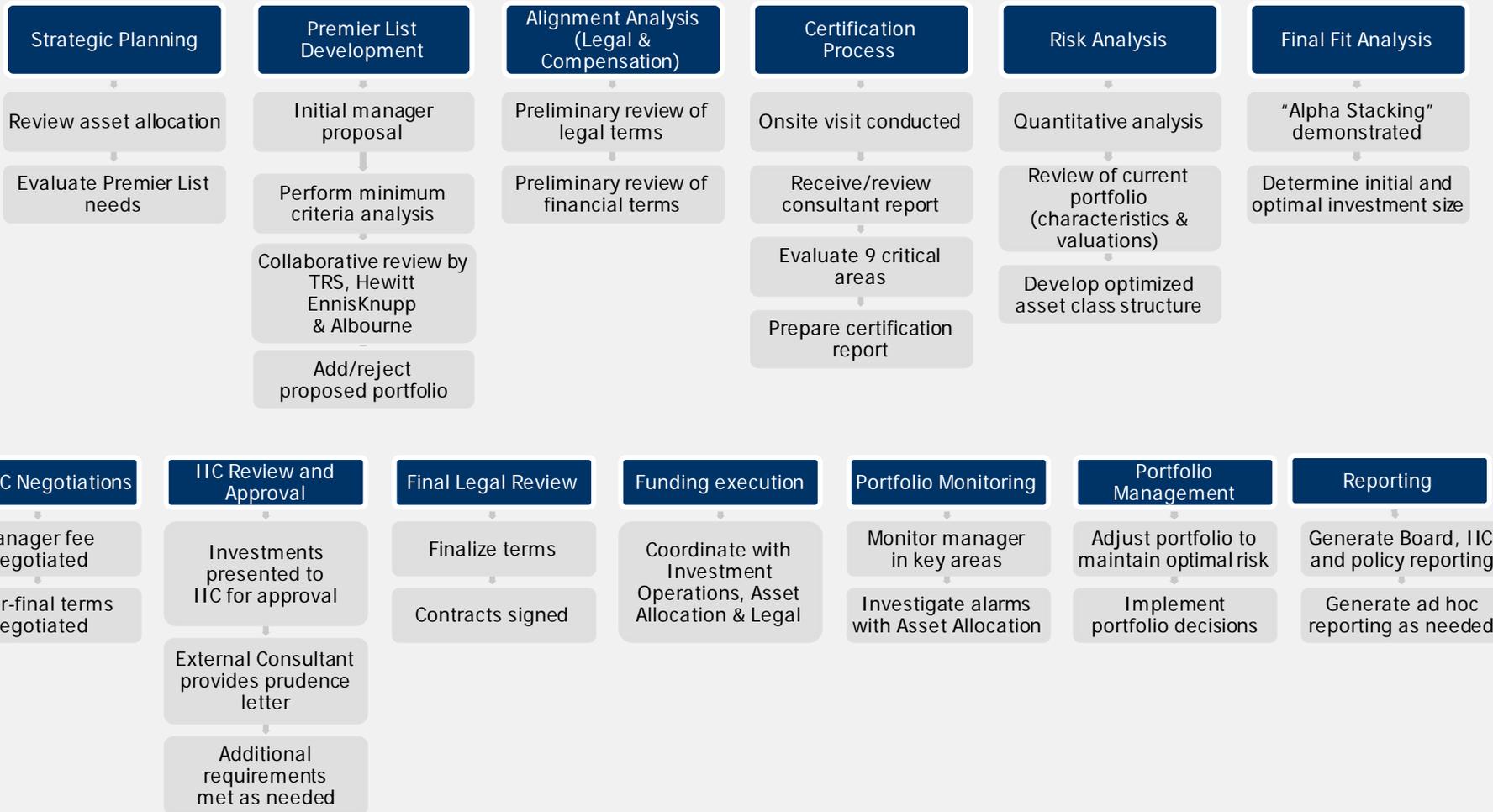
Team Admin: Jon Klekman (BA, SUNY Binghamton)

Lazard Asset Management

* Management Committee Member

External Managers Investment Process

Critical Process Map



Strategic Partnership Network



Public Markets

<u>Strategic Partners</u>	Allocation as of 9/30/11		3 Year Returns		
	<u>Assets</u>	<u>% of Trust</u>	<u>Return</u>	<u>Alpha*</u>	<u>Quartile</u>
Barclays ⁴	\$451.0	0.5%	N/A	N/A	N/A
Black Rock	\$1,065.3	1.1%	6.3%	1.4%	1st
JP Morgan	\$1,065.6	1.1%	5.9%	1.0%	1st
Morgan Stanley	\$1,034.2	1.0%	5.6%	0.7%	1st
Neuberger Berman	\$1,099.3	1.1%	7.5%	2.7%	1st
Total SPN	\$4,715.4	4.7%	6.4%	1.5%	1st

1. Asset Mix approximately equal to TRS Fund Policy, Public Only.
2. *Alpha as compared to TUCS Universe is Public Fund Master Trusts > \$10 Billion.
3. More than 12 Proprietary Research projects conducted.
4. Funded in July 1, 2011.

Public Markets

External Long-Oriented Strategies

Long-Oriented Portfolio As of September 30, 2011

	Percentage of Trust			Remaining Allocation		Managers Hired	New Manager Needs	Neutral Tracking Error (%)	Realized Historical Tracking Error (%)
	Target	Funded	Funded (\$B)	(%)	(\$B)				
US Large Cap	8.0%	6.9%	\$7.0	1.1%	\$1.2	9	0	3.0	2.7
US Small Cap	2.0%	0.9%	\$0.9	1.1%	\$1.1	6	1	5.0	4.7
Developed International	4.0%	3.7%	\$3.7	0.3%	\$0.3	10	0	3.0	3.9
Emerging Markets	6.0%	5.5%	\$5.6	0.5%	\$0.5	7	0	3.0	3.6
World Equity	4.0%	3.1%	\$3.2	0.9%	\$0.9	4	1	3.0	3.5
Total Long Oriented	24.0%	20.0%	\$20.3	4.0%	\$4.0	36	2		

Long-Oriented Portfolio

Annualized 3 Year Returns as of 9/2011

	Portfolio*	Benchmark	Value Added
US Large Cap	4.4%	-0.9%	5.3%
US Small Cap			
Developed International	-1.0%	-0.9%	-0.1%
Emerging Markets	4.3%	6.3%	-2.0%
World Equity			

* At the beginning of this 3 year period there was 1 Large Cap, 2 Developed International, and 1 EM manager in place.

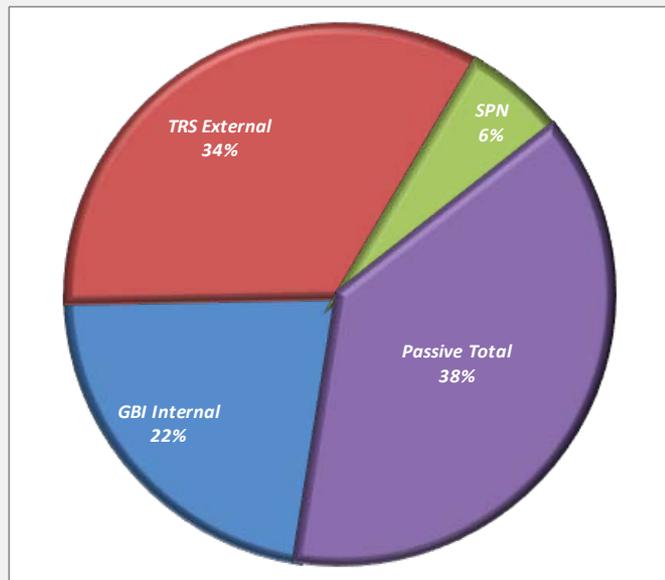
Risk Signals

Managing	Signals	<ul style="list-style-type: none"> • Identify and monitor key statistical thresholds which when crossed will cause specific investigation and action • Bubble Signals and CUSUM Signals are important types of Risk Signals
	Budgeting	<ul style="list-style-type: none"> • Manage how trust allocations and correlations combine to either overweight and underweight the risk of the trust • Focus upon Tracking Error and Value at Risk
	Strategies	<ul style="list-style-type: none"> • A new effort, Risk Strategies, will seek to optimize the risk profile of the Trust
Monitoring	Compliance	<ul style="list-style-type: none"> • Jointly with Investment Compliance, monitor and resolve Compliance Issues • Serve as a resource for implementing the Investment Policy Statement
	Monitoring	<ul style="list-style-type: none"> • Prepare useful Risk Reports • Monitor trust risks including Leverage, Liquidity, Concentration, Currency Risk, Liquidity Risk, Leverage, Counterparty Risk
	Certification	<ul style="list-style-type: none"> • Certify all new External Public investments with respect to Market Factors, Leverage, Drawdown History, Liquidity, Risk Management Systems and Audit History • Review new strategies within External Private investments

Internal Management

As of September 30, 2011

- Authorization to use external management allowed TRS to focus its limited internal resources much more effectively



	Assets (\$ in millions)
Actively Managed	
GBI Internal	\$17,639.0
Precious Metals Fund	\$705.0
Total Active	\$18,344.0
Passively Managed	
Long-Term Treasuries	\$13,563.2
TIPS	\$4,827.3
REITS	\$1,760.2
Commodities	\$1,473.8
Passive Total*	\$30,330.5
TOTAL	\$48,670.5

Hedge Fund Portfolio

As of September 30, 2011



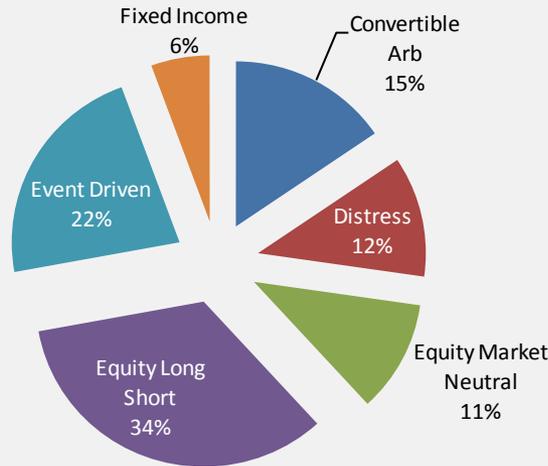
Hedge Fund Portfolio Composition

	2006	2011	Change
Equity Long Short	34%	15%	-19%
Event Driven	22%	8%	-15%
Convertible Arb	15%	15%	-1%
Distress	12%	8%	-3%
Equity Market Neutral	11%	20%	9%
Fixed Income	6%	8%	2%
Macro		16%	16%
CTA		6%	6%
Multistrategy		5%	5%

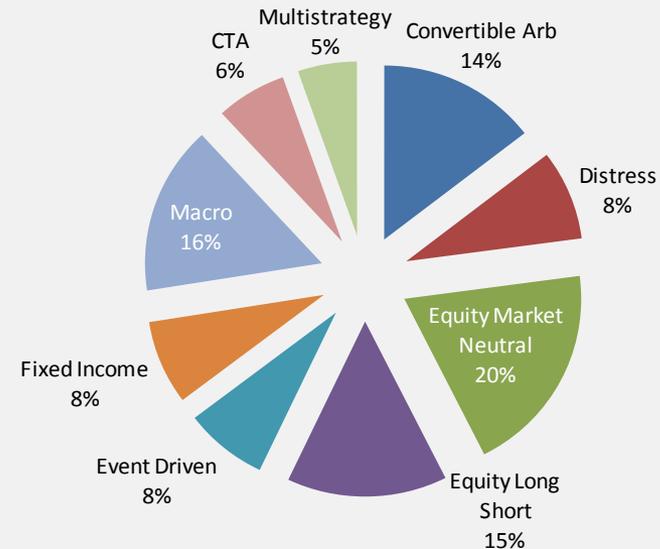
3-Year Results	TRS Hedge Fund Portfolio	MSCI World	Absolute Return Benchmark*	HFRI FoF Conservative Index
Performance	2.7%	-2.3%	2.6%	-0.6%
Volatility	3.6%	23.0%	0.2%	5.5%

*3-month LIBOR +2%.
Sources: State Street Bank, Bloomberg

Hedge Fund Allocation, 2006



Hedge Fund Allocation, 2011



Hedge Fund Allocation Update



	Conservative Hedge Funds	Directional Hedge Funds
TRS Asset Class	Stable Value	Global Equities
Projected Beta vs MSCI USA	< 0.2	> 0.3
Correlation vs MSCI USA	< 0.3	> 0.3
Benchmarks	HFRI FoF Conservative	HFRI FoF Composite
Target Allocation		
Commodities & Trends	20%	
Equity Market Neutral	35%	
Macro & Volatility	25%	
Fixed Income*	20%	20%
Event Driven**		30%
Long/Short Equity		40%
Risk Parity		10%
Multi-Strategy ***	-	-

Objectives

- Improve Diversification, particularly in Moderate Return and Down Markets
- Increase Alpha Potential
- Stabilize Returns

Conservative Strategy

- Outperform Equity in Down Markets
- Outperform Long Treasury Bond Long-Term

Directional

- Outperform Equity up to Approximately 10%
- High Sharpe Ratios

*Includes Convertible Arbitrage

**Includes Distressed

***The maximum allowed is 10% in both Stable Value and Directional

Derivatives Usage

Typical Derivative Use	Notional		
	Net (\$ in Billions)	Gross (\$ in Billions)	Gross as % of Total Gross Derivative Notional
Equity			
S&P 500	1.65	2.57	11%
MSCI US Small Cap	1.43	1.43	6%
Nasdaq	1.19	1.19	5%
S&P 400	0.63	0.63	3%
Russell 2000	(0.24)	0.37	2%
FTSE 100	(0.30)	0.37	2%
TOPIX	(0.34)	0.35	1%
Other Equity	0.82	2.88	12%
<i>Total Equity</i>	<i>4.84</i>	<i>9.79</i>	<i>41%</i>
Fixed Income			
30YR US Treasury	(1.98)	2.57	11%
Ultra Long US Treasury	(1.38)	1.56	7%
Other Fixed Income	(0.01)	1.04	4%
<i>Total Fixed Income</i>	<i>(3.37)</i>	<i>5.17</i>	<i>22%</i>
Currency Forwards			
Euro	(0.57)	1.50	6%
Pound Sterling	(0.39)	1.06	4%
Japanese Yen	(0.43)	0.98	4%
Hong Kong Dollar	0.44	0.60	3%
Canadian Dollar	(0.12)	0.54	2%
South Korean Won	0.10	0.47	2%
Swiss Franc	(0.17)	0.46	2%
Australian Dollar	(0.12)	0.46	2%
Other Currency Forwards	0.30	1.13	5%
<i>Total Currency Forwards</i>	<i>(0.96)</i>	<i>7.20</i>	<i>30%</i>
Commodities			
Citi CUBES	0.44	0.44	2%
Barclays Pure Beta	0.44	0.44	2%
JP Morgan Contag Beta	0.26	0.26	1%
JP Morgan Alpha	0.22	0.22	1%
S&P GSCI	0.22	0.22	1%
Other Commodities	0.13	0.21	1%
<i>Total Commodities</i>	<i>1.71</i>	<i>1.79</i>	<i>7%</i>
Total Derivatives Usage	2.22	23.95	100%

- Derivatives are generally basic investment instruments
 - Basic Proxies for Major Markets
- 80%+ of Institutional Investors use derivatives
- Less disruptive and lower cost than individual security trading
- Risk controls are in place
- Counterparty, Risk monitored
- Allowed for important new TRS capability

Expansion of Private Markets

Private Markets Organizational Chart



Steve LeBlanc

previous employer: Summit Properties, 31 yrs experience

**EXTERNAL PRIVATE MARKETS
MANAGEMENT COMMITTEE**

Eric Lang, Rich Hall

REAL ASSETS

- Eric Lang** – BBA UT, MBA U of Houston, CCIM
previous employer: Kennedy Wilson, 22 yrs experience
- John Ritter** – BBA, MBA, JD UT, CFA
previous employer: Sheshunoff Investment Banking, 17 yrs experience
- Grant Walker** – BBA Baylor, MBA St. Edwards
previous employer: Kennedy Wilson, 14 yrs experience
- Michael Pia** – BS US Naval Academy, MS U of W. Florida, MBA TCU
previous employer: Lockheed Martin Aeronautics, 4.5 yrs experience
- Craig Rochette** – BS University of Arizona, CFA, CAIA
previous employer: CalPERS, 10 yrs experience
- Brian Baumhover** – BS Iowa State, MBA UT
previous employer: US Army, 4 yrs experience
- Jennifer Wenzel** – BBA UT
previous employer: Cherokee Investment Partners, 8 yrs experience
- Nathan Zinn** - BA, MBA Northwestern
previous employer: LaSalle, 12 yrs experience

PRIVATE EQUITY

- Rich Hall** – BA Harvard, MBA Northwestern
previous employer: Bank of America, 20 yrs experience
- Allen MacDonell** – BBA U of Georgia, MBA Georgia State, CFA
previous employer: Duke Management Company, 24 yrs experience
- Neil Randall** – BBA, MS Texas A&M
previous employer: Convergent Investors, 11 yrs experience
- Courtney Villalta** – BBA St. Edwards
previous employer: Tejas Securities Group, 11 yrs experience
- Brad Thawley** – BBA Bucknell University
previous employer: Standard & Poor's, 10 yrs experience
- Scott Ramsower** – BS Texas A&M
previous employer: AlInvest Partners, 10 yrs experience

EMERGING MANAGER PROGRAM

Stuart Bernstein – BA, MBA UT
previous employer: Lehman Brothers, 7 yrs experience

PRINCIPAL INVESTMENTS

Rich Hall – BA Harvard, MBA Northwestern
previous employer: Bank of America, 20 yrs experience
Michael Lazorik – BBA UT
previous employer: BMC Software, 13 yrs experience

Analysts

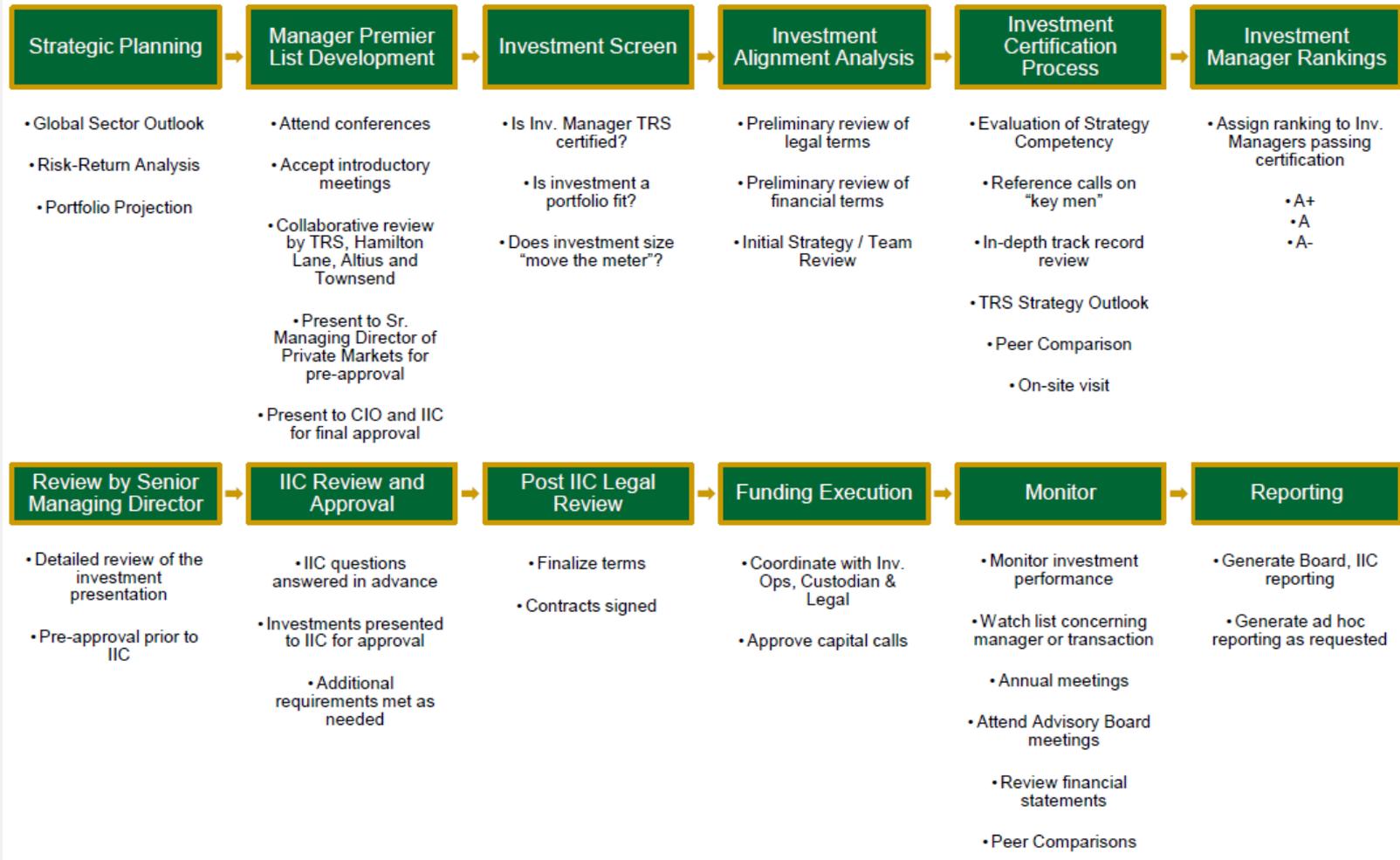
- Ross Willmann** – BBA Texas A&M
previous employer: TRS, 3 yrs experience
- Chase Hill** – BBA U of Georgia, MBA UT
previous employer: TRS, 2 yrs experience
- Andy Cronin** – BBA Texas A&M
previous employer: TRS, 2.5 yrs experience
- Molly Rose** – BBA Texas State
previous employer: TRS, 2 yrs experience

Team Support:

- Cynthia Mendoza** – BBA St. Mary's U
previous employer: South Texas Money Management, 7 yrs experience
- Melissa Kleihege** – BS Texas A&M
previous employer: TRS, 5 yrs experience
- Gracie Marsh** - BA U of Cal Davis
previous employer: TRS, 2 yrs experience

Private Markets Investment Process

Real Estate and Private Equity



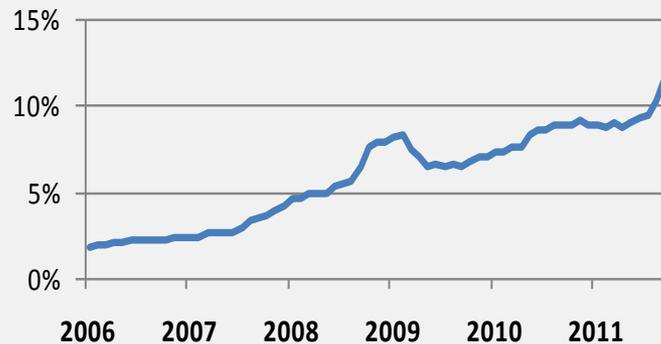
External Private Markets

2006 versus 2011

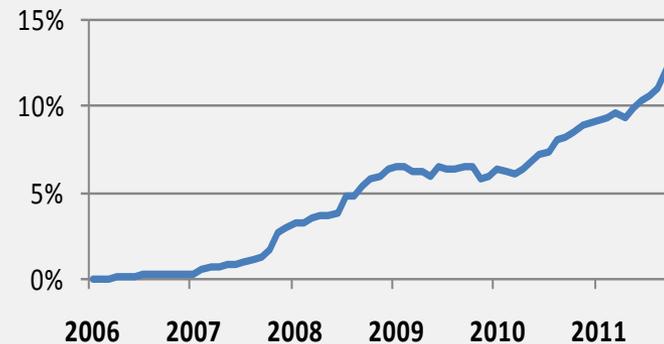


As of 9/30/11	2006 % of Trust	# of Investments made	Δ in NAV (\$ in billions)	Δ in Unfunded Commitments (\$ in billions)	9/30/11 % of Trust	Since Incep. IRR
Private Equity	2.4%	60	\$ 8.5	\$ 5.0	11.7%	12.0%
Real Assets	0.3%	88	\$ 11.7	\$ 7.7	12.2%	-0.6%
<i>Real Estate</i>	0.3%	75	\$ 10.2	\$ 5.5	10.7%	-1.3%
<i>Other Real Assets</i>	0.0%	13	\$ 1.5	\$ 2.2	1.5%	5.4%
Total	3.0%	148	\$20.2	\$12.7	23.9%	

Private Equity Percentage of Trust



Real Assets Percentage of Trust



Principal Investments Portfolio Update

- TRS approved Principal Investments Strategy (“PI”) in 2008
- Goal is to be 20% of Private Markets Net Asset Value (NAV) by 2015
- Fundamental Premises
 1. Higher returns than Limited Partnership Fund Commitments
 2. Ability to invest in tactical opportunities
 3. Obtain real-time market intelligence
- Emphasis on quality over quantity
- Sourcing only from select set of TRS GPs

Principal Investments Portfolio

As of September 30, 2011

Private Equity Investment	Vintage Year	Total Commitment	Total Funded	Net Asset Value	Since Inception IRR	Investment Multiple
Apollo Parallel Partners A Co-Invest	2009	\$50	\$20	\$28	23.9%	1.5x
Igloo Co-Invest	2010	\$50	\$50	\$59	15.7%	1.2x
KKR Heford Co-Invest	2010	\$23	\$23	\$56	156.4%	2.4x
MBF Co-Invest	2010	\$33	\$33	\$39	13.0%	1.2x
Allstar Co-Invest	2011	\$141	\$141	\$141	-	-
Blue Holdings Co-Invest	2011	\$27	\$27	\$27	-	-
CH Holding Co-Invest	2011	\$100	\$100	\$100	-	-
AP Selene Co-Invest	2011	\$77	\$77	\$74	-	-
TOTAL DIRECT PRIVATE EQUITY INVESTMENTS		\$501	\$471	\$525	22.6%	
Red River Direct Investment Fund (indirect)	2009	\$250	\$136	\$135	-0.3%	1.0x
TOTAL PRIVATE EQUITY PRINCIPAL INVESTMENTS		\$751	\$607	\$660	16.6%	1.1x

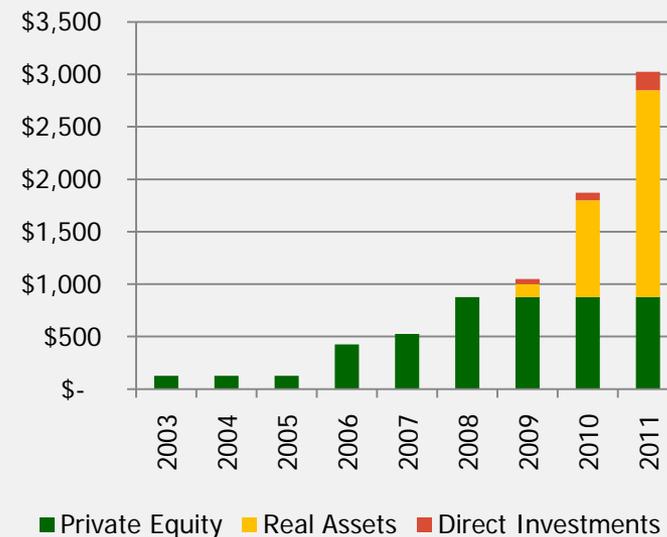
Real Assets Investment	Vintage Year	Total Commitment	Total Funded	Net Asset Value	Since Inception IRR	Investment Multiple
TLF Logistics	2009	\$401	\$401	\$343	16.8%	1.3x
General Growth Properties	2010	\$500	\$250	\$269	31.3%	1.1x
Blackstone GGP Principal Transaction Partners	2010	\$28	\$10	\$27	72.1%	2.7x
Principal Real Estate Strategic Equity Fund	2010	\$425	\$202	\$237	18.5%	1.2x
SP5 Wood Partners Development	2010	\$75	\$62	\$63	3.4%	1.0x
SP5 Wood Partners Venture 2	2011	\$102	\$34	\$34	-	-
Square Mile S3	2011	\$50	\$50	\$51	-	-
TOTAL DIRECT REAL ASSETS INVESTMENTS		\$1,581	\$1,009	\$1,023	21.2%	
Ranger Co-Investment Fund (indirect)	2009	\$200	\$131	\$138	10.6%	1.1x
Ranger Co-Investment Fund II (indirect)	2011	\$200	\$19	\$19	-	-
TOTAL REAL ASSETS PRINCIPAL INVESTMENTS		\$1,981	\$1,159	\$1,181	19.5%	1.2x
TOTAL PRINCIPAL INVESTMENTS		\$2,732	\$1,766	\$1,841		

Summary of Energy Related Commitments



(in millions)	Vintage	Commitment	Unfunded	Distributions	NAV	Since Incep. IRR
Real Assets						
EnCap Energy Infrastructure	2009	\$ 75.0	\$ 19.8	\$ -	\$ 70.8	30.0%
EnCap Co-Investment Fund	2009	\$ 50.0	\$ 14.7	\$ -	\$ 52.2	59.0%
First Reserve Infrastructure*	2010	\$ 250.0	\$ 229.9	\$ -	\$ 13.5	-
KKR Natural Resources*	2010	\$ 1,000.0	\$ 924.8	\$ 3.8	\$ 60.9	-
Zachry Hastings Infrastructure*	2010	\$ 300.0	\$ 180.0	\$ -	\$ 135.1	-
Energy Infrastructure Group*	2010	\$ 300.0	\$ 198.1	\$ -	\$ 106.8	-
		\$ 1,975.0	\$ 1,567.3	\$ 3.8	\$ 439.4	
Private Equity						
First Reserve X	2003	\$ 125.0	\$ -	\$ 167.6	\$ 58.2	33.1%
First Reserve XI	2006	\$ 300.0	\$ 63.1	\$ 62.4	\$ 173.5	-0.1%
EnCap Fund VII	2007	\$ 100.0	\$ 26.3	\$ 38.9	\$ 65.8	20.1%
First Reserve XII	2008	\$ 350.0	\$ 103.0	\$ 15.4	\$ 234.0	-1.9%
		\$ 875.0	\$ 192.4	\$ 284.3	\$ 531.6	
Direct Investments						
Parallel Co-Invest	2009	\$ 50.0	\$ 29.7	\$ 1.1	\$ 29.4	22.7%
Hilcorp Co-Invest	2010	\$ 23.3	\$ 0.0	\$ 56.1	\$ 2.2	139.8%
Samson Co-Invest*	2011	\$ 100.0	\$ -	\$ -	\$ 100.4	-
		\$ 173.3	\$ 29.7	\$ 57.2	\$ 132.0	
Total		\$ 3,023.3	\$ 1,789.4	\$ 345.3	\$ 1,102.9	

Growth of Private Energy Commitments (2003-2011; \$ in millions)



The Natural Resource Story

- Long-term growth potential for oil and associated liquids
- Relative value proposition for natural gas
- Energy's high beta to inflation
- Long duration commodity exposure

Private Markets SPN

Selection Criteria and Process



■ Criteria

- Senior management commitment
- Preferred fees and terms
- Asset-management infrastructure, resources and history
- Potential to add risk-adjusted returns to entire External Private Markets
- Increased principal investment source: deal flow, size and quality
- Research capabilities

■ Process

- Search consideration started the second quarter of 2010
- Evaluation and consideration of multiple firms
- Narrowed selection down to 7 firms
- Extensive selection questionnaire submitted to each firm
- Onsite visit with senior management
- Narrowed consideration to 2 firms
- Consultant review by Hamilton Lane, Hewitt Ennis Knupp and Townsend Group
- Austin Legal meeting held August 2011
- Board Approval November 2011
- 1st SPN Summit – January 2012 (Austin)

■ Apollo

- AUM: \$72 billion
- Opportunistic, open to investments outside of the core fund mandates
- Excel in down markets and poor credit environments
- Existing Strategic Partnership with South Carolina
- Lots of diversity, lower quality focus

■ Kohlberg, Kravis, Roberts

- AUM: \$61 billion
- Strong senior leadership and founders of the LBO
- Small, good diversity, high quality focus
- Core focus in buyout space
- Great communication and “can do” attitude

Combined result is ability to invest in all aspects of the capital structure

The Board and the Investment Management Division

Investment Management Division



Fit With the Board of Trustees: Governance Structure

The Board establishes investment objectives and policy, obtains expert advice and assistance, and oversees the employment of a qualified and competent investment staff (“Investment Division”) and legal staff. The Board also monitors the actions of staff and advisors to ensure compliance with its policies. The Board and the Investment Division are assisted by outside investment consultants and internal and external legal counsel.



Board Duties

- Establish long-term asset allocation policy
- Approve long-term return targets and risk parameters
- Provide appropriate resources, incentives and establish approved processes
- Establish appropriate reporting standards and metrics
- Comply with relevant laws
- Assure professional audit systems



IIC Duties

- Implement investment policy within approved guidelines
- Maximize effectiveness of resources provided
- Deliver transparent reporting
- Comply with relevant laws
- Collaborate with audit process
- Collaborate with Board

Standardized “Certification Process” with Monthly “Transparency Reports”

Internal and External Audits and Formal Consulting Projects



- 22 Audits over the past three years
- Multiple audit sources
- No significant findings

Inv Policy Statement	Internal Mgmt	External Mgmt	Performance Calculations	Operations and Controls	Portfolio Strategy	2012 Planned
SAO-Ethics Policies for Investment Practices at TRS, ERS & UTIMCo	IA-Actively Managed Portfolio	IA-Ext Mgr Selection & Monitoring; Hedge Fund definition	IA-Performance Benchmarks	IA/Huron –Valuation Audit	IA-Derivative Use	IA-Partnership Selection and Monitoring
IA-Quarterly IPS Compliance	Inv Training Consulting Inst (ITCI)- Dom Equity	Independent Fiduciary Review- Fiduciary Review of Ext Mgrs, Derivatives	IA/ Duff & Phelps- Performance Measurement	IA-Soft Dollars	SAO-Derivative Use	IA-Inv Risk Management
		SAO-Manager Selection	Incentive Calculations	Duff & Phelps-Valuation Policy		IA-Quarterly Security Testing incl. Bloomberg Access
		SAO-Manager Monitoring		Comprehensive Annual Financial Report (annually)		IA-Quarterly IPS Compliance
				Grant Thornton-IT Ops (Resource Review)		IA-SSB Compliance Calculations
				Grant Thornton-IT Controls		CAFR
				Grant Thornton-IT Service Level Agreement		IA-Investment Accounting
				Grant Thornton-IT Governance		
				Vito Consulting-Hiring Procedures		
				IA-Record Retention		
				IA-Third Party Paid Travel		

Delegated Investment Authority



	2006	2007	Current
INTERNAL			
Public Equities	Asset Allocation/Risk	Asset Allocation/Risk	Asset Allocation/Risk
Fixed Income	Asset Allocation/Risk	Asset Allocation/Risk	Asset Allocation/Risk
EXTERNAL LONG ONLY			
First	NA	1.0%	0.5%
Follow-On	NA	NA	1% ³
Re-Balancing	NA	NA	0.6% monthly
HEDGE FUNDS			
First	Board Approved List ¹	5%	0.5%
Follow-On	NA	NA	1% ³
Re-Balancing	NA	NA	0.18% Monthly
PRIVATE EQUITY			
First	\$150 million	0.5%	0.5%
Follow-On	1.5x First Allocation	1%	1% ³
Re-Balancing	NA	NA	0.24% Monthly
REAL ASSETS			
First	Board Approved List ²	0.5%	0.5%
Follow-On	\$150 million	1%	1% ³
Re-Balancing	NA	NA	0.3% Monthly
EMERGING	\$100 million (PE)	Same as Non-Emerging	\$1.65 billion

General Restrictions

- Advisor must agree with Staff recommendation
- All Policy limitations (risk/allocation) apply
- IIC Approval Required on all external Investments
- Board notification required on all external Investments
- Manager limitations of 3% per investment sleeve
- Manager limitations of 6% of TRS portfolio

¹ Maximum limit of 0.5% to any one manager

² Maximum of 0.75% to any one manager

³ Maximum limit of 3% with 90 day lapse for each 1% follow-on

Manager Concentration

- The Board has delegated the following investment authority to the Internal Investment Committee:

	Initial Allocation or Commitment with Manager Organization, by Portfolio	Additional or Follow-On Allocation or Commitment with the Same Manager Organization, by Portfolio	Total Management Organization Limits, by Portfolio
External Public Markets Portfolio	0.5%	1%	3%
Private Equity Portfolio	0.5%	1%	3%
Real Assets Portfolio	0.5%	1%	3%
Total IIC Approval Authority, Each Manager			6%

- TRs Consultants (Hamilton Lane, Hewitt EnnisKnupp and Townsend) have indicated that industry norms for manager concentration limits are between 5.4% and 6.8% of the Trust¹.
 - TRs limitation is 6.0%
- Additional or Follow-On Investments should not occur earlier than three months subsequent to the Initial Investment

¹ Based on 20-25% concentration in private markets provided by consultants extrapolated based on TRs allocation of 27% of the Trust . All percentages are as a percent of the Total Fund Source: Investment Policy Statement, Appendix B.

Current Manager Concentrations



Manager	Total Assets (in \$ millions)	% of Trust	Asset Classes
JP Morgan*	\$2,608	2.5%	SPN, Private Equity, Real Assets, External Public
Neuberger Berman*	\$1,984	1.9%	SPN, Dislocated Credit
Blackstone/GSO*	\$1,742	1.7%	Dislocated Credit, Private Equity, Real Assets
BlackRock*	\$1,313	1.3%	SPN, Private Equity, Real Assets
Morgan Stanley*	\$1,257	1.2%	SPN, Real Assets
Apollo *	\$1,197	1.2%	Dislocated Credit, Real Assets
DePrince & Zollo	\$1,150	1.1%	External Public
Westwood	\$1,142	1.1%	External Public
GMO	\$833	0.8%	External Public
Artisan	\$827	0.8%	External Public

* Managers have been presented to the Board either for Public SPN or Dislocated Credit mandates.

** The Board authorized negotiation of \$3B mandates with Apollo and KKR that will place both firms on this list—using the Trust values at 9/30/11 this would result in 4.8% and 4.9% concentrations (respectively) on a total fund exposure basis.

TRS Investment Management Division

Summary

- Investment Results in the First Quartile
- Investment Management Division Strong and Professional
- Asset Allocation Transition Nearing Completion
- Investment Processes and Risk Systems Fully Developed
- Communication Systems in Place
- 22 Audits Passed over Three Years
- Wide Industry Recognition for Excellence in Investment Management



Evolution in Investment Policy at TRS

February 2012

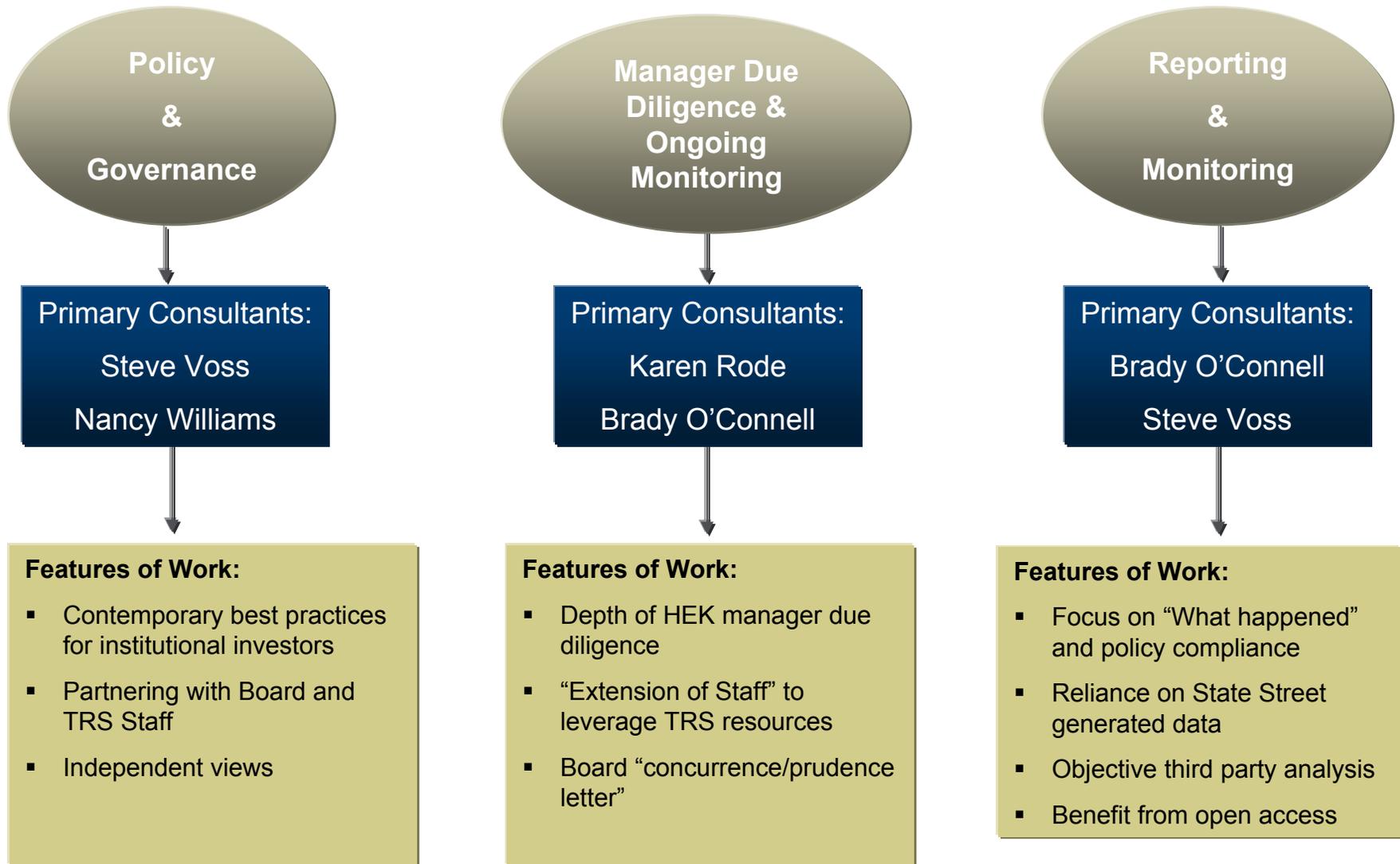
Discussion Topics

1. Role of Hewitt EnnisKnupp
2. Evolution of Investment Policy: Asset Allocation and Governance
3. What is Next for Investment Policy?

The Role of HEK

- As the investment policy and overall complexity of TRS' investment program have evolved, so too have the services we provide.
- Prior to the change, our primary responsibilities included: Board reporting, asset allocation, and general investment strategy advice.
- With the changes at TRS have come new responsibilities for HEK: Manager research for long oriented managers, emerging private equity manager due diligence, ad hoc participation in IIC and other meetings, ad hoc alternative investment projects.
- The current relationship, which has us working closely with both the Board and the IMD, allows us to effectively serve the Board by giving us direct access and clarity into the IMD's activities.

The Role of HEK



Background on Investment Policy

- In 2009, we reviewed with the Board 11 essential sections of a best in class investment policy statement (IPS). Below are the most important of those sections.
 1. Asset Allocation and Rebalancing
 2. Guidelines and Benchmarks
 3. Risk Management
 4. Monitoring and Reporting
 5. Governance/Delegation

- In 2007, these elements of investment policy were changed in a significant way.

- We comment in the following slides about why these changes were made and include some excerpts from our written work to the Board at the time.

Asset Allocation: Embracing a New Target

- During 2007, the Board adopted a proposed allocation that departed significantly from past practice at TRS. It also represented a significant departure from measures of peer averages at the time.

	Legacy TRS	Pro Forma TRS*	Greenwich Average	CEM Average	BNY Mellon Average
Large Cap U.S. Equity	36.1%	18%	44.3%	40%	40.1%
Small Cap U.S. Equity	10.8	2	--	1	--
Non-U.S. Developed Equity	12.4	15	16.6	17	25.7
Emerging Markets Equity	1.0	10	--	1	--
Private Equity	4.1	12	4.0	6	4.2
Real Assets	3.1	15	5.5	7	2.4
Fixed Income	30.4	18	27.0	27	26.9
Other**	2.1	10	2.6	1	0.7
Total	100.0%	100.0%	100.0%	100.0%	100.0%

- Our written advice to the Board at the time was: *The Pro Forma allocation advocated by the Investment team calls for a substantial departure from current and recent practice of favoring public market asset classes. While the changes are considerable when compared to past practice, EnnisKnupp endorses the proposed allocation.*

*Reflects October 2011 Policy Allocation

** Includes hedge funds and cash

Asset Allocation: Why the New Target?

- The major objective of the change was increased asset return. As the table below indicates, based on the Ennis Knupp assumptions, the Pro Forma target represented a significant increase in expected return.
- This allocation also represented the highest Sharpe Ratio, a measure of risk-adjusted return.

	Legacy TRS	Pro Forma TRS	Greenwich Average	CEM Average	BNY Mellon Average
Expectations (EK Assumptions):					
Expected Return (arithmetic)	7.8%	8.8%	7.8%	7.9 %	7.9 %
Expected Risk (std. dev.)	11.7%	13.2%	11.8%	11.7%	12.3%
Sharpe Ratio	0.259	0.300	0.260	0.267	0.258
Downside Risk	13.2%	14.5%	13.4%	13.1%	14.3%

- At the time we wrote: *Based on EnnisKnupp's best estimates of return and risk, the proposed allocation will provide a better risk/return tradeoff.*
- Looking at the risk and return expectations relied upon at the time by the IMD, the increased risk/return tradeoff was even more compelling.
 - Our risk assumptions for certain asset classes, particularly private markets, were higher than those used by others.

Asset Allocation: What is the Risk?

- The change contemplated was one of the most significant that we had witnessed in a public pension plan. At the time we observed:
 - *The proposed allocation sets TRS apart from the average fund, and in this sense the allocation is indeed “leap frogging” peer funds in terms of asset allocation. Given the increased reliance on alternative investments, the new structure will require a significant increase in investment management costs. **In the long run, our expectations favor this allocation to generate an investment return superior to that of the current TRS investment portfolio** (emphasis added). It is important to stress the phrase “in the long run,” as the timing of these changes may generate more intermediate term challenges.*
 - *Risk management will increase in importance and discussions of risk will include not only standard quantitative measures of risk, most appropriate for public market investments, but less quantitative issues like minimizing vintage year risk, general partner exposure and political risk will play an increased role.*

Asset Allocation: What Else Needed to Change?

- **Organization:** Given the significant shift in investment strategy, we made the following suggestions to facilitate a smooth transition to a much more complex investment strategy:
 - *De-emphasize strict organization of staff resources by asset class; shift budgetary resources up and to the center.*
 - *Strive to bring staff compensation in line with that of the private sector. Examine the trade-off between staff size and compensation.*

- **Delegation:** A much more complex strategy can only be implemented if the Board delegated more investment authority to the investment team, within the confines of a clear investment policy.
 - *Delegate greater manager selection authority to staff. Funds should strive to maximize the delegation of manager selection and retention to staff.*

- **Derivative Usage:** Authority for usage of derivatives for risk management was added, a crucial tool for managing the risks in a more complex investment portfolio.
 - *EnnisKnupp is supportive of the Investment team's efforts to use derivatives in managing the investment portfolio. Derivatives can be an efficient portfolio management tool. For large, sophisticated investors with proper control mechanisms, we think the rewards of derivative usage will more than compensate for the additional risks.*

Asset Allocation: Has It Worked?

- Through the end of the third quarter of 2011, the new policy added value over the old TRS investment policy over the time periods shown below.
- The margin of value added, however, is more modest than we would have expected but this is still too short of a time horizon to make a definitive judgment decision on the success of a portfolio containing meaningful exposure to illiquid investments.

Return Summary as of 9/30/11

	1 Year	2 Years	3 Years	Since 8/31/07	Since 9/30/07
Old TRS Investment Policy	1.18%	5.76%	4.16%	0.14%	-0.60%
New Investment Policy (Transition Benchmark)	4.99%	7.57%	4.68%	0.72%	-0.01%
TRS Actual Performance	3.64%	8.01%	4.56%	0.21%	-0.53%

Asset Allocation: Performance Relative to Peers?

- Results relative to peer public funds have been more compelling.
- Below is a table from our Third Quarter 2011 Performance Reporting show ranks relative to the BNY Mellon peer universe over trailing time periods.
- TRS has been at or near the top quartile of peer funds during recent periods.

Return Summary as of 9/30/11

	Quarter	YTD	1 Year	3 Years	5 Years
	Return (Rank)				
5 th Percentile	-0.21	3.37	6.38	8.09	4.53
25 th Percentile	-6.73	-2.70	2.60	4.69	2.36
Median	-8.93	-4.24	1.16	3.74	1.83
75 th Percentile	-10.3	-5.92	-0.12	2.80	1.14
95 th Percentile	-12.2	-8.18	-2.00	1.53	0.31
# of Portfolios	74	72	72	66	64
 Total Fund	-7.06 (27)	-1.87 (25)	3.64 (20)	4.56 (28)	2.63 (24)
 Total Benchmark	-5.35 (16)	0.04 (13)	5.00 (11)	4.68 (26)	2.81 (23)

Governance and Authority: Top 10 Traits

- To operate a public pension plan, Boards need to make sure they have properly addressed key governance issues.

- In 2007, we presented the Board with a list of the top 10 traits of effective Boards.
 1. Maintains an undivided loyalty to the Trust
 2. Maintains a high standard of ethics, independence and focus on fiduciary duty
 3. Sponsors and supports the creation of a prudent and effective long-term investment policy
 4. Sponsors and adopts a clear, practical and professional risk framework
 5. Effectively delegates investment activities to investment staff and outside service providers
 6. Provides required resources and incentives to create the desired long-term outcome
 7. Provides long-term continuity
 8. Maintains a long-term perspective when faced with adversity
 9. Creates standardized, streamlined and focused reporting systems
 10. Encourage diversity of opinions, and provides for strong institutional leadership

- The shift in asset allocation required a change in governance that saw manager hiring decisions delegated to the IMD with some complaints.
 - We believe this delegation was necessary in order to implement a more complex investment strategy.

Governance and Authority: 4 Conditions for Delegation

- In addition to an effective Board, the following four conditions are generally required to create an environment of effective delegation from Board to staff:
 1. Qualified and capable people
 2. Process for delegation of authority
 3. Board access to information
 4. Trust and confidence

- Below are observations specific to TRS for each of these conditions:
 1. **People:** Significantly expanded IMD, improved competitiveness of compensation, added qualified and experienced people.
 2. **Process:** Internal Investment Committee is created, IPS articulates limits of authority given to IIC and IMD.
 3. **Access to Information:** Transparency reports illustrate all IIC activity, Board and Committees also see regular updates and presentations -- reporting is comprehensive.
 4. **Trust and Confidence:** A two-way street that we think is working effectively. This can break down from time to time for any organization, so IMD and Board both need to make regular efforts to build trust.

- TRS has taken the steps to ensure that governance has been delegated effectively, but the Board may wish to revisit this issue given changes in Board composition.

Governance and Authority: Peer Practices for Delegation

- The most visible form of delegation of investment authority from Board to investment staff is in the area of investment manager hiring and firing.
- Why do we think this is so important?
 - **Expertise:** Effective selection of investment managers is difficult. Having specialists and experts in the evaluation of external managers is critical in making good decisions. Most boards contain lay people that may be less equipped to make these decisions.
 - **Speed:** Decisions can be made and implemented more effectively when executed by the investment staff and not a board.
- Delegation of manager hiring and firing decisions for large institutions is common practice.
 - A survey of investment policies of the ten largest public plans in the US in late 2010 indicated seven fully delegated manager decisions to staff, two retained authority at the Board/Trustee level, and authority for one remained unclear.
- Not only is it common practice among the very largest public funds, but when these funds have dedicated and capable investment personnel in place, operating within the confines of a clear policy, we think it is best practice for a Board to delegate.

How Were These Changes Implemented?

- The changes in investment policy at TRS have driven many other changes that were necessary to facilitate the new strategy:
 - More professionals hired into the IMD
 - More active managers
 - Higher overall cost structure and performance-based fees
 - More advisors (Albourne, Hamilton Lane, Townsend, HEK)
 - More delegation from the Board

What is Next for Investment Policy?

- As the Board knows, the IMD leads a comprehensive review of investment policy every year. Some years witness more meaningful changes than others.
- To ensure active Board participation, HEK will conduct a survey of the Board and focus on issues such as:
 - Governance
 - Delegation
 - Monitoring and Reporting
 - Risk Measurement
 - Other areas of interest
- This work would be in addition to the input from the IMD and other participants within TRS
 - We would begin this work in April and wrap it up in September.
- At this point, we do not recommend reconsideration of asset allocation.