

Kayne Anderson MLP Investment Company Provides Unaudited Balance Sheet Information and Announces its Net Asset Value and Asset Coverage Ratios at March 31, 2010

Houston, TX – April 1, 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 March 31, 2010.

As of March 31, 2010, the Company’s net assets were \$1.331 billion and its net asset value per share was \$22.91. As of March 31, 2010, the Company’s asset coverage ratio under the 1940 Act with respect to senior securities representing indebtedness was 438% and the Company’s asset coverage ratio under the 1940 Act with respect to total leverage (debt and preferred stock) was 371%.

Kayne Anderson MLP Investment Company
Balance Sheet
March 31, 2010
(Unaudited)

	(in millions)
Investments	\$ 2,019.4
Repurchase agreements and cash	2.1
Deposits	0.7
Accrued income	0.6
Receivable for securities sold	6.9
Other assets	2.5
Total assets	<u>2,032.2</u>
Short-term borrowings	46.0
Senior notes	370.0
Preferred stock	75.0
Total leverage	<u>491.0</u>
Payable for securities purchased	3.2
Deferred tax liability	197.5
Other liabilities	9.1
Total liabilities	<u>209.8</u>
Net assets	<u>\$ 1,331.4</u>

58.1 million common shares currently outstanding

Long-term investments were comprised of Midstream MLPs (70%), General Partner MLPs (9%), MLP Affiliates (9%), Propane MLPs (6%), Shipping (4%), Upstream MLPs (1%), and Coal (1%).

The Company's ten largest holdings by issuer at March 31, 2010 were:

	Units/Par (\$ (in thousands))	Amount (\$ millions)	Percent of Long-Term Investments
1. Plains All American Pipeline, L.P. (Midstream MLP)	2,876	163.7	8.1%
2. Enterprise Products Partners L.P. (Midstream MLP)	4,385	151.6	7.5%
3. Magellan Midstream Partners, L.P. (Midstream MLP)	3,150	149.7	7.4%
4. Kinder Morgan Management, LLC (MLP Affiliate)	2,371	139.0	6.9%
5. Inergy, L.P. (Propane MLP)	3,252	122.9	6.1%
6. MarkWest Energy Partners, L.P. (Midstream MLP)	3,519	107.8	5.3%
7. Copano Energy, L.L.C. (Midstream MLP)	3,634	87.7	4.3%
8. Energy Transfer Equity, L.P. (General Partner MLP)	2,452	82.7	4.1%
9. Energy Transfer Partners, L.P. (Midstream MLP)	1,724	80.8	4.0%
10. Regency Energy Partners LP (Midstream MLP)	3,358	73.7	3.7%

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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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