

BLACKROCK SENIOR HIGH INCOME FUND, INC.

Form N-Q

July 24, 2009

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM N-Q

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT INVESTMENT COMPANY

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: Donald C. Burke, Chief Executive Officer, BlackRock Senior High Income Fund, Inc., 800 Scudders Mill Road, Plainsboro, NJ, 08536. Mailing address: P.O. Box 9011, Princeton, NJ, 08543-9011

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

Date of fiscal year end: 02/28/2010

Date of reporting period: 05/31/2009

Item 1 – Schedule of Investments

BlackRock Senior High Income Fund, Inc.

Schedule of Investments May 31, 2009 (Unaudited)

(Percentages shown are based on Net Assets)

Industry	Corporate Bonds	Par (000)	Value
Aerospace & Defense - 3.1%	Hawker Beechcraft Acquisition Co. LLC, 8.50%, 4/01/15	USD 1,600	\$ 672,000
	Moog, Inc., 7.25%, 6/15/18 (a)	5,000	4,700,000
			5,372,000
Auto Components - 2.4%	The Goodyear Tire & Rubber Co., 8.625%, 12/01/11	4,000	3,890,000
	Lear Corp., 8.75%, 12/01/16	1,015	263,900
	Venture Holdings Co. LLC 12%, 6/01/09 (b)(c)	700	
	Venture Holdings Co. LLC Series B, 9.50%, 7/01/05 (b)(c)	3,325	333
			4,154,233
Building Products - 4.5%	Building Materials Corp. of America, 7.75%, 8/01/14	4,000	3,500,000
	CPG International I, Inc., 8.561%, 7/01/12 (d)	3,500	1,855,000
	CPG International I, Inc., 10.50%, 7/01/13	1,500	787,500
	Momentive Performance Materials, Inc. Series WI, 9.75%, 12/01/14	1,175	446,500
	Ply Gem Industries, Inc., 11.75%, 6/15/13	2,065	1,321,600
			7,910,600
Chemicals - 3.5%	American Pacific Corp., 9%, 2/01/15	610	532,225
	GEO Specialty Chemicals Corp., 7.50%, 3/31/15 (a)(e)(f)	1,822	1,184,440
	GEO Specialty Chemicals, Inc., 10%, 3/31/15	1,839	1,195,168
	Wellman Holdings, Inc. Second Lien Subordinate Note, 10%, 1/29/19 (a)(e)	2,383	2,383,000
	Wellman Holdings, Inc. Third Lien Subordinate Note, 5%, 1/29/19 (e)	1,557	778,500
Commercial Services & Supplies - 0.5%	ARAMARK Corp., 8.50%, 2/01/15	970	925,137
Construction Materials - 1.0%	Nortek, Inc., 10%, 12/01/13	2,630	1,702,925
Containers & Packaging - 2.8%	Berry Plastics Holding Corp., 4.504%, 9/15/14 (d)	100	65,500
	Clondalkin Acquisition BV, 2.629%, 12/15/13 (a)(d)	2,000	1,320,000
	Packaging Dynamics Finance Corp., 10%, 5/01/16 (a)	4,285	1,435,475
	Smurfit Kappa Funding Plc, 7.75%, 4/01/15	1,050	714,000
	Smurfit-Stone Container Enterprises, Inc., 8.375%, 7/01/12 (b)(c)	800	252,000
	Smurfit-Stone Container Enterprises, Inc., 8%, 3/15/17 (b)(c)	1,300	422,500
	Wise Metals Group LLC, 10.25%, 5/15/12	2,000	665,000
	Ford Motor Credit Co. LLC, 3.889%, 1/13/12 (d)	1,340	1,058,600

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

Diversified Financial Services -			
0.9%	Highland Legacy Ltd., 7.278%, 6/01/11 (a)(d)	4,076	611,377
			<u>1,669,977</u>
Diversified Telecommunication			
Services - 2.4%	Nordic Telephone Co. Holdings ApS, 8.875%, 5/01/16 (a)	1,200	1,200,000
	Qwest Corp., 8.375%, 5/01/16 (a)	3,000	2,947,500
			<u>4,147,500</u>
Electric Utilities - 0.4%	NSG Holdings LLC, 7.75%, 12/15/25 (a)	1,000	805,000

BlackRock Senior High Income Fund, Inc.

Schedule of Investments May 31, 2009 (Unaudited)

(Percentages shown are based on Net Assets)

Industry	Corporate Bonds	Par (000)	Value
Food & Staples Retailing - 0.2%	SUPERVALU, Inc., 8%, 5/01/16	USD 370	\$ 362,600
Food Products - 0.8%	Tyson Foods, Inc., 10.50%, 3/01/14 (a)	1,340	1,420,400
Health Care Providers & Services - 1.0%	Community Health Systems, Inc. Series WI, 8.875%, 7/15/15	1,880	1,858,850
Hotels, Restaurants & Leisure - 7.0%	American Real Estate Partners LP, 7.125%, 2/15/13	3,000	2,565,000
	CCM Merger, Inc., 8%, 8/01/13 (a)	4,125	2,846,250
	Harrah's Operating Co., Inc., 10%, 12/15/18 (a)	4,674	3,119,895
	Little Traverse Bay Bands of Odawa Indians, 10.25%, 2/15/14 (a)	1,210	523,325
	MGM Mirage, 10.375%, 5/15/14 (a)	400	412,000
	MGM Mirage, 11.125%, 11/15/17 (a)	750	785,625
	Shingle Springs Tribal Gaming Authority, 9.375%, 6/15/15 (a)	690	400,200
	Snoqualmie Entertainment Authority, 5.384%, 2/01/14 (a)(d)	500	261,250
	Tropicana Entertainment LLC Series WI, 9.625%, 12/15/14 (b)(c)	220	1,100
	Tunica-Biloxi Gaming Authority, 9%, 11/15/15 (a)	845	733,037
	Universal City Florida Holding Co. I, 5.778%, 5/01/10 (d)	1,000	715,000
			12,362,682
Household Durables - 0.4%	KB Home, 6.375%, 8/15/11	695	667,200
IT Services - 1.9%	First Data Corp., 9.875%, 9/24/15	5,000	3,400,000
Independent Power Producers & Energy Traders - 4.3%	Calpine Construction Finance Co. LP, 8%, 6/01/16 (a)	750	713,437
	Dynegy Holdings, Inc., 8.375%, 5/01/16	2,000	1,610,000
	Energy Future Holdings Corp., 11.25%, 11/01/17 (f)	1,590	819,682
	Texas Competitive Electric Holdings Co. LLC, 10.25%, 11/01/15	6,510	3,857,175
	Texas Competitive Electric Holdings Co. LLC, 11.25%, 11/01/16 (f)	1,267	495,789
			7,496,083
Industrial Conglomerates - 1.3%	Sequa Corp., 11.75%, 12/01/15 (a)	2,550	1,134,750
	Sequa Corp., 13.50%, 12/01/15 (a)(f)	3,590	1,162,357
			2,297,107
Machinery - 1.7%	ESCO Corp., 4.504%, 12/15/13 (a)(d)	1,540	1,108,800
	Ingersoll-Rand Global Holding Co. Ltd., 9.50%, 4/15/14	550	596,120
	RBS Global, Inc., 8.875%, 9/01/16	835	605,375

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

	Titan International, Inc., 8%, 1/15/12	770	662,200
			2,972,495
Marine - 0.1%	Navios Maritime Holdings, Inc., 9.50%, 12/15/14	324	247,860
Media - 4.1%	Affinion Group, Inc., 10.125%, 10/15/13	515	484,100
	CSC Holdings, Inc., 8.50%, 4/15/14 (a)	390	388,050
	Charter Communications Holdings LLC, 10%, 4/01/09 (b)(c)	1,121	5,605

BlackRock Senior High Income Fund, Inc.

Schedule of Investments May 31, 2009 (Unaudited)

(Percentages shown are based on Net Assets)

Industry	Corporate Bonds	Par (000)	Value
	Charter Communications Holdings LLC, 11.125%, 1/15/11 (b)(c)	USD 1,319	\$ 65,950
	Charter Communications Holdings LLC, 10%, 5/15/11 (b)(c)	660	3,300
	Intelsat Corp., 9.25%, 8/15/14 (a)	3,500	3,377,500
	Local Insight Regatta Holdings, Inc., 11%, 12/01/17	1,244	335,880
	Nielsen Finance LLC, 11.625%, 2/01/14 (a)	2,500	2,475,000
			7,135,385
Metals & Mining - 2.0%	Aleris International, Inc., 9%, 12/15/14 (b)(c)(f)	840	8,400
	RathGibson, Inc., 11.25%, 2/15/14	2,175	576,375
	Ryerson, Inc., 8.403%, 11/01/14 (a)(d)	3,360	1,852,200
	Teck Resources Ltd., 10.75%, 5/15/19 (a)	1,075	1,105,906
			3,542,881
Oil, Gas & Consumable Fuels - 6.9%	Chesapeake Energy Corp., 9.50%, 2/15/15	935	923,312
	Chesapeake Energy Corp., 6.875%, 1/15/16	4,000	3,450,000
	Compton Petroleum Finance Corp., 7.625%, 12/01/13	1,475	737,500
	Denbury Resources, Inc., 9.75%, 3/01/16	2,500	2,550,000
	Forest Oil Corp., 8.50%, 2/15/14 (a)	1,285	1,240,025
	Sabine Pass LNG LP, 7.50%, 11/30/16	2,985	2,417,850
	SandRidge Energy, Inc., 4.833%, 4/01/14 (d)	1,000	790,309
			12,108,996
Paper & Forest Products - 4.2%	Abitibi-Consolidated, Inc., 0%, 6/15/11 (b)(c)(d)	2,755	261,725
	Ainsworth Lumber Co. Ltd., 11%, 7/29/15 (a)	3,162	865,581
	Georgia-Pacific LLC, 8.25%, 5/01/16 (a)	1,630	1,605,550
	NewPage Corp., 7.278%, 5/01/12 (d)	5,175	2,509,875
	Verso Paper Holdings LLC, 11.50%, 7/01/14 (a)	315	289,699
	Verso Paper Holdings LLC Series B, 4.778%, 8/01/14 (d)	3,300	1,782,000
			7,314,430
Pharmaceuticals - 2.0%	Angiotech Pharmaceuticals, Inc., 4.418%, 12/01/13 (d)	2,690	1,936,800
	Elan Finance Plc, 7.75%, 11/15/11	1,650	1,485,000
			3,421,800
Real Estate Management & Development - 0.3%	Realty Corp., 10.50%, 4/15/14	1,200	441,000
Semiconductors & Semiconductor Equipment - 1.2%	Avago Technologies Finance Pte. Ltd., 6.168%, 6/01/13 (d)	766	647,270
	Spansion, Inc., 4.386%, 6/01/13 (a)(b)(c)	2,180	1,373,400

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

			2,020,670
Specialty Retail - 0.8%	Michaels Stores, Inc., 10%, 11/01/14	1,055	759,600
	United Auto Group, Inc., 7.75%, 12/15/16	915	704,550
			1,464,150
Textiles, Apparel & Luxury Goods - 1.3%	Quiksilver, Inc., 6.875%, 4/15/15	3,525	2,344,125
Wireless Telecommunication Services - 3.3%	Cricket Communicat		