Kayne Anderson MLP Investment CO
Form N-30B-2
April 27, 2012
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MLP Investment Company

KYN Quarterly Report

February 29, 2012

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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, project, will and similar expressions identify forward-looking statements, which generally are not hist 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.

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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 February 29, 2012, we had total assets of $4.4 billion, net assets applicable to our common stock of $2.5 billion (net asset value per share of $30.08), and 82.9 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 February 29, 2012, we held $4.1 billion in equity investments and $70.4 million in debt investments.

Recent Events

On February 29, 2012, we sold 7,500,000 shares of common stock at a price of $31.51 per share. The public offering was completed on March 5, 2012 and the net proceeds of $226.5 million were used to make additional portfolio investments and for general corporate purposes.

On March 21, 2012, we completed a public offering of 4,800,000 shares of Series E mandatory redeemable preferred stock (Series E MRP Shares) at a price of $25.00 per share. The Series E MRP Shares pay cash dividends at a rate of 4.25% per annum and trade on the New York Stock Exchange under the symbol KYNPRE . Net proceeds from the offering of $117.4 million were used to repay borrowings under our senior unsecured revolving credit facility (the Credit Facility) and to redeem $6.0 million of Series A mandatory redeemable preferred stock.

On April 13, 2012, we amended our Credit Facility to increase the total commitment amount from $175.0 million to $200.0 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.

On April 17, 2012, we reached a conditional agreement with institutional investors relating to a private placement of $175.0 million of senior unsecured notes (Senior Notes). The table below sets forth the key terms:

Series	Amount ($ in millions)	Interest Rate	Term
X	$ 14.0	2.46%	3 years
Y	20.0	2.91%	5 years
Z	15.0	3.39%	7 years
AA	15.0	3.56%	8 years
BB	35.0	3.77%	9 years
CC	76.0	3.95%	10 years
	$ 175.0		

Net proceeds from such offerings will be used to repay borrowings under our Credit Facility, to refinance $60.0 million principal amount of Series I Senior Notes that mature in June 2012, to make new portfolio investments and for general corporate purposes. Closing of the private placement is scheduled to occur in early May and is subject to investor due diligence, legal documentation and other standard closing conditions.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

MANAGEMENT DISCUSSION

(UNAUDITED)

In anticipation of the Senior Notes offering, we entered into interest rate swap contracts ($150.0 million notional amount). In conjunction with the pricing of the private placements on April 17, 2012, we terminated the interest rate swap contracts, which resulted in a realized loss of $2.6 million.

Our Top Ten Portfilio Investments as of February 29, 2012

Listed below are our top ten portfolio investments by issuer as of February 29, 2012.

	Holding	Sector	Amount ($ millions)	Percent of Long-Term Investments
1.	Enterprise Products Partners L.P.	Midstream MLP	$ 383.7	9.2%
2.	Kinder Morgan Management, LLC	MLP Affiliate	312.7	7.5
3.	Plains All American Pipeline, L.P.	Midstream MLP	261.4	6.3
4.	MarkWest Energy Partners, L.P.	Midstream MLP	234.5	5.6
5.	Energy Transfer Equity, L.P	General Partner MLP	192.4	4.6
6.	Magellan Midstream Partners, L.P.	Midstream MLP	169.5	4.1
7.	Regency Energy Pertners LP	Midstream MLP	169.4	4.1
8.	El Paso Pipeline Partners, L.P.	Midstream MLP	159.3	3.8
9.	Williams Partners L.P.	Midstream MLP	156.1	3.7
10.	ONEOK Partners, L.P.	Midstream MLP	139.5	3.3
			$ 2,178.5	52.2%

Results of Operations — For the Three Months Ended February 29, 2012

Investment Income. Investment income totaled $7.4 million and consisted primarily of net dividends and distributions and interest income on our investments. Interest and other income was $0.8 million, and we received $51.6 million of cash dividends and distributions, of which $45.0 million was treated as return of capital during the quarter. During the quarter, we received $6.9 million of paid-in-kind dividends, which are not included in investment income, but are reflected as an unrealized gain.

Operating Expenses. Operating expenses totaled $26.8 million, including $13.3 million of investment management fees, $8.9 million of interest expense (including non-cash amortization of debt issuance costs of $0.4 million), and $1.0 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 $13.5 million and included a deferred income tax benefit of $5.9 million.

Net Realized Gains. We had net realized gains from our investments of $21.1 million, net of $12.4 million of deferred tax expense.

Net Change in Unrealized Gains. We had a net change in unrealized gains of $260.4 million. The net change consisted of $413.3 million of unrealized gains from investments and a deferred tax expense of $152.9 million.

Net Increase in Net Assets Resulting from Operations. We had an increase in net assets resulting from operations of $268.0 million. This increase was composed of a net investment loss of $13.5 million; net realized gains of $21.1 million; and net change in unrealized gains of $260.4 million, as noted above.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

MANAGEMENT DISCUSSION

(UNAUDITED)

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.

Net Distributable Income (NDI)

(amounts in millions, except for per share amounts)

	Three Months Ended February 29, 2012
Distributions and Other Income from Investments	
Dividends and Distributions	$ 51.6
Paid-In-Kind Dividends	6.9
Interest and Other Income	0.8
Net Premiums Received from Call Options Written	0.9
Total Distributions and Other Income from Investments	60.2
Expenses	
Investment Management Fee	(13.3)
Other Expenses	(1.0)
Total Management Fee and Other Expenses	(14.3)
Interest Expense	(8.5)
Preferred Stock Distributions	(3.4)
Income Tax Benefit	5.9
Net Distributable Income (NDI)	**$ 39.9**
Weighted Shares Outstanding	75.3
NDI per Weighted Share Outstanding	**$ 0.53**

Distributions paid per Common Share[(1)]	**$**	**0.5175**

(1) The distribution of $0.5175 per share for the first quarter of fiscal 2012 was paid to common stockholders on April 13, 2012.

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.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

MANAGEMENT DISCUSSION

(UNAUDITED)

On March 21, 2012, we increased our quarterly distribution to $0.5175 from $0.51 per common share for the fiscal first quarter 2012 for a total quarterly distribution payment of $42.9 million. The distribution was paid on April 13, 2012 to common stockholders of record on April 5, 2012.

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.

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 February 29, 2012 of $1,111.0 million was comprised of $775.0 million of Senior Notes, $260.0 million of mandatory redeemable preferred stock and $76.0 million outstanding under our Credit Facility. Total leverage represented 25% of total assets at February 29, 2012. As of April 25, 2012, we had $137.0 million borrowed under our Credit Facility, and we had $6.6 million of cash.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

MANAGEMENT DISCUSSION

(UNAUDITED)

At February 29, 2012, the Credit Facility had a $175.0 million commitment and matures on June 11, 2013. 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. See Recent Events for an update on the Credit Facility. A full copy of our Credit Facility is available on our website, www.kaynefunds.com.

At February 29, 2012, our asset coverage ratios under the Investment Company Act of 1940, as amended (the 1940 Act), were 423% and 324% 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.

We had $775.0 million of senior unsecured notes outstanding at February 29, 2012. Of this amount, $60.0 million matures in 2012 and remaining $715.0 million of senior unsecured notes matures between 2013 and 2022. As of the same date, we had $260.0 million of mandatory redeemable preferred stock, which is subject to mandatory redemption starting on 2017 through 2020. See Recent Events for an update on our leverage.

Our leverage, at February 29, 2012, consisted of both fixed rate (79%) and floating rate (21%) obligations. At such date, the weighted average interest rate on our leverage was 4.36%.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

SCHEDULE OF INVESTMENTS

FEBRUARY 29, 2012

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

(UNAUDITED)

Description	No. of Shares/Units	Value
Long-Term Investments 167.1%		
Equity Investments[1] 164.3%		
Midstream MLP[2] 110.8%		
Boardwalk Pipeline Partners, LP	1,032	$ 28,046
Buckeye Partners, L.P.	1,405	84,033
Buckeye Partners, L.P. Class B Units[3][4]	865	47,087
Chesapeake Midstream Partners, L.P.	1,325	37,830
Copano Energy, L.L.C.	1,533	56,994
Crestwood Midstream Partners LP	1,826	52,663
Crestwood Midstream Partners LP Class C Units[3][4]	1,134	29,990
Crosstex Energy, L.P.	1,200	20,637
DCP Midstream Partners, LP	2,024	98,567
El Paso Pipeline Partners, L.P.	4,345	159,336
Enbridge Energy Partners, L.P.	3,715	120,916
Energy Transfer Partners, L.P.	1,736	82,294
Enterprise Products Partners L.P.	7,396	383,685
Exterran Partners, L.P.	2,878	68,064
Global Partners LP	1,974	43,398
Holly Energy Partners, L.P.	387	23,725
Inergy Midstream, L.P.	1,064	22,547
Magellan Midstream Partners, L.P.	2,316	169,457
MarkWest Energy Partners, L.P.	3,920	234,456
Niska Gas Storage Partners LLC	1,671	15,772
NuStar Energy L.P.	301	18,283
Oiltanking Partners, L.P.	460	14,890
ONEOK Partners, L.P.	2,397	139,520
PAA Natural Gas Storage, L.P.	1,124	21,577
Plains All American Pipeline, L.P.[5]	3,161	261,423
Regency Energy Partners LP	6,393	169,425
Rose Rock Midstream, L.P.	315	7,514
Spectra Energy Partners, L.P.	596	19,673
Targa Resources Partners L.P.	1,873	79,682
TC PipeLines, LP	190	8,810
Tesoro Logistics LP	502	18,339
Transmontaigne Partners L.P.	393	13,632
Western Gas Partners L.P.	1,156	52,921
Williams Partners L.P.	2,509	156,076
		2,761,262
MLP Affiliate[2] 15.5%		
Enbridge Energy Management, L.L.C.[4]	2,161	72,961

Kinder Morgan Management, LLC(4)	3,900	312,700
		385,661
General Partner MLP(2) 11.3%		
Alliance Holdings GP L.P.	1,706	85,825
Energy Transfer Equity, L.P.	4,425	192,422
NuStar GP Holdings, LLC	74	2,592
		280,839

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

SCHEDULE OF INVESTMENTS

FEBRUARY 29, 2012

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

(UNAUDITED)

Description	No. of Shares/Units	Value
Shipping MLP 9.0%		
Capital Product Partners L.P.	2,841	$ 21,221
Golar LNG Partners LP	92	3,419
Navios Maritime Partners L.P.	1,950	31,258
Teekay LNG Partners L.P.	1,879	73,645
Teekay Offshore Partners L.P.	3,223	94,734
		224,277
Midstream 7.6%		
El Paso Corporation[6]	656	18,232
Kinder Morgan, Inc.	854	30,095
ONEOK, Inc.	421	34,808
Plains All American GP LLC Unregistered[3)(5]	24	47,538
Targa Resources Corp.	276	12,280
The Williams Companies, Inc.	1,588	47,440
		190,393
Upstream MLP & Income Trust 4.5%		
BreitBurn Energy Partners L.P.	1,597	30,111
Chesapeake Granite Wash Trust	533	14,807
Legacy Reserves L.P.	535	15,437
LRR Energy, L.P.	243	4,912
Memorial Production Partners LP	318	5,908
Mid-Con Energy Partners, LP	338	8,214
SandRidge Permian Trust	1,028	24,930
VOC Energy Trust	344	7,459
		111,778
Coal MLP 3.1%		
Alliance Resource Partner, L.P.	12	883
Penn Virginia Resource Partners, L.P.	3,063	76,382
		77,265
Propane MLP 2.4%		
Inergy, L.P.	3,510	61,290

Other 0.1%

Clearwater Trust[3][5][7]			N/A	3,250
Total Equity Investments (Cost $2,408,532)				4,096,015
	Interest Rate	**Maturity Date**	**Principal Amount**	
Debt Investments 2.8%				
Midstream 1.6%				
Crestwood Holdings Partners, LLC	[8]	10/1/16	$ 5,549	5,660
Crestwood Midstream Partners LP	7.750%	4/1/19	11,750	11,927
Niska Gas Storage Partners LLC	8.875	3/15/18	24,000	23,160
				40,747

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

SCHEDULE OF INVESTMENTS

FEBRUARY 29, 2012

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

(UNAUDITED)

Description	Interest Rate	Maturity Date	Principal Amount	Value
Upstream 0.7%				
BreitBurn Energy Partners L.P.	7.875%	4/15/22	$ 2,250	$ 2,368
Eagle Rock Energy Partners, L.P.	8.375	6/1/19	975	1,009
Linn Energy, LLC	6.250	11/1/19	13,500	13,500
				16,877
Coal MLP 0.3%				
Penn Virginia Resource Partners, L.P.	8.250	4/15/18	6,250	6,531
Other 0.2%				
Calumet Specialty Products Partners, L.P.	9.375	5/1/19	4,000	4,190
Calumet Specialty Products Partners, L.P.	9.375	5/1/19	2,000	2,095
				6,285
Total Energy Debt Investments (Cost $68,794)				70,440
Total Long-Term Investments (Cost $2,477,326)				4,166,455

	No. of Contracts	
Liabilities		
Call Option Contracts Written[9]		
Midstream		
El Paso Pipeline Partners, L.P., call option expiring 4/20/12 @ $37.50 (Premiums Received $88)	1,000	(50)
Revolving Credit Facility		(76,000)
Senior Unsecured Notes		(775,000)
Mandatory Redeemable Preferred Stock at Liquidation Value		(260,000)
Deferred Tax Liability		(645,606)
Other Liabilities		(200,244)
Total Liabilities		(1,956,900)
Other Assets		283,187
Total Liabilities in Excess of Other Assets		(1,673,713)
Net Assets Applicable to Common Stockholders		$ 2,492,742

(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. See Note 5 Agreements and Affiliations.

(6) Security or a portion thereof is segregated as collateral on option contracts written.

(7) The Company owns an interest in the Creditors Trust of Miller Bros. Coal, LLC (Clearwater Trust) consisting of a coal royalty interest. See Notes 5 and 7 in Notes to Financial Statements.

(8) 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 February 29, 2012).

(9) Security is non-income producing.

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

STATEMENT OF ASSETS AND LIABILITIES

FEBRUARY 29, 2012

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

(UNAUDITED)

ASSETS	
Investments at fair value:	
Non-affiliated (Cost $2,357,609)	$ 3,854,244
Affiliated (Cost $119,717)	312,211
Total investments (Cost $2,477,326)	4,166,455
Cash	43,122
Deposits with brokers	391
Receivable for common stock offering	226,875
Receivable for securities sold	1,312
Interest, dividends and distributions receivable	2,709
Deferred debt issuance and preferred stock offering costs and other assets	8,778
Total Assets	4,449,642
LIABILITIES	
Revolving credit facility	76,000
Payable for securities purchased	175,919
Investment management fee payable	13,333
Accrued directors fees and expenses	79
Call option contracts written (Premiums received $88)	50
Accrued expenses and other liabilities	10,913
Deferred tax liability	645,606
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	1,956,900
NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS	$ 2,492,742
NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS CONSIST OF	
Common stock, $0.001 par value (82,868,863 shares issued and outstanding, 189,600,000 shares authorized)	$ 83
Paid-in capital	1,571,849
Accumulated net investment loss, net of income taxes, less dividends	(356,912)
Accumulated realized gains on investments, options, and interest rate swap contracts, net of income taxes	216,793
Net unrealized gains on investments and options, net of income taxes	1,060,929
NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS	$ 2,492,742
NET ASSET VALUE PER COMMON SHARE	$ 30.08

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

STATEMENT OF OPERATIONS

FOR THE THREE MONTHS ENDED FEBRUARY 29, 2012

(amounts in 000 s)

(UNAUDITED)

INVESTMENT INCOME	
Income	
Dividends and distributions:	
Non-affiliated investments	$ 47,769
Affiliated investments	3,842
Total dividends and distributions	51,611
Return of capital	(45,010)
Net dividends and distributions	6,601
Interest and other income	812
Total Investment Income	7,413
Expenses	
Investment management fees	13,333
Administration fees	211
Professional fees	137
Custodian fees	102
Reports to stockholders	101
Directors fees and expenses	90
Insurance	53
Other expenses	272
Total Expenses Before Interest Expense, Preferred Distributions and Taxes	14,299
Interest expense and amortization of debt issuance costs	8,941
Distributions on mandatory redeemable preferred stock and amortization of offering costs	3,559
Total Expenses Before Taxes	26,799
Net Investment Loss Before Taxes	(19,386)
Deferred tax benefit	5,856
Net Investment Loss	(13,530)
REALIZED AND UNREALIZED GAINS (LOSSES)	
Net Realized Gains	
Investments non-affiliated	33,196
Options	356
Deferred tax expense	(12,414)
Net Realized Gains	21,138

Net Change in Unrealized Gains (Losses)	
Investments non-affiliated	350,459
Investments affiliated	62,952
Options	(55)
Deferred tax expense	(152,942)
Net Change in Unrealized Gains	260,414
Net Realized and Unrealized Gains	281,552
NET INCREASE IN NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS RESULTING FROM OPERATIONS	$ 268,022

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

STATEMENT OF CHANGES IN NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS

(amounts in 000 s, except share amounts)

	For the Three Months Ended February 29, 2012 (Unaudited)	For the Fiscal Year Ended November 30, 2011
OPERATIONS		
Net investment loss, net of tax	$ (13,530)	$ (49,953)
Net realized gains, net of tax	21,138	110,193
Net change in unrealized gains, net of tax	260,414	91,626
Net Increase in Net Assets Resulting from Operations	268,022	151,866
DIVIDENDS AND DISTRIBUTIONS TO COMMON STOCKHOLDERS(1)		
Dividends	(7,608)(2)	(89,963)(3)
Distributions return of capital	(30,708)(2)	(51,663)(3)
Dividends and Distributions to Common Stockholders	(38,316)	(141,626)
CAPITAL STOCK TRANSACTIONS		
Issuance of common stock offerings of 7,500,000 and 5,700,000 shares of common stock, respectively	236,325	174,306
Underwriting discounts and offering expenses associated with the issuance of common stock	(9,796)	(7,322)
Issuance of 238,654 and 958,808 newly issued shares of common stock from reinvestment of dividends and distributions, respectively	6,904	26,488
Net Increase in Net Assets Applicable to Common Stockholders from Capital Stock Transactions	233,433	193,472
Total Increase in Net Assets Applicable to Common Stockholders	463,139	203,712
NET ASSETS ATTRIBUTABLE TO COMMON STOCKHOLDERS		
Beginning of period	2,029,603	1,825,891
End of period	$ 2,492,742	$ 2,029,603

(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 $3,406 paid to mandatory redeemable preferred stockholders during the three months ended February 29, 2012 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. Therefore, the characterization may differ from the preliminary estimates. Distributions in the amount of $11,451 paid to mandatory redeemable preferred stockholders for the fiscal year ended November 30, 2011, were characterized as qualified dividend income. This characterization is based on the Company s earnings and profits.

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

STATEMENT OF CHANGES IN NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS

(amounts in 000 s, except share amounts)

(2) This is an estimate of the characterization of the distributions paid to common stockholders for the three months ended February 29, 2012 as either a dividend (qualified dividend 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. Therefore, the characterization may differ from the preliminary estimates.

(3) The information presented in each of these items is a characterization of a portion of the total dividends and distributions paid to common stockholders for the fiscal year ended November 30, 2011 as either dividends (qualified dividend income) or distributions (return of capital). This characterization is based on the Company s earnings and profits.

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

STATEMENT OF CASH FLOWS

FOR THE THREE MONTHS ENDED FEBRUARY 29, 2012

(amounts in 000 s)

(UNAUDITED)

CASH FLOWS FROM OPERATING ACTIVITIES	
Net increase in net assets resulting from operations	$ 268,022
Adjustments to reconcile net increase in net assets resulting from operations to net cash used in operating activities:	
Net deferred tax expense	159,500
Return of capital distributions	45,010
Net realized gains	(33,552)
Net unrealized gains	(413,356)
Accretion of bond premiums, net	(17)
Purchase of long-term investments	(427,719)
Proceeds from sale of long-term investments	186,766
Increase in deposits with brokers	(117)
Increase in receivable for securities sold	(60)
Increase in interest, dividends and distributions receivable	(1,825)
Amortization of deferred debt issuance costs	425
Amortization of mandatory redeemable preferred stock issuance costs	154
Decrease in other assets, net	47
Increase in payable for securities purchased	167,237
Increase in investment management fee payable	1,419
Decrease in call option contracts written, net	(34)
Decrease in accrued expenses and other liabilities	(7,196)
Net Cash Used in Operating Activities	(55,296)
CASH FLOWS FROM FINANCING ACTIVITIES	
Proceeds from revolving Credit Facility	76,000
Cash distributions paid to common stockholders	(31,412)
Net Cash Provided by Financing Activities	44,588
NET DECREASE IN CASH	(10,708)
CASH BEGINNING OF PERIOD	53,830
CASH END OF PERIOD	$ 43,122

Supplemental disclosure of cash flow information:

Non-cash financing activities not included herein consist of reinvestment of distributions of $6,904 pursuant to the Company s dividend reinvestment plan.

During the three months ended February 29, 2012, interest paid was $15,763 and there were no income taxes paid.

The Company received $6,950 paid-in-kind dividends during the three months ended February 29, 2012. See Note 2 Significant Accounting Policies.

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

FINANCIAL HIGHLIGHTS

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

	For the Three Months Ended February 29, 2012 (Unaudited)	For the Fiscal Year Ended November 30, 2011	2010	2009	2008	2007	2006	2005	For the Period September 28, 2004[1] through November 30, 2004
Per Share of Common Stock[2]									
Net asset value, beginning of period	$ 27.01	$ 26.67	$ 20.13	$ 14.74	$ 30.08	$ 28.99	$ 25.07	$ 23.91	$ 23.70[3]
Net investment income/(loss)[4]	(0.18)	(0.69)	(0.44)	(0.33)	(0.73)	(0.73)	(0.62)	(0.17)	0.02
Net realized and unrealized gain/(loss)	3.74	2.91	8.72	7.50	(12.56)	3.58	6.39	2.80	0.19
Total income/(loss) from operations	3.56	2.22	8.28	7.17	(13.29)	2.85	5.77	2.63	0.21
Auction rate preferred dividends[4][5]						(0.10)		(0.05)	
Auction rate preferred distributions return of capital[5]				(0.01)	(0.10)		(0.10)		
Total dividends and distributions auction rate preferred				(0.01)	(0.10)	(0.10)	(0.10)	(0.05)	
Common dividends[5]	(0.10)	(1.26)	(0.84)			(0.09)		(0.13)	
Common distributions return of capital[5]	(0.41)	(0.72)	(1.08)	(1.94)	(1.99)	(1.84)	(1.75)	(1.37)	
Total dividends and distributions common	(0.51)	(1.98)	(1.92)	(1.94)	(1.99)	(1.93)	(1.75)	(1.50)	
Underwriting discounts and offering costs on the issuance of auction rate preferred stock								(0.03)	
Effect of issuance of common stock	0.02	0.09	0.16	0.12		0.26		0.11	
Effect of shares issued in reinvestment of dividends		0.01	0.02	0.05	0.04	0.01			
Total capital stock transactions	0.02	0.10	0.18	0.17	0.04	0.27		0.08	

Net asset value, end of period	$ 30.08	$ 27.01	$ 26.67	$ 20.13	$ 14.74	$ 30.08	$ 28.99	$ 25.07	$ 23.91
Market value per share of common stock, end of period	$ 31.40	$ 28.03	$ 28.49	$ 24.43	$ 13.37	$ 28.27	$ 31.39	$ 24.33	$ 24.90
Total investment return based on common stock market value(6)	14,0%(7)	5.6%	26.0%	103.0%	(48.8)%	(4.4)%	37.9%	3.7%	(0.4)%(7)

See accompanying notes to financial statements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

FINANCIAL HIGHLIGHTS

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

	For the Three Months Ended February 29, 2012 (Unaudited)	For the Fiscal Year Ended November 30, 2011	2010	2009	2008	2007	2006	2005	For the Period September 28, 2004[1] through November 30, 2004
plemental Data and os[8]									
assets applicable to mon stockholders, end riod	$ 2,492,742	$ 2,029,603	$ 1,825,891	$ 1,038,277	$ 651,156	$ 1,300,030	$ 1,103,392	$ 932,090	$ 792,836
o of expenses to age net assets									
agement fees	2.3%	2.4%	2.1%	2.1%	2.2%	2.3%	3.2%	1.2%	0.8%
r expenses	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.3	0.4
otal	2.5	2.6	2.3	2.5	2.5	2.5	3.4	1.5	1.2
est expense and ibutions on mandatory emable preferred [4]	2.2	2.3	1.9	2.5	3.4	2.3	1.7	0.8	0.0
me tax expense	28.2	4.8	20.5	25.4	[9]	3.5	13.8	6.4	3.5
l expenses	32.9%	9.7%	24.7%	30.4%	5.9%	8.3%	18.9%	8.7%	4.7%
o of net investment me/(loss) to average net s[4]	(2.4)%	(2.5)%	(1.8)%	(2.0)%	(2.8)%	(2.3)%	(2.4)%	(0.7)%	0.5%
ncrease/(decrease) in ssets to common kholders resulting from ations to average net s	11.8%[7]	7.7%	34.6%	43.2%	(51.2)%	7.3%	21.7%	10.0%	0.9%
folio turnover rate	4.9%[7]	22.3%	18.7%	28.9%	6.7%	10.6%	10.0%	25.6%	11.8%
age net assets	$ 2,273,613	$ 1,971,469	$ 1,432,266	$ 774,999	$ 1,143,192	$ 1,302,425	$ 986,908	$ 870,672	$ 729,280
or unsecured notes anding, end of period	775,000	775,000	620,000	370,000	304,000	505,000	320,000	260,000	
olving credit facility anding, end of period	76,000					97,000	17,000		
ion rate preferred , end of period				75,000	75,000	75,000	75,000	75,000	
datory redeemable erred stock, end of od	260,000	260,000	160,000						
age shares of common k outstanding	75,335,887	72,661,162	60,762,952	46,894,632	43,671,666	41,134,949	37,638,314	34,077,731	33,165,900
t coverage of total 10)	423.5%	395.4%	420.3%	400.9%	338.9%	328.4%	449.7%	487.3%	

t coverage of total rage (debt and preferred k)[11]	324.4%	296.1%	334.1%	333.3%	271.8%	292.0%	367.8%	378.2%
rage amount of owings per share of mon stock during the od[2]	$ 10.78	$ 10.09	$ 7.70	$ 6.79	$ 11.52	$ 12.14	$ 8.53	$ 5.57

See accompanying notes to financial statements.

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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 three months ended February 29, 2012 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 fiscal 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.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except number of 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 and deferred 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.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except number of 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 professionals 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, this discount will be amortized on a straight line basis over such estimated time frame.

At February 29, 2012, the Company held 5.1% of its net assets applicable to common stockholders (2.9% of total assets) in securities valued at fair value, as determined pursuant to procedures adopted by the Board of Directors, with fair value of $127,865. See Note 7 Restricted Securities.

E. *Repurchase Agreements* The Company has agreed, from time to time, 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 whom 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. As of February 29, 2012, the Company did not have any repurchase agreements.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

NOTES TO FINANCIAL STATEMENTS

(amounts in 000 s, except number of 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.

The Company s short sales, if any, are fully collateralized. The Company is required to maintain 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 would segregate an equivalent amount of securities owned as collateral while the short sale is outstanding. During the three months ended February 29, 2012, the Company did not engage in any 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 (losses) and net change in unrealized gains (losses).

	Three Months Ended February 29, 2012
Return of capital portion of distributions received	87%
Return of capital attributable to net realized gains (losses)	$ 6,925
Return of capital attributable to net change in unrealized gains (losses)	38,085
Total return of capital	$ 45,010

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 months ended February 29, 2012, 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

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KAYNE ANDERSON MLP INVESTMENT COMPANY

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(UNAUDITED)

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, LLC. During the three months ended February 29, 2012, the Company received the following paid-in-kind dividends.

	Three Months Ended February 29, 2012
Buckeye Partners, L.P. (Class B Units)	$ 880
Crestwood Midstream Partners LP (Class C Units)	547
Enbridge Energy Management, L.L.C.	1,184
Kinder Morgan Management, LLC	4,339
Total paid-in-kind dividends	$ 6,950

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.

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

KAYNE ANDERSON MLP INVESTMENT COMPANY

NOTES TO FINANCIAL STATEMENTS

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

(UNAUDITED)

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 February 29, 2012, the Company did not have any interest or penalties associated with the underpayment of any income taxes. The tax years from 2008 through 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 hedging techniques such as interest rate swaps to mitigate potential interest rate risk on a portion of the Company s leverage. Such interest rate swaps would principally be used to protect the Company against higher costs 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 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 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.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

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

(UNAUDITED)

The Company may also write (sell) call options with the purpose of generating realized gains or reducing its ownership of certain securities. If the Company writes a call option on a security, the Company has the obligation upon exercise of the option to deliver the underlying security upon payment of the exercise price. The Company will only write call options on securities that the Company holds in its portfolio (i.e., covered calls).

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 Topic 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. Note that the valuation levels below are not necessarily an indication of the risk or liquidity associated with the underlying investment.

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.

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The following table presents the Company s assets measured at fair value on a recurring basis at February 29, 2012. The Company presents these assets by security type and description on its Schedule of Investments.

	Total	Quoted Prices in Active Markets (Level 1)	Prices with Other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
Assets at Fair Value				
Equity investments	$ 4,096,015	$ 3,968,150	$	$ 127,865
Debt investments	70,440		70,440	
Total assets at fair value	$ 4,166,455	$ 3,968,150	$ 70,440	$ 127,865
Liabilities at Fair Value				
Call option contracts written	$ 50	$	$ 50	$

The Company did not have any liabilities that were measured at fair value on a recurring basis using significant unobservable inputs (Level 3) at February 29, 2012 or at November 30, 2011. For the three months ended February 29, 2012, there were no transfers between Level 1 and Level 2.

In May 2011, the 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 which amends ASC Topic 820, Fair Value Measurement. The amended guidance clarifies the wording used to describe many requirements in accounting literature for fair value measurement and disclosure to establish consistency between 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. The Company will adopt ASU No. 2011-04 in the fiscal second quarter of 2012, which is the Company s first reportable period for which adoption is required. Management is currently evaluating this guidance and does not believe that the adoption of this guidance will have a material impact on the Company s financial statements and disclosures.

The following table presents the Company s assets measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the three months ended February 29, 2012.

	Equity Investments
Balance November 30, 2011	$ 164,129
Purchases	
Issuances	1,427
Transfers out	(40,711)
Realized gains (losses)	
Unrealized gains, net	3,020

Balance February 29, 2012	$ 127,865

The $3,020 of unrealized gains presented in the table above for the three months ended February 29, 2012 related to investments that are still held at February 29, 2012, and the Company includes these unrealized gains on the Statement of Operations Net Change in Unrealized Gains (Losses).

The issuances of $1,427 relate to additional units received from Buckeye Partners, L.P. (Class B Units) and Crestwood Midstream Partners LP (Class C Units). The Company s investments in the common units of Teekay Offshore Partners L.P., which is noted as a transfer out of Level 3 in the table above, became readily marketable during the three months ended February 29, 2012.

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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), which may be amended from time to time. 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 and a majority of the Company s Directors who are not interested persons of the Company, as such term is defined in the 1940 Act. For the three months ended February 29, 2012, 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 dividends/distributions on any outstanding common stock and accrued and unpaid dividends/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 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.

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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 February 29, 2012, the Company held approximately 63% 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.

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 February 29, 2012 are as follows:

Deferred tax assets:	
Net operating loss carryforwards Federal	$ 50,902
Net operating loss carryforwards State	4,308
Other	105
Deferred tax liabilities:	
Net unrealized gains on investment securities, interest rate swap contracts and option contracts	(685,113)
Basis reductions resulting from estimated return of capital	(15,808)

Total deferred tax liability, net	$ (645,606)

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At February 29, 2012, the Company had federal net operating loss carryforwards of $150,051 (deferred tax asset of $50,902). 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, $19,121, $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. In addition, the Company has state net operating losses of $140,018 (deferred tax asset of $4,308). These state net operating losses begin to expire in 2012 through 2030.

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.

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 months ended February 29, 2012 , as follows:

	Three Months Ended February 29, 2012
Computed federal income tax at 35%	$ 149,633
State income tax, net of federal tax	8,622
Non-deductible distributions on mandatory redeemable preferred stock and other	1,245
Total income tax expense	$ 159,500

At February 29, 2012, the cost basis of investments for federal income tax purposes was $2,313,393. The cost basis of investments includes a $163,933 reduction in basis attributable to the Company s portion of the allocated losses from its MLP investments. At February 29, 2012, gross unrealized appreciation and depreciation of investments and options for federal income tax purposes were as follows:

Gross unrealized appreciation of investments	$ 1,860,427
Gross unrealized depreciation of investments	(7,326)
Net unrealized appreciation of investments	$ 1,853,101

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.

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At February 29, 2012, the Company held the following restricted investments:

Investment	Security	Acquisition Date	Type of Restriction	Number of Units, Principal ($) (in 000 s)	Cost Basis	Fair Value	Percent of Net Assets	Percent of Total Assets
Level 3 Investments[1]								
Buckeye Partners, L.P.	Class B Units	(2)	(3)	865	45,006	$ 47,087	1.9%	1.0%
Clearwater Trust	Trust Interest	(4)	(5)	1	3,266	3,250	0.1	0.1
Crestwood Midstream Partners LP	Class C Units	4/1/11	(3)	1,134	26,007	29,990	1.2	0.7
Plains All American GP LLC[6]	Common Units	(2)	(5)	24	33,040	47,538	1.9	1.1
Total					$ 107,319	$ 127,865	5.1%	2.9%
Level 2 Investments[7]								
BreitBurn Energy Partners L.P.	Senior Notes	1/10/12	(3)	$ 2,250	$ 2,231	$ 2,368	0.1%	0.1%
Crestwood Holdings Partners LLC	Bank Loan	9/29/10	(5)	5,549	5,458	5,660	0.2	0.1
Crestwood Midstream Partners LP	Senior Notes	(2)	(3)	11,750	11,739	11,926	0.5	0.3
Linn Energy, LLC	Senior Notes	2/28/12	(3)	13,500	13,499	13,500	0.5	0.3
Total					$ 32,927	$ 33,454	1.3%	0.8%
Total of all restricted securities					$ 140,246	$ 161,319	6.4%	3.7%

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

(2) Securities acquired at various dates throughout the fiscal year ended November 30, 2011.

(3) Unregistered or restricted security of a publicly traded 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) In determining the fair value for Plains All American GP, LLC (PAA GP), the Company s valuation is based on publicly available information. Robert V. Sinnott, the CEO of KACALP, sits on PAA GP s board of directors (see Note 5 Agreements and Affiliations for more detail). Certain private investment funds managed by KACALP may value its investment in PAA GP based on non-public information, and, as a result, such valuation may be different than the Company s valuation.

(7) 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, the following are the derivative instruments and hedging activities of the Company. The total number of outstanding options at February 29, 2012 is indicative of the volume of this type of option activity during the period. See Note 2 Significant Accounting Policies.

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Option Contracts Transactions in option contracts for the three months ended February 29, 2012 were as follows:

Call Options Written	**Number of Contracts**	**Premium**
Options outstanding at November 30, 2011	1,119	$ 121
Options written	10,050	1,095
Options subsequently repurchased[1]	(5,111)	(583)
Options exercised	(5,058)	(545)
Options outstanding at February 29, 2012[2]	1,000	$ 88

(1) The price at which the Company subsequently repurchased the options was $227, which resulted in a realized gain of $356.

(2) The percentage of total investments subject to call options written was 0.1% at February 29, 2012.

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 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 February 29, 2012, the Company did not have any interest rate swap contracts outstanding.

The following table sets forth the fair value of the Company s derivative instruments on the Statement of Assets and Liabilities.

Derivatives Not Accounted for as Hedging Instruments	**Statement of Assets and Liabilities Location**	**Fair Value as of February 29, 2012**
Call options	Call option contracts written	$ (50)

The following table set forth the effect of the Company s derivative instruments on the Statement of Operations.

Derivatives Not Accounted for as Hedging Instruments	Location of Gains/(Losses) on Derivatives Recognized in Income	For the Three Months Ended February 29, 2012 Net Realized Gains/(Losses) on Derivatives Recognized in Income	Change in Unrealized Gains/(Losses) on Derivatives Recognized in Income
Call options	Options	$ 356	$ (55)

9. Investment Transactions

For the three months ended February 29, 2012, the Company purchased and sold securities in the amounts of $427,719 and $186,766 (excluding short-term investments and options), respectively.

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10. Revolving Credit Facility

At February 29, 2012, the Company had a $175,000 unsecured revolving credit facility (the Credit Facility) with a syndicate of lenders. The Credit Facility matures 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. See Note 14 Subsequent Events.

For the three months ended February 29, 2012, the average amount outstanding under the Credit Facility was $37,385 with a weighted average interest rate of 2.21%. As of February 29, 2012, the Company had $76,000 outstanding under the Credit Facility at an interest rate of 3.19%.

11. Senior Unsecured Notes

At February 29, 2012, the Company had $775,000, aggregate principal amount of senior unsecured fixed and floating rate notes (the Senior Notes) outstanding. See Note 14 Subsequent Events.

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

Series	Principal Outstanding, February 29, 2012	Estimated Fair Value, February 29, 2012	Fixed/Floating Interest Rate	Maturity
I	$ 60,000	$ 61,300	5.847%	6/19/12
K	125,000	132,300	5.991%	6/19/13
M	60,000	63,700	4.560%	11/4/14
N	50,000	50,100	3-month LIBOR + 185 bps	11/4/14
O	65,000	68,700	4.210%	5/7/15
P	45,000	44,700	3-month LIBOR + 160 bps	5/7/15
Q	15,000	15,400	3.230%	11/9/15
R	25,000	26,000	3.730%	11/9/17
S	60,000	63,800	4.400%	11/9/20
T	40,000	42,500	4.500%	11/9/22
U	60,000	59,100	3-month LIBOR + 145 bps	5/26/16
V	70,000	73,000	3.710%	5/26/16
W	100,000	107,200	4.380%	5/26/18
	$ 775,000	$ 807,800		

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 three months ended February 29, 2012, the weighted average interest rate on the outstanding Senior Notes was 4.17%.

As of February 29, 2012, each series of Senior Notes were rated AAA by FitchRatings and series I, K, M, and N Senior Notes were rated Aa1 by Moody s. In the event the credit rating on any series of Senior Notes falls below A- (FitchRatings) or A3 (Moody s), the interest rate on such series will increase by 1% during the period of time such series is rated below A- or A3 . The Company is required to maintain a current rating from one rating agency.

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

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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 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 February 29, 2012, the Company was in compliance with all covenants under the Senior Notes agreements.

12. Preferred Stock

At February 29, 2012, the Company had 10,400,000 shares of mandatory redeemable preferred stock outstanding, with a liquidation value of $260,000. See Note 14 Subsequent Events.

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

Series	Shares Outstanding, February 29, 2012 (1)	Liquidation Value, February 29, 2012	Estimated Fair Value, February 29, 2012	Rate	Mandatory Redemption Date
A	4,400,000	$ 110,000	$ 118,500	5.57%	5/7/17
B	320,000	8,000	8,200	4.53%	11/9/17
C	1,680,000	42,000	43,500	5.20%	11/9/20
D(2)	4,000,000	100,000	101,640	4.95%	6/1/18
	10,400,000	$ 260,000	$ 271,840		

(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 KYNPRD . The fair value is based on the price of $25.41 as of February 29, 2012.

Holders of the series A, B and C mandatory redeemable preferred stock are entitled to receive cumulative cash dividend 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 dividend payments on the first business day of each month.

The table below outlines the terms of each series of mandatory redeemable preferred stock. The dividend rate on the Company s mandatory redeemable preferred stock will increase if the credit rating is downgraded below A (FitchRatings). Further, the annual dividend rate for all series of mandatory redeemable preferred

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

	Series A, B and C	Series D
Rating as of February 29, 2012 (FitchRatings)	AA	AA
Ratings Threshold	A	A
Method of Determination	Lowest Credit Rating	Highest Credit Rating
Increase in Annual Dividend Rate	0.5% to 4.0%	0.75% to 4.0%

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%.

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 February 29, 2012, the Company was in compliance with the asset coverage and basic maintenance requirements of its mandatory redeemable preferred stock.

13. Common Stock

At February 29, 2012, the Company has 189,600,000 shares of common stock authorized and 82,868,863 shares outstanding. As of that date, KACALP owned 4,000 shares. Transactions in common shares for the three months ended February 29, 2012 were as follows:

Shares outstanding at November 30, 2011	75,130,209
Shares issued through reinvestment of distributions	238,654
Shares issued in connection with offerings of common stock(1)	7,500,000
Shares outstanding at February 29, 2012	82,868,863

(1) On February 29, 2012, the Company sold 7,500,000 shares of common stock at a price of $31.51 per share. The public offering was completed on March 5, 2012 and the net proceeds of $226,529 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 March 21, 2012, the Company declared its quarterly distribution of $0.5175 per common share for the fiscal first quarter for a total quarterly distribution payment of $42,885. The distribution was paid on April 13, 2012 to common stockholders of record on April 5, 2012. Of this total, pursuant to the Company s dividend reinvestment plan, $5,436 was reinvested into the Company through the issuance of 191,479 shares of common stock.

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KAYNE ANDERSON MLP INVESTMENT COMPANY

NOTES TO FINANCIAL STATEMENTS

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

(UNAUDITED)

On March 21, 2012, the Company completed a public offering of 4,800,000 shares of Series E mandatory redeemable preferred stock (Series E MRP Shares) at a price of $25.00 per share. The Series E MRP Shares pay cash dividends at a rate of 4.25% per annum and trade on the New York Stock Exchange under the symbol KYNPRE . Net proceeds from the offering of $117,400 were used to repay borrowings under the Credit Facility and to redeem $6,000 of Series A mandatory redeemable preferred stock.

On April 13, 2012, the Company amended its Credit Facility to increase the total commitment amount from $175,000 to $200,000. 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.

On April 17, 2012, the Company reached a conditional agreement with institutional investors relating to a private placement of $175,000 of Senior Notes. The table below sets forth the key terms:

Series	Amount	Interest Rate	Term
X	$ 14,000	2.46%	3 years
Y	20,000	2.91%	5 years
Z	15,000	3.39%	7 years
AA	15,000	3.56%	8 years
BB	35,000	3.77%	9 years
CC	76,000	3.95%	10 years
	$ 175,000		

Net proceeds from such offerings will be used to repay borrowings under the Company s Credit Facility, to refinance $60,000 principal amount of Series I Senior Notes that mature in June 2012, to make new portfolio investments and for general corporate purposes. Closing of the private placement is scheduled to occur in early May and is subject to investor due diligence, legal documentation and other standard closing conditions.

In anticipation of the Senior Notes offering we entered into interest rate swap contracts ($150,000 notional amount). In conjunction with the pricing of the private placements on April 17, 2012, the Company terminated the interest rate swap contracts, which resulted in a realized loss of $2,600.

KAYNE ANDERSON MLP INVESTMENT COMPANY

INFORMATION REGARDING CHANGES TO INVESTMENT POLICY

(UNAUDITED)

On March 21, 2012, the Company s board of directors approved a change to its non-fundamental investment policy related to debt securities. The prior policy allowed 5% of the Company s total assets to be invested in unrated debt securities. The revised policy allows 5% of the Company s total assets to be invested in unrated debt securities or debt securities that are rated less than B - (Standard & Poor s or FitchRatings) / B3 (Moody s) of public or private companies.

The revised policy related to debt securities will be effective July 1, 2012 as follows:

The Company may invest up to 20% of its total assets in debt securities of MLPs and other Midstream Energy Companies, including below-investment-grade debt securities (commonly referred to as junk bonds or high yield bonds) rated, at the time of investment, at least B3 by Moody s Investors Service, Inc., B- by Standard & Poor s or FitchRatings, comparably rated by another rating agency or, if unrated, determined by Kayne Anderson to be of comparable quality. In addition, up to one-quarter of its permitted investments in debt securities (or up to 5% of its total assets) may be invested in unrated debt securities or debt securities that are rated less than B- / B3 of public or private companies.

REPURCHASE DISCLOSURE

(UNAUDITED)

Notice is hereby given in accordance with Section 23(c) of the 1940 Act, that the Company may from time to time purchase shares of its common and preferred stock and its Senior Notes in the open market or in privately negotiated transactions.

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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
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Houston, TX 77002

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

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

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American Stock Transfer & Trust Company
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New York, NY 10038

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

Independent Registered Public Accounting Firm
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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.

This report, including the financial statements herein, is made available to stockholders of the Company for their information. It is not a prospectus, circular or representation intended for use in the purchase or sale of shares of the Company or of any securities mentioned in this report.