NORTHERN TRUST
ASSET MANAGEMENT

# THE GOOD, BAD AND UGLY: IMPLICATIONS OF BUILDING A SUCCESSFUL PRIVATE INVESTMENT PROGRAM

Not-for-profit investors building a private investment program designed to boost returns generally have a singular focus: the "good" expected long-term contribution from these investments. But beyond the glamour of the "good," it's paramount that investors also prepare for the potentially "bad" initial drag on results and the corresponding "ugly" line items early in the process.

In the current environment, with lower expected returns on traditional investments, the potential return premium from private investments can be essential to the portfolio of long-horizon investors. The benefit to total portfolio returns, however, can take time to fully develop as a private investment program matures.

One important nuance of private investing is that results are frequently assessed in cash flow-weighted return measures, such as multiples of beginning capital and internal rate of return. This can create a translation challenge for investors measuring the total portfolio in time-weighted returns. To address that challenge, we focus on the investment of committed and returned capital around the private investment program to minimize potential dilution of cash flow-weighted returns as they translate to time-weighted measures in the total portfolio.

We focus on two segments: (1) the initial building of a substantial private investment allocation and (2) the sweet spot of a successful, "self-funding" allocation to understand their potential translation impact on total portfolio time-weighted returns.

**Manage Expectations**

Investors who anticipate the potential effects of the *good, bad and ugly* returns are better prepared to understand the process and ultimately enjoy the fruits of a sustainable private investment program.

## SWEET SPOT – THE GOOD

In a mature private investment program, regular new commitments to maintain targeted invested levels in the asset category complement numerous ongoing investments. Distributions from more-mature investments may largely or completely meet capital calls for earlier-stage investments. This flow of distributions and capital calls (i.e. the reinvestment rate) on committed and returned capital has substantial impact on time-weighted returns for private investments. The closer the reinvestment rate comes to the cash-flow weighted return, the closer the time-weighted return will be to it.

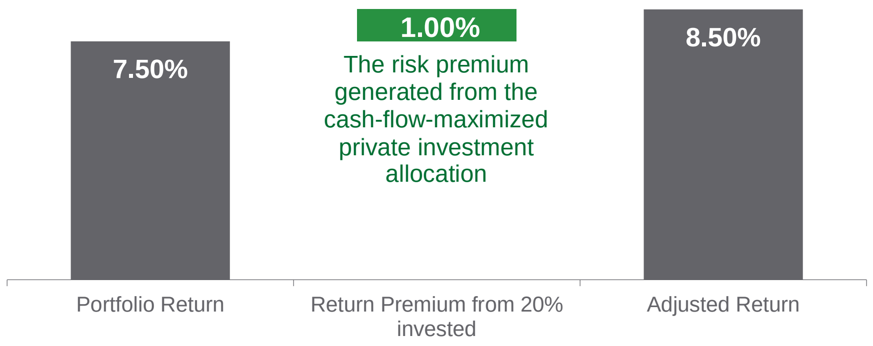
This truly is the “sweet spot” of the private equity program. Assuming the program realizes a premium to public returns, the higher time-weighted return in the mature program’s sweet spot can provide a significant benefit to the total portfolio’s time-weighted returns.

For example, assume a portfolio with a 20% target investment in private investments is in its sweet spot and realizing a return premium. Looking at the 20 years ended December 31, 2016, private investments outperformed global equities by 7.7%[1]. So even using a more conservative realized excess return of 5%, the increment to total portfolio time-weighted returns would approach approximately 1.0%:

**5.0% (Return Premium) X 20.0% (Allocation) = 1.0% (Potential Increase)**

This suggests that if the total portfolio without private investment had an annualized return of 7.5%, the total portfolio with the 20% allocation to private investment would receive the 1.0% boost up to an annualized return of 8.5% (assuming constant annual returns in this simplified example), as shown below in Exhibit 1.

**EXHIBIT 1: PRIVATE INVESTMENT PROGRAM IN ITS SWEET SPOT**




SOURCE: Northern Trust Multi-Manager Solutions. **Hypothetical** returns for the 20 years ending 12/31/16.

While this hypothetical return premium may seem small; in an environment of lower expected portfolio returns, any source of incremental returns can help long-horizon investors achieve their objectives. As such, a successful private investment program, patiently built to its “self-funding” sweet spot (and sized to a meaningful proportion of the total portfolio), can be an important source of incremental returns at the total portfolio level.

## AN EARLY-STAGE BUILD

In the early stages of a private investment, capital calls are made to fund investments and pay management fees. Capital called and invested is typically held at cost until there is rationale (e.g., a subsequent funding round or other valuation event) to mark-to-market level. From the investor’s viewpoint, capital called to pay management fees is a direct “hit” to the investment’s value. This early impact of fees, while reasonable and expected, can create a “drag” on time-weighted returns at the total portfolio level. This can be particularly frustrating for an investor building a substantial private investment position from scratch or from a smaller current allocation.

**The Early Impact of Fees**

From the investor’s viewpoint, capital called to pay management fees is a direct “hit” to the investment’s value.

[1]Source: Northern Trust Asset Management. ‘Global equities’ is represented by the MSCI ACWI index and ‘private investments’ by the Cambridge Private Equity Index.

To quantify this potential early-stage drag, we consider an investor building from 0% in private investments to a target of 20%. To realize that 20% invested position, the investor may need to commit more than 20% of the portfolio as at the peak for any given private investment, the net invested amount relative to commitments may only be 60-70%. So as a starting point, we can assume the investor needs to make a 30% commitment to hit a 20% invested target.

### THE BAD

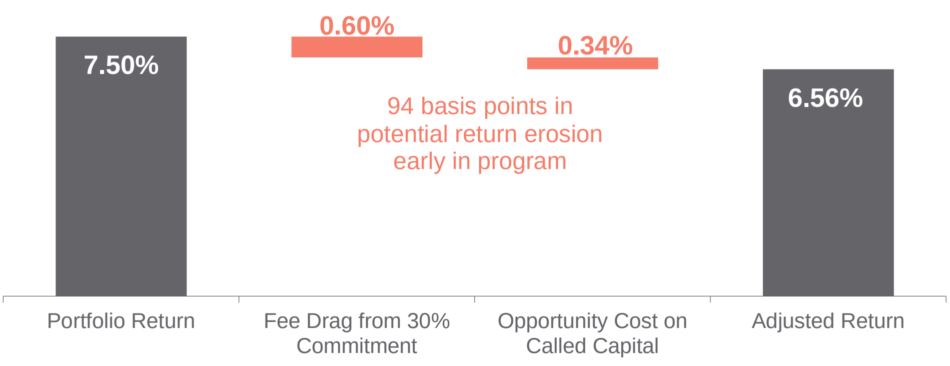
In building to the 20% invested level, commitments will be made across multiple vintage years. In the spirit of a stress test, let's assume an investor makes commitments of 30% to private investments on Day 1 to minimize the time to reach a 20% invested level. In this scenario the investor would pay fees based on those total commitments in Year 1, with potentially no offsetting investment markups or distributions. Keep in mind; a typical fee structure for private investments includes a management fee of 2% on commitments. Applying that fee to the 30% of the portfolio committed represents a 0.60% potential drag to total portfolio returns (30% allocation * 2% fee).

**Opportunity Cost**

Capital called in the early periods of a private investment is not earning the same return it may have earned if invested elsewhere.

We also must consider the opportunity cost of capital, as capital called in the early periods of a private investment is not earning the same return it may have earned if invested elsewhere. If we assume that 15% of the 30% commitment was called in Year 1, then 4.5% (15% * 30%) of the total portfolio was invested that year in private equity and potentially would show no return. If the broader portfolio returned 7.5%, the opportunity cost at the total portfolio level would be approximately 0.34% [4.5% * -7.5% = -0.34%], as shown below in Exhibit 2.

**EXHIBIT 2: THE DRAG OF COMMITED CAPITAL IN YEAR 1**




SOURCE: Northern Trust Multi-Manager Solutions. **Hypothetical** 1year return as defined above.

Staging investments across multiple vintage years will lessen the "fee drag" in any given year, and any offsets of private portfolio markups and/or distributions will reduce the opportunity cost. Investing across multiple vintage years takes advantage of offsetting markups and distributions that potentially can help mute cash flow volatility and opportunity costs when building a substantial private equity allocation.

### THE UGLY

When tracking total portfolio results, the investor can isolate the private investments and separately track the time-weighted returns of the more liquid portfolio. For a full view, however, the investor should track the program's time-weighted returns and the individual private fund line items at both the liquid portfolio and total portfolio levels. We know the drag to total portfolio time-weighted returns could be as high as 90 to 100 basis points in the early stages of a private equity build out. But the line item view of individual private funds can look even more challenging – if not downright ugly – in the early stages.

Consider an example where a private equity fund calls 5% of capital in Year 1. Of that, 3% is invested in underlying private businesses and 2% pays management fees. Using $100 as the commitment amount, $5 is called and the position's value at the end of the year (assuming no markups or markdowns to the invested capital) is $3. Simply calculated, the $2 decrease results in a one year time-weighted return of -40%, as illustrated in Exhibit 3.

**EXHIBIT 3: TIME-WEIGHTED RETURN OF YEAR 1 CAPITAL CALL – LINE ITEM IMPACT**


SOURCE: Northern Trust Multi-Manager Solutions. **Hypothetical** 1year return as defined above.

The dollar amounts of these early-stage investments are small relative to the individual commitments and even smaller yet relative to the total private program and total portfolio. Thus, the "ugly" line-item (time-weighted returns) does not have a great impact on the total portfolio. However, investors should be prepared to see very challenging line-items early in a private investment program.

**Be Prepared**

While relatively small in proportion to a total portfolio, investors should be prepared to see very challenging line-items early in a private investment program.

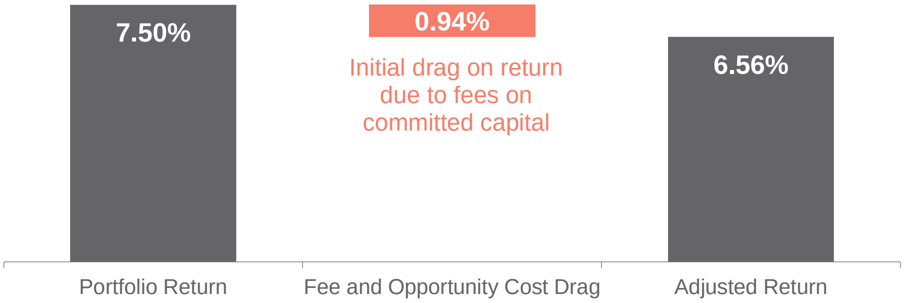
## BUILDING A SUSTAINABLE INVESTMENT PROGRAM – AN EXAMPLE

To check our theoretical work, we analyzed the impact on total portfolio time-weighted returns of a successful, substantial private investment. We focused on both the initial drag on returns and the sweet spot increment to returns – and used the actual detailed cash flows from a single, fully mature successful private investment. In keeping with our earlier examples, we assumed a 30% commitment to this investment, targeting a 20% allocation, and an assumed simple growth rate of 7.5% on the non-private investment portion of the portfolio.

In Year 1, the investment called capital to make initial investments and pay fees to the general partner. The line item for that investment showed a 1-year, time-weighted return of -12.0%, which translated into a negative total "premium" (fee and opportunity cost) of -19.5% relative to the 7.5% on the non-private investments. This is clearly the "ugly."

Because only a portion of the commitment was called (around 16%), just 4.8% of the total portfolio was subject to the -19.5% premium and pulled the total portfolio time-weighted returns down by almost 1% (illustrated in Exhibit 4). While not as shocking as the double digit loss on paper, an actual 1% detraction is certainly the "bad".

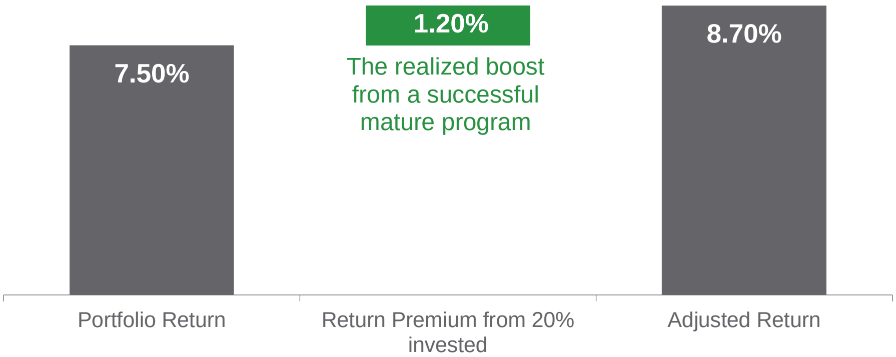
**EXHIBIT 4: THE REALIZED IMPACT OF THE "BAD"**




SOURCE: Northern Trust Multi-Manager Solutions. **Hypothetical** 1year return as defined above.

In Year 6, the private investment had a 12.1% time-weighted return, a positive premium of 4.6%. The mature investment going into Year 6 represented 26% of the total portfolio (overshooting the 20% target driven by the success of the investment). A 4.6% premium on 26% of the portfolio added approximately 1.2% to total portfolio return, a clear showing of the "Good." (Exhibit 5)

**EXHIBIT 5: THE REALIZED IMPACT OF THE "GOOD" AS THE PROGRAM MATURES**




SOURCE: Northern Trust Multi-Manager Solutions. **Hypothetical** 1year return as defined above.

In addition, the annualized return for the total portfolio also reflected a substantial premium to the non-private investment assumed return, which illustrates the potential portfolio level long-term compounding benefit of a successful private investment program.

## UNDERSTANDING STAGES OF PRIVATE EQUITY

Private investments can be an effective component in the portfolio of a long-horizon investor. Effective manager selection and portfolio construction can help maximize the potential of the illiquidity premium, but a program takes time and patience to build. In the early stages of the build, the program may actually reduce the time-weighted returns of the total portfolio. But in the sweet spot, a mature, successful private investment program can potentially add significantly to the time-weighted return of the total portfolio and realize the benefits of long-term compounding.

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