The Missing Metric for Endowment Growth: Net Flow Rate

By comparing the net flow rate with the real investment return, an institution can determine whether its LTIP is successfully sustaining its role in the institution's business model

- The net flow rate is the regular LTIP payout rate plus reinvested operating surpluses, capital additions, and capital withdrawals.
- Over the long term, the real investment return must exceed any net outflow to ensure the LTIP sustains its role in the business model.
- To track the ability of the LTIP to keep pace, and to consider other financial levers as well as investment performance, we suggest that the net flow rate be measured each year.

For decades, endowment management has been evaluated in terms of investment performance and endowment spending or payout rate. As long as the *real* return rate equaled or exceeded the payout rate, then most everyone slept well at night. With the financial crisis of 2008–09 came the realization that additional attention must be directed at liquidity both within and outside the long-term portfolio. For institutions with debt financing, debt metrics also demanded attention.

Yet for the most part, for policy purposes the payout rate remains the sole bridge between the long-term investment portfolio (LTIP) and the rest of the enterprise. Board members turn mainly to portfolio construction and payout rule adjustments to ensure that the bridge is in good repair, with investment committee members tackling the portfolio side of the bridge, and finance committee members tending to the enterprise (budget planning) side. For any

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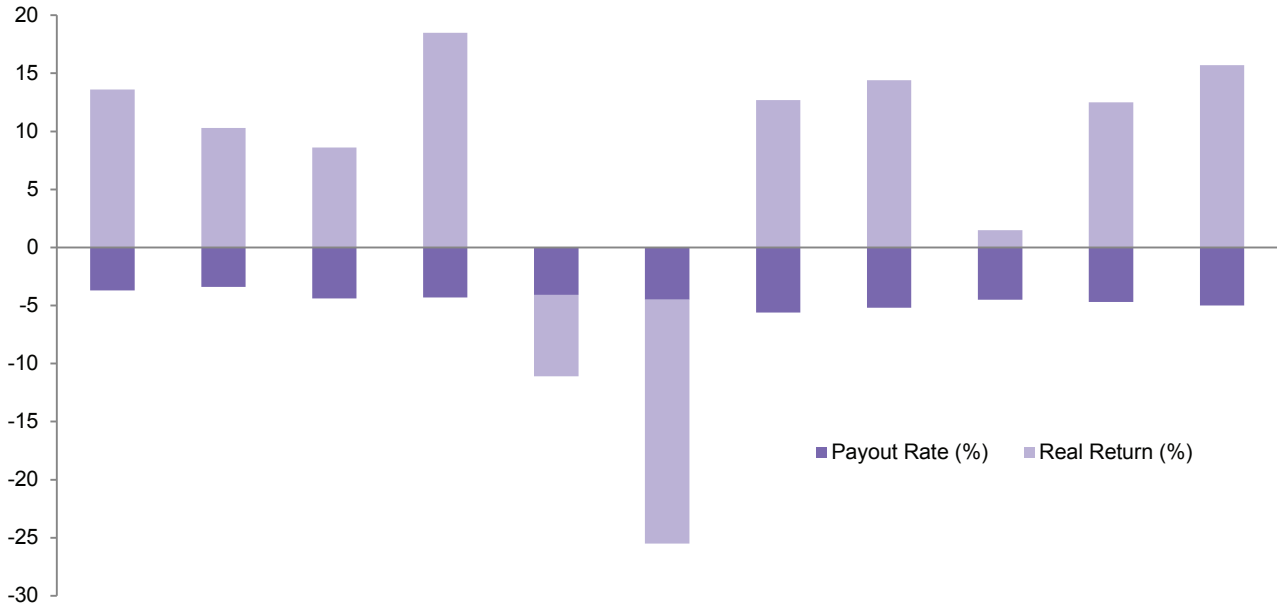
given year, comparing real return to payout has been considered the key metric.

As robust as this approach has been, it omits an important part of the picture. Endowment management must also reckon with capital inflows and capital withdrawals. Investment return must be compared not only to LTIP payout (endowment spending), but also to capital flows. Payout + net capital flows constitute the *net flow rate*. Only by comparing this net flow with the real investment return can an institution determine whether its LTIP is successfully sustaining its role in the institution's business model. Net flow has been "the missing metric."

Net Flow Analysis

To illustrate the difference between spending rate analysis and net flow rate analysis, we begin with an example of a classic measure of the bridge between portfolio and operations: total return versus spending (payout). At the particular institution shown in Figure 1, the inflation-adjusted investment return outpaced payout every year, with the exception of 2008 and 2009, during the financial crisis, and in 2012. However, this analysis omits important additional factors that can have a major effect on endowment management, including the following: (1) reinvested operating surpluses, (2) capital additions, and (3) capital withdrawals.

Figure 1. Real Return and Spending
Fiscal Years 2004–14



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Real Return	13.6	10.3	8.6	18.5	-7.0	-21.0	12.7	14.4	1.5	12.5	15.7
Payout Rate	-3.7	-3.4	-4.4	-4.3	-4.1	-4.5	-5.6	-5.2	-4.5	-4.7	-5.0

- **Reinvested Operating Surpluses**
  - Institutions frequently place operating surpluses in their LTIP, either directly or indirectly. Direct placement books the surplus to the LTIP. Indirect placement occurs when an operating surplus is transferred to a reserve which itself is partially invested in the LTIP.
- **Capital Additions**
  - Capital campaign proceeds—the most common capital addition
  - Bequests—another major source of new capital
  - Non-portfolio real estate sales (e.g., an office building or dormitory/apartment building no longer needed for operations)
  - Other non-portfolio asset sales (e.g., intellectual property, deaccessioned art)
  - Taxable debt proceeds
- **Capital Withdrawals**[1]
  - To fund capital construction
  - To fund operating deficits
  - To fund debt service not included in the annual LTIP payout
  - To extinguish debt
  - To fund capital campaign expenses not included in the annual LTIP payout
  - Borrowings from endowment/LTIP
  - Any payout amount in excess of the payout rule/spending rule

[1] "Capital withdrawals" refer to any monies exiting the endowment or LTIP that are *not* part of the payout rule.

These three kinds of transactions can have a major impact on the size of the LTIP, which in turn affects the *dollar amount* of return and thereby the impact of investment performance on the operating budget. To capture these additional factors, some new terminology may be in order. "Net flow rate" includes all of these transactions *and the regular LTIP payout rate*. It is this hurdle—which may be either higher or lower than the payout rate alone—that real investment return must clear (Figure 2).

Of course, some of these transactions are "lumpy," and thus the net flow rate can fluctuate from year to year, as evident in Figure 3. Yet, on average over the long term, *the real investment return must exceed any net outflow (including payout) to ensure that the LTIP sustains its role in the institution's business model*. In other words, focusing on the spending (payout) rate alone gives an incomplete picture. The incomplete picture may mask the true trend in the strength of the institution's endowment. Thus, Figure 3 shows annual inflow above the line and the outflow below the line—including but not limited to the annual payout. The *net* flow rate each year is marked by the blue triangle.

Figure 2. Net Flow and Endowment Growth

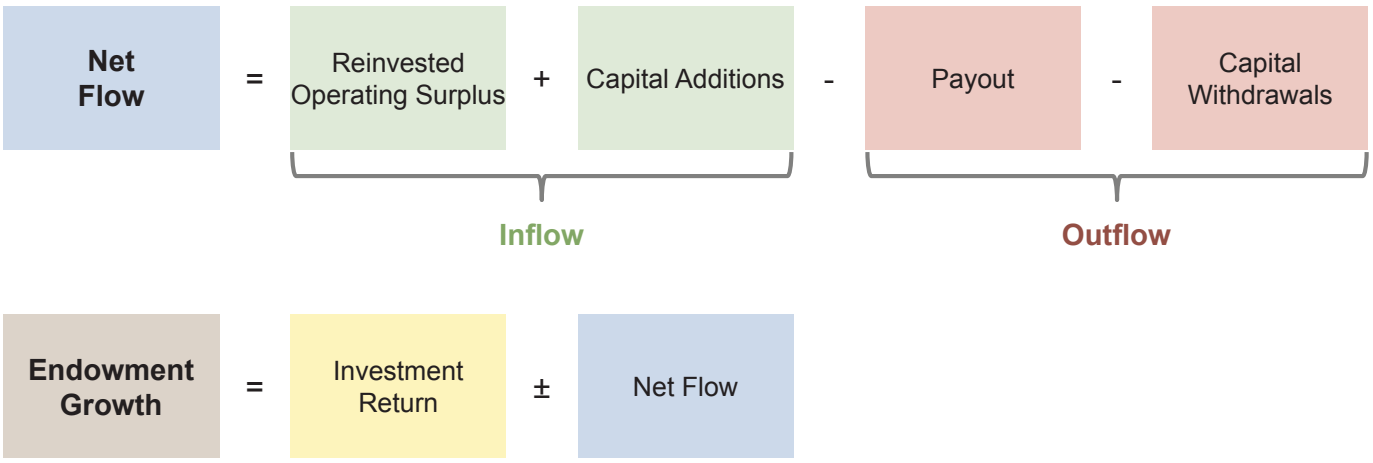
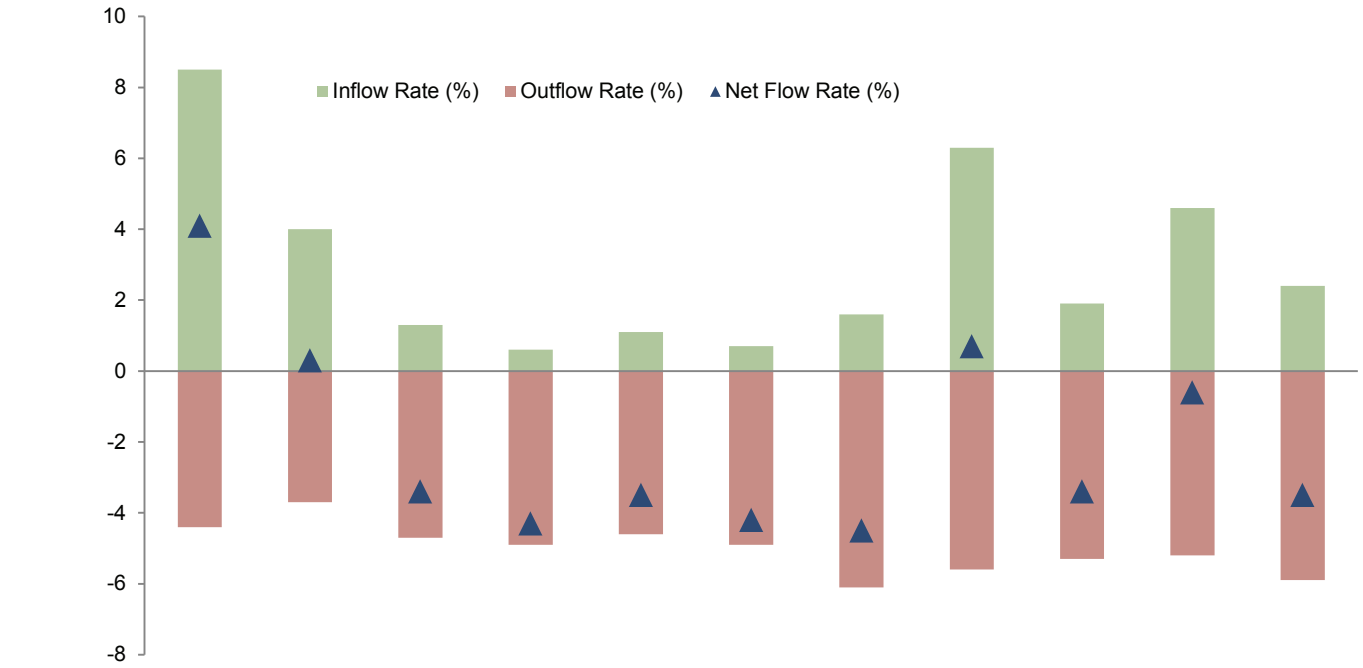


Figure 3. Net Flow Rate
Fiscal Years 2004–14



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Outflow Rate	-4.4	-3.7	-4.7	-4.9	-4.6	-4.9	-6.1	-5.6	-5.3	-5.2	-5.9
Inflow Rate	8.5	4.0	1.3	0.6	1.1	0.7	1.6	6.3	1.9	4.6	2.4
Net Flow Rate	4.1	0.3	-3.4	-4.3	-3.5	-4.2	-4.5	0.7	-3.4	-0.6	-3.5

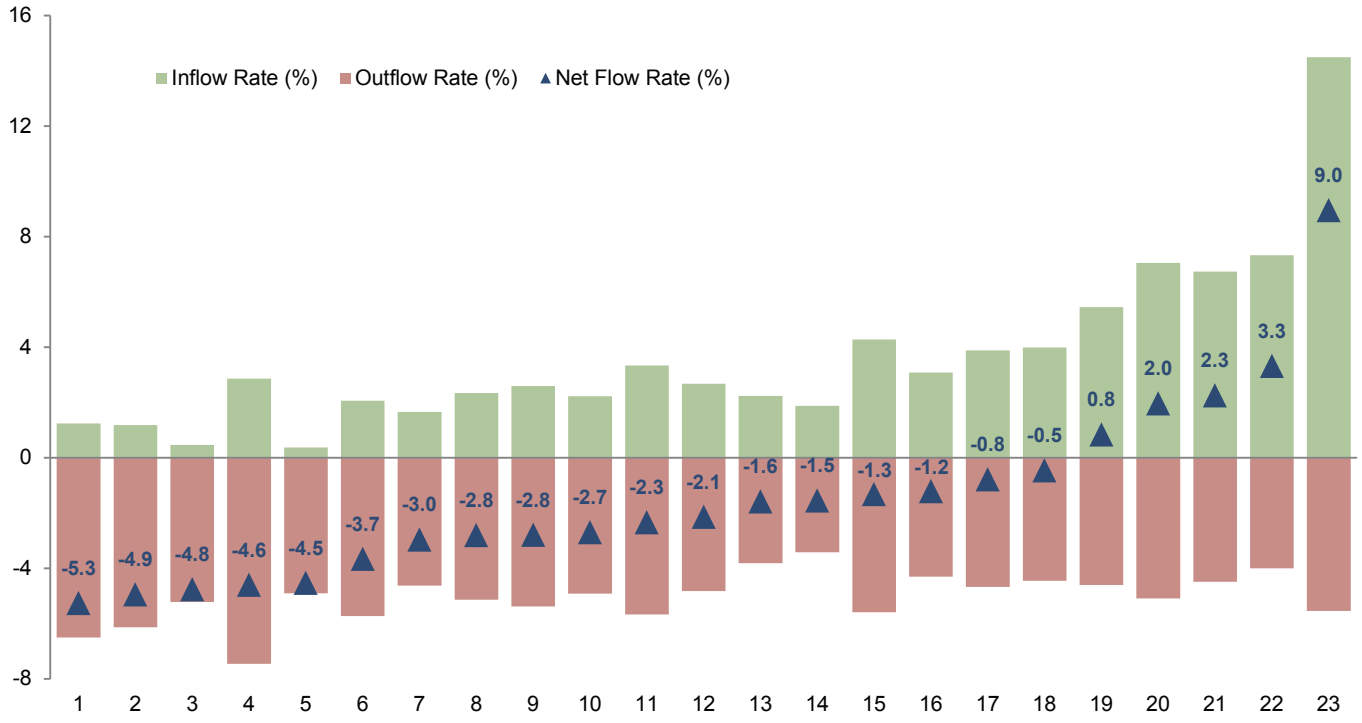
A Comparison of Colleges

How do these observations apply to a broader range of institutions? We looked first at the comparative net flow rates for a group of private liberal arts colleges in fiscal year 2013 (Figure 4).

Here we see the strikingly different experience of these 23 colleges in fiscal year 2013. Five colleges actually experienced *net in*flows, one as high as 9% of its endowment market value, where gifts and operating surplus more—far more—than offset payout and withdrawals. At the other end of the spectrum was a college whose outflow rate far exceeded its inflow rate, resulting in a 5.3% *net out*flow. (An investment return of nearly 10% enabled the college to avoid a decline in the size of the portfolio in 2013.)

In Figure 4 it is worth noting that with a few exceptions, most of the colleges on the left (more negative net outflow rate) have larger endowments relative to operating scale, and most of the colleges on the right have smaller endowments. Clearly, fund raising (which composes most of the capital additions) was a powerful driver of net flow rate in 2013. Whether the larger endowments can continue to spend, and the smaller endowments continue to raise capital, are questions that come to mind.

Figure 4. Net Flow Rate Comparison for 23 Colleges
Fiscal Year 2013

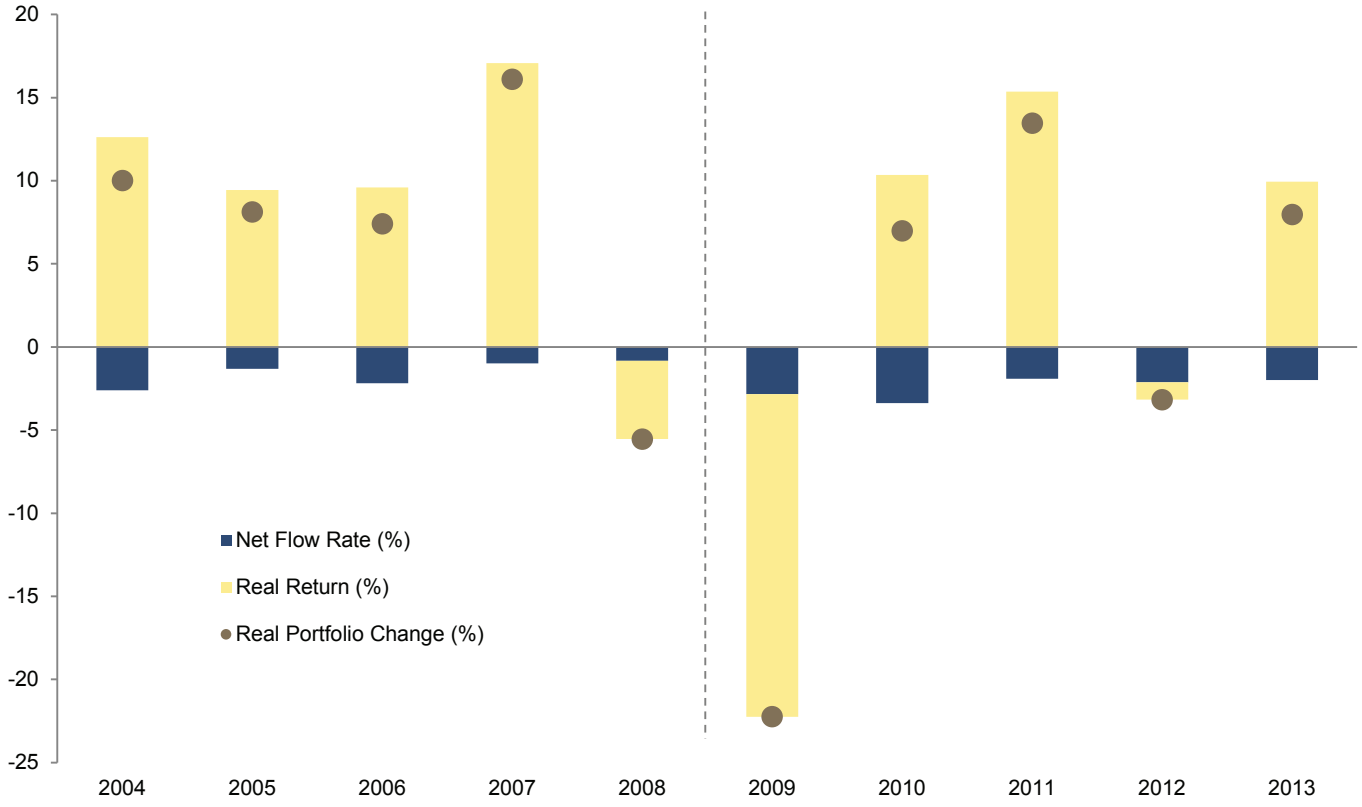


A Ten-Year Analysis

In fact, fiscal year 2013 was a good investment year for most of these colleges. Figure 5 shows ten years of net flow and investment return history for the colleges, with median real investment return shown in yellow, and median net flow rate in dark blue. The brown circle denotes the median *percent portfolio change on an inflation-adjusted basis*. A positive real portfolio change indicates that the endowment's role in the college's business model has been sustained. A negative change marks slippage.

Figure 5 is telling in a number of ways. First, it is evident that compared to the preceding five years, beginning in 2009 the net flow rate has played a larger role in total real portfolio growth (or lack thereof). Nevertheless, investment returns tend to swamp the effects of net flows—with the notable exception of 2012, when the flow rate far exceeded the return rate. Since both the flow rate and return rate were negative, there was a median decline in portfolio size—the only year in the decade that saw portfolio decline, other than in the financial crisis years.

Figure 5. Net Flow Rate +/- Investment Return Equals Total Portfolio Growth
Fiscal Years 2004–13 • Median for 30 Colleges



A Broader Universe

Figure 6 shows the net flow rate for a broader universe of institutions, including museums, endowed independent schools, and universities, as well as colleges. Perhaps the most immediate observation here is the extraordinary range in net flow rates, varying from -6% to +13%. Clearly an institution with a -6% net flow rate faces a greater investment performance challenge than one that has a positive rate (net capital *additions*) of +13%, or even the usual -5% payout hurdle.

A further observation concerning the 119 institutions shown in Figure 6 is that net outflow rate was not difficult to offset in most cases, given LTIP investment performance in 2013. Real investment returns tended to clear the net flow hurdle easily, and thus most institutions experienced net asset growth in 2013.

Figure 7 maps the institutions in a graph that shows investment performance versus net flow rate in 2013. Evident in this graph is that universities and colleges were in a stronger position (top right quadrant) in 2013 relative to museums and independent schools, which on the whole appear to have more negative flow rates.

Figure 6. Net Flow Rate Comparison for 119 Institutions
Fiscal Year 2013

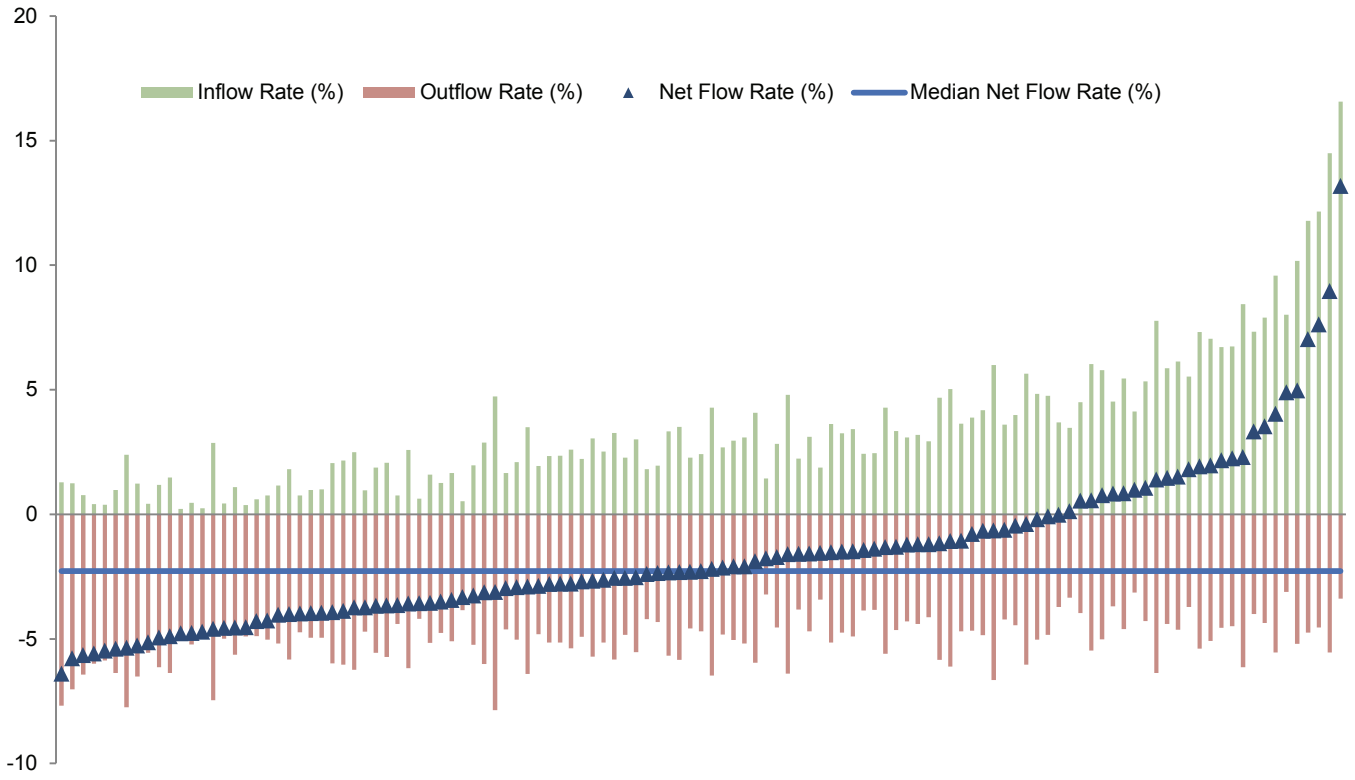
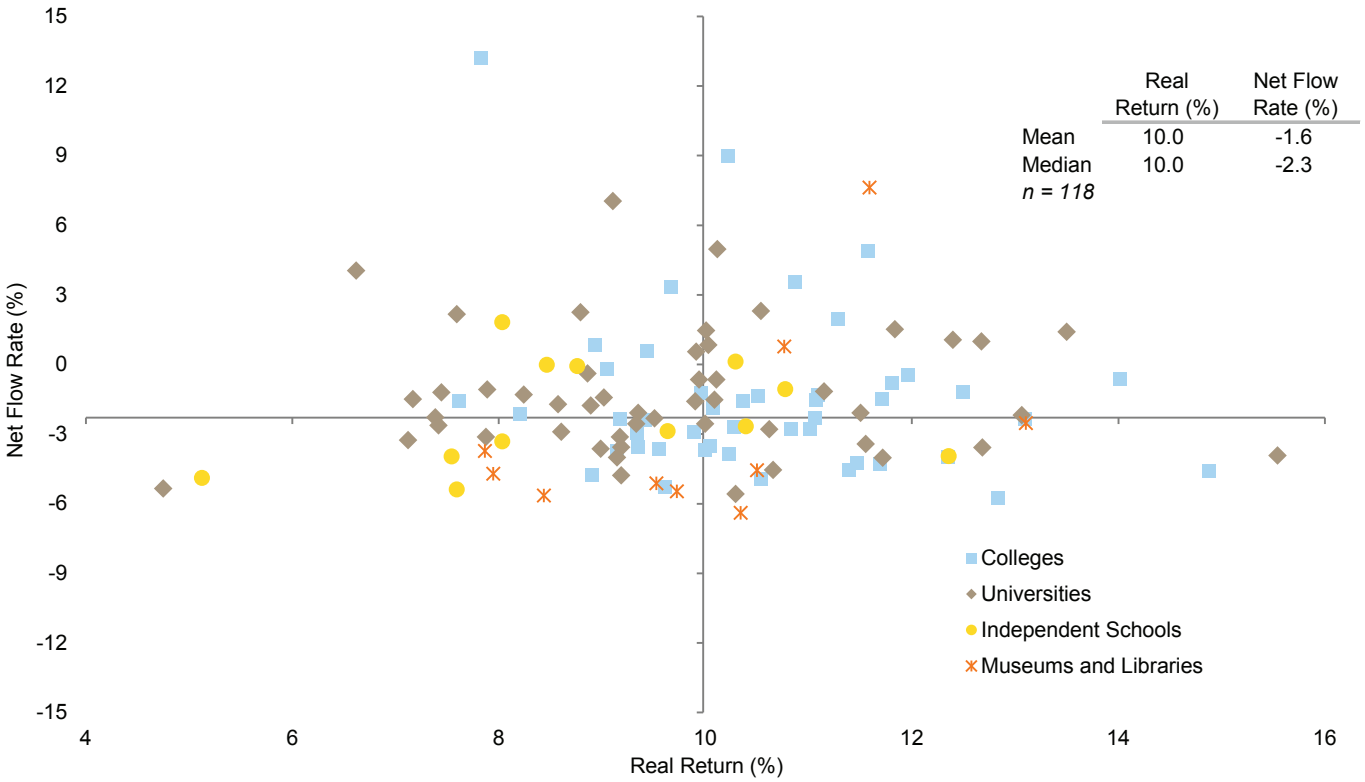


Figure 7. Net Flow Rate Versus Real Return
Fiscal Year 2013



What Can Be Done to Grow the Endowment or LTIP?

The focus on net flow rate, and not just the LTIP payout rate, effectively means that *absent sufficient capital additions* the bar is raised for investment performance. And this at a time when future long-term investment performance expectations are muted—when a 5% payout rate can seem like a challenge to support by means of investment returns alone. What can be done to improve the net flow rate in order to sustain and grow the LTIP?

First, make sure that capital withdrawals from the LTIP are minimized and that the payout rule is appropriate:

- Avoid outflows that exceed the payout/spending rule.
- Avoid borrowing from the endowment or LTIP.
- Avoid funding deficits from the LTIP; instead, fund from operating reserves (if any) or seek external liquidity via a prearranged bank line of credit or a motivated, loyal donor(s).

- Consider whether certain charges to capital should be transferred to the operating budget (e.g., debt payments or capital campaign expenses).
- In the case of unitized LTIPs in complex institutions, put in place a capital access policy ("decapitalization" policy) that ensures adequate advance notice of capital withdrawals and that discourages frequent decapitalizations.
- In the case of operating funds invested in the LTIP, "right-size" such allocations to ensure the following: these investments do not constitute an outsize percentage of the LTIP; they are intended to be called infrequently (in effect, as above, put in place a gating process to limit and/or regularize the capital outflows); and they do not risk enterprise operations should the LTIP decline.
- Finally, consider linking LTIP payout fully to the LTIP market value:
  - If a portion of the payout rule is linked to the prior year's spending amount, consider de-linking it or (alternatively) placing a lower cap on the payout to ensure—in a declining market—that near-term budget demands do not corrode the long-term purchasing power of the LTIP.
  - In a rising market, to avoid unsustainable budget reliance on endowment growth, consider placing in a "stabilization" or other reserve the payout exceeding standard budget growth.[2]

[2] Such a reserve can be invested partly in the LTIP.

Second, maximize capital additions:

- Insofar as possible, add bequests to the LTIP instead of to current income.
- Ensure that capital campaigns are right-sized, and that the goals are consistent with long-term financial equilibrium.
- Insofar as possible, emphasize capital gifts to endowment over gifts for buildings and for incremental programs.[3]
- Emphasize unrestricted or minimally restricted gifts, because this kind of "equity" builds debt capacity, whereas heavily restricted endowment gifts do not.
- In decentralized institutions, discourage reporting units from holding excess working capital; instead, encourage them to invest in the LTIP what they can comfortably manage by means of liquidity tiers within their operating or working capital reserves.[4]
- If depreciation reserves are substantial relative to the replacement cost of plant, then invest a portion of these reserves in the LTIP; for plants in good repair, a high

[3] It is useful to be able to demonstrate the disparate financial results that come from putting capital gifts into endowment, as distinct from putting them into bricks and mortar or incremental programs. Cambridge Associates has a capital expansion model that tests the implications of alternative capital choices such as these.

[4] The matter of "right-sizing" operating reserves requires a careful balancing of liquidity risk associated with capital market losses against the opportunity cost of excess liquidity, particularly when operating reserves are added to the liquidity within the portfolio.

percentage of depreciation reserves is often investable on a long-term basis.

- Direct the proceeds from non-portfolio asset sales (sale of campus buildings, intellectual property, deaccessioned assets) into the LTIP, insofar as possible.
- Any use of direct LTIP leverage (for example, the issuance of taxable 100-year bonds with a portion of proceeds invested in endowment) should be carefully weighed in terms of compounding portfolio risk as well as return.
- Whenever possible, place operating surpluses into the LTIP/endowment. Many substantial LTIPs have been built from accumulated operating surpluses over time.

Few institutions can or need take all of the steps listed above. Yet it is worth considering the implementation of at least some of these measures where appropriate so that more capital inflows are captured and lesser outflows permitted, thus minimizing the outflow hurdle to be cleared by investment return. Or, in best-case scenarios, adding the net capital additions from inflows to investment returns.

Finally, in addition to greater attention to capital inflows and outflows, continued attention to investment return is also warranted. After all, it is the investment return that enables the LTIP to offset any net *out*flow rate over the long haul, and to build upon any net *in*flow through investment of such funds. Some ideas to consider:

- Revisit portfolio asset allocation within the context of broader enterprise considerations.
- Test asset allocations under various capital market scenarios to gauge the effect within the portfolio and also their impact on the enterprise's "bottom line."
- Review governance so that all enterprise areas that affect the portfolio (including development/fund raising, capital construction, and debt issuance) make mutually consistent decisions.

Conclusion

Historically, capital inflows (e.g., capital campaign proceeds) were intended for mission expansion either through expanded facilities or expanded programs. Today, in contrast, capital additions often shore up the *current* mission, the current operating scale. Indeed, one sign of a weakening financial position is a downtrend in the net flow rate, coupled with investment returns insufficient to cover the net flow rate, after inflation.

For many endowed institutions, the current economic environment and other challenges—ranging from pricing pressures to the market effects of technological innovation—have put unprecedented strain on their business models. One striking effect of these industry and macro-economic factors is the growing importance of the endowment or LTIP. Whether the LTIP is the source of funding for price discounts (such as student financial aid), or a rainy-day fund to be used in case of unpredictable industry effects

(such as the Affordable Care Act), or simply the main driver of capital growth when other capital sources have become iffy (debt issuance, capital campaigns), investment performance has become ever more central to overall institutional financial performance. To track the ability of the LTIP to keep pace, and to consider other financial levers as well as investment performance, we suggest that the net flow rate be measured each year. This rate should be weighed both in relative terms (peer comparisons) and in absolute terms over time.

With respect to governance, a negative rate not offset by investment return requires the attention of not only the investment committee and the finance committee, but also (usually) the development committee. To achieve financial equilibrium, institutions must look to endowment performance and operating performance (the annual budget). But they must also systematically factor in the capital inflows and outflows to ensure that any net outflow is manageable and does not undermine endowment and budget performance. In this way they can monitor whether the role of their endowment/LTIP, as an important part of their business model, continues to be sustained. ■

Ann Bennett Spence, Managing Director
Tracy Filosa, Senior Investment Director
Billy Prout, Director

Exhibit Notes

Real Return and Spending
Source: Cambridge Associates LLC.
Note: Represents a stylized example for a single institution.

Net Flow and Endowment Growth
Source: Cambridge Associates LLC.

Net Flow Rate
Source: Cambridge Associates LLC.
Note: Represents a stylized example for a single institution.

Net Flow Rate Comparison for 23 Colleges
Source: Cambridge Associates LLC Annual College & University Pool Returns Survey.
Note: Data figures on the graph represent the net flow rate for each institution.

Net Flow Rate +/- Investment Return Equals Total Portfolio Growth
Source: Cambridge Associates LLC Annual College & University Pool Returns Survey.
Note: Analysis includes 30 colleges and universities that provided data each year from 2004 to 2013.

Net Flow Rate Comparison for 119 Institutions
Source: Cambridge Associates LLC Fiscal Year 2013 Pool Returns Survey.
Note: Analysis includes 13 independent schools, 10 museums and libraries, and 96 colleges and universities.

Net Flow Rate Versus Real Return
Source: Cambridge Associates LLC Fiscal Year 2013 Pool Returns Survey.
Note: Analysis excludes 1 institution that was an outlier due to its negative real return.