Impact of Venture Capital on UC Private Equity Returns: Historical and Forecast

Committee on Investments
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Based on Wilshire Associates January 2003 Capital Market Assumptions

Efficient frontiers constrained by UCRP / GEP policy

- Upper and lower bounds per Jan 2003 policy revision

**Base case**: Private Equity return = 11%
- This is 300 bp above US Equity, consistent with benchmark

**Alternate case**: Private Equity return = 9.5%
- Reduce 300 bp premium by 50% to adjust for Top Tier removed from opportunity set

**Impact on total UCRP return** = negative 7.5 bp
- = 150 bp x 5% weight

**Impact on total GEP return** = negative 15 bp
- = 150 bp x 10% weight
Forecast Frontier Comparison: UCRP and GEP

UCRP and GEP Constrained Frontiers

Standard Deviation

- GEP Policy
- GEP (Private Equity Adjusted)
- UCRP Policy
- UCRP (Private Equity Adjusted)
- UCRP 11% Private Equity
- UCRP 9.5% Private Equity (Adjusted)
- GEP 11% Private Equity
- GEP 9.5% Private Equity (Adjusted)
- Used UCRP actual returns for ten years 7/1993 – 6/2003

- Total Private Equity Returns 26.5%
  - VC 41%, LBO 18%, Intl PE minus 6%

- Return for UCRP Equity = 8.8%, Bonds = 10.0%
  - Other asset classes added recently are not shown

- Base case: actual private equity return with VC
- Alternate case: approx PE without VC ~ 11%

- Opportunity set (efficient frontier) significantly reduced

- Without VC total UCRP return of 10.1% would have been reduced to approx. 9.7% (35bp lower each year)
Efficient frontier calculated from actual risk and return for 10 years ending June 2003

Red frontier shows reduced opportunity set for private equity without actual venture capital returns
SUMMARY

◆ The annualized return actually achieved by the UCRP over last 10 years would have been about 35 bps less without VC
  - Approx. dollar impact over 10 years would have been at least minus $1 Billion
    ◆ 0.35%/year X 10 years X $30B = $1B

◆ Actual dollars returned from ongoing investment in UC Private Equity was $2.2 Billion over 1978-03
  - UCRP+GEP+403b

◆ Court ruling places external economic constraints on our portfolio by excluding top tier VC in the future

◆ These are the potential returns that we are trying to protect in the future