MassPRIM

Appendix H

Meketa’s Multi-Asset Credit Manager Search Report

Mass PRIM Investment Committee
Tuesday, May 7, 2024

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Mass PRIM

May 7, 2024

Multi-Asset Credit Manager Search

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Background

Background

→ In 4Q2023 Mass PRIM issued a public Request for Proposal for a Multi-Asset Credit investment manager. A total of 48 firms responded with 51 proposed strategies.

→ Mass PRIM staff ('Staff') and Meketa Investment Group ('Meketa') collaborated on developing an initial short list of 15 managers for consideration. Following several meetings between Staff and Meketa, a final shortlist of 5 managers was developed. Staff and Meketa travelled to each of the 5 finalists' offices for additional due diligence.

→ Following our onsite visits, one manager was eliminated. The remaining 4 managers, and 5 Multi-Asset Credit strategies outlined in this document are:

Manager	Strategy	Approach
Anchorage	Multi-Asset Credit ('AMAC')	Opportunistic
KKR	Global Credit Opportunities	Opportunistic
KKR	Multi-Asset Credit ('KMAC')	Diversified
HPS	Institutional Credit	Diversified
Shenkman	Multi-Asset Credit	Diversified

Manager Research Structure and Monitoring

→ At Meketa, manager research is a centralized function whereby there is an asset class specialist team, either in public markets or private markets, that actively monitors existing and potential strategies in their asset classes. On the public markets side, each team within fixed income, equities, and marketable alternatives have a team lead that reports up to our head of public markets research.

→ On an individual account basis, the research team works in coordination with client specific consultants, investment analysts and performance analysts to monitor existing investments. It is the responsibility of the manager research teams to monitor developments at the investment manager while the client team will be responsible for monitoring client specific guidelines and objectives.

→ In addition to periodic updates with investment managers in the industry, Meketa utilizes a combination of internal and external tools to monitor investments within each asset class including but not limited to, proprietary research, internal databases, Diligence Vault, eVestment, Morningstar, etc.

→ Meketa's Public Markets Research Team members are shown on the following organizational chart. Mark McKeown leads Meketa's Fixed Income manager research team.

Public Markets Manager Research Team[1]

Amy Hsiang, CFA, CAIA
Director of Public Markets Manager Research (24, 3)

Equities

Josh Brough, CFA
Co-Head of Equities (21, 7)
US Value

Hayley Tran, CFA, CAIA
Co-Head of Equities (17, 3)
Non-US Equities

Matt Curran, CFA, CAIA
Research Consultant (7, 7)
US Core

Dennis Rafferty, CFA
Research Analyst (7, 1)
US Growth Equity

Orianna Grillo
Research Analyst (6, 6)
Domestic Equities, REITs

Merav Kaufman, CFA
Research Analyst (10, 10)
Non-US Equities

Griffin O'Riley
Research Associate (5, 1)
Non-US Equities

Beckett Cummings
Research Associate (2, 2)
Non-US Equities

Fixed Income

Mark McKeown, CFA
Head of Fixed Income (29, 5)
Generalist

Tracy Gage
Research Consultant (26, 3)
Generalist

Ricky Pamensky, CFA
Research Consultant (9, 4)
Generalist

Connor Collins
Research Analyst (6, 3)
Generalist

Marketable Alternatives

Ryan Lobdell, CFA, CAIA
Head of MALTs (13, 13)
Generalist

W. Brian Dana, CAIA
Director of OCIO Services (24, 18)
Generalist

Zachary Driscoll, CFA
Research Consultant (8, 6)
Generalist

Colin Bebee, CFA
Consultant (14, 14)
Generalist

Clara Etchegaray
Research Associate (2, 2)
Generalist

Sustainable Investing / Diverse Manager Engagement

Josh Brough, CFA
Co-Head of Equities (21, 7)

Hayley Tran, CFA, CAIA
Co-Head of Equities (17, 3)

Zachary Driscoll, CFA
Research Consultant (8, 6)

Yvette Elizalde, FSA
Research Analyst (8, 6)
Public Infrastructure

Ricky Pamensky, CFA
Research Consultant (9, 4)

Orianna Grillo
Research Analyst (6, 6)

Passive Management

Stephen MacLellan, CFA
Consultant (17, 11)

Beckett Cummings
Research Associate (2, 2)

Orianna Grillo
Research Analyst (6, 6)

Operational Due Diligence

Louis Rodriguez, CFE
Head of Operational Due Diligence (30, 2)

Joe Gil
Private Markets Monitoring Analyst (15, 2)

Cristen Xhama, CFA
Private Markets Analyst (12, 3)

Matthew Perun
Private Markets Monitoring Associate (4, 1)

[1] As of February 2024. (Years industry experience, Years with firm).

Search Introduction

Manager Due Diligence Process Introduction

→ Selecting strong and appropriate investment managers is a key determinant of the overall success of Mass PRIM. Investment managers are expected to operate within a client's investment guidelines and are given a large degree of latitude to achieve the investment objectives.

→ Manager selection is a nuanced process and requires extensive due diligence. When selecting prospective active managers, Meketa Investment Group evaluates the following areas:

- Organization
- Investment team
- Investment philosophy
- Investment process
- Investment performance
- Management fees

→ In addition, all managers are evaluated within the context of Mass PRIM's overall investment policy.

Multi-Asset Credit Manager Search

Manager Summaries

Manager Overviews
As of September 30, 2023

	Anchorage	KKR	KKR	HPS	Shenkman
Firm Location	New York, NY	New York, NY	New York, NY	New York, NY	New York, NY
Firm Inception	2003	1976	1976	2007	2007
Ownership Structure	Employee Owned	Publicly Traded	Publicly Traded	Employee Owned	Employee Owned
Assets Under Management (Firm)	$26.7 billion	$527.7 billion	$527.7 billion	$106 billion	$29.3 billion
Strategy Name	Multi-Asset Credit ('AMAC')	Global Credit Opportunities (GCOF)	Multi-Asset Credit ('KMAC')	Institutional Credit	Multi-Asset Credit
Benchmark	50% ICE BofA US High Yield 50% LSTA Leveraged Loan	50% ICE BofA US High Yield 50% LSTA Leveraged Loan	50% ICE BofA US High Yield 50% LSTA Leveraged Loan	50% CS High Yield 50% CS Leveraged Loan	50% ICE BofA US High Yield 50% LSTA Leveraged Loan
Strategy Inception	June 2015	May 2008	July 2008	June 2007	Sep 2010
Assets Under Management (Strategy)	$5.8 billion	$3.9 billion	$1.6 billion	$3.7 billion	$3.2 billion

Anchorage

Organization: Anchorage Capital Advisors is a credit-oriented investment firm founded in 2003 with headquarters in New York with affiliates in the UK and Luxembourg. The firm was originally founded as a distressed credit hedge fund by former CEO Kevin Ulrich and Tony Davis who had both previously worked in distressed debt at Goldman Sachs. Both founders have since stepped down and the firm remains privately owned with majority ownership held by Yale Baron and Thibault Gournay. As of September 2023, Anchorage managed $26.7 billion primarily across performing credit, structured credit, and distressed & special situations. The Multi-Asset credit composite had $5.8 billion, primarily comprised of AUM from 14 CDOs and 1 customized vehicle.

Investment Team: The investment team is led by co-CIOs Thibault Gournay and Yale Baron. Mr. Baron has 26 years of experience and joined Anchorage in 2008 from JPMorgan to build a structured credit investment discipline that was closely integrated with their trading platform and performing credit research. Mr. Gournay has 22 years of experiences and joined in 2009 from Greywolf capital, and previously at Goldman Sachs, to establish the firm's London office. The two are supported by; 24 research specialists (17 in the US and 7 in UK) that are organized by industry and region; 7 traders (5 in US, 2 in UK), 6 specialists (US) that have expertise in structured credit, restructuring, operational and sourcing disciplines; 4 structured commodities professional (US) that lead research, structuring and execution on structured commodities investments.

Investment Philosophy: They believe that a performing credit strategy with the flexibility to invest across adjacent markets can significantly broaden the alpha opportunity. There is a strong emphasis on liquidity in their portfolios given that the world is always changing, such as the rate environment or industry dynamics, so they seek to maintain a portfolio that can tactically move through time. The team strongly believes in active trading to generate additional alpha, specifically in the primary bond market.

Investment Process: The process begins with fundamental credit research from their industry analysts. The analysts will create rankings for their coverage and develop a tradable universe for the strategy. Following the fundamental analysis, they then pair this with relative value in the market to identify alpha opportunities. Part of the relative value process in the MAC strategy is a fluid top-down discussion between the portfolio managers and the analysts where they would like to add fixed vs floating rate exposure. While they are relatively benchmark agnostic, the team is always cognizant of where they are deviating from the index such as the time of their meeting how they discussed their increased spread position offset by their shorter duration than the 50/50 blended. A few times a week their investment committee will meet and is made up of Soo Kim, who is responsible for the day-to-day process for performing credit, along with Yale and Thibault. Traders sit in on these meetings to incorporate current market conditions into their decision making. The investment committee will generate a population of names to populate the portfolios. The final step is a top-down asset allocation overlay that is dictated by the portfolio managers. This step is to avoid overweights to particular assets and industries that may arise from the bottom-up process. At the end of the day, they are benchmark aware so they will not end up with 100% in structured credit, loans, or high yield. Within their High Yield book, they typically keep 5% of their portfolio allocated to flipping new deals. They see this as a source of liquidity as it can be more easily traded closer to the time of issue. Yale mentioned that they expect about 100bps of alpha to be generated from their trading strategy on new issues.

KKR - GCOF

Organization: KKR is a publicly traded New York based global investment firm founded in 1976 by Jerome Kohlberg, Henry Kravis, and George Roberts. The business initially focused on US Private Equity ("PE") but expanded globally in the 1990s and into credit in 2004. KKR operates through three primary business segments: Private Markets, Public Markets and Capital Markets. KKR's primary business lines are augmented by operational consultants, advisors, public affairs executives, capital raising executives and macro research professionals. As of Sep 2023, KKR managed a total of $528 billion with $202bln in credit. The GCOF strategy, launched in May 2008, is managed within the leveraged credit platform, and had $3.9bln AUM.

Investment Team: The GCOF team is led by Chris Sheldon, Partner & Head PM. The strategy has a dedicated Investment Committee, the KKR Credit US Leveraged Credit IC, comprised of Mr. Sheldon, John Reed (Partner and Head Trader), Jeremiah Lane and Terry Ing. Chris, John, and Jeremiah have been together at KKR for over 15 years and average 23 years of industry experience. Terry comes with 24 years of experience and joined KKR in 2019 and is Co-head of KKR's Leveraged Credit Research team. Although not on the portfolio management team, Henry McVey also contributes to the process from the top down as the Global Head of Macro, he will join the portfolio managers on a weekly basis to discuss his views.

Investment Philosophy: The inefficiency that the team is trying to exploit relates to the broad market's inability to appropriately assess credit risk. Their deep, fundamentally driven approach allows them to capitalize upon market mis-pricings, thereby adding value for their investors. While they do not have any formalized sector constraints, they generally seek to avoid businesses that 1) do not generate free cash flow over the investment horizon; 2) have meaningfully unhedged commodity risk; and 3) have unsustainable capital, regardless of purchase price.

Investment Process: Although top-down macro-economic overlay influences their portfolio construction, the bulk of GCOF's alpha relies on detailed bottom-up, security-based credit analysis. They construct a portfolio by (i) identifying attractive risk/return credits and securities where they are comfortable with the credit and (ii) weighting these credits based on conviction of the risk/return profile and availability in the marketplace. They then review the portfolio to identify specific risks (i.e., commodity, industry) as well as market risk (i.e., duration, beta) and adjust to where they are comfortable. KKR Credit will only invest in a credit once it has undergone a deep due diligence analysis and the respective Investment Committee (IC) has determined that we have a competitive advantage via their sourcing, analysis, or diligence findings. GCOF is governed by the US Leveraged Credit IC. The US Leveraged Credit IC approves or removes credits for their approved credit list. The Portfolio Management Committee ("PMC") has direct oversight and monitoring of process and approval of key limits and allocations. However, to provide eligible client accounts with the ability to participate in deal flow and trading ideas that are subject to a constrained timeline, discretionary trading is allowed within IC approval limits. Sponsor due diligence is also an important part of their investment process. Among other things, they evaluate a sponsor's track record and experience in the industry as well as their motivations and investment thesis behind an investment. They think that having access to a sponsor is important and can be a key advantage when doing diligence. When doing diligence on a KKR sponsored company, their analysts spend a lot of time with their private equity teams to ensure they understand their investment thesis and industry views. Their portfolio composition is organized into investment themes that take advantage of credit market dislocations, spanning asset types and liquidity profiles. In all there will be roughly 100 trades in the portfolio across these themes.

KKR - KMAC

Organization: KKR is a publicly traded New York based global investment firm founded in 1976 by Jerome Kohlberg, Henry Kravis, and George Roberts. The business initially focused on US Private Equity ("PE") but expanded globally in the 1990s and into credit in 2004. KKR operates through three primary business segments: Private Markets, Public Markets and Capital Markets. KKR's primary business lines are augmented by operational consultants, experienced advisors, public affairs executives, capital raising executives and macro research professionals. As of Sep 2023, KKR managed a total of $528 billion with $202bln in credit. The KMAC strategy, launched in July 2008, is managed within the leveraged credit platform, and had $1.6bln AUM.

Investment Team: The KMAC team is led by Jeremiah Lane, Partner & PM. The strategy has a dedicated Investment Committee, the KKR Credit US Leveraged Credit IC, comprised of Chris Sheldon, John Reed (Partner and Head Trader), Mr. Lane and Terry Ing. Chris, John, and Jeremiah have been together at KKR for over 15 years and average 23 years of industry experience. Terry comes with 24 years of experience and joined KKR in 2019 and is Co-head of KKR's Leveraged Credit Research team. Although not on the portfolio management team, Henry McVey also contributes to the process from the top down as the Global Head of Macro, he will join the portfolio managers on a weekly basis to discuss his views.

Investment Philosophy: The inefficiency that the team is trying to exploit relates to the broad market's inability to appropriately assess credit risk. Their fundamentally driven approach allows them to capitalize upon market mis-pricings, thereby adding value for their investors. KMAC's investment strategy is a diversified credit strategy that can invest primarily across bank loans, high yield bonds, structured credit, asset backed securities and convertible bonds in the US and Europe. The investment objective of KMAC is to generate consistent income across a diversified pool of assets with additional upside via capital appreciation.

Investment Process: The team works closely with the Global Macro and Asset Allocation ("GMAA") team to determine top-down asset allocation across asset classes for the KMAC Strategy. There are no explicit sector, industry or geographical weightings. The GMAA team helps to consolidate in-house macro views and facilitates improved investment decision-making as its input flows into the diligence work of their deal teams as well as Investment Committee and Portfolio Management Committee discussions. KKR Credit will only invest in a credit once it has undergone a deep due diligence analysis and the respective Investment Committee ("IC") has determined that they have a competitive advantage via their sourcing, analysis, or diligence findings. KMAC is governed by the US Leveraged Credit IC. The US Leveraged Credit IC approves or removes credits for their approved credit list. The Portfolio Management Committee ("PMC") has direct oversight and monitoring of process and approval of key limits and allocations. However, to provide eligible client accounts with the ability to participate in deal flow and trading ideas that are subject to a constrained timeline, discretionary trading is allowed within IC approval limits. Sponsor due diligence is also an important part of their investment process. Among other things, they evaluate a sponsor's track record and experience in the industry as well as their motivations and investment thesis behind an investment. They think that having access to a sponsor is important and can be a key advantage when doing diligence. When doing diligence on a KKR sponsored company, their analysts spend a lot of time with their private equity teams to ensure they understand their investment thesis and industry views.

HPS

Organization: HPS Investments is a New York based investment manager specializing in private and public credit. The firm was originally founded in 2007 by Scott Kapnick, Scot French and Michael Patterson after they left Goldman Sachs. Originally called Highbridge Principal Strategies ("HPS"), it was formed as the private equity and credit investment division of Highbridge Capital Management (Highbridge). Highbridge itself was acquired by J.P. Morgan Asset Management in 2004. At Highbridge, their strategies included mezzanine capital, bonds, direct lending, and growth capital that included seed capital from JPM. There is ~75% employee ownership but 100% of the voting rights are held by employees. As of September 2023, HPS managed ~$106 billion, of which $6.4bln was in Multi-Asset Credit strategies, inclusive of $3.7bln Institutional Credit strategy. Over 80% of total firm assets are managed on behalf of institutional investors.

Investment Team: The Liquid Credit team is led by Purnima Puri. The Portfolio Management team is comprised of Purnima and Serge Adam, and they are supported by the sector portfolio managers. Purnima and Serge have 29 years of experience each and have been working together since graduate school. They have also been working together with George Khouri, Head of Trading, since 2008. Most of the sector portfolio managers have over 20 years of experience. The Corporate Credit Research group is led by Scott Crocombe and comprised of 12 analysts in North America and 6 analysts in Europe. George Khouri leads the trading group and has 2 members supporting him. There are 4 additional securitized credit structuring and investment professionals, 4 Asia Credit professionals, and 6 members of the risk and analytics team. The broader platform at HPS has over 200 investment professionals supporting areas like their private market, restructuring and infrastructure activities.

Investment Philosophy: The Institutional Credit investment strategy is centered around its emphasis on fundamental credit selection and ongoing relative value across asset classes and industry sectors, along with a focus on current income, with the goal of generating consistent returns and relative outperformance across credit cycles. Expected sector exposures are 25-75% Lev Loans, 25-75% High Yield Bonds, 0-10% IG/Crossover Bonds and 5-20% Structured Credit.

Investment Process: Investment analyst will complete a formal investment memo and present it at a US Public Credit Committee meeting to the Global Head of Research and the Portfolio Managers. Portfolio Managers will then assess the merits and relative total return potential as they seek to build a portfolio to maximize risk adjusted returns. The Portfolio Managers also evaluate relative value across asset classes, and macroeconomic and technical market trends, to determine appropriate sizing investments, issuers, and asset classes. In general, they seek to have issuer concentrations of 1-2%, with certain high conviction names generally in the range of 3-5%. The investment team meets multiple times per week on a formal basis to discuss any information that may affect the team's opinions on existing or potential new investments. The analysts provide updates on company specific announcements and reporting, pertinent industry or sector information and pending new issues. Traders provide technical updates on the market and individual credits, including trading levels, technical market factors affecting capital flows, and issuer trading activity

Shenkman

Organization: Shenkman is headquartered in New York, NY with offices in Stamford, CT, Boca Raton, FL and London, UK. The Firm was founded in 1985 by Mark R. Shenkman, who remains President and controlling shareholder. Ownership is shared by 15 other senior team members, one former team member and one outside director (and/or trusts controlled by them). Mark and family trusts own 78% while the 20 current and former employee and outside own the remaining 22%. Shenkman has a dedicated focus on credit markets. As of September 30, 2023, total firm assets were $29.4 billion across strategies, and total AUM in the proposed Multi-Asset Credit strategy was $3.2 billion.

Investment Team: Justin Slatky and Robert Kricheff MAC Portfolio Managers work closely together as a team and share ultimate authority and accountability for the MAC strategy. As CIO, Justin determines key market themes and outlines acceptable risk exposures to the investment team, who then work as a unit to implement our MAC strategy. Portfolio Managers of the various asset classes incorporate the MAC Portfolio Managers' investment decisions into their daily processes for the client accounts in their respective product areas. The strategy also regularly draws upon all the firm's resources, as it incorporates nearly all of the strategies the firm pursues. The MAC strategy benefits from the entire investment team which includes the CIO, 14 Portfolio Managers, 16 Credit Researchers, 7 Traders, 7 Quant analysts, and 6 research associates.

Investment Philosophy: Shenkman's investment philosophy centers on the basic tenet that comprehensive, fundamental credit research is the key to realizing above-average returns over a full market cycle. They believe this core principle is essential to properly manage the inherently higher credit risk associated with non-investment grade assets. They have developed a structured and disciplined credit process that includes using proprietary tools to analyze historical and projected operating performance and trends, including liquidity, cash flow, and a working capital analysis. The MAC strategy builds on Shenkman's traditional philosophy of income generation, while exploiting their in-depth credit knowledge to fully express their broad perspectives on credit, unconstrained by asset class.

Investment Process: The firm's investment approach is characterized by a strong emphasis on fundamental credit analysis, which is conducted by a 22-person credit research team. This team is organized by industry, covering the entire capital structure of issuers within their respective sectors. The firm utilizes a structured, disciplined process that features their proprietary C-Scope score that they believe is a more accurate measure of a company's credit worthiness. The team follows a thorough multi-step process that includes the Credit Analyst conducting their proprietary C-Scope score, followed by a detailed credit report and a risk assessment. All investment ideas are presented to the Credit Committee for debate. Decisions are made by 2/3 approval via a blind-ballot process. Once approved, buy/sell decisions are determined with risk management reports closely monitored. Liquidity risk is addressed through a proprietary liquidity score assigned to all issues in traditional strategies, which is updated monthly and reflects the frequency of trading. This score ranges from L1 (most liquid) to L4 (lowest liquidity). Additionally, Shenkman establishes a Credit Line for each issue purchased, limiting aggregate exposure across all client accounts. Concentration risk is mitigated through broad diversification, typically including diversification of investment risk with a practice of not exceeding 3% in issue/issuer concentration. The strategy typically targets 20-60% High Yield Bonds, 20-60% Leveraged Loans, 10-20% Convertible Bonds, 5-15% CLOs and 0-10% Emerging Markets Debt.

Portfolio Characteristics, Historical Performance, and Management Fees

Portfolio Characteristics
As of September 30, 2023

	Anchorage	KKR - GCOF	KKR - KMAC	HPS	Shenkman	*50/50 Index*[1]
Portfolio Profile						
Average Duration	2.0	1.7	1.3	1.1	1.9	*1.9*
Average Coupon	7.9	10.3	7.9	8.9	6.4	*7.4*
Yield to Worst	11.2	10.9	9.2	10.8	7.7	*9.2*
Average Price	84.6	95.4	94.7	88.2	93.0	*93.3*
Average Quality	B	CCC+	B	B	B+	*B+*
Credit Quality Breakdown (%)						
AAA, AA, and A	-3	0	0	3	-	-
BBB	2	1	2	4	8	*1*
BB	26	7	23	18	27	*31*
B	43	41	53	51	37	*57*
CCC or Lower	27	37	10	19	9	*10*
Not Rated	1	13	12	4	20	*1*
Sector Allocation (%)						
US Treasury and Agency	-3	-	-	-	-	-
US IG Corporate Bonds	1	0	0	1	-	-
US High Yield Corporate Bonds	40	39	25	33	40	*50*
Developed Corp. Bonds	-	8	10	-	-	-
CLO	25	6	15	15	3	-
Other Structured Credit	-	-	-	-	-	-
Bank Debt (Leveraged Loans)	20	40	46	49	32	*50*
Convertible Bonds	4	4	4	-	16	-
Preferred Stock	-	-	-	2	-	-
Equity	-	2	-	0	-	-
Cash Equivalents	5	-	-	-	7	-
Other	-	0	-	-	2	-
Portfolio Concentration						
Number of Issuers/Issues	120/176	215/280	710/1070	176/232	639/1136	*2169/3390*
% of portfolio in top 10 issuers	28	27	8	17	10	*13*
% of portfolio in top 25 issuers	48	50	15	35	21	*21*
% of portfolio <$500M facility/issue size	45	28	32	28	20	*18*

[1] 50/50 Index – 50% ICE BofA US High Yield / 50% Morningstar LSTA US Leveraged Loan Index.

Trailing and Calendar Year Performance (Gross of Fees)[1]
As of September 30, 2023

	Anchorage	KKR - GCOF	KKR - KMAC	HPS	Shenkman	*50/50 Index*[2]
Trailing Period Returns (%)						
MRQ	2.6	3.8	2.6	4.4	1.4	2.0
YTD	8.9	16.2	10.0	10.4	7.4	8.1
1 year	10.5	17.5	13.7	12.6	11.3	11.6
3 years	5.0	7.2	4.9	6.2	4.4	4.0
5 years	5.9	5.7	4.5	5.3	4.8	3.7
7 years	6.6	7.1	5.1	6.0	5.9	4.2
10 years	--	7.3	5.0	6.3	5.7	4.3
Calendar Year Returns (%)						
2022	-8.0	-8.8	-4.9	-6.5	-6.1	-6.0
2021	8.7	8.2	5.1	8.8	4.9	5.3
2020	12.1	8.7	6.0	9.8	11.7	4.7
2019	13.0	9.7	10.3	9.1	13.7	11.5
2018	1.9	3.3	0.9	2.2	-0.6	-0.9
2017	7.7	10.7	6.7	6.8	8.3	5.8
2016	20.6	22.1	10.4	12.0	16.4	13.8
2015	--	-0.7	0.2	5.4	-3.0	-2.7
2014	--	1.5	2.9	2.8	3.0	2.1

[1] Returns sourced manager responses to initial RFP.
[2] 50/50 Index – 50% ICE BofA US High Yield / 50% Morningstar LSTA US Leveraged Loan Index.

Common Period Returns and Risk Statistics (Gross of Fees)[1]
As of September 30, 2023

	Anchorage	KKR - GCOF	KKR - KMAC	HPS	Shenkman	*50/50 Index*[2]
Performance:						
Returns (%)	7.2	7.3	4.8	6.1	5.3	*4.1*
Up Period Percent	82	78	40	52	69	--
Down Period Percent	83	66	94	89	37	--
Risk Measures:						
Standard Deviation (%)	6.8	8.3	6.0	6.8	7.4	*6.6*
Tracking Error (%)	1.6	2.9	1.4	2.4	1.7	--
Beta	0.99	1.19	0.89	0.96	1.09	*1.00*
Correlation to Benchmark	0.97	0.95	0.98	0.93	0.98	--
Downside Deviation (%)	7.63	10.31	7.25	8.74	8.35	*8.0*
Upside Capture (%)	122	133	92	100	121	--
Downside Capture (%)	81	97	74	67	111	--
Risk-Adjusted Performance:						
Jensen's Alpha (%)	3.06	2.65	1.01	2.03	0.98	---
Sharpe Ratio	0.87	0.72	0.58	0.69	0.54	*0.42*
Information Ratio	1.97	1.10	0.53	0.80	0.73	--

[1] Common period is June 2015. Risk statistics calculated relative to the blended index of 50% ICE BofA US High Yield / 50% Morningstar LSTA US Leveraged Loan Index.
[2] 50/50 Index – 50% ICE BofA US High Yield / 50% Morningstar LSTA US Leveraged Loan Index.

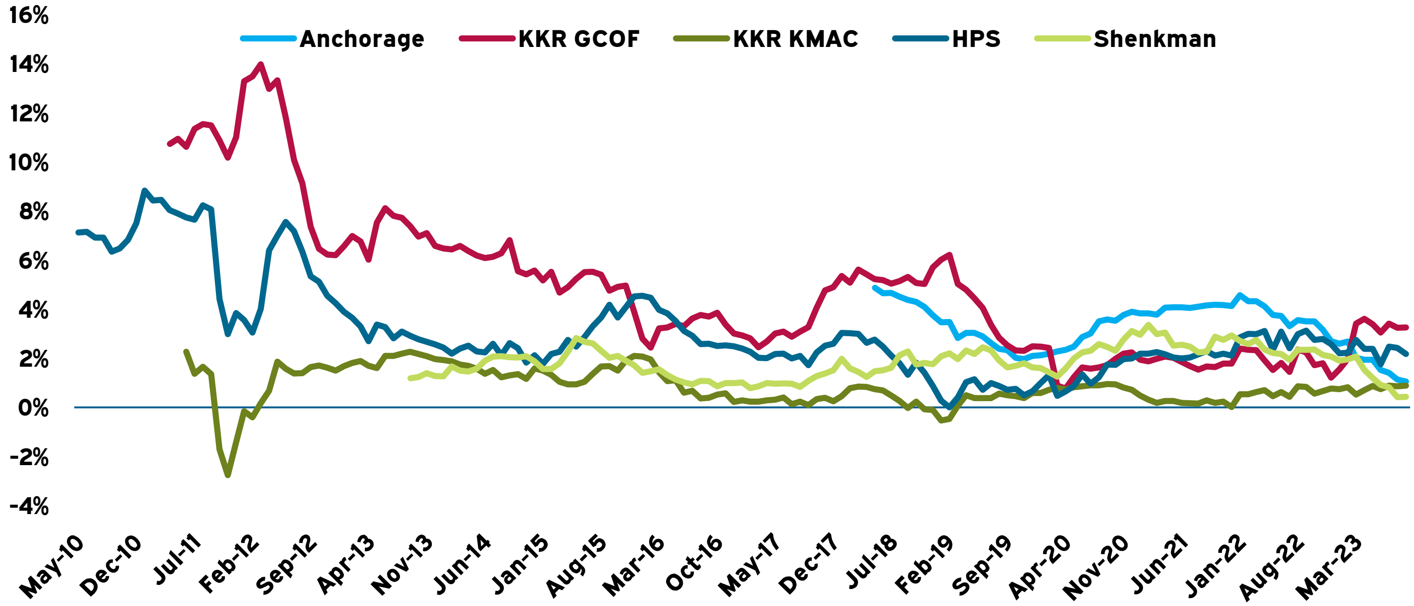
Correlation Matrix – Excess Returns (Gross of Fees)[1]

As of 09/30/2023	Anchorage	KKR - GCOF	KKR - KMAC	HPS	Shenkman
Anchorage	1.00	0.42	0.15	0.44	0.24
KKR – GCOF	0.42	1.00	0.04	0.33	0.35
KKR – KMAC	0.15	0.04	1.00	0.58	-0.17
HPS	0.44	0.33	0.58	1.00	0.07
Shenkman	0.24	0.35	-0.17	0.07	1.00

[1] Common period is June 2015 to September 2023. Risk statistics calculated relative to the blended index of 50% ICE BofA US High Yield / 50% Morningstar LSTA US Leveraged Loan Index.

Three-year Rolling Excess Returns vs. 50/50 Index

June 2002 to September 2023



As of 09/30/2023	Total Periods	Periods Outperformed	Percentage (%)	Average Excess Return (%)	Median Excess Return (%)	Max (%)	Min (%)	Range (%)
Anchorage	65	65	100	3.3	3.5	4.9	1.1	3.8
KKR – GCOF	150	150	100	4.8	4.3	14.0	0.8	13.2
KKR – KMAC	148	138	93	0.8	0.7	2.3	-2.8	5.0
HPS	161	161	100	3.1	2.5	8.8	0.0	8.8
Shenkman	121	121	100	1.8	1.9	3.4	0.4	3.0

Management Fees

→ The median fee for a $250 million Multi-Asset Credit separate account mandate is 46 basis points (0.46%). The median fee for a $500 million mandate is 44 basis points (0.44%).

- Anchorage's proposed fee ranks in the 1st quartile for a $250 million mandate and 2nd quartile for a $500 million mandate.
- KKR's proposed fee for GCOF ranks in the 4th quartile for a $250 million and for a $500 million mandate.
- KKR's proposed fee for KMAC ranks in the 1st quartile for a $250 million and for a $500 million mandate.
- HPS's proposed fee ranks in the 1st quartile for a $250 million and for a $500 million mandate.
- Shenkman's opposed fee ranks in the 1st quartile for a $250 million and for a $500 million mandate.

→ Assuming a $2 billion total Multi-Asset Credit portfolio, the blended effective fee based on the three illustrative scenarios on the following page would be between 0.33% to 0.37%. This blended fee would be in the 1st quartile.

Multi-Asset Credit Fixed Income Recommendation

Recommendation and Supporting Analysis

→ Staff and Meketa collaborated on analysis of the investment managers under consideration, and the preferable construction of the asset class. In terms of portfolio construction, we looked across several dimensions: first, through a qualitative assessment of the investment strategies, and second, through a returns-based analysis, to provide a holistic view at the total portfolio level.

→ For the returns-based analysis, we created portfolio combinations using historical returns. These portfolios ranged from a 60-80% allocation to the "diversified" strategies, with the remainder split between two managers selected from the "opportunistic" subset. The monthly excess return correlations over the common period for each manager showed that return streams for each portfolio are relatively uncorrelated.

→ Since each manager provides diversification benefits to the others, the objective is to find the allocation mix which maximizes risk-adjusted returns—here defining risk both on an absolute (beta/standard deviation/Sharpe) and relative (tracking error/information ratio) basis.

→ As we narrowed down our short list to KKR – KMAC, HPS and Shenkman as the "diversified" managers paired with Anchorage and KKR - GCOF as the "opportunistic" managers, the return analysis that follows was done over the common period of June 2015 to September 2023.

Recommendation and Supporting Analysis (continued) [1]

Portfolio Weights (%)	1	2	3
Anchorage	10	15	20
KKR - GCOF	10	15	20
KKR - KMAC	26.7	23.3	20
HPS	26.7	23.3	20
Shenkman	26.7	23.3	20
Return & Risk			
Return	5.8	6.0	6.2
Excess Return	1.7	1.9	2.1
Tracking Error	1.3	1.3	1.3
Standard Deviation	6.8	6.9	6.9
Beta	1.00	1.01	1.02
Information Ratio	1.36	1.49	1.58
Sharpe Ratio	0.66	0.68	0.70

→ As illustrated above, each incremental allocation to the opportunistic managers modestly increases the total portfolio's relative risk as measured by beta and standard deviation. The incremental allocations also improved risk adjusted returns as measured by Information Ratio and Sharpe Ratio. We believe the incremental credit risk within the portfolios of Anchorage and KKR-GCOF do not warrant additional allocations above a total of 40% in Scenario 3.

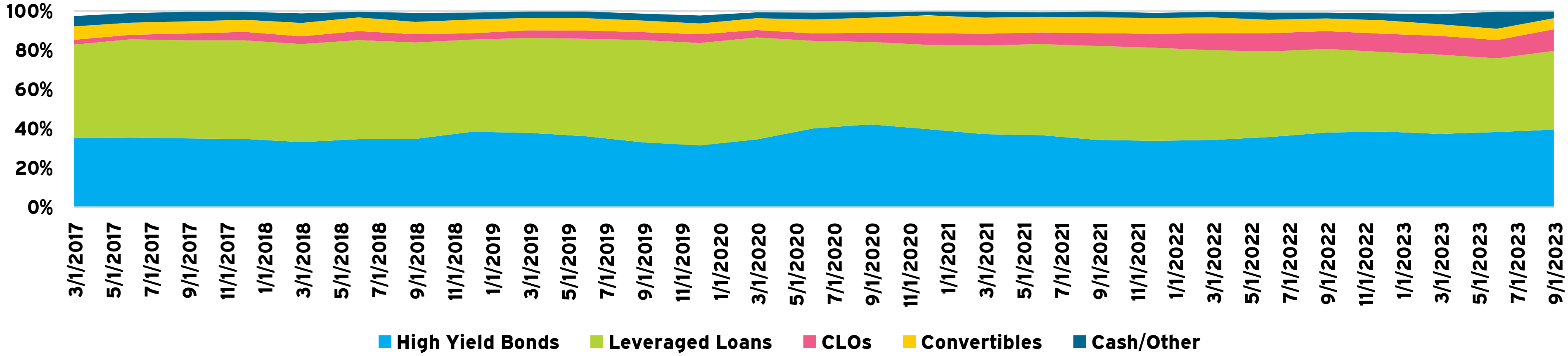
→ Please note that the portfolio weightings in each of the three scenarios above are for illustrative purposes only.

We recommend that the Multi-Asset Credit mandate target allocation weights of 10-20% Anchorage, 10-20% KKR-GCOF, 20-30% KKR-KMAC, 20-30% HPS, and 20-30% Shenkman within Mass PRIM's overall allocation to Multi-Asset credit fixed income. This structure allows for an allocation to broadly diversified strategies (KKR-KMAC, HPS and Shenkman), paired with two complementary, "opportunistic" strategies (Anchorage, KKR-GCOF) that have the potential to generate alpha in their credit allocations across multiple credit sectors. We believe any allocation to the individual strategies within the recommended ranges are appropriate.

[1] Benchmark: 50% ICE BofA US High Yield / 50% Morningstar LSTA US Leveraged Loan Index. Common period is June 2015 to September 2023. All returns are gross of fees.

Recommendation and Supporting Analysis (continued) [1]

Model Portfolio 2 Historical Sector Exposures



→ As part of the scenario analysis, we analyzed the historical sector exposures that result from various weightings to the 'opportunistic' and 'diversified' managers. For illustrative purposes, we have displayed Model 2 in the chart above. Over the common period, we found that given the diversification across these sets of managers, the total portfolio remained well diversified across the underlying credit sectors. We found that the model portfolio averaged 36% exposure to High Yield Bonds, 47% exposure to Leveraged Loans, 6% exposure to CLOs, 7% exposure to convertibles and 4% to Cash/Other.

[1] Model Portfolio 2 is based on a 15% allocation to Anchorage, 15% allocation to KKR GCOF, 23% allocation to KKR KMAC, 23% allocation to HPS, and 23% allocation to Shenkman.

Appendix

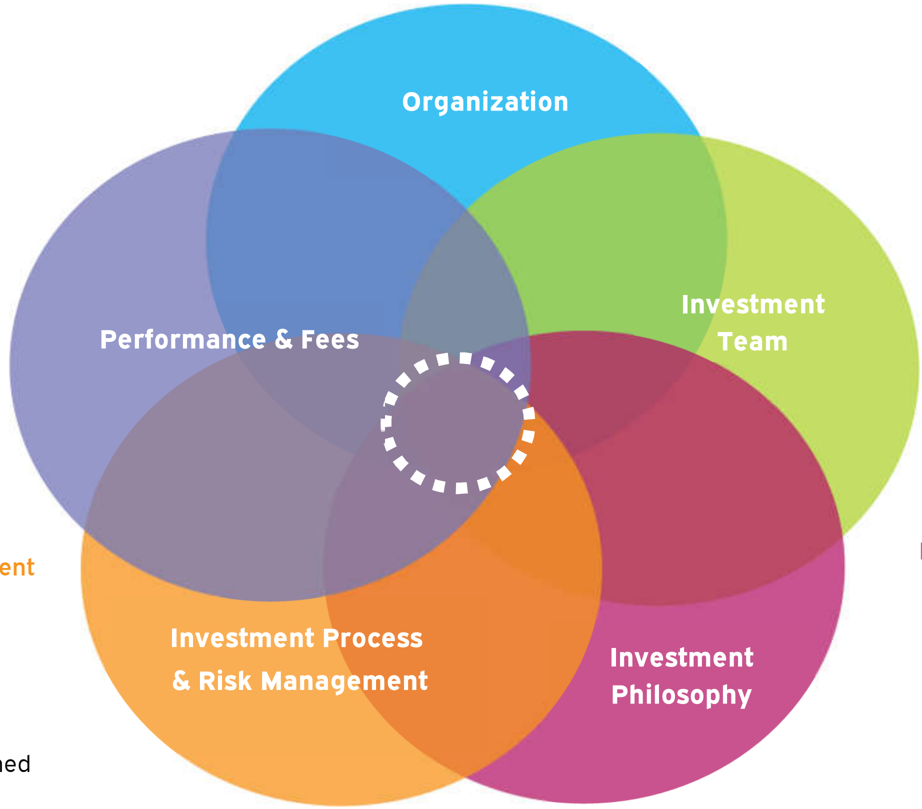
Manager Evaluation Criteria

The Five Key Areas of the Meketa Investment Manager Evaluation Process

Organization
- → Stability
- → Focus
- → Employee ownership
- → Investment driven culture
- → Operationally sound

Performance & Fees
- → Validates process
- → Long-term record
- → Risk-adjusted returns
- → Reasonable fees

Investment Team
- → Experience
- → Depth of resources
- → Team-oriented, performance driven
- → Stock selection ability
- → Investment intuition



Investment Process & Risk Management
- → Level of due diligence
- → Thought process assessment
- → Communication
- → Decision-making and portfolio construction
- → Self-evaluation / lessons learned
- → Risk controls

Investment Philosophy
- → Set of beliefs
- → Stock price determinants
- → Reasons for mispricing
- → Competitive edge / how add value
- → Avoid the tails
- → High Quality bias

Manager Evaluation Criteria

Organization

→ While there is no single "correct" way to organize an asset management effort, we believe that the ideal investment management organization possesses most of the following elements:

- Focused on a single investment style or a focused team within a larger organization.
- Appropriately sized for the firm's assets under management, with a reasonable growth plan and a willingness to close capacity-constrained strategies.
- Stable, investment driven, independent, and employee-owned (or majority employee-owned).
- Performance driven with a team-oriented, supportive culture.
- Organized in such a way to ensure that information flows efficiently so that investment decisions can be made easily and, if necessary, quickly.
- Financially and operationally sound.

Manager Evaluation Criteria (continued)

Investment Team

Members of the investment team responsible for managing the strategy are evaluated in order to assess their competitive "edge" and to determine if they will be able to add value in the future. In a profession where intellectual capital is the greatest differentiator between managers, an investment strategy is only as good as the people behind it.

During the course of our due diligence, we review the background of each member of the team. We want to know what motivated these individuals to work in the fixed income management business, what experience they bring, and how long they have been in the industry.

Specific qualities that we believe make a good credit investor are intelligence, inquisitiveness, analytical ability, and natural skepticism. A command of the details and an ability to assimilate lots of information, yet tie the information together and make a decision, are valued. Through the interview process, we seek to understand how a manager thinks about bonds, the bond market, and their portfolio.

In credit, it is important that investment teams have sufficient resources allocated to evaluating the legal documents and covenants of each bond. Managers will either have lawyers on their teams, retain outside counsel, or train their analyst teams to complete a legal review.

Significant time is spent evaluating how the investment team interacts, their tenure together and their depth. Although some firms have been successful using the generalist model, we prefer specialization. Our belief is that there is value in having analysts with specific sector expertise who have followed an industry through multiple cycles.

Compensation structure and incentives are also analyzed. The investment team should be incented to place the interests of the client first and to maximize performance while assuming an appropriate level of risk.

Manager Evaluation Criteria (continued)

Investment Philosophy

An investment philosophy is a set of beliefs about what factors drive changes in bond prices, what factors cause securities to be mispriced, and how security mispricing can be exploited through active management. A manager's investment philosophy also incorporates their beliefs about what their competitive edge is and how they distinguish themselves from their peers.

We try to find managers who have a clear investment philosophy, and who can articulate how they are able to identify undervalued bonds and take advantage of the opportunities they uncover. Understanding where this philosophy comes from, how it has evolved over time, and how the manager identifies and selects attractive investments using their research process are very important. Some managers may not have formally thought about their philosophy and are therefore not able to articulate what they believe. Their philosophy often becomes evident when they explain their investment process and discuss the bonds they own in their portfolio.

Another element of a manager's philosophy is how they think about the benchmark they are evaluated against. Most managers we recommend are either benchmark aware or believe in managing portfolios in a benchmark agnostic manner. We are biased toward managers who have conviction in their ideas and reflect that conviction by establishing relatively large positions in their portfolios.

Manager Evaluation Criteria (continued)

Investment Process

Every analysis of an investment manager must entail an examination of how they pick bonds for their portfolio, why they sell bonds from the portfolio, and how their portfolio is constructed. We like investment processes that are straightforward and easy to understand. Although we want to see consistency in the process, there is considerable art to investing. A repeatable process, in and of itself, does not guarantee good investment results. It is in the execution of the process where managers differentiate themselves and add value.

In our analysis, we determine whether the portfolio is bottom-up driven, or if there is a significant top-down element to the process. Themes can also play a role in how portfolios are managed.

With this information as a backdrop, our analysis of the investment process initially focuses on how new ideas are generated and how these ideas find their way into the portfolio. Once the opportunity set has been identified, we seek to understand what kind of fundamental research a manager performs. Superior managers generally perform intensive due diligence and their level of understanding of the businesses in which they invest often gives them an edge. We want to make sure they know what they own in their portfolios.

Once the research on an idea has been completed, an investment decision must be made. Ultimately, successful active fixed income management requires exercising good judgment. We always want to know how managers make investment decisions and who makes them. It is important to us that investment ideas are thoroughly vetted. We also want the decision-making process to be efficient and responsive to changing dynamics in the market. How managers construct their portfolios, and think about, as well as control, risk is also evaluated.

Manager Evaluation Criteria (continued)

Investment Performance

Just because a manager has performed well in the past does not guarantee they will be able to continue to do so in the future. We do feel that if we can find strong organizations with bright, motivated, knowledgeable, and experienced people, combined with a history of long-term, consistent success, we significantly increase the chances that managers we recommend to clients will add value in the future. If we are correct in our assessment of the quality of the organization and the people, then the performance should follow.

Portfolio performance over multiple time horizons is evaluated. We review calendar-year results over as long a period as possible. We also examine rolling time periods to eliminate the impact of end point bias. We do not expect a manager to outperform the relevant index every year, but we do believe they should outperform over a full market cycle. What we are looking for is consistency. In addition, we analyze each manager's risk-adjusted returns. We want to make sure that our clients are being compensated for the risk the manager is taking. For each manager, we also look at the standard deviation, beta, tracking error, and correlation with the benchmark. Our analysis of upside and downside capture gives us a sense of which managers can be expected to perform well in up and down markets. We have a bias toward fixed income managers who protect their clients on the downside because of the asymmetric nature of fixed income returns.

We review the portfolio holdings of each manager to verify their investment style, to assess where their biases are, and to determine where they have been able to add value. We always look at security-level performance attribution. This analysis tells us what helped and hurt the portfolio, and in which industries a manager is particularly adept. We also look at the distribution of returns within the portfolio. Avoiding bad credits and credit downgrades, or minimizing their impact, is an important part of successfully managing a diversified portfolio.

Manager Evaluation Criteria (continued)

Management Fees

The final step in our analysis is evaluating an investment manager's fees and the expenses they incur in managing the portfolio. Minimizing fees and expenses is important because these costs reduce the return to our clients. This effect can be very pronounced over time, so we seek to negotiate lower fees whenever possible.

Trading costs are another hidden expense to investors and must also be evaluated. In general, portfolio managers with high turnover trading less liquid bonds will incur the highest trading costs.

Information Ratio: This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

Sharpe Ratio: A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk-free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

Standard Deviation: A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

Tracking Error: This statistic measures the standard deviation of excess returns relative to a benchmark. Tracking error is calculated by multiplying the standard deviation of the monthly excess returns of a portfolio relative to a benchmark by the square root of twelve in order to annualize. The higher the tracking error, the greater the volatility of excess returns relative to a benchmark.

Upside/Downside Market Capture: A measure of the manager's performance in up(down) markets relative to the market itself. For UMC, a value of 110 suggests the manager performs ten percent better than the market when the market is up during the selected time period. For DMC, A value of 90 suggests the manager's loss is only nine tenths of the market's loss during the selected time period. The Upside/Downside Capture Ratio is calculated by dividing the return of the manager during the up-market periods by the return of the market for the same period. Generally, the higher the UMC Ratio and lower the DMC, the better (If the manager's UMC Ratio is negative, it means that during that specific time period, the manager's return for that period was actually negative and if the DMC is negative, the manager's return for that period was actually positive)

Up/Down Period Percent: Measures the number of periods that a fund outperformed the benchmark when the benchmark return was greater(less) or equal to than 0%, divided by the number of periods that the benchmark return was greater(less) than or equal to 0%. The larger the ratio, the better, indicating the percentage of periods that the product outperformed the benchmark in an up(down) market.

Sources:

www.evestment.com

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