Horizon Model: What’s Changed?

The Horizon Model is a proprietary modeling tool that leverages Hamilton Lane’s historic data to create a powerful portfolio forecasting tool. The Horizon Model gives investors the ability to forecast expected cash flows and exposure growth for their private markets portfolio, to plan and derive future private markets commitments and to stress test their private markets portfolio.

Due to its unique position in the private markets, Hamilton Lane continuously receives high-quality, up-to-date data spanning the total private markets universe, inclusive of equities, credit and real assets. On a periodic basis, Hamilton Lane evaluates its data to ensure the Horizon Model’s projected behavior remains reflective of investors experienced behavior in their portfolios.

When making these periodic adjustments, Hamilton Lane ensures that these changes are fundamental, structural changes in the private markets rather than short-term blips. In Hamilton Lane’s experience, changes tend to be evolutionary rather than revolutionary. Path adjustments tend to be at the margins for established styles, while newer styles may experience larger adjustments as data for those newer strategies becomes more plentiful.

The core functionality of the Horizon Model remains the same. With the Horizon Model, users will still be able to:

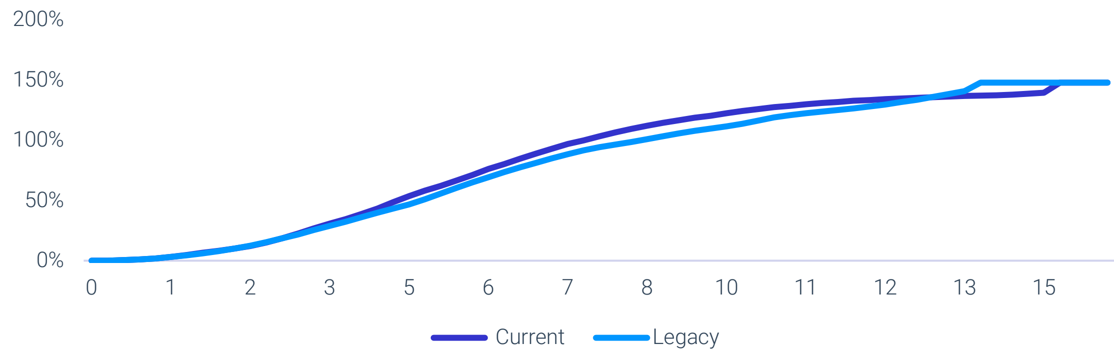
- Model a straight-forward projection of their existing private markets portfolio.
- Use the commitment plan solver to calculate an annual commitment plan that achieves their target allocation.
- Layer future commitments, by style and quarter, on top of their existing portfolio.
- Simulate the impact “economic scenarios", such as a recessionary period or a period of robust growth, will have on their portfolio.
- Export a detailed, fund-by-fund, quarter-by-quarter portfolio forecast and a portfolio-level summary forecast.

What’s changing then? Hamilton Lane has adjusted some of its style-based paths to capture the behavior of private markets funds more accurately. A summary of the most significant changes is below. The term “Current Horizon Model” refers to the Horizon Model paths updated in May 2021, while the term “Legacy Horizon Model” refers the to the Horizon Model paths prior to May 2021. Cobalt LP users will have access to both the Current Horizon Model paths and the Legacy Horizon Model paths, though the Horizon Model will select the Current paths by default. The Legacy paths will be retired at the end of 2021.

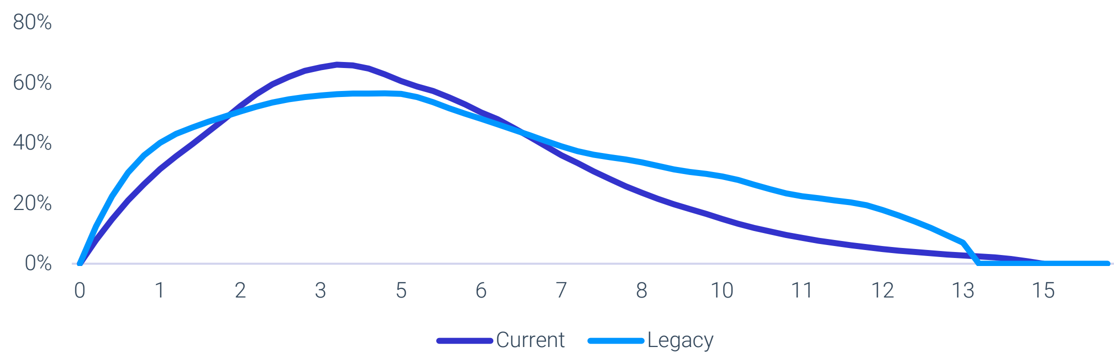
Impact to Cash Flows and NAVs

Hamilton Lane’s refreshed data suggested minor adjustments to distributions. In general, total distributions were adjusted downward. This is particularly true in the middle of a fund’s life, though there are periods later in a fund’s life where distributions were adjusted upward. For example, distributions for strategies such as credit are slightly higher between years five and eight. Counterintuitively, increasing distributions when a fund experiences its peak in NAV reduces total cumulative distributions in the long run. Remember, NAV is future distributions, so by increasing distributions we are decreasing the NAV.

Example: Credit Cumulative Distributions (as a percentage of Commitment)



Example: Credit NAV (as a percentage of Commitment)

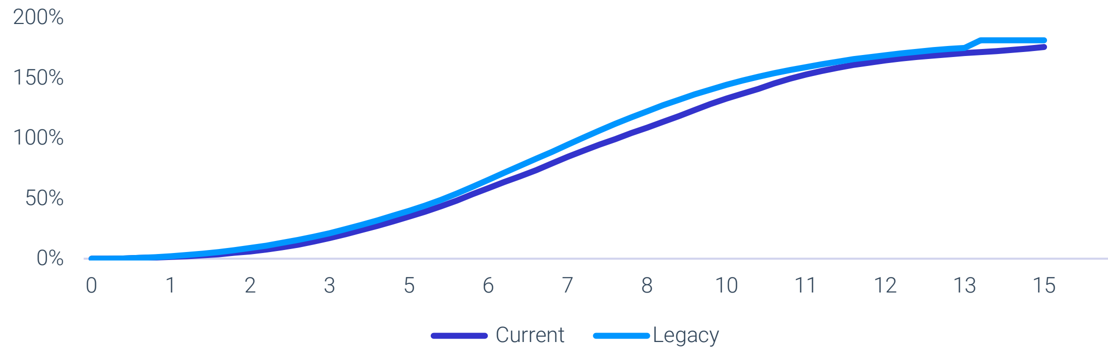


Source: Hamilton Lane Data via Cobalt LP (May 2021). For illustrative purposes only. Actual results may vary.

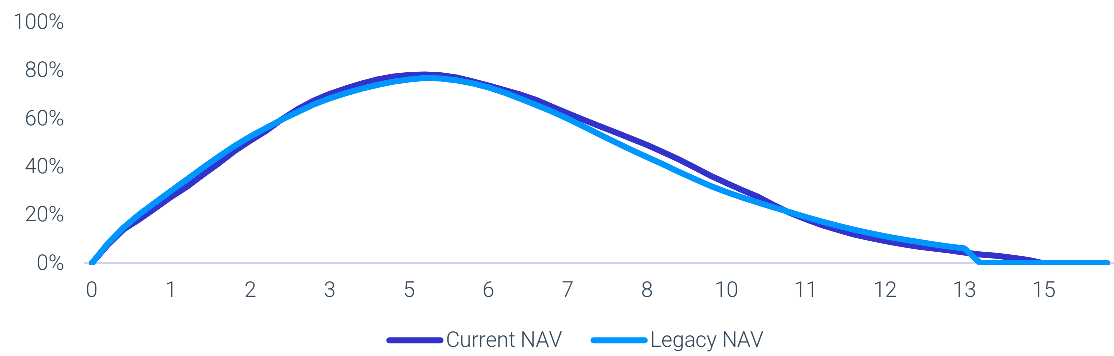
As seen in the above credit example, this behavior is consistent with the trend of private markets funds realizing fewer quick exits but still generating similar total value. In the first chart, titled “Credit Cumulative Distributions”, the distributions increase at a faster rate, compared to the Legacy version, starting year five. The total NAV is also reduced causing a reduction in total distributions. In the second chart, titled “Credit NAV”, the increase in distributions around years four and five rapidly reduces NAV. Over the course of the fund, the total NAV is reduced relative to the Legacy version.

Other paths, such as buyout, experienced a reduction in distributions largely from a reduction in growth rates as seen below. In the first chart, titled “Buyout Cumulative Distributions”, the distributions are reduced, relative to the Legacy version, which pairs with a reduction in growth rates. In the second chart, titled “Buyout NAV”, the reduction in growth keeps NAV relatively consistent despite this reduction in distributions.

Example: Buyout Cumulative Distributions (as a percentage of Commitment)



Example: Buyout NAV (as a percentage of Commitment)



Source: Hamilton Lane Data via Cobalt LP (May 2021). For illustrative purposes only. Actual results may vary.

The strategies that will have the largest impact on portfolios due to changes in distribution activity are buyout (6% reduction in total distributions), credit (11% reduction), and fund of funds (9% reduction). Adjustments to contribution pacing were marginal. Certain strategies, such as buyout, venture capital and distressed debt will experience a slight shift forward in the timing of their contributions. These adjustments to distributions and contributions, coupled with small adjustments to growth rates, impact NAV projections. For most strategies, NAV will build slightly faster early in the fund's life and experience a higher peak relative to Legacy Horizon Model projections. The larger distributions during the "harvesting period" of a fund's life generate a steeper NAV curve from the harvesting period through the end-of-life period. The strategies that will see the largest impact from this phenomenon include buyout, credit, and fund of funds.

The combination of changes to cash flow profiles and NAV profiles influences the implied returns for each style. Most portfolios will likely experience small reductions in the IRR resulting from the adjustments to distribution pacing discussed above. Please see the Summary of Changes, by Style table in the appendix for a more comprehensive list of implied returns for each Horizon Model path.

Impact to Commitment Pacing

The updates to the individual style paths have a trickle-down effect on commitment pacing. The changes to the NAV curves are of particular importance to the Horizon Model's commitment plan.

While the mathematics of how changes to NAV influences commitment pacing can seem complicated, the impacts can be generalized as follows. NAV can be thought of as the basis for future distributions – it represents an estimate of the value an investment can be sold at. The reduced distributions discussed above imply lower average NAV throughout a fund's life. If funds have a lower average NAV, the portfolio will require larger commitments to those funds to achieve a given NAV target (all else equal).

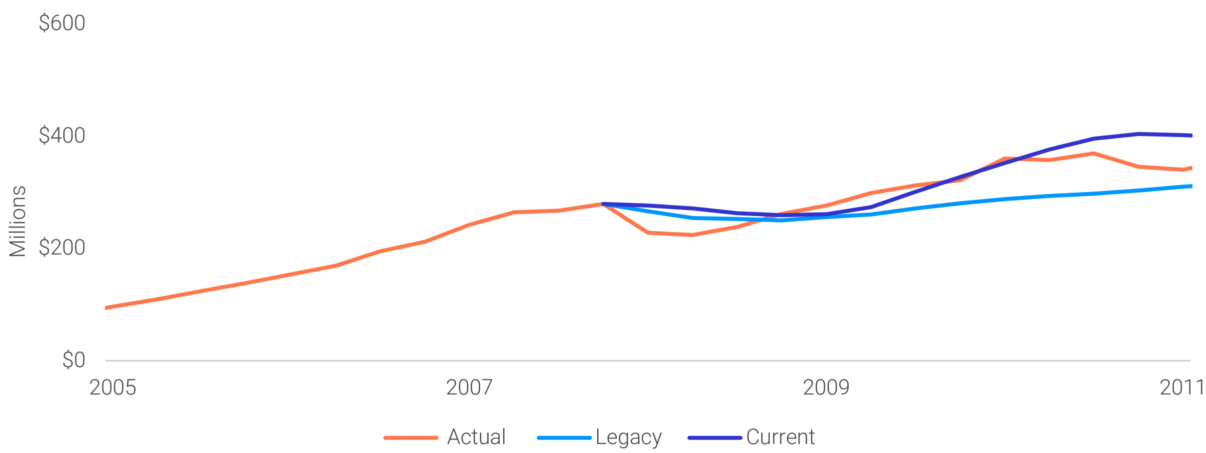
While results will vary based on the unique characteristics of each portfolio, most diversified portfolios will experience small increases (zero to five percent) in the annual commitment pacing suggested by the commitment plan solver. Portfolios that have large allocations to credit and fund of funds may experience the largest increases in commitment pacing while portfolios with large allocations to venture capital and real assets will see smaller changes.

Improved Economic Scenarios

Users will notice small changes to the Growth and Sharp Growth scenarios and more material changes to the Decline and Sharp Decline scenarios. The Decline scenarios experience a sharper rebound after the first six quarters of a Decline or Sharp Decline event. This is because Hamilton Lane's data shows that a stronger rebound is better reflective of an LPs actual experience during the 2007-2009 economic recession. The initial six-quarter decline in performance between the Current and Legacy will largely follow the same trajectory, but the next six quarters experience a stronger recovery period increasing the accuracy of long-term forecasts.

In the below example, the Current version of the Horizon Model, during a Sharp Decline economic scenario, projects behavior that is more in line with investor's actual experienced behavior during the 2007-2009 economic recession.

Example: NAV During a Sharp Decline



Source: Hamilton Lane Data via Cobalt LP (May 2021). For illustrative purposes only. Actual results may vary.

Appendix

Summary of Changes, by Style

End of Day IRR and TVPI Assumptions by Style						
Asset Class	**IRR**		**TVPI**		**Fund Life (in quarters)**	
	Current	Legacy	Current	Legacy	Current	Legacy
Buyout	12.5%	14.2%	1.8x	1.9x	60	56
Growth Equity	13.0%	14.2%	1.8x	1.9x	60	56
Venture Capital	10.5%	10.1%	1.7x	1.7x	60	60
Credit	9.2%	10.7%	1.4x	1.6x	60	56
Credit – Distressed	10.2%	12.8%	1.5x	1.6x	60	52
Secondaries	12.5%	11.6%	1.4x	1.5x	60	64
Fund of Funds	8.9%	10.4%	1.6x	1.8x	72	64
Real Assets	9.0%	9.3%	1.6x	1.6x	60	56
Real Estate	10.0%	11.1%	1.5x	1.6x	60	52

Source: Hamilton Lane Data via Cobalt LP (May 2021). Note: Buyout includes co-investment. For each strategy shown, end of day assumptions are based on a $10M USD new commitment with the market average economic scenario overlayed at year 0 in the life of the fund. Please refer to the Horizon Model Disclosures on page 8 for more information.

Impact of Changes on Economic Scenarios, by Style

End of Day IRR Assumptions by Scenario and Style								
Asset Class	Current Decline		Legacy Decline		Current Sharp Decline		Legacy Sharp Decline	
	Year 0	Year 5	Year 0	Year 5	Year 0	Year 5	Year 0	Year 5
Buyout	11.5%	8.4%	13.2%	9.3%	15.7%	8.7%	13.7%	4.6%
Growth Equity	13.0%	8.8%	13.2%	9.3%	18.0%	9.2%	13.7%	4.6%
Venture Capital	10.5%	6.5%	10.2%	6.6%	15.8%	7.2%	11.0%	3.3%
Credit	7.0%	6.3%	9.7%	8.4%	9.4%	6.3%	10.7%	6.1%
Credit – Distressed	6.7%	7.3%	8.8%	9.1%	8.6%	6.6%	4.8%	5.2%
Secondaries	10.7%	8.3%	9.4%	8.7%	15.3%	8.1%	8.5%	6.0%
Fund of Funds	8.7%	5.3%	9.6%	5.9%	11.2%	6.6%	9.3%	1.9%
Real Assets	7.7%	10.8%	8.9%	6.6%	9.6%	6.5%	9.1%	4.0%
Real Estate	7.8%	6.1%	10.6%	6.1%	12.6%	5.8%	10.7%	1.1%

End of Day IRR Assumptions by Scenario and Style								
Asset Class	Current Growth		Legacy Growth		Current Sharp Growth		Legacy Sharp Growth	
	Year 0	Year 5	Year 0	Year 5	Year 0	Year 5	Year 0	Year 5
Buyout	12.5%	13.4%	15.3%	16.3%	12.4%	14.3%	16.4%	18.3%
Growth Equity	13.2%	14.1%	15.3%	16.3%	13.5%	15.2%	16.4%	18.3%
Venture Capital	11.0%	11.6%	10.8%	11.3%	11.6%	12.7%	11.9%	12.6%
Credit	9.2%	10.0%	11.1%	12.1%	9.1%	10.1%	11.6%	13.5%
Credit – Distressed	10.0%	11.1%	15.4%	13.6%	9.7%	11.8%	15.7%	14.2%
Secondaries	12.7%	13.4%	12.8%	12.8%	12.9%	14.3%	14.3%	14.1%
Fund of Funds	9.1%	10.0%	10.7%	11.5%	9.2%	11.1%	11.2%	12.6%
Real Assets	9.2%	9.9%	10.1%	12.6%	9.4%	10.8%	11.3%	15.9%
Real Estate	10.0%	10.8%	11.6%	13.3%	10.1%	11.7%	12.6%	15.5%

Source: Hamilton Lane Data via Cobalt LP. As of May 2021. Note: Buyout includes co-investment. Credit includes mezzanine and excludes distressed. For each strategy shown, end of day assumptions are based on a new commitment with the respective economic scenario overlayed at the indicated year in the life of the fund. Please refer to the Horizon Model Disclosures on page 8 for more information.

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End of Day TVPI Assumptions by Scenario and Style								
Asset Class	Current Decline		Legacy Decline		Current Sharp Decline		Legacy Sharp Decline	
	Year 0	Year 5	Year 0	Year 5	Year 0	Year 5	Year 0	Year 5
Buyout	1.7x	1.5x	1.8x	1.5x	2.0x	1.5x	1.6x	1.3x
Growth Equity	1.8x	1.5x	1.8x	1.5x	2.1x	1.6x	1.6x	1.3x
Venture Capital	1.7x	1.4x	1.6x	1.4x	2.1x	1.5x	1.6x	1.2x
Credit	1.3x	1.3x	1.5x	1.4x	1.4x	1.3x	1.5x	1.3x
Credit – Distressed	1.3x	1.3x	1.5x	1.4x	1.4x	1.3x	1.3x	1.2x
Secondaries	1.4x	1.3x	1.4x	1.4x	1.6x	1.3x	1.4x	1.3x
Fund of Funds	1.6x	1.3x	1.7x	1.4x	1.8x	1.4x	1.6x	1.1x
Real Assets	1.5x	1.7x	1.6x	1.4x	1.7x	1.4x	1.6x	1.3x
Real Estate	1.4x	1.3x	1.6x	1.3x	1.6x	1.3x	1.6x	1.1x

End of Day TVPI Assumptions by Scenario and Style								
Asset Class	Current Growth		Legacy Growth		Current Sharp Growth		Legacy Sharp Growth	
	Year 0	Year 5	Year 0	Year 5	Year 0	Year 5	Year 0	Year 5
Buyout	1.8x	1.8x	1.9x	2.0x	1.8x	1.9x	2.0x	2.1x
Growth Equity	1.9x	1.9x	1.9x	2.0x	1.9x	2.0x	2.0x	2.1x
Venture Capital	1.8x	1.81x	1.8x	1.8x	1.8x	1.9x	1.9x	1.9x
Credit	1.4x	1.4x	1.6x	1.6x	1.4x	1.5x	1.6x	1.7x
Credit – Distressed	1.5x	1.5x	1.7x	1.7x	1.5x	1.5x	1.7x	1.7x
Secondaries	1.5x	1.5x	1.6x	1.6x	1.5x	1.6x	1.7x	1.7x
Fund of Funds	1.6x	1.7x	1.8x	1.9x	1.6x	1.8x	1.9x	1.9x
Real Assets	1.6x	1.6x	1.7x	1.8x	1.6x	1.7x	1.8x	2.0x
Real Estate	1.5x	1.5x	1.7x	1.8x	1.5x	1.6x	1.7x	1.9x

Source: Hamilton Lane Data via Cobalt LP. As of May 2021. Note: Buyout includes co-investment. Credit includes mezzanine and excludes distressed. For each strategy shown, end of day assumptions are based on a new commitment with the respective economic scenario overlayed at the indicated year in the life of the fund. Please refer to the Horizon Model Disclosures on page 8 for more information.

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