Kayne Anderson

MLP Investment Company

Kayne Anderson MLP Investment Company Provides Unaudited Balance Sheet Information and Announces its Net Asset Value and Asset Coverage Ratios at September 30, 2010

Houston, TX – October 4, 2010 – Kayne Anderson MLP Investment Company (the "Company") (NYSE: KYN) today provided a summary unaudited balance sheet and announced its net asset value and asset coverage ratios under the Investment Company Act of 1940 (the "1940 Act") as of September 30, 2010.

As of September, 2010, the Company's net assets were \$1.7 billion and its net asset value per share was \$25.27. As of September 30, 2010, the Company's asset coverage ratio under the 1940 Act with respect to senior securities representing indebtedness was 475% and the Company's asset coverage ratio under the 1940 Act with respect to total leverage (debt and preferred stock) was 388%.

Kayne Anderson MLP Investment Company Balance Sheet September 30, 2010 (Unaudited)

	(in millions)	Per Share
Investments	\$ 2,654.8	\$ 38.93
Repurchase agreement and cash	0.6	0.01
Deposits	0.3	0.00
Accrued income	0.9	0.01
Receivable for securities sold	15.1	0.22
Other assets	5.5	0.08
Total assets	2,677.2	39.25
Credit facility borrowings	9.0	0.13
Senior notes	480.0	7.04
Preferred stock	110.0	1.61
Total leverage	599.0	8.78
Payable for securities purchased	29.7	0.43
Deferred tax liability	314.6	4.61
Other liabilities	10.5	0.16
Total liabilities	354.8	5.20
Net assets	\$ 1,723.4	\$ 25.27

The Company had 68.19 million common shares outstanding as of September 30, 2010.

Long-term investments were comprised of Midstream MLPs (67%), General Partner MLPs (12%), MLP Affiliates (9%), Propane MLPs (4%), Shipping (5%), Upstream MLPs (2%), and Coal (1%).

The Company's ten largest holdings by issuer at September 30, 2010 were:

	Units/Par (\$) (in thousands)	Amount (\$ millions)	Percent of Long-Term Investments
Enterprise Products Partners L.P. (Midstream MLP)	5,122	203.2	7.7%
Magellan Midstream Partners, L.P. (Midstream MLP)	3,752	192.8	7.3%
Plains All American Pipeline, L.P. (Midstream MLP)	2,876	181.0	6.8%
Kinder Morgan Management, LLC (MLP Affiliate)	2,846	171.5	6.5%
MarkWest Energy Partners, L.P. (Midstream MLP)	3,780	135.8	5.1%
Williams Partners L.P. (Midstream MLP)	2,989	126.7	4.8%
Inergy, L.P. (Propane MLP)	2,810	111.4	4.2%
Energy Transfer Equity, L.P. (General Partner MLP)	2,638/\$7,500	105.8	4.0%
Copano Energy, L.L.C. (Midstream MLP)	3,510	96.2	3.6%
Energy Transfer Partners, L.P. (Midstream MLP)	1,876	90.6	3.4%
	Magellan Midstream Partners, L.P. (Midstream MLP) Plains All American Pipeline, L.P. (Midstream MLP) Kinder Morgan Management, LLC (MLP Affiliate) MarkWest Energy Partners, L.P. (Midstream MLP) Williams Partners L.P. (Midstream MLP) Inergy, L.P. (Propane MLP) Energy Transfer Equity, L.P. (General Partner MLP) Copano Energy, L.L.C. (Midstream MLP)	Enterprise Products Partners L.P. (Midstream MLP) Magellan Midstream Partners, L.P. (Midstream MLP) Plains All American Pipeline, L.P. (Midstream MLP) Kinder Morgan Management, LLC (MLP Affiliate) MarkWest Energy Partners, L.P. (Midstream MLP) Williams Partners L.P. (Midstream MLP) Jayren Jayre	Enterprise Products Partners L.P. (Midstream MLP) Magellan Midstream Partners, L.P. (Midstream MLP) Plains All American Pipeline, L.P. (Midstream MLP) Xinder Morgan Management, LLC (MLP Affiliate) MarkWest Energy Partners, L.P. (Midstream MLP) Williams Partners L.P. (Midstream MLP) Jayred Jayre

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Kayne Anderson MLP Investment Company is a non-diversified, closed-end management investment company registered under the Investment Company Act of 1940, whose common stock is traded on the NYSE. The Company's investment objective is to obtain a high after-tax total return by investing at least 85% of its total assets in energy-related master limited partnerships and their affiliates, and in other companies that, as their principal business, operate assets used in the gathering, transporting, processing, storing, refining, distributing, mining or marketing natural gas, natural gas liquids (including propane), crude oil, refined petroleum products or coal.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS: This press release contains "forward-looking statements" as defined under the U.S. federal securities laws. Generally, the words "believe," "expect," "intend," "estimate," "anticipate," "project," "will" and similar expressions identify forward-looking statements, which generally are not historical in nature. Forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ from the Company's historical experience and its present expectations or projections indicated in any forward-looking statements. These risks include, but are not limited to, changes in economic and political conditions; regulatory and legal changes; MLP industry risk; leverage risk; valuation risk; interest rate risk; tax risk; and other risks discussed in the Company's filings with the SEC. You should not place undue reliance on forward-looking statements, which speak only as of the date they are made. The Company undertakes no obligation to publicly update or revise any forward-looking statements made herein. There is no assurance that the Company's investment objectives will be attained.

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