

BLACKROCK SENIOR HIGH INCOME FUND, INC.

Form N-CSRS

November 08, 2010

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM N-CSRS

CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-07456

Name of Fund: BlackRock Senior High Income Fund, Inc. (ARK)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: Anne F. Ackerley, Chief Executive Officer, BlackRock Senior High Income Fund, Inc., 55 East 52nd Street, New York, NY 10055

Registrant's telephone number, including area code: (800) 882-0052, Option 4

Date of fiscal year end: 02/28/2011

Date of reporting period: 08/31/2010

Item 1 Report to Stockholders

August 31, 2010

Semi-Annual Report (Unaudited)

BlackRock Corporate High Yield Fund, Inc. (COY)

BlackRock Corporate High Yield Fund III, Inc. (CYE)

BlackRock Debt Strategies Fund, Inc. (DSU)

BlackRock Floating Rate Income Strategies Fund II, Inc. (FRB)

BlackRock Senior High Income Fund, Inc. (ARK)

Not FDIC Insured § No Bank Guarantee § May Lose Value

Table of Contents

	Page
<u>Dear Shareholder</u>	3
Semi-Annual Report:	
<u>Fund Summaries</u>	4
<u>The Benefits and Risks of Leveraging</u>	9
<u>Derivative Financial Instruments</u>	9
Financial Statements:	
<u>Schedules of Investments</u>	10
<u>Statements of Assets and Liabilities</u>	48
<u>Statements of Operations</u>	49
<u>Statements of Changes in Net Assets</u>	50
<u>Statements of Cash Flows</u>	53
<u>Financial Highlights</u>	54
<u>Notes to Financial Statements</u>	59
<u>Disclosure of Investment Advisory Agreements and Sub-Advisory Agreements</u>	67
<u>Officers and Directors</u>	71
<u>Additional Information</u>	72

Dear Shareholder

The global economic recovery continues, although global and US economic statistics show that the pace of economic growth has slowed. The sovereign debt crisis in Europe, slowing growth in China and concerns over the possibility that the United States and other developed markets are heading for a double-dip recession have all acted to depress investor sentiment. Despite broadening evidence of a slowdown in global economic activity, market volatility has normalized from the extreme levels seen in recent months. In the United States, economic data continues to be mixed, but it is our view that the preponderance of data suggests that the recovery is continuing. The critical issue for investors remains the question of whether the economy will experience a double-dip recession. We are on the optimistic side of this debate and would point out that while the recovery has been slow, we have made significant progress.

Global equity markets have moved unevenly higher since bottoming out in early 2009 as investors were enticed by depressed valuations, improved corporate earnings, and their desire for higher yields. Several significant downturns, however, have occurred primarily as a result of mixed economic data and concerns about the possibility of prolonged deflation (especially in Europe). As the period drew to a close, equity markets lost ground on weaker-than-expected economic data, most notably from the United States. International equities posted negative returns on both a six- and 12-month basis while US equities posted negative returns over the six months, but were still showing positive returns on a 12-month basis as the domestic economic recovery had been more pronounced and credit-related issues held European markets down. Within the United States, smaller cap stocks continue to outperform large caps year-to-date.

In fixed income markets, yields have fluctuated significantly over the past year as economic data has been mixed. Risk aversion and credit issues have kept interest rates low and US Treasury yields have fallen significantly as investors favored safe haven assets. As the period drew to a close, Treasuries modestly outperformed the spread sectors of the market (those driven by changes in credit risk). Corporate credit spreads benefited from the low rate environment and high yield fixed income remains attractive due to low default rates and better-than-expected results on European bank stress tests. Meanwhile, tax-exempt municipal bonds slightly outperformed US investment grade bonds on a 12-month basis, but underperformed year-to-date as investors rotated to the relative safety of Treasuries.

Regarding cash investments, yields on money market securities remain near all-time lows (producing returns only marginally above zero percent), with the Federal Open Market Committee reiterating that economic circumstances are likely to necessitate an accommodative interest rate stance for an extended period.

Against this backdrop, the major market averages posted the following returns:

Total Returns as of August 31, 2010	6-month	12-month
US large cap equities (S&P 500 Index)	(4.04)%	4.91%
US small cap equities (Russell 2000 Index)	(3.60)	6.60
International equities (MSCI Europe, Australasia, Far East Index)	(3.04)	(2.34)
3-month Treasury bill (BofA Merrill Lynch 3-Month Treasury Bill Index)	0.07	0.14
US Treasury securities (BofA Merrill Lynch 10-Year US Treasury Index)	11.49	11.58
US investment grade bonds (Barclays Capital US Aggregate Bond Index)	5.81	9.18
Tax-exempt municipal bonds (Barclays Capital Municipal Bond Index)	5.42	9.78
US high yield bonds (Barclays Capital US Corporate High Yield 2% Issuer Capped Index)	6.62	21.40

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Past performance is no guarantee of future results. Index performance shown for illustrative purposes only. You cannot invest directly in an index.

Although conditions have improved over the past couple of years, investors across the globe continue to face uncertainty about the future direction of economic growth. Through periods of uncertainty, as ever, BlackRock's full resources are dedicated to the management of our clients' assets. For additional market perspective and investment insight, visit www.blackrock.com/shareholdermagazine, where you'll find the most recent issue of our award-winning *Shareholder*[®] magazine, as well as its quarterly companion newsletter, *Shareholder Perspectives*. We thank you for entrusting BlackRock with your investments, and we look forward to your continued partnership in the months and years ahead.

Sincerely,
Rob Kapito
President, BlackRock Advisors, LLC

THIS PAGE NOT PART OF YOUR FUND REPORT

3

Fund Summary as of August 31, 2010

BlackRock Corporate High Yield Fund, Inc.**Fund Overview**

BlackRock Corporate High Yield Fund, Inc. s (COY) (the Fund) investment objective is to provide shareholders with current income by investing primarily in a diversified portfolio of fixed income securities, which are rated in the lower rating categories of the established rating services (BB or lower by Standard & Poor s Corporation (S&P) or Ba or lower by Moody s Investors Service, Inc. (Moody s)) or are unrated securities considered by BlackRock to be of comparable quality. The Fund s secondary objective is to provide stockholders with capital appreciation. The Fund invests, under normal market conditions, at least 80% of its assets in high yield debt instruments, including high yield bonds (commonly referred to as junk bonds) and corporate loans which are below investment grade quality. The Fund may invest directly in such securities or synthetically through the use of derivatives.

No assurance can be given that the Fund s investment objectives will be achieved.

Performance

For the six months ended August 31, 2010, the Fund returned 6.15% based on market price and 7.94% based on net asset value (NAV). For the same period, the closed-end Lipper High Current Yield Funds (Leveraged) category posted an average return of 10.10% based on market price and 7.66% based on NAV. All returns reflect reinvestment of dividends. The Fund s premium to NAV, which narrowed during the period, accounts for the difference between performance based on price and performance based on NAV. The following discussion relates to performance based on NAV. During the six-month period, high yield bonds lagged investment grade issues but outperformed the broad US equity market. Given our outlook for a continued slow economic environment, we focused more on sectors and companies with relatively stable cash flows and the ability to generate steady income, and less on companies which require growth to prosper and service their debt. Outside of this focus, the Fund s investments in special situations and recovery stories, most notably in the automotive sector, contributed to the Fund s outperformance versus its peer group. The Fund s underweight in higher quality speculative grade names and overweight in lower quality credits benefited performance. Toward the end of the period, we moved to an underweight position in lower quality names as lower quality issues have recently become expensive relative to higher quality names. During the period, the Fund maintained leverage at an average of approximately 17% of its total managed assets, which detracted from relative performance versus competitors that maintained higher leverage, as would be expected when markets are advancing. The Fund s exposure to Floating Rate Loans detracted from performance (despite favorable security selection within the sector) as the bank loan sector underperformed high yield during the period.

The views expressed reflect the opinions of BlackRock as of the date of this report and are subject to change based on changes in market, economic or other conditions. These views are not intended to be a forecast of future events and are no guarantee of future results.

Fund Information

Symbol on NYSE	COY
Initial Offering Date	June 25, 1993
Yield on Closing Market Price as of August 31, 2010 (\$6.98) ¹	8.77%
Current Monthly Distribution per Share ²	\$0.051
Current Annualized Distribution per Share ²	\$0.612
Leverage as of August 31, 2010 ³	17%

- ¹ Yield on closing market price is calculated by dividing the current annualized distribution per share by the closing market price. Past performance does not guarantee future results.
- ² The distribution rate is not constant and is subject to change.
- ³ Represents loan outstanding as a percentage of total managed assets, which is the total assets of the Fund (including any assets attributable to borrowings) minus the sum of liabilities (other than borrowings representing financial leverage). For a discussion of leveraging techniques utilized by the Fund, please see The Benefits and Risks of Leveraging on page 9.

The table below summarizes the changes in the Fund's market price and NAV per share:

	8/31/10	2/28/10	Change	High	Low
Market Price	\$ 6.98	\$ 6.88	1.45%	\$ 7.08	\$ 5.50
Net Asset Value	\$ 6.85	\$ 6.64	3.16%	\$ 7.02	\$ 6.60

The following charts show the portfolio composition of the Fund's long-term investments and credit quality allocations of the Fund's corporate bond investments:

Portfolio Composition

	8/31/10	2/28/10
Corporate Bonds	84%	82%
Floating Rate Loan Interests	12	13
Common Stocks	2	3
Other Interests	2	2

Credit Quality Allocations⁴

	8/31/10	2/28/10
BBB/Baa	3%	3%
BB/Ba	36	30
B	46	46
CCC/Caa	11	12
CC/Ca		1
D		1
Not Rated	4	7

4 Using the higher of S&P's or Moody's ratings.

4

SEMI-ANNUAL REPORT

AUGUST 31, 2010

Fund Summary as of August 31, 2010

BlackRock Corporate High Yield Fund III, Inc.**Fund Overview**

BlackRock Corporate High Yield Fund III, Inc. s (CYE) (the Fund) primary investment objective is to provide current income by investing primarily in fixed-income securities, which are rated in the lower rating categories of the established rating services (BBB or lower by S&P or Baa or lower by Moody s) or are unrated securities of comparable quality. The Fund s secondary investment objective is to provide capital appreciation. The Fund may invest directly in such securities or synthetically through the use of derivatives.

No assurance can be given that the Fund s investment objectives will be achieved.

Performance

For the six months ended August 31, 2010, the Fund returned 8.45% based on market price and 7.81% based on NAV. For the same period, the closed-end Lipper High Current Yield Funds (Leveraged) category posted an average return of 10.10% based on market price and 7.66% based on NAV. All returns reflect reinvestment of dividends. The Fund moved from a discount to NAV to a premium by period end, which accounts for the difference between performance based on price and performance based on NAV. The following discussion relates to performance based on NAV. During the six-month period, high yield bonds lagged investment grade issues but outperformed the broad US equity market, as the slowing economy and concerns about Europe caused investors to sell riskier investments and falling interest rates pushed up the prices of higher quality bonds. Given our outlook for a continued slow economic environment, we began to focus more on sectors and companies with relatively stable cash flows and the ability to generate steady income, and less on companies with less stable cash flow and which require growth to be able to service their debt. Outside of this focus, we continued to invest in a few special situations and recovery stories, most notably in the automotive sector. These investments were key contributors to the Fund s outperformance versus its peer group for the period. The Fund s underweight position in higher quality speculative grade names and overweight in lower quality credits benefited performance during the period. Toward the end of the period, we moved to an underweight position in lower quality names, which we believe will benefit the Fund going forward as lower quality issues have recently become expensive relative to higher quality names. During the period, the Fund maintained leverage at an average amount between 18% to 20% of its total managed assets, which detracted from relative performance versus competitors that maintained higher leverage, as would be expected when markets are advancing. The Fund s exposure to Floating Rate Loans detracted from performance (despite favorable security selection within the sector) as the bank loan sector underperformed high yield during the period.

The views expressed reflect the opinions of BlackRock as of the date of this report and are subject to change based on changes in market, economic or other conditions. These views are not intended to be a forecast of future events and are no guarantee of future results.

Fund Information

Symbol on NYSE	CYE
Initial Offering Date	January 30, 1998
Yield on Closing Market Price as of August 31, 2010 (\$6.92) ¹	8.67%
Current Monthly Distribution per Share ²	\$0.05
Current Annualized Distribution per Share ²	\$0.60
Leverage as of August 31, 2010 ³	20%

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

- ¹ Yield on closing market price is calculated by dividing the current annualized distribution per share by the closing market price. Past performance does not guarantee future results.
- ² The distribution rate is not constant and is subject to change.
- ³ Represents loan outstanding as a percentage of total managed assets, which is the total assets of the Fund (including any assets attributable to borrowings) minus the sum of liabilities (other than borrowings representing financial leverage). For a discussion of leveraging techniques utilized by the Fund, please see The Benefits and Risks of Leveraging on page 9.

The table below summarizes the changes in the Fund's market price and NAV per share:

	8/31/10	2/28/10	Change	High	Low
Market Price	\$ 6.92	\$ 6.67	3.75%	\$ 7.14	\$ 5.29
Net Asset Value	\$ 6.90	\$ 6.69	3.14%	\$ 7.13	\$ 6.66

The following charts show the portfolio composition of the Fund's long-term investments and credit quality allocations of the Fund's corporate bond investments:

Portfolio Composition

	8/31/10	2/28/10
Corporate Bonds	80%	81%
Floating Rate Loan Interests	14	13
Common Stocks	2	4
Other Interests	2	2
Preferred Stocks	2	

Credit Quality Allocations⁴

	8/31/10	2/28/10
BBB/Baa	3%	3%
BB/Ba	35	29
B	46	47
CCC/Caa	11	12
D		1
Not Rated	5	8

⁴ Using the higher of S&P's or Moody's ratings.

Fund Summary as of August 31, 2010

BlackRock Debt Strategies Fund, Inc.**Fund Overview**

BlackRock Debt Strategies Fund, Inc. s (DSU) (the **Fund**) primary investment objective is to provide current income by investing primarily in a diversified portfolio of US companies' debt instruments, including corporate loans, which are rated in the lower rating categories of the established rating services (BBB or lower by S&P or Baa or lower by Moody's) or unrated debt instruments, which are in the judgment of the investment adviser of equivalent quality. The Fund's secondary objective is to provide capital appreciation. Corporate loans include senior and subordinated corporate loans, both secured and unsecured. The Fund may invest directly in such securities or synthetically through the use of derivatives.

No assurance can be given that the Fund's investment objectives will be achieved.

Performance

For the six months ended August 31, 2010, the Fund returned 4.91% based on market price and 7.61% based on NAV. For the same period, the closed-end Lipper High Current Yield Funds (Leveraged) category posted an average return of 10.10% based on market price and 7.66% based on NAV. All returns reflect reinvestment of dividends. The Fund moved from a premium to NAV to a discount by period end, which accounts for the difference between performance based on price and performance based on NAV. The following discussion relates to performance based on NAV. The Fund's Lipper category competitors invest primarily in high yield bonds, whereas the Fund invests in both high yield bonds and bank loans. During the period, approximately 48% of the Fund was invested in bank loans, with 43% in high yield, and the remainder in common stock, convertibles and investment-grade bonds. The Fund performed in line with its Lipper category, even though bank loans underperformed high yield during the period. The Fund maintained relatively conservative positioning, with a focus on sectors that are less sensitive to the economy and the consumer. This positioning had a negative impact on performance in a generally improving market, although it proved beneficial during the market correction that occurred in the second quarter of 2010. The Fund continued to maintain relatively low levels of leverage, which detracted from performance versus competitors that maintained higher leverage, as would be expected in an advancing market. Contributing positively to performance were the Fund's overweight position in the automobiles sector, investments in several distressed credits and special situations, and an underweight position in health care.

The views expressed reflect the opinions of BlackRock as of the date of this report and are subject to change based on changes in market, economic or other conditions. These views are not intended to be a forecast of future events and are no guarantee of future results.

Fund Information

Symbol on NYSE	DSU
Initial Offering Date	March 27, 1998
Yield on Closing Market Price as of August 31, 2010 (\$3.92) ¹	8.88%
Current Monthly Distribution per Share ²	\$0.029
Current Annualized Distribution per Share ²	\$0.348
Leverage as of August 31, 2010 ³	16%

¹ Yield on closing market price is calculated by dividing the current annualized distribution per share by the closing market price. Past performance does not guarantee future results.

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

² A change in the distribution rate was declared on September 1, 2010. The Monthly Distribution per Share was decreased to \$0.027. The Yield on Closing Market Price, Current Monthly Distribution per Share and Current Annualized Distribution per Share do not reflect the new distribution rate. The new distribution rate is not constant and is subject to change in the future.

³ Represents loan outstanding as a percentage of total managed assets, which is the total assets of the Fund (including any assets attributable to borrowings) minus the sum of liabilities (other than borrowings representing financial leverage). For a discussion of leveraging techniques utilized by the Fund, please see The Benefits and Risks of Leveraging on page 9.

The table below summarizes the changes in the Fund's market price and NAV per share:

	8/31/10	2/28/10	Change	High	Low
Market Price	\$ 3.92	\$ 3.91	0.26%	\$ 4.42	\$ 2.95
Net Asset Value	\$ 4.00	\$ 3.89	2.83%	\$ 4.14	\$ 3.89

The following charts show the portfolio composition of the Fund's long-term investments and credit quality allocations of the Fund's corporate bond investments:

Portfolio Composition

	8/31/10	2/28/10
Floating Rate Loan Interests	50%	47%
Corporate Bonds	46	49
Common Stocks	3	4
Other Interests	1	

Credit Quality Allocations⁴

	8/31/10	2/28/10
BBB/Baa	6%	5%
BB/Ba	30	27
B	48	44
CCC/Caa	9	11
D		1
Not Rated	7	12

⁴ Using the higher of S&P's or Moody's ratings.

Fund Summary as of August 31, 2010

BlackRock Floating Rate Income Strategies Fund II, Inc.

Fund Overview

BlackRock Floating Rate Income Strategies Fund II, Inc. s (FRB) (the Fund) investment objective is to provide shareholders with high current income and such preservation of capital as is consistent with investment in a diversified, leveraged portfolio consisting primarily of floating rate debt securities and instruments. The Fund seeks to achieve its investment objective by investing, under normal market conditions, at least 80% of its assets in floating rate debt securities, including floating or variable rate debt securities that pay interest at rates that adjust whenever a specified interest rate changes and/or which reset on predetermined dates (such as the last day of a month or calendar quarter). The Fund invests a substantial portion of its investments in floating rate debt securities consisting of secured or unsecured senior floating rate loans that are rated below investment grade. The Fund may invest directly in such securities or synthetically through the use of derivatives.

No assurance can be given that the Fund s investment objective will be achieved.

Performance

For the six months ended August 31, 2010, the Fund returned (7.02)% based on market price and 4.25% based on NAV. For the same period, the closed-end Lipper Loan Participation Funds category posted an average return of 2.23% based on market price and 2.82% based on NAV. The performance of the Lipper category does not necessarily correlate to that of the Fund, as the Lipper group comprises both closed-end funds and unleveraged continuously offered closed-end funds. All returns reflect reinvestment of dividends. The Fund s premium to NAV, which narrowed during the period, accounts for the difference between performance based on price and performance based on NAV. The following discussion relates to performance based on NAV. The Fund s allocation to high yield bonds (approximately 20%) benefited performance as the sector performed well during the period. We focused on higher quality loan structures and borrowers with relatively stable cash flows and the ability to generate steady income. Outside of this focus, we invested in a few special situations and recovery stories, most notably in the automotive sector, which contributed positively to performance. The Fund s overweight in higher quality speculative investments and underweight in lower quality credits modestly detracted from performance. The Fund maintained leverage at an average between 16% to 17% of its total managed assets, which detracted from relative performance versus competitors that maintained higher leverage, as would be expected when markets are advancing.

The views expressed reflect the opinions of BlackRock as of the date of this report and are subject to change based on changes in market, economic or other conditions. These views are not intended to be a forecast of future events and are no guarantee of future results.

Fund Information

Symbol on NYSE	FRB
Initial Offering Date	July 30, 2004
Yield on Closing Market Price as of August 31, 2010 (\$13.50) ¹	6.67%
Current Monthly Distribution per Share ²	\$0.075
Current Annualized Distribution per Share ²	\$0.900
Leverage as of August 31, 2010 ³	17%

¹ Yield on closing market price is calculated by dividing the current annualized distribution per share by the closing market price. Past performance does not guarantee future results.

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

² The distribution rate is not constant and is subject to change.

³ Represents loan outstanding as a percentage of total managed assets, which is the total assets of the Fund (including any assets attributable to borrowings) minus the sum of liabilities (other than borrowings representing financial leverage). For a discussion of leveraging techniques utilized by the Fund, please see The Benefits and Risks of Leveraging on page 9.

The table below summarizes the changes in the Fund's market price and NAV per share:

	8/31/10	2/28/10	Change	High	Low
Market Price	\$ 13.50	\$ 15.01	(10.06)%	\$ 15.63	\$ 12.80
Net Asset Value	\$ 13.27	\$ 13.16	0.84%	\$ 13.52	\$ 13.03

The following charts show the portfolio composition of the Fund's long-term investments and credit quality allocations of the Fund's corporate bond investments:

Portfolio Composition

	8/31/10	2/28/10
Floating Rate Loan Interests	76%	73%
Corporate Bonds	22	26
Other Interests	1	1
Common Stock	1	

Credit Quality Allocations⁴

	8/31/10	2/28/10
BBB/Baa	6%	6%
BB/Ba	34	34
B	48	38
CCC/Caa	6	10
CC/Ca	1	1
D		2
Not Rated	5	9

⁴ Using the higher of S&P's or Moody's ratings.

Fund Summary as of August 31, 2010

BlackRock Senior High Income Fund, Inc.

Fund Overview

BlackRock Senior High Income Fund, Inc. s (ARK) (the Fund) investment objective is to provide high current income by investing principally in senior debt obligations of companies, including corporate loans made by banks and other financial institutions and both privately placed and publicly offered corporate bonds and notes. The Fund may invest directly in such securities or synthetically through the use of derivatives.

No assurance can be given that the Fund s investment objective will be achieved.

Performance

For the six months ended August 31, 2010, the Fund returned 3.86% based on market price and 5.98% based on NAV. For the same period, the closed-end Lipper High Current Yield Funds (Leveraged) category posted an average return of 10.10% based on market price and 7.66% based on NAV. All returns reflect reinvestment of dividends. The Fund moved from a premium to NAV to a discount by period end, which accounts for the difference between performance based on price and performance based on NAV. The following discussion relates to performance based on NAV. The Fund s Lipper category competitors invest primarily in high yield bonds, whereas the Fund invests in both high yield bonds and bank loans. During the period, approximately 46% of the Fund was invested in bank loans, with 47% in high yield, and the remainder in common stock, convertibles and investment-grade bonds. The Fund s allocation to bank loans detracted from relative performance during the period, as loans underperformed high yield. The Fund maintained relatively conservative positioning, with a focus on sectors that are less sensitive to the economy and the consumer. This positioning had a negative impact on performance in a generally improving market, although it proved beneficial during the market correction that occurred in the second quarter of 2010. The Fund continued to maintain relatively low levels of leverage (less than 15%), which detracted from performance versus competitors that maintained higher leverage, as would be expected in an advancing market. Contributing positively to performance were the Fund s overweight position in the automobiles sector, investments in several distressed credits and special situations, and an underweight position in health care.

The views expressed reflect the opinions of BlackRock as of the date of this report and are subject to change based on changes in market, economic or other conditions. These views are not intended to be a forecast of future events and are no guarantee of future results.

Fund Information

Symbol on NYSE	ARK
Initial Offering Date	April 30, 1993
Yield on Closing Market Price as of August 31, 2010 (\$3.94) ¹	7.61%
Current Monthly Distribution per Common Share ²	\$0.025
Current Annualized Distribution per Common Share ²	\$0.300
Leverage as of August 31, 2010 ³	13%

¹ Yield on closing market price is calculated by dividing the current annualized distribution per share by the closing market price. Past performance does not guarantee future results.

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

² The distribution is not constant and is subject to change.

³ Represents loan outstanding as a percentage of total managed assets, which is the total assets of the Fund (including any assets attributable to borrowings) minus the sum of liabilities (other than borrowings representing financial leverage). For a discussion of leveraging techniques utilized by the Fund, please see The Benefits and Risks of Leveraging on page 9.

The table below summarizes the changes in the Fund's market price and NAV per share:

	8/31/10	2/28/10	Change	High	Low
Market Price	\$ 3.94	\$ 3.94	0.00%	\$ 4.48	\$ 3.59
Net Asset Value	\$ 3.99	\$ 3.91	2.05%	\$ 4.09	\$ 3.87

The following charts show the portfolio composition of the Fund's long-term investments and credit quality allocations of the Fund's corporate bond investments:

Portfolio Composition

	8/31/10	2/28/10
Floating Rate Loan Interests	51%	46%
Corporate Bonds	46	52
Common Stocks	2	2
Other Interests	1	

Credit Quality Allocations⁴

	8/31/10	2/28/10
BBB/Baa	7%	5%
BB/Ba	32	33
B	48	43
CCC/Caa	7	11
D		1
Not Rated	6	7

⁴ Using the higher of S&P's or Moody's ratings.

The Benefits and Risks of Leveraging

The Funds may utilize leverage to seek to enhance the yield and NAV. However, these objectives cannot be achieved in all interest rate environments.

The Funds may utilize leverage by borrowing through a credit facility. In general, the concept of leveraging is based on the premise that the financing cost of assets to be obtained from leverage will be based on short-term interest rates, which normally will be lower than the income earned by each Fund on its longer-term portfolio investments. To the extent that the total assets of each Fund (including the assets obtained from leverage) are invested in higher-yielding portfolio investments, each Fund's shareholders will benefit from the incremental net income.

The interest earned on securities purchased with the proceeds from leverage is paid to shareholders in the form of dividends, and the value of these portfolio holdings is reflected in the per share NAV. However, in order to benefit shareholders, the yield curve must be positively sloped; that is, short-term interest rates must be lower than long-term interest rates. If the yield curve becomes negatively sloped, meaning short-term interest rates exceed long-term interest rates, income to shareholders will be lower than if the Funds had not used leverage.

To illustrate these concepts, assume a Fund's capitalization is \$100 million and it issues debt securities for an additional \$30 million, creating a total value of \$130 million available for investment in long-term securities. If prevailing short-term interest rates are 3% and long-term interest rates are 6%, the yield curve has a strongly positive slope. In this case, the Fund pays interest expense on the \$30 million of debt securities based on the lower short-term interest rates. At the same time, the securities purchased by the Fund with assets received from borrowings earn income based on long-term interest rates. In this case, the interest expense of borrowings is significantly lower than the income earned on the Fund's long-term investments, and therefore the shareholders are the beneficiaries of the incremental net income.

If short-term interest rates rise, narrowing the differential between short-term and long-term interest rates, the incremental net income pickup will be reduced or eliminated completely. Furthermore, if prevailing short-term interest rates rise above long-term interest rates of 6%, the yield curve has a negative slope. In this case, the Fund pays interest expense on the higher short-term interest rates whereas the Fund's total portfolio earns income based on lower long-term interest rates.

Furthermore, the value of the Fund's portfolio investments generally varies inversely with the direction of long-term interest rates, although other factors can influence the value of portfolio investments. In contrast, the redemption value of the Fund's borrowings do not fluctuate in relation to interest rates. As a result, changes in interest rates can influence the Fund's NAV positively or negatively in addition to the impact on Fund performance from leverage from borrowings discussed above.

The use of leverage may enhance opportunities for increased income to the Funds and shareholders, but as described above, it also creates risks as short- or long-term interest rates fluctuate. Leverage also will generally cause greater changes in each Fund's NAV, market price and dividend rate than a comparable portfolio without leverage. If the income derived from securities purchased with assets received from leverage exceeds the cost of leverage, each Fund's net income will be greater than if leverage had not been used. Conversely, if the income from the securities purchased is not sufficient to cover the cost of leverage, each Fund's net income will be less than if leverage had not been used, and therefore the amount available for distribution to shareholders will be reduced. Each Fund may be required to sell portfolio securities at inopportune times or at distressed values in order to comply with regulatory requirements applicable to the use of leverage or as required by the terms of leverage instruments, which may cause a Fund to incur losses. The use of leverage may limit each Fund's ability to invest in certain types of securities or use certain types of hedging strategies. Each Fund will incur expenses in connection with the use of leverage, all of which are borne by shareholders and may reduce income.

Under the Investment Company Act of 1940, the Funds are permitted to borrow through their credit facility up to 33 $\frac{1}{3}$ % of their total managed assets. As of August 31, 2010, the Funds had outstanding leverage from borrowings as a percentage of their total managed assets as follows:

	Percent of Leverage
COY	17%
CYE	20%
DSU	16%

FRB	17%
ARK	13%

Derivative Financial Instruments

The Funds may invest in various derivative instruments, including financial futures contracts, swaps, foreign currency exchange contracts and options, as specified in Note 2 of the Notes to Financial Statements, which may constitute forms of economic leverage. Such instruments are used to obtain exposure to a market without owning or taking physical custody of securities or to hedge market, equity, credit and/or foreign currency exchange rate risks. Such derivative instruments involve risks, including the imperfect correlation between the value of a derivative instrument and the underlying asset, possible default of the counterparty to the transaction or illiquidity of the derivative instrument. The Funds ability to successfully use a derivative instrument depends on the investment advisor's ability to accurately predict pertinent market movements, which cannot be assured. The use of derivative instruments may result in losses greater than if they had not been used, may require a Fund to sell or purchase portfolio securities at inopportune times or for distressed values, may limit the amount of appreciation a Fund can realize on an investment, may result in lower dividends paid to shareholders or may cause a Fund to hold a security that it might otherwise sell. The Funds investments in these instruments are discussed in detail in the Notes to Financial Statements.

Schedule of Investments August 31, 2010 (Unaudited)

BlackRock Corporate High Yield Fund, Inc. (COY)
 (Percentages shown are based on Net Assets)

Common Stocks	Shares	Value
Building Products 0.1%		
Masonite Worldwide Holdings (a)	5,953	\$ 226,214
Capital Markets 0.1%		
E*Trade Financial Corp. (a)	26,900	333,829
Chemicals 0.0%		
Wellman Holdings, Inc. (a)	1,425	71
Communications Equipment 0.5%		
Loral Space & Communications Ltd. (a)	22,577	1,208,773
Construction Materials 0.0%		
Nortek, Inc. (a)	2,020	83,830
Containers & Packaging 0.0%		
Smurfit Kappa Plc (a)	3,634	31,776
Electrical Equipment 0.0%		
Medis Technologies Ltd. (a)	67,974	2,107
Household Durables 0.2%		
Beazer Homes USA, Inc. (a)	113,588	393,014
Machinery 0.2%		
Accuride Corp., Restricted Shares (a)	84,389	92,828
Navistar International Corp. (a)	8,700	364,356
		457,184
Media 0.4%		
Charter Communications, Inc. (a)	15,186	516,324
Gannett Co., Inc.	39,500	477,555
		993,879
Paper & Forest Products 0.1%		
Ainsworth Lumber Co. Ltd. (a)	36,744	86,144
Ainsworth Lumber Co. Ltd. (a)(b)	41,686	97,731
Western Forest Products, Inc. (a)	147,968	40,935
Western Forest Products, Inc. (a)(b)	41,528	11,488
		236,298
Semiconductors & Semiconductor		

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Equipment 0.0%

SunPower Corp., Class B (a)	352	3,640
-----------------------------	-----	-------

Software 0.2%

HMH Holdings/EduMedia (a)	83,184	415,922
---------------------------	--------	---------

Wireless Telecommunication Services 0.1%

FiberTower Corp. (a)	76,542	274,786
----------------------	--------	---------

Total Common Stocks 1.9%

4,661,323

Corporate Bonds

**Par
(000)**

Aerospace & Defense 0.4%

Bombardier, Inc., 7.75%, 3/15/20 (b)	USD	200	215,000
DynCorp International, Inc., 10.38%, 7/01/17 (b)		230	228,850
Kratos Defense & Security Solutions, Inc., 10.00%, 6/01/17		500	516,250
			<u>960,100</u>

Corporate Bonds

**Par
(000)**

Value

Air Freight & Logistics 0.6%

National Air Cargo Group, Inc.:			
Series 1, 12.38%, 8/16/15	USD	695	\$ 695,000
Series 2, 12.38%, 8/16/15		695	695,000
			<u>1,390,000</u>

Airlines 2.9%

Air Canada (b):			
9.25%, 8/01/15		970	950,600
12.00%, 2/01/16		260	243,100
American Airlines, Inc., 10.50%, 10/15/12 (b)		870	924,375
American Airlines Pass Through Trust, Series 2001-02, 7.86%, 4/01/13		390	408,135
Continental Airlines, Inc.:			
6.75%, 9/15/15 (b)		540	534,600
Series 1997-4-B, 6.90%, 7/02/18		503	490,655
Series 2001-1-C, 7.03%, 12/15/12		224	222,395
Delta Air Lines, Inc., Series B, 9.75%, 12/17/16		926	972,807
United Air Lines, Inc., 12.75%, 7/15/12		1,982	2,210,376
			<u>6,957,043</u>

Auto Components 1.5%

Allison Transmission, Inc. (b):			
11.00%, 11/01/15		220	236,500

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

11.25%, 11/01/15 (c)		164	176,300
Delphi International Holdings Unsecured, 12.00%, 10/06/14		41	39,860
The Goodyear Tire & Rubber Co.:			
8.25%, 8/15/20		400	409,500
8.75%, 8/15/20		280	296,100
Icahn Enterprises LP, 8.00%, 1/15/18		2,475	2,462,625
			3,620,885
Beverages 0.2%			
Cott Beverages USA, Inc., 8.13%, 9/01/18 (b)		245	252,044
Crown European Holdings SA, 7.13%, 8/15/18 (b)	EUR	225	292,259
			544,303
Biotechnology 0.3%			
QHP Pharma, 10.25%, 3/15/15 (b)	USD	582	593,916
Building Products 1.5%			
Associated Materials LLC, 9.88%, 11/15/16		710	752,600
Building Materials Corp. of America (b):			
6.88%, 8/15/18		490	476,525
7.00%, 2/15/20		570	567,150
Momentive Performance Materials, Inc., Series WI, 9.75%, 12/01/14		695	678,494
Ply Gem Industries, Inc., 11.75%, 6/15/13		1,130	1,163,900
			3,638,669
Capital Markets 0.5%			
E*Trade Financial Corp., 3.43%, 8/31/19 (b)(d)(e)		226	271,200
Marsico Parent Co., LLC, 10.63%, 1/15/16 (b)		904	334,480
Marsico Parent Holdco, LLC, 12.50%, 7/15/16 (b)(c)		254	22,889
Marsico Parent Superholdco, LLC, 14.50%, 1/15/18 (b)(c)		266	23,928
Offshore Group Investments Ltd., 11.50%, 8/01/15 (b)		480	478,800
			1,131,297

Portfolio Abbreviations

To simplify the listings of portfolio holdings in the Schedules of Investments, the names and descriptions of many of the securities have been abbreviated according to the following list:

CAD	Canadian Dollar
EUR	Euro
FKA	Formerly Known As
GBP	British Pound
PIK	Payment-In-Kind
USD	US Dollar

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Corporate High Yield Fund, Inc. (COY)
(Percentages shown are based on Net Assets)

Corporate Bonds	Par (000)	Value
Chemicals 3.5%		
American Pacific Corp., 9.00%, 2/01/15	USD 800	\$ 791,000
CF Industries, Inc.:		
6.88%, 5/01/18	405	426,263
7.13%, 5/01/20	715	766,837
Chemtura Corp., 7.88%, 9/01/18 (b)	490	500,412
Georgia Gulf Corp., 9.00%, 1/15/17 (b)	155	160,619
Hexion U.S. Finance Corp.:		
9.75%, 11/15/14	730	717,225
8.88%, 2/01/18	690	638,250
Huntsman International LLC (b):		
6.88%, 11/15/13	260	324,543
8.63%, 3/15/20	220	218,075
Ineos Finance Plc, 9.00%, 5/15/15 (b)	385	389,331
Innophos, Inc., 8.88%, 8/15/14	740	758,500
MacDermid, Inc., 9.50%, 4/15/17 (b)	1,180	1,196,225
OXEA Finance/Cy SCA, 9.63%, 7/15/17 (b)	EUR 385	504,968
Wellman Holdings, Inc., Subordinate Note (d):		
(Second Lien), 10.00%, 1/29/19 (b)	USD 790	687,300
(Third Lien), 5.00%, 1/29/19 (c)	259	101,015
		8,180,563
Commercial Banks 3.0%		
CIT Group, Inc.:		
7.00%, 5/01/16	1,735	1,648,250
7.00%, 5/01/17	5,870	5,519,631
		7,167,881
Commercial Services & Supplies 1.1%		
ACCO Brands Corp., 10.63%, 3/15/15	480	528,000
RSC Equipment Rental, Inc., 10.00%, 7/15/17 (b)	555	604,950
Scientific Games International, Inc., 9.25%, 6/15/19	215	227,900
West Corp., 11.00%, 10/15/16	1,170	1,228,500
		2,589,350
Construction Materials 0.9%		
Nortek, Inc., 11.00%, 12/01/13	2,029	2,138,035
Consumer Finance 1.0%		
Credit Acceptance Corp., 9.13%, 2/01/17 (b)	640	663,200
Ford Motor Credit Co. LLC:		
3.28%, 1/13/12 (f)	195	191,100

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

7.80%, 6/01/12	200	210,468
8.00%, 12/15/16	170	184,609
6.63%, 8/15/17	1,150	1,168,828
		2,418,205

Containers & Packaging 3.2%

Ball Corp., 6.75%, 9/15/20	475	499,938
Berry Plastics Corp.:		
8.88%, 9/15/14	755	719,137
8.25%, 11/15/15	125	125,313
9.50%, 5/15/18 (b)	395	363,400
Berry Plastics Holding Corp., 8.88%, 9/15/14	2,305	2,195,512
Graphic Packaging International, Inc., 9.50%, 6/15/17	810	862,650
Impress Holdings BV, 3.65%, 9/15/13 (b)(f)	390	368,550
Owens-Brockway Glass Container, Inc., 6.75%, 12/01/14	EUR 152	194,548
Pregis Corp., 12.38%, 10/15/13	USD 1,130	1,130,000
Smurfit Kappa Acquisitions (b):		
7.25%, 11/15/17	465	601,057
7.75%, 11/15/19	440	571,530
		7,631,635

Corporate Bonds	Par (000)	Value
Diversified Consumer Services 1.2%		
Service Corp. International, 7.00%, 6/15/17	USD 2,800	\$ 2,898,000

Diversified Financial Services 6.7%		
Ally Financial Inc. (b):		
8.30%, 2/12/15	1,970	2,048,800
7.50%, 9/15/20	1,760	1,742,400
Axcan Intermediate Holdings, Inc., 12.75%, 3/01/16	935	936,169
FCE Bank Plc:		
7.88%, 2/15/11	1,150	1,785,742
7.13%, 1/16/12	1,450	1,901,826
7.13%, 1/15/13	550	721,382
GMAC, Inc.:		
7.50%, 12/31/13	350	357,437
2.74%, 12/01/14 (f)	371	318,959
8.00%, 3/15/20 (b)	2,300	2,357,500
Leucadia National Corp., 8.13%, 9/15/15	1,120	1,192,800
Reynolds Group DL Escrow, Inc., 7.75%, 10/15/16 (b)	1,340	1,350,050
Reynolds Group Issuer, Inc. (b):		
7.75%, 10/15/16	350	450,186
8.50%, 5/15/18	710	681,600
		15,844,851

Diversified Telecommunication Services 4.5%		
Broadview Networks Holdings, Inc., 11.38%, 9/01/12	1,000	980,000

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Frontier Communications Corp.:		
7.88%, 4/15/15	550	580,250
8.25%, 4/15/17	700	740,250
8.50%, 4/15/20	325	344,906
GCI, Inc., 8.63%, 11/15/19	1,100	1,155,000
ITC Deltacom, Inc., 10.50%, 4/01/16	500	492,500
Nordic Telephone Co. Holdings ApS, 8.88%, 5/01/16 (b)	200	210,000
Qwest Communications International, Inc.:		
7.50%, 2/15/14	1,890	1,925,437
8.00%, 10/01/15 (b)	500	537,500
Series B, 7.50%, 2/15/14	1,385	1,410,969
Qwest Corp.:		
7.63%, 6/15/15	500	561,250
8.38%, 5/01/16	650	757,250
Windstream Corp.:		
8.13%, 8/01/13	400	426,500
7.88%, 11/01/17	600	609,000
		10,730,812

Energy Equipment & Services 1.9%

Compagnie Générale de Géophysique-Veritas:		
7.50%, 5/15/15	1,210	1,197,900
7.75%, 5/15/17	300	297,750
Expro Finance Luxembourg SCA, 8.50%, 12/15/16 (b)	1,715	1,603,525
Global Geophysical Services, Inc., 10.50%, 5/01/17 (b)	285	282,150
North American Energy Alliance LLC, 10.88%, 6/01/16 (b)	625	675,000
Thermon Industries, Inc., 9.50%, 5/01/17 (b)	500	512,500
		4,568,825

Food & Staples Retailing 0.9%

AmeriQual Group LLC, 9.50%, 4/01/12 (b)		
	750	735,000
Rite Aid Corp.:		
9.75%, 6/12/16	380	403,750
10.25%, 10/15/19	580	595,950
8.00%, 8/15/20 (b)	480	477,000
		2,211,700

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Corporate High Yield Fund, Inc. (COY)
(Percentages shown are based on Net Assets)

Corporate Bonds	Par (000)	Value
Food Products 0.5%		
B&G Foods, Inc., 7.63%, 1/15/18	USD 200	\$ 205,750
Reddy Ice Corp., 11.25%, 3/15/15 (b)	410	415,638
Smithfield Foods, Inc., 10.00%, 7/15/14 (b)	440	491,150
TreeHouse Foods, Inc., 7.75%, 3/01/18	150	158,625
		1,271,163
Health Care Equipment & Supplies 1.4%		
DJO Finance LLC, 10.88%, 11/15/14	2,255	2,415,669
Hologic, Inc., 2.00%, 12/15/37 (d)(g)	910	822,412
		3,238,081
Health Care Providers & Services 4.9%		
American Renal Holdings, 8.38%, 5/15/18 (b)	260	260,000
Gentiva Health Services, Inc., 11.50%, 9/01/18 (b)	655	677,925
HCA, Inc.:		
9.13%, 11/15/14	1,645	1,727,250
8.50%, 4/15/19	935	1,024,994
7.25%, 9/15/20	2,145	2,241,525
inVentiv Health Inc., 10.00%, 8/15/18 (b)	600	586,500
Omnicare, Inc., 7.75%, 6/01/20	465	465,000
Tenet Healthcare Corp.:		
9.00%, 5/01/15	1,717	1,828,605
10.00%, 5/01/18	622	699,750
8.88%, 7/01/19	2,010	2,173,312
		11,684,861
Health Care Technology 1.1%		
IMS Health, Inc., 12.50%, 3/01/18 (b)	2,235	2,589,806
Hotels, Restaurants & Leisure 2.3%		
Diamond Resorts Corp., 12.00%, 8/15/18 (b)	1,100	1,039,500
Enterprise Inns Plc, 6.50%, 12/06/18	GBP 388	491,129
Harrah's Operating Co., Inc., 11.25%, 6/01/17	USD 615	658,050
Inn of the Mountain Gods Resort & Casino, 12.00%, 11/15/10 (a)(h)	1,425	623,437
Little Traverse Bay Bands of Odawa Indians, 10.25%, 2/15/14 (a)(b)(h)	1,175	396,563
MGM Mirage, 13.00%, 11/15/13	90	103,950
MGM Resorts International:		
10.38%, 5/15/14	235	256,150
11.13%, 11/15/17	780	871,650
Marina District Finance Co., Inc., 9.88%, 8/15/18 (b)	340	339,150

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Travelport LLC:		
5.16%, 9/01/14 (f)	145	134,488
9.88%, 9/01/14	190	194,275
Tropicana Entertainment LLC, Series WI, 9.63%, 12/15/14 (a)(h)		
	315	230
Virgin River Casino Corp., 9.00%, 1/15/12 (a)(h)	805	362,250
		5,470,822

Household Durables 3.6%

Beazer Homes USA, Inc.:		
6.88%, 7/15/15	170	147,050
8.13%, 6/15/16	295	258,125
12.00%, 10/15/17	1,425	1,604,906
9.13%, 6/15/18	1,620	1,433,700
DFS Furniture Holdings Plc, 9.75%, 7/15/17 (b)	GBP 193	277,494
K. Hovnanian Enterprises, Inc., 10.63%, 10/15/16	USD 1,620	1,571,400
Ryland Group Inc., 6.63%, 5/01/20	625	585,938

Corporate Bonds	Par (000)	Value
Household Durables (concluded)		
Standard Pacific Corp.:		
9.25%, 4/15/12	USD 125	\$ 128,281
6.25%, 4/01/14	485	452,263
7.00%, 8/15/15	325	299,000
10.75%, 9/15/16	1,285	1,352,462
8.38%, 5/15/18	535	514,938
		8,625,557

Independent Power Producers & Energy Traders 2.9%

The AES Corp., 8.75%, 5/15/13 (b)	587	596,539
Calpine Construction Finance Co. LP, 8.00%, 6/01/16 (b)	1,190	1,249,500
Energy Future Holdings Corp., 10.00%, 1/15/20 (b)	3,115	2,999,754
Energy Future Intermediate Holding Co. LLC, 10.00%, 12/01/20	161	154,718
NRG Energy, Inc.:		
7.25%, 2/01/14	1,215	1,239,300
7.38%, 2/01/16	250	251,875
7.38%, 1/15/17	385	387,888
		6,879,574

Industrial Conglomerates 2.6%

Sequa Corp. (b):		
11.75%, 12/01/15	2,190	2,255,700
13.50%, 12/01/15 (c)	3,759	3,909,102
		6,164,802

Insurance 0.9%

Alliant Holdings I, Inc., 11.00%, 5/01/15 (b)	1,600	1,642,000
USI Holdings Corp., 4.25%, 11/15/14 (b)(f)	630	533,925
		2,175,925

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Life Sciences Tools & Services 0.2%

Patheon, Inc., 8.63%, 4/15/17 (b)	540	537,975
-----------------------------------	-----	---------

Machinery 1.8%

AGY Holding Corp., 11.00%, 11/15/14	900	765,000
Accuride Corp., 7.50%, 2/26/20 (c)(d)	9	22,842
Navistar International Corp.:		
3.00%, 10/15/14 (d)	1,750	1,909,687
8.25%, 11/01/21	1,000	1,047,500
Oshkosh Corp., 8.25%, 3/01/17	130	136,825
Titan International, Inc., 5.63%, 1/15/17 (b)(d)	220	261,800
		4,143,654

Marine 0.7%

Horizon Lines, Inc., 4.25%, 8/15/12 (d)	1,985	1,667,400
---	-------	-----------

Media 12.8%

Affinion Group, Inc.:		
10.13%, 10/15/13	2,235	2,290,875
10.13%, 10/15/13	715	731,087
CCH II LLC, 13.50%, 11/30/16	502	595,301
CCO Holdings LLC (b):		
7.88%, 4/30/18	430	445,050
8.13%, 4/30/20	430	452,575
CMP Susquehanna Corp., 3.64%, 5/15/14 (b)(f)	150	3,000
CSC Holdings, Inc., 8.50%, 4/15/14	370	404,225
Catalina Marketing Corp., 10.50%, 10/01/15 (b)(c)	555	593,850
Clear Channel Worldwide Holdings, Inc.:		
9.25%, 12/15/17	779	808,212
Series B, 9.25%, 12/15/17	3,945	4,137,319
Cox Enterprises, Inc.:		
Loan Close 2, 4.00%, 8/15/18	605	605,266
Loan Close 3, 8/15/18	700	700,000
Shares Loan, 4.00%, 8/15/18	714	713,688

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Corporate High Yield Fund, Inc. (COY)
(Percentages shown are based on Net Assets)

Corporate Bonds		Par (000)	Value
Media (concluded)			
DISH DBS Corp., 7.00%, 10/01/13	USD	90	\$ 93,713
Gray Television, Inc., 10.50%, 6/29/15		420	404,250
Harland Clarke Holdings Corp.:			
6.00%, 5/15/15 (f)		330	277,200
9.50%, 5/15/15		390	371,475
Intelsat Corp., 9.25%, 6/15/16		2,090	2,215,400
Interactive Data Corp., 10.25%, 8/01/18 (b)		945	980,437
Liberty Global, Inc., 4.50%, 11/15/16 (b)(d)		440	539,000
Liberty Media Corp., 3.13%, 3/30/23 (d)		1,023	1,112,512
Lighthouse International Co. SA:			
8.00%, 4/30/14	EUR	519	388,045
8.00%, 4/30/14 (b)		53	39,627
Live Nation Entertainment, Inc., 8.13%, 5/15/18 (b)	USD	600	579,000
McClatchy Co., 11.50%, 2/15/17 (b)		1,285	1,326,762
Nielsen Finance LLC:			
11.63%, 2/01/14		70	78,488
10.00%, 8/01/14		2,085	2,189,250
ProtoStar I Ltd., 18.00%, 10/15/12 (a)(b)(d)(h)		812	771,181
Rainbow National Services LLC (b):			
8.75%, 9/01/12		410	410,513
10.38%, 9/01/14		1,496	1,552,100
Regal Entertainment Group, 9.13%, 8/15/18		305	312,625
Seat Pagine Gialle SpA, 10.50%, 1/31/17 (b)	EUR	125	147,318
TL Acquisitions, Inc., 10.50%, 1/15/15 (b)	USD	1,120	1,069,600
UPC Germany GmbH (b):			
8.13%, 12/01/17	EUR	640	657,600
8.13%, 12/01/17		407	526,086
9.63%, 12/01/19		530	703,546
UPC Holding BV, 9.88%, 4/15/18 (b)	USD	500	520,625
Unitymedia GmbH, 9.63%, 12/01/19	EUR	158	209,736
Ziggo Bond Co. BV, 8.00%, 5/15/18 (b)		343	441,187
			30,397,724
Metals & Mining 4.1%			
AK Steel Corp., 7.63%, 5/15/20	USD	20	20,150
Aleris International, Inc. (a)(h):			
9.00%, 12/15/14		950	1,900
10.00%, 12/15/16		800	304
Drummond Co., Inc.:			
9.00%, 10/15/14 (b)		800	837,000
7.38%, 2/15/16		215	215,269
FMG Finance Property Ltd. (b):			
10.00%, 9/01/13		500	550,625
10.63%, 9/01/16		1,100	1,274,625
Foundation PA Coal Co., 7.25%, 8/01/14		1,850	1,854,625
Goldcorp, Inc., 2.00%, 8/01/14 (d)		615	747,994

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

McJunkin Red Man Corp., 9.50%, 12/15/16 (b)	565	498,612
Murray Energy Corp., 10.25%, 10/15/15 (b)	490	501,025
New World Resources NV:		
7.38%, 5/15/15	245	304,267
7.88%, 5/01/18	190	243,185
7.88%, 5/01/18 (b)	192	245,745
Novelis, Inc., 11.50%, 2/15/15	405	445,500
Ryerson, Inc.:		
7.84%, 11/01/14 (f)	380	352,450
12.00%, 11/01/15	245	252,044
Steel Dynamics, Inc., 7.38%, 11/01/12	250	265,625
United States Steel Corp., 7.38%, 4/01/20	480	486,000
Vedanta Resources Plc, 9.50%, 7/18/18 (b)	600	630,000
		9,726,945

Corporate Bonds	Par (000)	Value
Multiline Retail 2.5%		
Dollar General Corp.:		
10.63%, 7/15/15	USD 1,285	\$ 1,410,288
11.88%, 7/15/17 (c)	4,007	4,608,050
		6,018,338

Oil, Gas & Consumable Fuels 8.3%		
Arch Coal, Inc.:		
8.75%, 8/01/16	55	59,538
7.25%, 10/01/20	790	801,850
Atlas Energy Operating Co. LLC:		
12.13%, 8/01/17	450	516,938
10.75%, 2/01/18	240	264,600
Berry Petroleum Co., 8.25%, 11/01/16	470	474,700
Bill Barrett Corp., 9.88%, 7/15/16	40	43,400
Chesapeake Energy Corp.:		
6.63%, 8/15/20	2,170	2,178,137
2.25%, 12/15/38 (d)	775	580,281
Coffeyville Resources LLC, 9.00%, 4/01/15 (b)	270	277,425
Connacher Oil and Gas Ltd. (b):		
11.75%, 7/15/14	165	179,025
10.25%, 12/15/15	1,075	1,075,000
Consol Energy, Inc., 8.25%, 4/01/20 (b)	1,825	1,936,781
Crosstex Energy LP, 8.88%, 2/15/18	375	387,188
Denbury Resources, Inc., 8.25%, 2/15/20	652	696,010
Linn Energy LLC, 8.63%, 4/15/20 (b)	1,005	1,060,275
Massey Energy Co., 6.88%, 12/15/13	865	875,812
Niska Gas Storage US LLC, 8.88%, 3/15/18 (b)	1,730	1,820,825
OPTI Canada, Inc. (b):		
9.00%, 12/15/12	1,615	1,619,037
9.75%, 8/15/13	900	888,750
Patriot Coal Corp., 8.25%, 4/30/18	380	377,150
Peabody Energy Corp., 6.50%, 9/15/20	1,000	1,051,250
Petrohawk Energy Corp.:		
10.50%, 8/01/14	530	592,275
7.88%, 6/01/15	450	466,875
QEP Resources, Inc., 6.88%, 3/01/21	430	448,275
Range Resources Corp., 8.00%, 5/15/19	400	428,000

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Teekay Corp., 8.50%, 1/15/20	610	651,175
		<u>19,750,572</u>

Paper & Forest Products 2.6%

Ainsworth Lumber Co. Ltd., 11.00%, 7/29/15 (b)(c)	337	287,866
Boise Paper Holdings LLC:		
9.00%, 11/01/17	310	326,275
8.00%, 4/01/20	140	142,450
Clearwater Paper Corp., 10.63%, 6/15/16	370	416,250
Georgia-Pacific LLC, 8.25%, 5/01/16 (b)	1,525	1,669,875
Glatfelter, 7.13%, 5/01/16 (b)	190	191,187
NewPage Corp., 11.38%, 12/31/14	2,930	2,380,625
Verso Paper Holdings LLC, 11.50%, 7/01/14	785	828,175
		<u>6,242,703</u>

Pharmaceuticals 0.6%

Angiotech Pharmaceuticals, Inc., 4.29%, 12/01/13 (f)	995	803,463
Elan Finance Plc, 8.88%, 12/01/13	90	90,675
Novasep Holding SAS, 9.63%, 12/15/16 (b)	EUR 580	617,404
		<u>1,511,542</u>

Real Estate Investment Trusts (REITs) 0.6%

iStar Financial, Inc., 5.65%, 9/15/11	USD 1,500	1,374,375
---------------------------------------	-----------	-----------

Real Estate Management & Development 0.5%

Forest City Enterprises, Inc., 7.63%, 6/01/15	1,325	1,209,063
---	-------	-----------

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Corporate High Yield Fund, Inc. (COY)
(Percentages shown are based on Net Assets)

Corporate Bonds		Par (000)	Value
Road & Rail 0.9%			
Avis Budget Car Rental LLC, 9.63%, 3/15/18	USD	475	\$ 496,375
Hertz Holdings Netherlands BV, 8.50%, 7/31/15 (b)	EUR	660	869,841
Syncreon Global Ireland Ltd., 9.50%, 5/01/18 (b)	USD	750	733,125
			2,099,341
Semiconductors & Semiconductor Equipment 0.2%			
Advanced Micro Devices, Inc.:			
6.00%, 5/01/15 (d)		129	126,259
7.75%, 8/01/20 (b)		265	262,350
			388,609
Software 0.0%			
BMS Holdings, Inc., 8.59%, 2/15/12 (b)(c)(f)		445	8,906
Specialty Retail 1.6%			
Group 1 Automotive, Inc., 2.25%, 6/15/36 (d)(g)		985	749,831
Hillman Group, Inc., 10.88%, 6/01/18 (b)		490	515,725
Ltd. Brands, Inc., 8.50%, 6/15/19		745	841,850
Sonic Automotive, Inc., 9.00%, 3/15/18		345	351,038
Toys R Us-Delaware, Inc., 7.38%, 9/01/16 (b)		390	393,900
United Auto Group, Inc., 7.75%, 12/15/16		950	907,250
			3,759,594
Textiles, Apparel & Luxury Goods 0.2%			
Quiksilver, Inc., 6.88%, 4/15/15		470	434,750
Tobacco 0.1%			
Vector Group Ltd., 11.00%, 8/15/15		300	305,625
Wireless Telecommunication Services 5.2%			
Cricket Communications, Inc.:			
10.00%, 7/15/15		1,795	1,880,262
7.75%, 5/15/16		336	346,920
Digicel Group Ltd. (b):			
8.88%, 1/15/15		635	639,763
9.13%, 1/15/15 (c)		1,711	1,719,185
8.25%, 9/01/17		850	882,937
10.50%, 4/15/18		500	536,250
FiberTower Corp., 9.00%, 1/01/16 (c)		293	249,069
iPCS, Inc., 2.59%, 5/01/13 (f)		760	710,600
MetroPCS Wireless, Inc., 9.25%, 11/01/14		2,365	2,459,600

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Nextel Communications, Inc.:		
Series E, 6.88%, 10/31/13	1,110	1,107,225
Series F, 5.95%, 3/15/14	100	96,625
Orascom Telecom Finance SCA, 7.88%, 2/08/14 (b)	265	251,750
Sprint Capital Corp., 6.88%, 11/15/28	1,720	1,436,200
		12,316,386
Total Corporate Bonds	98.9%	235,210,163

Floating Rate Loan Interests (f)

Auto Components 1.0%

Affinion Group Holdings, Inc., Term Loan, 8.51%, 3/01/12 (c)		
	455	436,988
Allison Transmission, Inc., Term Loan, 3.04%, 8/07/14	2,164	1,994,156
		2,431,144

Automobiles 1.3%

Ford Motor Co., Tranche B-1 Term Loan, 3.03%, 12/15/13	3,243	3,119,476
---	-------	-----------

Building Products 1.2%

CPG International I, Inc., Term Loan, 5.54%, 2/28/11	2,940	2,939,698
---	-------	-----------

Floating Rate Loan Interests (f)	Par (000)	Value
---	----------------------	--------------

Capital Markets 0.1%

Marsico Parent Co., LLC, Term Loan, 5.31% 5.56%, 12/15/14	USD	377	\$	261,513
--	-----	-----	----	---------

Chemicals 0.2%

PQ Corp. (FKA Niagara Acquisition, Inc.), Term Loan (First Lien), 3.52% 3.73%, 7/30/14		406		371,090
---	--	-----	--	---------

Construction & Engineering 0.7%

Safway Services, LLC, Last Out Tranche Loan, 15.63%, 12/14/17		1,750		1,750,000
--	--	-------	--	-----------

Diversified Telecommunication Services 1.8%

Wind Finance SL SA, Euro Facility (Second Lien), 7.89%, 12/17/14	EUR	3,350		4,236,667
---	-----	-------	--	-----------

Health Care Providers & Services 0.8%

Harden Healthcare LLC:				
Add-on Term Loan, 7.75%, 3/02/15	USD	500		490,000
Tranche A Term Loan, 8.50%, 2/22/15		436		427,280
inVentiv Health, Inc. (FKA Ventive Health, Inc.), Term Loan B, 6.50%, 7/31/16		900		898,312
				1,815,592

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Hotels, Restaurants & Leisure 1.2%

Travelport LLC (FKA Travelport, Inc.), Loan, 8.37%, 3/27/12 (c)	3,121	2,902,582
--	-------	-----------

IT Services 0.4%

First Data Corp.:		
Initial Tranche B-1 Term Loan, 3.01%, 9/24/14	47	39,964
Initial Tranche B-2 Term Loan, 3.01%, 9/24/14	380	323,556
Initial Tranche B-3 Term Loan, 3.01%, 9/24/14	743	633,782
		<u>997,302</u>

Independent Power Producers & Energy Traders 1.0%

Texas Competitive Electric Holdings Co., LLC (TXU):		
Initial Tranche B-1 Term Loan, 3.79% 4.03%, 10/10/14	205	155,503
Initial Tranche B-2 Term Loan, 3.79% 4.07%, 10/10/14	296	224,518
Initial Tranche B-3 Term Loan, 3.79% 4.03%, 10/10/14	2,558	1,928,166
		<u>2,308,187</u>

Media 1.6%

Cengage Learning Acquisitions, Inc. (Thomson Learning), Tranche 1 Incremental Term Loan, 7.50%, 7/03/14	1,470	1,465,100
HMH Publishing Co., Ltd., Tranche A Term Loan, 5.79%, 6/12/14 (c)	883	804,193
Newsday, LLC, Fixed Rate Term Loan, 10.50%, 8/01/13	1,375	1,459,219
		<u>3,728,512</u>

Multiline Retail 0.6%

Hema Holding BV, Mezzanine, 9.15%, 1/29/17 (c)	EUR	1,043	1,216,042
The Neiman Marcus Group, Inc., Term Loan, 2.30%, 4/06/13	USD	225	213,631
			<u>1,429,673</u>

Oil, Gas & Consumable Fuels 1.3%

Tronox Worldwide LLC:		
Tranche B-1 Term Loan, 11.25%, 9/20/10	1,104	1,112,496
Tranche B-2 Term Loan, 11.25%, 9/20/10	296	298,879
Turbo Beta Ltd., Dollar Facility, 14.50%, 3/15/18 (c)	2,216	1,756,268
		<u>3,167,643</u>

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Corporate High Yield Fund, Inc. (COY)
(Percentages shown are based on Net Assets)

Floating Rate Loan Interests (f)	Par (000)	Value
Paper & Forest Products 0.3%		
Verso Paper Finance Holdings LLC, PIK Loan, 6.69% 7.44%, 2/01/13 (c)	USD 1,240	\$ 743,985
Real Estate Management & Development 0.6%		
Realogy Corp.:		
Initial Term Loan B, 3.30% 3.53%, 10/10/13	373	322,075
Synthetic Letter of Credit, 0.11%, 10/10/13	75	64,760
Second Lien Term Facility, 13.50%, 10/15/17	925	975,875
		1,362,710
Specialty Retail 0.2%		
Claire's Stores, Inc., Term Loan B, 3.01% 3.23%, 5/29/14	133	113,398
Michaels Stores, Inc., Term Loan B-1, 2.63% 2.81%, 10/31/13	331	312,138
		425,536
Total Floating Rate Loan Interests 14.3%		33,991,310

Other Interests (i)	Beneficial Interest (000)	
Auto Components 1.9%		
Delphi Debtor-in-Possession Holding Co. LLP Class B Membership Interests	(j)	4,553,557
Media 0.0%		
Adelphia Escrow	700	70
Adelphia Recovery Trust	878	3,512
		3,582
Total Other Interests 1.9%		4,557,139

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Preferred Stocks	Shares	
Diversified Financial Services 0.9%		
Ally Financial Inc., 7.00% (b)	2,674	2,208,808
Household Durables 0.1%		
Beazer Homes USA, Inc., 7.50% (d)	5,000	99,050
Media 0.0%		
CMP Susquehanna Radio Holdings Corp. (a)(b)(f)	34,982	
Total Preferred Stocks 1.0%		2,307,858

Warrants (k)

Health Care Providers & Services 0.0%		
HealthSouth Corp. (Expires 1/16/14)	29,930	1
Media 0.0%		
CMP Susquehanna Radio Holdings Corp. (Expires 3/26/19) (b)	39,975	
New Vision Holdings LLC (Expires 9/30/14)	14,965	150
		150
Oil, Gas & Consumable Fuels 0.0%		
Turbo Cayman Ltd. (No Expiration)	1	
Software 0.0%		
HMH Holdings/EduMedia (Expires 3/09/17)	9,997	
Total Warrants 0.0%	151	
Total Long-Term Investments (Cost \$285,578,895) 118.0%		280,727,944

Short-Term Securities	Shares	Value
BlackRock Liquidity Funds, TempCash, Institutional Class, 0.27% (l)(m)	322,368	\$ 322,368
Total Short-Term Securities (Cost \$322,368) 0.1%		322,368

Options Purchased	Contracts
Over-the-Counter Call Options 0.0%	
Marsico Parent Superholdco LLC, Strike Price USD 942.86, expires 12/21/19, Broker	17

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Goldman Sachs Bank USA

Total Options Purchased		
(Cost \$16,622)	0.0%	
Total Investments (Cost \$285,917,885*)		281,050,312
118.1%		
Liabilities in Excess of Other Assets		(43,199,176)
(18.1)%		
Net Assets		\$ 237,851,136
100.0%		

* The cost and unrealized appreciation (depreciation) of investments as of August 31, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 287,104,524
Gross unrealized appreciation	\$ 13,346,589
Gross unrealized depreciation	(19,400,801)
Net unrealized depreciation	\$ (6,054,212)

- (a) Non-income producing security.
- (b) Security exempt from registration under Rule 144A of the Securities Act of 1933. These securities may be resold in transactions exempt from registration to qualified institutional investors.
- (c) Represents a payment-in-kind security which may pay interest/dividends in additional face/shares.
- (d) Convertible security.
- (e) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.
- (f) Variable rate security. Rate shown is as of report date.
- (g) Represents a step-down bond that pays an initial coupon rate for the first period and then a lower coupon rate for the following periods. Rate shown is as of report date.
- (h) Issuer filed for bankruptcy and/or is in default of interest payments.
- (i) Other interests represent beneficial interest in liquidation trusts and other reorganization entities and are non-income producing.
- (j) Amount is less than \$1,000.
- (k) Warrants entitle the Fund to purchase a predetermined number of shares of common stock and are non-income producing. The purchase price and number of shares are subject to adjustment under certain conditions until the expiration date, if any.
- (l) Investments in companies considered to be an affiliate of the Fund during the period, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held at February 28, 2010	Net Activity	Shares Held at August 31, 2010	Income
-----------	--	-----------------	--------------------------------------	--------

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

BlackRock Liquidity
Funds, TempFund,
Institutional Class

4,931,674 (4,609,306) 322,368 \$ 2,350

(m) Represents the current yield as of report date.

See Notes to Financial Statements.

SEMI-ANNUAL REPORT

AUGUST 31, 2010

15

Schedule of Investments (continued)

BlackRock Corporate High Yield Fund, Inc. (COY)

Foreign currency exchange contracts as of August 31, 2010 were as follows:

Currency Purchased	Currency Sold	Counterparty	Settlement Date	Unrealized Appreciation (Depreciation)
EUR 763,800	USD 980,728	Citibank NA	9/15/10	\$ (12,823)
USD 16,539,551	EUR 13,056,000	Citibank NA	9/15/10	(5,315)
USD 489,452	EUR 385,000	Deutsche Bank AG	9/15/10	1,571
USD 179,941	CAD 190,000	Deutsche Bank AG	10/20/10	1,906
GBP 114,000	USD 177,834	UBS AG	10/20/10	(3,059)
USD 2,115,757	GBP 1,386,000	Citibank NA	10/20/10	(9,141)
USD 293,808	GBP 192,500	Deutsche Bank AG	10/20/10	(1,317)
USD 178,806	GBP 116,000	Royal Bank of Scotland Plc	10/20/10	964
Total				\$ (27,214)

Financial futures contracts sold as of August 31, 2010 were as follows:

Contracts	Issue	Exchange	Expiration Date	Notional Value	Unrealized Appreciation
26	S&P 500 Index	Chicago Mercantile	September 2010	\$ 6,922,729	\$ 108,779

Credit default swaps on single-name issuers buy protection outstanding as of August 31, 2010 were as follows:

Issuer	Pay Fixed Rate	Counterparty	Expiration	Notional Amount (000)	Unrealized Appreciation (Depreciation)
iStar Financial, Inc.	5.00%	Morgan Stanley Capital Services, Inc.	September 2011	\$ 1,500	\$ 35,889
K. Hovnanian Enterprises, Inc.	5.00%	Goldman Sachs Bank USA	December 2011	\$ 475	28,246

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

K. Hovnanian Enterprises, Inc.	5.00%	Goldman Sachs Bank USA	December 2013	\$ 925	155,858
Louisiana-Pacific Corp.	5.00%	JPMorgan Chase Bank NA	March 2014	\$ 500	(106,314)
Total				\$	113,679

Credit default swaps on single-name issuers sold protection outstanding as of August 31, 2010 were as follows:

Issuer	Receive Fixed Rate	Counterparty	Expiration	Credit Rating ¹	Notional Amount (000) ²	Unrealized Appreciation (Depreciation)
Texas Competitive Electric Holdings Co. LLC	5.00%	Goldman Sachs International	September 2012	CCC	\$ 475	\$ (42,756)
Realogy Corp.	5.00%	Credit Suisse International	March 2015	C	\$ 100	699
Realogy Corp.	5.00%	JPMorgan Chase Bank NA	March 2015	C	\$ 450	(15,573)
Advanced Micro Devices, Inc.	5.00%	JPMorgan Chase Bank NA	March 2015	B+	\$ 550	(6,161)
Levi Strauss & Co.	5.00%	Citibank NA	June 2015	B+	\$ 360	221
NOVA Chemicals Corp.	5.00%	Goldman Sachs International	June 2015	B+	\$ 350	(6,416)
Levi Strauss & Co.	5.00%	Goldman Sachs International	September 2015	B+	\$ 500	
Realogy Corp.	5.00%	JPMorgan Chase Bank NA	September 2015	C	\$ 125	(450)
Total					\$	(70,436)

¹ Using Standard & Poor's rating of the issuer.

² The maximum potential amount the Fund may pay should a negative credit take place as defined under the terms of the agreement.

For Fund compliance purposes, the Fund's industry classifications refer to any one or more of the industry sub-classifications used by one or more widely recognized market indexes or rating group indexes, and/or as defined by Fund management. This definition may not apply for purposes of this report, which may combine such industry sub-classifications for reporting ease.

Fair Value Measurements Various inputs are used in determining the fair value of investments and derivatives, which are as follows:

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Level 1 price quotations in active markets/exchanges for identical assets and liabilities

Level 2 other observable inputs (including, but not limited to: quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

Level 3 unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available (including the Fund's own assumptions used in determining the fair value of investments and derivatives)

The inputs or methodologies used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. For information about the Fund's policy regarding valuation of investments and other significant accounting policies, please refer to Note 1 of the Notes to Financial Statements.

See Notes to Financial Statements.

16 SEMI-ANNUAL REPORT AUGUST 31, 2010

Schedule of Investments (concluded)

BlackRock Corporate High Yield Fund, Inc. (COY)

The following tables summarize the inputs used as of August 31, 2010 in determining the fair valuation of the Fund's investments and derivatives:

Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Investments in Securities:				
Long-Term Investments:				
Common Stocks	\$ 4,022,995	\$ 222,335	\$ 415,993	\$ 4,661,323
Corporate Bonds		230,198,853	5,011,310	235,210,163
Floating Rate Loan Interests		22,125,725	11,865,585	33,991,310
Other Interests		4,553,557	3,582	4,557,139
Preferred Stocks	2,307,858			2,307,858
Warrants			151	151
Short-Term Securities	322,368			322,368
Liabilities:				
Unfunded Loan Commitments			(21,252)	(21,252)
Total	\$ 6,653,221	\$ 257,100,470	\$ 17,275,369	\$ 281,029,060

Derivative Financial Instruments¹

Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Credit contracts		\$ 220,913		\$ 220,913
Equity contracts	\$ 108,779			108,779
Foreign currency exchange contracts		4,441		4,441
Liabilities:				
Credit contracts		(177,670)		(177,670)
Foreign currency exchange contracts		(31,655)		(31,655)
Total	\$ 108,779	\$ 16,029		\$ 124,808

¹ Derivative financial instruments are financial futures contracts, swaps and foreign currency exchange contracts. Financial futures contracts, swaps and foreign currency exchange contracts are valued at the unrealized appreciation/depreciation on the instrument.

The following table is a reconciliation of Level 3 investments for which significant unobservable inputs were used in determining fair value:

Warrants

Total

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

	Common Stocks	Corporate Bonds	Floating Rate Loan Interests	Other Interests		Unfunded Loan Commitments	
Assets/Liabilities:							
Balance, as of February 28, 2010	\$ 75,096	\$ 3,961,360	\$ 19,218,811	\$ 4,212,670	\$ 150	\$ (51,643)	\$ 27,416,444
Accrued discounts/premiums		12,626	79,364				91,990
Net realized gain (loss)		5,192	215,474	311,075	22,463		554,204
Net change in unrealized appreciation/depreciation ²	8,805	(138,594)	852,238	323,519	1	30,391	1,076,360
Purchases		34,239	8,418,054	319,000			8,771,293
Sales			(13,176,786)	(609,125)	(22,463)		(13,808,374)
Transfers in ³	415,922	1,390,000	917,280				2,723,202
Transfers out ³	(83,830)	(253,513)	(4,658,850)	(4,553,557)			(9,549,750)
Balance, as of August 31, 2010	\$ 415,993	\$ 5,011,310	\$ 11,865,585	\$ 3,582	\$ 151	\$ (21,252)	\$ 17,275,369

² Included in the related net change in unrealized appreciation/depreciation on the Statements of Operations. The change in the unrealized appreciation/depreciation on the securities still held on August 31, 2010 was \$249,870.

³ The Fund's policy is to recognize transfers in and transfers out as of the end of the period of the event or the change in circumstances that caused the transfer.

See Notes to Financial Statements.

SEMI-ANNUAL REPORT

AUGUST 31, 2010

17

Schedule of Investments August 31, 2010 (Unaudited)

BlackRock Corporate High Yield Fund III, Inc. (CYE)
(Percentages shown are based on Net Assets)

Common Stocks	Shares	Value
Building Products 0.1%		
Masonite Worldwide Holdings (a)	5,365	\$ 203,870
Capital Markets 0.1%		
E*Trade Financial Corp. (a)	29,600	367,336
Chemicals 0.2%		
LyondellBasell Industries NV, Class A (a)	6,388	130,954
LyondellBasell Industries NV, Class B (a)	18,485	378,758
Wellman Holdings, Inc. (a)	1,522	76
		<u>509,788</u>
Commercial Services & Supplies 0.1%		
Air Lease Corp. (a)(b)	12,900	258,000
Communications Equipment 0.5%		
Loral Space & Communications Ltd. (a)	25,022	1,339,678
Construction Materials 0.0%		
Nortek, Inc. (a)	2,145	89,017
Diversified Financial Services 0.0%		
Citigroup, Inc. (a)	1	4
Electrical Equipment 0.0%		
Medis Technologies Ltd. (a)	70,784	2,194
Hotels, Restaurants & Leisure 0.0%		
Buffets Restaurants Holdings, Inc. (a)	1,099	4,616
Household Durables 0.2%		
Beazer Homes USA, Inc. (a)	153,500	531,110
Machinery 0.2%		
Accuride Corp., Restricted Shares (a)	90,983	100,081
Navistar International Corp. (a)	9,400	393,672
		<u>493,753</u>
Media 0.7%		
Charter Communications, Inc. (a)	16,555	562,870
Gannett Co., Inc.	44,700	540,423
Gray Television, Inc. (a)	162,000	299,700
Sinclair Broadcast Group, Inc., Class A (a)	50,000	299,000

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

		1,701,993
Paper & Forest Products 0.3%		
Ainsworth Lumber Co. Ltd. (a)	122,117	286,297
Ainsworth Lumber Co. Ltd. (a)(b)	140,415	329,195
Western Forest Products, Inc. (a)	158,023	43,716
Western Forest Products, Inc. (a)(b)	45,762	12,660
		671,868
Semiconductors & Semiconductor Equipment 0.0%		
SunPower Corp., Class B (a)	778	8,044
Software 0.3%		
HMH Holdings/EduMedia (a)	90,514	452,570
TiVo, Inc. (a)	26,525	208,487
		661,057
Wireless Telecommunication Services 0.1%		
FiberTower Corp. (a)	76,542	274,786
Total Common Stocks 2.8%		7,117,114

Corporate Bonds	Par (000)	Value
Aerospace & Defense 0.4%		
Bombardier, Inc., 7.75%, 3/15/20 (b)	USD 200	\$ 215,000
DynCorp International, Inc., 10.38%, 7/01/17 (b)	230	228,850
Kratos Defense & Security Solutions, Inc., 10.00%, 6/01/17	540	557,550
		1,001,400
Air Freight & Logistics 0.6%		
National Air Cargo Group, Inc.:		
Series 1, 12.38%, 8/16/15	755	755,000
Series 2, 12.38%, 8/16/15	755	755,000
		1,510,000
Airlines 2.9%		
Air Canada (b):		
9.25%, 8/01/15	1,060	1,038,800
12.00%, 2/01/16	280	261,800
American Airlines, Inc., 10.50%, 10/15/12 (b)	940	998,750
American Airlines Pass Through Trust, Series 2001-02, 7.86%, 4/01/13	400	418,600
Continental Airlines, Inc.:		
6.75%, 9/15/15 (b)	630	623,700
Series 1997-4-B, 6.90%, 7/02/18 (c)	522	508,827
Series 2001-1-C, 7.03%, 12/15/12	250	249,236
Delta Air Lines, Inc., Series B, 9.75%, 12/17/16	1,045	1,097,526
United Air Lines, Inc., 12.75%, 7/15/12	2,082	2,320,895

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

7,518,134

Auto Components 1.5%

Allison Transmission, Inc. (b):		
11.00%, 11/01/15	230	247,250
11.25%, 11/01/15 (d)	177	190,275
Delphi International Holdings Unsecured,		
12.00%, 10/06/14	91	89,282
The Goodyear Tire & Rubber Co.:		
8.25%, 8/15/20	440	450,450
8.75%, 8/15/20	250	264,375
Icahn Enterprises LP:		
4.00%, 8/15/13 (b)(e)(f)	255	232,050
8.00%, 1/15/18	2,470	2,457,650

3,931,332

Beverages 0.1%

Cott Beverages USA, Inc., 8.13%, 9/01/18 (b)	264	271,590
Crown European Holdings SA, 7.13%, 8/15/18 (b)	EUR 245	318,238

589,828

Biotechnology 0.2%

QHP Pharma, 10.25%, 3/15/15 (b)	USD 591	602,400
---------------------------------	---------	---------

Building Products 1.5%

Associated Materials LLC, 9.88%, 11/15/16	770	816,200
Building Materials Corp. of America (b):		
6.88%, 8/15/18	530	515,425
7.00%, 2/15/20	620	616,900
Momentive Performance Materials, Inc., Series WI,		
9.75%, 12/01/14	735	717,544
Ply Gem Industries, Inc., 11.75%, 6/15/13	1,180	1,215,400

3,881,469

Capital Markets 0.7%

E*Trade Financial Corp. (e)(g):		
3.39%, 8/31/19 (b)	244	292,800
Series A, 3.64%, 8/31/19	7	8,400
MU Finance Plc, 8.75%, 2/01/17 (b)	GBP 422	621,312

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Corporate High Yield Fund III, Inc. (CYE)
(Percentages shown are based on Net Assets)

Corporate Bonds	Par (000)	Value
Capital Markets (concluded)		
Marsico Parent Co., LLC, 10.63%, 1/15/16 (b)	USD 963	\$ 356,310
Marsico Parent Holdco, LLC, 12.50%, 7/15/16 (b)(d)	272	24,452
Marsico Parent Superholdco, LLC, 14.50%, 1/15/18 (b)(d)	289	26,008
Offshore Group Investments Ltd., 11.50%, 8/01/15 (b)	520	518,700
		1,847,982
Chemicals 3.5%		
American Pacific Corp., 9.00%, 2/01/15	880	870,100
CF Industries, Inc.:		
6.88%, 5/01/18	440	463,100
7.13%, 5/01/20	780	836,550
Chemtura Corp., 7.88%, 9/01/18 (b)	530	541,262
Georgia Gulf Corp., 9.00%, 1/15/17 (b)	165	170,981
Hexion U.S. Finance Corp.:		
9.75%, 11/15/14	790	776,175
8.88%, 2/01/18	765	707,625
Huntsman International LLC (b):		
6.88%, 11/15/13	280	349,508
8.63%, 3/15/20	235	232,944
Ineos Finance Plc, 9.00%, 5/15/15 (b)	420	424,725
Innophos, Inc., 8.88%, 8/15/14	825	845,625
MacDermid, Inc., 9.50%, 4/15/17 (b)	1,260	1,277,325
OXEA Finance/Cy SCA, 9.50%, 7/15/17 (b)	555	585,525
Wellman Holdings, Inc., Subordinate Note (e):		
(Second Lien), 10.00%, 1/29/19 (b)	844	734,280
(Third Lien), 5.00%, 1/29/19 (d)	276	107,749
		8,923,474
Commercial Banks 3.1%		
CIT Group, Inc.:		
7.00%, 5/01/16	3,076	2,922,662
7.00%, 5/01/17	5,170	4,861,488
Glitnir Banki HF (a)(h):		
4.15%, 4/20/10 (b)	111	31,635
6.38%, 9/25/12 (b)	500	142,500
Series EMTN, 5.07%, 1/27/10	EUR 50	17,741
Series EMTN, 3.00%, 6/30/10	45	15,967
Series GMTN, 4.38%, 2/05/10	50	17,742
		8,009,735

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Commercial Services & Supplies 1.0%			
ACCO Brands Corp., 10.63%, 3/15/15	USD	250	275,000
RSC Equipment Rental, Inc., 10.00%, 7/15/17 (b)		585	637,650
Scientific Games International, Inc., 9.25%, 6/15/19		230	243,800
West Corp., 11.00%, 10/15/16		1,290	1,354,500
			2,510,950

Construction Materials 1.0%			
Nortek, Inc., 11.00%, 12/01/13		2,395	2,523,239

Consumer Finance 1.0%			
Credit Acceptance Corp., 9.13%, 2/01/17 (b)		680	704,650
Ford Motor Credit Co. LLC: 3.28%, 1/13/12 (f)		215	210,700
7.80%, 6/01/12		200	210,468
8.00%, 12/15/16		180	195,468
6.63%, 8/15/17		1,260	1,280,629
			2,601,915

Corporate Bonds	Par (000)	Value
Containers & Packaging 3.2%		
Ball Corp., 6.75%, 9/15/20	USD 525	\$ 552,562
Berry Plastics Corp.: 8.88%, 9/15/14	810	771,525
8.25%, 11/15/15	135	135,338
9.50%, 5/15/18 (b)	435	400,200
Berry Plastics Holding Corp., 8.88%, 9/15/14	2,470	2,352,675
Graphic Packaging International, Inc., 9.50%, 6/15/17	840	894,600
Impress Holdings BV, 3.65%, 9/15/13 (b)(f)	420	396,900
Owens-Brockway Glass Container, Inc., 6.75%, 12/01/14	EUR 155	198,388
Pregis Corp., 12.38%, 10/15/13	USD 1,200	1,200,000
Smurfit Kappa Acquisitions (b): 7.25%, 11/15/17	495	639,835
7.75%, 11/15/19	470	610,498
		8,152,521

Diversified Consumer Services 1.2%			
Service Corp. International, 7.00%, 6/15/17		3,000	3,105,000

Diversified Financial Services 6.9%			
Ally Financial Inc. (b): 8.30%, 2/12/15		1,990	2,069,600
7.50%, 9/15/20		1,910	1,890,900
Axcan Intermediate Holdings, Inc., 12.75%, 3/01/16		995	996,244
FCE Bank Plc: 7.88%, 2/15/11		700	1,086,973
7.13%, 1/16/12		1,800	2,360,888
7.13%, 1/15/13		1,050	1,377,184
GMAC, Inc.: 7.50%, 12/31/13		280	285,950
2.74%, 12/01/14 (f)		394	338,732

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

8.00%, 3/15/20 (b)	3,180	3,259,500
Leucadia National Corp., 8.13%, 9/15/15	1,175	1,251,375
Reynolds Group DL Escrow, Inc., 7.75%, 10/15/16 (b)	1,460	1,470,950
Reynolds Group Issuer, Inc. (b):		
7.75%, 10/15/16	400	514,499
8.50%, 5/15/18	775	744,000
		17,646,795
Diversified Telecommunication Services 4.5%		
Broadview Networks Holdings, Inc., 11.38%, 9/01/12	1,035	1,014,300
Frontier Communications Corp.:		
7.88%, 4/15/15	630	664,650
8.25%, 4/15/17	800	846,000
8.50%, 4/15/20	350	371,438
GCI, Inc., 8.63%, 11/15/19	1,200	1,260,000
ITC Deltacom, Inc., 10.50%, 4/01/16	540	531,900
Nordic Telephone Co. Holdings ApS, 8.88%, 5/01/16 (b)	215	225,750
Qwest Communications International, Inc.:		
7.50%, 2/15/14	2,020	2,057,875
8.00%, 10/01/15 (b)	600	645,000
Series B, 7.50%, 2/15/14	1,450	1,477,187
Qwest Corp.:		
7.63%, 6/15/15	525	589,312
8.38%, 5/01/16	680	792,200
Windstream Corp.:		
8.13%, 8/01/13	460	490,475
7.88%, 11/01/17	630	639,450
		11,605,537

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Corporate High Yield Fund III, Inc. (CYE)
(Percentages shown are based on Net Assets)

Corporate Bonds	Par (000)	Value
Energy Equipment & Services 1.9%		
Compagnie Générale de Géophysique-Veritas: 7.50%, 5/15/15	USD 1,315	\$ 1,301,850
7.75%, 5/15/17	320	317,600
Expro Finance Luxembourg SCA, 8.50%, 12/15/16 (b)	1,835	1,715,725
Global Geophysical Services, Inc., 10.50%, 5/01/17 (b)	310	306,900
North American Energy Alliance LLC, 10.88%, 6/01/16 (b)	665	718,200
Thermon Industries, Inc., 9.50%, 5/01/17 (b)	555	568,875
		4,929,150
Food & Staples Retailing 0.9%		
AmeriQual Group LLC, 9.50%, 4/01/12 (b)	800	784,000
Rite Aid Corp.: 9.75%, 6/12/16	410	435,625
10.25%, 10/15/19	670	688,425
8.00%, 8/15/20 (b)	530	526,688
		2,434,738
Food Products 0.5%		
B&G Foods, Inc., 7.63%, 1/15/18	220	226,325
Reddy Ice Corp., 11.25%, 3/15/15 (b)	440	446,050
Smithfield Foods, Inc., 10.00%, 7/15/14 (b)	460	513,475
TreeHouse Foods, Inc., 7.75%, 3/01/18	160	169,200
		1,355,050
Health Care Equipment & Supplies 1.4%		
DJO Finance LLC, 10.88%, 11/15/14	2,455	2,629,919
Hologic, Inc., 2.00%, 12/15/37 (e)(i)	955	863,081
		3,493,000
Health Care Providers & Services 4.9%		
American Renal Holdings, 8.38%, 5/15/18 (b)	280	280,000
Gentiva Health Services, Inc., 11.50%, 9/01/18 (b)	710	734,850
HCA, Inc.: 9.13%, 11/15/14	1,785	1,874,250
8.50%, 4/15/19	1,020	1,118,175
7.25%, 9/15/20	2,315	2,419,175
inVentiv Health Inc., 10.00%, 8/15/18 (b)	650	635,375
Omnicare, Inc., 7.75%, 6/01/20	500	500,000

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Tenet Healthcare Corp.:		
9.00%, 5/01/15	1,799	1,915,935
10.00%, 5/01/18	644	724,500
8.88%, 7/01/19	2,279	2,464,169
		12,666,429

Health Care Technology 1.1%		
IMS Health, Inc., 12.50%, 3/01/18 (b)	2,405	2,786,794

Hotels, Restaurants & Leisure 2.3%		
Diamond Resorts Corp., 12.00%, 8/15/18 (b)	1,190	1,124,550
Enterprise Inns Plc, 6.50%, 12/06/18	GBP 425	537,963
Harrah's Operating Co., Inc., 11.25%, 6/01/17	USD 660	706,200
Inn of the Mountain Gods Resort & Casino, 12.00%, 11/15/10 (a)(h)	1,550	678,125
Little Traverse Bay Bands of Odawa Indians, 10.25%, 2/15/14 (a)(b)(h)	1,290	435,375
MGM Mirage, 13.00%, 11/15/13	110	127,050
MGM Resorts International:		
10.38%, 5/15/14	255	277,950
11.13%, 11/15/17	820	916,350
Marina District Finance Co., Inc., 9.88%, 8/15/18 (b)	370	369,075

Corporate Bonds	Par (000)	Value
Hotels, Restaurants & Leisure (concluded)		
Travelport LLC:		
5.16%, 9/01/14 (f)	USD 160	\$ 148,400
9.88%, 9/01/14	210	214,725
Tropicana Entertainment LLC, Series WI, 9.63%, 12/15/14 (a)(h)	305	223
Virgin River Casino Corp., 9.00%, 1/15/12 (a)(h)	940	423,000
		5,958,986

Household Durables 3.5%		
Beazer Homes USA, Inc.:		
6.88%, 7/15/15	185	160,025
8.13%, 6/15/16	315	275,625
12.00%, 10/15/17	1,345	1,514,806
9.13%, 6/15/18	1,770	1,566,450
DFS Furniture Holdings Plc, 9.75%, 7/15/17 (b)	GBP 208	299,061
K. Hovnanian Enterprises, Inc., 10.63%, 10/15/16	USD 1,725	1,673,250
Ryland Group Inc., 6.63%, 5/01/20	675	632,812
Standard Pacific Corp.:		
9.25%, 4/15/12	135	138,544
6.25%, 4/01/14	365	340,363
7.00%, 8/15/15	265	243,800
10.75%, 9/15/16	1,390	1,462,975
8.38%, 5/15/18	605	582,313
		8,890,024

Independent Power Producers & Energy Traders 2.8%		
The AES Corp., 8.75%, 5/15/13 (b)	450	457,313
Calpine Construction Finance Co. LP, 8.00%, 6/01/16 (b)	1,260	1,323,000

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Energy Future Holdings Corp., 10.00%, 1/15/20 (b)	3,395	3,269,395
Energy Future Intermediate Holding Co. LLC, 10.00%, 12/01/20	174	167,211
NRG Energy, Inc.:		
7.25%, 2/01/14	1,275	1,300,500
7.38%, 2/01/16	270	272,025
7.38%, 1/15/17	400	403,000

7,192,444

Industrial Conglomerates 2.5%

Sequa Corp. (b):		
11.75%, 12/01/15	2,340	2,410,200
13.50%, 12/01/15 (d)	3,954	4,112,171

6,522,371

Insurance 0.9%

Alliant Holdings I, Inc., 11.00%, 5/01/15 (b)	1,700	1,744,625
USI Holdings Corp., 4.25%, 11/15/14 (b)(f)	680	576,300

2,320,925

Leisure Equipment & Products 0.4%

Brunswick Corp., 11.25%, 11/01/16 (b)	795	908,288
---------------------------------------	-----	---------

Life Sciences Tools & Services 0.2%

Patheon, Inc., 8.63%, 4/15/17 (b)	585	582,806
-----------------------------------	-----	---------

Machinery 1.7%

AGY Holding Corp., 11.00%, 11/15/14	980	833,000
Accuride Corp., 7.50%, 2/26/20 (d)(e)	10	24,627
Navistar International Corp.:		
3.00%, 10/15/14 (e)	1,900	2,073,375
8.25%, 11/01/21	1,000	1,047,500
Oshkosh Corp., 8.25%, 3/01/17	140	147,350
Titan International, Inc., 5.63%, 1/15/17 (b)(e)	240	285,600

4,411,452

Marine 0.7%

Horizon Lines, Inc., 4.25%, 8/15/12 (e)	2,230	1,873,200
---	-------	-----------

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Corporate High Yield Fund III, Inc. (CYE)
(Percentages shown are based on Net Assets)

Corporate Bonds		Par (000)	Value
Media 12.7%			
Affinion Group, Inc.:			
10.13%, 10/15/13	USD	2,445	\$ 2,506,125
10.13%, 10/15/13		765	782,212
CCH II LLC, 13.50%, 11/30/16		543	643,098
CCO Holdings LLC (b):			
7.88%, 4/30/18		470	486,450
8.13%, 4/30/20		470	494,675
CMP Susquehanna Corp., 3.64%, 5/15/14 (b)(f)		160	3,200
CSC Holdings, Inc., 8.50%, 4/15/14		390	426,075
Catalina Marketing Corp., 10.50%, 10/01/15 (b)(d)		610	652,700
Clear Channel Worldwide Holdings, Inc.:			
9.25%, 12/15/17		835	866,312
Series B, 9.25%, 12/15/17		4,240	4,446,700
Cox Enterprises, Inc.:			
Loan Close 2, 4.00%, 8/15/18		636	635,530
Loan Close 3, 4.00%, 8/15/18		735	735,000
Shares Loan, 4.00%, 8/15/18		749	749,372
DISH DBS Corp., 7.00%, 10/01/13		90	93,713
Gray Television, Inc., 10.50%, 6/29/15		455	437,938
Harland Clarke Holdings Corp.:			
6.00%, 5/15/15 (f)		350	294,000
9.50%, 5/15/15		420	400,050
Intelsat Corp., 9.25%, 6/15/16		2,120	2,247,200
Interactive Data Corp., 10.25%, 8/01/18 (b)		1,030	1,068,625
Liberty Global, Inc., 4.50%, 11/15/16 (b)(e)		470	575,750
Liberty Media Corp., 3.13%, 3/30/23 (e)		1,113	1,210,387
Lighthouse International Co. SA:			
8.00%, 4/30/14	EUR	546	408,232
8.00%, 4/30/14 (b)		67	50,094
Live Nation Entertainment, Inc., 8.13%, 5/15/18 (b)	USD	650	627,250
McClatchy Co., 11.50%, 2/15/17 (b)		1,395	1,440,337
Nielsen Finance LLC:			
11.63%, 2/01/14		180	201,825
10.00%, 8/01/14		2,145	2,252,250
ProtoStar I Ltd., 18.00%, 10/15/12 (a)(b)(e)(h)		850	807,410
Rainbow National Services LLC (b):			
8.75%, 9/01/12		440	440,550
10.38%, 9/01/14		1,582	1,641,325
Regal Entertainment Group, 9.13%, 8/15/18		335	343,375
Seat Pagine Gialle SpA, 10.50%, 1/31/17 (b)	EUR	136	160,282
TL Acquisitions, Inc., 10.50%, 1/15/15 (b)	USD	1,330	1,270,150
UPC Germany GmbH (b):			
8.13%, 12/01/17		755	775,762
8.13%, 12/01/17	EUR	441	570,035
9.63%, 12/01/19		570	756,644
UPC Holding BV, 9.88%, 4/15/18 (b)	USD	500	520,625
Unitymedia GmbH, 9.63%, 12/01/19	EUR	168	223,011

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Ziggo Bond Co. BV, 8.00%, 5/15/18 (b)	388	499,069
		32,743,338

Metals & Mining 4.0%

AK Steel Corp., 7.63%, 5/15/20	USD	20	20,150
Aleris International, Inc. (a)(h):			
9.00%, 12/15/14		1,035	2,070
10.00%, 12/15/16		800	304
Drummond Co., Inc.:			
9.00%, 10/15/14 (b)		875	915,469
7.38%, 2/15/16		225	225,281
FMG Finance Property Ltd. (b):			
10.00%, 9/01/13		535	589,169
10.63%, 9/01/16		1,180	1,367,325
Foundation PA Coal Co., 7.25%, 8/01/14		1,975	1,979,937
GoldCorp, Inc., 2.00%, 8/01/14 (e)		665	808,806
McJunkin Red Man Corp., 9.50%, 12/15/16 (b)		605	533,913
Murray Energy Corp., 10.25%, 10/15/15 (b)		520	531,700

Corporate Bonds		Par (000)	Value
-----------------	--	--------------	-------

Metals & Mining (concluded)

New World Resources NV:			
7.38%, 5/15/15	EUR	255	\$ 316,686
7.88%, 5/01/18		190	243,185
7.88%, 5/01/18 (b)		210	268,784
Novelis, Inc., 11.50%, 2/15/15	USD	430	473,000
Ryerson, Inc.:			
7.84%, 11/01/14 (f)		400	371,000
12.00%, 11/01/15		265	272,619
Steel Dynamics, Inc., 7.38%, 11/01/12		260	276,250
United States Steel Corp., 7.38%, 4/01/20		520	526,500
Vedanta Resources Plc, 9.50%, 7/18/18 (b)		640	672,000
			10,394,148

Multiline Retail 2.5%

Dollar General Corp.:			
10.63%, 7/15/15		1,393	1,528,817
11.88%, 7/15/17 (d)		4,351	5,003,650
			6,532,467

Oil, Gas & Consumable Fuels 8.3%

Arch Coal, Inc.:			
8.75%, 8/01/16		55	59,538
7.25%, 10/01/20		855	867,825
Atlas Energy Operating Co. LLC:			
12.13%, 8/01/17		500	574,375
10.75%, 2/01/18		260	286,650
Berry Petroleum Co., 8.25%, 11/01/16		510	515,100
Bill Barrett Corp., 9.88%, 7/15/16		45	48,825
Chesapeake Energy Corp.:			
6.63%, 8/15/20		2,360	2,368,850
2.25%, 12/15/38 (e)		800	599,000
Coffeyville Resources LLC, 9.00%, 4/01/15 (b)		295	303,113
Connacher Oil and Gas Ltd. (b):			
11.75%, 7/15/14		175	189,875

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

10.25%, 12/15/15	1,145	1,145,000
Consol Energy, Inc., 8.25%, 4/01/20 (b)	1,990	2,111,887
Crosstex Energy LP, 8.88%, 2/15/18	405	418,163
Denbury Resources, Inc., 8.25%, 2/15/20	737	786,747
Linn Energy LLC, 8.63%, 4/15/20 (b)	1,100	1,160,500
Massey Energy Co., 6.88%, 12/15/13	945	956,812
Niska Gas Storage US LLC, 8.88%, 3/15/18 (b)	1,870	1,968,175
OPTI Canada, Inc. (b):		
9.00%, 12/15/12	1,735	1,739,337
9.75%, 8/15/13	975	962,812
Patriot Coal Corp., 8.25%, 4/30/18	420	416,850
Peabody Energy Corp., 6.50%, 9/15/20	1,100	1,156,375
Petrohawk Energy Corp.:		
10.50%, 8/01/14	555	620,213
7.88%, 6/01/15	460	477,250
QEP Resources, Inc., 6.88%, 3/01/21	450	469,125
Range Resources Corp., 8.00%, 5/15/19	400	428,000
Teekay Corp., 8.50%, 1/15/20	660	704,550
		21,334,947
Paper & Forest Products 2.9%		
Ainsworth Lumber Co. Ltd., 11.00%, 7/29/15 (b)(d)	1,134	969,671
Boise Paper Holdings LLC:		
9.00%, 11/01/17	330	347,325
8.00%, 4/01/20	165	167,888
Clearwater Paper Corp., 10.63%, 6/15/16	390	438,750
Georgia-Pacific LLC, 8.25%, 5/01/16 (b)	1,600	1,752,000
Glatfelter, 7.13%, 5/01/16 (b)	210	211,312
NewPage Corp., 11.38%, 12/31/14	3,150	2,559,375
Verso Paper Holdings LLC, 11.50%, 7/01/14	840	886,200
		7,332,521

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Corporate High Yield Fund III, Inc. (CYE)
(Percentages shown are based on Net Assets)

Corporate Bonds		Par (000)	Value
Pharmaceuticals 0.6%			
Angiotech Pharmaceuticals, Inc., 4.29%, 12/01/13 (f)	USD	1,050	\$ 847,875
Elan Finance Plc, 8.88%, 12/01/13		105	105,787
Novasep Holding SAS, 9.63%, 12/15/16 (b)	EUR	630	670,629
			<u>1,624,291</u>
Real Estate Management & Development 0.5%			
Forest City Enterprises, Inc., 7.63%, 6/01/15	USD	1,425	1,300,313
Road & Rail 0.9%			
Avis Budget Car Rental LLC, 9.63%, 3/15/18		510	532,950
Hertz Holdings Netherlands BV, 8.50%, 7/31/15 (b)	EUR	710	935,738
Syncreon Global Ireland Ltd., 9.50%, 5/01/18 (b)	USD	820	801,550
			<u>2,270,238</u>
Semiconductors & Semiconductor Equipment 0.2%			
Advanced Micro Devices, Inc.:			
6.00%, 5/01/15 (e)		138	135,068
7.75%, 8/01/20 (b)		285	282,150
			<u>417,218</u>
Software 0.0%			
BMS Holdings, Inc., 8.59%, 2/15/12 (b)(d)(f)		477	9,542
Specialty Retail 1.6%			
Group 1 Automotive, Inc., 2.25%, 6/15/36 (e)(i)		1,055	803,119
Hillman Group, Inc., 10.88%, 6/01/18 (b)		530	557,825
Ltd. Brands, Inc., 8.50%, 6/15/19		785	887,050
Sonic Automotive, Inc., 9.00%, 3/15/18		370	376,475
Toys R Us-Delaware, Inc., 7.38%, 9/01/16 (b)		420	424,200
United Auto Group, Inc., 7.75%, 12/15/16		1,025	978,875
			<u>4,027,544</u>
Textiles, Apparel & Luxury Goods 0.2%			
Quiksilver, Inc., 6.88%, 4/15/15		530	490,250
Tobacco 0.1%			
Vector Group Ltd., 11.00%, 8/15/15		325	331,094
Wireless Telecommunication Services 4.9%			

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Cricket Communications, Inc.:		
10.00%, 7/15/15	1,890	1,979,775
7.75%, 5/15/16	220	227,150
Digicel Group Ltd. (b):		
8.88%, 1/15/15	700	705,250
9.13%, 1/15/15 (d)	1,783	1,791,915
8.25%, 9/01/17	870	903,712
10.50%, 4/15/18	500	536,250
FiberTower Corp., 9.00%, 1/01/16 (d)	293	249,068
iPCS, Inc., 2.59%, 5/01/13 (f)	815	762,025
MetroPCS Wireless, Inc., 9.25%, 11/01/14	2,405	2,501,200
Nextel Communications, Inc.:		
Series E, 6.88%, 10/31/13	1,170	1,167,075
Series F, 5.95%, 3/15/14	110	106,288
Orascom Telecom Finance SCA, 7.88%, 2/08/14 (b)	275	261,250
Sprint Capital Corp., 6.88%, 11/15/28	1,790	1,494,650
		12,685,608
Total Corporate Bonds 98.4%		253,780,887

Floating Rate Loan Interests (f)

Auto Components 1.0%

Affinion Group Holdings, Inc., Term Loan, 8.51%, 3/01/12 (d)	455	436,988
Allison Transmission, Inc., Term Loan, 3.04%, 8/07/14	2,213	2,039,026
		2,476,014

Floating Rate Loan Interests (f)	Par (000)	Value
Automobiles 1.3%		
Ford Motor Co., Tranche B-1 Term Loan, 3.03%, 12/15/13	USD 3,592	\$ 3,455,826
Building Products 1.3%		
CPG International I, Inc., Term Loan, 5.54%, 2/28/11	3,234	3,233,668
Capital Markets 0.1%		
Marsico Parent Co., LLC, Term Loan, 5.31% 5.56%, 12/15/14	377	261,514
Chemicals 0.1%		
PQ Corp. (FKA Niagara Acquisition, Inc.), Term Loan (First Lien), 3.52% 3.73%, 7/30/14	376	343,728
Commercial Services & Supplies 0.9%		
AWAS Finance Luxembourg Sarl, Term Loan, 7.75%, 6/10/16	1,000	1,005,833
Delos Aircraft, Inc., Term Loan 2, 7.00%, 3/17/16	550	552,979
International Lease Finance Corp., Term Loan 1, 6.75%, 3/17/15	750	755,938

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

			2,314,750
Construction & Engineering 0.8%			
Safeway Services, LLC, Last Out Tranche Loan, 15.63%, 12/14/17		2,000	2,000,000
Consumer Finance 1.7%			
American General Finance Corp., Term Loan, 7.25%, 4/21/15		4,250	4,199,531
DaimlerChrysler Financial Services Americas LLC, Term Loan (Second Lien), 6.78%, 8/05/13		250	249,113
			4,448,644
Diversified Telecommunication Services 1.7%			
Wind Finance SL SA, Euro Facility (Second Lien), 7.89%, 12/17/14	EUR	3,460	4,375,781
Electric Utilities 0.5%			
New Development Holdings, LLC, Term Loan, 7.00%, 7/03/17	USD	1,350	1,363,500
Health Care Providers & Services 0.7%			
Harden Healthcare LLC:			
Add-on Term Loan, 7.75%, 3/02/15		525	514,500
Tranche A Term Loan, 8.50%, 2/22/15		495	485,545
inVentiv Health, Inc. (FKA Ventive Health, Inc.), Term Loan B, 6.50%, 7/31/16		900	898,313
			1,898,358
Hotels, Restaurants & Leisure 1.2%			
Travelpart LLC (FKA Travelpart, Inc.), Loan, 8.37%, 3/27/12 (d)		3,334	3,100,402
IT Services 0.4%			
First Data Corp.:			
Initial Tranche B-1 Term Loan, 3.01%, 9/24/14		284	242,384
Initial Tranche B-2 Term Loan, 3.01%, 9/24/14		408	348,130
Initial Tranche B-3 Term Loan, 3.01%, 9/24/14		595	507,148
			1,097,662
Independent Power Producers & Energy Traders 1.0%			
Texas Competitive Electric Holdings Co., LLC (TXU):			
Initial Tranche B-1 Term Loan, 3.79% 4.03%, 10/10/14		215	162,909
Initial Tranche B-2 Term Loan, 3.79% 4.07%, 10/10/14		255	193,115
Initial Tranche B-3 Term Loan, 3.79% 4.03%, 10/10/14		2,807	2,115,640
			2,471,664
Media 1.6%			
Cengage Learning Acquisitions, Inc. (Thomson Learning), Tranche 1 Incremental Term Loan, 7.50%, 7/03/14		1,715	1,709,284

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

HMH Publishing Co., Ltd., Tranche A Term Loan,
5.79%, 6/12/14 (d)

958

872,304

See Notes to Financial Statements.

22

SEMI-ANNUAL REPORT

AUGUST 31, 2010

Schedule of Investments (continued)

BlackRock Corporate High Yield Fund III, Inc. (CYE)
(Percentages shown are based on Net Assets)

Floating Rate Loan Interests (f)	Par (000)	Value
Media (concluded)		
Newsday, LLC, Fixed Rate Term Loan, 10.50%, 8/01/13	USD 1,325	\$ 1,406,156
Protostar Ltd., Debtor in Possession Term Loan, 18.00%, 10/26/10 (d)	159	158,820
		<u>4,146,564</u>
Multiline Retail 0.1%		
The Neiman Marcus Group, Inc., Term Loan, 2.30%, 4/06/13	244	231,433
Oil, Gas & Consumable Fuels 1.3%		
Tronox Worldwide LLC:		
Tranche B-1 Term Loan, 11.25%, 9/20/10	1,261	1,271,424
Tranche B-2 Term Loan, 11.25%, 9/20/10	339	341,576
Turbo Beta Ltd., Dollar Facility, 14.50%, 3/15/18 (d)	2,322	1,839,899
		<u>3,452,899</u>
Paper & Forest Products 0.3%		
Verso Paper Finance Holdings LLC, PIK Loan, 6.69% 7.44%, 2/01/13 (d)	1,340	804,059
Real Estate Management & Development 0.6%		
Realogy Corp.:		
Initial Term Loan B, 3.30% 3.53%, 10/10/13	398	343,264
Synthetic Letter of Credit, 0.11%, 10/10/13	81	70,156
Second Lien Term Facility, 13.50%, 10/15/17	1,000	1,055,000
		<u>1,468,420</u>
Specialty Retail 0.2%		
Claire's Stores, Inc., Term Loan B, 3.01% 3.23%, 5/29/14	137	117,564
Michaels Stores, Inc., Term Loan B-1, 2.63% 2.81%, 10/31/13	355	334,433
		<u>451,997</u>
Wireless Telecommunication Services 0.7%		
Vodafone Americas Finance 2 Inc., Initial Loan, 6.88%, 7/30/15	1,750	1,750,000
Total Floating Rate Loan Interests 17.5%		<u>45,146,883</u>

Other Interests (j)	Beneficial Interest (000)	
Auto Components 2.0%		
Delphi Debtor-in-Possession Holding Co. LLP		
Class B Membership Interests	(k)	5,037,660
Lear Corp. Escrow	460	5,750
		5,043,410
Hotels, Restaurants & Leisure 0.0%		
Buffets, Inc.	575	58
Media 0.0%		
Adelphia Escrow	750	75
Adelphia Recovery Trust	941	3,762
		3,837
Total Other Interests 2.0%		5,047,305

Preferred Stocks	Shares	
Auto Components 0.1%		
Dana Holding Corp., 4.00% (b)(e)	2,200	210,100
Diversified Financial Services 1.5%		
Ally Financial Inc., 7.00% (b)	3,245	2,680,472
Citigroup, Inc., 7.50% (e)	11,000	1,258,950
		3,939,422

Preferred Stocks	Shares	Value
Household Durables 0.1%		
Beazer Homes USA, Inc., 7.50% (e)	10,132	\$ 200,715
Media 0.2%		
CMP Susquehanna Radio Holdings Corp. (a)(b)(f)	37,314	
TRA Global, Inc. (a)	286,652	463,144
		463,144
Real Estate Investment Trusts (REITs) 0.0%		
MPG Office Trust, Inc., Series A, 7.63% (a)	8,994	97,045
Thriffs & Mortgage Finance 0.0%		
Fannie Mae, Series O (a)	30,000	12,300

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Freddie Mac, Series Z (a)	75,961	25,067
		37,367

Total Preferred Stocks 1.9%		4,947,793
------------------------------------	--	-----------

Warrants (l)

Containers & Packaging 0.0%		
MDP Acquisitions Plc (Expires 10/01/13)	700	31,460

Health Care Providers & Services 0.0%		
HealthSouth Corp. (Expires 1/16/14)	32,042	

Hotels, Restaurants & Leisure 0.0%		
Buffets Restaurants Holdings, Inc. (Expires 4/29/14)	485	5

Media 0.0%		
CMP Susquehanna Radio Holdings Corp. (Expires 3/26/19) (b)	42,640	1
New Vision Holdings LLC (Expires 9/30/14)	22,447	224
		225

Oil, Gas & Consumable Fuels 0.0%		
Turbo Cayman Ltd. (No Expiration)	1	

Software 0.0%		
HMH Holdings/EduMedia (Expires 3/09/17)	11,225	

Total Warrants 0.0%		31,690
----------------------------	--	--------

Total Long-Term Investments (Cost \$321,408,636) 122.6%		316,071,672
---	--	-------------

Short-Term Securities

BlackRock Liquidity Funds, TempFund, Institutional Class, 0.24% (m)(n)	2,569,493	2,569,493
---	-----------	-----------

Total Short-Term Securities (Cost \$2,569,493) 1.0%		2,569,493
---	--	-----------

Options Purchased

Contracts

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Over-the-Counter Call Options 0.0%

Marsico Parent Superholdco LLC, Strike Price

USD 942.86, expires 12/21/19, Broker

Goldman Sachs Bank USA

19

Total Options Purchased

(Cost \$18,578) 0.0%

Total Investments (Cost \$323,996,707*) 123.6%

318,641,165

Liabilities in Excess of Other Assets (23.6)%

(60,886,126)

Net Assets 100.0%

\$ 257,755,039

See Notes to Financial Statements.

SEMI-ANNUAL REPORT

AUGUST 31, 2010

23

Schedule of Investments (continued)

BlackRock Corporate High Yield Fund III, Inc. (CYE)

* The cost and unrealized appreciation (depreciation) of investments as of August 31, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 325,170,052
Gross unrealized appreciation	\$ 15,013,408
Gross unrealized depreciation	(21,542,295)
Net unrealized depreciation	\$ (6,528,887)

- (a) Non-income producing security.
- (b) Security exempt from registration under Rule 144A of the Securities Act of 1933. These securities may be resold in transactions exempt from registration to qualified institutional investors.
- (c) All or a portion of security has been pledged as collateral in connection with swaps.
- (d) Represents a payment-in-kind security which may pay interest/dividends in additional face/shares.
- (e) Convertible security.
- (f) Variable rate security. Rate shown is as of report date.
- (g) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.
- (h) Issuer filed for bankruptcy and/or is in default of interest payments.
- (i) Represents a step-down bond that pays an initial coupon rate for the first period and then a lower coupon rate for the following periods. Rate shown is as of report date.
- (j) Other interests represent beneficial interest in liquidation trusts and other reorganization entities and are non-income producing.
- (k) Amount is less than \$1,000.
- (l) Warrants entitle the Fund to purchase a predetermined number of shares of common stock and are non-income producing. The purchase price and number of shares are subject to adjustment under certain conditions until the expiration date, if any.
- (m) Investments in companies considered to be an affiliate of the Fund during the period, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held at February 28, 2010	Net Activity	Shares Held at August 31, 2010	Income
BlackRock Liquidity Funds, TempFund, Institutional Class	3,276,755	(707,262)	2,569,493	\$ 1,690

(n) Represents the current yield as of report date.

Foreign currency exchange contracts as of August 31, 2010 were as follows:

Currency Purchased		Currency Sold		Counterparty	Settlement Date	Unrealized Appreciation (Depreciation)
EUR	784,300	USD	1,007,943	Citibank NA	9/15/10	\$ (14,059)
USD	16,913,617	EUR	13,357,500	Citibank NA	9/15/10	(13,317)
USD	315,687	EUR	245,000	Deutsche Bank AG	9/15/10	5,218
GBP	238,000	USD	371,268	UBS AG	10/20/10	(6,387)
USD	2,211,164	GBP	1,448,500	Citibank NA	10/20/10	(9,553)
USD	425,230	CAD	449,000	Deutsche Bank AG	10/20/10	4,505
USD	316,702	GBP	207,500	Deutsche Bank AG	10/20/10	(1,420)
USD	342,197	GBP	222,000	Royal Bank of Scotland	10/20/10	1,845
Total						\$ (33,168)

Financial futures contracts sold as of August 31, 2010 were as follows:

Contracts	Issue	Exchange	Expiration Date	Notional Value	Unrealized Appreciation
27	S&P 500 Index	Chicago Mercantile	September 2010	\$ 7,189,857	\$ 113,832

Credit default swaps on single-name issuers buy protection outstanding as of August 31, 2010 were as follows:

Issuer	Pay Fixed Rate	Counterparty	Expiration	Notional Amount (000)	Unrealized Appreciation (Depreciation)
K. Hovnanian Enterprises, Inc.	5.00%	Goldman Sachs International	December 2011	\$ 510	\$ 30,327
K. Hovnanian Enterprises, Inc.	5.00%	Goldman Sachs Bank USA	December 2013	\$ 1,000	168,495
Louisiana-Pacific Corp.	5.00%	JPMorgan Chase Bank NA	March 2014	\$ 500	(106,314)
Brunswick Corp.	5.00%	Goldman Sachs Bank USA	September 2014	\$ 200	(10,541)
Total					\$ 81,967

Credit default swaps on single-name issuers sold protection outstanding as of August 31, 2010 were as follows:

Issuer	Receive Fixed Rate	Counterparty	Expiration	Credit Rating ¹	Notional Amount (000) ²	Unrealized Appreciation (Depreciation)
Texas Competitive Electric Holdings Co., LLC	5.00%	Goldman Sachs International	September 2012	CCC	\$ 500	\$ (45,006)
Realogy Corp.	5.00%	Credit Suisse International	March 2015	C	\$ 100	699
Advanced Micro Devices, Inc.	5.00%	JPMorgan Chase Bank NA	March 2015	B+	\$ 600	(6,721)
Realogy Corp.	5.00%	JPMorgan Chase Bank NA	March 2015	C	\$ 475	(16,004)
Levi Strauss & Co.	5.00%	Goldman Sachs International	June 2015	B+	\$ 235	1,254
NOVA Chemicals Corp.	5.00%	Goldman Sachs International	June 2015	B+	\$ 375	(6,874)
Levi Strauss & Co.	5.00%	Goldman Sachs International	September 2015	B+	\$ 560	
Realogy Corp.	5.00%	JPMorgan Chase Bank NA	September 2015	C	\$ 125	(450)
Total						\$ (73,102)

¹ Using S&P's rating of the issuer.

² The maximum potential amount the Fund may pay should a negative event take place as defined under the terms of agreement.

For Fund compliance purposes, the Fund's industry classifications refer to any one or more of the industry sub-classifications used by one or more widely recognized market indexes or rating group indexes, and/or as defined by Fund management. This definition may not apply for purposes of this report, which may combine such industry sub-classifications for reporting ease.

Fair Value Measurements Various inputs are used in determining the fair value of investments and derivatives, which are as follows:

Level 1 price quotations in active markets/exchanges for identical assets and liabilities

See Notes to Financial Statements.

Schedule of Investments (concluded)

BlackRock Corporate High Yield Fund III, Inc. (CYE)

Level 2 other observable inputs (including, but not limited to: quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

Level 3 unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available (including the Fund's own assumptions used in determining the fair value of investments and derivatives)

The inputs or methodologies used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. For information about the Fund's policy regarding valuation of investments and other significant accounting policies, please refer to Note 1 of the Notes to Financial Statements.

The following tables summarize the inputs used as of August 31, 2010 in determining the fair valuation of the Fund's investments and derivatives:

Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Investments in Securities:				
Long-Term Investments:				
Common Stocks	\$ 5,977,192	\$ 687,276	\$ 452,646	\$ 7,117,114
Corporate Bonds		248,391,323	5,389,564	253,780,887
Floating Rate Loan Interests		31,243,970	13,902,913	45,146,883
Other Interests		5,037,660	9,645	5,047,305
Preferred Stocks	4,274,549	210,100	463,144	4,947,793
Warrants			31,690	31,690
Short-Term Securities	2,569,493			2,569,493
Liabilities:				
Unfunded loan commitments			(47,602)	(47,602)
Total	\$ 12,821,234	\$ 285,570,329	\$ 20,202,000	\$ 318,593,563

Derivative Financial Instruments ¹				
Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Credit contracts		\$ 200,775		\$ 200,775
Equity contracts	\$ 113,832			113,832
Foreign currency exchange contracts		11,568		11,568
Liabilities:				
Credit contracts		(191,910)		(191,910)
Foreign currency exchange contracts		(44,736)		(44,736)
Total	\$ 113,832	\$ (24,303)		\$ 89,529

¹ Derivative financial instruments are financial futures contracts, swaps and foreign currency exchange contracts. Financial futures contracts, swaps and foreign currency exchange contracts are valued at the unrealized appreciation/depreciation on the instrument. The following table is a reconciliation of Level 3 investments for which significant unobservable inputs were used in determining fair value:

	Common Stocks	Corporate Bonds	Floating Rate Loan Interests	Other Interests	Preferred Stocks	Warrants	Unfunded Loan Commitments	Total
Assets/Liabilities:								
Balance, as of February 28, 2010	\$ 79,746	\$ 4,246,019	\$ 21,135,986	\$ 4,699,133	\$ 1	\$ 230	\$ (115,579)	\$ 30,045,536
Accrued discounts/premiums		13,176	122,051					135,227
Net realized gain (loss)		9,735	272,814	349,894		25,669		658,112
Net change in unrealized appreciation/depreciation ²	9,348	(153,725)	313,212	358,728			67,977	595,540
Purchases		35,613	741,716	319,000				1,096,329
Sales			(6,741,723)	(685,200)		(25,669)		(7,452,592)
Transfers in ³	452,570	1,510,000	2,999,158	5,750	463,143	31,460		5,462,081
Transfers out ³	(89,018)	(271,254)	(4,940,301)	(5,037,660)				(10,338,233)
Balance, as of August 31, 2010	\$ 452,646	\$ 5,389,564	\$ 13,902,913	\$ 9,645	\$ 463,144	\$ 31,690	\$ (47,602)	\$ 20,202,000

² Included in the related net change in unrealized appreciation/depreciation on the Statements of Operations. The change in the unrealized appreciation/depreciation on the securities still held on August 31, 2010 was \$110,767.

³ The Fund's policy is to recognize transfers in and out as of the end of the period of the event or the change in circumstances that caused the transfer.

See Notes to Financial Statements.

Schedule of Investments August 31, 2010 (Unaudited)

BlackRock Debt Strategies Fund, Inc. (DSU)
 (Percentages shown are based on Net Assets)

Common Stocks (a)	Shares	Value
Building Products 0.3%		
Masonite Worldwide Holdings	32,730	\$ 1,243,740
Chemicals 0.2%		
GEO Specialty Chemicals, Inc.	339,340	130,273
LyondellBasell Industries NV, Class A	9,898	202,909
LyondellBasell Industries NV, Class B	31,315	641,644
Wellman Holdings, Inc.	5,373	269
		975,095
Construction Materials 0.0%		
Nortek, Inc.	2,970	123,255
Containers & Packaging 1.7%		
Smurfit Kappa Plc	36,342	317,776
Viskase Cos., Inc.	1,428,423	6,770,725
		7,088,501
Electrical Equipment 0.0%		
Medis Technologies Ltd.	286,757	8,889
Hotels, Restaurants & Leisure 0.0%		
Buffets Restaurants Holdings, Inc.	2,753	11,563
HRP Corp., Class B (b)(c)	5,000	50
		11,613
Metals & Mining 0.2%		
Euramax International	2,337	771,309
Paper & Forest Products 1.3%		
Ainsworth Lumber Co. Ltd.	1,095,719	2,568,854
Ainsworth Lumber Co. Ltd. (b)	1,335,501	3,131,010
Western Forest Products, Inc. (b)	211,149	58,413
		5,758,277
Semiconductors & Semiconductor Equipment 0.0%		
SunPower Corp., Class B	4,892	50,583
Software 0.2%		
HMH Holdings/EduMedia	161,041	805,207

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Specialty Retail	0.0%		
Movie Gallery, Inc.		503,737	604
Total Common Stocks	3.9%		16,837,073

Corporate Bonds		Par (000)	
Aerospace & Defense	1.2%		
Bombardier, Inc., 7.75%, 3/15/20 (b)		USD 1,750	1,881,250
Kratos Defense & Security Solutions, Inc., 10.00%, 6/01/17		1,160	1,197,700
TransDigm, Inc., 7.75%, 7/15/14		2,000	2,060,000
			<u>5,138,950</u>

Airlines	0.7%		
Air Canada, 9.25%, 8/01/15 (b)		1,250	1,225,000
Delta Air Lines, Inc., Series B, 9.75%, 12/17/16		950	997,751
United Air Lines, Inc., 12.75%, 7/15/12		793	884,150
			<u>3,106,901</u>

Auto Components	1.3%		
The Goodyear Tire & Rubber Co., 8.75%, 8/15/20		130	137,475
Icahn Enterprises LP: 7.75%, 1/15/16		320	317,600
8.00%, 1/15/18		5,260	5,233,700
Venture Holdings Co. LLC (a)(d)(e): 12.00%, 6/01/09		4,450	
Series B, 9.50%, 7/01/05		1,800	180
			<u>5,688,955</u>

Corporate Bonds		Par (000)		Value
Beverages	0.1%			
Crown European Holdings SA, 7.13%, 8/15/18 (b)		EUR 410	\$	532,562
Biotechnology	0.1%			
QHP Pharma, 10.25%, 3/15/15 (b)		USD 491		500,586
Building Products	2.5%			
Building Materials Corp. of America, 7.00%, 2/15/20 (b)		1,300		1,293,500
CPG International I, Inc.: 7.50%, 7/01/12 (f)		7,500		7,246,875
10.50%, 7/01/13		1,300		1,298,375
		105		102,506

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Momentive Performance Materials, Inc., Series WI,

9.75%, 12/01/14

Ply Gem Industries, Inc., 11.75%, 6/15/13	1,050	1,081,500
		<u>11,022,756</u>

Capital Markets 0.4%

E*Trade Financial Corp., 4.01%, 8/31/19 (b)(g)(h)	593	711,600
MU Finance Plc, 8.75%, 2/01/17 (b)	GBP 698	1,027,667
		<u>1,739,267</u>

Chemicals 3.0%

American Pacific Corp., 9.00%, 2/01/15	USD 1,490	1,473,237
CF Industries, Inc., 6.88%, 5/01/18	1,475	1,552,437
GEO Specialty Chemicals, Inc. (b):		
7.50%, 3/31/15 (c)(g)	4,171	2,711,012
10.00%, 3/31/15	4,106	2,668,640
Hexion U.S. Finance Corp.:		
9.75%, 11/15/14	585	574,763
8.88%, 2/01/18	455	420,875
OXEA Finance/Cy SCA, 9.50%, 7/15/17 (b)	465	490,575
Wellman Holdings, Inc., Subordinate Note (g):		
(Second Lien), 10.00%, 1/29/19 (b)	2,978	2,590,860
(Third Lien), 5.00%, 1/29/19 (c)	978	381,332
		<u>12,863,731</u>

Commercial Banks 2.2%

CIT Group, Inc.:		
7.00%, 5/01/16	1,615	1,534,250
7.00%, 5/01/17	7,820	7,353,240
Glitnir Banki HF (a)(d):		
4.15%, 4/20/10 (b)	184	52,440
6.38%, 9/25/12 (b)	1,115	317,775
Series EMTN, 5.07%, 1/27/10	EUR 50	17,741
Series EMTN, 3.00%, 6/30/10	75	26,612
Series GMTN, 4.38%, 2/05/10	85	30,161
		<u>9,332,219</u>

Commercial Services & Supplies 1.0%

ACCO Brands Corp., 10.63%, 3/15/15	USD 660	726,000
Clean Harbors, Inc., 7.63%, 8/15/16	1,200	1,230,000
The Geo Group, Inc., 7.75%, 10/15/17 (b)	850	875,500
RSC Equipment Rental, Inc., 10.00%, 7/15/17 (b)	970	1,057,300
West Corp., 9.50%, 10/15/14	340	346,800
		<u>4,235,600</u>

Construction Materials 0.7%

Nortek, Inc., 11.00%, 12/01/13	2,983	3,143,546
--------------------------------	-------	-----------

Consumer Finance 1.1%

Credit Acceptance Corp., 9.13%, 2/01/17 (b)	570	590,662
Ford Motor Credit Co. LLC:		
3.28%, 1/13/12 (f)	2,680	2,626,400
6.63%, 8/15/17	900	914,735
Inmarsat Finance Plc, 7.38%, 12/01/17 (b)	725	743,125

4,874,922

See Notes to Financial Statements.

26

SEMI-ANNUAL REPORT

AUGUST 31, 2010

Schedule of Investments (continued)

BlackRock Debt Strategies Fund, Inc. (DSU)
(Percentages shown are based on Net Assets)

Corporate Bonds		Par (000)	Value
Containers & Packaging 2.7%			
Ball Corp., 6.75%, 9/15/20	USD	625	\$ 657,813
Berry Plastics Corp.:			
8.25%, 11/15/15		2,100	2,105,250
9.50%, 5/15/18 (b)		895	823,400
Berry Plastics Holding Corp., 8.88%, 9/15/14		470	447,675
Beverage Packaging Holdings Luxembourg II SA, 8.00%, 12/15/16	EUR	260	312,187
Crown Americas LLC, 7.63%, 5/15/17 (b)	USD	710	757,925
Graphic Packaging International, Inc., 9.50%, 6/15/17		975	1,038,375
Smurfit Kappa Acquisitions (b):			
7.25%, 11/15/17	EUR	830	1,072,854
7.75%, 11/15/19		785	1,019,661
Smurfit Kappa Funding Plc, 7.75%, 4/01/15	USD	3,325	3,325,000
			11,560,140
Diversified Financial Services 4.4%			
Ally Financial, Inc.:			
8.30%, 2/12/15 (b)		1,700	1,768,000
7.50%, 9/15/20 (b)		5,450	5,395,500
8.00%, 11/01/31		1,350	1,329,750
Archimedes Funding III Ltd., 5.50%, 11/29/11 (b)		3,734	2,240,208
Axcan Intermediate Holdings, Inc., 12.75%, 3/01/16		705	705,881
FCE Bank Plc, 7.13%, 1/16/12	EUR	3,250	4,262,714
GMAC, Inc.:			
5.38%, 6/06/11		436	551,140
7.50%, 12/31/13	USD	90	91,913
8.00%, 3/15/20 (b)		200	205,000
Preferred Term Securities VI, Ltd. (a)(b)(g)		35	1,750
Reynolds Group DL Escrow, Inc., 7.75%, 10/15/16 (b)		1,625	1,637,187
Reynolds Group Issuer, Inc., 7.75%, 10/15/16 (b)	EUR	650	836,060
			19,025,103
Diversified Telecommunication Services 2.5%			
Frontier Communications Corp., 8.25%, 4/15/17	USD	2,915	3,082,613
ITC Deltacom, Inc., 10.50%, 4/01/16		1,750	1,723,750
Nordic Telephone Co. Holdings ApS, 8.88%, 5/01/16 (b)		390	409,500
Qwest Corp., 8.38%, 5/01/16		4,000	4,660,000
tw telecom holdings, Inc., 8.00%, 3/01/18		920	956,800
			10,832,663

Electronic Equipment, Instruments & Components 0.0%

Muzak Holdings, LLC, 13.00%, 3/15/10 (a)(d)	2,675	268
---	-------	-----

Energy Equipment & Services 0.9%

Compagnie Générale de Géophysique-Veritas, 7.50%, 5/15/15	1,845	1,826,550
Expro Finance Luxembourg SCA, 8.50%, 12/15/16 (b)	2,000	1,870,000
		<u>3,696,550</u>

Food & Staples Retailing 0.4%

Rite Aid Corp., 9.75%, 6/12/16	1,590	1,689,375
--------------------------------	-------	-----------

Food Products 0.6%

B&G Foods, Inc., 7.63%, 1/15/18	900	925,875
Bumble Bee Foods LLC, 7.75%, 12/15/15 (b)	730	771,975
Smithfield Foods, Inc., 10.00%, 7/15/14 (b)	940	1,049,275
		<u>2,747,125</u>

Health Care Equipment & Supplies 0.3%

DJO Finance LLC, 10.88%, 11/15/14	1,345	1,440,831
-----------------------------------	-------	-----------

Corporate Bonds	Par (000)	Value
Health Care Providers & Services 1.2%		
American Renal Holdings, 8.38%, 5/15/18 (b)	USD 470	\$ 470,000
inVentiv Health, Inc., 10.00%, 8/15/18 (b)	405	395,888
Tenet Healthcare Corp.:		
9.00%, 5/01/15	680	724,200
8.88%, 7/01/19	3,280	3,546,500
		<u>5,136,588</u>

Health Care Technology 0.8%

IMS Health, Inc., 12.50%, 3/01/18 (b)	2,980	3,453,075
---------------------------------------	-------	-----------

Hotels, Restaurants & Leisure 1.4%

Diamond Resorts Corp., 12.00%, 8/15/18 (b)	1,040	982,800
HRP Myrtle Beach Holdings LLC, 14.69%, 4/01/14 (a)(b)(d)(h)	6,891	689
HRP Myrtle Beach Operations LLC (a)(b)(d)(h):		
0.00%, 4/01/12	5,000	500
12.04%, 4/01/13	5,000	500
Little Traverse Bay Bands of Odawa Indians, 10.25%, 2/15/14 (a)(b)(d)	2,560	864,000
MGM Mirage, 13.00%, 11/15/13	345	398,475
MGM Resorts International, 11.13%, 11/15/17	1,340	1,497,450
Marina District Finance Co., Inc., 9.88%, 8/15/18 (b)	310	309,225
Travelport LLC, 5.16%, 9/01/14 (f)	2,160	2,003,400
Tropicana Entertainment LLC, Series WI, 9.63%, 12/15/14 (a)(d)	530	387

6,057,426

Household Durables 1.0%		
Beazer Homes USA, Inc., 12.00%, 10/15/17	1,700	1,914,625
K. Hovnanian Enterprises, Inc., 10.63%, 10/15/16	1,695	1,644,150
Standard Pacific Corp.:		
6.25%, 4/01/14	315	293,738
7.00%, 8/15/15	600	552,000
		4,404,513

IT Services 0.3%		
SunGard Data Systems, Inc., 4.88%, 1/15/14	1,265	1,211,238

Independent Power Producers & Energy Traders 2.6%		
The AES Corp., 8.75%, 5/15/13 (b)	261	265,241
Calpine Construction Finance Co. LP, 8.00%, 6/01/16 (b)	1,750	1,837,500
Energy Future Holdings Corp., 10.00%, 1/15/20 (b)	3,190	3,071,980
NRG Energy, Inc.:		
7.25%, 2/01/14	3,705	3,779,100
7.38%, 2/01/16	690	695,175
7.38%, 1/15/17	665	669,987
8.50%, 6/15/19	800	822,000
		11,140,983

Industrial Conglomerates 1.7%		
Sequa Corp. (b):		
11.75%, 12/01/15	2,850	2,935,500
13.50%, 12/01/15 (c)	4,023	4,183,759
		7,119,259

Insurance 0.6%		
Alliant Holdings I, Inc., 11.00%, 5/01/15 (b)	1,100	1,128,875
USI Holdings Corp., 4.25%, 11/15/14 (b)(f)	1,630	1,381,425
		2,510,300

Leisure Equipment & Products 0.3%		
Brunswick Corp., 11.25%, 11/01/16 (b)	980	1,119,650

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Debt Strategies Fund, Inc. (DSU)
(Percentages shown are based on Net Assets)

Corporate Bonds		Par (000)	Value
Machinery 1.5%			
ESCO Corp., 4.41%, 12/15/13 (b)(f)	USD	3,070	\$ 2,793,700
Navistar International Corp., 8.25%, 11/01/21		2,000	2,095,000
Titan International, Inc., 8.00%, 1/15/12		1,530	1,591,200
			6,479,900
Media 6.2%			
Affinion Group, Inc., 10.13%, 10/15/13		2,835	2,905,875
CCO Holdings LLC, 7.88%, 4/30/18 (b)		2,075	2,147,625
CSC Holdings, Inc., 8.50%, 4/15/14		680	742,900
Clear Channel Worldwide Holdings, Inc.: 9.25%, 12/15/17		639	662,963
Series B, 9.25%, 12/15/17		5,422	5,686,322
DISH DBS Corp., 7.00%, 10/01/13		3,000	3,123,750
Gannett Co., Inc.: 10.00%, 4/01/16		390	435,848
9.38%, 11/15/17 (b)		1,015	1,111,425
Interactive Data Corp., 10.25%, 8/01/18 (b)		1,715	1,779,312
McClatchy Co., 11.50%, 2/15/17 (b)		1,355	1,399,038
Nielsen Finance LLC, 11.63%, 2/01/14		1,925	2,158,406
Regal Entertainment Group, 9.13%, 8/15/18		555	568,875
Seat Pagine Gialle SpA, 10.50%, 1/31/17 (b)	EUR	241	284,029
TL Acquisitions, Inc., 10.50%, 1/15/15 (b)	USD	895	854,725
UPC Germany GmbH, 8.13%, 12/01/17 (b)		3,000	3,082,500
			26,943,593
Metals & Mining 0.9%			
Aleris International, Inc. (a)(d): 9.00%, 12/15/14		1,100	2,200
10.00%, 12/15/16		1,500	570
Murray Energy Corp., 10.25%, 10/15/15 (b)		490	501,025
RathGibson, Inc., 11.25%, 2/15/14 (a)(d)		4,440	47,730
Ryerson, Inc., 7.84%, 11/01/14 (f)(i)		3,595	3,334,363
			3,885,888
Multiline Retail 0.8%			
Dollar General Corp.: 10.63%, 7/15/15		1,075	1,179,813
11.88%, 7/15/17 (c)		1,775	2,041,250
			3,221,063
Oil, Gas & Consumable Fuels 2.6%			

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Arch Coal, Inc., 8.75%, 8/01/16	235	254,388
Atlas Energy Operating Co. LLC:		
12.13%, 8/01/17	1,440	1,654,200
10.75%, 2/01/18	355	391,387
Coffeyville Resources LLC, 9.00%, 4/01/15 (b)	490	503,475
Consol Energy, Inc., 8.25%, 4/01/20 (b)	1,750	1,857,187
Crosstex Energy LP, 8.88%, 2/15/18	225	232,313
Denbury Resources, Inc.:		
9.75%, 3/01/16	925	1,019,812
8.25%, 2/15/20	670	715,225
Forest Oil Corp., 8.50%, 2/15/14	470	499,375
Massey Energy Co., 6.88%, 12/15/13	1,300	1,316,250
OPTI Canada, Inc., 9.00%, 12/15/12 (b)	1,850	1,854,625
Titan Petrochemicals Group Ltd., 8.50%, 3/18/12 (b)	1,760	968,000
		11,266,237

Paper & Forest Products 2.8%

Ainsworth Lumber Co. Ltd., 11.00%, 7/29/15 (b)(c)	4,312	3,686,510
Clearwater Paper Corp., 10.63%, 6/15/16	640	720,000
Georgia-Pacific LLC, 8.25%, 5/01/16 (b)	2,950	3,230,250
NewPage Corp., 11.38%, 12/31/14	3,890	3,160,625
Verso Paper Holdings LLC:		
11.50%, 7/01/14	550	580,250
Series B, 4.22%, 8/01/14 (f)	890	729,800
		12,107,435

Corporate Bonds	Par (000)	Value
Pharmaceuticals 0.4%		
Angiotech Pharmaceuticals, Inc., 4.29%, 12/01/13 (f)	USD 1,570	\$ 1,267,775
Novasep Holding SAS, 9.63%, 12/15/16 (b)	EUR 564	600,373
		1,868,148
Real Estate Investment Trusts (REITs) 0.2%		
Omega Healthcare Investors, Inc., 7.50%, 2/15/20 (b)	USD 1,010	1,052,925
Software 0.0%		
BMS Holdings, Inc., 8.59%, 2/15/12 (b)(c)(f)	1,780	35,611
Specialty Retail 0.3%		
United Auto Group, Inc., 7.75%, 12/15/16	1,275	1,217,625
Textiles, Apparel & Luxury Goods 0.3%		
Phillips-Van Heusen Corp.:		
7.38%, 5/15/20	925	952,750
7.75%, 11/15/23	410	446,140
		1,398,890

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Wireless Telecommunication Services 3.5%

Cricket Communications, Inc., 7.75%, 5/15/16	3,050	3,149,125
Digicel Group Ltd. (b):		
9.13%, 1/15/15 (c)	3,948	3,967,740
8.25%, 9/01/17	300	311,625
MetroPCS Wireless, Inc.:		
9.25%, 11/01/14	760	790,400
9.25%, 11/01/14	2,100	2,184,000
Nextel Communications, Inc., Series E, 6.88%, 10/31/13	2,275	2,269,312
Orascom Telecom Finance SCA, 7.88%, 2/08/14 (b)	755	717,250
Sprint Capital Corp.:		
8.38%, 3/15/12	625	660,938
6.88%, 11/15/28	1,000	835,000
		14,885,390

Total Corporate Bonds 55.5%

239,687,787

Floating Rate Loan Interests (f)

Aerospace & Defense 0.4%

Hawker Beechcraft Acquisition Co., LLC:		
Letter of Credit Linked Deposit, 0.43%, 3/26/14	124	98,445
Term Loan, 2.26% 2.53%, 3/26/14	2,072	1,650,926
		1,749,371

Airlines 0.4%

Delta Air Lines, Inc., Credit-Linked Deposit Loan, 0.11% 2.28%, 4/30/12	1,940	1,855,125
--	-------	-----------

Auto Components 2.7%

Affinion Group Holdings, Inc., Term Loan, 8.51%, 3/01/12 (c)	3,194	3,066,405
Affinion Group, Inc., Tranche B Term Loan, 5.00%, 10/09/16	998	959,675
Allison Transmission, Inc., Term Loan, 3.04%, 8/07/14	7,267	6,695,941
Dana Holding Corp., Term Advance, 4.52% 6.50%, 1/30/15	346	339,646
The Goodyear Tire & Rubber Co., Loan (Second Lien), 2.24%, 4/30/14	750	694,336
		11,756,003

Automobiles 0.7%

Ford Motor Co.:		
Tranche B-1 Term Loan, 3.03%, 12/15/13	2,935	2,823,307
Tranche B-2 Term Loan, 3.03%, 12/15/13	316	302,847
		3,126,154

See Notes to Financial Statements.

28 SEMI-ANNUAL REPORT AUGUST 31, 2010

Schedule of Investments (continued)

BlackRock Debt Strategies Fund, Inc. (DSU)
(Percentages shown are based on Net Assets)

Floating Rate Loan Interests (f)	Par (000)	Value
Beverages 0.6%		
SW Acquisitions Co., Inc., Term Loan, 5.75%, 6/01/16	USD 2,638	\$ 2,640,222
Building Products 1.0%		
Building Materials Corp. of America, Term Loan Advance, 3.06%, 2/22/14	553	542,139
Goodman Global, Inc., Term Loan, 6.25%, 2/13/14	2,683	2,692,335
Momentive Performance Materials (Blitz 06-103 GmbH), Tranche B-2 Term Loan, 2.88%, 12/04/13	EUR 1,075	1,248,770
		<u>4,483,244</u>
Chemicals 3.2%		
CF Industries, Inc., Term Loan B-1, 4.50%, 4/05/15	USD 1,534	1,541,528
Chemtura Corp.: Debtor in Possession Term Facility, 6.00%, 2/11/11	1,600	1,596,000
Exit Term Loan, 5.50%, 8/16/16	1,300	1,305,417
Gentek Holding, LLC, Tranche B Term Loan, 7.00%, 10/29/14	724	724,154
MacDermid, Inc., Tranche C Term Loan, 2.27%, 4/12/14	EUR 697	803,984
Nalco Co., Term Loan, 6.50%, 5/13/16	USD 1,708	1,713,442
PQ Corp. (FKA Niagara Acquisition, Inc.), Term Loan, (First Lien), 3.52% - 3.73%, 7/30/14	3,306	3,022,858
Rockwood Specialties Group, Inc., Term Loan H, 6.00%, 5/15/14	1,340	1,339,436
Solutia, Inc., Term Loan, 4.75%, 3/17/17	1,820	1,818,404
		<u>13,865,223</u>
Commercial Banks 0.4%		
CIT Group, Inc., Term Loan, 6.25%, 1/20/12	1,500	1,495,110
Commercial Services & Supplies 3.5%		
ARAMARK Corp.: Letter of Credit-1 Facility, 0.11%, 1/26/14	55	51,997
Letter of Credit-2 Facility, 0.11%, 7/26/16	64	61,826
Term Loan B, 3.78%, 7/26/16	970	940,102
US Term Loan, 2.41%, 1/26/14	761	719,013
AWAS Finance Luxembourg Sarl, Term Loan, 7.75%, 6/10/16	2,250	2,263,124
Altegrity, Inc., Incremental Term Loan, 7.75%, 2/21/15	3,000	2,988,750

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Casella Waste Systems, Inc., Term Loan B, 7.00%, 4/09/14	386	388,030
Delos Aircraft, Inc., Term Loan 2, 7.00%, 3/17/16	975	980,282
International Lease Finance Corp., Term Loan 1, 6.75%, 3/17/15	2,800	2,822,168
Quad Graphics, Term Loan, 5.50%, 4/20/16	950	906,300
Synagro Technologies, Inc., Term Loan (First Lien), 2.27% 2.28%, 4/02/14	786	664,011
West Corp., Incremental Term Loan B-3, 7.25%, 10/24/13	2,104	2,097,152
		<u>14,882,755</u>

Construction & Engineering 0.6%

Safway Services, LLC, First Out Tranche Loan, 9.00%, 12/18/17	2,750	2,750,000
--	-------	-----------

Construction Materials 0.2%

Fairmount Minerals Ltd., Term Loan B, 6.25%, 8/05/16	675	675,281
---	-----	---------

Consumer Discretionary 1.0%

Laureate Education, Series A New Term Loan, 7.00%, 8/15/14	4,297	4,224,708
---	-------	-----------

Floating Rate Loan Interests (f)	Par (000)	Value
Consumer Finance 1.9%		
AGFS Funding Co., Term Loan, 7.25%, 4/21/15	USD 5,000	\$ 4,940,625
DaimlerChrysler Financial Services Americas LLC, Term Loan (Second Lien), 6.78%, 8/05/13	3,432	3,420,315
		<u>8,360,940</u>

Containers & Packaging 0.2%

Anchor Glass Container Corp., Term Loan (First Lien), 6.00%, 3/02/16	243	240,556
BWAY Holding Co., Term Loan B, 5.50% 6.00%, 6/16/17	357	356,126
Berry Plastics Holding Corp., Term Loan C, 2.38%, 4/03/15	343	312,757
ICL Industrial Containers ULC/ICL Contenants Industriels ULC (FKA BWAY Corp.), Term Loan C, 5.50% 6.00%, 6/16/17	33	33,408
		<u>942,847</u>

Diversified Consumer Services 1.5%

Coinmach Service Corp., Term Loan, 3.35%, 11/14/14	4,583	3,995,790
ServiceMaster Co.:		
Closing Date Loan, 2.77% 3.04%, 7/24/14	2,305	2,118,965
Delayed Draw Term Loan, 2.77%, 7/24/14	230	211,017
		<u>6,325,772</u>

Diversified Financial Services 1.0%

Reynolds Group Holdings, Inc.:

Incremental US Term Loan, 6.25%, 5/05/16 1,400 1,390,084

US Term Loan, 6.25%, 5/05/16 1,193 1,186,239

Whitelabel IV SA:

Term Loan B1, 5.00%, 8/11/17 EUR 565 708,837

Term Loan B2, 5.00%, 8/11/17 935 1,173,030

4,458,190

Diversified Telecommunication Services 2.1%Cincinnati Bell, Inc., Tranche B Term Loan, 6.50%,
6/11/17

USD 1,995 1,980,038

Hawaiian Telcom Communications, Inc., Tranche C

Term Loan, 4.75%, 5/30/14 (c) 4,644 3,250,642

Level 3 Communications, Incremental Term Loan,

2.53% 2.78%, 3/13/14 3,250 2,911,288

Wind Telecomunicazioni SpA:

Term Loan Facility B2, 4.66%, 5/24/13 568 551,841

Term Loan Facility C2, 3.66%, 5/26/14 568 551,841

9,245,650

Electric Utilities 0.7%New Development Holdings, LLC, Term Loan,
7.00%, 7/03/17

3,000 3,030,000

Electronic Equipment, Instruments &**Components 1.0%**CDW LLC (FKA LOW Corp.), Term Loan, 4.28%,
10/10/14

2,259 2,023,280

Flextronics International Ltd., Closing Date Loan B,

2.56%, 10/01/12 535 515,205

Styron Sarl, Term Loan, 7.50%, 6/17/16 1,600 1,612,496

4,150,981

Energy Equipment & Services 0.4%MEG Energy Corp., Tranche D Term Loan, 6.00%,
4/03/16

1,912 1,906,924

Food & Staples Retailing 1.4%AB Acquisitions UK Topco 2 Ltd. (FKA Alliance Boots),
Facility B1, 3.55%, 7/09/15

GBP 1,700 2,425,350

Pierre Foods, Term Loan, 7.00%, 3/03/16 USD 1,284 1,280,600

Pilot Travel Centers, LLC, Initial Tranche B Term Loan,
5.25%, 6/30/16

2,157 2,159,485

5,865,435

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Debt Strategies Fund, Inc. (DSU)
(Percentages shown are based on Net Assets)

Floating Rate Loan Interests (f)	Par (000)	Value
Food Products 1.7%		
Dole Food Co., Inc., Tranche B-1 Term Loan, 5.00% 5.50%, 3/02/17	USD 797	\$ 798,767
Michael Foods Group, Inc. (FKA M-Foods Holdings, Inc.), Term Loan B, 6.25%, 6/29/16	1,000	1,000,714
Pilgrim's Pride Corp., Term Loan A, 5.53%, 12/01/12	1,430	1,415,700
Pinnacle Foods Finance LLC, Tranche D Term Loan, 6.00%, 4/02/14	2,063	2,065,579
Solvest, Ltd. (Dole), Tranche C-1 Term Loan, 5.00% 5.50%, 3/02/17	1,979	1,982,800
		7,263,560
Health Care Equipment & Supplies 0.7%		
DJO Finance LLC (FKA ReAble Therapeutics Finance LLC), Term Loan, 3.26%, 5/20/14	3,074	2,915,908
Health Care Providers & Services 4.6%		
CHS/Community Health Systems, Inc.:		
Delayed Draw Term Loan, 2.55%, 7/25/14	205	193,242
Term Loan Facility, 2.55%, 7/25/14	4,024	3,794,425
DaVita, Inc., Tranche B-1 Term Loan, 1.77% 2.04%, 10/05/12	600	590,747
Gentiva Health Services, Inc., Term Loan B, 6.75%, 8/12/16	1,100	1,085,562
HCA, Inc.:		
Tranche A-1 Term Loan, 2.03%, 11/16/12	4,569	4,395,650
Tranche B-1 Term Loan, 2.78%, 11/18/13	245	235,811
Harden Healthcare LLC:		
Add-on Term Loan, 7.75%, 3/02/15	2,650	2,597,000
Tranche A Term Loan, 8.50%, 2/22/15	793	776,873
inVentiv Health, Inc. (FKA Ventive Health, Inc.), Term Loan B, 6.50%, 7/31/16	3,250	3,243,906
Renal Advantage Holdings, Inc., Tranche B Term Loan, 6.00%, 6/03/16	1,100	1,100,000
Vanguard Health Holding Co. II, LLC (Vanguard Health Systems, Inc.), Initial Term Loan, 5.00%, 1/29/16	1,845	1,823,056
		19,836,272
Health Care Technology 0.6%		
IMS Health, Inc., Tranche B Dollar Term Loan, 5.25%, 2/26/16	2,721	2,725,821

Hotels, Restaurants & Leisure 2.7%

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Harrah's Operating Co., Inc.:		
Term Loan B-1, 3.50%, 1/28/15	449	383,817
Term Loan B-3, 3.50% - 3.53%, 1/28/15	1,404	1,199,391
Term Loan B-4, 9.50%, 10/31/16	2,239	2,284,770
Six Flags Theme Parks, Inc., Tranche B Term Loan (First Lien), 6.00%, 6/30/16	3,386	3,347,210
Universal City Development Partners Ltd., Loan, 7.75%, 11/06/14	2,488	2,499,938
VML US Finance LLC (FKA Venetian Macau):		
Term B Delayed Draw Project Loan, 5.04%, 5/25/12	1,060	1,042,023
Term B Funded Project Loan, 5.04%, 5/27/13	1,013	990,932
		11,748,081

IT Services 2.8%		
Ceridian Corp., US Term Loan, 3.26%, 11/09/14	2,910	2,588,882
EVERTEC, Inc., Term Loan B, 7.00%, 8/20/16	1,150	1,124,125
First Data Corp.:		
Initial Tranche B-2 Term Loan, 3.01%, 9/24/14	2,801	2,388,167
Initial Tranche B-3 Term Loan, 3.01%, 9/24/14	1,375	1,172,779
SunGard Data Systems, Inc. (Solar Capital Corp.), Incremental Term Loan, 6.75%, 2/28/14	349	348,613
TransUnion LLC, Term Loan, 6.75%, 6/15/17	4,250	4,288,518
		11,911,084

Floating Rate Loan Interests (f)	Par (000)	Value
Independent Power Producers & Energy Traders 0.5%		
Dynegy Holdings, Inc.:		
Term Letter of Credit Facility, 4.02%, 4/02/13	USD 327	\$ 321,860
Tranche B Term Loan, 4.02%, 4/02/13	26	25,777
Texas Competitive Electric Holdings Co., LLC (TXU):		
Initial Tranche B-2 Term Loan, 3.79% - 4.07%, 10/10/14	2,171	1,645,021
Initial Tranche B-3 Term Loan, 3.79% - 4.03%, 10/10/14	196	148,085
		2,140,743
Industrial Conglomerates 0.3%		
Sequa Corp., Term Loan, 3.79%, 12/03/14	1,394	1,282,098
Insurance 0.1%		
Alliant Holdings I, Inc., Term Loan, 3.53%, 8/21/14	581	552,049
Internet & Catalog Retail 0.3%		
FTD Group, Inc., Tranche B Term Loan, 6.75%, 8/26/14	1,096	1,096,254
Leisure Equipment & Products 0.3%		
EB Sports Corp., Loan, 11.50%, 5/01/12 (c)	1,466	1,392,281
Machinery 0.2%		
	343	315,378

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Generac Acquisition Corp., Term Loan (First Lien), 2.81% 3.03%, 11/10/13		
Oshkosh Truck Corp., Term Loan B, 6.44% 6.54%, 12/06/13	612	614,883
		930,261

Media 8.2%

Cengage Learning Acquisitions, Inc. (Thomson Learning), Tranche 1 Incremental Term Loan, 7.50%, 7/03/14	2,526	2,517,582
Charter Communications Operating, LLC: New Term Loan, 2.26%, 3/06/14	546	516,358
Term Loan B1, 7.25%, 3/06/14	1,672	1,707,700
Term Loan C, 3.79%, 9/06/16	5,302	5,071,115
Ellis Communications KDOC, LLC, Loan, 10.00%, 12/30/11	6,303	2,363,533
HMH Publishing Co., Ltd., Tranche A Term Loan, 5.79%, 6/12/14 (c)	3,154	2,871,752
Hanley-Wood, LLC, Term Loan, 2.56% 2.63%, 3/10/14	742	321,082
Interactive Data Corp., Term Loan, 6.75%, 1/29/17	1,300	1,307,583
Lavena Holding 3 GmbH (Prosiebensat.1 Media AG): Facility B1, 3.52%, 6/30/15	EUR 337	322,477
Facility C1, 3.77%, 6/30/16	674	644,953
Mediacom Illinois, LLC (FKA Mediacom Communications, LLC), Tranche D Term Loan, 5.50%, 3/31/17	USD 993	972,327
Newsday, LLC, Fixed Rate Term Loan, 10.50%, 8/01/13	4,250	4,510,312
Sinclair Television Group, Inc., New Tranche B Loan, 5.50% 6.25%, 10/29/15	1,587	1,588,602
Springer Science+Business Media SA, Facility A1, 6.75%, 7/01/16	EUR 1,900	2,381,692
Sunshine Acquisition Ltd. (FKA HIT Entertainment), Term Facility, 5.68%, 6/01/12	USD 1,432	1,335,986
TWCC Holdings Corp., Replacement Term Loan, 5.00%, 9/14/15	1,943	1,940,669
UPC Financing Partnership, Facility U, 4.64%, 12/31/17	EUR 1,600	1,882,159
Virgin Media Investment Holdings, Ltd., Facility B, 4.77%, 12/31/15	GBP 1,250	1,858,360
Yell Group Plc Facility A3-Yell Finance (UK) Limited, 2.60%, 4/30/14	USD 1,406	1,357,031
		35,471,273

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Debt Strategies Fund, Inc. (DSU)
(Percentages shown are based on Net Assets)

Floating Rate Loan Interests (f)	Par (000)	Value
Metals & Mining 0.6%		
Euramax International, Inc., Domestic Term Loan:		
10.00%, 6/29/13	USD 1,286	\$ 1,196,384
14.00%, 6/29/13 (c)	1,343	1,249,093
		<u>2,445,477</u>
Multi-Utilities 0.3%		
Energy Transfer Equity, LP, Term Loan, 2.02%, 11/01/12		
	750	734,062
FirstLight Power Resources, Inc. (FKA NE Energy, Inc.):		
Synthetic Letter of Credit, 0.41%, 11/01/13	9	7,940
Term B Advance (First Lien), 3.06%, 11/01/13	509	472,314
		<u>1,214,316</u>
Multiline Retail 1.7%		
Dollar General Corp., Tranche B-2 Term Loan, 3.01% 3.03%, 7/07/14		
	2,179	2,097,209
Hema Holding BV:		
Facility B, 2.65%, 7/06/15	EUR 369	442,525
Facility C, 3.40%, 7/05/16	369	442,525
Facility D, 5.65%, 1/01/17	2,900	3,399,399
The Neiman Marcus Group, Inc., Term Loan, 2.30%, 4/06/13	USD 966	915,428
		<u>7,297,086</u>
Oil, Gas & Consumable Fuels 2.2%		
Big West Oil, LLC, Term Loan, 12.00%, 7/23/15		
	1,500	1,518,125
Tronox Worldwide LLC:		
Tranche B-1 Term Loan, 11.25%, 9/20/10	2,246	2,264,723
Tranche B-2 Term Loan, 11.25%, 9/20/10	603	608,433
Turbo Beta Ltd., Dollar Facility, 14.50%, 3/15/18 (c)	GBP 6,226	4,934,275
		<u>9,325,556</u>
Paper & Forest Products 0.6%		
Georgia-Pacific LLC, Term Loan B, 2.30% 2.53%, 12/23/12		
	USD 214	210,797
Verso Paper Finance Holdings LLC, PIK Loan, 6.69% 7.44%, 2/01/13 (c)	4,208	2,524,622
		<u>2,735,419</u>

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Personal Products 0.0%

American Safety Razor Co., LLC, Term Loan (First Lien), 8.75%, 7/31/13 (c)	161	148,717
---	-----	---------

Pharmaceuticals 0.8%

Warner Chilcott Co., LLC, Term Loan A, 6.00%, 10/30/14	708	706,642
Warner Chilcott Corp.:		
Additional Term Loan B, 6.25%, 4/30/15	676	675,102
Term Loan B-1, 6.25%, 4/30/15	270	269,162
Term Loan B-2, 6.25%, 4/30/15	445	444,781
Term Loan B-3, 6.50%, 2/20/16	872	875,000
Term Loan B-4, 6.50%, 2/20/16	283	283,914

3,254,601

Professional Services 0.4%

Booz Allen Hamilton, Inc., Term Loan C, 6.00%, 7/31/15	1,741	1,740,815
--	-------	-----------

Real Estate Management & Development 1.7%

Enclave, Term Loan (First Lien), 6.14%, 3/01/12 (a)(d)	4,000	1
Realogy Corp.:		
Delayed Draw Term Loan B, 3.30% 3.53%, 10/10/13	1,468	1,266,267
Initial Term Loan B, 3.30%, 10/10/13	4,418	3,812,239
Synthetic Letter of Credit, 0.11%, 10/10/13	757	653,512
Term Loan (Second Lien), 13.50%, 10/15/17	1,500	1,582,500

7,314,519

Floating Rate Loan Interests (f)

Par
(000)

Value

Semiconductors & Semiconductor Equipment 0.2%

Freescale Semiconductor, Inc., Extended Maturity Term Loan, 4.56%, 12/01/16	USD	740	\$	661,722
--	-----	-----	----	---------

Software 0.3%

Telcordia Technologies, Inc., Term Loan, 6.75%, 4/30/16		1,097		1,096,336
--	--	-------	--	-----------

Specialty Retail 0.9%

Burlington Coat Factory Warehouse Corp., Term Loan, 2.54% 2.66%, 5/28/13		680		644,130
Michaels Stores, Inc.:				
Term Loan B-1, 2.63% 2.81%, 10/31/13		1,384		1,305,420
Term Loan B-2, 4.88% 5.06%, 7/31/16		543		523,653
Toys R Us, Inc., Term Loan B, 6.00%, 8/17/16		1,500		1,496,241

3,969,444

Textiles, Apparel & Luxury Goods 0.3%

Phillips Van Heusen Corp., U.S. Tranche B Term Loan, 4.75%, 5/06/16		1,325		1,332,158
--	--	-------	--	-----------

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Wireless Telecommunication Services 1.9%

Cavtel Holdings, LLC, Term Loan, 10.50%, 12/31/12 (c)	825	779,602
Digicel International Finance Ltd., U.S. Term Loan (Non-Rollover), 3.06%, 3/30/12	1,167	1,139,381
MetroPCS Wireless, Inc.:		
Tranche B-1 Term Loan, 2.56%, 11/03/13	83	81,058
Tranche B-2 Term Loan B, 3.81%, 11/03/16	909	891,419
Vodafone Americas Finance 2 Inc., Initial Loan, 6.88%, 7/30/15	5,500	5,500,000
		<u>8,391,460</u>

Total Floating Rate Loan Interests 59.8% 257,983,246

Other Interests (j) **Beneficial Interest (000)**

Airlines 0.1%

Delta Air Lines, Inc. Default Escrow:		
8.33%	5,505	98,539
10.00%	4,200	75,180
		<u>173,719</u>

Auto Components 0.0%

Intermet Liquidating Trust, Class A	833	250
-------------------------------------	-----	-----

Diversified Financial Services 0.3%

J.G. Wentworth LLC Preferred Equity Interests (k)	1	1,190,710
---	---	-----------

Household Durables 0.2%

Stanley Martin, Class B Membership Units (k)	2	947,250
--	---	---------

Media 0.0%

Adelphia Escrow	7,500	750
Adelphia Preferred Escrow	5	1
Adelphia Recovery Trust	9,406	37,624
Adelphia Recovery Trust, Series ACC-6B INT	500	50
		<u>38,425</u>

Metals & Mining 0.3%

RathGibson Acquisition Co., LLC (k)	280	1,488,924
-------------------------------------	-----	-----------

Specialty Retail 0.0%

Buffets, Inc.	1,440	144
Movie Gallery, Inc. Default Escrow	21,700	217
		<u>361</u>

Total Other Interests 0.9% 3,839,639

See Notes to Financial Statements.

SEMI-ANNUAL REPORT

AUGUST 31, 2010

31

Schedule of Investments (continued)

BlackRock Debt Strategies Fund, Inc. (DSU)
(Percentages shown are based on Net Assets)

Warrants (l)	Shares	Value
Health Care Providers & Services 0.0%		
HealthSouth Corp. (Expires 1/16/14)	126,761	\$ 1
Hotels, Restaurants & Leisure 0.0%		
Buffets Restaurants Holdings, Inc. (Expires 4/29/14)	1,216	12
Media 0.0%		
Charter Communications, Inc. (Expires 11/30/14)	12,661	69,636
Oil, Gas & Consumable Fuels 0.0%		
Turbo Cayman Ltd. (No Expiration)	4	
Software 0.0%		
HMH Holdings/EduMedia (Expires 3/09/17)	24,924	
Specialty Retail 0.0%		
Movie Gallery, Inc. (Expires 5/15/15)	62,323	1
Total Warrants 0.0%		69,650
Total Long-Term Investments (Cost \$596,588,061) 120.1%		518,417,395
Short-Term Securities	Beneficial Interest (000)	
Bank of New York Cash Reserves, 0.01% (m)	USD 2,175	2,174,508
Total Short-Term Securities (Cost \$2,174,508) 0.5%		2,174,508
Total Investments (Cost \$598,762,569*) 120.6%		520,591,903
Liabilities in Excess of Other Assets (20.6)%		(89,033,094)
Net Assets 100.0%		\$ 431,558,809

*

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

The cost and unrealized appreciation (depreciation) of investments as of August 31, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 595,470,258
Gross unrealized appreciation	\$ 24,052,036
Gross unrealized depreciation	(98,930,391)
Net unrealized depreciation	\$ (74,878,355)

- (a) Non-income producing security.
- (b) Security exempt from registration under Rule 144A of the Securities Act of 1933. These securities may be resold in transactions exempt from registration to qualified institutional investors.
- (c) Represents a payment-in-kind security which may pay interest/dividends in additional face/shares.
- (d) Issuer filed for bankruptcy and/or is in default of interest payments.
- (e) As a result of bankruptcy proceedings, the company did not repay the principal amount or accrued interest of the security upon maturity.
- (f) Variable rate security. Rate shown is as of report date.
- (g) Convertible security.
- (h) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.
- (i) All or a portion of security has been pledged as collateral in connection with swaps.
- (j) Other interests represent beneficial interest in liquidation trusts and other reorganization entities and are non-income producing.
- (k) The investment is held by a wholly-owned taxable subsidiary of the Fund.
- (l) Warrants entitle the Fund to purchase a predetermined number of shares of common stock and are non-income producing. The purchase price and number of shares are subject to adjustment under certain conditions until the expiration date, if any.
- (m) Represents the current yield as of report date.

Investments in companies considered to be an affiliate of the Fund during the period, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held at February 28, 2010	Net Activity	Shares Held at August 31, 2010	Income
BlackRock Liquidity Funds, TempFund, Institutional Class	1,319,723	(1,319,723)		\$2,856

Foreign currency exchange contracts as of August 31, 2010 were as follows:

Currency Purchased		Currency Sold		Counterparty	Settlement Date	Unrealized Appreciation (Depreciation)
EUR	2,395,100	USD	3,055,024	Citibank NA	9/15/10	\$ (19,898)
USD	20,931,990	EUR	16,528,000	Citibank NA	9/15/10	(12,675)
USD	520,319	EUR	403,500	Deutsche Bank AG	9/15/10	8,995
CAD	1,140,500	USD	1,083,775	UBS AG	10/20/10	(15,098)
USD	3,702,055	CAD	3,909,000	Deutsche Bank AG	10/20/10	39,222
USD	5,130,643	GBP	3,328,500	Royal Bank of Scotland Plc	10/20/10	27,669
Total						\$ 28,215

Credit default swaps on single-name issuers buy protection outstanding as of August 31, 2010 were as follows:

Issuer	Pay Fixed Rate	Counterparty	Expiration	Notional Amount (000)	Unrealized Appreciation (Depreciation)
K. Hovnanian Enterprises, Inc.	5.00%	Goldman Sachs Bank USA	December 2011	\$ 855	\$ 50,843
K. Hovnanian Enterprises, Inc.	5.00%	Goldman Sachs Bank USA	September 2013	\$ 250	21,190
Brunswick Corp.	5.00%	Goldman Sachs Bank USA	September 2015	\$ 325	(17,128)
Total					\$ 54,905

Credit default swaps on traded issuers sold protection outstanding as of August 31, 2010 were as follows:

Issuer	Receive Fixed Rate	Counterparty	Expiration	Credit Rating ¹	Notional Amount (000) ²	Unrealized Depreciation
BAA Ferrovia Junior Term Loan	2.00%	Deutsche Bank AG	March 2012	A	GBP 900	\$(48,632)

¹ Using S&P's rating of the issuer.

² The maximum potential amount the Fund may pay should a negative event take place as defined under the terms of agreement.

For Fund compliance purposes, the Fund's industry classifications refer to any one or more of the industry sub-classifications used by one or more widely recognized market indexes or rating group indexes, and/or as defined by Fund management. This definition may not apply for purposes of this report, which may combine such industry sub-classifications for reporting ease.

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Fair Value Measurements Various inputs are used in determining the fair value of investments and derivatives, which are as follows:

Level 1 price quotations in active markets/exchanges for identical assets and liabilities

Level 2 other observable inputs (including, but not limited to: quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

See Notes to Financial Statements.

32 SEMI-ANNUAL REPORT AUGUST 31, 2010

Schedule of Investments (concluded)

BlackRock Debt Strategies Fund, Inc. (DSU)

Level 3 unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available (including the Fund's own assumptions used in determining the fair value of investments and derivatives)

The inputs or methodologies used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. For information about the Fund's policy regarding valuation of investments and other significant accounting policies, please refer to Note 1 of the Notes to Financial Statements.

The following tables summarize the inputs used as of August 31, 2010 in determining the fair valuation of the Fund's investments and derivatives:

Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Investments in Securities:				
Long-Term Investments:				
Common Stocks	\$ 11,681,179	\$ 4,220,095	\$ 935,799	\$ 16,837,073
Corporate Bonds		229,063,438	10,624,349	239,687,787
Floating Rate Loan Interests		205,463,969	52,519,277	257,983,246
Other Interests		173,719	3,665,920	3,839,639
Warrants	69,636		14	69,650
Short-Term Securities		2,174,508		2,174,508
Liabilities:				
Unfunded Loan Commitments			(52,865)	(52,865)
Total	\$ 11,750,815	\$ 441,095,729	\$ 67,692,494	\$ 520,539,038

Derivative Financial Instruments ¹				
Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Credit contracts		\$ 72,033		\$ 72,033
Foreign currency exchange contracts		75,886		75,886
Liabilities:				
Credit contracts		(17,128)	\$ (48,632)	(65,760)
Foreign currency exchange contracts		(47,671)		(47,671)
Total		\$ 83,120	\$ (48,632)	\$ 34,488

¹ Derivative financial instruments are swaps and foreign currency exchange contracts. Swaps and foreign currency exchange contracts are valued at the unrealized appreciation/depreciation on the instrument.

The following table is a reconciliation of Level 3 investments for which significant unobservable inputs were used in determining fair value:

	Common Stocks	Corporate Bonds	Floating Rate Loan Interests	Other Interests	Warrants	Unfunded Loan Commitments	Total
Assets/Liabilities:							
Balance, as of February 28, 2010	\$ 311,675	\$ 11,805,208	\$ 58,483,045	\$ 2,253,500	\$ 31,175		\$ 72,884,603
Accrued discounts/premiums		283,239	312,255				595,494
Net realized gain (loss)		177,745	(6,167,426)	364,537			(5,625,144)
Net change in unrealized appreciation/depreciation ²	713,481	758,386	8,253,852	79,727	(31,161)	\$ (52,865)	9,721,420
Purchases		23,853	3,147,673				3,171,526
Sales		(2,406,340)	(31,346,952)	(520,768)			(34,274,060)
Transfers in ³	805,207		32,221,417	1,488,924			34,515,548
Transfers out ³	(894,564)	(17,742)	(12,384,587)				(13,296,893)
Balance, as of August 31, 2010	\$ 935,799	\$ 10,624,349	\$ 52,519,277	\$ 3,665,920	\$ 14	\$ (52,865)	\$ 67,692,494

² Included in the related net change in unrealized appreciation/depreciation on the Statements of Operations. The change in the unrealized appreciation/depreciation on the securities still held on August 31, 2010 was \$1,342,598.

³ The Fund's policy is to recognize transfers in and transfers out as of the end of the period of the event or the change in circumstances that caused the transfer.

The following table is a reconciliation of Level 3 derivative financial instruments for which significant unobservable inputs were used in determining fair value:

	Credit Contracts
Liabilities:	
Balance, as of February 28, 2010	\$ (94,696)
Accrued discounts/premiums	
Net realized gain (loss)	
Net change in unrealized appreciation/depreciation ⁴	46,064
Purchases	
Sales	
Transfers in ⁵	
Transfers out ⁵	
Balance, as of August 31, 2010	\$ (48,632)

⁴ Included in the related net change in unrealized appreciation/depreciation on the Statements of Operations. The change in the unrealized appreciation/depreciation on swaps still held on August 31, 2010 was \$46,064.

⁵ The Fund's policy is to recognize transfers in and transfers out as of the end of the period of the event or the change in circumstances that caused the transfer.

See Notes to Financial Statements.

Schedule of Investments August 31, 2010 (Unaudited)

BlackRock Floating Rate Income Strategies Fund II, Inc. (FRB)
(Percentages shown are based on Net Assets)

Common Stocks (a)	Shares	Value
Building Products 0.1%		
Masonite Worldwide Holdings	3,830	\$ 145,540
Chemicals 0.0%		
GEO Specialty Chemicals, Inc.	10,732	4,120
Wellman Holdings, Inc.	181	9
		4,129
Construction Materials 0.0%		
Nortek, Inc.	710	29,465
Electrical Equipment 0.0%		
Medis Technologies Ltd.	13,053	405
Semiconductors & Semiconductor Equipment 0.1%		
SunPower Corp., Class B	5,332	55,133
Software 0.2%		
HMH Holdings/EduMedia	47,611	238,055
Total Common Stocks 0.4%		472,727

Corporate Bonds	Par (000)	Value
Airlines 0.4%		
Air Canada, 9.25%, 8/01/15 (b)	USD 250	245,000
Delta Air Lines, Inc., Series B, 9.75%, 12/17/16	285	299,325
		544,325
Auto Components 0.8%		
Delphi International Holdings Unsecured, 12.00%, 10/06/14	16	15,830
Icahn Enterprises LP: 7.75%, 1/15/16	105	104,213
8.00%, 1/15/18	1,000	995,000
		1,115,043

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Building Products 2.4%		
Building Materials Corp. of America, 7.00%, 2/15/20 (b)	425	422,875
CPG International I, Inc., 7.50%, 7/01/12 (c)	3,000	2,898,750
		3,321,625

Capital Markets 0.2%		
E*Trade Financial Corp., 4.00%, 8/31/19 (b)(d)(e)	46	55,200
Marsico Parent Co., LLC, 10.63%, 1/15/16 (b)	593	219,410
Marsico Parent Holdco, LLC, 12.50%, 7/15/16 (b)(f)	166	14,971
Marsico Parent Superholdco, LLC, 14.50%, 1/15/18 (b)(f)	176	15,865
		305,446

Chemicals 1.1%		
CF Industries, Inc., 6.88%, 5/01/18	480	505,200
GEO Specialty Chemicals, Inc. (b): 7.50%, 3/31/15 (d)(f)	702	456,366
10.00%, 3/31/15	691	448,864
Wellman Holdings, Inc., Subordinate Note (Third Lien), 5.00%, 1/29/19 (d)(f)	195	76,181
		1,486,611

Commercial Banks 1.1%		
CIT Group, Inc., 7.00%, 5/01/17	1,585	1,490,395

Commercial Services & Supplies 0.5%		
Clean Harbors, Inc., 7.63%, 8/15/16	400	410,000
The Geo Group, Inc., 7.75%, 10/15/17 (b)	300	309,000
		719,000

Corporate Bonds	Par (000)	Value
Construction Materials 0.5%		
Nortek, Inc., 11.00%, 12/01/13	USD 713	\$ 751,487
Consumer Finance 0.5%		
Credit Acceptance Corp., 9.13%, 2/01/17 (b)	190	196,888
Inmarsat Finance Plc, 7.38%, 12/01/17 (b)	525	538,125
		735,013

Containers & Packaging 2.4%		
Berry Plastics Corp.: 8.25%, 11/15/15	900	902,250
9.50%, 5/15/18 (b)	280	257,600
Berry Plastics Holding Corp., 8.88%, 9/15/14	50	47,625
Clondalkin Acquisition BV, 2.54%, 12/15/13 (b)(c)	1,500	1,308,750
Owens-Brockway Glass Container, Inc., 6.75%, 12/01/14	EUR 113	144,631
Smurfit Kappa Acquisitions (b): 7.25%, 11/15/17	275	355,464

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

7.75%, 11/15/19		265	344,217
			3,360,537
Diversified Financial Services 1.6%			
Ally Financial Inc., 8.30%, 2/12/15 (b)	USD	950	988,000
Axcan Intermediate Holdings, Inc., 12.75%, 3/01/16		100	100,125
FCE Bank Plc, 7.13%, 1/16/12	EUR	400	524,642
Reynolds Group DL Escrow, Inc., 7.75%, 10/15/16 (b)	USD	400	403,000
Reynolds Group Issuer, Inc., 7.75%, 10/15/16 (b)	EUR	200	257,249
			2,273,016
Diversified Telecommunication Services 1.0%			
Frontier Communications Corp., 8.25%, 4/15/17	USD	290	306,675
ITC Deltacom, Inc., 10.50%, 4/01/16		500	492,500
Qwest Communications International, Inc., 8.00%, 10/01/15 (b)		300	322,500
Qwest Corp., 8.38%, 5/01/16		240	279,600
			1,401,275
Energy Equipment & Services 0.5%			
Expro Finance Luxembourg SCA, 8.50%, 12/15/16 (b)		750	701,250
Food & Staples Retailing 0.3%			
AmeriQual Group LLC, 9.50%, 4/01/12 (b)		250	245,000
Rite Aid Corp., 8.00%, 8/15/20 (b)		140	139,125
			384,125
Food Products 0.7%			
B&G Foods, Inc., 7.63%, 1/15/18		300	308,625
Bumble Bee Foods LLC, 7.75%, 12/15/15 (b)		240	253,800
Smithfield Foods, Inc., 10.00%, 7/15/14 (b)		390	435,337
			997,762
Health Care Equipment & Supplies 0.5%			
DJO Finance LLC, 10.88%, 11/15/14		685	733,806
Health Care Providers & Services 0.9%			
American Renal Holdings, 8.38%, 5/15/18 (b)		75	75,000
HCA, Inc., 7.25%, 9/15/20		255	266,475
Tenet Healthcare Corp.:			
9.00%, 5/01/15		95	101,175
8.88%, 7/01/19		690	746,062
			1,188,712
Health Care Technology 0.8%			
IMS Health, Inc., 12.50%, 3/01/18 (b)		980	1,135,575

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Floating Rate Income Strategies Fund II, Inc. (FRB)
 (Percentages shown are based on Net Assets)

Corporate Bonds	Par (000)	Value
Hotels, Restaurants & Leisure 1.1%		
Little Traverse Bay Bands of Odawa Indians, 10.25%, 2/15/14 (a)(b)(g)	USD 1,565	\$ 528,188
MGM Resorts International, 10.38%, 5/15/14	260	283,400
Travelport LLC, 5.16%, 9/01/14 (c)	815	755,912
		1,567,500
Independent Power Producers & Energy Traders 2.5%		
Calpine Construction Finance Co. LP, 8.00%, 6/01/16 (b)	1,215	1,275,750
Energy Future Holdings Corp., 10.00%, 1/15/20 (b)	500	481,501
NRG Energy, Inc., 7.25%, 2/01/14	1,660	1,693,200
		3,450,451
Industrial Conglomerates 0.5%		
Sequa Corp., 13.50%, 12/01/15 (b)(f)	679	705,814
Media 2.6%		
Affinion Group, Inc., 10.13%, 10/15/13	555	568,875
CSC Holdings, Inc., 8.50%, 4/15/14	230	251,275
Clear Channel Worldwide Holdings, Inc.: 9.25%, 12/15/17	212	219,950
Series B, 9.25%, 12/15/17	847	888,291
DISH DBS Corp., 7.00%, 10/01/13	525	546,656
Seat Pagine Gialle SpA, 10.50%, 1/31/17 (b)	EUR 60	70,713
TL Acquisitions, Inc., 10.50%, 1/15/15 (b)	USD 135	128,925
UPC Germany GmbH, 8.13%, 12/01/17 (b)	1,000	1,027,500
		3,702,185
Metals & Mining 0.4%		
FMG Finance Property Ltd., 4.30%, 9/01/11 (b)(c)	180	180,225
Ryerson, Inc., 7.84%, 11/01/14 (c)	450	417,375
		597,600
Multiline Retail 0.2%		
Dollar General Corp., 11.88%, 7/15/17 (f)	235	270,250
Oil, Gas & Consumable Fuels 0.6%		
Coffeyville Resources LLC, 9.00%, 4/01/15 (b)	160	164,400
OPTI Canada, Inc., 9.00%, 12/15/12 (b)	665	666,663

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

		831,063
Paper & Forest Products 0.1%		
Verso Paper Holdings LLC, Series B, 4.22%, 8/01/14 (c)	180	147,600
Pharmaceuticals 0.9%		
Angiotech Pharmaceuticals, Inc., 4.29%, 12/01/13 (c)	300	242,250
Elan Finance Plc, 4.38%, 11/15/11 (c)	950	948,812
		1,191,062
Textiles, Apparel & Luxury Goods 0.1%		
Phillips-Van Heusen Corp., 7.38%, 5/15/20	195	200,850
Wireless Telecommunication Services 1.8%		
Cricket Communications, Inc., 7.75%, 5/15/16	825	851,812
Digicel Group Ltd. (b): 9.13%, 1/15/15 (f)	399	400,995
8.25%, 9/01/17	100	103,875
iPCS, Inc., 2.59%, 5/01/13 (c)	500	467,500
Nextel Communications, Inc., Series E, 6.88%, 10/31/13	425	423,938
Sprint Capital Corp., 8.38%, 3/15/12	200	211,500
		2,459,620
Total Corporate Bonds 27.0%		37,768,998

Floating Rate Loan Interests (c)	Par (000)	Value
Aerospace & Defense 1.6%		
DynCorp International, Term Loan, 6.25%, 7/07/16	USD 575	\$ 570,544
Hawker Beechcraft Acquisition Co., LLC: Letter of Credit Linked Deposit, 0.43%, 3/26/14	45	35,596
Term Loan, 2.26%, 3/26/14	736	586,523
TASC, Inc.:		
Tranche A Term Loan, 5.50%, 12/18/14	323	323,269
Tranche B Term Loan, 5.75%, 12/18/15	657	658,342
		2,174,274

Auto Components 3.0%		
Affinion Group Holdings, Inc., Term Loan, 8.51%, 3/01/12 (f)	341	327,741
Affinion Group, Inc., Tranche B Term Loan, 5.00%, 10/09/16	748	719,756
Allison Transmission, Inc., Term Loan, 3.04%, 8/07/14	2,643	2,435,781
Dana Holding Corp., Term Advance, 4.52% 6.50%, 1/30/15	475	466,419
Exide Global Holdings Netherlands C.V., European Borrower, Term Loan, 3.94%, 5/15/12	EUR 170	199,538
GPX International Tire Corp. (a)(g): Tranche B Term Loan, 10.25%, 3/30/12	549	
PIK fee 12.00%, 4/11/12	USD 9	

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

			4,149,235
Automobiles 1.2%			
Ford Motor Co.:			
Tranche B-1 Term Loan, 3.03%, 12/15/13		1,626	1,563,953
Tranche B-2 Term Loan, 3.03%, 12/15/13		146	139,915
			1,703,868
Beverages 1.0%			
SW Acquisitions Co., Inc., Term Loan, 5.75%, 6/01/16			
		1,368	1,369,720
Building Products 1.8%			
Building Materials Corp. of America, Term Loan Advance, 3.06%, 2/22/14			
		470	461,329
Goodman Global, Inc., Term Loan, 6.25%, 2/13/14		1,432	1,436,894
Momentive Performance Materials (Blitz 06-103 GmbH), Tranche B-2 Term Loan, 2.88%, 12/04/13			
	EUR	345	400,768
PGT Industries, Inc., Tranche A-2 Term Loan, 7.25%, 2/14/12	USD	226	209,183
			2,508,174
Capital Markets 0.3%			
Nuveen Investments, Inc., Term Loan (First Lien), 3.48% 3.53%, 11/13/14			
		525	463,477
Chemicals 5.2%			
CF Industries, Inc., Term Loan B-1, 4.50%, 4/05/15			
		487	489,310
Chemtura Corp.:			
Debtor in Possession Term Facility, 6.00%, 2/11/11			
		800	798,000
Exit Term Loan, 5.50%, 8/16/16		800	803,334
Gentek Holding, LLC, Tranche B Term Loan, 7.00%, 10/29/14		453	452,596
Huish Detergents, Inc., Tranche B Term Loan, 2.02%, 4/26/14		331	312,553
Lyondell Chemical Co., Exit Term Loan, 5.50%, 4/08/16		335	337,326
MacDermid, Inc., Tranche C Term Loan, 2.27%, 4/12/14	EUR	285	328,609
Nalco Co., Term Loan, 6.50%, 5/13/16	USD	1,262	1,266,457
PQ Corp. (FKA Niagara Acquisition, Inc.), Term Loan (First Lien), 3.52% 3.73%, 7/30/14		1,304	1,191,937
Rockwood Specialties Group, Inc., Term Loan H, 6.00%, 5/15/14		678	678,089

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Floating Rate Income Strategies Fund II, Inc. (FRB)
 (Percentages shown are based on Net Assets)

Floating Rate Loan Interests (c)	Par (000)	Value
Chemicals (concluded)		
Solutia, Inc., Term Loan, 4.75%, 3/17/17	USD 647	\$ 646,907
		7,305,118
Commercial Banks 0.9%		
CIT Group, Inc., Term Loan, 6.25%, 1/20/12	1,325	1,320,681
Commercial Services & Supplies 6.4%		
ARAMARK Corp.:		
Letter of Credit-1 Facility, 0.11%, 1/26/14	18	16,881
Letter of Credit-2 Facility, 0.11%, 7/26/16	29	27,635
U.S. Term Loan, 2.41%, 1/26/14	247	233,436
U.S. Term Loan B, 3.78%, 7/26/16	433	420,209
AWAS Finance Luxembourg Sarl, Term Loan, 7.75%, 6/10/16	675	678,937
Adesa, Inc. (KAR Holdings, Inc.), Initial Term Loan, 3.02%, 10/21/13	407	391,331
Advanced Disposal Services, Inc., Term Loan B, 6.00%, 1/14/15	498	497,500
Altegrity, Inc., Incremental Term Loan, 7.75%, 2/21/15	1,000	996,250
Casella Waste Systems, Inc., Term Loan B, 7.00%, 4/09/14	495	497,475
Diversey, Inc. (FKA Johnson Diversey, Inc.), Tranche B Dollar Term Loan, 5.50%, 11/24/15	498	496,256
Delos Aircraft, Inc., Term Loan 2, 7.00%, 3/17/16	600	603,250
International Lease Finance Corp., Term Loan 1, 6.75%, 3/17/15	1,150	1,159,105
Protection One, Inc., Term Loan, 6.00%, 6/04/16	870	860,213
Quad Graphics, Term Loan, 5.50%, 4/20/16	300	286,200
Synagro Technologies, Inc., Term Loan (First Lien), 2.27% 2.28%, 4/02/14	970	819,650
West Corp., Incremental Term Loan B-3, 7.25%, 10/24/13	1,011	1,008,119
		8,992,447
Communications Equipment 0.1%		
Sorenson Communications, Tranche C Term Loan, 6.00%, 8/16/13	134	119,799
Construction & Engineering 0.7%		
Acquilex Holdings, LLC, Term Loan B, 5.50%, 4/01/16	100	99,334
Safway Services, LLC, First Out Tranche Loan, 9.00%, 12/18/17	900	900,000

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

				999,334
Construction Materials 0.3%				
Fairmount Minerals Ltd., Term Loan B, 6.25%, 8/05/16			475	475,198
Consumer Finance 2.6%				
AGFS Funding Co., Term Loan, 7.25%, 4/21/15			2,025	2,000,953
DaimlerChrysler Financial Services Americas LLC, Term Loan (Second Lien), 6.78%, 8/05/13			1,687	1,681,510
				3,682,463
Containers & Packaging 0.8%				
Anchor Glass Container Corp., Term Loan (First Lien), 6.00%, 3/02/16			325	321,913
BWAY Holding Co., Term Loan, 5.50% 6.00%, 6/16/17			128	127,840
Berry Plastics Holding Corp., Term Loan C, 2.32% 2.38%, 4/03/15			366	333,444
Graham Packaging Co., LP, Term Loan C, 6.75%, 4/05/14			274	275,460
ICL Industrial Containers ULC/ICL Contenants Industriels ULC (FKA BWAY Corp.), Term Loan C, 5.50% 6.00%, 6/16/17			12	11,993
				1,070,650
Floating Rate Loan Interests (c)				
		Par (000)		Value
Diversified Consumer Services 3.1%				
Coinmach Service Corp., Term Loan, 3.35%, 11/14/14		USD	1,466	\$ 1,278,313
Laureate Education, Series A New Term Loan, 7.00%, 8/15/14			2,059	2,024,942
ServiceMaster Co.:				
Closing Date Loan, 2.77% 3.04%, 7/24/14			964	886,036
Delayed Draw Term Loan, 6.25% 2.77%, 7/24/14			96	88,236
				4,277,527
Diversified Financial Services 2.0%				
MSCI, Inc., Term Loan, 4.75%, 6/01/16			923	925,379
Reynolds Group Holdings, Inc.:				
Incremental US Term Loan, 6.25%, 5/05/16			600	595,750
US Term Loan, 6.25%, 5/05/16			596	592,498
Whitelabel IV SA:				
Term Loan B-1, 5.00%, 8/11/17			188	236,279
Term Loan B-2, 5.00%, 8/11/17			312	391,010
				2,740,916
Diversified Telecommunication Services 2.6%				
Cincinnati Bell Inc., Tranche B Term Loan, 6.50%, 6/11/17			723	717,764
Integra Telecom Holdings, Inc., Term Loan, 9.25%, 4/15/15			800	798,000

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Level 3 Communications, Incremental Term Loan, 2.53% 2.78%, 3/13/14		1,650	1,478,039
Wind Finance SL SA, Euro Facility (Second Lien), 7.89%, 12/17/14	EUR	525	663,955
			3,657,758
Electric Utilities 1.1%			
New Development Holdings, LLC, Term Loan, 7.00%, 7/03/17	USD	1,500	1,515,000
Electrical Equipment 0.5%			
Baldor Electric Co., Term Loan, 5.25% 5.50%, 1/31/14		640	639,625
Electronic Equipment, Instruments & Components 1.4%			
CDW LLC (FKA CDW Corp.), Term Loan B, 4.28%, 10/10/14		677	606,494
Flextronics International Ltd.: Closing Date Loan B, 2.56%, 10/01/12		558	537,039
Delayed Draw Term Loan A-2, 2.51%, 10/01/14		21	19,419
Delayed Draw Term Loan A-3, 2.56%, 10/01/14		24	22,656
Styron Sarl, Term Loan B, 7.50%, 6/17/16		800	806,248
			1,991,856
Energy Equipment & Services 0.5%			
MEG Energy Corp., Tranche D Term Loan, 6.00%, 4/03/16		744	742,587
Food & Staples Retailing 2.9%			
AB Acquisitions UK Topco 2 Ltd. (FKA Alliance Boots), Facility B1, 3.55%, 7/09/15	GBP	675	963,006
Bolthouse Farms, Inc., Term Loan (First Lien), 5.50%, 2/11/16	USD	599	595,202
DS Waters of America, Inc., Term Loan, 2.51%, 10/29/12		456	435,918
Pierre Foods, Term Loan, 7.00%, 3/03/16		585	583,294
Pilot Travel Centers, LLC, Initial Tranche B Term Loan, 5.25%, 6/30/16		1,294	1,295,691
Rite Aid Corp., Term Loan B, 6.00%, 7/09/14		250	241,500
			4,114,611
Food Products 2.6%			
CII Investment, LLC (FKA Cloverhill): Term Loan A, 8.50%, 10/14/14		445	444,771
Term Loan B, 8.50%, 10/14/14		541	540,943
Dole Food Co., Inc., Tranche B-1 Term Loan, 5.00% 5.50%, 3/02/17		207	207,640

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Floating Rate Income Strategies Fund II, Inc. (FRB)
(Percentages shown are based on Net Assets)

Floating Rate Loan Interests (c)	Par (000)	Value
Food Products (concluded)		
Michael Foods Group, Inc. (FKA M-Foods Holdings, Inc.), Term Loan B, 6.25%, 6/29/16	USD 500	\$ 500,357
Pilgrim's Pride Corp., Term Loan A, 5.53%, 12/01/12	640	633,600
Pinnacle Foods Finance LLC, Tranche D Term Loan, 6.00%, 4/02/14	838	839,048
Solvest, Ltd. (Dole), Tranche C-1 Term Loan, 5.00% 5.50%, 3/02/17	522	522,815
		3,689,174
Health Care Equipment & Supplies 1.0%		
Biomet, Inc., Dollar Term Loan, 3.26% 3.54%, 3/25/15	425	410,687
DJO Finance LLC (FKA ReAble Therapeutics Finance LLC), Term Loan, 3.26%, 5/20/14	439	416,558
Fresenius AG:		
Tranche C-1 Dollar Term Loan, 4.50%, 9/10/14	343	343,171
Tranche C-2 Term Loan, 4.50%, 9/10/14	183	183,340
		1,353,756
Health Care Providers & Services 5.7%		
CHS/Community Health Systems, Inc.:		
Delayed Draw Term Loan, 2.55%, 7/25/14	89	83,541
Term Loan Facility, 2.55%, 7/25/14	1,668	1,572,484
DaVita, Inc., Tranche B-1 Term Loan, 1.77% 2.04%, 10/05/12	175	172,301
Gentiva Health Services, Inc., Term Loan B, 6.75%, 8/12/16	600	592,125
HCA, Inc.:		
Tranche A-1 Term Loan, 2.03%, 11/16/12	976	938,607
Tranche B-1 Term Loan, 2.78%, 11/18/13	311	298,895
Tranche B-2 Term Loan, 3.78%, 3/31/17	553	535,175
Harden Healthcare LLC:		
Add-on Term Loan, 7.75%, 3/02/15	700	686,000
Tranche A Term Loan, 8.50%, 2/22/15	396	388,436
inVentiv Health, Inc. (FKA Ventive Health, Inc.), Term Loan B, 6.50%, 7/31/16	1,200	1,197,750
Renal Advantage Holdings, Inc., Tranche B Term Loan, 6.00%, 6/03/16	600	600,000
Vanguard Health Holding Co. II, LLC (Vanguard Health Systems, Inc.), Initial Term Loan, 5.00%, 1/29/16	893	882,066

7,947,380

Health Care Technology 0.7%

IMS Health, Inc., Tranche B Dollar Term Loan, 5.25%, 2/26/16	977	979,144
---	-----	---------

Hotels, Restaurants & Leisure 4.7%

Harrah's Operating Co., Inc.:		
Term Loan B-1, 3.50%, 1/28/15	128	109,662
Term Loan B-3, 3.50% 3.53%, 1/28/15	1,876	1,603,075
Penn National Gaming, Inc., Term Loan B, 2.01% 2.24%, 10/03/12	450	438,916
Six Flags Theme Parks, Inc., Tranche B Term Loan (First Lien), 6.00%, 6/30/16	943	932,437
Travelport LLC (FKA Travelport, Inc.):		
Delayed Draw Term Loan, 2.76%, 8/23/13	250	237,198
Original Post-First Amendment and Restatement Synthetic Letter of Credit Loan, 3.03%, 8/23/13	24	22,493
Tranche B Dollar Term Loan, 2.76%, 8/23/13	131	123,870
Universal City Development Partners Ltd.:		
Term Loan, 7.75%, 11/06/14	746	749,981
Term Loan B, 5.50%, 11/16/14	769	769,967
VML US Finance LLC (FKA Venetian Macau), Term B:		
Delayed Draw Project Loan, 5.04%, 5/25/12	534	524,738
Funded Project Loan, 5.04%, 5/27/13	1,036	1,017,964
		<u>6,530,301</u>

Floating Rate Loan Interests (c)

	Par (000)	Value
IT Services 4.5%		
Audio Visual Services Group, Inc., Tranche B Term Loan (First Lien), 2.79%, 2/28/14 (f)	USD 495	\$ 366,234
Ceridian Corp., US Term Loan, 3.26%, 11/09/14	1,046	930,608
EVERTEC, Inc., Term Loan B, 7.00%, 8/20/16	400	391,000
First Data Corp.:		
Initial Tranche B-1 Term Loan, 3.01%, 9/24/14	311	265,695
Initial Tranche B-2 Term Loan, 3.01%, 9/24/14	1,501	1,279,939
Initial Tranche B-3 Term Loan, 3.01%, 9/24/14	480	409,222
SunGard Data Systems, Inc. (Solar Capital Corp.), Incremental Term Loan, 6.75%, 2/28/14	1,110	1,108,367
TransUnion LLC, Term Loan, 6.75%, 6/15/17	1,500	1,513,594
		<u>6,264,659</u>

Independent Power Producers & Energy Traders 1.0%

Dynegy Holdings, Inc.:		
Term Letter of Credit Facility, 4.02%, 4/02/13	242	238,039
Tranche B Term Loan, 4.02%, 4/02/13	19	19,064
Texas Competitive Electric Holdings Co., LLC (TXU):		
Initial Tranche B-1 Term Loan, 3.79% 4.03%, 10/10/14	819	620,561
Initial Tranche B-3 Term Loan, 3.79% 4.03%, 10/10/14	614	463,155
		<u>1,340,819</u>

Industrial Conglomerates 1.4%

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Sequa Corp., Term Loan, 3.79%, 12/03/14	2,122	1,952,134
Insurance 0.5%		
Alliant Holdings I, Inc., Term Loan, 3.53%, 8/21/14	810	769,589
Internet & Catalog Retail 0.3%		
FTD Group, Inc., Tranche B Term Loan, 6.75%, 8/26/14	382	382,115
Machinery 0.3%		
Oshkosh Truck Corp., Term Loan B, 6.44% 6.54%, 12/06/13	487	489,796
Marine 0.2%		
Horizon Lines, LLC:		
Revolving Loan, 3.52% 3.55%, 8/08/12	195	166,986
Term Loan, 3.79%, 8/08/12	148	134,762
		301,748
Media 16.0%		
Cengage Learning Acquisitions, Inc. (Thomson Learning), Tranche 1 Incremental Term Loan, 7.50%, 7/03/14	1,755	1,749,201
Cequel Communications, LLC, New Term Loan, 2.30%, 11/05/13	530	509,095
Charter Communications Operating, LLC:		
New Term Loan, 2.26%, 3/06/14	259	245,270
Term Loan B-1, 7.25%, 3/06/14	524	535,252
Term Loan C, 3.79%, 9/06/16	2,827	2,703,933
Clarke American Corp., Term Loan B, 2.76%, 6/30/14	723	622,942
FoxCo Acquisition Sub, LLC, Term Loan, 7.50%, 7/14/15	414	398,168
HMH Publishing Co., Ltd., Tranche A Term Loan, 5.79%, 6/12/14 (f)	1,008	917,024
Hanley-Wood, LLC, Term Loan, 2.56% 2.63%, 3/10/14	975	421,688
Intelsat Corp. (FKA PanAmSat Corp.):		
Tranche B-2-A Term Loan, 3.03%, 1/03/14	165	156,337
Tranche B-2-B Term Loan, 3.03%, 1/03/14	165	156,289
Tranche B-2-C Term Loan, 3.03%, 1/03/14	165	156,289

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Floating Rate Income Strategies Fund II, Inc. (FRB)
(Percentages shown are based on Net Assets)

Floating Rate Loan Interests (c)	Par (000)	Value
Media (concluded)		
Intelsat Subsidiary Holding Co. Ltd., Term Loan B, 3.03%, 7/03/13	USD 728	\$ 694,367
Interactive Data Corp., Term Loan, 6.75%, 1/29/17	700	704,083
Lavena Holding 3 GmbH (Prosiebensat.1 Media AG), Facility B1, 3.52%, 6/30/15	EUR 337	322,477
MCNA Cable Holdings LLC (OneLink Communications), Loan, 6.89%, 3/01/13 (f)	USD 586	497,921
Mediacom Illinois, LLC (FKA Mediacom Communications, LLC):		
Term Loan, 4.50%, 10/23/17	1,000	943,733
Tranche D Term Loan, 5.50%, 3/31/17	496	486,164
Newsday, LLC, Fixed Rate Term Loan, 10.50%, 8/01/13	1,325	1,406,156
Nielsen Finance LLC:		
Class A, Dollar Term Loan, 2.29%, 8/09/13	13	12,557
Class B, Dollar Term Loan, 4.04%, 5/01/16	1,354	1,308,709
Class C, Dollar Term Loan, 4.04%, 5/28/16	352	337,668
Penton Media, Inc., Term Loan (First Lien), 5.00%, 8/01/14 (f)	486	335,005
Regal Cinemas Corp., Term Loan, 4.03%, 11/19/16	324	320,135
Sinclair Television Group, Inc., New Tranche B Loan, 5.50% 6.25%, 10/29/15	614	614,148
Springer Science+Business Media SA, Facility A1, 6.75%, 7/01/16	EUR 1,000	1,253,522
Sunshine Acquisition Ltd. (FKA HIT Entertainment), Term Facility, 5.68%, 6/01/12	USD 522	487,136
TWCC Holdings Corp., Replacement Term Loan, 5.00%, 9/14/15	1,061	1,059,830
UPC Financing Partnership, Facility U, 4.64%, 12/31/17	EUR 1,050	1,235,167
Virgin Media Investment Holdings, Ltd., B Facility, 4.77%, 12/31/15	GBP 750	1,115,016
Yell Group Plc Facility A3-Yell Finance (UK) Limited, 2.60, 4/30/14	USD 703	678,516
		22,383,798
Multi-Utilities 0.2%		
FirstLight Power Resources, Inc. (FKA NE Energy, Inc.):		
Synthetic Letter of Credit, 0.41%, 11/01/13	4	3,493
Term B Advance (First Lien), 3.06%, 11/01/13	224	207,769
		211,262
Multiline Retail 1.4%		
	960	924,512

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Dollar General Corp., Tranche B-2 Term Loan,
3.01% 3.03%, 7/07/14

Hema Holding BV:

Facility B, 2.65%, 7/06/15	209	250,764
Facility C, 3.40%, 7/05/16	209	250,764

The Neiman Marcus Group, Inc., Term Loan, 2.30%, 4/06/13	540	511,563
---	-----	---------

1,937,603

Oil, Gas & Consumable Fuels 1.0%

Big West Oil, LLC, Term Loan, 12.00%, 7/23/15	500	506,041
---	-----	---------

Tronox Worldwide LLC:

Tranche B-1 Term Loan, 11.25%, 9/20/10	709	715,176
--	-----	---------

Tranche B-2 Term Loan, 11.25%, 9/20/10	191	192,137
--	-----	---------

1,413,354

Paper & Forest Products 1.2%

Georgia-Pacific LLC, Term Loan B, 2.30% 2.53%, 12/23/12	847	834,628
--	-----	---------

Verso Paper Finance Holdings LLC, PIK Loan, 6.69% 7.44%, 2/01/13 (f)	1,327	796,357
---	-------	---------

1,630,985

Floating Rate Loan Interests (c)

**Par
(000)**

Value

Personal Products 0.0%

American Safety Razor Co., LLC, Term Loan (First Lien), 8.75%, 7/31/13 (f)	USD	54	\$	49,564
---	-----	----	----	--------

Pharmaceuticals 1.0%

Warner Chilcott Co., LLC, Term Loan A, 6.00%, 10/30/14	398	397,019
---	-----	---------

Warner Chilcott Corp.:

Additional Term Loan, 6.25%, 4/30/15	217	216,970
--------------------------------------	-----	---------

Term Loan B-1, 6.25%, 4/30/15	163	162,700
-------------------------------	-----	---------

Term Loan B-2, 6.25%, 4/30/15	273	272,549
-------------------------------	-----	---------

Term Loan B-3, 6.50%, 2/20/16	272	272,727
-------------------------------	-----	---------

Term Loan B-4, 6.50%, 2/20/16	88	88,493
-------------------------------	----	--------

1,410,458

Professional Services 0.9%

Booz Allen Hamilton, Inc., Tranche C Term Loan, 6.00%, 7/31/15	1,244	1,243,439
---	-------	-----------

Real Estate Management & Development 1.9%

Mattamy Funding Partnership, Term Loan, 2.56%, 4/11/13	229	211,049
---	-----	---------

Realogy Corp.:

Delayed Draw Term Loan B, 3.30% 3.53%, 10/10/13	1,393	1,202,268
--	-------	-----------

Initial Term Loan B, 3.30%, 10/10/13	1,213	1,047,033
--------------------------------------	-------	-----------

Synthetic Letter of Credit, 0.11%, 10/10/13	208	179,487
---	-----	---------

2,639,837

Semiconductors & Semiconductor Equipment 0.2%

Freescale Semiconductor, Inc., Extended Maturity Term Loan, 4.56%, 12/01/16	300	268,266
---	-----	---------

Software 0.8%

Telcordia Technologies, Inc., Term Loan, 6.75%, 4/30/16	698	697,669
Vertafore, Inc., Term Loan B, 6.75%, 7/28/16	355	352,781

1,050,450

Specialty Retail 1.7%

Bass Pro Group LLC, Term Loan, 5.00% 5.75%, 4/10/15	180	179,492
Burlington Coat Factory Warehouse Corp., Term Loan, 2.54% 2.66%, 5/28/13	220	208,395
Matalan, Term Loan, 5.57%, 3/24/16	GBP 300	455,723
Michaels Stores, Inc., Term Loan B-1: 2.63% 2.81%, 10/31/13	USD 523	493,755
4.88% 5.06%, 7/31/16	277	266,804
Toys R Us, Inc., Term Loan B, 6.00%, 8/17/16	800	797,995

2,402,164

Textiles, Apparel & Luxury Goods 0.8%

Hanesbrands, Inc., New Term Loan, 5.25%, 12/10/15	368	371,091
Phillips Van Heusen Corp., Tranche B Loan, 4.75%, 5/06/16	776	780,264

1,151,355

Wireless Telecommunication Services 3.0%

Digicel International Finance Ltd., U.S. Term Loan (Non-Rollover), 3.06%, 3/30/12	2,340	2,284,435
MetroPCS Wireless, Inc.:		
Tranche B-1 Term Loan, 2.56%, 11/03/13	84	81,163
Tranche B-2 Term Loan B, 3.81%, 11/03/16	910	892,574
Vodafone Group Americas Finance 2 Inc., Initial Loan, 6.88%, 7/30/15	1,000	1,000,000

4,258,172

Total Floating Rate Loan Interests 93.0%

130,065,640

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Floating Rate Income Strategies Fund II, Inc. (FRB)
(Percentages shown are based on Net Assets)

Other Interests (h)	Beneficial Interest (000)	Value
Auto Components 1.1%		
Delphi Debtor-in-Possession Holding Co. LLP Class B Membership Interests	USD	(i) \$ 1,558,950
Diversified Financial Services 0.2%		
J.G. Wentworth LLC Preferred Equity Interest (j)		(i) 299,336
Total Other Interests 1.3%		1,858,286

Warrants (k)	Shares
HMH Holdings/EduMedia (Expires 3/09/17)	5,330
Total Warrants 0.0%	
Total Long-Term Investments (Cost \$176,704,266) 121.7%	170,165,651

Short-Term Securities		
BlackRock Liquidity Funds, TempFund, Institutional Class, 0.25% (l)(m)	1,227,551	1,227,551
Total Short-Term Securities (Cost \$1,227,551) 0.9%		1,227,551

Options Purchased	Contracts
Over-the-Counter Call Options 0.0%	
Marsico Parent Superholdco LLC, Strike Price USD 942.86, expires 12/21/19, Broker Goldman Sachs Bank USA	11

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Total Options Purchased		
(Cost \$10,756)	0.0%	
<hr/>		
Total Investments (Cost \$177,942,573*)	122.6%	171,393,202
Liabilities in Excess of Other Assets	(22.6)%	(31,552,737)
<hr/>		
Net Assets	100.0%	\$ 139,840,465
<hr/>		

* The cost and unrealized appreciation (depreciation) of investments as of August 31, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 178,037,546
Gross unrealized appreciation	\$ 3,393,067
Gross unrealized depreciation	(10,037,411)
Net unrealized depreciation	\$ (6,644,344)

- (a) Non-income producing security.
- (b) Security exempt from registration under Rule 144A of the Securities Act of 1933. These securities may be resold in transactions exempt from registration to qualified institutional investors.
- (c) Variable rate security. Rate shown is as of report date.
- (d) Convertible security.
- (e) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.
- (f) Represents a payment-in-kind security which may pay interest/dividends in additional face/shares.
- (g) Issuer filed for bankruptcy and/or is in default of interest payments.
- (h) Other interests represent beneficial interest in liquidation trusts and other reorganization entities and are non-income producing.
- (i) Amount is less than \$1,000.
- (j) The investment is held by a wholly owned taxable subsidiary of the Fund.
- (k) Warrants entitle the Fund to purchase a predetermined number of shares of common stock and are non-income producing. The purchase price and number of shares are subject to adjustment under certain conditions until the expiration date, if any.
- (l) Investments in companies considered to be an affiliate of the Fund during the period, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held at February 28, 2010	Net Activity	Shares Held at August 31, 2010	Income
	1,797,812	(570,261)	1,227,551	\$ 2,472

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

BlackRock Liquidity
Funds, TempFund,
Institutional Class

(m) Represents the current yield as of report date.

Foreign currency exchange contracts as of August 31, 2010 were as follows:

Currency Purchased		Currency Sold		Counterparty	Settlement Date	Unrealized Appreciation (Depreciation)
USD	211,852	EUR	160,000	Citibank NA	9/15/10	\$ 9,096
USD	6,736,299	EUR	5,347,500	Deutsche Bank AG	9/15/10	(40,177)
EUR	619,200	USD	789,751	Citibank NA	9/15/10	(5,086)
USD	2,855,495	GBP	1,852,500	Royal Bank of Scotland	10/20/10	15,399
Total						\$ (20,768)

For Fund compliance purposes, the Fund's industry classifications refer to any one or more of the industry sub-classifications used by one or more widely recognized market indexes or rating group indexes, and/or as defined by Fund management. This definition may not apply for purposes of this report, which may combine such industry sub-classifications for reporting ease.

Fair Value Measurements Various inputs are used in determining the fair value of investments and derivatives, which are as follows:

Level 1 price quotations in active markets/exchanges for identical assets and liabilities

Level 2 other observable inputs (including, but not limited to: quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

Level 3 unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available (including the Fund's own assumptions used in determining the fair value of investments and derivatives)

The inputs or methodologies used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. For information about the Fund's policy regarding valuation of investments and other significant accounting policies, please refer to Note 1 of the Notes to Financial Statements.

See Notes to Financial Statements.

Schedule of Investments (concluded)

BlackRock Floating Rate Income Strategies Fund II, Inc. (FRB)

The following tables summarize the inputs used as of August 31, 2010 in determining the fair valuation of the Fund's investments and derivatives:

Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Investments in Securities:				
Long-Term Investments:				
Common Stocks	\$ 230,543		\$ 242,184	\$ 472,727
Corporate Bonds		\$ 36,771,757	997,241	37,768,998
Floating Rate Loan Interests		107,309,721	22,755,919	130,065,640
Other Interests		1,558,950	299,336	1,858,286
Short-Term Securities	1,227,551			1,227,551
Liabilities:				
Unfunded Loan Commitments			(50,937)	(50,937)
Total	\$ 1,458,094	\$ 145,640,428	\$ 24,243,743	\$ 171,342,265

Derivative Financial Instruments¹

Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Foreign currency exchange contracts		\$ 24,495		\$ 24,495
Liabilities:				
Foreign currency exchange contracts		(45,263)		(45,263)
Total		\$ (20,768)		\$ (20,768)

¹ Derivative financial instruments are foreign currency exchange contracts. Foreign currency exchange contracts are valued at the unrealized appreciation/depreciation on the instrument.

The following table is a reconciliation of Level 3 investments for which significant unobservable inputs were used to determine fair value:

	Common Stocks	Corporate Bonds	Floating Rate Loan Interests	Other Interests	Unfunded Loan Commitments	Total
Assets/Liabilities:						
Balance as of August 31, 2009	\$ 30,435	\$ 1,016,670	\$ 18,711,638	\$ 1,622,470	\$ (34,025)	\$ 21,347,188
Accrued discounts/premiums		24,219	64,432			88,651
Net realized gain (loss)		5	(954,756)			(954,751)

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Net change in unrealized appreciation/depreciation ²	3,159	(48,878)	1,737,603	(63,520)	(16,912)	1,611,452
Purchases		4,776	7,083,084			7,087,860
Sales		449	(15,639,731)			(15,639,282)
Transfers in ³	238,055		14,824,999	299,336		15,362,390
Transfers out ³	(29,465)		(3,071,350)	(1,558,950)		(4,659,765)
Balance, as of August 31, 2010	\$ 242,184	\$ 997,241	\$ 22,755,919	\$ 299,336	\$ (50,937)	\$ 24,243,743

² Included in the related net change in unrealized appreciation/depreciation on the Statements of Operations. The change in the unrealized appreciation/depreciation on the securities still held on August 31, 2010 was \$231,584.

³ The Fund's policy is to recognize transfers in and transfers out as of the end of the period of the event or the change in circumstances that caused the transfer.

See Notes to Financial Statements.

40 SEMI-ANNUAL REPORT AUGUST 31, 2010

Schedule of Investments August 31, 2010 (Unaudited)

BlackRock Senior High Income Fund, Inc. (ARK)
(Percentages shown are based on Net Assets)

Common Stocks (a)	Shares	Value
Building Products 0.2%		
Masonite Worldwide Holdings	12,832	\$ 487,616
Capital Markets 0.2%		
E*Trade Financial Corp.	27,100	336,311
Chemicals 0.0%		
GEO Specialty Chemicals, Inc.	142,466	54,693
Wellman Holdings, Inc.	5,131	256
		<u>54,949</u>
Construction Materials 0.0%		
Nortek, Inc.	2,570	106,655
Containers & Packaging 0.1%		
Smurfit Kappa Plc	18,171	158,888
Metals & Mining 0.1%		
Euramax International	935	308,517
Paper & Forest Products 0.8%		
Ainsworth Lumber Co. Ltd.	346,134	811,493
Ainsworth Lumber Co. Ltd. (b)	421,556	988,315
		<u>1,799,808</u>
Software 0.2%		
HMH Holdings/EduMedia	76,829	384,143
Total Common Stocks 1.6%		<u>3,636,887</u>

Corporate Bonds	Par (000)	
Aerospace & Defense 1.2%		
Bombardier, Inc., 7.75%, 3/15/20 (b)	\$ 900	967,500
Kratos Defense & Security Solutions, Inc., 10.00%, 6/01/17	600	619,500
TransDigm, Inc., 7.75%, 7/15/14	1,100	1,133,000
		<u>2,720,000</u>

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Airlines 0.8%

Air Canada, 9.25%, 8/01/15 (b)	700	686,000
Delta Air Lines, Inc., Series B, 9.75%, 12/17/16	475	498,875
United Air Lines, Inc., 12.75%, 7/15/12	595	663,113
		1,847,988

Auto Components 1.3%

Icahn Enterprises LP:		
7.75%, 1/15/16	160	158,800
8.00%, 1/15/18	2,690	2,676,550
Venture Holdings Co. LLC (a)(c)(d):		
12.00%, 6/01/09	700	
Series B, 9.50%, 7/01/05	3,325	333
		2,835,683

Biotechnology 0.1%

QHP Pharma, 10.25%, 35 (b)	262	267,262
----------------------------	-----	---------

Building Products 2.8%

Building Materials Corp. of America, 7.00%, 2/15/20 (b)	675	671,625
CPG International I, Inc.:		
7.50%, 7/01/12 (e)	3,500	3,381,875
10.50%, 7/01/13	1,500	1,498,125
Ply Gem Industries, Inc., 11.75%, 6/15/13	725	746,750
		6,298,375

Corporate Bonds	Par (000)	Value
Chemicals 3.0%		
American Pacific Corp., 9.00%, 2/01/15	\$ 610	\$ 603,138
CF Industries, Inc., 6.88%, 5/01/18	770	810,425
GEO Specialty Chemicals, Inc. (b):		
7.50%, 3/31/15 (f)(g)	1,869	1,214,605
10.00%, 3/31/15	1,839	1,195,168
OXEA Finance/Cy SCA, 9.50%, 7/15/17 (b)	240	253,200
Wellman Holdings, Inc., Subordinate Note (g):		
(Second Lien), 10.00%, 1/29/19 (b)	2,383	2,073,210
(Third Lien), 5.00%, 1/29/19 (f)	1,680	655,335
		6,805,081

Commercial Banks 2.0%

CIT Group, Inc., 7.00%, 5/01/17	4,845	4,555,812
---------------------------------	-------	-----------

Commercial Services & Supplies 1.0%

ACCO Brands Corp., 10.63%, 3/15/15	365	401,500
Clean Harbors, Inc., 7.63%, 8/15/16	700	717,500
The Geo Group, Inc., 7.75%, 10/15/17 (b)	450	463,500
RSC Equipment Rental, Inc., 10.00%, 7/15/17 (b)	550	599,500
		2,182,000

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Construction Materials 1.2%

Nortek, Inc., 11.00%, 12/01/13	2,581	2,720,173
--------------------------------	-------	-----------

Consumer Finance 1.4%

Credit Acceptance Corp., 9.13%, 2/01/17 (b)	300	310,875
Ford Motor Credit Co. LLC: 3.28%, 1/13/12 (e)	1,340	1,313,200
6.63%, 8/15/17	400	406,549
Inmarsat Finance Plc, 7.38%, 12/01/17 (b)	1,150	1,178,750
		3,209,374

Containers & Packaging 2.3%

Ball Corp., 6.75%, 9/15/20	325	342,062
Berry Plastics Corp., 8.25%, 11/15/15	1,100	1,102,750
Clondalkin Acquisition BV, 2.54%, 12/15/13 (b)(e)	2,000	1,745,000
Crown Americas LLC, 7.63%, 5/15/17 (b)	400	427,000
Graphic Packaging International, Inc., 9.50%, 6/15/17	555	591,075
Smurfit Kappa Funding Plc, 7.75%, 4/01/15	1,050	1,050,000
		5,257,887

Diversified Financial Services 4.1%

Ally Financial, Inc. (b): 8.30%, 2/12/15	4,700	4,888,000
7.50%, 9/15/20	1,650	1,633,500
Axcan Intermediate Holdings, Inc., 12.75%, 3/01/16	370	370,463
Highland Legacy Ltd., 6.72%, 6/01/11 (b)(e)	3,081	1,417,351
Reynolds Group DL Escrow, Inc., 7.75%, 10/15/16 (b)	955	962,162
		9,271,476

Diversified Telecommunication Services 2.8%

Frontier Communications Corp., 8.25%, 4/15/17	1,460	1,543,950
ITC Deltacom, Inc., 10.50%, 4/01/16	900	886,500
Nordic Telephone Co. Holdings ApS, 8.88%, 5/01/16 (b)	180	189,000
Qwest Corp., 8.38%, 5/01/16	3,000	3,495,000
tw telecom holdings, Inc., 8.00%, 3/01/18	230	239,200
		6,353,650

Energy Equipment & Services 0.8%

Compagnie Générale de Géophysique-Veritas, 7.50%, 5/15/15	965	955,350
Expro Finance Luxembourg SCA, 8.50%, 12/15/16 (b)	1,000	935,000
		1,890,350

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Senior High Income Fund, Inc. (ARK)
(Percentages shown are based on Net Assets)

Corporate Bonds	Par (000)	Value
Food & Staples Retailing 0.4%		
Rite Aid Corp., 9.75%, 6/12/16	\$ 825	\$ 876,562
Food Products 0.7%		
B&G Foods, Inc., 7.63%, 1/15/18	500	514,375
Bumble Bee Foods LLC, 7.75%, 12/15/15 (b)	380	401,850
Smithfield Foods, Inc., 10.00%, 7/15/14 (b)	630	703,237
		1,619,462
Health Care Equipment & Supplies 0.7%		
DJO Finance LLC, 10.88%, 11/15/14	710	760,587
Hologic, Inc., 2.00%, 12/15/37 (g)(h)	830	750,113
		1,510,700
Health Care Providers & Services 1.8%		
American Renal Holdings, 8.38%, 5/15/18 (b)	245	245,000
HCA, Inc., 8.50%, 4/15/19	210	230,213
inVentiv Health, Inc., 10.00%, 8/15/18 (b)	210	205,275
Tenet Healthcare Corp.:		
10.00%, 5/01/18	850	956,250
8.88%, 7/01/19	2,230	2,411,187
		4,047,925
Health Care Technology 0.8%		
IMS Health, Inc., 12.50%, 3/01/18 (b)	1,580	1,830,825
Hotels, Restaurants & Leisure 1.2%		
Diamond Resorts Corp., 12.00%, 8/15/18 (b)	540	510,300
Little Traverse Bay Bands of Odawa Indians, 10.25%, 2/15/14 (a)(b)(c)	1,210	408,375
MGM Mirage, 13.00%, 11/15/13	80	92,400
MGM Resorts International:		
10.38%, 5/15/14	720	784,800
11.13%, 11/15/17	750	838,125
Marina District Finance Co., Inc., 9.88%, 8/15/18 (b)	160	159,600
Tropicana Entertainment LLC, Series WI, 9.63%, 12/15/14 (a)(c)	220	161
		2,793,761
Household Durables 0.9%		

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Beazer Homes USA, Inc., 12.00%, 10/15/17	1,000	1,126,250
K. Hovnanian Enterprises, Inc., 10.63%, 10/15/16	900	873,000
		1,999,250

Independent Power Producers & Energy Traders 2.7%

The AES Corp., 8.75%, 5/15/13 (b)	139	141,259
Calpine Construction Finance Co. LP, 8.00%, 6/01/16 (b)	1,600	1,680,000
Energy Future Holdings Corp., 10.00%, 1/15/20 (b)	1,065	1,025,598
NRG Energy, Inc.:		
7.25%, 2/01/14	2,020	2,060,400
7.38%, 2/01/16	375	377,812
7.38%, 1/15/17	365	367,738
8.50%, 6/15/19	500	513,750
		6,166,557

Industrial Conglomerates 1.5%

Sequa Corp. (b):		
11.75%, 12/01/15	1,430	1,472,900
13.50%, 12/01/15 (f)	1,930	2,007,176
		3,480,076

Machinery 1.7%

ESCO Corp., 4.41%, 12/15/13 (b)(e)	1,540	1,401,400
Navistar International Corp., 8.25%, 11/01/21	1,500	1,571,250
Titan International, Inc., 8.00%, 1/15/12	770	800,800
		3,773,450

Corporate Bonds	Par (000)	Value
Media 6.5%		
Affinion Group, Inc., 10.13%, 10/15/13	\$ 1,455	\$ 1,491,375
CCO Holdings LLC, 7.88%, 4/30/18 (b)	1,075	1,112,625
CSC Holdings, Inc., 8.50%, 4/15/14	390	426,075
Clear Channel Worldwide Holdings, Inc.:		
9.25%, 12/15/17	340	352,750
Series B, 9.25%, 12/15/17	2,757	2,891,404
DISH DBS Corp.:		
7.00%, 10/01/13	850	885,062
6.63%, 10/01/14	750	766,875
Gannett Co., Inc.:		
10.00%, 4/01/16	205	229,100
9.38%, 11/15/17 (b)	530	580,350
Interactive Data Corp., 10.25%, 8/01/18 (b)	900	933,750
McClatchy Co., 11.50%, 2/15/17 (b)	745	769,213
Nielsen Finance LLC, 11.63%, 2/01/14	1,000	1,121,250
Regal Entertainment Group, 9.13%, 8/15/18	290	297,250
UPC Germany GmbH, 8.13%, 12/01/17 (b)	1,500	1,541,250
Virgin Media Secured Finance Plc, 6.50%, 1/15/18	1,250	1,300,000
		14,698,329

Metals & Mining 0.9%

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Aleris International, Inc., 9.00%, 12/15/14 (a)(c)	840	1,680
Murray Energy Corp., 10.25%, 10/15/15 (b)	260	265,850
RathGibson, Inc., 11.25%, 2/15/14 (a)(c)	2,175	23,381
Ryerson, Inc., 7.84%, 11/01/14 (e)	1,800	1,669,500
		<u>1,960,411</u>

Multiline Retail 0.8%

Dollar General Corp.:		
10.63%, 7/15/15	660	724,350
11.88%, 7/15/17 (f)	948	1,090,200
		<u>1,814,550</u>

Oil, Gas & Consumable Fuels 2.5%

Arch Coal, Inc., 8.75%, 8/01/16	140	151,550
Atlas Energy Operating Co. LLC:		
12.13%, 8/01/17	825	947,719
10.75%, 2/01/18	200	220,500
Coffeyville Resources LLC, 9.00%, 4/01/15 (b)	260	267,150
Consol Energy, Inc., 8.25%, 4/01/20 (b)	900	955,125
Crosstex Energy LP, 8.88%, 2/15/18	120	123,900
Denbury Resources, Inc.:		
9.75%, 3/01/16	520	573,300
8.25%, 2/15/20	351	374,692
Forest Oil Corp., 8.50%, 2/15/14	280	297,500
Massey Energy Co., 6.88%, 12/15/13	800	810,000
OPTI Canada, Inc., 9.00%, 12/15/12 (b)	1,000	1,002,500
		<u>5,723,936</u>

Paper & Forest Products 1.8%

Ainsworth Lumber Co. Ltd., 11.00%, 7/29/15 (b)(f)	1,356	1,159,529
Clearwater Paper Corp., 10.63%, 6/15/16	365	410,625
Georgia-Pacific LLC, 8.25%, 5/01/16 (b)	1,630	1,784,850
Verso Paper Holdings LLC:		
11.50%, 7/01/14	315	332,325
Series B, 4.22%, 8/01/14 (e)	485	397,700
		<u>4,085,029</u>

Pharmaceuticals 0.4%

Angiotech Pharmaceuticals, Inc., 4.29%, 12/01/13 (e)	955	771,163
---	-----	---------

Real Estate Investment Trusts (REITs) 0.3%

Omega Healthcare Investors, Inc., 7.50%, 2/15/20 (b)	530	552,525
---	-----	---------

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Senior High Income Fund, Inc. (ARK)
(Percentages shown are based on Net Assets)

Corporate Bonds	Par (000)	Value
Specialty Retail 0.4%		
United Auto Group, Inc., 7.75%, 12/15/16	\$ 845	\$ 806,975
Textiles, Apparel & Luxury Goods 0.5%		
Phillips-Van Heusen Corp.:		
7.38%, 5/15/20	485	499,550
7.75%, 11/15/23	215	233,952
Quiksilver, Inc., 6.88%, 4/15/15	525	485,625
		1,219,127
Wireless Telecommunication Services 3.4%		
Cricket Communications, Inc.:		
10.00%, 7/15/15	140	146,650
7.75%, 5/15/16	1,770	1,827,525
Digicel Group Ltd., 12.00%, 4/01/14 (b)	800	914,000
MetroPCS Wireless, Inc.:		
9.25%, 11/01/14	2,000	2,080,000
9.25%, 11/01/14	10	10,400
Nextel Communications, Inc.:		
Series E, 6.88%, 10/31/13	1,340	1,336,650
Series F, 5.95%, 3/15/14	100	96,625
Orascom Telecom Finance SCA, 7.88%, 2/08/14 (b)	395	375,250
Sprint Capital Corp.:		
7.63%, 1/30/11	220	223,850
8.38%, 3/15/12	325	343,687
6.88%, 11/15/28	370	308,950
		7,663,587
Total Corporate Bonds 54.7%		123,609,311

Floating Rate Loan Interests (e)

Aerospace & Defense 0.7%		
Hawker Beechcraft Acquisition Co., LLC:		
Letter of Credit Linked Deposit, 0.43%, 3/26/14	52	41,029
Term Loan, 2.26%, 3/26/14	866	689,965
TASC, Inc., Tranche B Term Loan, 5.75%, 12/18/15	875	877,187
		1,608,181

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Airlines 0.5%		
Delta Air Lines, Inc., Credit-Linked Deposit Loan, 0.11% 2.28%, 4/30/12	1,213	1,159,453
Auto Components 3.6%		
Affinion Group Holdings, Inc., Loan, 8.51%, 3/01/12 (f)	1,543	1,481,063
Affinion Group, Inc., Tranche B Term Loan, 5.00%, 10/09/16	748	719,756
Allison Transmission, Inc., Term Loan, 3.04%, 8/07/14	5,421	4,995,521
Dana Holding Corp., Term Advance, 4.52% 6.50%, 1/30/15	592	580,817
The Goodyear Tire & Rubber Co., Loan (Second Lien), 2.24%, 4/30/14	300	277,734
		8,054,891
Automobiles 0.7%		
Ford Motor Co.:		
Tranche B-1 Term Loan, 3.03%, 12/15/13	1,548	1,489,061
Tranche B-2 Term Loan, 3.03%, 12/15/13	170	162,994
		1,652,055
Beverages 0.6%		
SW Acquisitions Co., Inc., Term Loan, 5.75%, 6/01/16	1,443	1,444,603
Floating Rate Loan Interests (e)		
	Par (000)	Value
Building Products 0.9%		
Building Materials Corp. of America, Term Loan Advance, 3.06%, 2/22/14	\$ 415	\$ 407,498
Goodman Global, Inc., Term Loan, 6.25%, 2/13/14	1,523	1,528,082
		1,935,580
Capital Markets 0.2%		
Nuveen Investments, Inc., Term Loan (First Lien), 3.48% 3.53%, 11/13/14	625	551,758
Chemicals 3.3%		
CF Industries, Inc., Term Loan B-1, 4.50%, 4/05/15	796	799,522
Chemtura Corp.:		
Debtor in Possession Term Facility, 6.00%, 2/11/11	800	798,000
Exit Term Loan, 5.50%, 8/16/16	800	803,334
Gentek Holding, LLC, Tranche B Term Loan, 7.00%, 10/29/14	362	362,077
Nalco Co., Term Loan, 6.50%, 5/13/16	1,015	1,018,132
PQ Corp. (FKA Niagara Acquisition, Inc.), Term Loan (First Lien), 3.52% 3.73%, 7/30/14	2,166	1,980,629
Rockwood Specialties Group, Inc., Term Loan H, 6.00%, 5/15/14	736	735,226
Solutia, Inc., Term Loan, 4.75%, 3/17/17	997	996,396
		7,493,316

Commercial Banks 0.5%

CIT Group, Inc., Term Loan, 6.25%, 1/20/12	1,025	1,021,659
--	-------	-----------

Commercial Services & Supplies 3.8%

ARAMARK Corp.:		
Letter of Credit-1 Facility, 0.11%, 1/26/14	33	31,209
Letter of Credit-2 Facility, 0.11%, 7/26/16	41	40,039
U.S. Term Loan, 2.41%, 1/26/14	457	431,557
U.S. Term Loan B, 3.78%, 7/26/16	628	608,813
AWAS Finance Luxembourg Sarl, Term Loan, 7.75%, 6/10/16	1,125	1,131,562
Altegrity, Inc., Incremental Term Loan, 7.75%, 2/21/15	1,500	1,494,375
Casella Waste Systems, Inc., Term Loan B, 7.00%, 4/09/14	218	218,889
Delos Aircraft, Inc., Term Loan 2, 7.00%, 3/17/16	1,075	1,080,823
International Lease Finance Corp., Term Loan 1, 6.75%, 3/17/15	1,500	1,511,876
Quad Graphics, Term Loan, 5.50%, 4/20/16	500	477,000
Synagro Technologies, Inc., Term Loan (First Lien), 2.27% 2.28%, 4/02/14	422	356,370
West Corp., Incremental Term Loan B-3, 7.25%, 10/24/13	1,093	1,089,582
		8,472,095

Construction & Engineering 0.9%

Brand Energy & Infrastructure Services, Inc. (FR Brand Acquisition Corp.), Synthetic Letter of Credit, Term Loan (First Lien), 0.56%, 2/07/14		
	500	455,625
Safway Services, LLC, First Out Tranche Loan, 9.00%, 12/18/17	1,500	1,500,000
		1,955,625

Construction Materials 0.2%

Fairmount Minerals Ltd., Term Loan B, 6.25%, 8/05/16	350	350,146
--	-----	---------

Consumer Finance 1.1%

AGFS Funding Co., Term Loan, 7.25%, 4/21/15	2,500	2,470,312
---	-------	-----------

Containers & Packaging 0.4%

Anchor Glass Container Corp., Term Loan (First Lien), 6.00%, 3/02/16	149	147,261
BWAY Holding Co., Term Loan B, 5.50% 6.00%, 6/16/17	197	196,326
Berry Plastics Holding Corp., Term Loan C, 2.32% 2.38%, 4/03/15	496	452,306

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Senior High Income Fund, Inc. (ARK)
(Percentages shown are based on Net Assets)

Floating Rate Loan Interests (e)	Par (000)	Value
Containers & Packaging (concluded)		
ICL Industrial Containers ULC/ICL Contenants Industriels ULC (FKA BWAY Corp.), Term Loan C, 5.50% 6.00%, 6/16/17	\$ 18	\$ 18,417
		<u>814,310</u>
Diversified Consumer Services 2.6%		
Coinmach Service Corp., Term Loan, 3.35%, 11/14/14	1,955	1,704,417
Laureate Education, Series A New Term Loan, 7.00%, 8/15/14	2,945	2,895,832
ServiceMaster Co.:		
Closing Date Loan, 2.77% 3.04%, 7/24/14	1,200	1,103,366
Delayed Draw Term Loan, 2.77%, 7/24/14	120	109,879
		<u>5,813,494</u>
Diversified Financial Services 0.8%		
Reynolds Group Holdings, Inc.:		
Incremental US Term Loan, 6.25%, 5/05/16	800	794,334
US Term Loan, 6.25%, 5/05/16	894	889,679
		<u>1,684,013</u>
Diversified Telecommunication Services 2.0%		
Cincinnati Bell, Inc., Tranche B Term Loan, 6.50%, 6/11/17	1,022	1,014,769
Integra Telecom Holdings, Inc., Term Loan, 9.25%, 4/15/15	925	922,687
Level 3 Communications, Incremental Term Loan, 2.53% 2.78%, 3/13/14	2,225	1,993,113
Wind Telecomunicazioni SpA:		
Term Loan Facility B2, 4.66%, 5/26/14	300	291,187
Term Loan Facility C2, 3.66%, 5/24/13	300	291,188
		<u>4,512,944</u>
Electric Utilities 0.8%		
New Development Holdings LLC, Term Loan, 7.00%, 7/03/17	1,750	1,767,500
Electrical Equipment 0.3%		
Baldor Electric Co., Term Loan, 5.25% 5.50%, 1/31/14	585	584,773

Electronic Equipment, Instruments & Components 0.8%

CDW LLC (FKA CDW Corp.), Term Loan, 4.28%, 10/10/14	1,212	1,085,335
Styron Sarl, Term Loan, 7.50%, 6/17/16	800	806,248
		1,891,583

Energy Equipment & Services 0.4%

MEG Energy Corp., Tranche D Term Loan, 6.00%, 4/03/16	967	964,650
---	-----	---------

Food & Staples Retailing 0.8%

Pierre Foods, Term Loan, 7.00%, 3/03/16	674	671,957
Pilot Travel Centers LLC, Initial Tranche B Term Loan, 5.25%, 6/30/16	1,078	1,079,742
		1,751,699

Food Products 1.7%

Dole Food Co., Inc., Tranche B-1 Term Loan, 5.00% 5.50%, 3/02/17	437	437,396
Michael Foods Group, Inc. (FKA M-Foods Holdings, Inc.), Term Loan B, 6.25%, 6/29/16	500	500,357
Pilgrim s Pride Corp., Term Loan A, 5.53%, 12/01/12	725	717,750
Pinnacle Foods Finance LLC, Tranche D Term Loan, 6.00%, 4/02/14	1,096	1,097,370
Solvest, Ltd. (Dole), Tranche C-1 Term Loan, 5.00% 5.50%, 3/02/17	1,081	1,083,316
		3,836,189

Floating Rate Loan Interests (e)	Par (000)	Value
----------------------------------	--------------	-------

Health Care Equipment & Supplies 0.4%

DJO Finance LLC (FKA ReAble Therapeutics Finance LLC), Term Loan, 3.26%, 5/20/14	\$ 878	\$ 833,117
--	--------	------------

Health Care Providers & Services 4.9%

CHS/Community Health Systems, Inc.:		
Delayed Draw Term Loan, 2.55%, 7/25/14	122	115,481
Term Loan Facility, 2.55%, 7/25/14	2,346	2,212,287
DaVita, Inc., Tranche B-1 Term Loan, 1.77% 2.04%, 10/05/12		
	300	295,374
Gentiva Health Services, Inc., Term Loan B, 6.75%, 8/12/16		
	600	592,125
HCA, Inc.:		
Tranche A-1 Term Loan, 2.03%, 11/16/12	2,495	2,400,150
Tranche B-1 Term Loan, 2.78%, 11/18/13	125	120,312
Harden Healthcare LLC:		
Add-on Term Loan, 8.50%, 2/22/15	396	388,436
Tranche A Term Loan, 7.75%, 3/02/15	1,400	1,372,000
inVentiv Health, Inc. (FKA Ventive Health, Inc.), Term Loan B, 6.50%, 7/31/16		
	2,000	1,996,250

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Renal Advantage Holdings, Inc., Tranche B Term Loan, 6.00%, 6/03/16	600	600,000
Vanguard Health Holding Co. II, LLC (Vanguard Health Systems, Inc.), Initial Term Loan, 5.00%, 1/29/16	967	955,875
		11,048,290

Health Care Technology 0.6%

IMS Health Inc., Tranche B Dollar Term Loan, 5.25%, 2/26/16	1,454	1,457,111
---	-------	-----------

Hotels, Restaurants & Leisure 3.1%

Harrah's Operating Co., Inc.:		
Term Loan B-3, 3.50% - 3.53%, 1/28/15	976	834,364
Term Loan B-4, 9.50%, 10/31/16	1,244	1,269,316
Six Flags Theme Parks, Inc., Tranche B Term Loan (First Lien), 6.00%, 6/30/16	1,838	1,817,057
Universal City Development Partners Ltd., Loan, 7.75%, 11/06/14	1,244	1,249,969
VML US Finance LLC (FKA Venetian Macau):		
Term B Delayed Draw Project Loan, 5.04%, 5/25/12	546	536,546
Term B Funded Project Loan, 5.04%, 5/27/13	1,415	1,386,668
		7,093,920

IT Services 3.6%

Audio Visual Services Group, Inc., Tranche B Term Loan (First Lien), 2.79%, 2/28/14 (f)	990	732,468
Ceridian Corp., US Term Loan, 3.26%, 11/09/14	1,470	1,307,975
EVERTEC, Inc., Term Loan B, 7.00%, 8/20/16	675	659,813
First Data Corp.:		
Initial Tranche B-1 Term Loan, 3.01%, 9/24/14	175	149,384
Initial Tranche B-2 Term Loan, 3.01%, 9/24/14	1,449	1,235,373
Initial Tranche B-3 Term Loan, 3.01%, 9/24/14	1,073	914,979
SunGard Data Systems, Inc. (Solar Capital Corp.), Incremental Term Loan, 6.75%, 2/28/14	853	851,796
TransUnion LLC, Term Loan, 6.75%, 6/15/17	2,250	2,270,392
		8,122,180

Independent Power Producers & Energy Traders 0.3%

Dynegy Holdings, Inc.:		
Term Letter of Credit Facility, 4.02%, 4/02/13	192	189,027
Tranche B Term Loan, 4.02%, 4/02/13	15	15,139
Texas Competitive Electric Holdings Co., LLC (TXU):		
Initial Tranche B-2 Term Loan, 3.79% - 4.07%, 10/10/14	481	364,674
Initial Tranche B-3 Term Loan, 3.79% - 4.03%, 10/10/14	226	170,298
		739,138

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Senior High Income Fund, Inc. (ARK)
(Percentages shown are based on Net Assets)

Floating Rate Loan Interests (e)	Par (000)	Value
Industrial Conglomerates 0.2%		
Sequa Corp., Term Loan, 3.79%, 12/03/14	\$ 475	\$ 437,000
Insurance 0.1%		
Alliant Holdings I, Inc., Term Loan, 3.53%, 8/21/14	139	132,262
Internet & Catalog Retail 0.3%		
FTD Group, Inc., Tranche B Term Loan, 6.75%, 8/26/14	573	573,173
Leisure Equipment & Products 0.1%		
Fender Musical Instruments Corp.:		
Delayed Draw Loan, 2.55%, 6/09/14	109	90,666
Initial Loan, 2.79%, 6/09/14	215	179,482
		<u>270,148</u>
Machinery 0.3%		
Oshkosh Truck Corp., Term Loan B, 6.44% 6.54%, 12/06/13	661	664,534
Media 9.6%		
Cengage Learning Acquisitions, Inc. (Thomson Learning), Tranche 1 Incremental Term Loan, 7.50%, 7/03/14	3,435	3,423,727
Charter Communications Operating, LLC:		
New Term Loan, 2.26%, 3/06/14	273	258,179
Term Loan B1, 7.25%, 3/06/14	873	892,087
Term Loan C, 3.79%, 9/06/16	3,093	2,958,615
Ellis Communications KDOC, LLC, Loan, 10.00%, 12/30/11	3,879	1,454,482
HMH Publishing Co., Ltd., Tranche A Term Loan, 5.79%, 6/12/14 (f)	1,888	1,718,697
Hanley-Wood, LLC, Term Loan, 2.56% 2.63%, 3/10/14	975	421,687
Interactive Data Corp., Term Loan, 6.75%, 1/29/17	700	704,083
Mediacom Illinois, LLC (FKA Mediacom Communications, LLC), Tranche D Term Loan, 5.50%, 3/31/17	496	486,164
Newsday, LLC, Fixed Rate Term Loan, 10.50%, 8/01/13	3,250	3,449,062
Penton Media, Inc., Term Loan (First Lien), 5.00%, 8/01/14 (f)	728	502,507
Sinclair Television Group, Inc., New Tranche B Loan, 5.50% 6.25%, 10/29/15	1,011	1,011,982
Sunshine Acquisition Ltd. (FKA HIT Entertainment), Term Facility, 5.68%, 6/01/12	970	904,682

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

TWCC Holdings Corp., Replacement Term Loan, 5.00%, 9/14/15	1,040	1,039,071
UPC Financing Partnership, Facility Term Loan, 4.25%, 12/30/16	1,750	1,680,000
Yell Group Plc Facility A3-Yell Finance (UK) Ltd., 2.60%, 8/09/11	703	678,516
		<u>21,583,541</u>

Metals & Mining 0.7%

Euramax International, Inc., Domestic Term Loan: 10.00%, 6/29/13	858	797,682
13.00%, 6/29/13 (f)	896	832,873
		<u>1,630,555</u>

Multi-Utilities 0.2%

FirstLight Power Resources, Inc. (FKA NE Energy, Inc.): Synthetic Letter of Credit, 0.41%, 11/01/13	7	6,669
Term B Advance (First Lien), 3.06%, 11/01/13	428	396,712
		<u>403,381</u>

Floating Rate Loan Interests (e)	Par (000)	Value
----------------------------------	--------------	-------

Multiline Retail 0.6%

Dollar General Corp., Tranche B-2 Term Loan, 3.01% 3.03%, 7/07/14	\$ 983	\$ 945,881
The Neiman Marcus Group, Inc., Term Loan, 2.30%, 4/06/13	507	480,151
		<u>1,426,032</u>

Oil, Gas & Consumable Fuels 1.0%

Big West Oil, LLC, Term Loan, 12.00%, 7/23/15	750	759,062
Tronox Worldwide LLC: Tranche B-1 Term Loan, 11.25%, 9/20/10	1,182	1,191,960
Tranche B-2 Term Loan, 11.25%, 9/20/10	318	320,228
		<u>2,271,250</u>

Personal Products 0.0%

American Safety Razor Co., LLC, Term Loan (First Lien), 8.75%, 7/31/13 (f)	81	74,352
---	----	--------

Pharmaceuticals 0.7%

Warner Chilcott Co., LLC, Term Loan A, 6.00%, 10/30/14	382	381,432
Warner Chilcott Corp.: Additional Term Loan B, 6.25%, 4/30/15	360	359,650
Term Loan B-1, 6.25%, 4/30/15	149	148,410
Term Loan B-2, 6.25%, 4/30/15	246	245,418
Term Loan B-3, 6.50%, 2/20/16	385	386,364
Term Loan B-4, 6.50%, 2/20/16	125	125,365
		<u>1,646,639</u>

Professional Services 0.4%

Booz Allen Hamilton, Inc., Tranche C Term Loan, 6.00%, 7/31/15	995	994,751
--	-----	---------

Real Estate Management & Development 0.7%

Realogy Corp., Synthetic Letter of Credit, 0.11%, 10/10/13	1,853	1,598,751
--	-------	-----------

Semiconductors & Semiconductor Equipment 0.2%

Freescale Semiconductor, Inc., Extended Maturity Term Loan, 4.56%, 12/01/16	390	348,745
---	-----	---------

Software 0.2%

Telcordia Technologies, Inc., Term Loan, 6.75%, 4/30/16	549	548,168
---	-----	---------

Specialty Retail 1.2%

Burlington Coat Factory Warehouse Corp., Term Loan, 2.54% 2.66%, 5/28/13	355	336,274
Michaels Stores, Inc.:		
Term Loan B-1, 2.63% 2.81%, 10/31/13	733	691,584
Term Loan B-2, 4.88% 5.06%, 7/31/16	798	769,875
Toys R Us, Inc., Term Loan B, 6.00%, 8/17/16	1,000	997,494

2,795,227

Textiles, Apparel & Luxury Goods 0.3%

Phillips Van Heusen Corp., U.S. Tranche B Term Loan, 4.75%, 5/06/16	748	751,718
---	-----	---------

Wireless Telecommunication Services 2.6%

Cavtel Holdings, LLC, Term Loan, 10.50%, 12/31/12 (f)	401	378,664
Digicel International Finance Ltd., U.S. Term Loan (Non-Rollover), 3.06%, 3/30/12	2,352	2,295,875
MetroPCS Wireless, Inc.:		
Tranche B-1 Term Loan, 2.56%, 11/03/13	42	40,529
Tranche B-2 Term Loan, 3.81%, 11/03/16	454	445,710
Vodafone Americas Finance 2 Inc., Initial Loan, 6.88%, 7/30/15	2,750	2,750,000

5,910,778

Total Floating Rate Loan Interests 59.9%

135,145,590

See Notes to Financial Statements.

Schedule of Investments (continued)

BlackRock Senior High Income Fund, Inc. (ARK)
(Percentages shown are based on Net Assets)

Other Interests (i)	Beneficial Interest (000)	Value
Auto Components 0.0%		
Intermet Liquidating Trust	\$ 321	\$ 96
Diversified Financial Services 0.4%		
J.G. Wentworth LLC Preferred Equity Interests (j)		(k) 951,244
Media 0.0%		
Adelphia Preferred Escrow	3	
Adelphia Recovery Trust	250	25
		25
Metals & Mining 0.3%		
RathGibson Acquisition Co., LLC (j)	137	729,063
Total Other Interests 0.7%		1,680,428
Warrants (l)		
Media 0.0%		
Charter Communications, Inc. (Expires 11/30/14)	6,862	37,741
Total Warrants 0.0%		37,741
Total Long-Term Investments (Cost \$286,008,061) 116.9%		264,109,957
Short-Term Securities		
Bank of New York Cash Reserves, 0.01% (m)	\$ 1,257	1,257,197
Total Short-Term Securities (Cost \$1,257,197) 0.6%		1,257,197
Total Investments (Cost \$287,265,258*) 117.5%		265,367,154

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Liabilities in Excess of Other Assets	(17.5)%	(39,482,031)
Net Assets	100.0%	\$ 225,885,123

* The cost and unrealized appreciation (depreciation) of investments as of August 31, 2010, as computed for federal income tax purposes, were as follows:

Aggregate cost	\$ 286,641,288
Gross unrealized appreciation	\$ 8,966,866
Gross unrealized depreciation	(30,241,000)
Net unrealized depreciation	\$ (21,274,134)

- (a) Non-income producing security.
- (b) Security exempt from registration under Rule 144A of the Securities Act of 1933. These securities may be resold in transactions exempt from registration to qualified institutional investors.
- (c) Issuer filed for bankruptcy and/or is in default of interest payments.
- (d) As a result of bankruptcy proceedings, the company did not repay the principal amount or accrued interest of the security upon maturity.
- (e) Variable rate security. Rate shown is as of report date.
- (f) Represents a payment-in-kind security which may pay interest/dividends in additional face/shares.
- (g) Convertible security.
- (h) Represents a step-down bond that pays an initial coupon rate for the first period and then a lower coupon rate for the following periods. Rate shown reflects the current yield as of report date.
- (i) Other interests represent beneficial interest in liquidation trusts and other reorganization entities and are non-income producing.
- (j) The investment is held by a wholly-owned taxable subsidiary of the Fund. (k) Amount is less than \$1,000.
- (l) Warrants entitle the Fund to purchase a predetermined number of shares of common stock and are non-income producing. The purchase price and number of shares are subject to adjustment under certain conditions until the expiration date, if any.
- (m) Represents the current yield as of report date.

Investments in companies considered to be an affiliate of the Fund during the period, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held at February 28, 2010	Net Activity	Shares Held at August 31, 2010	Income
BlackRock Liquidity Funds, TempFund, Institutional Class	1,938,484	(1,938,484)		\$ 2,481

Foreign currency exchange contracts as of August 31, 2010 were as follows:

Currency Purchased	Currency Sold	Counterparty	Settlement Date	Unrealized Appreciation
USD 1,218,745	CAD 1,260,500	Citibank NA	10/20/10	\$ 37,624

Credit default swaps on single-name issuers buy protection outstanding as of August 31, 2010 were as follows:

Issuer	Pay Fixed Rate	Counterparty	Expiration	Notional Amount (000)	Unrealized Appreciation
K. Hovnanian Enterprises, Inc.	5.00%	Goldman Sachs Bank USA	December 2011	\$ 460	\$ 27,354
K. Hovnanian Enterprises, Inc.	5.00%	Goldman Sachs Bank USA	September 2013	\$ 200	16,953
Total					\$ 44,307

For Fund compliance purposes, the Fund's industry classifications refer to any one or more of the industry sub-classifications used by one or more widely recognized market indexes or rating group indexes, and/or as defined by Fund management. This definition may not apply for purposes of this report, which may combine such industry sub-classifications for reporting ease.

Fair Value Measurements Various inputs are used in determining the fair value of investments and derivatives, which are as follows:

Level 1 price quotations in active markets/exchanges for identical assets and liabilities

Level 2 other observable inputs (including, but not limited to: quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

Level 3 unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available (including the Fund's own assumptions used in determining the fair value of investments and derivatives)

The inputs or methodologies used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. For information about the Fund's policy regarding valuation of investments and other significant accounting policies, please refer to Note 1 of the Notes to Financial Statements.

See Notes to Financial Statements.

Schedule of Investments (concluded)

BlackRock Senior High Income Fund, Inc. (ARK)

The following tables summarize the inputs used as of August 31, 2010 in determining the fair valuation of the Fund's investments and derivatives:

Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Investments in Securities:				
Long-Term Investments:				
Common Stocks	\$ 1,742,075	\$ 1,455,720	\$ 439,092	\$ 3,636,887
Corporate Bonds		117,053,310	6,556,001	123,609,311
Floating Rate Loan Interests		111,466,918	23,678,672	135,145,590
Other Interests			1,680,428	1,680,428
Warrants	37,741			37,741
Short-Term Securities		1,257,197		1,257,197
Liabilities:				
Unfunded Loan Commitments			(21,065)	(21,065)
Total	\$ 1,779,816	\$ 231,233,145	\$ 32,333,128	\$ 265,346,089

Derivative Financial Instruments ¹				
Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Credit contracts		\$ 44,307		\$ 44,307
Foreign currency exchange contracts		37,624		37,624
Total		\$ 81,931		\$ 81,931

¹ Derivative financial instruments are swaps and foreign currency exchange contracts. Swaps and foreign currency exchange contracts are valued at the unrealized appreciation/depreciation on the instrument.

The following table is a reconciliation of Level 3 investments for which significant unobservable inputs were used in determining fair value:

	Common Stocks	Corporate Bonds	Floating Rate Loan Interests	Other Interests	Unfunded Loan Commitments	Total
Assets/Liabilities:						
Balance, as of February 28, 2010	\$ 179,112	\$ 8,012,790	\$ 17,012,972	\$ 1,066,529		\$ 26,271,403
Accrued discounts/premiums		76,793	67,437			144,230

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Net realized gain (loss)		978	(144,168)	140,206		(2,984)
Net change in unrealized appreciation/depreciation ²	291,009	(656,826)	1,002,706	(55,075)	\$ (21,065)	560,749
Purchases		40,983	4,032,676			4,073,659
Sales		(918,717)	(8,741,584)	(200,295)		(9,860,596)
Transfers in ³	384,143		12,515,127	729,063		13,628,333
Transfers out ³	(415,172)		(2,066,494)			(2,481,666)
Balance, as of August 31, 2010	\$ 439,092	\$ 6,556,001	\$ 23,678,672	\$ 1,680,428	\$ (21,065)	\$ 32,333,128

² Included in the related net change in unrealized appreciation/depreciation on the Statements of Operations. The change in the unrealized appreciation/depreciation on the securities still held on August 31, 2010 was \$(200,839).

³ The Fund's policy is to recognize transfers in and transfers out as of the end of the period of the event or the change in circumstances that caused the transfer.

See Notes to Financial Statements.

SEMI-ANNUAL REPORT

AUGUST 31, 2010

47

Statements of Assets and Liabilities

August 31, 2010 (Unaudited)	BlackRock Corporate High Yield Fund, Inc. (COY)	BlackRock Corporate High Yield Fund III, Inc. (CYE)	BlackRock Debt Strategies Fund, Inc. (DSU)	BlackRock Floating Rate Income Strategies Fund II, Inc. (FRB)	BlackRock Senior High Income Fund, Inc. (ARK)
Assets					
Investments at value unaffiliated	\$ 280,727,944	\$ 316,071,672	\$ 520,591,903	\$ 170,165,651	\$ 265,367,154
Investments at value affiliated	322,368	2,569,493		1,227,551	
Unrealized appreciation on swaps	220,913	200,775	72,033		44,307
Unrealized appreciation on foreign currency exchange contracts	4,441	11,568	75,886	24,495	37,624
Unrealized appreciation on unfunded loan commitments				3,402	
Foreign currency at value ³	3,919	31,364	5,267	52,181	298
Cash	1,983,051				
Cash on deposit for financial futures contracts	700,000	730,000			
Interest receivable	5,215,987	5,713,643	6,444,882	1,449,301	3,098,007
Investments sold receivable	1,566,211	1,694,528	8,973,940	4,988,501	3,221,960
Swaps receivable	46,600	49,300	91,584		58,635
Principal paydowns receivable			1,687,486	21,787	45,562
Swap premium paid	412,021	224,500	96,183		553
Dividends receivable		13,331	57,825		
Commitment fees receivable			6,041	2,286	2,990
Dividends receivable affiliated			477		536
Prepaid expenses	18,345	19,510	35,515	11,127	18,293
Other assets	123,061	134,832	1,863,165	104,659	749,553
Total assets	291,344,861	327,464,516	540,002,187	178,050,941	272,645,472
Liabilities					
Loan payable	50,000,000	66,000,000	84,000,000	28,000,000	35,000,000
Unrealized depreciation on swaps	177,670	191,910	65,760		
Unrealized depreciation on foreign currency exchange contracts	31,655	44,736	47,671	45,263	
Unrealized depreciation on unfunded loan commitments	21,252	47,602	52,865	54,339	21,065
Cash held as collateral for swaps	100,000				
Deferred income			87,260	85,072	35,935
Investments purchased payable	2,615,318	2,819,567	23,418,982	9,806,337	11,376,646
Swap premiums received	262,224	271,711			
Investment advisory fees payable	121,007	162,340	261,246	106,599	109,616
Interest expense payable	99,466	124,416	177,668	61,251	76,258
Swaps payable	34,000	22,100	14,300		6,600
Margin variation payable	20,800	21,600			
Commitment fees payable	1,659	518			
Other affiliates payable	928	1,024	1,636	529	831

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

Officers and Directors fees payable	459	497	76,684	252	400
Income dividends payable			214,964		127,788
Other accrued expenses payable		1,456	24,342	13,112	5,210
Other liabilities	7,287			37,722	
Total liabilities	53,493,725	69,709,477	108,443,378	38,210,476	46,760,349
Net Assets	\$ 237,851,136	\$ 257,755,039	\$ 431,558,809	\$ 139,840,465	\$ 225,885,123

Net Assets Consist of

Paid-in capital ⁴	\$ 381,872,533	\$ 439,505,026	\$ 882,654,653	\$ 199,926,953	\$ 401,932,057
Undistributed (distributions in excess of) net investment income	1,564,261	607,410	(2,465,478)	(745,306)	3,813,705
Accumulated net realized loss	(140,824,582)	(177,042,955)	(370,880,215)	(52,717,235)	(158,023,391)
Net unrealized appreciation/depreciation	(4,761,076)	(5,314,442)	(77,750,151)	(6,623,947)	(21,837,248)
Net Assets	\$ 237,851,136	\$ 257,755,039	\$ 431,558,809	\$ 139,840,465	\$ 225,885,123
Net asset value	\$ 6.85	\$ 6.90	\$ 4.00	\$ 13.27	\$ 3.99
¹ Investments at cost unaffiliated	\$ 285,595,517	\$ 321,427,214	\$ 598,762,569	\$ 176,715,022	\$ 287,265,258
² Investments at cost affiliated	\$ 322,368	\$ 2,569,493		\$ 1,227,551	
³ Foreign currency at cost	\$ 3,942	\$ 31,596	\$ 4,860	\$ 52,907	\$ 308
⁴ Shares outstanding, 200 million shares authorized, par value \$0.10 per share	34,740,689	37,345,262	107,772,006	10,540,570	56,606,319

See Notes to Financial Statements.

Statements of Operations

Six Months Ended August 31, 2010 (Unaudited)	BlackRock Corporate High Yield Fund, Inc. (COY)	BlackRock Corporate High Yield Fund III, Inc. (CYE)	BlackRock Debt Strategies Fund, Inc. (DSU)	BlackRock Floating Rate Income Strategies Fund II, Inc. (FRB)	BlackRock Senior High Income Fund, Inc. (ARK)
Investment Income					
Interest	\$ 12,839,324	\$ 13,730,978	\$ 20,235,546	\$ 5,603,307	\$ 10,051,635
Facility and other fees	66,560	85,982	493,723	164,055	261,660
Dividends	61,537	144,039			
Dividends affiliated	2,350	1,690	5,765	2,472	2,481
Total income	12,969,771	13,962,689	20,735,034	5,769,834	10,315,776
Expenses					
Investment advisory	741,764	978,541	1,541,366	628,550	659,185
Borrowing costs ¹	134,220	143,307	232,416	88,716	140,825
Professional	56,180	50,219	114,878	64,537	74,059
Custodian	12,695	25,349	30,401	31,326	15,166
Printing	15,453	16,978	28,893	9,748	15,814
Accounting services	28,084	30,390	50,810	17,233	26,822
Transfer agent	21,731	20,573	50,524	17,337	28,526
Officer and Directors	11,732	12,795	22,819	7,010	11,690
Registration	6,176	6,521	20,096	4,735	10,191
Miscellaneous	35,231	36,520	34,459	19,833	17,723
Total expenses excluding interest expense	1,063,266	1,321,193	2,126,662	889,025	1,000,001
Interest expense	369,791	429,452	516,111	172,197	238,000
Total expenses	1,433,057	1,750,645	2,642,773	1,061,222	1,238,001
Less fees waived by advisor	(1,102)	(760)	(1,186)	(1,074)	(1,087)
Total expenses after fees waived	1,431,955	1,749,885	2,641,587	1,060,148	1,236,914
Net investment income	11,537,816	12,212,804	18,093,447	4,709,686	9,078,862
Realized and Unrealized Gain (Loss)					
Net realized gain (loss) from:					
Investments	2,999,165	3,583,729	(3,981,045)	(576,853)	(1,825,878)
Financial futures contracts	491,127	524,025			
Swaps	(604,102)	(248,804)	41,873	2,111	20,099
Foreign currency transactions	2,719,547	2,789,331	3,201,987	888,279	(19,045)

Edgar Filing: BLACKROCK SENIOR HIGH INCOME FUND, INC. - Form N-CSRS

	5,605,737	6,648,281	(737,185)	313,537	(1,824,824)
Net change in unrealized appreciation/depreciation on:					
Investments	1,397,957	1,344,908	15,644,633	1,490,889	5,632,315
Financial futures contracts	108,779	113,832			
Swaps	405,802	238,857	111,087	(856)	44,805
Foreign currency transactions	(1,392,930)	(1,473,543)	(1,793,437)	(613,192)	34,771
Unfunded loan commitments	30,391	67,977	(52,865)	(16,912)	(21,065)
	549,999	292,031	13,909,418	859,929	5,690,826
Total realized and unrealized gain	6,155,736	6,940,312	13,172,233	1,173,466	3,866,002
Net Increase in Net Assets Resulting from Operations	\$ 17,693,552	\$ 19,153,116	\$ 31,265,680	\$ 5,883,152	\$ 12,944,864

¹ See Note 6 of the Notes to Financial Statements for details of borrowings.

See Notes to Financial Statements.

SEMI-ANNUAL REPORT

AUGUST 31, 2010

49

Statements of Changes in Net Assets

	BlackRock Corporate High Yield Fund, Inc. (COY)		BlackRock Corporate High Yield Fund III, Inc. (CYE)	
	Six Months Ended August 31, 2010 (Unaudited)	Year Ended February 28, 2010	Six Months Ended August 31, 2010 (Unaudited)	Year Ended February 28, 2010
Increase (Decrease) in Net Assets:				
Operations				
Net investment income	\$ 11,537,816	\$ 22,380,112	\$ 12,212,804	\$ 23,836,686
Net realized gain (loss)	5,605,737	(18,246,371)	6,648,281	(16,068,173)
Net change in unrealized appreciation/depreciation	549,999	106,169,011	292,031	115,769,455
Net increase in net assets resulting from operations	17,693,552	110,302,752	19,153,116	123,537,968
Dividends to Shareholders From				
Net investment income	(10,622,990)	(25,342,365)	(11,200,041)	(25,189,541)
Capital Share Transactions				
Reinvestment of dividends	188,036	832,119	81,395	111,029
Net Assets				
Total increase in net assets	7,258,598	85,792,506	8,034,470	98,459,456
Beginning of period	230,592,538			