Arizona State Retirement System Board

Private Equity Asset Class Review

Gary Dokes, Chief Investment Officer
Richard Henkel, Private Equity Portfolio Manager
Steve McCourt, Principal, Meketa Investment Group
Bruce Rosenberg, Director, Credit Suisse, CFIG

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Background

5%+/-2% Strategic Asset Allocation (SAA) Approved[1]	October 2006
IMD Private Equity Portfolio Manager Hired	January 2007
Private Equity Consultant(s) Hired	May 2007
Private Equity Strategic Plan Approved	July 2007
Private Equity Committee Inaugural Meeting	July 2007
First PE Investment Manager Approved	September 2007
Increase in SAA to 7%+/-2% from 5% Approved[1]	October 2009

[1] ASRS Total Fund Asset Allocation Study

Private Equity Program Overview:
Fundings, Commitments, and Existing Structure

- 35 Investment Managers (GPs) contracted since program's inception date
- Committed Capital ($)[1] = $1,513.1 mm
- Invested Capital ($)[2] = $384.6 mm
- Invested/Committed Capital (%) = 25.4%
- Invested Capital/Total ASRS market value (%)[3] = 1.7%
- Invested & Unfunded Capital/Total ASRS market value (%)[3] = 6.3%

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[1] Committed capital as of 12/15/09, includes investment in CC Media Holdings. All foreign currency denominated commitments translated to USD at 9/30/09 fx rates

[2] Based on 6/30/09 FMVs, adjusted for cash flows through 9/30/09, includes investment in CC Media Holding.

[3] Total Pension Fund = $ 23,263.4 mm as of 9/30/09

Private Equity Existing Structure
of Funds and Committed Capital by Sector and Enterprise Value ($ mm)

Mega/P2P ($)		Large ($)		Midsize ($)		Small/Micro ($)		Totals ($)		Asset Class
(3)	176	(4)	256	(9)	446	(5)	190	(21)	1,068	Corporate Finance
(2)	130	(2)	110	(3)	120	(1)	20	(8)	380	Special Situations
-		-		-		(6)	65	(6)	65	Venture Capital
(5)	**306**	**(6)**	**366**	**(12)**	**566**	**(12)**	**275**	**(35)**	**1,513**	**Total**

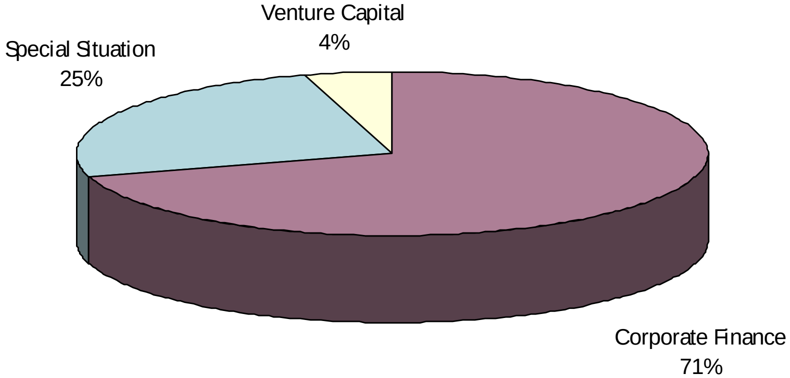
- Current portfolio positioning and implementation is consistent with a tactical bias for small- to mid-size recession-resistant sectors and investment strategies focused on organic growth/bolt-on acquisition.

Private Equity Program Overview
Fund Roster

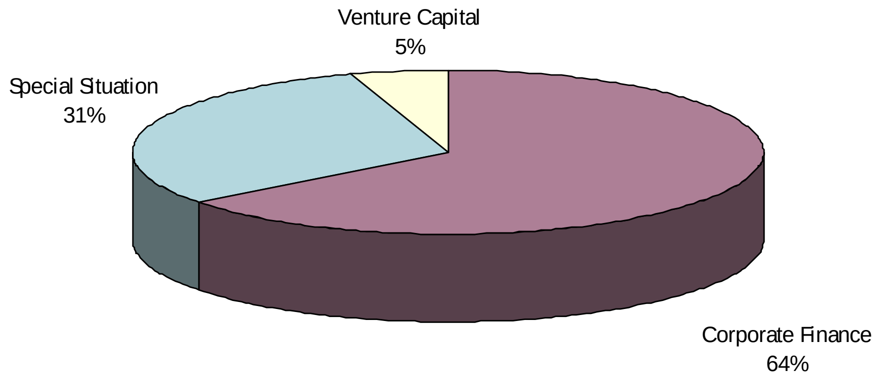
Corporate Finance	Venture Capital	Special Situations
Accel-KKR Capital Partners III	Atlas Venture Fund VIII	Apollo Investment Fund VII
Blackstone Capital Partners VI	CMEA Ventures VII	First Reserve Fund XII
Bridgepoint Europe IV	IDG Ventures SF	Maranon Mezzanine
Crown European Buyout Opps II	Montreux Equity Partners IV	Platinum Equity Capital Partners II
CVC European Equity Partners V	New Atlantic Ventures III	Quantum Energy Partners V
JLL Partners Fund VI	Peninsula Tech Ventures	Saybrook Corp. Opp. Fund
Levine Leichtman Capital Partners IV		TCW / Crescent Mezz. Partners V
Lincolnshire Equity Fund IV		Wayzata Opps. Fund II
LLR Equity Partners III		
Nautic Partners VI		
New Mountain Partners III		
Oak Hill Capital Partners III		
Onex Partners III		
Partners Group Sec. 2008		
Paul Capital Partners IX		
Pine Brook Capital Partners		
Silver Lake Partners III		
The Resolute Fund II		
Thomas H. Lee Partners Fund VI		
Warburg Pincus Private Equity X		
Yucaipa American Alliance Fund II		

- As part of a broad strategy review, the categorization of new and existing partnerships will be considered.

Strategy Diversification by Commitments[1]



Strategy Diversification by Fair Market Value[2]



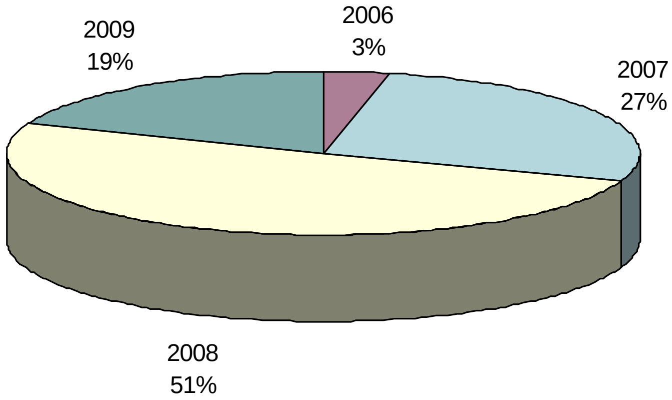
	Target Allocation	Allocation Range[3]
Corporate Finance	65%	(55% - 75%)
Special Situation	25	(15 - 35)
Venture Capital	10	(5 - 20)

[1] Represents commitments as of September 30, 2009. Non-U.S. dollar denominated commitments have been converted to U.S. dollars based on foreign exchange rates on September 30, 2009.

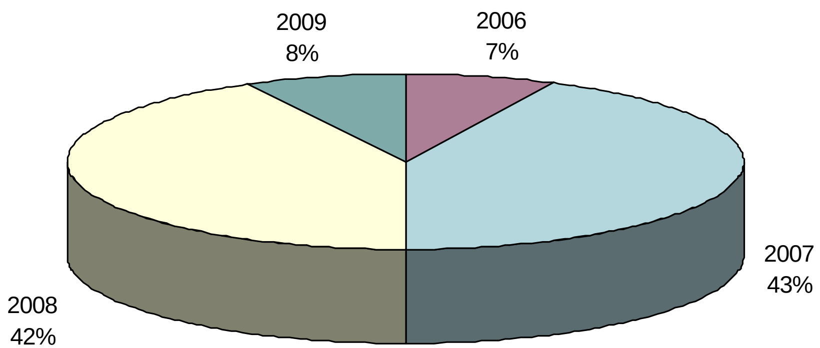
[2] Based on fair market values provided by underlying fund managers as of June 30, 2009, and adjusted for cash flows through September 30, 2009.

[3] During the early stages of the Program's implementation, actual portfolio diversification may temporarily deviate from the targeted allocation ranges.

Vintage Year Diversification by Commitments[1]



Vintage Year Diversification by Fair Market Value[2]



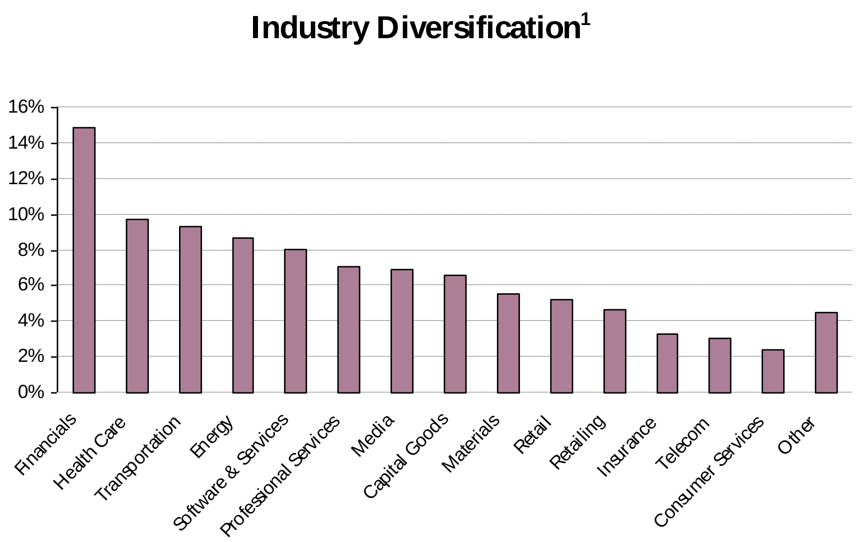
- The Private Equity Program remains in the early years of its formation.

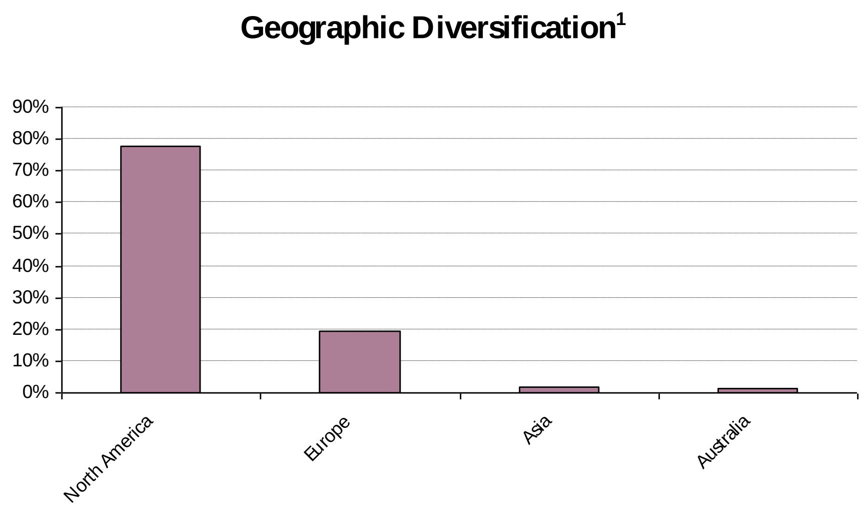
[1] Represents commitments as of September 30, 2009. Non-U.S. dollar denominated commitments have been converted to U.S. dollars based on foreign exchange rates on September 30, 2009.

[2] Based on fair market values provided by underlying fund managers as of June 30, 2009, and adjusted for cash flows through September 30, 2009.

Arizona State Retirement System

Private Equity Program Overview
Industry and Geographic Diversification

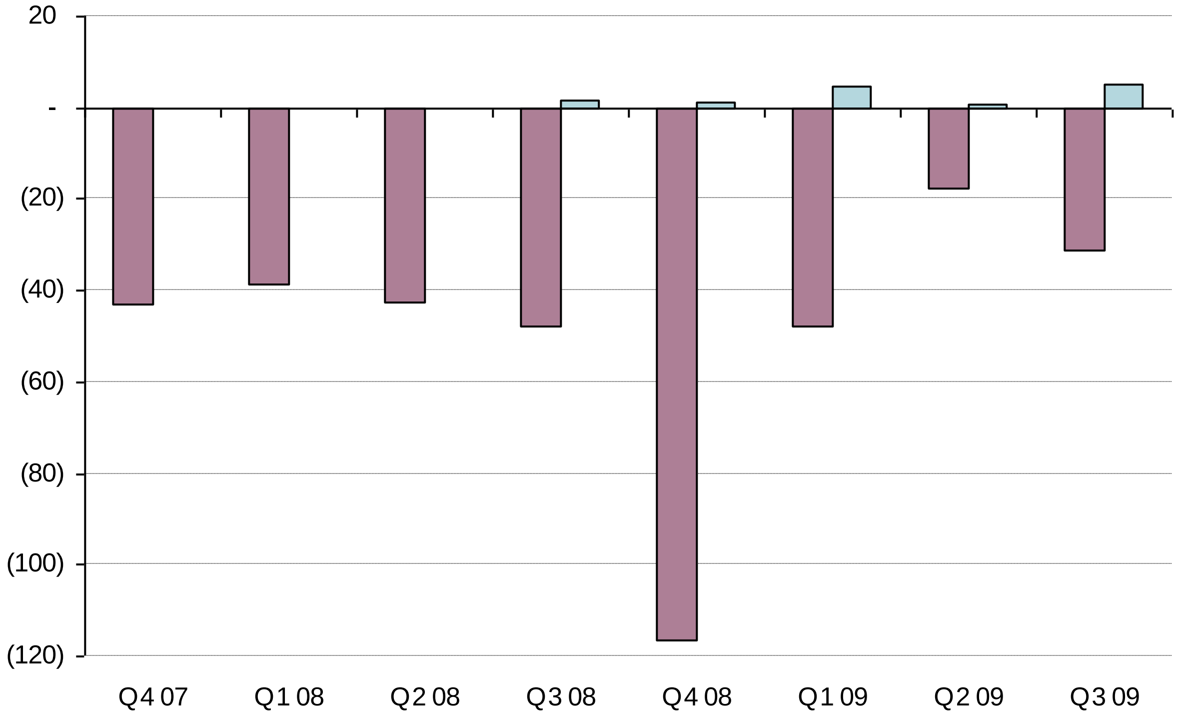




- The Private Equity Program is extraordinarily well diversified with approximately 1,600 company interests under management by 194 partnerships.

1 Based on fair market values provided by the underlying fund managers as of June 30, 2009.

Quarterly Cash Flows ($ mm)



- As an immature Program, the Private Equity portfolio is expected to produce net cash outflows for several more years.

Performance

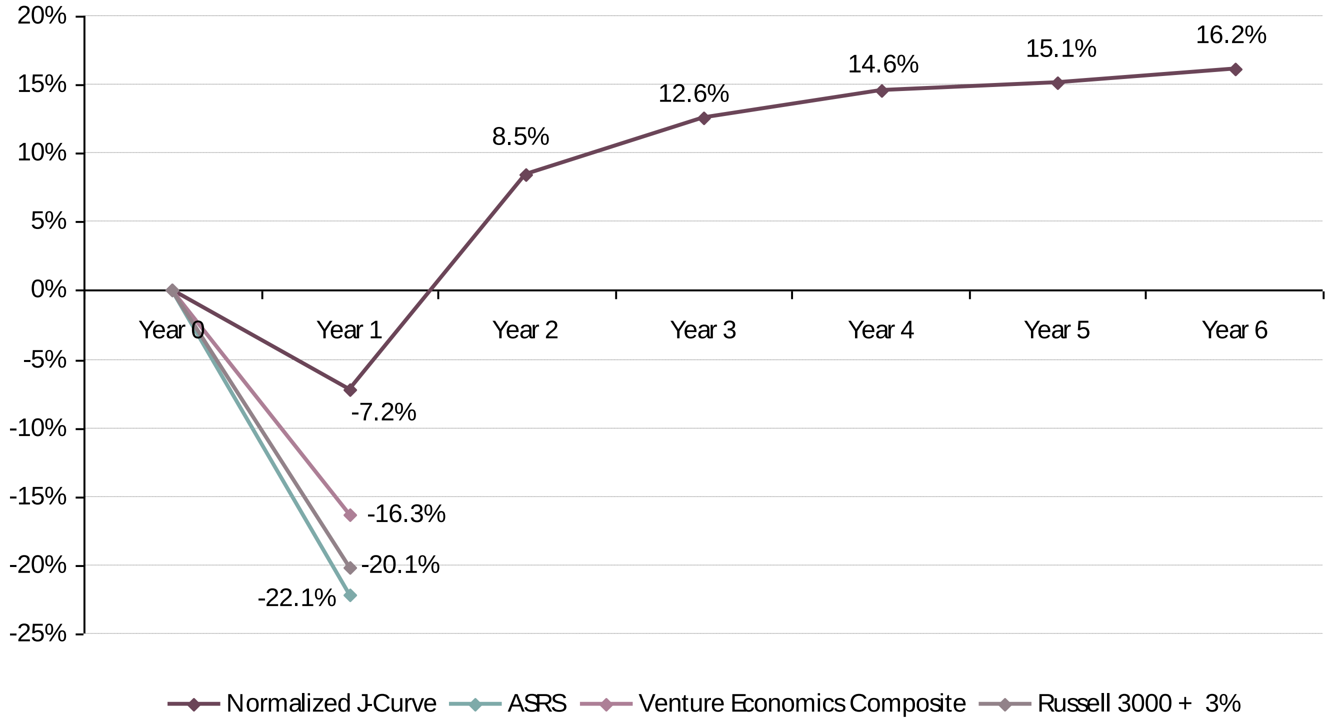
ASRS Net IRR Since Inception[1]	Absolute Long-term Return Target	Russell 3000 + 3% Since Inception
-22.1%	11.0%	-20.1%

Long-term objectives of the private equity program:

- Generate a net annualized return of 3% in excess of the Russell 3000 index.
- Fully diversify the program by all relevant metrics, including by manager, geography, vintage year, and strategy.
- Generate annual distributions in excess of annual capital calls.

1 ASRS net IRR since inception provided by Credit Suisse.

Normalized J-Curve[1]



- The initial returns of the Private Equity Program have been negative due to both the normal "J-Curve" effect and the weak recent financial markets.

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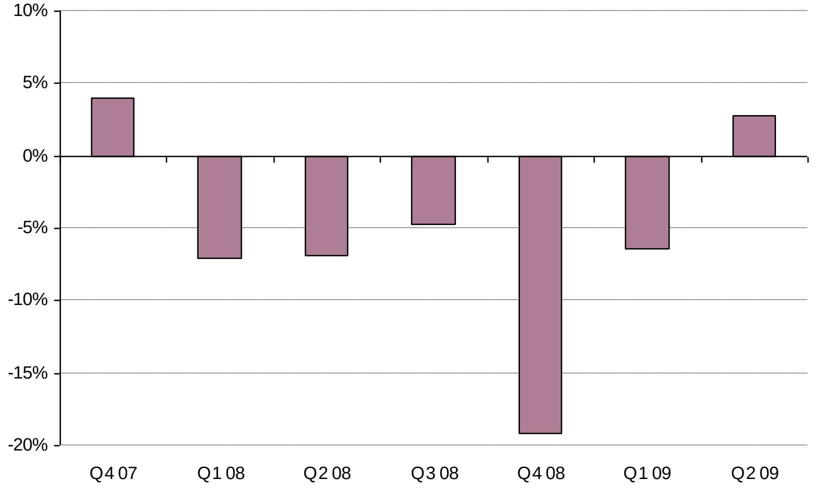
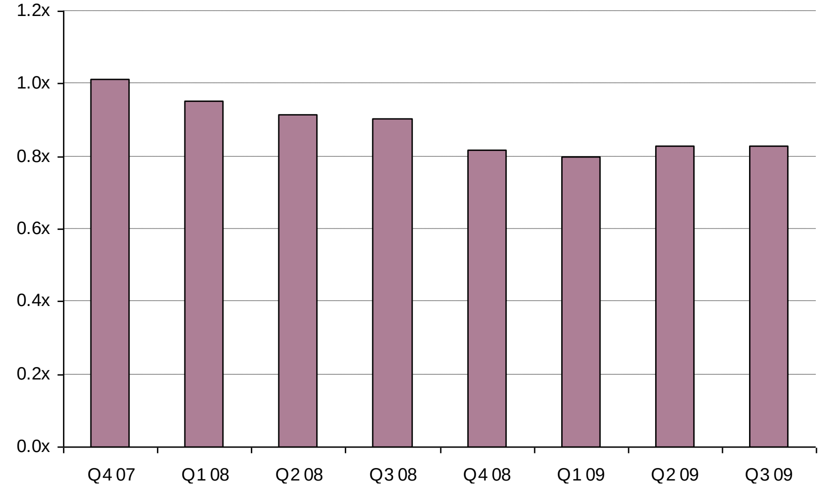
[1] Based on the average “J Curve” experienced by Private Equity partnerships from 1994 through 2008. Data from Venture Economics..

Periodic Net IRR

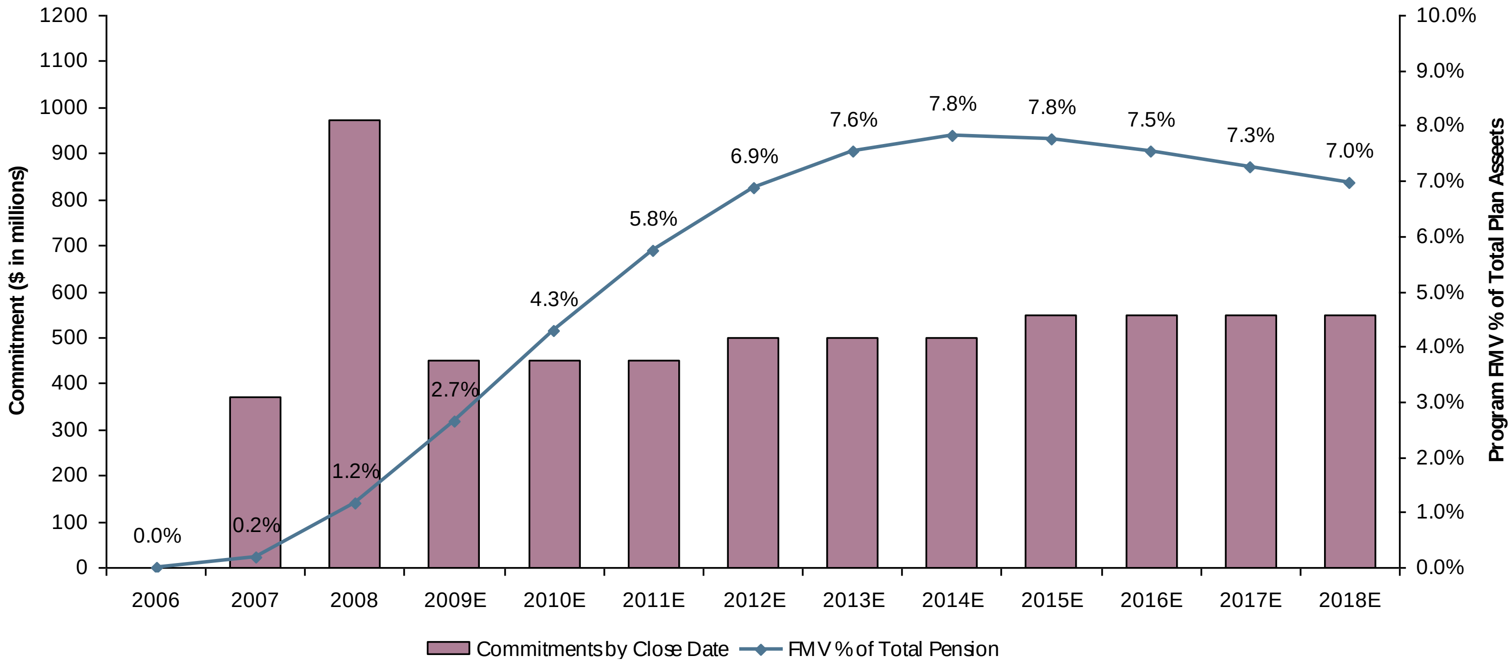


Net Total Value Multiple[1]



[1] Total Value Multiple equals cumulative distributions plus fair market value, then divided by cumulative capital drawn. The fair market values used to determine total value for the third quarter of 2009 are based on fair market values provided by underlying fund managers as of June 30, 2009, and adjusted for cash flows through September 30, 2009.

Strategy and Implementation



($ in millions)	2007	2008	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E
Commitments by Close Date	370	974	450	450	450	500	500	500	550	550	550	550
Commitments Made to Date[1]	370	974	90[2]	80[3]	0	0	0	0	0	0	0	0
FMV % of Total Pension	0.2%	1.2%	2.7%	4.3%	5.8%	6.9%	7.6%	7.8%	7.8%	7.5%	7.3%	7.0%
Total Plan Assets	28,000	20,500	23,338	24,738	26,222	27,795	29,463	31,231	33,105	35,091	37,196	39,428

[1] As of December 2009. Commitments denominated in foreign currencies were translated to U.S. dollars at September 30, 2009 exchange rates.

[2] Includes a $30 million add-on commitment to Levine Leichtman Capital Partners IV, a $30 million commitment to Lincolnshire Equity Fund IV, and a $30 million commitment to Maranon Mezzanine Fund.

[3] Includes a $80 million commitment to Blackstone Capital Partners VI. ASRS executed its commitment to the fund in 2009; however, the fund is not expected to draw capital until 2010.

Five private equity funds are currently under review by the Private Equity Committee:

Corporate Finance	Special Situations
Veritas Capital Fund IV	Catalyst Fund III
	Energy Capital Partners II
	Littlejohn Fund IV
	White Deer Energy

Five existing fund managers are expected to return to the fundraising market in 2010:

Corporate Finance	Venture Capital	Special Situations
Warburg Pincus	CMEA Ventures	Wayzata Opportunities
Paul Capital Partners	Peninsula Tech Ventures	

Meketa Investment Group expects 2010 to present numerous attractive areas of opportunity, including in the smaller end of the buyout market, select pockets of the venture capital market, various private debt strategies, and other special situations.

Private Equity Market Environment
(Current and Prospective)

Limited debt financing and the business cycle downturn is having several profound affects on the buyout market:

- New deal activity has slowed considerably. While some transaction activity has continued in the small and middle-markets, and general liquidity has begun to slowly return, debt financing will likely continue to be at cyclical lows for the near to mid-term.
- Many transactions closed from 2005 through 2008 are now broadly perceived to have been purchased at high prices and with inappropriate amounts of leverage, particularly in the large end of the buyout market.

The Venture Capital market's slow recovery from the tech bubble is strained by recent distress in the broader financial markets:

- A dramatic slowdown in the market for initial public offerings limits options for exiting mature venture capital backed companies.
- Many venture capital firms, even some well-known and respected managers, have not generated carried interest in nearly a decade. This dynamic strains alignment of interests with limited partners and managers' abilities to recruit and retain talent.

Private Debt managers are uniquely positioned to capitalize on limited liquidity and financial distress:

- Distressed debt for control managers are encountering record deal flow, and see many opportunities to acquire attractive businesses that are encountering financial distress.
- Mezzanine debt managers are experiencing high demand for providing financing, and are generally able to command high interest rates with additional equity participation in certain cases.

Secondary managers are benefiting from large numbers of limited partners seeking to sell interests in private equity funds due to liquidity constraints

Market Outlook:

- Buyout investment and realization activity in the small- and middle- markets will gradually increase to levels that are consistent with historic averages.
- Small and less stable companies will generally continue to experience challenges in the near-term; creating opportunities for managers with certain skill sets, and issues for managers holding troubled companies.
- Many managers will return to the fundraising market in 2010 and 2011 after waiting out the slow fundraising environment of 2009.

Areas of Focus:

- Emphasize small- and middle-market funds within the Buyout space, particularly managers with highly differentiated sourcing platforms, industry expertise, or operating capabilities.
- Stress turnaround strategies and industry specialists in key markets, such as financial services and energy.
- Focus on private debt managers, particularly mezzanine and distressed debt.

Future Private Equity Program Activities

#1 Strategic Plan Review

Issues to be considered are:

- Where will structural change and fiscal policy create or destroy investment opportunity
- Classification of investments by sub-asset class
- Sub-asset classes included in Private Equity
- Effective benchmarking for Private Equity
- Identification/reaffirmation of tactical strategies
- Contracting vehicles available to Private Equity

#2 Terms and Conditions

ASRS is working with sister funds, the Institutional Limited Partners Association (ILPA), and General Partners (GPs) via participation on Advisory Boards to promote the ILPA Partnership Principles to increase transparency, governance, and alignment of interest between GPs and Limited Partners (LPs).

The Principles are generally guiding discussion with existing investment managers but are more proactively being promoted with new investment relationships.

#3 Separate Account Mandate(s)

- Determine appropriate number of mandate(s)
- Determine appropriate commitment level(s)
- Determine mandate(s) strategy
  - Focus on managers who have the following core competencies
    - Valuation skills specific to portfolio company level analysis, mergers and acquisitions, direct and co-investment
    - Expertise in niche strategies
    - Possess an overarching ability to implement strategy on tactical basis
    - Emphasis will be placed on selecting/negotiating with those managers who possess all of the above in conjunction with the best alignment of interest
- Determine appropriate benchmarking methodology
- Conduct manager due diligence and select manager
- Formalize implementation, reporting and other operational processes

Private Market/Opportunistic Investments
Back-Office Vendor – CFIG Introduction and Services Provided

Back office Administration:

- ASRS/ CFIG Relationship (Private Equity, Real Estate, Opportunistic Asset Classes)

Common Practices:

- Capital Call/Distribution Administration
- Accounting “Book-of-Record”
- Archival of all documentation related to the investments
- Amendment Review
- Performance Measurement – Internal Rates of Return/Time-Weighted Returns
- Monitoring and Reporting
- Responsible for data integrity/GP/Cash flow/GL reconciliation
- Data/Reports sent to ASRS Staff, ASRS PE Consultant (MIG) and ASRS General Investment Consultant (NEPC)
  - Audit trail defined

Status of Implementation:

Relationship commenced in June 2009 with CFIG providing oversight and accounting services ("Official Book of Record") for the Arizona State Retirement System ("ASRS"):

- 35 Private Equity Fund Investments
- 33 Real Estate Fund Investments (including 3 Owned Property Investments)
- 3 Opportunistic Fund Investments

In July 2009, CFIG visited with the accounting and investment groups of the ASRS to understand the services to be provided, review procedures and develop a timeline for deliverables.

CFIG reconciled all historical transactions to the individual General Partner's/Manager's records. Balances reconciled include total commitment, contributions, distributions, unfunded balances, and ending partner's capital balances.

CFIG has provided ASRS with access to FundCentral Investor Portal where quarterly and real time accounting, performance and portfolio company information can be viewed.

Back-Office Vendor Services Provided

Daily Deliverables:

- CFIG reviews all capital call and distribution notices received from the funds.
- CFIG prepares and verifies daily wire instructions and journal entries for all contributions and distributions. This information is used by the ASRS to authorize their custodian bank to move cash.
- CFIG records capital calls, distributions and partners' capital statements as received. The information is available for client view in the FundCentral Investor Portal within 24 hours after review.
- CFIG reconciles all cash transactions to the records of ASRS' custodian, State Street and communicates any discrepancies to ASRS, if necessary.
- CFIG scans all documents received from the funds (capital calls, distributions, legal documents, etc.) into FundCentral Investor Portal which is available to ASRS online 24 hours a day.

Weekly Deliverables:

- CFIG reconciles cash flows received from State Street each Monday to our records and communicates any discrepancies to ASRS, if necessary.

Monthly Deliverables:

- CFIG provides a monthly commitment report to ASRS to ensure completeness of new commitments.
- All foreign denominated funds are converted to US Dollar with the latest foreign currency rate as of month end.

Quarterly Deliverables:

- CFIG prepares ASRS custom quarterly reports for each of the three asset classes in a format agreed to by ASRS.
- CFIG prepares an accounting roll-forward for each asset class and reconciles the schedule to the custodian.
- CFIG provides a quarterly journal entry for each asset class based on the accounting roll-forward to ASRS.
- CFIG provides performance measurement information for both IRRs and Time-Weighted Returns ("TWRs")
- CFIG provides various ASRS consultants information (cash flows, ending values, performance information, etc.) as requested.