BLACKROCK SENIOR HIGH INCOME FUND, INC.
Form N-Q
July 27, 2012 UNITED STATES
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: John M. Perlowski, Chief Executive Officer, BlackRock Senior High Income Fund, Inc., 55 East 52 <sup>nd</sup> Street, New York, NY 10055
Registrant's telephone number, including area code: (800) 882-0052, Option 4
Date of fiscal year end: 02/28/2013
Date of reporting period: 05/31/2012
Item 1 – Schedule of Investments

Consolidated Schedule of Investments May 31, 2012 (Unaudited)

Kratos Defense & Security Solutions, Inc., 10.00%,

Delta Air Lines, Inc., Series 2009-1, Class B, 9.75%, 6/17/18

6/01/17

Airlines 0.3%

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

Asset-Backed Securities	Par (000)		Value
American Airlines Pass-Through	(***)		
Trust, Series 2011-2, Class A,			
8.63%, 4/15/23	USD 325	5 \$	341,366
CSAM Funding, Series 2A,			
Class B1, 7.05%, 10/15/16	500	)	503,900
Fraser Sullivan CLO Ltd., Series			
2012-7A, Class C, 4.47%,			
4/20/23 (a)(b)	403	5	359,843
Gannett Peak CLO Ltd., Series			
2006-1X, Class A2, 0.83%,			
10/27/20 (b)	495	5	403,425
Goldentree Loan Opportunities VI			
Ltd., Series 2012-6A, Class D,			
4.61%, 4/17/22 (a)(b)	650	)	601,055
Greyrock CDO Ltd., Series 2005-			
1X, Class A2L, 0.89%,			
11/15/17 (b)	1,025	5	893,390
LCM LP (a)(b):			
Series 11A, Class D2, 4.28%,			
4/19/22	700	)	624,400
Series 9A, Class E, 4.67%,			
7/14/22	500	)	396,200
Symphony CLO Ltd., Series 2012-			
9A, Class D, 4.62%,			
4/16/22 (a)(b)	525	5	487,042
Total Asset-Backed Securities 2.0%			4,610,621
	cri.		
Common Stocks (c)	Share	3	
Chemicals 0.0%	142.46		65 524
GEO Specialty Chemicals, Inc.	142,460	)	65,534
Containers & Packaging 0.1%	10 17		114.550
Smurfit Kappa Plc	18,17		114,550
Metals & Mining 0.1% Euramax International	024	<del>.</del>	271 121
	933	,	271,121
Paper & Forest Products 0.3% Ainsworth Lumber Co. Ltd.	542.100	)	664.050
Software 0.0%	562,190	,	664,058
HMH Holdings/EduMedia	75,670	5	757
	73,070	,	1,116,020
Total Common Stocks 0.5%			1,110,020
	Par		
Corporate Bonds	(000)		Value
Aerospace & Defense 0.5%			
Huntington Ingalls Industries, Inc.,			
7.13%, 3/15/21	USD 425	5 \$	440,938
Vratas Dafansa & Sagurity			

733,520

94,746

1,174,458

692

United Air Lines, Inc., 12.75%,		
7/15/12	589	595,140
113112	30)	689,886
Auto Components 1.7%		009,000
Delphi Corp., 6.13%, 5/15/21	290	308,850
Icahn Enterprises LP:		,
7.75%, 1/15/16	110	115,500
8.00%, 1/15/18	2,740	2,900,975
Titan International, Inc., 7.88%,		
10/01/17	490	507,150
Venture Holdings Co. LLC (c)(d):		
12.00%, 7/01/49	700	
Series B, 9.50%, 7/01/05	3,325	
		3,832,475
Biotechnology 0.0%		
QHP Royalty Sub LLC, 10.25%,		
3/15/15 (a)	73	73,251
Building Products 0.4%		
Building Materials Corp. of America (a):	405	500.250
7.00%, 2/15/20	485	509,250
6.75%, 5/01/21	410	419,225
Conital Moulests 0.00		928,475
Capital Markets 0.9% American Capital Ltd., 7.96%,		
12/31/13 (e)	600	601,686
E*Trade Financial Corp., 12.50%,	000	001,000
11/30/17	935	1,072,913
KKR Group Finance Co., 6.38%,	755	1,072,713
9/29/20 (a)	280	301,372
),,(W)	200	1,975,971
Chemicals 4.4%		1,5 , 0,5 , 1
American Pacific Corp., 9.00%,		
2/01/15	610	606,950
Celanese US Holdings LLC, 5.88%,		
6/15/21	745	776,663
GEO Specialty Chemicals, Inc. (a):		
7.50%, 3/31/15 (f)(g)	1,869	2,223,661
10.00%, 3/31/15	1,839	1,838,720
Hexion US Finance Corp., 6.63%,		
4/15/20 (a)	905	916,312
Huntsman International LLC,		
8.63%, 3/15/21	395	442,400

BLACKROCK SENIOR HIGH INCOME FUND, INC.

MAY 31, 2012

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

	Par		
Corporate Bonds	(000)		Value
Chemicals (concluded)			
Ineos Finance Plc (a):			
8.38%, 2/15/19	USD	805	\$ 827,138
7.50%, 5/01/20		375	371,250
Kinove German Bondco GmbH,			
9.63%, 6/15/18 (a)		400	409,000
LyondellBasell Industries NV (a):			
6.00%, 11/15/21		535	572,450
5.75%, 4/15/24		935	958,375
NOVA Chemicals Corp., 8.63%,			
11/01/19		300	335,250
			10,278,169
Commercial Banks 0.5%			
CIT Group, Inc.:			
5.00%, 5/15/17		330	324,225
5.50%, 2/15/19 (a)		760	739,100
			1,063,325
Commercial Services & Supplies 1.4%			
ARAMARK Holdings Corp., 8.63%,			
5/01/16 (a)(f)		330	337,428
AWAS Aviation Capital Ltd., 7.00%,			
10/17/16 (a)		500	516,151
Brickman Group Holdings, Inc.,			
9.13%, 11/01/18 (a)		25	24,000
Covanta Holding Corp., 6.38%,			
10/01/22		420	435,489
The Geo Group, Inc., 7.75%,		450	400.255
10/15/17		450	480,375
Iron Mountain, Inc., 7.75%, 10/01/19		220	244.050
		230	244,950
Mead Products LLC / ACCO Brands		675	(02.5(2
Corp., 6.75%, 4/30/20 (a)		675	693,562
Mobile Mini, Inc., 7.88%, 12/01/20		335	251 750
		165	351,750
West Corp., 8.63%, 10/01/18		103	172,013 3,255,718
Communications Equipment 0.1%			3,233,710
Hughes Satellite Systems Corp.,			
6.50%, 6/15/19		320	324,800
Construction Materials 0.4%		320	321,000
HD Supply, Inc., 8.13%,			
4/15/19 (a)		810	844,425
Consumer Finance 0.2%		010	5, .20
Ford Motor Credit Co. LLC:			
7.00%, 4/15/15		140	157,150
6.63%, 8/15/17		300	348,342
			505,492
Containers & Packaging 1.0%			
Ardagh Packaging Finance Plc,			
9.13%, 10/15/20 (a)		300	309,000
Ball Corp., 6.75%, 9/15/20		325	352,625
1 / /			,o <b></b> 0

Berry Plastics Corp., 8.25%, 11/15/15 540 571,050

Company Pouls			Par	<b>V</b> /-1
Corporate Bonds Containers & Packaging (concluded)	,	(0	000)	Value
Crown Americas LLC, 6.25%,	)			
2/01/21		USD	535	\$ 579,137
Sealed Air Corp. (a):		OSD	333	\$ 379,137
8.13%, 9/15/19			405	439,425
8.38%, 9/15/21			110	121,000
8.36 /0, 3/13/21			110	2,372,237
Diversified Consumer Services 0.	0/0			2,312,231
ServiceMaster Co., 8.00%,	70			
2/15/20			435	456,206
Diversified Financial Services 3.3	<b>7</b>		733	+30,200
Ally Financial, Inc.:	v			
			3,670	3,926,900
8.30%, 2/12/15 8.00%, 11/01/31			230	258,750
8.00%, 11/01/31			370	413,536
CNG Holdings, Inc., 9.38%,			260	261 200
5/15/20 (a)			260	261,300
DPL, Inc., 7.25%, 10/15/21 (a)			95	103,313
Reynolds Group Issuer, Inc. (a):				
7.13%, 4/15/19			560	575,400
9.88%, 8/15/19			1,065	1,062,337
6.88%, 2/15/21			695	705,425
8.50%, 2/15/21			100	92,750
WMG Acquisition Corp., 9.50%,				
6/15/16 (a)			105	112,087
				7,511,798
Diversified Telecommunication Ser	rices 1.3%			
ITC Deltacom, Inc., 10.50%,				
4/01/16			520	547,300
Level 3 Financing, Inc.:				
4.51%, 2/15/15 (b)			1,295	1,233,487
8.13%, 7/01/19			1,130	1,130,000
				2,910,787
Energy Equipment & Services 2.4	%			
Calfrac Holdings LP, 7.50%,				
12/01/20 (a)			920	864,800
Cie Generale de Geophysique -				
Veritas, 6.50%, 6/01/21			1,105	1,082,900
Frac Tech Services LLC, 8.13%,			,	, ,
11/15/18 (a)			625	618,750
Gulfmark Offshore, Inc., 6.38%,				
3/15/22 (a)			70	70,350
Hornbeck Offshore Services, Inc.,			, ,	, 0,220
5.88%, 4/01/20 (a)			140	137,200
Key Energy Services, Inc., 6.75%,			1.0	107,200
3/01/21			380	381,425
MEG Energy Corp., 6.50%,			300	301,123
3/15/21 (a)			490	499,800
Oil States International, Inc.,			470	477,000
6.50%, 6/01/19			270	278,775
Peabody Energy Corp., 6.25%,			270	218,113
			1 000	1 007 075
11/15/21 (a)			1,090	1,087,275
Precision Drilling Corp.:			120	121.050
6.63%, 11/15/20			130	131,950

BLACKROCK SENIOR HIGH INCOME FUND, INC.

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	Par		
Corporate Bonds	(000)	Value	
Energy Equipment & Services (concluded)			
Precision Drilling Corp. (concluded):			
6.50%, 12/15/21	USD 445	\$ 448,	
		5,601,	562
Food Products 0.2%			
Constellation Brands, Inc.,			
6.00%, 5/01/22	245	260,	313
Post Holdings, Inc., 7.38%,			
2/15/22 (a)	140	142,	450
		402,	,763
Health Care Equipment & Supplies 0.8%			
Bausch & Lomb, Inc., 9.88%,			
11/01/15	65	68,0	,088
Biomet, Inc., 10.38%, 10/15/17 (f)	435	463,0	
DJO Finance LLC:		,	
10.88%, 11/15/14	150	152,0	625
8.75%, 3/15/18 (a)	115	115,	
7.75%, 4/15/18	30		,225
Fresenius Medical Care US Finance II,	30	27,.	223
Inc. (a): 5.63%, 7/31/19	360	257	200
•		357,3	
5.88%, 1/31/22	340	338,3	
Teleflex, Inc., 6.88%, 6/01/19	250	265,0	
W M C B 11 0 C 1 And		1,784,	116
Health Care Providers & Services 2.7%			
Aviv Healthcare Properties LP:			
7.75%, 2/15/19	235	244,	
7.75%, 2/15/19 (a)	130	133,9	,900
HCA, Inc.:			
8.50%, 4/15/19	25		,594
6.50%, 2/15/20	1,030	1,087,9	
7.88%, 2/15/20	1,174	1,288,	465
5.88%, 3/15/22	785	779,	113
Omnicare, Inc., 7.75%, 6/01/20	695	762,	763
Tenet Healthcare Corp.:			
10.00%, 5/01/18	430	490,2	,200
8.88%, 7/01/19	1,015	1,129,	187
Vanguard Health Holding Co. II			
LLC, 7.75%, 2/01/19 (a)	300	294,0	,000
		6,237,	559
Health Care Technology 0.9%		, ,	
IMS Health, Inc., 12.50%,			
3/01/18 (a)	1,730	2,024,	100
Hotels, Restaurants & Leisure 1.1%	1,700	2,02.,	100
Affinity Gaming LLC/Affinity			
Gaming Finance Corp., 9.00%,			
5/15/18 (a)	125	125,0	000
Caesars Entertainment Operating Co.,	123	123,	000
* -			
Inc.:	75	70	.688
11.25%, 6/01/17	75	,	
8.50%, 2/15/20 (a)	905	901,0	OUO

Carlson Wagonlit BV, 6.88%, 6/15/19 (a) 200 199,000

	,	D		
Corporate Bonds		Par 000)	Value	
Hotels, Restaurants & Leisure (concluded)		,		
Diamond Resorts Corp., 12.00%,				
8/15/18	USD	540	\$ 581,850	0
Little Traverse Bay Bands of				
Odawa Indians, 9.00%, 8/31/20 (a)		282	256,62	0
Tropicana Entertainment LLC,		202	230,02	.0
9.63%, 12/15/14 (c)(d)		220		
Wynn Las Vegas LLC, 5.38%,				
3/15/22 (a)		525	508,59	
W 1.115 11 400			2,652,35	8
Household Durables 1.0%				
Beazer Homes USA, Inc., 12.00%, 10/15/17		860	926,650	n
Libbey Glass, Inc., 6.88%,		800	720,03	
5/15/20 (a)		90	90,22	5
Standard Pacific Corp., 8.38%,			,	
1/15/21		1,120	1,198,40	
			2,215,27	5
Independent Power Producers & Energy Traders 3.4%				
AES Corp.:		155	172.05	0
7.75%, 10/15/15 9.75%, 4/15/16		155 674	172,056 790,26	
The, 7.38%, 7/01/21 (a)		70	75,60	
Calpine Corp. (a):		, 0	75,00	
7.25%, 10/15/17		350	369,25	0
7.50%, 2/15/21		190	198,55	0
Energy Future Holdings Corp.,				
10.00%, 1/15/20		775	823,43	7
Energy Future Intermediate				
Holding Co. LLC, 10.00%, 12/01/20		4,160	4,482,40	Ω
Laredo Petroleum, Inc.:		4,100	4,462,40	U
9.50%, 2/15/19		520	577,20	0
7.38%, 5/01/22 (a)		215	219,83	
QEP Resources, Inc., 5.38%,				
10/01/22		178	173,99	
			7,882,58	5
Industrial Conglomerates 1.5%				
Sequa Corp. (a): 11.75%, 12/01/15		1,430	1,517,58	Q
13.50%, 12/01/15		1,430	2,048,18	
13.3076, 12/01/13		1,230	3,565,77	
Insurance 0.6%			-,,-	
CNO Financial Group, Inc., 9.00%,				
1/15/18 (a)		851	902,06	0
Genworth Financial, Inc., 7.63%,				_
9/24/21		370	359,07	0
MPL 2 Acquisition Canco, Inc., 9.88%, 8/15/18 (a)		220	189,20	0
7.00 /U, 0/13/10 (a)		220	1,450,33	
IT Services 0.7%			1,750,55	
First Data Corp.:				
7.38%, 6/15/19 (a)		445	445,00	0

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	Par		
Corporate Bonds	(000)		Value
IT Services (concluded)			
First Data Corp. (concluded):	HOD	(51 f	(21.470
8.25%, 1/15/21 (a)		651 \$	631,470
12.63%, 1/15/21		288	271,440
SunGard Data Systems, Inc.,		215	222.055
7.63%, 11/15/20		315	322,875
Marking and 0.00%			1,670,785
Machinery 0.9%			
UR Financing Escrow Corp. (a):		160	470.005
5.75%, 7/15/18		462	470,085
7.38%, 5/15/20	1	300	307,500
7.63%, 4/15/22	1,	,245	1,273,012
M.P. (16)			2,050,597
Media 6.1%			
AMC Networks, Inc., 7.75%,		100	210,000
7/15/21 (a)		190	210,900
CCO Holdings LLC, 7.88%,		105	424.262
4/30/18		405	434,362
Cengage Learning Acquisitions,		500	400.750
Inc., 11.50%, 4/15/20 (a)		500	498,750
Checkout Holding Corp., 0.01%,			
11/15/15 (a)(h)		570	222,300
Cinemark USA, Inc., 8.63%,		40=	242062
6/15/19		195	212,063
Clear Channel Worldwide Holdings, Inc.:			
9.25%, 12/15/17		340	363,800
7.63%, 3/15/20 (a)		,195	1,141,225
Series B, 9.25%, 12/15/17	4,	,301	4,623,575
DISH DBS Corp., 5.88%,			
7/15/22 (a)		335	326,625
Interactive Data Corp., 10.25%,			
8/01/18		810	897,075
Lamar Media Corp., 5.88%,			274704
2/01/22 (a)		255	256,594
NAI Entertainment Holdings LLC,			
8.25%, 12/15/17 (a)		530	577,700
Nielsen Finance LLC, 7.75%,			
10/15/18		640	688,000
ProQuest LLC, 9.00%, 10/15/18 (a)		220	189,200
Unitymedia Hessen GmbH & Co. KG:			
8.13%, 12/01/17 (a)		,500	1,582,500
7.50%, 3/15/19		540	569,708
Virgin Media Secured Finance Plc,			
6.50%, 1/15/18	1.	,250	1,362,500
			14,156,877
Metals & Mining 1.4%			
FMG Resources August 2006 Property			
Ltd. (a):			
6.88%, 2/01/18		230	225,975
6.88%, 4/01/22		425	409,063
		255	257,550

Global Brass and Copper, Inc., 9.50%, 6/01/19 (a)

Kaiser Aluminum Corp., 8.25%,

6/01/20 (a) 190,950

	Par	
Corporate Bonds	(000)	Value
Metals & Mining (concluded)		
New Gold, Inc., 7.00%,		
4/15/20 (a)	USD 65	
Novelis, Inc., 8.75%, 12/15/20	1,895	5 2,003,962
RathGibson, Inc., 11.25%,		
2/15/14 (c)(d)	2,175	
		3,153,800
Oil, Gas & Consumable Fuels 7.2%		
Alpha Natural Resources, Inc.:		
6.00%, 6/01/19	115	
6.25%, 6/01/21	310	275,900
Berry Petroleum Co., 6.38%,	100	102 (00
9/15/22	180	183,600
Chaparral Energy, Inc., 7.63%,		
11/15/22 (a)	115	5 117,588
Chesapeake Energy Corp.:		
6.63%, 8/15/20	290	,
6.88%, 11/15/20	150	,
6.13%, 2/15/21	235	5 220,900
Chesapeake Midstream Partners		
LP, 6.13%, 7/15/22	415	394,250
Chesapeake Oilfield Operating LLC,		
6.63%, 11/15/19 (a)	4	5 4,325
Coffeyville Resources LLC, 9.00%,		
4/01/15 (a)	105	5 111,825
Concho Resources, Inc., 5.50%,		
10/01/22	210	206,325
Consol Energy, Inc.:		
8.25%, 4/01/20	1,110	
6.38%, 3/01/21	230	210,450
Crosstex Energy LP:		
8.88%, 2/15/18	55	
7.13%, 6/01/22 (a)	195	5 193,538
Denbury Resources, Inc., 8.25%,		
2/15/20	26	5 28,080
Energy XXI Gulf Coast, Inc., 7.75%,		
6/15/19	665	671,650
Everest Acquisition LLC / Everest		
Acquisition Finance, Inc. (a):		
6.88%, 5/01/19	170	
9.38%, 5/01/20	125	
Forest Oil Corp., 8.50%, 2/15/14	110	115,500
Hilcorp Energy I LP, 7.63%,		
4/15/21 (a)	1,105	5 1,154,725
Holly Energy Partners LP, 6.50%,		
3/01/20 (a)	80	79,600
Kodiak Oil & Gas Corp., 8.13%,		
12/01/19 (a)	385	396,550
Linn Energy LLC:		
6.25%, 11/01/19 (a)	1,460	
8.63%, 4/15/20	190	,
7.75%, 2/01/21	485	5 495,912
Newfield Exploration Co., 5.75%,		
1/30/22	540	568,350

Northern Oil and Gas, Inc., 8.00%, 6/01/20 (a)

265

263,675

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MAY 31, 2012

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	Par	
Corporate Bonds	(000)	Value
Oil, Gas & Consumable Fuels (concluded)		
Oasis Petroleum, Inc.:		
7.25%, 2/01/19	USD 170	\$ 175,100
6.50%, 11/01/21	155	155,000
Offshore Group Investments Ltd.:		
11.50%, 8/01/15 (a)	210	223,650
11.50%, 8/01/15	165	175,725
OGX Petroleo e Gas Participacoes SA		
(a):		
8.50%, 6/01/18	2,695	2,593,937
8.38%, 4/01/22	295	279,513
Petrohawk Energy Corp., 7.25%, 8/15/18	275	313,423
Pioneer Natural Resources Co., 7.20%, 1/15/28	570	703,545
Plains Exploration & Production Co., 6.75%, 2/01/22	90	89,100
Range Resources Corp.:		22,200
5.75%, 6/01/21	645	664,350
5.00%, 8/15/22	298	286,080
Samson Investment Co., 9.75%,		
2/15/20 (a)	370	368,150
SandRidge Energy, Inc.:		,
7.50%, 3/15/21	120	116,400
8.13%, 10/15/22 (a)	110	108,350
SESI LLC:		
6.38%, 5/01/19	280	294,000
7.13%, 12/15/21 (a)	275	299,750
SM Energy Co., 6.50%, 11/15/21	225	230,063
Targa Resources Partners LP,		
6.88%, 2/01/21	250	257,500
		16,606,204
Paper & Forest Products 0.2%		
Clearwater Paper Corp., 10.63%,		
6/15/16	365	406,975
Longview Fibre Paper & Packaging,		
Inc., 8.00%, 6/01/16 (a)	145	143,913
		550,888
Pharmaceuticals 0.3%		
Valeant Pharmaceuticals		
International (a):		
6.50%, 7/15/16	380	387,600
7.25%, 7/15/22	350	329,000
		716,600
Real Estate Investment Trusts (REITs) 0.4%		
Felcor Lodging LP, 6.75%, 6/01/19	950	952,375
Real Estate Management & Development 0.8%		
Realogy Corp., 7.63%, 1/15/20 (a)	1,130	1,161,075
Shea Homes LP, 8.63%, 5/15/19	655	682,838
		1,843,913
		-,,- 10

**Road & Rail** 1.1% Avis Budget Car Rental LLC, 8.25%, 1/15/19 160 165,600

Corporate Bonds		'ar 00)	Value
Road & Rail (concluded)			
Florida East Coast Railway Corp.,			
8.13%, 2/01/17	USD	200	\$ 205,000
The Hertz Corp.:			
7.50%, 10/15/18		780	812,175
6.75%, 4/15/19		135	138,038
6.75%, 4/15/19 (a)		150	153,375
7.38%, 1/15/21		1,095	1,148,381
			2,622,569
Software 0.6%			
Lawson Software, Inc., 9.38%,			
4/01/19 (a)		1,335	1,375,050
Specialty Retail 0.7%		,	
Claire s Stores, Inc., 9.00%,			
3/15/19 (a)		225	225,000
Penske Automotive Group, Inc.,			,
7.75%, 12/15/16		845	874,575
Sally Holdings LLC:		015	071,373
6.88%, 11/15/19 (a)		350	372,750
5.75%, 6/01/22		160	161,800
5.13 %, 0101122		100	1,634,125
Textiles, Apparel & Luxury Goods 0.2%			1,054,125
Levi Strauss & Co., 6.88%,			
5/01/22 (a)		140	138,950
·		215	246,175
PVH Corp., 7.75%, 11/15/23		213	
Transportation Infrastructure 0.10/			385,125
Transportation Infrastructure 0.1%		176	170 520
Aguila 3 SA, 7.88%, 1/31/18 (a)  Window Tologomy instance Somions 4.2%		170	179,520
Wireless Telecommunication Services 4.2%			
Cricket Communications, Inc.,		1 770	1.067.250
7.75%, 5/15/16		1,770	1,867,350
Digicel Group Ltd. (a):		000	000 000
12.00%, 4/01/14		800	880,000
8.25%, 9/01/17		270	271,350
Intelsat Jackson Holdings SA,		1 450	1 420 125
7.25%, 10/15/20 (a)		1,450	1,439,125
MetroPCS Wireless, Inc., 6.63%,		460	445.050
11/15/20		460	445,050
Sprint Capital Corp., 6.88%,		2 440	1 011 700
11/15/28		2,440	1,811,700
Sprint Nextel Corp. (a):		1.150	1 244 055
9.00%, 11/15/18		1,150	1,244,875
7.00%, 3/01/20		1,725	1,737,937
			9,697,387
Total Corporate Bonds 56.1%			129,609,712
Floating Date Lean Interests (b)			
Floating Rate Loan Interests (b)			
Aerospace & Defense 0.3%			
TransDigm, Inc.:			
Add on Term Loan B2, 4.00%,		100	197.960
2/14/17		189	187,868

BLACKROCK SENIOR HIGH INCOME FUND, INC.

MAY 31, 2012

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

	Par	
Floating Rate Loan Interests (b)	(000)	Value
Aerospace & Defense (concluded)		
TransDigm, Inc. (concluded):		
Term Loan (First Lien), 4.00%, 2/14/17	USD 6	501 \$ 595,496
2/14/1/	USD (	783,364
Airlines 0.4%		703,304
Delta Air Lines, Inc., Credit - New		
Term Loan B, 5.50%, 4/20/17	1,0	1,000,337
Auto Components 2.3%		
Allison Transmission, Inc., Term		
Loan B, 2.75%, 8/07/14	1,7	775 1,741,089
August LuxUK Holding Co. Sarl,		
Luxco Term Loan, 6.25%,		
4/27/18	1	105 104,826
Autoparts Holdings Ltd.:		
First Lien Term Loan, 6.50%,	·	022.702
7/28/17	8	861 832,703
Second Lien Term Loan,		900 814,500
10.50%, 1/29/18 Federal-Mogul Corp., Term Loan B,	>	900 814,500
2.18%, 12/29/14		199 468,776
TheGoodyear Tire & Rubber		100,770
Company, Term Loan (Second		
Lien), 4.75%, 4/30/19	g	950 919,724
Schaeffler AG, Term Loan C2,		
6.00%, 1/27/17	4	492,525
		5,374,143
Biotechnology 0.3%		
Grifols, Inc., Term Loan B, 4.50%,		
6/01/17	(	655 645,743
Building Products 1.3%		
Armstrong World Industries, Inc.,		17.4
Term Loan B, 4.00%, 3/09/18		174 468,399
CPG International, Inc., Term Loan	4	593 570,281
B, 6.00%, 2/18/17 Goodman Global, Inc.:	•	593 570,281
Initial Term Loan (First Lien),		
5.75%, 10/28/16	1 6	529 1,622,850
Term Loan (Second Lien),	1,0	1,022,030
9.00%, 10/30/17	3	385,064
		3,046,594
Capital Markets 1.1%		
HarbourVest Partners, Term Loan		
(First Lien), 6.25%, 12/16/16	7	799,363
Nuveen Investments, Inc.:		
(First Lien), Term Loan, 5.97%,		
5/13/17	3	364,138
Incremental Term Loan,	_	2015
7.25%, 5/13/17		295 294,262
Term Loan, 5.97%, 5/12/17	1,0	990,315
		2,448,078

Chemicals	4.3%
American Ro	ock Salt Holdings LLC,
Term Loan	5 50% 4/25/17

1,183 1,121,437

		Par	
Floating Rate Loan Interests (b)		(000)	Value
Chemicals (concluded)			
Chemtura Corp., Exit Term Loan B, 5.50%, 8/27/16	USD	800	\$ 799,336
Gentek, Inc., Term Loan B, 5.00% - 5.75%, 10/06/15		689	689,176
Ineos US Finance LLC, 6 year Term Loan, 6.50%, 5/04/18		3,200	3,134,272
Nexeo Solutions LLC, Term Loan B, 5.00% - 5.75%, 9/08/17		866	843,511
PolyOne Corp., Term Loan, 5.00%, 12/20/17		349	348,144
PQ Corp., 3.99%, 7/30/14		1,735	1,663,711
Styron Sarl LLC, Term Loan B, 6.00% - 6.75%, 8/02/17		355	316,476
Tronox Worldwide LLC, Term Loan B, 4.25%, 2/08/18		389	382,122
Univar, Inc., Term Loan B, 5.00%, 6/30/17		669	649,858
0/30/17		00)	9,948,043
Commercial Services & Supplies 2.9%			2,2 10,0 10
ACCO Brands Corp., Term Loan B, 4.25%, 4/30/19		711	710,536
Altegrity, Inc., Tranche D Term Loan, 7.75%, 2/20/15		1,273	1,262,508
AWAS Finance Luxembourg Sarl, Term Loan B, 5.25%, 6/10/16		575	572,306
Delos Aircraft, Inc., Term Loan B2, 4.75%, 4/12/16		1,075	1,073,656
KAR Auction Services, Inc., Term			
Loan B, 5.00%, 5/19/17 Protection One Alarm Monitoring,		1,241	1,237,523
Inc., Term Loan, 5.75%, 3/16/19		510	505,961
Synagro Technologies, Inc., Term Loan B, 2.24%, 4/02/14		490	427,947
Volume Services America, Inc., Term Loan B, 10.50%, 9/16/16		985	979,258
Term Loan B, 10.30 %, 7/10/10		703	6,769,695
Communications Equipment 1.4% Avaya, Inc.:			0,703,030
Term Loan B1, 3.22%,			
10/24/14		954	898,442
Term Loan B3, 4.97%, 10/26/17		175	153,813
CommScope, Inc., Term Loan B, 4.25%, 1/12/18		827	821,383
Telesat LLC, Term Loan B, 4.25%, 3/26/19		1,385	1,366,455
			3,240,093
Construction & Engineering 0.9%			
BakerCorp. International, Inc., Term Loan B, 4.75%, 6/01/18		680	672,339

BLACKROCK SENIOR HIGH INCOME FUND, INC.

MAY 31, 2012

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

		Par		
Floating Rate Loan Interests (b)		(000)		Value
Construction & Engineering (concluded)				
Safway Services LLC, First Out		USD 1,50	00 €	1 500 000
Tranche Loan, 9.00%, 12/16/17		03D 1,30	00 \$	1,500,000 2,172,339
Construction Materials 0.9%				2,172,339
HD Supply, Inc., Senior Debt B,				
7.25%, 10/12/17		2,1	15	2,123,460
Consumer Finance 0.6%				
Springleaf Finance Corp., Term				
Loan, 5.50%, 5/10/17		1,6	10	1,484,549
Containers & Packaging 0.4%				
Sealed Air Corp., Term Loan B,				
4.75%, 10/03/18		90	)9	909,494
Diversified Consumer Services 2.7%				
Coinmach Service Corp., Term		0.1		2 000 501
Loan, 3.24%, 11/20/14		2,10	00	2,008,591
Education Management LLC, Term		<i>E</i> ′	7.5	562.025
Loan C3, 8.25%, 3/29/18		57	/5	562,925
Laureate Education, Inc., Extended Term Loan, 5.25%, 8/15/18		2,14	12	2,052,308
ServiceMaster Co.:		2,12	t <i>L</i>	2,032,308
Delayed Draw Term Loan,				
2.74%, 7/24/14		8	36	84,147
Term Loan, 2.79%, 7/24/14		80		845,019
Weight Watchers International,				, ,
Inc., Term Loan F, 4.00%,				
3/12/19		63	30	618,345
				6,171,335
Diversified Financial Services 1.2%				
Reynolds Group Holdings, Inc.:				
Tranche B Term Loan, 6.50%,			-0	450.677
2/09/18		4:	50	450,677
Tranche C Term Loan, 6.50%,		2.10	10	2 202 040
8/09/18		2,19	98	2,203,940 2,654,617
Diversified Telecommunication Services	3.0%			2,034,017
Hawaiian Telcom Communications,	3.0 /0			
Inc., Term Loan B, 7.00%,				
2/28/17		8	70	858,037
Integra Telecom Holdings, Inc.,				,
Term Loan B, 9.25%, 4/15/15		90	)9	880,221
Level 3 Financing, Inc.:				
Term Loan B2, 5.75%,				
9/03/18		2,05	50	2,030,607
Term Loan B3, 5.75%,		-	. ~	7/7///
8/31/18 T		77	/5	767,669
Tranche A Term Loan, 2.49% -		1 1/	00	1.070.212
2.72%, 3/13/14 US Telepacific Corp., Term Loan B,		1,10	<i>.</i>	1,070,212
5.75%, 2/23/17		1,36	58	1,288,020
0.70 70, 2120111		1,50		6,894,766
				-,-> .,. 00

Floating Rate Loan Interests (b) Electronic Equipment, Instruments & Components	0.5%	Par (000)	Value
CDW LLC, Extended Term Loan,	0.3 %		
4.00%, 7/14/17	USI	D 431	\$ 411,869
Sensata Technologies Finance Co.			
LLC, Term Loan, 4.00%,			
5/11/18		775	762,260
Energy Equipment & Services 2.2%			1,174,129
Dynegy Midwest Generation LLC,			
Coal Co. Term Loan, 9.25%,			
8/04/16		861	878,031
Dynegy Power LLC, Gas Co. Term			
Loan, 9.25%, 8/04/16		1,576	1,624,366
MEG Energy Corp., Term Loan B,		1.550	1 522 (2)
4.00%, 3/16/18 Tervita Corp., Term Loan B, 3.24%,		1,552	1,533,636
11/14/14		1,203	1,153,659
		1,203	5,189,692
Food & Staples Retailing 0.3%			2, 21,22
US Foods, Inc. (FKA US			
Foodservice, Inc.), Term Loan B,			
2.74%, 7/03/14		643	621,048
Food Products 2.0%			
Advance Pierre Foods, Term Loan (First Lien), 7.00%, 9/30/16		2,278	2,279,913
Del Monte Corp., Term Loan,		2,210	2,217,713
4.50%, 3/08/18		1,042	1,015,100
Pinnacle Foods Finance LLC:			
Term Loan E, 4.75%,			
10/17/18		733	726,515
Tranche B Term Loan, 3.97%, 10/03/16		119	117 920
Solvest Ltd. (Dole):		119	117,830
Tranche B-2 Term Loan,			
5.00% - 6.00%, 7/06/18		203	202,367
Tranche C-2 Term Loan,			
5.00% - 6.00%, 7/06/18		364	362,131
W 10 G F 1 40 G 11 40 G			4,703,856
Health Care Equipment & Supplies 1.9%			
Bausch & Lomb, Inc., Term Loan B, 5.25%, 5/17/19		1,135	1,114,525
DJO Finance LLC:		1,133	1,111,525
Term Loan B2, 5.24%,			
11/01/16		356	352,820
Term Loan B3, 6.25%,			
9/15/17		1,235	1,220,081
Hupah Finance Inc., Term Loan B,		675	<i>477</i> 112
6.25%, 1/21/19 Immucor, Inc., Term Loan B,		675	677,113
7.25%, 8/17/18		975	973,276
,			4,337,815

BLACKROCK SENIOR HIGH INCOME FUND, INC.

MAY 31, 2012

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

	Par	
Floating Rate Loan Interests (b)	(000)	Value
Health Care Providers & Services 2.9%		
ConvaTec, Inc., Term Loan, 5.75%, 12/22/16	USD 1,068	\$ 1,059,454
DaVita, Inc., Term Loan B, 4.50%, 10/20/16	1,086	1,079,222
Emergency Medical Services, Term		
Loan, 5.25% - 6.00%, 5/25/18	863	851,061
Harden Healthcare LLC:		
Term Loan A, 8.50%, 3/02/15	304	298,217
Tranche A Additional Term	1.070	1 049 504
Loan, 7.75%, 3/02/15 inVentiv Health, Inc.:	1,070	1,048,524
Combined Term Loan B,		
6.50%, 8/04/16	140	131,268
Incremental Term Loan B-3,		, , , ,
6.75%, 5/15/18	620	588,293
Medpace, Inc., Term Loan,		
6.50% - 7.25%, 6/16/17	1,042	1,000,440
Wolverine Healthcare, Term Loan B,	5.60	550,000
6.75%, 5/12/17	560	550,900
Health Care Technology 1.0%		6,607,379
IMS Health, Inc., Term Loan B,		
4.50%, 8/25/17	1,028	1,019,105
Kinetic Concepts, Inc., Term	400	702 191
Loan B, 7.00%, 5/04/18 MedAssets, Inc., Term Loan,	698	702,181
5.25%, 11/16/16	548	545,105
		2,266,391
Hotels, Restaurants & Leisure 3.9%		
Alpha D2 Ltd.:		
Term Loan B, 5.75%, 4/28/17	365	364,011
Term Loan B, 6/08/18	225	222,656
Caesars Entertainment Operating		
Co., Inc.:		
Extended Term Loan B6, 5.49%, 1/26/18	175	154,028
Incremental Term Loan B4,	173	134,026
9.50%, 10/31/16	729	733,481
Term Loan B1, 3.24%,	, =>	755,101
1/28/15	536	489,292
Term Loan B3, 3.24% - 3.47%,		
1/28/15	2,942	2,684,938
Dunkin Brands, Inc., Term Loan B,	<u></u>	
4.00%, 11/23/17	1,344	1,327,764
Golden Living, Term Loan, 5.00%, 5/04/18	141	131,295
OSI Restaurant Partners LLC:	141	131,293
Revolver, 2.72% 4.50%,		
6/14/13	8	7,891
	82	79,793

Term Loan B, 2.56% - 4.50%, 6/14/14
Sabre, Inc., Non Extended Initial

Sabre, Inc., Non Extended Initial
Term Loan, 2.24%, 9/30/14
310
294,565

	Par	
Floating Rate Loan Interests (b)	(000)	Value
Hotels, Restaurants & Leisure (concluded)		
SeaWorld Parks & Entertainment,		
Inc., Term Loan B, 4.00%, 8/17/17	USD 900	¢ 996.266
Six Flags Theme Parks, Inc.,	USD 900	\$ 886,266
Tranche B Term Loan (First		
Lien), 4.25%, 12/20/18	420	415,502
Wendy s International, Inc.:	.20	110,002
Delayed Draw Term Loan,		
0.50%, 5/15/19	502	494,900
Term Loan B, 4.75%, 5/15/19	628	620,173
		8,906,555
Household Products 0.3%		
Prestige Brands, Inc., Term Loan,		
5.25% - 6.25%, 1/31/19	733	732,928
Independent Power Producers & Energy Traders 0.4%		
AES Corp., Term Loan, 4.25%,	0.41	020 101
6/01/18 Industrial Conglomerates 1.2%	941	929,101
Schrader International, Term		
Loan B, 6.25%, 4/27/18	80	80,637
Sequa Corp.:	00	00,037
Incremental Term Loan,		
6.25%, 12/03/14	304	303,477
Term Loan, 3.72%, 12/03/14	1,225	1,200,939
Tomkins Plc, Term Loan B, 4.25%,		
9/29/16	1,121	1,114,840
		2,699,893
Insurance 0.2%		
Asurion LLC, Term Loan (First		## / <b>*</b> 0 *
Lien), 5.50%, 5/24/18	564	554,696
Internet Software & Services 0.3%		
Web.com Group, Inc., Term Loan B, 7.00%, 10/27/17	613	606,124
IT Services 4.0%	013	000,124
Ceridian Corp., Term Loan, 3.24%,		
11/10/14	1,220	1,153,261
First Data Corp.:	1,220	1,100,201
Extended Term Loan B, 4.24%,		
3/23/18	4,159	3,756,804
Term Loan B-1, 2.99%,		
9/24/14	333	314,819
Term Loan B-3, 2.99%,		
9/24/14	141	133,511
InfoGroup Inc., Term Loan B, 5.75%, 5/25/18	473	420,958
iPayment, Inc., Term Loan B, 5.75%, 5/08/17	511	509,723
NeuStar, Inc., Term Loan B, 5.00%, 11/08/18	771	773,053
SunGard Data Systems, Inc. (Solar	//1	113,033
Capital Corp.), Tranche B Term		
Loan, 3.86% - 4.09%, 2/26/16	287	283,706
		•

BLACKROCK SENIOR HIGH INCOME FUND, INC.

MAY 31, 2012

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

Floating Rate Loan Interests (b)	Par (000)	Value
IT Services (concluded)		
TransUnion LLC, Term Loan B,	1100 1.045	¢ 1.052.060
5.50%, 2/12/18	USD 1,945	\$ 1,953,060 9,298,895
Leisure Equipment & Products 0.4%		9,290,093
Eastman Kodak Co., DIP Term		
Loan B, 8.50%, 7/19/13	726	726,023
Freedom Group, Inc., Term Loan,	200	***
5.50%, 4/12/19	300	298,875 1,024,898
Machinery 1.3%		1,024,070
Harbor Freight Tools USA, Inc.,		
Term Loan B, 5.50%, 11/10/17	450	445,725
Rexnord Corp., Term Loan B,	•	- ,
5.00%, 4/02/18	349	347,030
Terex Corp., Term Loan B, 5.50%,		
4/28/17	1,130	1,129,335
Wabash National Corp., Term	1.025	1.014.750
Loan B, 6.00%, 5/02/19	1,025	1,014,750
Media 11.0%		2,936,840
Acosta, Inc., Term Loan, 4.75%,		
3/01/18	305	301,340
Affinion Group, Inc., Tranche B		,-
Term Loan, 5.00%, 7/16/15	265	244,975
AMC Networks, Inc., Term Loan B,		
4.00%, 12/31/18	717	710,034
Capsugel Healthcare Ltd., Term		
Loan, 5.25%, 8/01/18	779	778,925
Cengage Learning Acquisitions, Inc.:	752	690.126
Term Loan, 2.49%, 7/03/14 Tranche 1 Incremental Term	753	680,126
Loan, 7.50%, 7/03/14	666	637,314
Charter Communications Operating LLC:	000	037,314
Term Loan C, 3.72%, 9/06/16	1,632	1,607,227
Term Loan D, 4.00%, 5/15/19	636	626,457
Cumulus Media, Inc., Term Loan,		
5.75%, 9/17/18	1,152	1,142,520
EMI Music Publishing Ltd., Term		
Loan B, 11/14/17	475	472,031
Gray Television, Inc., Term Loan B,	970	950 940
3.74%, 12/31/14 HMH Publishing Co. Ltd., Term	869	859,840
Loan, 0.00%, 6/12/14	1,338	741,614
Hubbard Broadcasting, Term Loan	1,336	771,017
B (Second Lien), 5.25%,		
4/28/17	557	552,331
Intelsat Jackson Holdings SA,		
Tranche B Term Loan, 5.25%,		
4/02/18	5,824	5,772,148
	891	875,407

Interactive Data Corp., Term		
Loan B, 4.50%, 2/12/18		
Kabel Deutschland GmbH, Term		
Loan F, 4.25%, 2/01/19	1,200	1,179,756

	Pa		
Floating Rate Loan Interests (b)	(00	0)	Value
Media (concluded)			
Newsday LLC, Fixed Rate Term Loan, 10.50%, 8/01/13	USD	3,250	\$ 3,312,985
Nielsen Finance LLC, Class C Term Loan, 3.49%, 5/02/16		223	219,667
Sinclair Television Group, Inc.,			_=>,
Tranche B Term Loan, 4.00%, 10/28/16		1,217	1,206,309
Univision Communications, Inc., Extended First Lien Term Loan, 4.49%, 3/31/17		1,708	1,565,018
UPC Financing Partnership:			
Term Loan, 4.75%, 12/29/17 Term Loan T, 3.74%,		350	344,575
12/30/16		425	419,109
WC Luxco Sarl, Term Loan B3, 4.25%, 3/15/18		311	308,759
Weather Channel, Term Loan B, 4.25%, 2/13/17		844	838,108
		-	25,396,575
Metals & Mining 2.2%			
Constellium Holding Co. BV, Term Loan B, 9.25%, 5/22/18		230	224.250
Novelis, Inc.:		230	224,250
Incremental Term Loan B2, 4.00%, 3/10/17		893	873,587
Term Loan B2, 4.00%,			ŕ
3/10/17 SunCoke Energy, Inc., Term		1,629	1,593,398
Loan B, 4.00%, 7/26/18		844	833,081
4.00%, 4/02/18		1,629	1,563,936
			5,088,252
99 Cents Only Stores, Term Loan B, 5.25%, 1/11/19		793	787,350
Oil, Gas & Consumable Fuels 1.7%			
Chesapeake Energy Corp.,			
· · · · ·		1,715	1,683,272
EP Energy LLC, Term Loan B,			
Gibson Energy, Term Loan B,			
		794	789,037
Term Loan, 7.00%, 11/02/15		1,034	1,034,425
Donor & Forest Droducts 0.2%			3,962,021
8.00%, 3/07/13		350	352,772
5.50%, 2/10/17		938	907,167
Multiline Retail 0.3%  99 Cents Only Stores, Term Loan B, 5.25%, 1/11/19  Oil, Gas & Consumable Fuels 1.7%  Chesapeake Energy Corp., Unsecured Term Loan, 8.50%, 12/01/17  EP Energy LLC, Term Loan B, 6.50%, 4/24/18  Gibson Energy, Term Loan B, 4.75%, 6/15/18  Obsidian Natural Gas Trust, Term Loan, 7.00%, 11/02/15  Paper & Forest Products 0.2%  NewPage Corp., DIP Term Loan, 8.00%, 3/07/13  Pharmaceuticals 2.2%  Aptalis Pharma, Inc., Term Loan B,		793 1,715 455 794 1,034	5,088,252 787,350 1,683,272 455,287 789,037 1,034,425 3,962,021 352,772

BLACKROCK SENIOR HIGH INCOME FUND, INC.

MAY 31, 2012

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

	Par		
Floating Rate Loan Interests (b)	(000)		Value
Pharmaceuticals (concluded) Pharmaceutical Product			
Development, Inc., Term Loan Tranche 2, 6.25%, 12/05/18	USD 1,5	592 \$	1,591,987
Quintiles Transnational Corp., Term	03D 1,3	192 <b>p</b>	1,391,907
Loan, 5.00%, 6/08/18	7	00	689,000
RPI Finance Trust:	,	00	002,000
Incremental Tranche 2 Term			
Loan, 4.00%, 11/09/18	1	70	168,513
Term Loan Tranche 2, 4.00%,			200,020
5/09/18	4	45	441,765
Valeant Pharmaceuticals			
International, Add-On Term Loan			
B, 4.75%, 2/13/19	7	'30	713,392
Warner Chilcott Corp.:			
Term Loan B-1, 4.25%,			
3/15/18	4	53	449,105
Term Loan B-2, 4.25%,	_		
3/15/18	2	26	224,552
Professional Services 0.8%			5,185,481
Booz Allen Hamilton, Inc., Tranche			
B Term Loan, 3.75%, 8/03/17	3	45	343,706
Emdeon, Inc., Term Loan B, 6.75%, 11/02/18	1,3	21	1,317,516
ON Assignment, Inc., Term Loan B,			
5.00%, 5/15/19	2	235	232,356
D 15 ( ) 1 ( ) ( ) 10 ( ) 10 ( )			1,893,578
Real Estate Investment Trusts (REITs) 1.0%			
iStar Financial, Inc.:			
Term Loan A1, 5.00%, 6/28/13	2,3	:07	2,296,262
Term Loan A2, 7.00%,	2,5	107	2,270,202
6/30/14		80	79,800
0.501.1			2,376,062
Real Estate Management & Development 1.4%			, ,
Realogy Corp.:			
Extended Synthetic Letter of			
Credit Loan, 4.49%,			
10/10/16	1,1	.60	1,057,038
Extended Term Loan, 4.49%,			
10/10/16	2,1	.33	1,944,103
Stockbridge SBE Holdings LLC,			
Term Loan BTerm Loan B, 13.00%, 5/02/17	1	.60	157,600
13.00 /0, 3/02/11	1	.00	3,158,741
Road & Rail 0.7%			3,130,741
Avis Budget Car Rental LLC,			
Incremental Term Loan, 6.25%,			
9/21/18		667	365,851
	8	330	826,198

RailAmerica, Inc., Term Loan B, 4.00%, 3/01/19

	Par			
Floating Rate Loan Interests (b) Road & Rail (concluded)	(000)			Value
Road Infrastructure Investment				
LLC, Term Loan B, 6.25%, 3/30/18	USD	440	\$	433,400
3/30/16	USD	440	φ	1,625,449
Semiconductors & Semiconductor Equipment 0.6%				,, .
Freescale Semiconductor, Inc.,				
Extended Term Loan B, 4.49%, 12/01/16		1,002		020.252
NXP B.V., Term Loan A-2, 5.50%,		1,002		939,353
3/03/17		507		499,178
				1,438,531
Software 1.7%				
Blackboard, Inc., Term Loan B, 7.50%, 10/04/18		324		308,993
Lawson Software, Inc., Term				
Loan B, 6.25%, 4/05/18 Sophia, LP, Term Loan B, 6.25%,		1,920		1,916,237
7/19/18		650		651,163
SS&C Technologies:		000		32 2,2 32
Term Loan B-1, 5.00%,				
5/11/19 Tarry Larry B 2 5 000/		852		848,680
Term Loan B-2, 5.00%, 5/13/19		88		87,795
5(15)17		00		3,812,868
Specialty Retail 3.6%				, ,
Academy Ltd., Term Loan, 6.00%, 8/03/18		998		997,500
Bass Pro Group LLC, Term Loan,				
5.25%, 6/13/17		435		433,551
Burlington Coat Factory Warehouse Corp., Term Loan B,				
5.50%, 2/28/17		712		704,847
Claire s Stores, Inc., Term Loan B,				
2.99% - 3.22%, 5/29/14		542		503,585
General Nutrition Centers, Inc., Term Loan B, 4.25%, 3/02/18		705		696,568
Jo-Ann Stores, Inc., Term Loan B,		703		070,300
4.75%, 3/16/18		388		383,398
Michaels Stores, Inc.:				
Extended Term Loan B3,		239		227 021
5.00%, 7/29/16 Term Loan B2, 5.00%,		239		237,921
7/29/16		959		954,101
Petco Animal Supplies, Inc., Term				
Loan B, 4.50%, 11/24/17		1,504		1,483,827
Things Remembered, Inc., New Term Loan B, 8.00%, 5/30/18		580		568,400
Toys R Us Delaware, Inc.:		200		500,400
Term Loan, 6.00%, 9/01/16		381		372,473
Term Loan B2, 5.25%,				
5/25/18 Term Loan B3 5 25%		162		154,320
Term Loan B3, 5.25%, 5/25/18		190		180,025
		270		100,020

BLACKROCK SENIOR HIGH INCOME FUND, INC.

MAY 31, 2012

Ally Financial, Inc., 7.00% (a)

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

170

	Par		
Floating Rate Loan Interests (b)	(000)		Value
Specialty Retail (concluded)			
The Yankee Candle Co., Inc.,			
New Term Loan B, 5.25%, 4/02/19	USD	555	\$ 550,699
			8,221,215
Textiles, Apparel & Luxury Goods 0.3%			
Ascend Performance Materials			
LLC, Term Loan B, 6.75%,			
4/10/18		755	733,611
Wireless Telecommunication Services 1.8%			
Crown Castle International Corp.,			
Term Loan B, 4.00%, 1/31/19		409	402,840
MetroPCS Wireless, Inc., Term			
Loan B-3, 4.00%, 3/16/18		567	551,057
Vodafone Americas Finance 2, Inc.,			
Term Loan, 6.88%, 8/11/15 (f)		3,046	3,091,386
			4,045,283
Total Floating Rate Loan Interests 76.3%			176,334,679
_			

	Beneficial Interest	
Other Interests (i)	(000)	
Auto Components 0.0%		
Intermet Liquidating Trust,		
Class A (c)	320	
Diversified Financial Services 0.4%		
J.G.Wentworth LLC Preferred		
Equity Interests (c)	(j)	1,033,025
Media 0.0%		
Adelphia Preferred Escrow (c)	3	
Adelphia Recovery Trust, Series		
ACC-6B INT (c)	250	1,250
		1,250
Total Other Interests 0.4%		1,034,275
Preferred Securities		
Preferred Stocks 0.1% Diversified Financial Services	Shares	

Preferred Securities	Shares	Value
Trust Preferreds 0.2%		
Diversified Financial Services		
GMAC Capital Trust I, Series 2,		
8.13%, 2/15/40 (b)	22,630	\$ 518,680
Total Preferred Securities 0.3%		664,444

145,764

Warrants (k) Media 0.1%		
Charter Communications, Inc.		
(Issued/exercisable 11/30/09,		
1 Share for 1 warrant, Expires		
11/30/14, Strike Price \$51.28) (c)	6,862	116,654
Total Long-Term Investments (Cost \$324,304,076) 135.7%		313,486,405

Short-Term Securities	Benet Inte (00	rest	
Bank of New York Cash Reserves,			
0.01 (l)	USD	517	516,814
Total Short-Term Securities			
(Cost \$516,814) 0.2%			516,814
Total Investments (Cost - \$324,820,890*) 135.9%			314,003,219
Liabilities in Excess of Other Assets (35.9)%			(82,954,659)
Net Assets 100.0%		\$	231,048,560

\* As of May 31, 2012, gross unrealized appreciation and gross unrealized depreciation based on cost for federal income tax purposes were as follows:

Tax cost	\$ 322,936,910
Gross unrealized appreciation	\$ 6,476,974
Gross unrealized depreciation	(15,410,665)
Net unrealized depreciation	\$ (8.933.691)

- (a) Security exempt from registration pursuant to Rule 144A under the Securities Act of 1933, as amended. These securities may be resold in transactions exempt from registration to qualified institutional investors.
- (b) Variable rate security. Rate shown is as of report date.
- (c) Non-income producing security.
- (d) Issuer filed for bankruptcy and/or is in default of principal and/or interest payments.
- (e) 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.

BLACKROCK SENIOR HIGH INCOME FUND, INC.

MAY 31, 2012

#### Consolidated Schedule of Investments (continued)

BlackRock Senior High Income Fund, Inc. (ARK)

- (f) Represents a payment-in-kind security which may pay interest/dividends in additional par/shares.
- (g) Convertible security.
- (h) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.
- (i) Other interests represent beneficial interests in liquidation trusts and other reorganization or private entities.
- (j) Amount is less than \$500.
- (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) Represents the current yield as of report date.

#### **Portfolio Abbreviations**

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

CAD Canadian Dollar DIP Debtor-In-Possession

EBITDA Earnings Before Interest, Taxes, Depreciation and Amortization

FKA Formerly Known As

USD US Dollar

Foreign currency exchange contracts as of May 31, 2012 were as follows:

Currency					Settlement	Uı	ırealized
Purchased		Curre	ency Sold	Counterparty	Date	Apj	preciation
USD	384,081	CAD	381,500	Citibank	7/18/12	\$	15,094

Credit default swaps on traded indexes - sold protection outstanding as of May 31, 2012 were as follows:

Index	Receive Fixed Rate	Counter- party	Expiration Date	Issuer Credit Rating <sup>1</sup>		onal ount (0) <sup>2</sup>	_	nrealized preciation
Dow Jones CDX North America High Yield Index Series 18	5.00%	Deutsche Bank AG	6/20/17	Not Rated	USD	3,500	\$	(132,566)
Dow Jones CDX North America High Yield	5.00%	JPMorgan Chase & Co.	6/20/17	Not Rated	USD	5,950		(294,455)

Index Series 18

**Total** \$ (427,021)

- Using Standard & Poor s rating of the underlying securities.
- 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. These definitions 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 derivative financial instruments. These inputs are categorized into a disclosure hierarchy consisting of three broad levels for financial reporting purposes as follows:

Level 1 unadjusted 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 derivative financial instruments)

Changes in valuation techniques may result in transfers into or out of an assigned level within the disclosure hierarchy. In accordance with the Fund s policy, transfers between different levels of the fair value disclosure hierarchy are deemed to have occurred as of the beginning of the reporting period. The categorization of a value determined for investments and derivative financial instruments is based on the pricing transparency of the investment and derivative financial instruments and is not necessarily an indication of the risks associated with investing in those securities. For information about the Fund s policy regarding valuation of investments and derivative financial instruments and other significant accounting policies, please refer to the Fund s most recent financial statements as contained in its annual report.

BLACKROCK SENIOR HIGH INCOME FUND, INC.

MAY 31, 2012

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

The following tables summarize the inputs used as of May 31, 2012 in determining the fair valuation of the Fund s investments and derivative financial instruments:

Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Investments in Securities:				
Long Term Investments:				
Asset-Backed Securities		\$ 341,366	\$ 4,269,255	\$ 4,610,621
Common Stocks \$	664,058	114,550	337,412	1,116,020
Corporate Bonds		125,290,711	4,319,001	129,609,712
Floating Rate Loan Interests		166,117,093	10,217,586	176,334,679
Other Interests	1,250		1,033,025	1,034,275
Preferred Securities	518,680	145,764		664,444
Warrants	116,654			116,654
Short-Term Securities		516,814		516,814
Liabilities:				
Unfunded Loan Commitments		(808)		(808)
Total \$	1,300,642	\$ 292,525,490	\$ 20,176,279	\$ 314,002,411
Valuation Inputs	Level 1	Level 2	Level 3	Total
Derivative Financial Instruments <sup>1</sup>				
Assets:				
Foreign currency exchange contracts		\$ 15,094		\$ 15,094
Liabilities:				
Credit contracts		(427,021)		(427,021)
Total		\$ (411,927)		\$ (411,927)

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

Certain of the Fund s assets and liabilities are held at carrying amount, which approximates fair value for financial reporting purposes. As of May 31, 2012, such assets and liabilities are categorized within the disclosure hierarchy as follows:

Valuation Inputs	L	evel 1	Level 2	Level 3	Total
Assets:					
Foreign currency	\$	4,397			\$ 4,397
Liabilities:					
Loan Payable			\$ (76,000,000)		(76,000,000)
Total	\$	4,397	\$ (76,000,000)		\$ (75,995,603)

There were no transfers between Level 1 and Level 2 during the period ended May 31, 2012.

BLACKROCK SENIOR HIGH INCOME FUND, INC.

MAY 31, 2012

#### BlackRock Senior High Income Fund (ARK)

The following table summarizes the valuation techniques used and unobservable inputs developed by the BlackRock Global Valuation Methodologies Committee to determine the fair value of certain of the Fund s Level 3 investments as of May 31, 2012:

Assets:	Value	Valuation Techniques	Unobservable Inputs <sup>1</sup>	Range of Unobservable Inputs	Weighted Average of Unobservable Inputs <sup>2</sup>
			EBITDA		
Common Stocks	\$ 65,534	Market Comparable Companies	Multiple	5.0x	5.0x
			EBITDA		
Corporate Bonds	4,062,381	Market Comparable Companies	Multiple	5.0x	5.0x
Total <sup>3</sup>	\$ 4.127.915				

A change to the unobservable input may result in a significant change to the value of the investment as follows:

Impact to Value if Input Decreases Unobservable Input Impact to Value if Input Increases **EBITDA** Multiple Increase Decrease

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

				Floating Rate		
	Asset-Backed	Common	Corporate	Loan	Other	T 1
	Securities	Stocks	Bonds	Interests	Interests	Total
Assets:						
Opening balance, as of February 29, 2012	\$ 3,022,303	\$ 355,57	4 \$ 4,310,541	\$ 12,348,294	\$ 989,983	\$ 21,026,695
Transfers into Level 3 <sup>1</sup>						
Transfers out of Level 3 <sup>1</sup>				(2,967,667)		(2,967,667)
Accrued discounts/premiums	11,479		44,729	3,216		59,424
Net realized gain (loss)	(37,006)			(91)		(37,097)
Net change in unrealized						
appreciation/depreciation <sup>2</sup>	87,085	(18,16	2) (36,269)	39,194	43,035	114,883
Purchases	2,463,289			1,653,525	7	4,116,821
Sales	(1,277,895)			(858,885)		(2,136,780)
Closing balance, as of May 31, 2012	\$ 4,269,255	\$ 337,41	2 \$ 4,319,001	\$ 10,217,586	\$ 1,033,025	\$ 20,176,279

<sup>&</sup>lt;sup>1</sup> Transfers into and transfers out of Level 3 represent the beginning of the reporting period value. As of February 29, 2012, the Fund used significant unobservable inputs in determining the value of certain investments. As of May 31, 2012, the Fund used observable inputs in determining the value on the same investments. As a result, investments with a beginning of period value of \$2,967,667 transferred from Level 3 to Level 2 in the disclosure hierarchy.

A reconciliation of Level 3 investments is presented when the Fund had a significant amount of Level 3 investments at the beginning and/or end of the period in relation to net assets.

<sup>2</sup> Unobservable inputs are weighted based on the value of the investments included in the range.

<sup>3</sup> Does not include Level 3 investments with values derived utilizing prices from prior transactions or third party pricing information without adjustment for which such inputs are unobservable. See above valuation input table for values of such Level 3 investments. A significant change in the unobservable inputs could result in a significantly lower or higher value in such Level 3 investments.

<sup>&</sup>lt;sup>2</sup> The change in unrealized appreciation/depreciation on investments still held as of May 31, 2012 was \$(1,736).

BLACKROCK SENIOR HIGH INCOME FUND, INC.

MAY 31, 2012

#### Item 2 - Controls and Procedures

- 2(a) The registrant's principal executive and principal financial officers, or persons performing similar functions, have concluded that the registrant's disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the "1940 Act")) are effective as of a date within 90 days of the filing of this report based on the evaluation of these controls and procedures required by Rule 30a-3(b) under the 1940 Act and Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended.
- 2(b) There were no changes in the registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act) that occurred during the registrant's last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the registrant's internal control over financial reporting.

#### Item 3 - Exhibits

Certifications - Attached hereto

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BlackRock Senior High Income Fund, Inc.

By: /s/ John M. Perlowski
John M. Perlowski
Chief Executive Officer (principal executive officer) of
BlackRock Senior High Income Fund, Inc.

Date: July 25, 2012

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By: /s/ John M. Perlowski
John M. Perlowski
Chief Executive Officer (principal executive officer) of
BlackRock Senior High Income Fund, Inc.

Date: July 25, 2012

By: /s/ Neal J. Andrews
Neal J. Andrews
Chief Financial Officer (principal financial officer) of
BlackRock Senior High Income Fund, Inc.

Date: July 25, 2012