Kayne Anderson MLP Investment CO Form N-30B-2 October 28, 2011

CONTENTS

	Page
Management Discussion	1
Schedule of Investments	5
Statement of Assets and Liabilities	8
Statement of Operations	9
Statement of Changes in Net Assets Applicable to Common Stockholders	10
Statement of Cash Flows	12
Financial Highlights	13
Notes to Financial Statements	16

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS: This report of Kayne Anderson MLP Investment Company (the Company) contains forward-looking statements as defined under the U.S. federal securities laws. Generally, the words believe, expect, intend, estimate, anticipate, will 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 materially 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; master limited partnership industry risk; leverage risk; valuation risk; interest rate risk; tax risk; and other risks discussed in the Company s filings with the Securities and Exchange Commission (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 update or revise any forward-looking statements made herein. There is no assurance that the Company s investment objectives will be attained.

KAYNE ANDERSON MLP INVESTMENT COMPANY MANAGEMENT DISCUSSION (UNAUDITED)

Company Overview

Kayne Anderson MLP Investment Company is a non-diversified, closed-end fund that commenced operations in September 2004. Our investment objective is to obtain a high after-tax total return by investing at least 85% of our total assets in energy-related master limited partnerships and their affiliates (MLPs) and in other companies that operate assets used in the gathering, transporting, processing, storing, refining, distributing, mining or marketing of natural gas, natural gas liquids, crude oil, refined petroleum products or coal (collectively with MLPs, Midstream Energy Companies).

As of August 31, 2011, we had total assets of \$3.4 billion, net assets applicable to our common stock of \$1.9 billion (net asset value per share of \$26.01), and 74.9 million shares of common stock outstanding.

Our investments are principally in equity securities issued by MLPs, but we may also invest in debt securities of MLPs and debt/equity securities of Midstream Energy Companies. As of August 31, 2011, we held \$3.3 billion in equity investments and \$45.5 million in debt investments.

Recent Events

On October 17, 2011 we amended our senior unsecured revolving credit facility (the Credit Facility) to increase the total commitment amount to \$175.0 million. This \$25.0 million increase in commitment amount was accomplished by adding a new lender to the syndicate. All other terms of the Credit Facility remain the same including the maturity date and interest rates.

Our Top Ten Portfolio Investments as of August 31, 2011

Listed below are our top ten portfolio investments by issuer as of August 31, 2011.

	Holding	Sector	Amount (\$ millions)	Percent of Long-Term Investments
1.	Enterprise Products Partners L.P.	Midstream MLP	\$ 276.6	8.2%
2.	Kinder Morgan Management, LLC	MLP Affiliates	222.0	6.6
3.	Magellan Midstream Partners, L.P.	Midstream MLP	188.9	5.6
4.	MarkWest Energy Partners, L.P.	Midstream MLP	182.6	5.4
5.	Plains All American Pipeline, L.P.	Midstream MLP	170.6	5.1
6.	Williams Partners L.P.	Midstream MLP General Partner	161.4	4.8
7.	Energy Transfer Equity, L.P.	MLP	148.1	4.4
8.	Regency Energy Partners LP	Midstream MLP	136.6	4.1
9.	Buckeye Partners, L.P.	Midstream MLP	132.6	3.9
10.	El Paso Pipeline Partners, L.P.	Midstream MLP	122.2	3.6
			\$ 1,741.6	51.7%

Results of Operations For the Three Months Ended August 31, 2011

Investment Income. Investment income totaled \$2.7 million and consisted primarily of net dividends and distributions and interest and other income on our investments. Interest and other income was \$1.2 million, and we received \$49.0 million of cash dividends and distributions, of which \$47.5 million was treated as return of capital during the quarter. During the quarter we received 2010 tax reporting information from out portfolio investments that increased our return of capital estimate by \$5.0 million. During the quarter, we received \$6.6 million of paid-in-kind dividends, which are not included in investment income, but are reflected as an unrealized gain.

1

KAYNE ANDERSON MLP INVESTMENT COMPANY MANAGEMENT DISCUSSION (UNAUDITED)

Operating Expenses. Operating expenses totaled \$25.4 million, including \$12.0 million of investment management fees, \$8.7 million of interest expense (including non-cash amortization of debt issuance costs of \$0.4 million), and \$1.1 million of other operating expenses. Management fees are calculated based on the average total assets under management. Preferred stock distributions for the quarter were \$3.6 million (including non-cash amortization of \$0.2 million).

Net Investment Loss. Our net investment loss totaled \$17.7 million and included a deferred income tax benefit of \$5.0 million.

Net Realized Gains. We had net realized gains from our investments of \$19.9 million, net of \$9.6 million of deferred tax expense.

Net Change in Unrealized Losses. We had net unrealized losses of \$79.6 million. The net unrealized losses consisted of \$127.6 million of unrealized losses from investments and a deferred tax benefit of \$48.0 million.

Net Decrease in Net Assets Resulting from Operations. We had a decrease in net assets resulting from operations of \$77.4 million. The composition of this decrease was as follows: (a) net investment loss of \$17.7 million; (b) net realized gains of \$19.9 million; and (c) net unrealized losses of \$79.6 million, as noted above.

Distributions to Common Stockholders

We pay quarterly distributions to our common stockholders, funded in part by net distributable income (NDI) generated from our portfolio investments. NDI is the amount of income received by us from our portfolio investments less operating expenses, subject to certain adjustments as described below. NDI is not a financial measure under the accounting principles generally accepted in the United States of America (GAAP). Refer to the Reconciliation of NDI to GAAP section below for a reconciliation of this measure to our results reported under GAAP.

Income from portfolio investments includes (a) cash dividends and distributions, (b) paid-in-kind dividends received (i.e., stock dividends), (c) interest income from debt securities and commitment fees from private investments in public equity (PIPE investments) and (d) net premiums received from the sale of covered calls.

Operating expenses include (a) investment management fees paid to our investment adviser, (b) other expenses (mostly attributable to fees paid to other service providers), (c) interest expense and preferred stock distributions and (d) deferred income tax expense/benefit on net investment income/loss.

2

KAYNE ANDERSON MLP INVESTMENT COMPANY MANAGEMENT DISCUSSION (UNAUDITED)

Net Distributable Income (NDI)

(amounts in millions, except for per share amounts)

	Three Months Ended August 31, 2011	
Distributions and Other Income from Investments		
Dividends and Distributions	\$	49.0
Paid-In-Kind Dividends		6.6
Interest and Other Income		1.2
Net Premiums Received from Call Options Written		0.9
Total Distributions and Other Income from Investments Expenses		57.7
Investment Management Fee		(12.0)
Other Expenses		(1.1)
Total Management Fee and Other Expenses Interest Expense		(13.1) (8.3)
Preferred Stock Distributions		(3.4)
Income Tax Benefit		5.0
Net Distributable Income (NDI)	\$	37.9
Weighted Shares Outstanding		74.8
NDI per Weighted Share Outstanding	\$	0.51

Payment of future distributions is subject to Board of Directors approval, as well as meeting the covenants of our debt agreements and terms of our preferred stock. In determining our quarterly distribution to common stockholders, our Board of Directors considers a number of factors that include, but are not limited to:

NDI generated in the current quarter;

Expected NDI over the next twelve months; and

Realized and unrealized gains generated by the portfolio.

On September 22, 2011, we increased our quarterly distribution to \$0.5025 from \$0.4975 per common share for the fiscal third quarter 2011 for a total quarterly distribution payment of \$37.6 million. The distribution was paid on October 14, 2011 to common stockholders of record on October 5, 2011.

Reconciliation of NDI to GAAP

The difference between distributions and other income from investments in the NDI calculation and total investment income as reported in our Statement of Operations is reconciled as follows:

GAAP recognizes that a significant portion of the cash distributions received from MLPs is characterized as a return of capital and therefore excluded from investment income, whereas the NDI calculation includes the return of capital portion of such distributions.

NDI includes the value of dividends paid-in-kind, whereas such amounts are not included as investment income for GAAP purposes, but rather are recorded as unrealized gains upon receipt.

NDI includes commitment fees from PIPE investments, whereas such amounts are generally not included in investment income for GAAP purposes, but rather are recorded as a reduction to the cost of the investment.

3

KAYNE ANDERSON MLP INVESTMENT COMPANY MANAGEMENT DISCUSSION (UNAUDITED)

Many of our investments in debt securities were purchased at a discount or premium to the par value of such security. When making such investments, we consider the security s yield to maturity, which factors in the impact of such discount (or premium). Interest income reported under GAAP includes the non-cash accretion of the discount (or amortization of the premium) based on the effective interest method. When we calculate interest income for purposes of determining NDI, in order to better reflect the yield to maturity, the accretion of the discount (or amortization of the premium) is calculated on a straight-line basis to the earlier of the expected call date or the maturity of the debt security.

We may sell covered call option contracts to generate income or to reduce our ownership of certain securities that we hold. In some cases, we are able to repurchase these call option contracts at a price less than the fee that we received, thereby generating a profit. The amount we received from selling call options, less the amount that we pay to repurchase such call option contracts is included in NDI. For GAAP purposes, premiums received from call option contracts sold is not included in investment income. See Note 2 Significant Accounting Policies for a full discussion of the GAAP treatment of option contracts.

The treatment of expenses included in NDI also differs from what is reported in the Statement of Operations as follows:

The non-cash amortization or write-offs of capitalized debt issuance costs and preferred stock offering costs related to our financings is included in interest expense and distributions on mandatory redeemable preferred stock for GAAP purposes, but is excluded from our calculation of NDI.

NDI also includes recurring payments (or receipts) on interest rate swap contracts (excluding termination payments) whereas for GAAP purposes, these amounts are included in the realized gains/losses section of the Statement of Operations.

Liquidity and Capital Resources

Total leverage outstanding at August 31, 2011 of \$1,035.0 million was comprised of \$775.0 million in senior unsecured notes and \$260.0 million in mandatory redeemable preferred stock. At August 31, 2011, we did not have any borrowings outstanding under our Credit Facility. Total leverage represented 30% of total assets at August 31, 2011. As of October 20, 2011, we had no borrowings under our Credit Facility.

The Credit Facility has a \$175.0 million commitment maturing on June 11, 2013. The Credit Facility was increased by \$25.0 million effective October 17, 2011. The interest rate may vary between LIBOR plus 1.75% and LIBOR plus 3.00%, depending on our asset coverage ratios. Outstanding loan balances accrue interest daily at a rate equal to one-month LIBOR plus 1.75% based on current asset coverage ratios. We pay a commitment fee of 0.40% per annum on any unused amounts of the Credit Facility. A full copy of our Credit Facility is available on our website, www.kaynefunds.com.

At August 31, 2011, our asset coverage ratios under the Investment Company Act of 1940, as amended (the 1940 Act), were 385% and 288% for debt and total leverage (debt plus preferred stock), respectively. We currently target an asset coverage ratio with respect to our debt of 375%, but at times may be above or below our target depending on market conditions.

At August 31, 2011, we had \$775.0 million of senior unsecured notes outstanding. Of this amount, \$60.0 million matures in 2012 and remaining \$715.0 million of senior unsecured notes matures between 2013 and 2022. At August 31, 2011, we had \$260.0 million of mandatory redeemable preferred stock, which is subject to mandatory redemption starting on 2017 through 2020.

As of August 31, 2011, our leverage consisted of both fixed rate (85%) and floating rate (15%) obligations. At such date, the weighted average interest rate on our leverage was 4.55%.

4

KAYNE ANDERSON MLP INVESTMENT COMPANY SCHEDULE OF INVESTMENTS AUGUST 31, 2011

$(amounts\ in\ 000\ \ s,\ except\ number\ of\ option\ contracts)\\ (UNAUDITED)$

Description	No. of Shares/Units	Value
Long-Term Investments 172.9%		
Equity Investments ⁽¹⁾ 170.5%		
Midstream MLP ⁽²⁾ 119.2%		
Boardwalk Pipeline Partners, LP	899	\$ 22,573
Buckeye Partners, L.P.	1,367	86,083
Buckeye Partners, L.P. Unregistered, Class B Unit(§)(4)	833	46,551
Chesapeake Midstream Partners, L.P.	1,013	28,236
Copano Energy, L.L.C.	1,911	61,948
Crestwood Midstream Partners LP	1,500	38,343
Crestwood Midstream Partners LP Unregistered, Class C Unit(§)(4)	1,094	24,578
Crosstex Energy, L.P.	2,173	35,608
DCP Midstream Partners, LP	1,958	75,916
Duncan Energy Partners L.P.	750	31,871
El Paso Pipeline Partners, L.P.	3,321	122,182
Enbridge Energy Partners, L.P.	2,985	85,070
Energy Transfer Partners, L.P.	2,061	92,874
Enterprise Products Partners L.P.	6,562	276,573
Exterran Partners, L.P.	2,384	54,328
Global Partners LP	1,896	37,820
Holly Energy Partners, L.P.	553	28,057
Magellan Midstream Partners, L.P.	3,150	188,884
MarkWest Energy Partners, L.P.	3,800	182,608
Martin Midstream Partners L.P.	93	3,302
Niska Gas Storage Partners LLC	1,091	13,836
ONEOK Partners, L.P.	2,120	92,143
PAA Natural Gas Storage, L.P.	1,531	27,689
Plains All American Pipeline, L.P. ⁽⁵⁾	2,814	170,593
Regency Energy Partners L.P.	5,722	136,638
Spectra Energy Partners, L.P.	1,265	36,759
Targa Resources Partners L.P.	1,529	52,452
TC PipeLines, LP	614	26,778
Tesoro Logistics LP	515	12,053
Transmontaigne Partners L.P.	667	22,602
Western Gas Partners L.P.	1,199	43,531
Williams Partners L.P.	2,979	161,426

2,319,905

MLP Affiliates⁽²⁾ 14.6%

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Enbridge Energy Management, L.L.C. ⁽⁴⁾ Kinder Morgan Management, LLC ⁽⁴⁾	2,234 3,669	61,514 221,962
		283,476
General Partner MLP 13.0%		
Alliance Holdings GP L.P.	1,462	69,466
Energy Transfer Equity, L.P.	3,873	148,095
Plains All American GP LLC Unregistered (5)	24	35,917
		253,478
Shipping MLP 7.8%		
Capital Product Partners L.P.	2,654	18,047
Navios Maritime Partners L.P.	1,950	30,907
Oiltanking Partners, L.P. ⁽⁶⁾	649	15,574

See accompanying notes to financial statements.

5

KAYNE ANDERSON MLP INVESTMENT COMPANY SCHEDULE OF INVESTMENTS AUGUST 31, 2011

 $\begin{array}{c} \text{(amounts in 000 } \ \ s, \, except \, \, number \, of \, option \, contracts)} \\ \text{(UNAUDITED)} \end{array}$

Description	No. of Shares/Units	Value	
Shipping MLP (continued) Teekay LNG Partners L.P. Teekay Offshore Partners L.P.	1,334 1,586	\$ 44,990 42,634	
		152,152	
Propane MLP 4.7%		0.5 1.55	
Inergy, L.P.	3,260	92,462	
Other 4.0%			
Clearwater Trust ⁽³⁾⁽⁵⁾⁽⁷⁾	N/A	4,110	
Crude Carriers Corp. (8)	72	678	
Kinder Morgan, Inc. Knightsbridge Tankers Ltd.	1,221 226	31,565 4,056	
ONEOK, Inc.	311	22,064	
Targa Resources Corp.	71	2,122	
Teekay Tankers Ltd.	1,524	9,908	
The Williams Companies, Inc.	103	2,772	
		77,275	
Coal MLP 3.9%			
Penn Virginia Resource Partners, L.P.	2,946	76,245	
Upstream MLP & Income Trust 3.3	%		
BreitBurn Energy Partners L.P.	511	9,445	
Legacy Reserves L.P.	789	21,742	
SandRidge Mississippian Trust I	334	8,711	
SandRidge Permian Trust ⁽⁶⁾	866	16,326	
VOC Energy Trust	393	8,771	
		64,995	
Total Equity Investments (Cost \$2,23	34,037)	3,319,988	

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	Interest Rate	Maturity Date	Principal Amount	
Debt Investments 2.4% Midstream 1.1% Crestwood Holdings Partners, LLC Crestwood Midstream Partners LP	(9) 7.750%	10/1/16 4/1/19	\$ 5,878 15,000	5,937 14,400
				20,337
Upstream 0.9%				
Eagle Rock Energy Partners, L.P.	8.375	6/1/19	975	959
EV Energy Partners, L.P.	8.000	4/15/19	4,820	4,748
Linn Energy, LLC	6.500	5/5/19	6,000	5,745
Linn Energy, LLC	8.625	4/15/20	5,000	5,375
Linn Energy, LLC	7.750	2/1/21	1,500	1,538
				18,365
Other 0.2%				
Calumet Specialty Products Partners, L.P.	9.375	5/1/19	4,000	3,880

See accompanying notes to financial statements.

6

KAYNE ANDERSON MLP INVESTMENT COMPANY SCHEDULE OF INVESTMENTS AUGUST 31, 2011

(amounts in 000 s, except number of option contracts) (UNAUDITED)

Description	Interest Rate	Maturity Date	incipal mount	Value
Shipping MLP (continued) Coal MLP 0.2% Penn Virginia Resource Partners, L.P.	8.250%	4/15/18	\$ 3,000	\$ 2,925
Total Energy Debt Investments (Cost \$46,374)				45,507
Total Long-Term Investments (Cost \$2,280,411)				3,365,495
Short-Term Investment 2.3% Repurchase Agreement 2.3% J.P. Morgan Securities Inc. (Agreement dated 8/31/11 to be repurchased at \$45,161), collateralized by \$46,121 in U.S. Treasury securities (Cost \$45,161)		9/1/11		45,161
Total Investments 175.2% (Cost \$2,325,572)				3,410,656
Liabilities Senior Unsecured Notes Mandatory Redeemable Preferred Stock at Liquidation Deferred Tax Liability Other Liabilities	Value			(775,000) (260,000) (418,175) (28,822)
Total Liabilities Other Assets				(1,481,997) 18,407
Total Liabilities in Excess of Other Assets				(1,463,590)
Net Assets Applicable to Common Stockholders				\$ 1,947,066

- (1) Unless otherwise noted, equity investments are common units/common shares.
- (2) Includes limited liability companies.
- (3) Fair valued securities, restricted from public sale. See Notes 2, 3 and 7 in Notes to Financial Statements.
- (4) Distributions are paid-in-kind.

- (5) The Company believes that it is an affiliate of the Clearwater Trust, Plains All American Pipeline, L.P. and Plains All American GP LLC.
- (6) Security is not currently paying cash distributions but is expected to pay cash distributions within the next 12 months.
- (7) The Company owns an interest in the Creditors Trust of Miller Bros. Coal, LLC (Clearwater Trust) consisting of cash and a coal royalty interest. See Notes 5 and 7 in Notes to Financial Statements.
- (8) Security is non-income producing.
- (9) Floating rate first lien senior secured term loan. Security pays interest at a rate of LIBOR + 850 basis points, with a 2% LIBOR floor (10.50% as of August 31, 2011).

See accompanying notes to financial statements.

7

KAYNE ANDERSON MLP INVESTMENT COMPANY STATEMENT OF ASSETS AND LIABILITIES AUGUST 31, 2011

(amounts in 000 s, except share and per share amounts) (UNAUDITED)

ASSETS	
Investments at fair value:	
Non-affiliated (Cost \$2,179,527)	\$ 3,154,875
Affiliated (Cost \$100,884)	210,620
Repurchase agreement (Cost \$45,161)	45,161
Total investments (Cost \$2,325,572)	3,410,656
Deposits with brokers	259
Receivable for securities sold	6,431
Interest, dividends and distributions receivable	1,881
Deferred debt issuance and preferred stock offering costs and other assets	9,836
Total Assets	3,429,063
LIABILITIES	
Payable for securities purchased	6,422
Investment management fee payable	12,047
Accrued directors fees and expenses	79
Accrued expenses and other liabilities	10,274
Deferred tax liability	418,175
Senior unsecured notes	775,000
Mandatory redeemable preferred stock, \$25.00 liquidation value per share (10,400,000 shares issued	
and outstanding)	260,000
Total Liabilities	1,481,997
NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS	\$ 1,947,066
NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS CONSIST OF	
Common stock, \$0.001 par value (74,868,084 shares issued and outstanding, 189,600,000 shares	
authorized)	\$ 75
Paid-in capital	1,377,090
Accumulated net investment loss, net of income taxes, less dividends	(301,005)

Table of Contents 17

190,609

680,297

26.01

\$ 1,947,066

\$

Accumulated realized gains on investments, options, and interest rate swap contracts, net of income

Net unrealized gains on investments and options, net of income taxes

NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS

NET ASSET VALUE PER COMMON SHARE

See accompanying notes to financial statements.

8

KAYNE ANDERSON MLP INVESTMENT COMPANY STATEMENT OF OPERATIONS (amounts in 000 s) (UNAUDITED)

	Mor	the Three oths Ended ost 31, 2011	For the Ni Months End August 31, 2	
INVESTMENT INCOME				
Income				
Dividends and distributions:	ф	45 502	ď	127.052
Non-affiliated investments Affiliated investments	\$	45,592 3,380	\$	127,852 9,890
Arrinated investments		3,360		9,890
Total dividends and distributions		48,972		137,742
Return of capital		(47,520)		(125,265)
1		, , ,		, , ,
Net dividends and distributions		1,452		12,477
Interest and other income		1,214		3,006
Total Investment Income		2,666		15,483
Expenses		12.040		24.600
Investment management fees		12,048		34,608
Administration fees		324		945
Professional fees Custodian fees		132 108		417
Reports to stockholders		108		296 241
Directors fees and expenses		79		191
Insurance		51		149
Other expenses		253		1,029
Other expenses		233		1,02)
Total Expenses Before Interest Expense, Preferred Distributions and Taxes	3	13,098		37,876
Interest expense and amortization of debt issuance costs		8,736		24,895
Distributions on mandatory redeemable preferred stock and amortization of				•
offering costs		3,564		8,372
Total Expenses Before Taxes		25,398		71,143
Not Investment Logg Defens Towns		(22.722)		(55 (60)
Net Investment Loss Before Taxes Deferred tax benefit		(22,732) 5,000		(55,660) 17,497
Defended tax benefit		3,000		17,497
Net Investment Loss		(17,732)		(38,163)
REALIZED AND UNREALIZED GAINS (LOSSES)				
Net Realized Gains				
Investments non-affiliated		27,472		162,967
investments non-unmated		21,712		102,707

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Investments affiliated	1,362	1,362
Options	699	2,916
Payments on interest rate swap contracts		(345)
Deferred tax expense	(9,618)	(61,753)
Net Realized Gains	19,915	105,147
Net Change in Unrealized Gains (Losses)		
Investments non-affiliated	(124,329)	(51,969)
Investments affiliated	(3,176)	7,010
Options	(103)	(425)
Deferred tax benefit	47,999	16,792
Net Change in Unrealized Losses	(79,609)	(28,592)
Net Realized and Unrealized Gains (Losses)	(59,694)	76,555
NET INCREASE (DECREASE) IN NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS RESULTING FROM OPERATIONS	\$ (77,426)	\$ 38,392

See accompanying notes to financial statements.

9

KAYNE ANDERSON MLP INVESTMENT COMPANY STATEMENT OF CHANGES IN NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS (amounts in 000 s, except share amounts)

	For the Nine Months Ended August 31, 2011 (Unaudited)		Y	r the Fiscal ear Ended vember 30, 2010
OPERATIONS Net investment loss, net of tax ⁽¹⁾ Net realized gains, net of tax Net change in unrealized gains (losses), net of tax	\$	(38,163) 105,147 (28,592)	\$	(26,342) 34,340 487,184
Net Increase in Net Assets Resulting from Operations		38,392		495,182
DIVIDENDS TO AUCTION RATE PREFERRED STOCKHOLDERS(1)				(177\(2)
Dividends DIVIDENDS/DISTRIBUTIONS TO COMMON STOCKHOLDERS				$(177)^{(2)}$
Dividends		$(66,984)^{(3)}$		$(49,829)^{(2)}$
Distributions return of capital		$(37,021)^{(3)}$		$(64,293)^{(2)}$
Dividends/Distributions to Common Stockholders		(104,005)		(114,122)
CAPITAL STOCK TRANSACTIONS Proceeds from common stock offerings of 5,700,000 and 15,846,650 shares of common stock, respectively Underwriting discounts and offering expenses associated with the		174,306		396,211
issuance of common stock		(7,293)		(15,169)
Issuance of 696,683 and 1,045,210 newly issued shares of common stock from reinvestment of distributions, respectively		19,775		25,689
Net Increase in Net Assets Applicable to Common Stockholders from Capital Stock Transactions		186,788		406,731
Total Increase in Net Assets Applicable to Common Stockholders		121,175		787,614
NET ASSETS ATTRIBUTABLE TO COMMON STOCKHOLDERS Beginning of period		1,825,891		1,038,277
End of period	\$	1,947,066	\$	1,825,891

⁽¹⁾ Distributions on the Company s mandatory redeemable preferred stock are treated as an operating expense under GAAP and are included in the calculation of net investment loss. See Note 2 Significant Accounting Policies.

The Company estimates that the distribution in the amount of \$8,045 paid to mandatory redeemable preferred stockholders during the nine months ended August 31, 2011 will be a dividend (ordinary income). This estimate is based solely on the Company s operating results during the period and does not reflect the expected result during the fiscal year. The actual characterization of the mandatory redeemable preferred stock distributions made during the period will not be determinable until after the end of the fiscal year when the Company can determine earnings and profits and, therefore, the characterization may differ from the preliminary estimates. Distributions in the amount of \$3,644 paid to mandatory redeemable preferred stockholders for the fiscal year ended November 30, 2010 were characterized as dividend income for such stockholders. This characterization is based on the Company s earnings and profits.

(2) The information presented in each of these items is a characterization of a portion of the total dividends and distributions paid to auction rate preferred stockholders and common stockholders for the fiscal year ended

See accompanying notes to financial statements.

10

KAYNE ANDERSON MLP INVESTMENT COMPANY STATEMENT OF CHANGES IN NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS (amounts in 000 s, except share amounts)

November 30, 2010 as either dividends (ordinary income) or distributions (return of capital). This characterization is based on the Company s earnings and profits.

(3) This is an estimate of the characterization of the distributions paid to common stockholders for the nine months ended August 31, 2011 as either a dividend (ordinary income) or distributions (return of capital). This estimate is based on the Company s operating results during the period. The actual characterization of the common stock distributions made during the period will not be determined until after the end of the fiscal year when the Company can determine earnings and profits and, therefore, the characterization may differ from the preliminary estimates.

See accompanying notes to financial statements.

11

KAYNE ANDERSON MLP INVESTMENT COMPANY STATEMENT OF CASH FLOWS FOR THE NINE MONTHS ENDED AUGUST 31, 2011 (amounts in 000 s) (UNAUDITED)

CASH FLOWS FROM OPERATING ACTIVITIES

CASH FLOWS FROM OF ERATING ACTIVITIES					
Net increase in net assets resulting from operations	\$	38,392			
Adjustments to reconcile net increase in net assets resulting from operations to net cash used in					
operating activities:					
Net deferred tax expense		27,464			
Return of capital distributions		125,265			
Net realized gains		(166,900)			
Unrealized losses		45,384			
Amortization of bond premiums, net		10			
Purchase of long-term investments		(937,671)			
Proceeds from sale of long-term investments		566,767			
Purchase of short-term investments, net		(28,841)			
Decrease in deposits with brokers		822			
Increase in receivable for securities sold		(5,531)			
Increase in interest, dividends and distributions receivable		(96)			
Amortization of deferred debt issuance costs		1,166			
Amortization of mandatory redeemable preferred stock issuance costs		327			
Decrease in other assets, net		12			
Increase in payable for securities purchased		778			
Increase in investment management fee payable		2,682			
Increase in accrued directors fees and expenses		25			
Decrease in call option contracts written, net		(1,247)			
Decrease in accrued expenses and other liabilities		(2,875)			
Net Cash Used in Operating Activities		(334,067)			
CASH FLOWS FROM FINANCING ACTIVITIES					
Issuance of shares of common stock, net of offering costs		167,013			
Proceeds from offering of senior unsecured notes		230,000			
Proceeds from issuance on mandatory redeemable preferred stock		100,000			
Redemption of senior unsecured notes		(75,000)			
Costs associated with issuance of revolving credit facility		(225)			
Costs associated with issuance of senior unsecured notes		(1,714)			
Costs associated with issuance of mandatory redeemable preferred stock		(2,322)			
Cash distributions paid to common stockholders		(84,230)			
Net Cash Provided by Financing Activities		333,522			
NET DECREASE IN CASH					
CASH BEGINNING OF PERIOD		545			
CASH END OF PERIOD	\$				

Supplemental disclosure of cash flow information:

Non-cash financing activities not included herein consist of reinvestment of distributions of \$19,775 pursuant to the Company s dividend reinvestment plan.

During the nine months ended August 31, 2011, there were no income taxes paid and interest paid was \$27,289.

The Company received \$17,986 paid-in-kind dividends during the nine months ended August 31, 2011. See Note 2 Significant Accounting Policies.

See accompanying notes to financial statements.

12

KAYNE ANDERSON MLP INVESTMENT COMPANY FINANCIAL HIGHLIGHTS

(amounts in 000 s, except share and per share amounts)

	-							For the Period
	For the Nine						S	eptember 28,
	Months Ended August 31, 2011 (Unaudited)	2010	2009	For the Fiscal Novem 2008		2006	2005	2004 ⁽¹⁾ through November 30, 2004
Per Share of Common Stock ⁽²⁾								
Net asset value, beginning of period Net investment	\$ 26.67	\$ 20.13	\$ 14.74	\$ 30.08	\$ 28.99	\$ 25.07	\$ 23.91	\$ 23.70(3)
income/(loss) ⁽⁴⁾ Net realized and	(0.53)	(0.44)	(0.33)	(0.73)	(0.73)	(0.62)	(0.17)	0.02
unrealized gain/(loss)	1.24	8.72	7.50	(12.56)	3.58	6.39	2.80	0.19
Total income/(loss)								
from operations	0.71	8.28	7.17	(13.29)	2.85	5.77	2.63	0.21
Auction Rate Preferred Dividends ⁽⁴⁾⁽⁵⁾ Auction Rate Preferred	l				(0.10)		(0.05)	
Distributions return capital ⁽⁵⁾	ot		(0.01)	(0.10)		(0.10)		
Total dividends and distributions Auction	1							
Rate Preferred			(0.01)	(0.10)	(0.10)	(0.10)	(0.05)	
Common Dividends ⁽⁵⁾ Common Distributions	(0.95)	(0.84)			(0.09)		(0.13)	
return of capital ⁽⁵⁾	(0.52)	(1.08)	(1.94)	(1.99)	(1.84)	(1.75)	(1.37)	
Total dividends and distributions Commo	on (1.47)	(1.92)	(1.94)	(1.99)	(1.93)	(1.75)	(1.50)	
Underwriting discount and offering costs on								
the issuance of auction rate preferred stock	I						(0.03)	

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Effect of issuance of

common stock Effect of shares issued	0.09	0.16	0.12		0.26		0.11	
in reinvestment of dividends	0.01	0.02	0.05	0.04	0.01			
Total capital stock transactions	0.10	0.18	0.17	0.04	0.27		0.08	
Net asset value, end of period	\$ 26.01	\$ 26.67	\$ 20.13	\$ 14.74	\$ 30.08	\$ 28.99	\$ 25.07	\$ 23.91
Market value per share of common stock, end of period	\$ 28.40	\$ 28.49	\$ 24.43	\$ 13.37	\$ 28.27	\$ 31.39	\$ 24.33	\$ 24.90
Total investment return based on common stock market value ⁽⁶⁾	4.9% ⁽⁷⁾	26.0%	103.0%	(48.8)%	(4.4)%	37.9%	3.7%	$(0.4)\%^{(7)}$

See accompanying notes to financial statements.

13

For the Nine

KAYNE ANDERSON MLP INVESTMENT COMPANY FINANCIAL HIGHLIGHTS

(amounts in 000 s, except share and per share amounts)

Months Ended August 31, 2011 (Unaudited)	2010	2009]	For the Fiscal Noveml 2008		2006	2005			
\$ 1,947,066	\$ 1,825,891	\$	1,038,277	\$	651,156	\$	1,300,030	\$ 1,103,392	\$	932,090
2.3% 0.2	2.1% 0.2		2.1% 0.4		2.2% 0.3		2.3% 0.2	3.2% 0.2		1.2% 0.3
2.5	2.3		2.5		2.5		2.5	3.4		1.5
2.2	1.9		2.5		3.4		2.3	1.7		0.8
1.9	20.5		25.4		(9)		3.5	13.8		6.4
6.6%	24.7%		30.4%		5.9%		8.3%	18.9%		8.7%
(2.6)% 1.9% ⁽⁷⁾	(1.8)% 34.6%		(2.0)% 43.2%		(2.8)% (51.2)%		(2.3)% 7.3%	(2.4)% 21.7%		(0.7)% 10.0%

\$ 17.0% ⁽⁷⁾ 1,980,976	\$ 18.7% 1,432,266	\$ 28.9% 774,999	\$	6.7% 1,143,192	\$	10.6% 1,302,425	\$ 10.0% 986,908	\$ 25.6% 870,672
775,000	620,000	370,000		304,000		505,000	320,000	260,000
						97,000	17,000	
		75,000		75,000		75,000	75,000	75,000
260,000	160,000							
71,882,287	60,762,952	46,894,632		43,671,666		41,134,949	37,638,314	34,077,731
384.8%	420.3%	400.9%		338.9%		328.4%	449.7%	487.3%
288.1%	334.1%	333.3%		271.8%		292.0%	367.8%	378.2%
\$ 10.01	\$ 7.70	\$ 6.79	\$::n a	11.52	\$:a1 a	12.14	\$ 8.53	\$ 5.57
		see accompany	/mg	notes to financ	iai s	tatements.		

Table of Contents 29

14

KAYNE ANDERSON MLP INVESTMENT COMPANY FINANCIAL HIGHLIGHTS

(amounts in 000 s, except share and per share amounts)

- (1) Commencement of operations.
- (2) Based on average shares of common stock outstanding.
- (3) Initial public offering price of \$25.00 per share less underwriting discounts of \$1.25 per share and offering costs of \$0.05 per share.
- (4) Distributions on the Company s mandatory redeemable preferred stock are treated as an operating expense under GAAP and are included in the calculation of net investment loss. See Note 2 Significant Accounting Policies.
- (5) The information presented for the nine months ended August 31, 2011 is an estimate of the characterization of the distribution paid and is based on the Company s operating results during the period. The information presented for each of the other periods is a characterization of the total distributions paid to preferred stockholders and common stockholders as either a dividend (ordinary income) or a distribution (return of capital) and is based on the Company s earnings and profits.
- (6) Total investment return is calculated assuming a purchase of common stock at the market price on the first day and a sale at the current market price on the last day of the period reported. The calculation also assumes reinvestment of distributions at actual prices pursuant to the Company s dividend reinvestment plan.
- (7) Not annualized.
- (8) Unless otherwise noted, ratios are annualized.
- (9) For the year ended November 30, 2008, the Company accrued deferred income tax benefits of \$339,991 (29.7% of average net assets) primarily related to unrealized losses on investments. Realization of a deferred tax benefit is dependent on whether there will be sufficient taxable income of the appropriate character within the carryforward periods to realize a portion or all of the deferred tax benefit. No deferred income tax benefit has been included for the purpose of calculating total expense.
- (10) Calculated pursuant to section 18(a)(1)(A) of the 1940 Act. Represents the value of total assets less all liabilities not represented by senior notes or any other senior securities representing indebtedness and mandatory redeemable preferred stock divided by the aggregate amount of senior notes and any other senior securities representing indebtedness. Under the 1940 Act, the Company may not declare or make any distribution on its common stock nor can it incur additional indebtedness if, at the time of such declaration or incurrence, its asset coverage with respect to senior securities representing indebtedness would be less than 300%. For purposes of this test, the revolving credit facility is considered a senior security representing indebtedness.
- (11) Calculated pursuant to section 18(a)(2)(A) of the 1940 Act. Represents the value of total assets less all liabilities not represented by senior notes, any other senior securities representing indebtedness and preferred stock divided by the aggregate amount of senior notes, any other senior securities representing indebtedness and

preferred stock. Under the 1940 Act, the Company may not declare or make any distribution on its common stock nor can it issue additional preferred stock if at the time of such declaration or issuance, its asset coverage with respect to all senior securities would be less than 200%. In addition to the limitations under the 1940 Act, the Company, under the terms of its mandatory redeemable preferred stock, would not be able to declare or pay any distributions on its common stock if such declaration would cause its asset coverage with respect to all senior securities to be less than 225%. For purposes of these tests, the revolving credit facility is considered a senior security representing indebtedness.

See accompanying notes to financial statements.

15

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS (amounts in 000 s, except option contracts, share and per share amounts)

(amounts in 000 s, except option contracts, share and per share amounts)
(UNAUDITED)

1. Organization

Kayne Anderson MLP Investment Company (the Company) was organized as a Maryland corporation on June 4, 2004, and is a non-diversified closed-end management investment company registered under the Investment Company Act of 1940, as amended (the 1940 Act). The Company s investment objective is to obtain a high after-tax total return by investing at least 85% of its net assets plus any borrowings (total assets) in energy-related master limited partnerships and their affiliates (collectively, MLPs), and in other companies that, as their principal business, operate assets used in the gathering, transporting, processing, storing, refining, distributing, mining or marketing of natural gas, natural gas liquids (including propane), crude oil, refined petroleum products or coal (collectively with MLPs, Midstream Energy Companies). The Company commenced operations on September 28, 2004. The Company s shares of common stock are listed on the New York Stock Exchange, Inc. (NYSE) under the symbol KYN.

2. Significant Accounting Policies

- A. *Use of Estimates* The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (GAAP) requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenue and expenses during the period. Actual results could differ materially from those estimates.
- B. Cash and Cash Equivalents Cash and cash equivalents include short-term, liquid investments with an original maturity of three months or less and include money market fund accounts.
- C. Calculation of Net Asset Value The Company determines its net asset value no less frequently than as of the last day of each month based on the most recent close of regular session trading on the NYSE, and makes its net asset value available for publication monthly. Currently, the Company calculates its net asset value on a weekly basis. Net asset value is computed by dividing the value of the Company s assets (including accrued interest and distributions), less all of its liabilities (including accrued expenses, distributions payable, current, deferred and other accrued income taxes, and any borrowings) and the liquidation value of any outstanding preferred stock, by the total number of common shares outstanding.
- D. Investment Valuation Readily marketable portfolio securities listed on any exchange other than the NASDAQ Stock Market, Inc. (NASDAQ) are valued, except as indicated below, at the last sale price on the business day as of which such value is being determined. If there has been no sale on such day, the securities are valued at the mean of the most recent bid and ask prices on such day. Securities admitted to trade on the NASDAQ are valued at the NASDAQ official closing price. Portfolio securities traded on more than one securities exchange are valued at the last sale price on the business day as of which such value is being determined at the close of the exchange representing the principal market for such securities.

Equity securities traded in the over-the-counter market, but excluding securities admitted to trading on the NASDAQ, are valued at the closing bid prices. Debt securities that are considered bonds are valued by using the mean of the bid and ask prices provided by an independent pricing service. For debt securities that are considered bank loans, the fair market value is determined by the mean of the bid and ask prices provided by the agent or syndicate bank or principal market maker. When price quotes are not available, fair market value will be based on prices of comparable securities.

In certain cases, the Company may not be able to purchase or sell debt securities at the quoted prices due to the lack of liquidity for these securities.

Exchange-traded options and futures contracts are valued at the last sales price at the close of trading in the market where such contracts are principally traded or, if there was no sale on the applicable exchange on such day, at the mean between the quoted bid and ask price as of the close of such exchange.

16

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except option contracts, share and per share amounts) (UNAUDITED)

The Company holds securities that are privately issued or otherwise restricted as to resale. For these securities, as well as any other portfolio security held by the Company for which reliable market quotations are not readily available, valuations are determined in a manner that most fairly reflects fair value of the security on the valuation date. Unless otherwise determined by the Board of Directors, the following valuation process is used for such securities:

Investment Team Valuation. The applicable investments are valued by senior professions of KA Fund Advisors, LLC (KAFA or the Adviser) who are responsible for the portfolio investments. The investments will be valued quarterly, unless a new investment is made during the quarter, in which case such investment is valued at the end of the month in which the investment was made.

Investment Team Valuation Documentation. Preliminary valuation conclusions will be determined by senior management of KAFA. Such valuations are submitted to the Valuation Committee (a committee of the Company s Board of Directors) or the Board of Directors on a monthly or quarterly basis, as appropriate, and stand for intervening periods of time.

Valuation Committee. The Valuation Committee meets to consider the valuations submitted by KAFA (1) at the end of each month for new investments, if any, and (2) at the end of each quarter for existing investments. Between meetings of the Valuation Committee, a senior officer of KAFA is authorized to make valuation determinations. All valuation determinations of the Valuation Committee are subject to ratification by the Board of Directors at its next regular meeting.

Valuation Firm. No less than quarterly, a third-party valuation firm engaged by the Board of Directors reviews the valuation methodologies and calculations employed for these securities.

Board of Directors Determination. The Board of Directors meets quarterly to consider the valuations provided by KAFA and the Valuation Committee, if applicable, and ratify valuations for the applicable securities. The Board of Directors considers the report provided by the third-party valuation firm in reviewing and determining in good faith the fair value of the applicable portfolio securities.

Unless otherwise determined by the Board of Directors, securities that are convertible into or otherwise will become publicly traded (*e.g.*, through subsequent registration or expiration of a restriction on trading) are valued through the process described above, using a valuation based on the fair value of the publicly traded security less a discount. The discount is initially equal in amount to the discount negotiated at the time the purchase price is agreed to. To the extent that such securities are convertible or otherwise become publicly traded within a time frame that may be reasonably determined, KAFA may determine an applicable discount in accordance with a methodology approved by the Valuation Committee.

At August 31, 2011, the Company held 5.7% of its net assets applicable to common stockholders (3.2% of total assets) in securities valued at fair value, as determined pursuant to procedures adopted by the Board of Directors, with fair value of \$111,156. See Note 7 Restricted Securities.

E. Repurchase Agreements The Company has agreed to purchase securities from financial institutions, subject to the seller s agreement to repurchase them at an agreed-upon time and price (repurchase agreements). The financial institutions with which the Company enters into repurchase agreements are banks and broker/dealers which KAFA

considers creditworthy. The seller under a repurchase agreement is required to maintain the value of the securities as collateral, subject to the agreement, at not less than the repurchase price plus accrued interest. KAFA monitors daily the mark-to-market of the value of the collateral, and, if necessary, requires the seller to maintain additional securities so that the value of the collateral is not less than the repurchase price. Default by or bankruptcy of the seller would, however, expose the Company to possible loss because of adverse market action or delays in connection with the disposition of the underlying securities.

17

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except option contracts, share and per share amounts) (UNAUDITED)

F. Short Sales A short sale is a transaction in which the Company sells securities it does not own (but has borrowed) in anticipation of or to hedge against a decline in the market price of the securities. To complete a short sale, the Company may arrange through a broker to borrow the securities to be delivered to the buyer. The proceeds received by the Company for the short sale are retained by the broker until the Company replaces the borrowed securities. In borrowing the securities to be delivered to the buyer, the Company becomes obligated to replace the securities borrowed at their market price at the time of replacement, whatever the price may be.

All short sales are fully collateralized. The Company maintains assets consisting of cash or liquid securities equal in amount to the liability created by the short sale. These assets are adjusted daily to reflect changes in the value of the securities sold short. The Company is liable for any dividends or distributions paid on securities sold short.

The Company may also sell short against the box (*i.e.*, the Company enters into a short sale as described above while holding an offsetting long position in the security which it sold short). If the Company enters into a short sale against the box, the Company segregates an equivalent amount of securities owned as collateral while the short sale is outstanding. At August 31, 2011, the Company had no open short sales.

- G. Security Transactions Security transactions are accounted for on the date these securities are purchased or sold (trade date). Realized gains and losses are reported on an identified cost basis.
- H. *Return of Capital Estimates* Distributions received from the Company s investments in MLPs generally are comprised of income and return of capital. The Company records investment income and return of capital based on estimates made at the time such distributions are received. Such estimates are based on historical information available from each MLP and other industry sources. These estimates may subsequently be revised based on information received from MLPs after their tax reporting periods are concluded.

The following table sets forth the Company s estimated total return of capital portion of the distributions received from its investments. The return of capital portion of the distributions is a reduction to investment income, results in an equivalent reduction in the cost basis of the associated investments and increases Net Realized Gains and Net Change in Unrealized Gains (Losses) in each of the periods presented below.

]	ee Months Ended Igust 31, 2011	 Nine Months Ended August 31, 2011			
Return of capital portion of distributions received		97%	91%			
Return of capital attributable to Net Realized Gains	\$	10,095	\$ 23,322			
Return of capital attributable to Net Change in Unrealized Gains (Losses)		37,425	101,943			
Total return of capital	\$	47,520	\$ 125,265			

For the three and nine months ended August 31, 2011, the Company estimated the return of capital portion of distributions received to be \$42,490 (87%) and \$120,235 (87%), respectively. These amounts were increased by \$5,030 attributable to 2010 tax reporting information received by the Company in the third quarter of 2011. As a result, the return of capital percentage for the three and nine months ended August 31, 2011 was 97% and 91%, respectively.

I. *Investment Income* The Company records dividends and distributions on the ex-dividend date. Interest income is recognized on the accrual basis, including amortization of premiums and accretion of discounts. When investing in securities with payment in-kind interest, the Company will accrue interest income during the life of the security even though it will not be receiving cash as the interest is accrued. To the extent that interest income to be received is not expected to be realized, a reserve against income is established. During the three and nine months

18

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except option contracts, share and per share amounts) (UNAUDITED)

ended August 31, 2011, the Company did not have a reserve against interest income, since all interest income accrued is expected to be received.

Many of the debt securities that the Company holds were purchased at a discount or premium to the par value of the security. The non-cash accretion of a discount to par value increases interest income while the non-cash amortization of a premium to par value decreases interest income. The accretion of a discount and amortization of premiums are based on the effective interest method. The amount of these non-cash adjustments can be found in the Company s Statement of Cash Flows. The non-cash accretion of a discount increases the cost basis of the debt security, which results in an offsetting unrealized loss. The non-cash amortization of a premium decreases the cost basis of the debt security which results in an offsetting unrealized gain. To the extent that par value is not expected to be realized, the Company discontinues accruing the non-cash accretion of the discount to par value of the debt security.

The Company receives paid-in-kind dividends in the form of additional units from its investment in Buckeye Partners, L.P. (Class B Units), Crestwood Midstream Partners LP (Class C Units), Enbridge Energy Management, L.L.C. and Kinder Morgan Management, L.L.C. In connection with the purchase of units directly from PAA Natural Gas Storage, L.P. (PNG) in a private investment in public equity (PIPE investments) transaction, the Company was entitled to the distribution paid to unitholders of record on February 4, 2011, even though such investment had not closed at such date. Pursuant to the purchase agreement, the purchase price for the PNG units was reduced by the amount of such dividend, which had the effect of paying such distribution in additional units. The additional units are not reflected in investment income during the period received but are recorded as unrealized gains. During the three and nine months ended August 31, 2011, the Company received the following paid-in-kind dividends.

	Three Months Ended August 31, 2011			Nine Months Ended August 31, 2011		
Buckeye Partners, L.P. (Class B Units)	\$	828	\$	1,883		
Crestwood Midstream Partners LP (Class C Units)		495		962		
Enbridge Energy Management, L.L.C.		1,119		3,288		
Kinder Morgan Management, LLC		4,119		11,370		
PAA Natural Gas Storage, L.P.				483		
Total paid-in-kind dividends	\$	6,561	\$	17,986		

J. Distributions to Stockholders — Distributions to common stockholders are recorded on the ex-dividend date. Distributions to mandatory redeemable preferred stockholders are accrued on a daily basis as described in Note 12 Preferred Stock. As required by the Distinguishing Liabilities from Equity topic of the Financial Accounting Standards Board (FASB) Accounting Standards Codification, the Company includes the accrued distributions on its mandatory redeemable preferred stock as an operating expense due to the fixed term of this obligation. For tax purposes the payments made to the holders of the Company s mandatory redeemable preferred stock are treated as dividends or distributions.

The estimated characterization of the distributions paid to preferred and common stockholders will be either a dividend (ordinary income) or distribution (return of capital). This estimate is based on the Company s operating results during the period. The actual characterization of the preferred and common stock distributions made during the current year will not be determinable until after the end of the fiscal year when the Company can determine earnings and profits and, therefore, the characterization may differ from the preliminary estimates.

K. *Partnership Accounting Policy* The Company records its pro rata share of the income (loss) and capital gains (losses), to the extent of distributions it has received, allocated from the underlying partnerships and adjusts the cost basis of the underlying partnerships accordingly. These amounts are included in the Company s Statement of Operations.

19

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except option contracts, share and per share amounts) (UNAUDITED)

L. Federal and State Income Taxation The Company, as a corporation, is obligated to pay federal and state income tax on its taxable income. The Company invests its assets primarily in MLPs, which generally are treated as partnerships for federal income tax purposes. As a limited partner in the MLPs, the Company includes its allocable share of the MLP s taxable income in computing its own taxable income. Deferred income taxes reflect (i) taxes on unrealized gains/(losses), which are attributable to the temporary difference between fair value and tax basis, (ii) the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes and (iii) the net tax benefit of accumulated net operating and capital losses. To the extent the Company has a deferred tax asset, consideration is given as to whether or not a valuation allowance is required. The need to establish a valuation allowance for deferred tax assets is assessed periodically by the Company based on the Income Tax Topic of the FASB Accounting Standards Codification that it is more likely than not that some portion or all of the deferred tax asset will not be realized. In the assessment for a valuation allowance, consideration is given to all positive and negative evidence related to the realization of the deferred tax asset. This assessment considers, among other matters, the nature, frequency and severity of current and cumulative losses, forecasts of future profitability (which are highly dependent on future cash distributions from the Company s MLP holdings), the duration of statutory carryforward periods and the associated risk that operating and capital loss carryforwards may expire unused.

The Company may rely to some extent on information provided by the MLPs, which may not necessarily be timely, to estimate taxable income allocable to the MLP units held in the portfolio and to estimate the associated deferred tax liability. Such estimates are made in good faith. From time to time, as new information becomes available, the Company modifies its estimates or assumptions regarding the deferred tax liability.

The Company s policy is to classify interest and penalties associated with underpayment of federal and state income taxes, if any, as income tax expense on its Statement of Operations. As of August 31, 2011, the Company does not have any interest or penalties associated with the underpayment of any income taxes. The tax years from 2008 through 2010 and for the nine months ended August 31, 2011 remain open and subject to examination by tax jurisdictions.

M. Derivative Financial Instruments The Company may utilize derivative financial instruments in its operations.

Interest rate swap contracts. The Company may use interest rate swap contracts to hedge against increasing interest expense on its leverage resulting from increases in short term interest rates. The Company does not hedge any interest rate risk associated with portfolio holdings. Interest rate transactions the Company uses for hedging purposes expose it to certain risks that differ from the risks associated with its portfolio holdings. A decline in interest rates may result in a decline in the value of the swap contracts, which, everything else being held constant, would result in a decline in the net assets of the Company. In addition, if the counterparty to an interest rate swap defaults, the Company would not be able to use the anticipated net receipts under the interest rate swap to offset its cost of financial leverage.

Interest rate swap contracts are recorded at fair value with changes in value during the reporting period, and amounts accrued under the agreements, included as unrealized gains or losses in the Statement of Operations. Monthly cash settlements under the terms of the interest rate swap agreements or termination payments are recorded as realized gains or losses in the Statement of Operations. The Company generally values its interest rate swap contracts based on dealer quotations, if available, or by discounting the future cash flows from the stated terms of the interest rate swap agreement by using interest rates currently available in the market. See Note 8 Derivative Financial Instruments.

Option contracts. The Company is also exposed to financial market risks including changes in the valuations of its investment portfolio. The Company may purchase or write (sell) call options. A call option on a security is a

20

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except option contracts, share and per share amounts) (UNAUDITED)

contract that gives the holder of the option, in return for a premium, the right to buy from the writer of the option the security underlying the option at a specified exercise price at any time during the term of the option.

The Company would normally purchase call options in anticipation of an increase in the market value of securities of the type in which it may invest. The Company would ordinarily realize a gain on a purchased call option if, during the option period, the value of such securities exceeded the sum of the exercise price, the premium paid and transaction costs; otherwise the Company would realize either no gain or a loss on the purchased call option. The Company may also purchase put option contracts. If a purchased put option is exercised, the premium paid increases the cost basis of the securities sold by the Company.

The Company may also write (sell) call options with the purpose of generating realized gains or reducing its ownership of certain securities. The writer of an option on a security has the obligation upon exercise of the option to deliver the underlying security upon payment of the exercise price.

When the Company writes a call option, an amount equal to the premium received by the Company is recorded as a liability and is subsequently adjusted to the current fair value of the option written. Premiums received from writing options that expire unexercised are treated by the Company on the expiration date as realized gains from investments. If the Company repurchases a written call option prior to its exercise, the difference between the premium received and the amount paid to repurchase the option is treated as a realized gain or loss. If a call option is exercised, the premium is added to the proceeds from the sale of the underlying security in determining whether the Company has realized a gain or loss. The Company, as the writer of an option, bears the market risk of an unfavorable change in the price of the security underlying the written option. See Note 8 Derivative Financial Instruments.

N. *Indemnifications* Under the Company's organizational documents, its officers and directors are indemnified against certain liabilities arising out of the performance of their duties to the Company. In addition, in the normal course of business, the Company enters into contracts that provide general indemnification to other parties. The Company's maximum exposure under these arrangements is unknown, as this would involve future claims that may be made against the Company that have not yet occurred, and may not occur. However, the Company has not had prior claims or losses pursuant to these contracts and expects the risk of loss to be remote.

3. Fair Value

As required by the Fair Value Measurement and Disclosures of the FASB Accounting Standards Codification, the Company has performed an analysis of all assets and liabilities measured at fair value to determine the significance and character of all inputs to their fair value determination.

The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value into the following three broad categories.

Level 1 Quoted unadjusted prices for identical instruments in active markets traded on a national exchange to which the Company has access at the date of measurement.

Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and

significant value drivers are observable in active markets. Level 2 inputs are those in markets for which there are few transactions, the prices are not current, little public information exists or instances where prices vary substantially over time or among brokered market makers.

Level 3 Model derived valuations in which one or more significant inputs or significant value drivers are unobservable. Unobservable inputs are those inputs that reflect the Company s own assumptions that market participants would use to price the asset or liability based on the best available information.

21

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except option contracts, share and per share amounts) (UNAUDITED)

Note that the valuation levels below are not necessarily an indication of the risk or liquidity associated with the underlying investment. For instance, the Company s repurchase agreements, which are collateralized by U.S. Treasury notes, are generally high quality and liquid; however, the Company reflects these repurchase agreements as Level 2 because the inputs used to determine fair value may not always be quoted prices in an active market.

The following table presents the Company s assets measured at fair value on a recurring basis at August 31, 2011. The Company presents these assets by security type and description on its Schedule of Investments.

			oted Prices in	rices with Other oservable	Uno	bservable
	Total	Active Markets (Level 1)		Inputs Level 2)		Inputs Level 3)
Assets at Fair Value Equity investments	\$, ,	\$	3,208,832	\$ 45 507	\$	111,156
Debt investments Repurchase agreements	45,507 45,161			45,507 45,161		
Total assets at fair value	\$ 3,410,656	\$	3,208,832	\$ 90,668	\$	111,156

The Company did not have any liabilities that were measured at fair value on a recurring basis using significant unobservable inputs (Level 3) at August 31, 2011 or at November 30, 2010. For the three and nine months ended August 31, 2011, there were no transfers between Level 1 and Level 2.

In May 2011, FASB issued Accounting Standards Update (ASU) No. 2011-04 Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs . ASU No. 2011-04 establishes common requirements for measuring fair value and for disclosing information about fair value measurements in accordance with U.S. GAAP and International Financial Reporting Standards (IFRSs). ASU No. 2011-04 is effective for interim and annual periods beginning after December 15, 2011 and is applied prospectively. Management is currently evaluating ASU No. 2011-04 and does not believe that it will have a material impact on the Company s financial statements and disclosures.

The following tables present the Company s assets measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the three and nine months ended August 31, 2011.

Three M	onths Ended August 31, 2011	Equity restments
Balance	May 31, 2011	\$ 176,269

Purchases, issuances or settlements	15,016
Transfers out	(77,700)
Realized gains (losses)	
Unrealized losses, net	(2,429)
Balance August 31, 2011	\$ 111,156

Nine Months Ended August 31, 2011	Equi Investn			
Balance November 30, 2010	\$	63,514		
Purchases, issuances or settlements		212,897		
Transfers out		(166,699)		
Realized gains (losses)				
Unrealized gains, net		1,444		
Balance August 31, 2011	\$	111,156		

22

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except option contracts, share and per share amounts) (UNAUDITED)

The \$2,429 of unrealized losses and the \$1,444 of unrealized gains presented in the tables above for the three and nine months ended August 31, 2011, respectively, related to investments that are still held at August 31, 2011, and the Company includes these unrealized gains (losses) on the Statement of Operations Net Change in Unrealized Gains (Losses).

The purchases, issuances or settlements of \$15,016 and \$212,897 for the three and nine months ended August 31, 2011, respectively, relate to the Company s investments in Buckeye Partners, L.P. (Class B Units), Buckeye Partners, L.P. (Common Units), Clearwater Trust, Crestwood Midstream Partners LP (Class C Units), PAA Natural Gas Storage, L.P., Plains All American GP LLC and Regency Energy Partners L.P. The Company s investments in the common units of Buckeye Partners, L.P., Inergy, LP, Magellan Midstream Partners, L.P. PAA Natural Gas Storage, L.P. and Regency Energy Partners L.P., which are noted as transfers out of Level 3 in the tables above, became readily marketable during the three and nine months ended August 31, 2011.

4. Concentration of Risk

The Company s investment objective is to obtain a high after-tax total return by investing at least 85% of our total assets in public and private investments in MLPs and other Midstream Energy Companies. Under normal circumstances, the Company intends to invest at least 80% of its total assets in MLPs, which are subject to certain risks, such as supply and demand risk, depletion and exploration risk, commodity pricing risk, acquisition risk, and the risk associated with the hazards inherent in midstream energy industry activities. A substantial portion of the cash flow received by the Company is derived from investment in equity securities of MLPs. The amount of cash that an MLP has available for distributions and the tax character of such distributions are dependent upon the amount of cash generated by the MLP s operations. The Company may invest up to 15% of its total assets in any single issuer and a decline in value of the securities of such an issuer could significantly impact the net asset value of the Company. The Company may invest up to 20% of its total assets in debt securities, which may include below investment grade securities. The Company may, for defensive purposes, temporarily invest all or a significant portion of its assets in investment grade securities, short-term debt securities and cash or cash equivalents. To the extent the Company uses this strategy, it may not achieve its investment objectives.

5. Agreements and Affiliations

A. *Administration Agreement* The Company has entered into an administration agreement with Ultimus Fund Solutions, LLC (Ultimus). Pursuant to the administration agreement, Ultimus will provide certain administrative services for the Company. The administration agreement has automatic one-year renewals unless earlier terminated by either party as provided under the terms of the administration agreement.

B. *Investment Management Agreement* The Company has entered into an investment management agreement with KAFA under which the Adviser, subject to the overall supervision of the Company s Board of Directors, manages the day-to-day operations of, and provides investment advisory services to, the Company. For providing these services, the Adviser receives a management fee from the Company. On June 14, 2011, the Company renewed its agreement with the Adviser for a period of one year. The agreement may be renewed annually upon approval of the Company s Board of Directors. For the three and nine months ended August 31, 2011, the Company paid management fees at an annual rate of 1.375% of average total assets.

For purposes of calculating the management fee, the Company s total assets are equal to the Company s gross asset value (which includes assets attributable to or proceeds from the Company s use of preferred stock, commercial paper or notes and other borrowings and excludes any net deferred tax asset), minus the sum of the Company s accrued and unpaid distributions on any outstanding common stock and accrued and unpaid distributions on any outstanding preferred stock and accrued liabilities (other than liabilities associated with borrowing or leverage by the Company and any accrued taxes, including, a deferred tax liability). Liabilities

23

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS mounts in 000 s, except option contracts, share and per share amounts in 000 s.

(amounts in 000 s, except option contracts, share and per share amounts) (UNAUDITED)

associated with borrowing or leverage by the Company include the principal amount of any borrowings, commercial paper or notes issued by the Company, the liquidation preference of any outstanding preferred stock, and other liabilities from other forms of borrowing or leverage such as short positions and put or call options held or written by the Company.

C. *Portfolio Companies* From time to time, the Company may control or may be an affiliate of one or more portfolio companies, each as defined in the 1940 Act. In general, under the 1940 Act, the Company would be presumed to control a portfolio company if the Company owned 25% or more of its outstanding voting securities and would be an affiliate of a portfolio company if the Company owned 5% or more of its outstanding voting securities. The 1940 Act contains prohibitions and restrictions relating to transactions between investment companies and their affiliates (including the Company s investment adviser), principal underwriters and affiliates of those affiliates or underwriters.

The Company believes that there is significant ambiguity in the application of existing Securities and Exchange Commission (SEC) staff interpretations of the term voting security to complex structures such as limited partnership interests of the kind in which the Company invests. As a result, it is possible that the SEC staff may consider that certain securities investments in limited partnerships are voting securities under the staff's prevailing interpretations of this term. If such determination is made, the Company may be regarded as a person affiliated with and controlling the issuers(s) of those securities for purposes of Section 17 of the 1940 Act.

In light of the ambiguity of the definition of voting securities, the Company does not intend to treat any class of limited partnership interests that it holds as voting securities unless the security holders of such class currently have the ability, under the partnership agreement, to remove the general partner (assuming a sufficient vote of such securities, other than securities held by the general partner, in favor of such removal) or the Company has an economic interest of sufficient size that otherwise gives it the de facto power to exercise a controlling influence over the partnership. The Company believes this treatment is appropriate given that the general partner controls the partnership, and without the ability to remove the general partner or the power to otherwise exercise a controlling influence over the partnership due to the size of an economic interest, the security holders have no control over the partnership.

Clearwater Trust At August 31, 2011, the Company held approximately 62% of the Clearwater Trust. The Company believes that it is an affiliate of the trust under the 1940 Act by virtue of its majority interest in the trust.

Plains All American GP LLC and Plains All American Pipeline, L.P. Robert V. Sinnott is Chief Executive Officer of Kayne Anderson Capital Advisors, L.P. (KACALP), the managing member of KAFA. Mr. Sinnott also serves as a director on the board of Plains All American GP LLC (Plains GP), the general partner of Plains All American Pipeline, L.P. (PAA). Members of senior management of KACALP and KAFA and various affiliated funds managed by KACALP, including the Company, own units of Plains GP. The Company believes that it is an affiliate of Plains GP and PAA under the 1940 Act by virtue of (i) the Company s and other affiliated Kayne Anderson funds ownership interests in Plains GP and (ii) Mr. Sinnott s participation on the board of Plains GP.

PAA Natural Gas Storage, L.P. (PNG) is an affiliate of PAA and Plains GP. PAA owns 62% of PNG s limited partner units and owns PNG s general partner. The Company does not believe it is an affiliate of PNG based on the current facts and circumstances.

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except option contracts, share and per share amounts) (UNAUDITED)

6. Income Taxes

Deferred income taxes reflect (i) taxes on net unrealized gains, which are attributable to the difference between fair market value and tax basis, (ii) the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes and (iii) the net tax benefit of accumulated net operating losses. Components of the Company s deferred tax assets and liabilities as of August 31, 2011 are as follows:

Deferred tax assets:	
Net operating loss carryforwards Federal	\$ 54,362
Net operating loss carryforwards State	4,515
Other	105
Deferred tax liabilities:	
Net unrealized gains on investment securities, interest rate swap contracts an	nd option contracts (469,407)
Basis reductions resulting from estimated return of capital	(7,750)

Total deferred tax liability, net \$ (418,175)

At August 31, 2011, the Company had federal net operating loss carryforwards of \$160,270 (deferred tax asset of \$54,362). Realization of the deferred tax assets and net operating loss carryforwards are dependent, in part, on generating sufficient taxable income prior to expiration of the loss carryforwards. If not utilized, \$29,340, \$52,182, \$26,118, \$33,413 and \$19,217 of the net operating loss carryforward will expire in 2026, 2027, 2028, 2029 and 2030, respectively. As of August 31, 2011, the Company expects to utilize all of its federal and state capital loss carryforwards of \$50,540. For corporations, capital losses can only be used to offset capital gains and cannot be used to offset ordinary income. In addition, the Company has state net operating losses of \$146,750 (deferred tax asset of \$4,515). These state net operating losses begin to expire in 2011 through 2029.

Although the Company currently has a net deferred tax liability, it periodically reviews the recoverability of its deferred tax assets based on the weight of available evidence. When assessing the recoverability of its deferred tax assets, significant weight is given to the effects of potential future realized and unrealized gains on investments and the period over which these deferred tax assets can be realized, as the expiration dates for the federal capital and operating loss carryforwards range from five to nineteen years.

Based on the Company s assessment, it has determined that it is more likely than not that its deferred tax assets will be realized through future taxable income of the appropriate character. Accordingly, no valuation allowance has been established for the Company s deferred tax assets. The Company will continue to assess the need for a valuation allowance in the future. Significant declines in the fair value of its portfolio of investments may change the Company s assessment regarding the recoverability of its deferred tax assets and may result in a valuation allowance. If a valuation allowance is required to reduce any deferred tax asset in the future, it could have a material impact on the Company s net asset value and results of operations in the period it is recorded.

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except option contracts, share and per share amounts) (UNAUDITED)

Total income taxes were different from the amount computed by applying the federal statutory income tax rate of 35% to the net investment loss and realized and unrealized gains (losses) on investments before taxes for the three and nine months ended August 31, 2011, as follows:

	Three Months Ended August 31, 2011	Nine Months Ended August 31, 2011
Computed federal income tax at 35%	\$ (42,282)	\$ 23,050
State income tax, net of federal tax Non-deductible distributions on mandatory redeemable preferred stock and	(2,346)	1,484
other	1,247	2,930
Total income tax expense (benefit)	\$ (43,381)	\$ 27,464

At August 31, 2011, the cost basis of investments for federal income tax purposes was \$2,140,424. The cost basis of investments includes a \$185,148 reduction in basis attributable to the Company s portion of the allocated losses from its MLP investments. At August 31, 2011, gross unrealized appreciation and depreciation of investments and options for federal income tax purposes were as follows:

Gross unrealized appreciation of investments	\$ 1,313,276
Gross unrealized depreciation of investments	(43,044)
Net unrealized appreciation of investments	\$ 1,270,232

7. Restricted Securities

From time to time, certain of the Company s investments may be restricted as to resale. For instance, private investments that are not registered under the Securities Act of 1933, as amended, cannot be offered for public sale in a non-exempt transaction without first being registered. In other cases, certain of the Company s investments have restrictions such as lock-up agreements that preclude the Company from offering these securities for public sale.

26

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS (amounts in 000 s, except option contracts, share and per share amounts) (UNAUDITED)

At August 31, 2011, the Company held the following restricted investments:

				Number of	er						
				Units						Percent	Percent
			Type							of	of
T 4	g	Acquisition		Principal			Cost		Fair	Net	Total
Investment	Security	Date Ro	estrictio	on(in uuu	S)		Basis		Value	Assets	Assets
Level 3 Investments ⁽¹⁾											
Buckeye Partners, L.P.	Class B Units	(2)	(3)	8.	33	\$	45,006	\$	46,551	2.4%	1.4%
Clearwater Trust	Trust	(4)	(5)		1		3,266		4,110	0.2	0.1
Crestwood Midstream	Class C Units	4/1/11	(3)	1,09	94		26,007		24,578	1.3	0.7
Partners LP											
Plains All American GP	Common Units	(2)	(5)	2	24		34,065		35,917	1.8	1.0
LLC											
T-4-1						Φ	100 244	ф	111 156	5 7 01	2 201
Total						\$	108,344	Þ	111,156	5.7%	3.2%
Level 2 Investments(6)											
Calumet Specialty	Senior Notes	4/15/11	(3)	\$ 4,00	00	\$	4,000	\$	3,880	0.2%	0.1%
Products Partners LP											
Crestwood Holdings	Bank Loan	9/29/10	(5)	5,8	78		5,774		5,937	0.3	0.2
Partners LLC											
Crestwood Midstream	Senior Notes	(2)	(3)	15,00	00		15,011		14,400	0.7	0.4
Partners LP		(2)	(2)								
Eagle Rock Energy	Senior Notes	(2)	(3)	9	75		993		959	0.1	0.0
Partners, L.P.	G : N.	(2)	(3)	4.04	•		4.706		4.77.40	0.2	0.1
EV Energy Partners LP	Senior Notes		(3)	4,82			4,726		4,748	0.2	0.1
Linn Energy, LLC	Senior Notes	5/10/11	(3)	6,00			6,021		5,745	0.3	0.2
Linn Energy, LLC	Senior Notes	5/11/11	(3)	1,50)()		1,603		1,538	0.1	0.1
Total						\$	38,128	\$	37,207	1.9%	1.1%
Total of all restricted second	urities					\$	146,472	\$	148,363	7.6%	4.3%

⁽¹⁾ Securities are valued using inputs reflecting the Company s own assumptions.

⁽²⁾ Securities acquired at various dates throughout the nine months ended August 31, 2011.

⁽³⁾ Unregistered security of a public company.

- (4) On September 28, 2010, the Bankruptcy Court finalized the plan of reorganization of Clearwater. As part of the plan of reorganization, the Company received an interest in the Clearwater Trust consisting of cash and a coal royalty interest as consideration for its unsecured loan to Clearwater. See Note 5 Agreements and Affiliations.
- (5) Unregistered security of a private company or trust.
- (6) These securities have a fair market value determined by the mean of the bid and ask prices provided by an agent or syndicate bank, principal market maker or an independent pricing service. These securities have limited trading volume and are not listed on a national exchange.

8. Derivative Financial Instruments

As required by the Derivatives and Hedging Topic of the FASB Accounting Standards Codification, below are the derivative instruments and hedging activities of the Company. See Note 2 Significant Accounting Policies.

27

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except option contracts, share and per share amounts) (UNAUDITED)

Option Contracts Transactions in option contracts for the three and nine months ended August 31, 2011 were as follows:

Three Months Ended August 31, 2011	Number of Contracts	Pr	emium
Put Options Purchased Options outstanding at May 31, 2011 Options purchased	2,000	\$	30
Options expired	(2,000)		(30)
Options outstanding at August 31, 2011		\$	
Call Options Written			
Options outstanding at May 31, 2011	1,830	\$	180
Options written	19,664		1,207
Options subsequently repurchased ⁽¹⁾	(11,098)		(855)
Options exercised	(7,675)		(360)
Options expired	(2,721)		(172)
Options outstanding at August 31, 2011		\$	

(1) The price at which the Company subsequently repurchased the options was \$298, which resulted in a realized gain of \$557.

Nine Months Ended August 31, 2011	Number of Contracts	Pr	emium
Put Options Purchased Options outstanding at November 30, 2010		\$	
Options purchased	2,000		30
Options expired	(2,000)		(30)
Options outstanding at August 31, 2011		\$	
Call Options Written			
Options outstanding at November 30, 2010	9,550	\$	1,247
Options written	56,654		5,001
Options subsequently repurchased ⁽¹⁾	(34,783)		(3,615)
Options exercised	(24,648)		(2,098)

Options expired (535)

Options outstanding at August 31, 2011

\$

(1) The price at which the Company subsequently repurchased the options was \$1,209, which resulted in a realized gain of \$2,406.

Interest Rate Swap Contracts The Company may enter into interest rate swap contracts to partially hedge itself from increasing interest expense on its leverage resulting from increasing short-term interest rates. A decline in future interest rates may result in a decline in the value of the swap contracts, which, everything else being held constant, would result in a decline in the net assets of the Company. In addition, if the counterparty to the interest rate swap contracts defaults, the Company would not be able to use the anticipated receipts under the swap contracts

28

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except option contracts, share and per share amounts) (UNAUDITED)

to offset the interest payments on the Company s leverage. At the time the interest rate swap contracts reach their scheduled termination, there is a risk that the Company would not be able to obtain a replacement transaction or that the terms of the replacement transaction would not be as favorable as on the expiring transaction. In addition, if the Company is required to terminate any swap contract early, then the Company could be required to make a termination payment. As of August 31, 2011, the Company did not have any interest rate swap contracts outstanding.

During the fiscal second quarter, the Company entered into interest rate swap contracts (\$125,000 notional amount) in anticipation of the private placements of senior notes and mandatory redeemable preferred stock. In conjunction with the pricing of the private placements on April 27, 2011, these interest rate swap contracts were terminated, which resulted in a \$345 realized loss.

The Company did not have any derivative instruments outstanding as of August 31, 2011. The following tables set forth the effect of the Company s derivative instruments on the Statement of Operations.

For the Three Months Ended

		August 31, 2011					
Derivatives Not Accounted for as Hedging Instruments	Location of Gains/(Losses) on Derivatives Recognized in Income	Gai De Rec	t Realized ns/(Losses) on erivatives cognized in Income	Change in Unrealized Gains/(Losses) on Derivatives Recognized in Income			
Call options	Options		\$ 699	9	\$ (103)		
Derivatives Not Accounted for as	Location of Gains/(Losses) on Derivatives Derivatives Not Accounted for as Hedging Instruments Recognized in Income			on S Derivatives			
Hedging Instruments			ncome	Income			
Call options Interest rate swap contracts	Options c contracts Interest rate swap contracts		2,916 (345)	\$	(425)		
		\$	2,571	\$	(425)		

9. Investment Transactions

For the nine months ended August 31, 2011, the Company purchased and sold securities in the amounts of \$937,671 and \$566,767 (excluding short-term investments and options), respectively.

10. Revolving Credit Facility

At August 31, 2011, the Company had a \$150,000 unsecured revolving credit facility (the Credit Facility) with a syndicate of lenders. The Credit Facility has a three-year commitment maturing on June 11, 2013. The interest rate may vary between LIBOR plus 1.75% to LIBOR plus 3.00%, depending on the Company s asset coverage ratios. Outstanding loan balances will accrue interest daily at a rate equal to one-month LIBOR plus 1.75% based on current asset coverage ratios. The Company will pay a fee of 0.40% per annum on any unused amounts of the Credit Facility. See Financial Highlights for the Company s asset coverage ratios under the 1940 Act.

29

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except option contracts, share and per share amounts) (UNAUDITED)

For the nine months ended August 31, 2011, the average amount outstanding under the Credit Facility was \$43,515 with a weighted average interest rate of 2.35%. As of August 31, 2011, the Company had no outstanding borrowings on the Credit Facility. See Note 14 Subsequent Events.

11. Senior Unsecured Notes

At August 31, 2011, the Company had \$775,000, aggregate principal amount, of senior unsecured fixed and floating rate notes (the Senior Notes) outstanding.

The table below sets forth the key terms of each series of the Senior Notes.

Principal					Principal		Estimated Fair					
Series		tstanding, vember 30, 2010		rincipal leemed ⁽¹⁾		rincipal Issued		tstanding, ugust 31, 2011	A	Value, ugust 31, 2011	Fixed/Floating Interest Rate	Maturity
G	\$	75,000	\$	75,000	\$		\$		\$		5.645%	6/19/11
I		60,000						60,000		62,300	5.847%	6/19/12
K		125,000						125,000		134,000	5.991%	6/19/13
M		60,000						60,000		64,000	4.560%	11/4/14
											3-month LIBOR +	
N		50,000						50,000		49,900	185 bps	11/4/14
O		65,000						65,000		68,600	4.210%	5/7/15
											3-month LIBOR +	
P		45,000						45,000		44,400	160 bps	5/7/15
Q		15,000						15,000		15,200	3.230%	11/9/15
R		25,000						25,000		25,500	3.730%	11/9/17
S		60,000						60,000		61,400	4.400%	11/9/20
T		40,000						40,000		40,100	4.500%	11/9/22
											3-month LIBOR +	
U						60,000		60,000		59,000	145 bps	5/26/16
V						70,000		70,000		72,500	3.710%	5/26/16
W						100,000		100,000		105,200	4.380%	5/26/18
	\$	620,000	\$	75,000	\$	230,000	\$	775,000	\$	802,100		

⁽¹⁾ On May 26, 2011, the Series G Senior Notes were no longer deemed to be outstanding following the Company s irrevocable deposit of \$75,000 (plus interest) with the Senior Notes paying agent.

Holders of the fixed rate Senior Notes are entitled to receive cash interest payments semi-annually (on June 19 and December 19) at the fixed rate. Holders of the floating rate Senior Notes are entitled to receive cash interest payments quarterly (on March 19, June 19, September 19 and December 19) at the floating rate. During the period, the weighted average interest rate on the outstanding Senior Notes was 4.41%.

The Senior Notes were issued in private placement offerings to institutional investors and are not listed on any exchange or automated quotation system. The Senior Notes contain various covenants related to other indebtedness, liens and limits on the Company s overall leverage. Under the 1940 Act and the terms of the Senior Notes, the Company may not declare dividends or make other distributions on shares of its common stock or make purchases of such shares if, at any time of the declaration, distribution or purchase, asset coverage with respect to the outstanding Senior Notes would be less than 300%.

The Senior Notes are redeemable in certain circumstances at the option of the Company. The Senior Notes are also subject to a mandatory redemption to the extent needed to satisfy certain requirements if the Company fails to

30

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except option contracts, share and per share amounts) (UNAUDITED)

meet an asset coverage ratio required by law and is not able to cure the coverage deficiency by the applicable deadline, or fails to cure a deficiency as stated in the Company s rating agency guidelines in a timely manner.

The Senior Notes are unsecured obligations of the Company and, upon liquidation, dissolution or winding up of the Company, will rank: (1) senior to all the Company s outstanding preferred shares; (2) senior to all of the Company s outstanding common shares; (3) on a parity with any unsecured creditors of the Company and any unsecured senior securities representing indebtedness of the Company; and (4) junior to any secured creditors of the Company.

At August 31, 2011, the Company was in compliance with all covenants under the Senior Notes agreements.

12. Preferred Stock

At August 31, 2011, the Company had 10,400,000 shares of mandatory redeemable preferred stock outstanding, with a liquidation value of \$260,000.

The table below sets forth the key terms of each series of the mandatory redeemable preferred stock.

Shares Held			Shares	Liquidation	Estimated Fair		
Series	at November 30, 2010	Shares Issued	Outstanding, August 31, 2011 ⁽¹⁾	Value, August 31, 2011	Value, August 31, 2011	Rate	Mandatory Redemption Date
A B	4,400,000 320,000		4,400,000 320,000	\$ 110,000 8,000	\$ 119,300 8,200	5.57% 4.53%	5/7/17 11/9/17
C D ⁽²⁾	1,680,000	4,000,000	1,680,000 4,000,000	42,000 100,000	43,400 101,560	5.20% 4.95%	11/9/20 6/1/18
	6,400,000	4,000,000	10,400,000	\$ 260,000	\$ 272,460		

- (1) Each share has a \$25 liquidation value.
- (2) Series D mandatory redeemable preferred shares are publicly traded on the New York Exchange (NYSE) under the symbol KYN. Pr D . The fair value is based on the price of \$25.39 as of August 31, 2011.

Holders of the Series A, B and C mandatory redeemable preferred stock are entitled to receive cumulative cash distribution payments on the first business day following each quarterly period (February 28, May 31, August 31 and November 30). Holders of the Series D mandatory redeemable preferred stock are entitled to receive cumulative cash distribution payments on the first business day of each month. If the rating provided by Fitch Ratings falls below A (or the equivalent rating of another nationally recognized agency), the annual distribution rate on the mandatory redeemable preferred stock will increase between 0.5% and 4.0%, depending on the rating and the series. The annual

distribution rate will increase by 4.0% if no ratings are maintained, and the distribution rate will increase by 5.0% if the Company fails to make quarterly distribution or certain other payments.

The mandatory redeemable preferred stock rank senior to all of the Company s outstanding common shares and on parity with any other preferred stock. The mandatory redeemable preferred stock is redeemable in certain circumstances at the option of the Company and are also subject to a mandatory redemption if the Company fails to meet a total leverage (debt and preferred stock) asset coverage ratio of 225% or fails to maintain its basic maintenance amount as stated in the Company s rating agency guidelines.

Under the terms of the mandatory redeemable preferred stock, the Company may not declare dividends or pay other distributions on shares of its common stock or make purchases of such shares if, at any time of the declaration, distribution or purchase, asset coverage with respect to total leverage would be less than 225%.

31

KAYNE ANDERSON MLP INVESTMENT COMPANY NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except option contracts, share and per share amounts) (UNAUDITED)

The holders of the mandatory redeemable preferred stock have one vote per share and will vote together with the holders of common stock as a single class except on matters affecting only the holders of mandatory redeemable preferred stock or the holders of common stock. The holders of the mandatory redeemable preferred stock, voting separately as a single class, have the right to elect at least two directors of the Company.

At August 31, 2011, the Company was in compliance with the asset coverage and basic maintenance requirements of its mandatory redeemable preferred stock.

13. Common Stock

At August 31, 2011, the Company has 189,600,000 shares of common stock authorized and 74,868,084 shares outstanding. As of that date, KACALP owned 4,000 shares. Transactions in common shares for the nine months ended August 31, 2011 were as follows:

Shares outstanding at November 30, 2010	68,471,401
Shares issued through reinvestment of distributions	696,683
Shares issued in connection with offerings of common stock ⁽¹⁾	5,700,000

Shares outstanding at August 31, 2011 74,868,084

(1) On April 8, 2011, the Company closed its public offering of 5,700,000 shares of common stock at a price of \$30.58 per share. Total net proceeds from the offering were \$167,013 and were used by the Company to make additional portfolio investments that are consistent with the Company s investment objective, and for general corporate purposes.

14. Subsequent Events

On September 22, 2011, the Company declared its quarterly distribution of \$0.5025 per common share for the fiscal third quarter for a total quarterly distribution payment of \$37,621. The distribution was paid on October 14, 2011 to common stockholders of record on October 5, 2011. Of this total, pursuant to the Company s dividend reinvestment plan, \$6,713 was reinvested into the Company through the issuance of 262,125 shares of common stock.

On October 17, 2011 the Company amended its Credit Facility to increase the total commitment amount to \$175,000. This \$25,000 increase in commitment amount was accomplished by adding a new lender to the syndicate. All other terms of the Credit Facility remain the same including the maturity date and interest rates.

32

Directors and Corporate Officers

Kevin S. McCarthy

Chairman of the Board of Directors,

President and Chief Executive Officer

Anne K. Costin Director
Steven C. Good Director
Gerald I. Isenberg Director
William H. Shea, Jr. Director

Terry A. Hart Chief Financial Officer and Treasurer
David J. Shladovsky Chief Compliance Officer and Secretary
J.C. Frey Executive Vice President, Assistant

Secretary and Assistant Treasurer
James C. Baker Executive Vice President

Jody C. Meraz Vice President

Investment Adviser

KA Fund Advisors, LLC 717 Texas Avenue, Suite 3100 Houston, TX 77002

1800 Avenue of the Stars, Third Floor Los Angeles, CA 90067

Custodian

JPMorgan Chase Bank, N.A. 14201 North Dallas Parkway, Second Floor Dallas, TX 75254

Administrator

Ultimus Fund Solutions, LLC 350 Jericho Turnpike, Suite 206 Jericho, NY 11753

Stock Transfer Agent and Registrar

American Stock Transfer & Trust Company 59 Maiden Lane New York, NY 10038

Independent Registered Public Accounting Firm

PricewaterhouseCoopers LLP 350 South Grand Avenue Los Angeles, CA 90071

Legal Counsel

Paul, Hastings LLP 55 Second Street, 24th Floor San Francisco, CA 94105

Please visit us on the web at http://www.kaynefunds.com or call us toll-free at 1-877-657-3863.

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