Private Equity Primer

TIFF Private Investments

- What is Private Equity?
- Investing in Private Equity
- Benefits and Risks of Private Equity
- Structure and Mechanics
- Understanding the J-Curve
- Sources of Private Equity Return
- Dispersion in Vintage and Manager Performance
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- Summary

What is Private Equity?

"Private equity" is a catch-all term that generally represents capital investment in companies and/or assets that are not available for trade (buying/selling) on public markets.

- Considered highly illiquid, these holdings can only be monetized through "realization" events; these can include sale to another buyer(s), an initial public offering (IPO), or a recapitalization (new/additional investment dollars)
- Holdings in a private investment are not priced daily like public markets and are typically valued quarterly based on various financial metrics and/or comparable measures of similar peer companies or sectors
- In exchange for liquidity, professional investors typically have greater control over their investments relative to public companies due to their increased ownership percentages and/or role in the company’s governance (board representation)

Types of Private Equity

<table>
<thead>
<tr>
<th>Venture Capital</th>
<th>Growth</th>
<th>Buyout</th>
<th>Real Assets</th>
<th>Credit/Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional investment in companies early in their life cycle; follows &quot;family &amp; friends&quot; capital.</td>
<td>Investments into relatively mature businesses needing additional capital for growth</td>
<td>Investment that acquires a majority equity stake in business; Often utilizes leverage (debt) to help fund acquisition</td>
<td>Investment in physical assets such as real estate, natural resources or infrastructure</td>
<td>Investment into the debt of a company or other securities senior to equity</td>
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<tr>
<td>Generally smaller dollar amounts, ownership percentages</td>
<td>Typically, minority ownership</td>
<td>Mature companies that are usually generating positive cash flow</td>
<td>Generally viewed as an inflation hedge</td>
<td>Shorter duration, lower overall return targets</td>
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<tr>
<td>High risk, potential high rewards at the company level</td>
<td>Often technology or consumer-based growth sectors</td>
<td>Lower return targets than other PE segments</td>
<td>Lower return targets than other PE segments</td>
<td>Often generates income during hold period</td>
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Investing in Private Equity – Common Approaches

**Primary Fund Investment**
- Primary fund commitments make up the core of most investor private equity allocations.
- A commitment amount is made to a private equity fund manager, who draws down capital over time as they find and invest into companies in their strategy.
- Proceeds are returned to investors as companies are sold.
- Return profile (annualized) of 15%+ and 1.75x-2.0x MOIC*, with a 12+ year duration.

**Secondaries**
- A secondary is the purchase (or sale) of an existing interest in a private equity fund.
- The portfolio has been largely or completely invested, and assets are usually more mature and closer to liquidity relative to primary fund commitments.
- Secondaries often transact at prices below (“discount” to) net asset value.
- Return profile (annualized) of 12%-15% and 1.25x-1.5x MOIC, with a highly variable duration, generally 2 to 7 years.

**Co-investments**
- A co-investment is a direct investment into a single company alongside a fund manager or “sponsor”.
- Opportunities often arise when a fund attempts to purchase a business for which it has insufficient capital, and limited partners are given the ability to increase their exposure.
- Co-investments generally have reduced fees.
- Depending on company specifics, return profiles (annualized) can reach 20%-30% and 2.0x-3.0x MOIC, with a 4-7 year duration.

Notes. *MOIC – Multiple on Invested Capital. Return profiles reflect general industry-wide expectations and are net of fees. Past performance does not guarantee future results and there is no assurance that TIFF will achieve comparable results. There can be no assurance that an investment in private equity will achieve its objective or avoid substantial losses.
Benefits of Private Equity

Return Profile

- Private equity investments have a higher potential return profile than many other asset classes. This is driven by market inefficiency (opportunity for price discovery and influence of professional management). There is also an "illiquidity premium" associated with locking up investor capital. Private companies maintain equivalent business or operating risk to publicly traded companies, though with added illiquidity.

Increased Value-Add

- Professional investors in private companies have a greater ability to enact change at their businesses given the smaller scale and the increased ownership, and because the target companies often lack strategic expertise or operate sub-optimally.

Increased Opportunity Set

- There are only a few thousand publicly traded companies in the United States, compared to millions of private companies. This broader opportunity set allows investors to have more selectivity when choosing businesses in which to invest.

Lower Return Correlation

- While not uncorrelated to public markets, private equity is less correlated to public market performance. Given the quarterly valuations of private assets, there is also a smoothing effect associated with private asset valuations.

Exploits Inefficiency

- Private markets are more inefficient than public markets, driven in part by the sheer number of private companies that exist, the illiquid nature of the asset class, and the lack of professionalization at smaller company sizes.

Innovation Opportunities

- Investing in private equity is a way to gain exposure to innovation and disruption happening in a variety of sectors. Access to certain opportunities at attractive valuations is limited in the public space as the businesses are often at scale when they go public.

There can be no assurance that an investment in private equity will achieve its objective or avoid substantial losses.
Risks of Private Equity

Illicituity
- Private equity investments are illiquid and cannot be easily entered or exited. Once invested in a business, stakeholders are generally locked in until a realization event occurs.

Complex Structure
- When investing in a private equity fund, the investment is called down in tranches for specific uses, with distributions coming unpredictably. Given the more complex cash flows, increased infrastructure is required to manage these investments. Page 7 offers an illustration of the investor's potential cash flows.

Valuation Reporting
- Unlike public investments, private companies are only valued once per quarter and marks do not come out until months after quarter-end. These marks are also harder to independently validate.

Blind Pool
- When committing to a new private equity fund, the companies in which the fund will invest is not determined in advance.

High Fees
- Private equity fund managers charge higher fees than other asset classes. The standard fee structure for many funds is an annual 2% management fee, as well as a 20% fee on all profits generated by the fund.

Business Risk
- Private equity fund portfolio companies are often smaller and/or less mature than public companies — particularly those early in their lifecycle. These companies also often have other complexities threatening the success of the business that are not as prevalent in companies that are public.

There can be no assurance that an investment in private equity will achieve its objective or avoid substantial losses.

Structure and Mechanics

Investors typically access private equity through a legal or fund structure represented by a limited partnership. The structure includes several key players and legal documentation.

- Institutional and individual investors (Limited Partners) select a private equity firm (the General Partner); both contribute capital (money) into a pooled fund vehicle.
- The General Partner has control over the fund’s investments and is paid a fee by the Limited Partners to manage the fund and execute its strategy, while adhering to rules agreed upon by both the General Partner and the Limited Partners.
- The fund invests its capital into different portfolio companies, and, when these holdings are realized, the proceeds flow back into the fund where they are then divided among the Partners based on the terms to which the parties agreed.

![Diagram of Private Equity Fund Structure](image-url)
Understanding the J-Curve

Private equity funds have a different cash flow profile than most publicly traded securities given the expected long-term time horizon and initial drawdown structure.

- Limited Partners make contributions during the initial years of a fund’s life to invest in portfolio companies as well as to pay fees to the General Partner.
- Initial years often show a negative investment return due to fee drag, and returns improve as the portfolio matures; this is referred to as the “J-curve” based on its initially downward then upward shape.
- As portfolio companies mature, the fund looks to begin realizing its portfolio and distributing proceeds back to Limited Partners. In the graph below, distributions start in Year 6, and investors have made back all of their invested capital between Year 8 and Year 9, with all subsequent distributions being profit.

Cash Flow Profile of a Generic Private Equity Fund

![Cash Flow Profile Graph]

Notes. Cash Flow Profile chart is for illustrative purposes only and reflects how a private equity fund calls capital in the first few years of investment followed by several years of distributions. There can be no assurance that an investment in private equity will achieve its objective or avoid substantial losses.

Sources of Private Equity Return

Private Equity (“PE”) may outperform public equity due to unique risks and return drivers.

- PE investors must be compensated for locking up their capital for extended periods of time. This is referred to as the illiquidity premium and is expected to contribute to PE outperformance over traditional public equity investments.
- PE investments often benefit from other risk premia as well, such as company size, value pricing, and leverage.
- Manager alpha is often larger in PE than in traditional public equity due to PE managers’ ability to access a broader investment opportunity set, influence operations, upgrade management teams, align incentives, and control capital structure and financing.
Sources of Return for Diversified Private Equity Program

Dispersion in Vintage and Manager Performance

There is a large amount of variability in Private Equity and Venture Capital across vintages.

- Over a lookback of 15 consecutive vintages, there is a wide dispersion in IRR between the top 5% and bottom 5% of Private Equity and Venture Capital managers, demonstrating the extent of opportunity within Private Equity.
- Due to this variability, there appears significant opportunity for alpha but also for incurring risk, highlighting the need for a robust manager selection program and expertise.
- Comparing the length of bars within each year in the table below highlights the variability of returns and degree of dispersion across different vintages.
- Allocating to a private equity program consistently across a series of vintages can help avoid unintended concentration as well as potential opportunity loss.

Dispersion in Fund IRR by Vintage Year

Notes. Other risk premia may include leverage, size, style, or other factors. There can be no assurance that an investment in private equity will achieve its objective or avoid substantial losses.
Illustrative Backtest

- Below shows two illustrative portfolios: one a traditional passive stock/bond portfolio (65% ACWI / 35% US Agg), the other a passive stock/bond portfolio with the addition of private equity and venture capital (40% ACWI / 25% PE&VC / 35% US Agg); both marked and rebalanced on a quarterly basis.
- Results indicate the portfolio with private equity exposure ultimately leads to long-term outperformance when compared to a traditional stock and bond portfolio.
- The portfolio with private equity also exhibits lower volatility despite marking and rebalancing in the same quarterly frequency.
- Across all trailing time periods, the private equity portfolio demonstrates a better risk adjusted return as measured by Sharpe Ratio.

![Cumulative Performance Graph](image)

<table>
<thead>
<tr>
<th>As of March 31, 2021</th>
<th>Annualized Total Return</th>
<th>Standard Deviation</th>
<th>Sharpe Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio</td>
<td>3y</td>
<td>5y</td>
<td>10y</td>
</tr>
</tbody>
</table>
| 40% ACWI / 25% PE&VC / 35% US Agg | 12.7% | 11.7% | 9.1% | 8.2% | 7.9% | 11.7% | 9.1% | 7.8% | 9.4% | 9.6% | 0.95 | 1.12 | 1.08 | 0.78 | 0.74 | 0.63 | 0.79 | 0.72 | 0.51 | 0.46
| 65% ACWI / 35% US Agg | 10.1% | 10.6% | 7.5% | 6.5% | 6.6% | 14.0% | 11.4% | 9.9% | 11.0% | 11.3% | 0.63 | 0.79 | 0.72 | 0.51 | 0.46 |
| Excess Return        | 2.6% | 1.7% | 1.6% | 1.7% | 1.3% |

Notes. Inception date is 3/31/1996. Portfolio constructed using MSCI ACWI Index, Bloomberg Barclays US Aggregate Fixed Income Index, and Cambridge Associates PE & VC Index which is a horizon calculation based on data compiled from 4,924 private equity & venture capital funds, including fully liquidated partnerships, formed between 1981 and 2020. All returns are net of fees, expenses, and carried interest. Past Performance is not indicative of future results, which may vary. There can be no assurance that an investment in private equity will achieve its objective or avoid substantial losses.

Summary

- Private Equity is a term that comprises several different ways to invest in and access companies that are not available to the public markets.
- Despite the large number of private companies, investing in private equity remains complicated and difficult to manage or access for many investors.
- While there are many benefits to private equity, it is a nuanced asset class and investors should fully consider and understand the risks before investing.
- As a result, it is important to thoroughly research private equity managers and construct a well-diversified private equity portfolio.
- The value of incorporating private equity into a long-term multi-asset portfolio is the potential for incremental return and diversification not found in publicly traded securities.
- At TIFF we strive to help our members better understand and ultimately access private markets through our investment strategies.
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Glossary

Buyout. A type of private equity that involves the purchase of a controlling stake of the equities of a business – buying out the previous owners. Leverage is often used in these transactions.

Commitment. The amount of dollars a limited partner agrees to invest in a fund and is legally obligated to contribute.

Contributions. The portion of a limited partner's commitment that has been drawn i.e. utilized by the GP fund sponsor.

Credit/Other. A type of private equity where an investment is made into illiquid securities other than the equity of a private business. These are non-marketable credit instruments.

Distributions. The return of capital (dollars) from a limited partnership to investors.

General Partner. The private equity firm managing a fund limited partnership.

Growth. A type of private equity that invests in relatively mature businesses needing capital to fuel growth where the investor usually takes a minority position, and target businesses often technology-based companies.

Limited Partner. An investor in a private equity fund limited partnership.

MOIC. Multiple of invested capital. A measure of how much money has been earned in relation to the original amount invested.

Net IRR is the discount rate at which the net present value of an investment is zero. Said differently, it is the rate at which an investment's future cash flows, discounted back to today, equal its price.

Real Assets. A type of private equity where physical assets are purchased and owned.

Sharpe Ratio is a measurement of risk-adjusted performance. It is calculated by subtracting a "risk-free" rate – in this report a 0- to 3-month Treasury bill index – from the portfolio return and dividing the result by the portfolio's standard deviation.

Standard Deviation in investing is a measure of a portfolio's volatility. It reveals the dispersion of all return data from the mean, or average.

Venture Capital. A type private equity that involves investing capital into early-stage companies. Long term holds are common in venture.
Index Descriptions. One cannot invest directly in an index, and unmanaged indices do not incur fees and expenses. Bloomberg Barclays US Aggregate Bond Index tracks the broad US bond market.

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