University of Western Ontario DC Pension

Private Equity Basics

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Agenda

1. Private Equity (PE)
2. Issues, Characteristics & Implementation
3. Are Alternatives, like PE, a Separate Asset Class?
4. Russell's Position on Alternatives

Appendix

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1. Private Equity

Private Equity - What Is It?

- Investing in companies that are not publicly traded
  - Typically limited to “organized private equity market” by pension funds, endowments, foundations, etc.
- “Value-added” financing method for entrepreneurs
  - Sought after by enterprises looking to grow rapidly but without easy access to adequate bank financing
  - Expensive form of financing but accommodates higher growth rates and offers experienced professional guidance
  - Forms:
    - Leveraged Buyout Funds
    - Venture Capital
    - Mezzanine Debt Financing
    - Expansion Capital
- Opportunities arise from market imperfections

Types of Private Equity

- Venture Capital
  - *Early stage (seed/start-up) and later stage (profitable/expansion)*
  - *Information technology and health care emphasis but includes non-technology*
  - *Average investment $5-15m*
  - *"Venture" profile of portfolio returns*
  - *High risk, high reward*
  - *Firms are specialized by region and industry*
- Buyouts (Management, Leveraged, Public/Private, Buy and Build)
  - *Mature businesses in need of capital*
  - *Returns depending on cash flow growth and leverage*
  - *Average investment size $50-300m*
  - *Lower volatility of returns*

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Types of Private Equity

- Mezzanine
  - *Middle layer of capital structure, usually with current yield*
  - *Can sometimes achieve equity-like returns with warrants, kickers*
  - *Lower risk, lower return*
- Distressed
  - *Investing in bankrupt or distressed businesses, often via the debt*
  - *Highly cyclical in terms of market opportunity*
  - *Short investment cycle can produce high IRRs but low return of capital*
- Secondaries
  - *Investing in funds that are at least 50% invested*
  - *Asset value is the driver, not investing in a blind pool*
  - *Diversifying back to prior vintage years*
  - *Must be confident in the longevity of the GP*

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Implications of Investing in Private Equity

- More expensive asset class than public assets
- Higher risk, but higher return if managed well
- Difficulty in achieving target allocations
- Requires experienced staff or advisors
- NOT an asset class to market time—steady commitments over various cycles is a must
- J-curve effect (can be truncated with secondaries – opportunistic)

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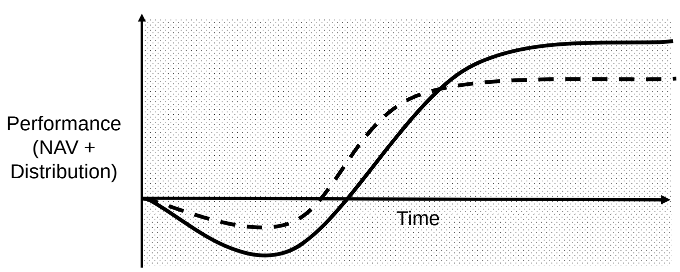
Impact of the J–Curve on Returns

Primaries

- **"Blind pool" commitment to a General Partner**
- **Initial management fees have negative impact on NAV**
- **Selection criteria are key**
- **Generally produce a higher multiple on invested capital than Secondaries**



Secondaries

- **Portfolio is partly known and can be valued**
- **Fees and expenses absorbed**
- **Shorten horizon to distribution**
- **Often have a higher Internal Rate of Return (IRR) than Primaries**

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Why Invest in Private Equity?

- Ability to outperform traditional investments
- Low correlation with other asset classes
- Diversification of assets - both manager specific and asset specific diversification

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Why Should Private Equity Outperform?

- **Active management and value creation by General Partners is the key driver to outperformance**
- Inefficient market: negotiated transactions, valuations and price information are based on private information
- Access to proprietary information and deal flow, often based on relationships
- Long-term and illiquid investments

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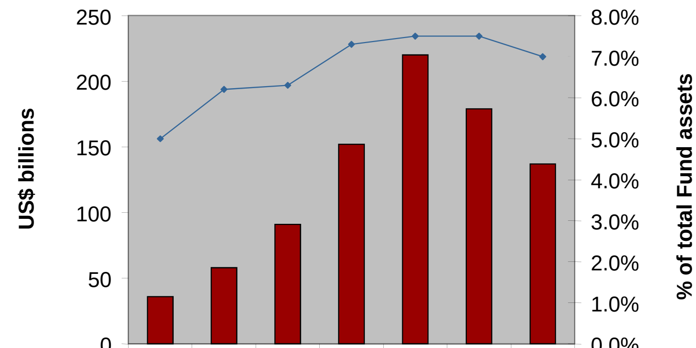
Growth of Private Equity

Commitments/Strategic Allocations



	1992	1995	1997	1999	2001	2003	2005
Commitments	36	58	91	152	220	179	137
Allocations	0.05	0.062	0.063	0.073	0.075	0.075	0.07

* Source: Russell Investment Group 2005 Survey on Alternative Investing

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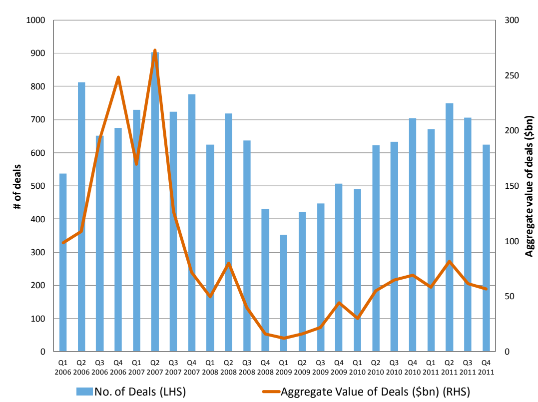
Deal volumes globally 2006 - 2011



Source: Preqin

- **Similar to fundraising, deal volume is significantly below pre crisis levels**
- **Deal volumes have slowed in response to tightened credit markets and an unwillingness to sell at low valuations**
- **After increasing deals through the end of 2010 and beginning of 2011, the deal volume fell through the second half of 2011**
- **Russell is concerned about the potential for a significant and prolonged reduction in both new deals and exits in the coming quarters**

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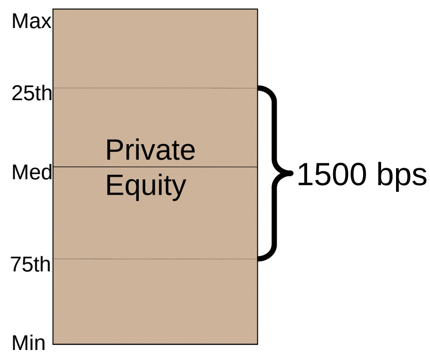
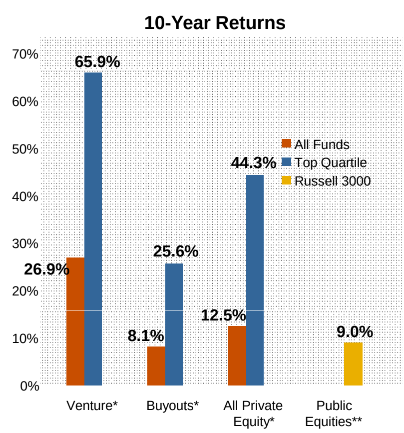
The Importance of Selection

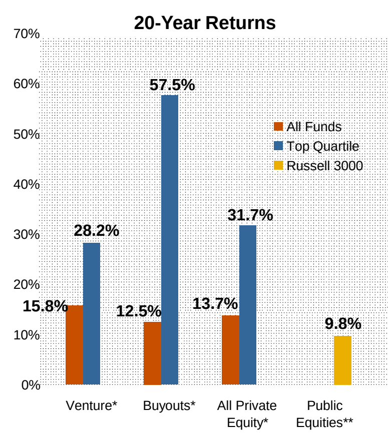
With no passive private equity alternative to consider, the importance of selection increases



- The gap between first and third quartile performance is substantially greater than in liquid markets
- Poor investment selection defeats the purpose of holding private equity

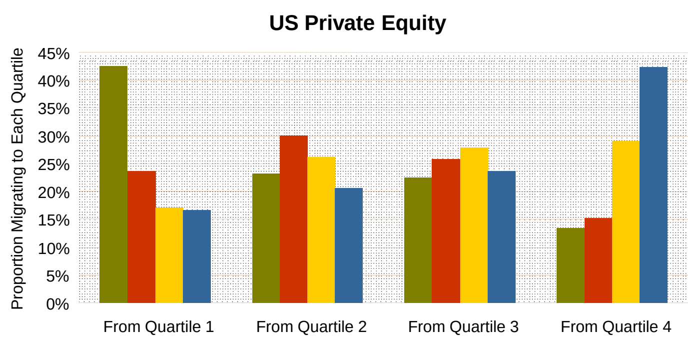
You Want to Invest in the Top Quartile





As of September 30, 2004; *IRR; **Geometric Mean Return
Source: Venture Economics / Bloomberg

Top Quartile Managers Tend to Stay in the Top Quartile



If you are in a top quartile fund, there is a 43% chance that the next fund will be in the top quartile….and a 66% chance it will be above median!

Source: Russell Investment Group

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2. Issues, Characteristics & Implementation

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Issues

- Higher use of staff resources (especially if internally managed)
- The need to commit more than the target allocation
- Monitoring and performance reporting
- Lack of appropriate benchmark
  - Suggested performance targets: equity returns + some premium to compensate for risk and illiquidity

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Characteristics

- High average returns but significant dispersion
  - Important to access best deals or managers
- No investable benchmarks
- J-Curve pattern of returns
- Pricing is more subjective
  - May mask true volatility
- Less disclosure and regulatory oversight
- Liquidity may be limited or non-existent
  - Holding periods of 7 to 10 years (or more) often required
- Higher fees

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How to Access Private Equity

Investment Vehicles

- Direct investment
- Limited Partnerships
- Fund-of-Funds
- Secondaries

Institutional Approaches

- Internal management:
  - high level of control and accountability
  - problems with staffing and getting sufficient diversification
- External professionals: Private equity advisor relationship ("gate keeper") or Fund-of-funds manager
  - Getting dedicated expertise; access to deals and ability to diversify
  - Approximately 100 bps of additional management fees

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Private Equity Risks in Access

- **Direct Investments into Companies:**
  30% probability of a <u>total</u> loss
  42% probability of any loss
  If a loss occurs, average loss is -85%

- **Direct Investments into Funds:**
  1% probability of a <u>total</u> loss
  30% probability of any loss
  If a loss occurs, average loss is -29%

- **Fund-of-Funds:**
  0% probability of a total loss
  1% probability of any loss
  If a loss occurs, average loss is -4%

Source: Weidig and Mathonet, Risk Profiles of PE, January 2004.

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Typical Private Equity Structures

	Advantages	Disadvantages
Fund-of-Funds	Highly diversified by stage/sector/geography, access to select GPs, cash-to-cash service, ability to access all sub-asset classes prudently	Higher expense ratio, less access to underlying GPs and deal flow, "index fund" approach by some
Funds	Easier to diversify than with directs, ability to co-invest and observe deal flow and transactions	Experience required to select/manage GPs, back office intensive, higher expense ratio, access to GPs, managing distributions
Direct Investments	Lower expense ratio, ability to gain strategic insight and control investment process	Need for skilled managers and deal flow, capital required for diversification
Secondaries	Diversification to prior years, often a discount to NAV	Short due diligence time, need for large base of GP and portfolio co. knowledge

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Fund-of-Funds

- Evergreen and sophisticated source of capital
- Strong and established relationships with GPs
- Consistent presence in the market
- Persistent calling efforts
- Global scope
- On-going monitoring / advisory committee representation
- Secondary capabilities

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Implementation

Advantages of External Management

- Advisors and fund-of-funds managers provide
  - Market expertise and due diligence
  - Access to deals that are out of reach
  - Expanded universe of investment opportunities
  - Diversified portfolio strategy
  - Stock distribution management

Disadvantages

- Approximately 100 bps of additional management fees
- Structure lowers control of funds invested
- Disconnect from an exciting market place

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How to Evaluate Private Equity Returns?

- The wait is long
- The private equity time horizon is 5-10 years, and returns are difficult to judge on an interim basis
- Cash-on-cash returns are the only true metric of performance; i.e., until portfolio companies have been sold, performance is not certain
- Makes the job of manager selection based on interim returns more interesting (and difficult)

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Conclusions

- Private equity cannot be ignored--it's becoming institutional, mainstream and is a sizeable part of the investment environment
- Private equity is *not* for those with short investment horizons or those prone to frequent changes in investment policy
- Returns from actively-managed private equity can be very compelling with a very low level of risk
- Manager selection is crucial and it is difficult to gain access to good fund managers
- Private equity cannot be market timed and selling is costly
- While the wait for distributions and interim-performance can be long, it's important to continue to commit capital over successive vintage years and market cycles.

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3. Is Private Equity a Separate Asset Class?

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Things that Define an “Asset Class*”

- Securities in the class should be conceptually similar;
- Return of securities should be more highly correlated;
- The asset class in aggregate should represent a material fraction of the investment;
- Price and composition data should be readily available;
- It should be possible to invest passively; and,
- All defined asset classes should sum to the entire investment opportunity set.

Asset Class: “a collection of investments with a reasonably homogeneous set of characteristics that are stable over time”

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Alternative Investments, like PE, do not Comprise a Separate Asset Class

- Private Equity (PE) is potentially an attractive substitute for some portion of the strategic equity allocation in a diversified investment program;
  - Quarterly valuations make mathematical correlations appear low, but do not reflect close ties with public equity markets.

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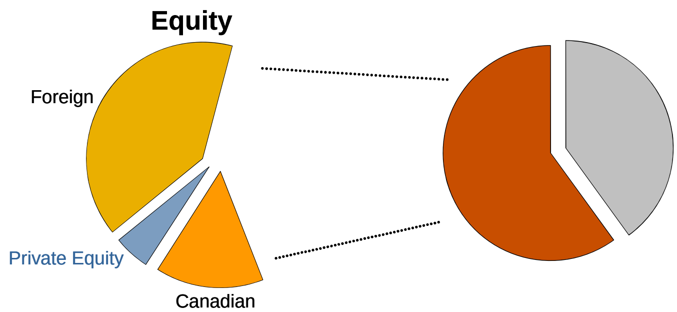
Example - Private Equity within a Diversified Fund



Private equity should be considered a subset of the fund's total equity structure

- Domestic or global strategy
- Can enhance diversification

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Unique Return Complications of Alternatives

- No appropriate, investable benchmark;
- Limited historical return data;
- Managers may control the cashflows;
- Appraised values are utilized on illiquid and infrequently traded assets (stale pricing);
- Survivorship, selection and backfill bias can distort return data;
- Returns are net of high fees, which may distort (smooth) performance;
- Leverage is present in many of the investment vehicles;
- Returns are very manager specific; and,
- Price and return data are too sparse to permit an accurate statistical characterization.

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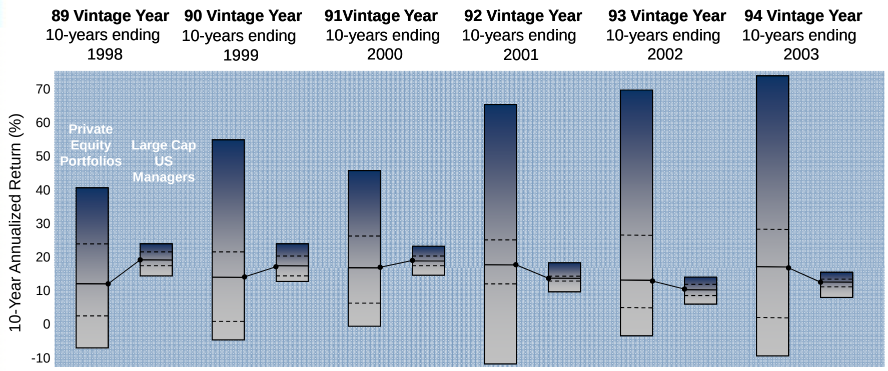
What's the Premium for Private Equity?

Dispersion of Active Annualized Returns in Private and Public Markets for 10-year periods



- Median return not materially different than public market (subtract fees and they are worse)
- Quartile differences from private market active management are substantial

Source: Private equity returns from Venture Economics; includes Venture Capital, leverage buy outs, mezzanine debt, and mezzanine equity. Data extracted January 26, 2004, returns for managers of large cap US stock funds. Public market manager returns from Russell/Mellon; percentile ranks by Russell Consulting.

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Alternative Investments

Subjective Allocation

Alternate investments cannot be treated as an asset class during strategic asset allocation modelling

- Returns are not forecastable in the same sense as liquid asset classes
  - Limited data
  - Unusual cash flow patterns
  - Limited liquidity
- Subjective allocation decision
  - Investor experience and judgement
  - Allocation target should be 5% or greater

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Approach is “Softer” than Asset Mix Policy Review

- Normally begins with review of characteristics, pro’s and con’s
- Technical exercise may be conducted for sensitivity
  - will not provide “solution”, can be misleading
- Data is often a problem – integrity, history
- Not appropriate for optimization modelling
  - no benchmarks
  - not distinct from other assets (public equity markets)
- **Product selection, not allocation, is most critical to success**
- **Investment must be compatible with Board beliefs and risk tolerances**

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Conditions for Private Equity Outperformance

- Management Efficiencies
  - Active management and value creation by General Partners is the key driver to outperformance
- Better Research
  - Inefficient market: negotiated transactions, valuations and price information are based on private information
- Inside Information
  - Access to proprietary information and deal flow, often based on relationships
- A Liquidity Premium
  - Long-term and illiquid investments

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Three Key Takeaways

1. Alternative investments is a mongrel categorization that is not homogeneous and is not a distinct asset class.

2. **Using historical returns increases error in making asset allocation policy. Optimization may lead to error maximization!**

3. **Successful investment relies almost completely on the ability to select and access top active managers.**

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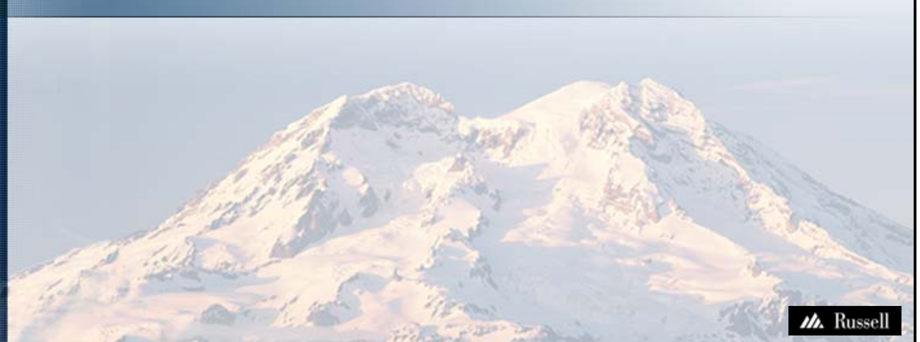
4. Russell's Position on Alternatives



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Russell’s Position

- **Alternatives are not for everyone!**
- Governing and managing fiduciaries must be comfortable with these alternative strategies (illiquidity, risk exposures, etc.);
- However, investors with a high tolerance for risk and sufficiently long time horizons should think about a meaningful allocation to alternatives (>5%);
- Do not attempt to determine an alternative allocation using mathematical optimization;
- **Professional management will provide an increased opportunity set, access to top funds, and skills that can’t generally be hired as internal staff;**

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Russell’s Position (cont’d)

- **Diversification among low correlation strategies is key;**
- Investors get a higher level of active management that can be fruitful;
- A fund of funds can help investors:
  - Quickly build a diversified portfolio with a small, minimum commitment;
  - Leverage the advice of dedicated, experienced investment professionals;
  - Access high caliber managers; and,
  - Manage and monitor the alternative portfolio.

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Appendix

Private Equity Tends to Outperform the Public Market

	5 Year (%)	10 Year (%)	20 Year (%)
Venture Capital*	**10.5**	**26.9**	**15.8**
Buyouts*	**2.7**	**8.1**	**12.5**
All Private Equity*	**4.7**	**12.5**	**13.7**
Russell 3000**	**-0.1**	**9.0**	**9.8**
Private Equity "Premium"	**4.8**	**3.5**	**3.9**

*Venture Economics: IRR as of 9/30/04 **Bloomberg: Geometric return as of 9/30/04

Note: Private Equity consists of Venture Capital, Buyouts, Mezzanine, and Distressed securities

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1936 Tacoma, Headquarters

1969 New York **1979** London **1984** Sydney **1984** Toronto **1986** Tokyo **1991** Auckland **1994** Paris **1999** Singapore

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