



# The Cashflow Challenge: Solutions Ahead

LGC Investment & Pensions Summit

September 2023

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# Liquidity challenge in private equity



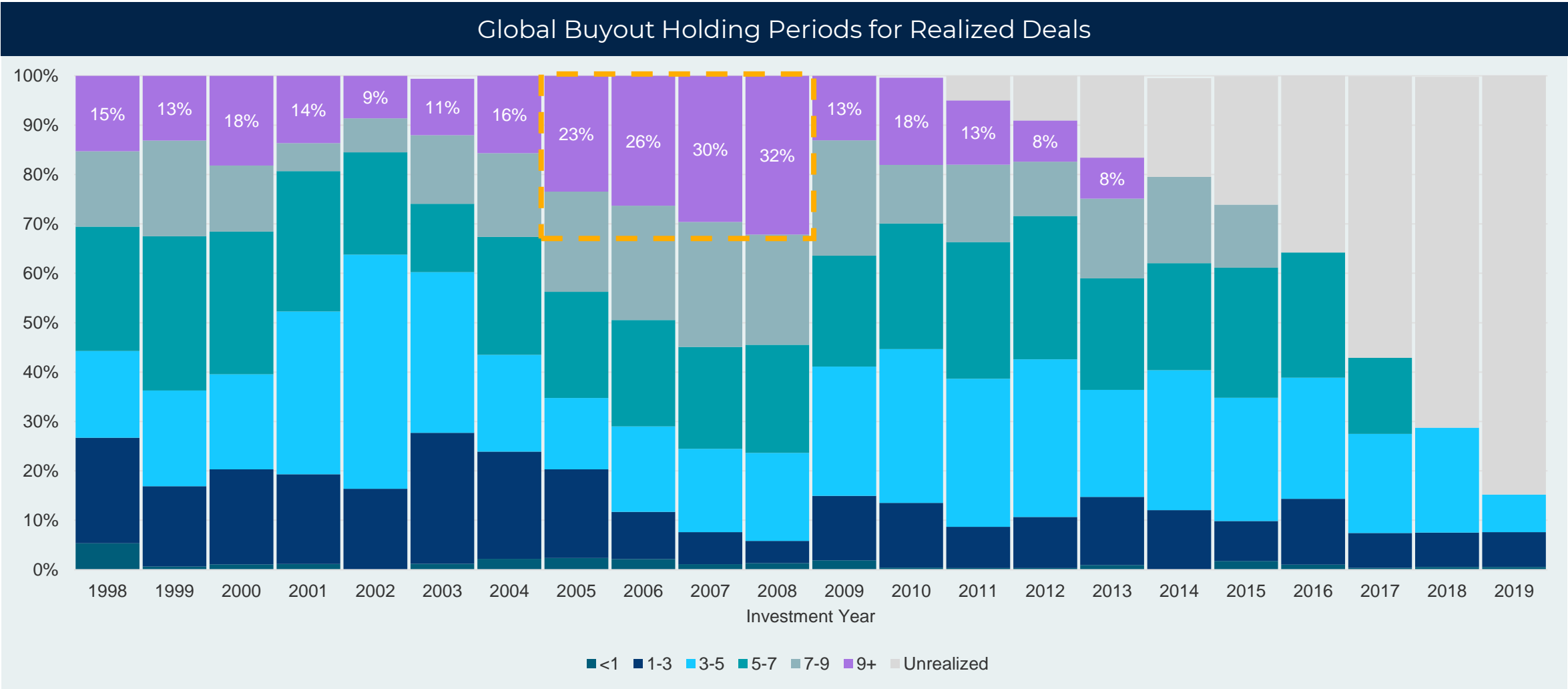
# Liquidity moves in cycles

Global Buyout Cash Flow Rates by Calendar Year

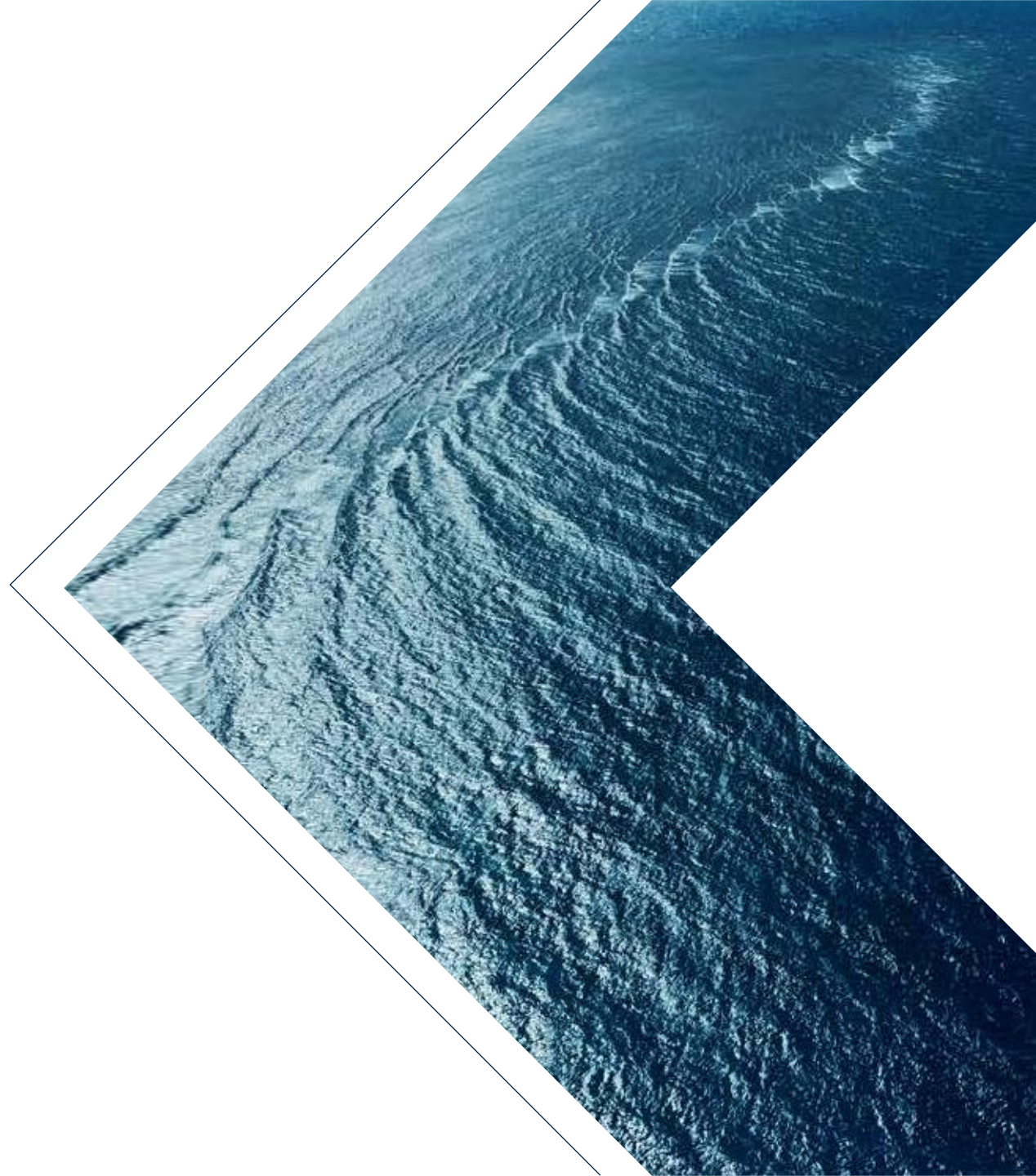


Note: Contribution and distribution rates are calculated as period contributions or distributions divided by previous valuation.  
Source: Burgiss. As of March 31, 2023.

# Holdings periods tend to extend for deals originating in peak environments



# Portfolio construction framework for private markets





# Balancing risk and return considerations with liquidity and horizon profile

Asset allocation decisions within private markets need to consider liquidity risk and holding period profile in addition to expected return and risk of capital loss characteristics

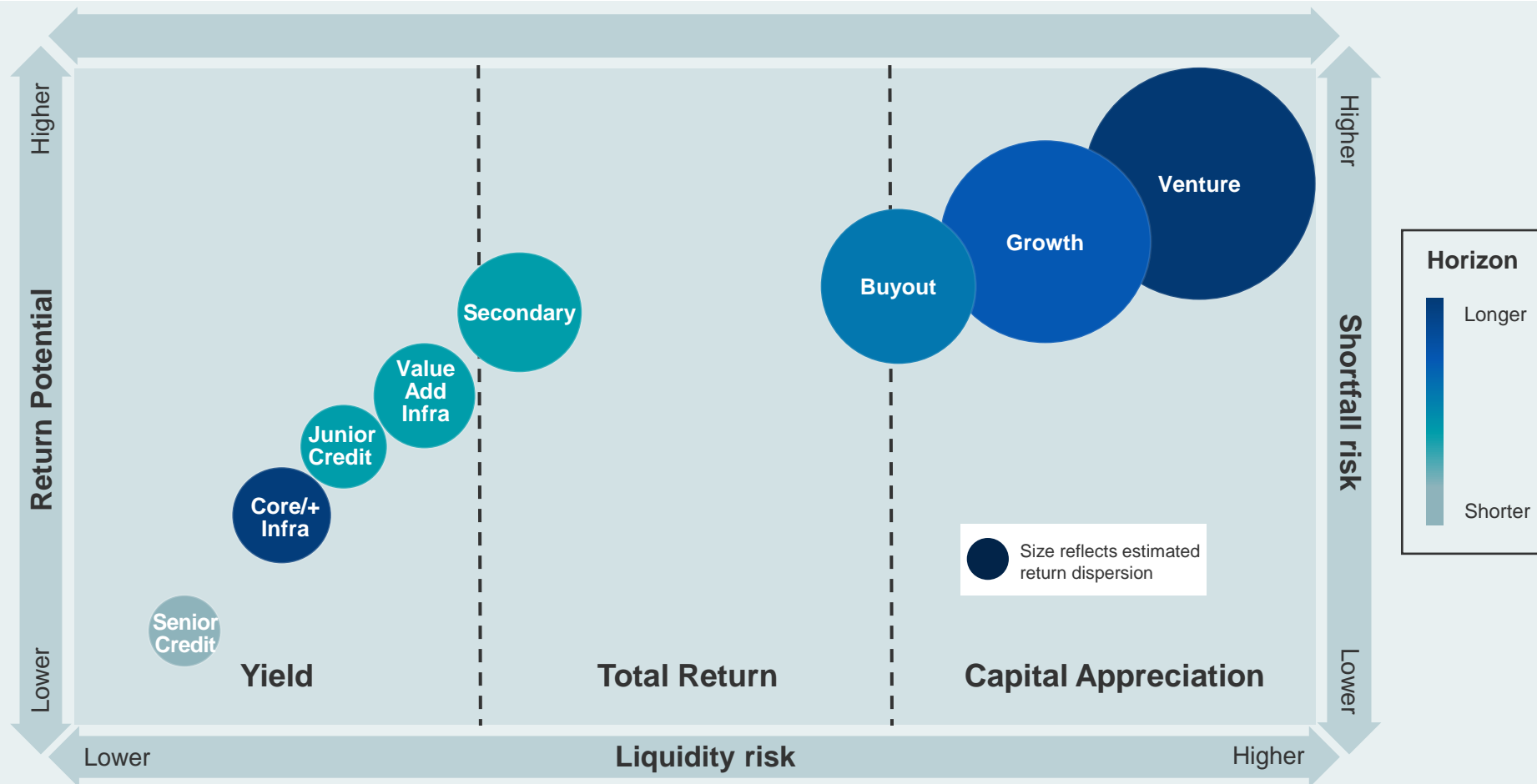


	Return	Liquidity	Horizon
Definition	<ul style="list-style-type: none"><li>▪ Expected rate of capital appreciation and dispersion of returns</li></ul>	<ul style="list-style-type: none"><li>▪ Level, pace, and volatility of cash flows throughout the holding period</li></ul>	<ul style="list-style-type: none"><li>▪ Period over which capital is returned to investors</li></ul>
Key Metrics	<ul style="list-style-type: none"><li>▪ Expected return</li><li>▪ Upside potential (expected surplus)</li><li>▪ Risk of under-performance (expected shortfall*)</li><li>▪ Risk of capital loss</li></ul>	<ul style="list-style-type: none"><li>▪ Cumulative net cash flow</li><li>▪ Cash flow at risk (CFaR)</li></ul>	<ul style="list-style-type: none"><li>▪ Weighted average life of NAV (WAL)</li></ul>

\*Shortfall risk : average return below the minimum acceptable return (MAR)

# Each asset class is represented by its risk, return, liquidity, and horizon characteristics

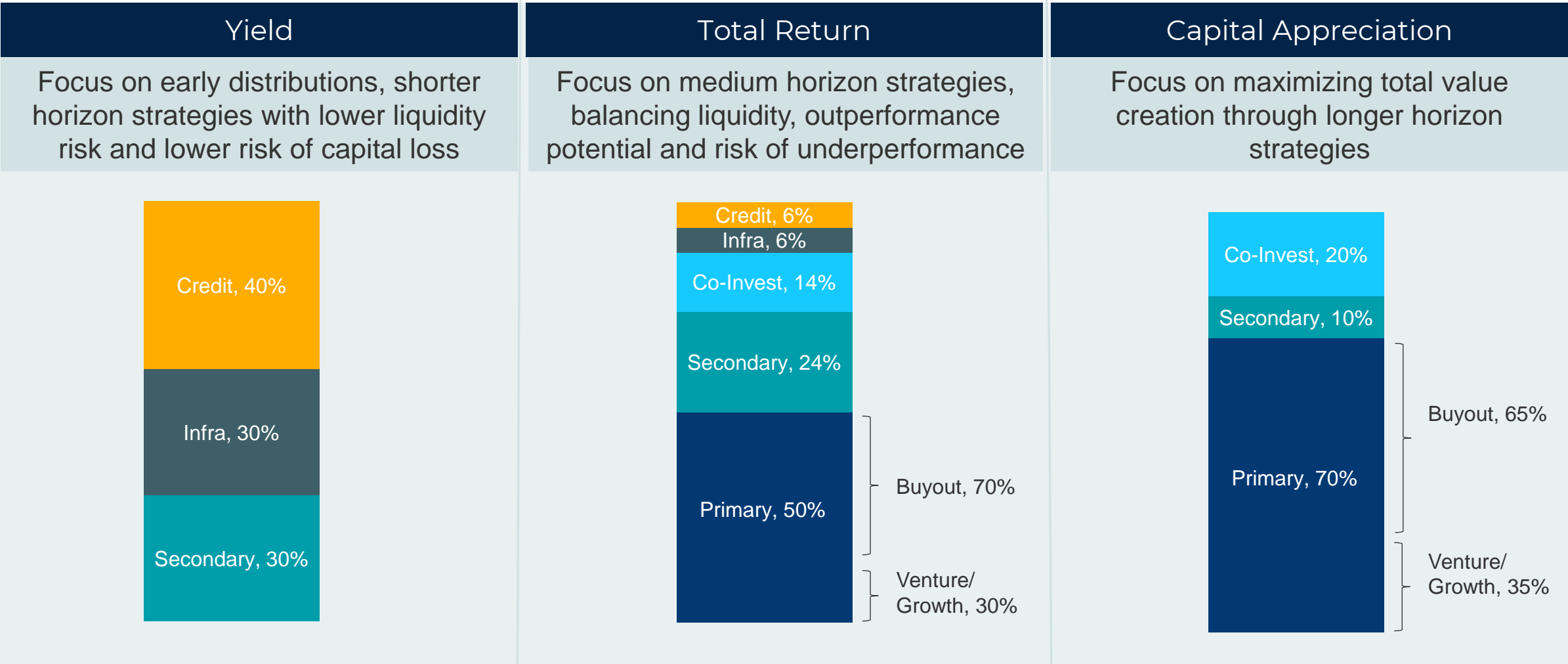
Higher returning assets generally have larger return dispersion, higher shortfall risk, greater liquidity risk, and a longer holding horizon



For illustrative purposes only. Statements concerning financial market trends are based on current market conditions, which will fluctuate. Forecasts, estimates, and certain information contained herein are based upon proprietary research and should not be considered as investment advice or a recommendation of any particular security, strategy or investment product. There is no guarantee that this investment strategy will work under all market conditions or is suitable for all investors. Each investor should evaluate their ability to invest long-term, especially during periods of downturn in the market. No representation is being made that any account, product, or strategy will or is likely to achieve profits, losses, or results similar to those shown.



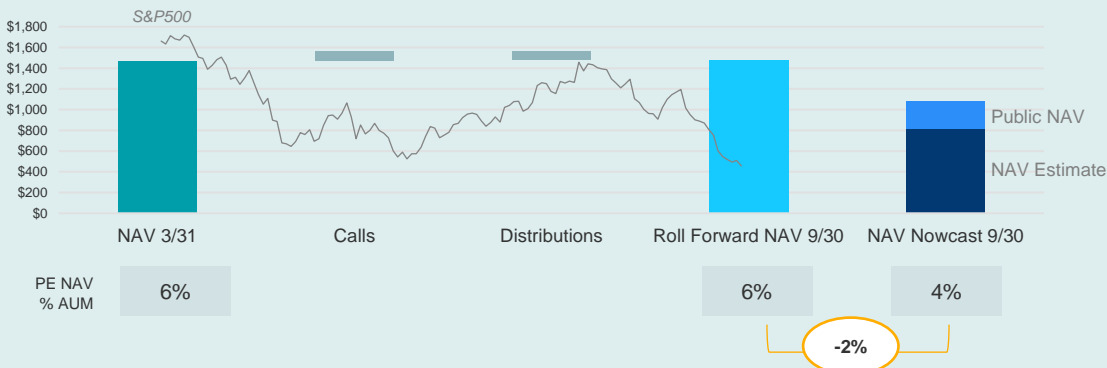
# Constructing objective-driven portfolios



# Example: LP facing current market headwinds

## Lower current NAV reflecting recent market developments

### NAV Nowcasting: estimating current portfolio value



## Recommendations

- Reduce overallocation through a **secondary transaction**
- Arrange a **credit facility** to provide immediate liquidity
- Expand allocation to **yield-oriented strategies**

*Above actions allowed LP to realign their portfolio and take advantage of current market environment*

## Constrained short-term liquidity requires a solution

### Cash flow forecasting: bottom-up and top-down approach



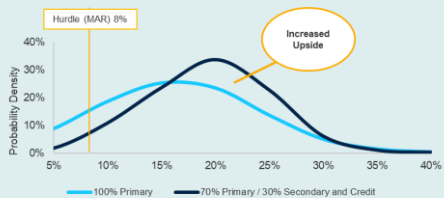
Year	Average NCF	CFaR
Dec-15	(\$5)	(\$13)
Dec-17	(\$129)	(\$152)
Dec-19	(\$545)	(\$486)
Dec-21	(\$784)	(\$435)
Dec-24	(\$127)	(\$275)
Dec-26	\$260	(\$116)

Weighted Average Life = 7.2 years

## Aligning the portfolio against long-term objectives

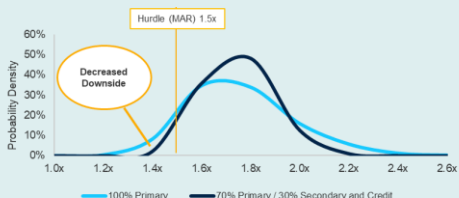
### Portfolio simulations: scenario analysis focused on liquidity

Hypothetical Short-Term View: 5-Year Net IRR



	100% Primary	70% Primary / 30% Secondary and Credit
Average Net IRR	14.0%	16.9%
Sortino Ratio (Risk Adjusted Return)	1.1	5.3
Expected Surplus (Average Return Above Hurdle)	16.8%	17.7%
Expected Shortfall (Average Return Below Hurdle)	3.9%	5.8%

Hypothetical Long-Term View: 10-Year Net TVPI



	100% Primary	70% Primary / 30% Secondary and Credit
Average Net TVPI	1.66x	1.65x
Sortino Ratio (Risk Adjusted Return)	0.9	1.7
Expected Surplus (Average Return Above Hurdle)	1.74x	1.68x
Expected Shortfall (Average Return Below Hurdle)	1.41x	1.44x

Additional important  
information



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Performance is expressed in US dollars, unless otherwise noted. Returns do not include the effect of any withholding taxes. Cash flows are converted to US dollars at historic daily exchange rates, unless otherwise indicated. The return to investors whose local currency is not the US dollar may increase or decrease as a result of currency fluctuations.

**Monte Carlo Simulations** - These model (hypothetical) portfolios, if shown, are intended for illustrative purposes only. Performance information for each hypothetical portfolio utilized a Monte Carlo Simulation and are based on the actual cash flows of a proprietary data set that includes partnership investments made by Funds, along with partnership data from external sources. The capital calls and distribution data is based on historic partnership investment cash flows but does not represent the actual experience of any investor or Fund. The results of the simulation are impacted by an uneven representation of funds with different vintage years, sizes, managers, and strategies, and a limited pool of investment cash flow data. The actual pace and timing of cash flows is likely to be different and will be highly dependent on the underlying partnerships' commitment pace, the types of investments made by the Fund(s), market conditions, and terms of any relevant management agreements. The results presented are based entirely on the output from numerous mathematical simulations. The simulations are unconstrained by the fund size, market opportunity, and minimum commitment amount, and do not take into account the practical aspects of raising and managing a fund. The simulated hypothetical portfolio results should be used solely as a guide and should not be relied upon to manage your investments or make investment decisions.

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## Epidemics, Pandemics and Other Health Risks

Many countries have experienced infectious illnesses in recent decades, including swine flu, avian influenza, SARS and 2019-nCoV (the "Coronavirus"). In December 2019, an initial outbreak of the Coronavirus was reported in Hubei, China. Since then, a large and growing number of cases have been confirmed around the world. The Coronavirus outbreak has resulted in numerous deaths and the imposition of both local and more widespread "work from home" and other quarantine measures, border closures and other travel restrictions causing social unrest and commercial disruption on a global scale. The World Health Organization has declared the Coronavirus outbreak a pandemic. The ongoing spread of the Coronavirus has had and will continue to have a material adverse impact on local economies in the affected jurisdictions and also on the global economy as cross-border commercial activity and market sentiment are increasingly impacted by the outbreak and government and other measures seeking to contain its spread. In addition to these developments having potentially adverse consequences for underlying portfolio investments of the Fund and the value of the Fund's investments therein, the operations of HarbourVest and the Fund have been, and could continue to be, adversely impacted, including through quarantine measures and travel restrictions imposed on HarbourVest personnel or service providers based around the world, and any related health issues of such personnel or service providers. Any of the foregoing events could materially and adversely affect the Fund's ability to source, manage and divest its investments and its ability to fulfill its investment objectives. Similar consequences could arise with respect to other comparable infectious diseases.

