

BlackRock Real Asset Equity Trust
Form N-Q
March 26, 2012

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 811-21931

Name of Fund: BlackRock Real Asset Equity Trust (BCF)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: John M. Perlowski, Chief Executive Officer, BlackRock Real Asset
Equity Trust, 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: 10/31/2012

Date of reporting period: 01/31/2012

Item 1 Schedule of Investments

Schedule of Investments January 31, 2012 (Unaudited)

BlackRock Real Asset Equity Trust (BCF)

(Percentages shown are based on Net Assets)

| Common Stocks | Shares | Value |
|---|-----------|--------------|
| Chemicals 11.1% | | |
| Agrium, Inc. (a) | 76,200 | \$ 6,115,812 |
| Air Products & Chemicals, Inc. | 61,900 | 5,449,057 |
| Celanese Corp., Series A (a) | 94,600 | 4,607,966 |
| The Dow Chemical Co. (a) | 164,025 | 5,496,478 |
| E.I. du Pont de Nemours & Co. (a) | 416,400 | 21,190,596 |
| Monsanto Co. (a) | 69,400 | 5,694,270 |
| The Mosaic Co. (a) | 19,800 | 1,108,206 |
| Olin Corp. (a) | 179,200 | 3,978,240 |
| Potash Corp. of Saskatchewan, Inc. (a) | 189,300 | 8,847,882 |
| Praxair, Inc. (a) | 159,700 | 16,960,140 |
| | | 79,448,647 |
| Containers & Packaging 1.2% | | |
| Temple-Inland, Inc. | 259,383 | 8,271,724 |
| Energy Equipment & Services 5.0% | | |
| Atwood Oceanics, Inc. (a)(b) | 30,000 | 1,379,400 |
| Basic Energy Services, Inc. (a)(b) | 44,400 | 799,644 |
| Calfrac Well Services Ltd. (a) | 16,500 | 426,857 |
| Core Laboratories NV (a) | 64,400 | 6,841,212 |
| Guide Exploration Ltd., Class A (b) | 317,400 | 819,852 |
| Halliburton Co. (a) | 172,800 | 6,355,584 |
| Key Energy Services, Inc. (a)(b) | 292,200 | 4,231,056 |
| Patterson-UTI Energy, Inc. (a) | 163,300 | 3,081,471 |
| Schlumberger Ltd. (a) | 54,900 | 4,126,833 |
| Seadrill Ltd. | 85,977 | 3,201,430 |
| Technip SA | 26,100 | 2,458,689 |
| Trican Well Service Ltd. (a) | 142,300 | 2,367,173 |
| | | 36,089,201 |
| Machinery 4.3% | | |
| Caterpillar, Inc. (a) | 227,800 | 24,857,536 |
| Deere & Co. (a) | 72,700 | 6,263,105 |
| | | 31,120,641 |
| Metals & Mining 43.0% | | |
| African Rainbow Minerals Ltd. | 278,750 | 6,562,016 |
| Agnico-Eagle Mines Ltd. (a) | 106,950 | 3,999,930 |
| Alcoa, Inc. (a) | 269,450 | 2,737,612 |
| Allegheny Technologies, Inc. (a) | 38,600 | 1,752,054 |
| Alumina Ltd. | 2,021,066 | 2,747,650 |
| Anglo American Platinum Ltd. | 50,444 | 3,567,066 |
| Anglo American Plc | 77,945 | 3,234,976 |
| Barrick Gold Corp. (a) | 97,700 | 4,812,702 |

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| | | |
|--|---------------|--------------|
| BHP Billiton Plc | 878,600 | 29,535,674 |
| Carpenter Technology Corp. (a) | 39,266 | 2,060,680 |
| Cia de Minas Buenaventura SA - ADR (a) | 266,900 | 11,450,010 |
| Cliffs Natural Resources, Inc. (a) | 27,500 | 1,986,875 |
| Detour Gold Corp. (a)(b) | 138,100 | 3,859,142 |
| Eramet | 14,750 | 2,227,721 |
| First Quantum Minerals Ltd. (a) | 530,000 | 11,607,460 |
| Freeport-McMoRan Copper & Gold, Inc. (a) | 122,000 | 5,637,620 |
| Fresnillo Plc | 475,000 | 13,016,293 |
| Glencore International Plc | 225,000 | 1,462,749 |
| Goldcorp, Inc. (a) | 171,450 | 8,296,466 |
| Harry Winston Diamond Corp. (a)(b) | 142,600 | 1,668,194 |
| IAMGOLD Corp. (a) | 126,000 | 2,102,304 |
| Iluka Resources Ltd. | 1,140,986 | 22,172,363 |
| Impala Platinum Holdings Ltd. | 415,200 | 9,091,483 |
| Industrias Penoles SAB de CV | 513,569 | 24,547,417 |
| Jiangxi Copper Co. Ltd., Class H | 1,621,500 | 4,113,498 |
| Kazakhmys Plc | 268,500 | 4,827,375 |
| Kinross Gold Corp. (a) | 250,000 | 2,822,500 |
| Minsur SA | 3,846,986 | 4,363,446 |
| Common Stocks | Shares | Value |
| | | |
| Metals & Mining (concluded) | | |
| MMC Norilsk Nickel OJSC - ADR | 11,420 | \$ 219,764 |
| Newcrest Mining Ltd. | 161,085 | 5,765,780 |
| Newmont Mining Corp. (a) | 65,550 | 4,030,014 |
| OZ Minerals Ltd. | 559,459 | 6,476,135 |
| Rio Tinto Plc - ADR | 517,104 | 31,150,960 |
| Southern Copper Corp. (a) | 75,400 | 2,615,626 |
| Straits Resources Ltd. (b) | 692,629 | 496,520 |
| Teck Resources Ltd., Class B (a) | 296,300 | 12,564,751 |
| United States Steel Corp. (a) | 39,900 | 1,204,581 |
| Vale SA - ADR (a) | 725,300 | 18,350,090 |
| Vedanta Resources Plc | 432,700 | 8,179,078 |
| Xstrata Plc | 1,077,996 | 18,348,876 |
| Zijin Mining Group Co. Ltd., Class H | 6,231,731 | 2,736,600 |
| | | 308,402,051 |
| | | |
| Oil, Gas & Consumable Fuels 25.9% | | |
| Alpha Natural Resources, Inc. (a)(b) | 392,412 | 7,895,329 |
| Anadarko Petroleum Corp. (a) | 46,300 | 3,737,336 |
| Angle Energy, Inc. (a)(b) | 183,800 | 1,000,846 |
| Apache Corp. (a) | 92,100 | 9,106,848 |
| Bill Barrett Corp. (a)(b) | 103,600 | 2,861,432 |
| Bonanza Creek Energy, Inc. (b) | 132,400 | 2,160,768 |
| BP Plc - ADR (a) | 81,800 | 3,755,438 |
| Cenovus Energy, Inc. (a) | 117,600 | 4,285,344 |
| Cheniere Energy, Inc. (a)(b) | 202,300 | 2,587,417 |
| Chesapeake Energy Corp. (a) | 214,500 | 4,532,385 |
| Chevron Corp. (a) | 54,800 | 5,648,784 |
| Concho Resources, Inc. (a)(b) | 22,100 | 2,357,186 |
| Consol Energy, Inc. (a) | 247,579 | 8,848,473 |
| Continental Resources, Inc. (a)(b) | 46,700 | 3,767,756 |
| Crescent Point Energy Corp. (a) | 159,400 | 7,290,400 |
| Denbury Resources, Inc. (a)(b)(c) | 330,600 | 6,235,116 |
| Energy XXI (Bermuda) Ltd. (a)(b) | 130,800 | 4,294,164 |
| EOG Resources, Inc. (a) | 96,800 | 10,274,352 |
| EQT Corp. (a) | 138,800 | 7,012,176 |
| Exxon Mobil Corp. (a) | 45,300 | 3,793,422 |
| Gasco Energy, Inc. (b) | 579,700 | 118,549 |
| Hess Corp. (a) | 51,300 | 2,888,190 |
| James River Coal Co. (a)(b)(c) | 159,500 | 1,003,255 |
| Kodiak Oil & Gas Corp. (a)(b)(c) | 187,400 | 1,699,718 |
| Kosmos Energy Ltd. (a) | 97,500 | 1,224,600 |
| Noble Energy, Inc. (a) | 76,000 | 7,650,920 |

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| | | |
|---|---------|-------------|
| Occidental Petroleum Corp. (a) | 106,900 | 10,665,413 |
| OGX Petroleo e Gas Participacoes SA (b) | 401,100 | 3,799,339 |
| Patriot Coal Corp. (a)(b)(c) | 122,460 | 930,696 |
| Peabody Energy Corp. (a) | 172,300 | 5,873,707 |
| PetroBakken Energy Ltd., Class A (a) | 32,400 | 474,351 |
| PetroChina Co. Ltd. - ADR (a) | 14,400 | 2,095,200 |
| Plains Exploration & Production Co. (a)(b)(c) | 152,400 | 5,748,528 |
| QEP Resources, Inc. (a) | 112,100 | 3,210,544 |
| Range Resources Corp. (a) | 99,600 | 5,728,992 |
| Rex Energy Corp. (b) | 132,200 | 1,250,612 |
| Rosetta Resources, Inc. (a)(b)(c) | 74,000 | 3,551,260 |
| Royal Dutch Shell Plc, Class A - ADR (a) | 59,400 | 4,238,784 |
| Southwestern Energy Co. (a)(b) | 62,600 | 1,949,364 |
| Statoil ASA | 187,100 | 4,710,654 |
| Suncor Energy, Inc. (a) | 136,300 | 4,702,350 |
| Whiting Petroleum Corp. (a)(b) | 218,000 | 10,919,620 |
| | | 185,879,618 |
| Paper & Forest Products 4.2% | | |
| Fibria Celulose SA - ADR (c) | 315,600 | 2,521,644 |
| International Paper Co. (a) | 390,400 | 12,157,056 |

JANUARY 31, 2012

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Schedule of Investments (continued)

BlackRock Real Asset Equity Trust (BCF)

(Percentages shown are based on Net Assets)

| Common Stocks | Shares | Value |
|---|--------------------------------|---------------|
| Paper & Forest Products (concluded) | | |
| MeadWestvaco Corp. | 433,800 | \$ 12,771,072 |
| Mondi Plc | 322,512 | 2,571,705 |
| | | 30,021,477 |
| Real Estate Investment Trusts (REITs) 1.3% | | |
| Weyerhaeuser Co. - REIT (a) | 453,600 | 9,081,072 |
| Total Long-Term Investments | | |
| (Cost \$579,238,199) 96.0% | | 688,314,431 |
| Short-Term Securities | | |
| BlackRock Liquidity Funds, TempFund, Institutional Class, 0.15% (d)(f) | 31,378,948 | 31,378,948 |
| | Beneficial Interest | |
| | (000) | |
| BlackRock Liquidity Series, LLC Money Market Series, 0.09% (d)(e)(f) | \$ 10,347 | 10,346,979 |
| Total Short-Term Securities | | |
| (Cost \$41,725,927) 5.8% | | 41,725,927 |
| Total Investments Before Outstanding Options Written | | |
| (Cost \$620,964,126*) 101.8% | | 730,040,358 |

Options Written

Contracts

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Exchange-Traded Call Options (0.9)%

| | | |
|--|-----|-----------|
| Agnico-Eagle Mines Ltd., Strike Price USD 37.50, Expires 3/19/12 | 355 | (73,308) |
| Agrium, Inc., Strike Price USD 70, Expires 2/20/12 | 250 | (262,500) |
| Alcoa, Inc.: | | |
| Strike Price USD 9, Expires 2/20/12 | 409 | (47,853) |
| Strike Price USD 11, Expires 3/19/12 | 445 | (8,455) |
| Allegheny Technologies, Inc., Strike Price USD 45, Expires 2/20/12 | 130 | (23,400) |
| Alpha Natural Resources, Inc.: | | |
| Strike Price USD 25, Expires 2/20/12 | 150 | (825) |
| Strike Price USD 23, Expires 3/19/12 | 500 | (38,000) |
| Anadarko Petroleum Corp., Strike Price USD 80, Expires 3/19/12 | 150 | (60,750) |
| Angle Energy, Inc., Strike Price CAD 7, Expires 2/20/12 | 300 | (2,992) |
| Apache Corp., Strike Price USD 100, Expires 3/19/12 | 305 | (115,900) |
| Atwood Oceanics, Inc., Strike Price USD 45, Expires 2/20/12 | 100 | (19,500) |
| Barrick Gold Corp., Strike Price USD 47, Expires 3/19/12 | 325 | (110,500) |
| Basic Energy Services, Inc.: | | |
| Strike Price USD 20, Expires 2/20/12 | 72 | (1,980) |
| Strike Price USD 22.50, Expires 2/20/12 | 72 | (1,080) |
| Bill Barrett Corp., Strike Price USD 35, Expires 2/20/12 | 340 | (5,100) |
| BP Plc - ADR, Strike Price USD 45, Expires 3/19/12 | 270 | (56,835) |

Options Written

Contracts **Value**

Exchange-Traded Call Options (continued)

| | | |
|--|-----|------------|
| Calfrac Well Services Ltd., Strike Price CAD 28, Expires 3/19/12 | 55 | \$ (2,331) |
| Carpenter Technology Corp.: | | |
| Strike Price USD 55, Expires 2/20/12 | 65 | (5,038) |
| Strike Price USD 60, Expires 2/20/12 | 65 | (975) |
| Caterpillar, Inc.: | | |
| Strike Price USD 105, Expires 2/20/12 | 750 | (391,875) |
| Strike Price USD 115, Expires 3/19/12 | 100 | (18,650) |
| Celanese Corp., Series A, Strike Price USD 50, Expires 3/19/12 | 315 | (51,975) |
| Cenovus Energy, Inc., Strike Price USD 35, Expires 3/19/12 | 350 | (86,625) |
| Cheniere Energy, Inc.: | | |
| Strike Price USD 14, Expires 3/19/12 | 25 | (2,500) |
| Strike Price USD 16, Expires 3/19/12 | 670 | (30,150) |
| Chesapeake Energy Corp.: | | |
| Strike Price USD 23, Expires 2/20/12 | 333 | (8,658) |
| Strike Price USD 23, Expires 3/19/12 | 375 | (22,875) |
| Chevron Corp.: | | |
| Strike Price USD 105, Expires 2/20/12 | 70 | (6,440) |
| Strike Price USD 110, Expires 2/20/12 | 120 | (1,260) |
| Cia de Minas Buenaventura SA - ADR: | | |
| Strike Price USD 41, Expires 2/20/12 | 440 | (104,500) |
| Strike Price USD 40, Expires 3/19/12 | 440 | (171,600) |
| Cliffs Natural Resources, Inc., Strike Price USD 75, Expires 3/19/12 | 90 | (28,125) |
| Concho Resources, Inc.: | | |
| Strike Price USD 100, Expires 3/19/12 | 38 | (36,100) |
| Strike Price USD 105, Expires 3/19/12 | 38 | (23,560) |
| Consol Energy, Inc.: | | |
| Strike Price USD 40, Expires 2/20/12 | 750 | (9,000) |
| Strike Price USD 36, Expires 3/19/12 | 67 | (12,764) |
| Continental Resources, Inc., Strike Price USD 75, Expires 3/19/12 | 155 | (130,200) |
| Core Laboratories NV, Strike Price USD 120, Expires 2/20/12 | 215 | (7,525) |
| Crescent Point Energy Corp.: | | |
| Strike Price CAD 46, Expires 2/20/12 | 175 | (6,109) |
| Strike Price CAD 47, Expires 3/19/12 | 350 | (11,344) |
| Deere & Co., Strike Price USD 87.50, Expires 3/19/12 | 240 | (59,640) |
| Denbury Resources, Inc.: | | |
| Strike Price USD 16, Expires 2/06/12 | 350 | (100,109) |
| Strike Price USD 19, Expires 3/19/12 | 740 | (77,700) |
| Detour Gold Corp.: | | |
| Strike Price CAD 27, Expires 2/20/12 | 100 | (13,713) |
| Strike Price CAD 28, Expires 4/23/12 | 360 | (72,704) |
| The Dow Chemical Co., Strike Price USD 34, Expires 3/19/12 | 540 | (64,530) |
| E.I. du Pont de Nemours & Co.: | | |
| Strike Price USD 46, Expires 2/20/12 | 500 | (246,250) |
| Strike Price USD 47, Expires 2/20/12 | 500 | (198,750) |
| Strike Price USD 50, Expires 3/19/12 | 375 | (68,812) |
| Strike Price USD 52.50, Expires 3/19/12 | 200 | (12,500) |

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| | | |
|--|-----|-----------|
| Energy XXI (Bermuda) Ltd., Strike Price USD 35, Expires 3/19/12 | 430 | (54,825) |
| EOG Resources, Inc., Strike Price USD 100, Expires 2/20/12 | 320 | (238,400) |

Schedule of Investments (continued)

BlackRock Real Asset Equity Trust (BCF)

(Percentages shown are based on Net Assets)

| Options Written | Contracts | Value |
|--|------------------|--------------|
| Exchange-Traded Call Options (continued) | | |
| EQT Corp., Strike Price USD 55, Expires 3/19/12 | 180 | \$ (13,950) |
| Exxon Mobil Corp., Strike Price USD 87.50, Expires 2/20/12 | 150 | (1,875) |
| First Quantum Minerals Ltd.: | | |
| Strike Price CAD 20, Expires 2/20/12 | 875 | (211,616) |
| Strike Price CAD 21, Expires 2/20/12 | 875 | (143,986) |
| Freeport-McMoRan Copper & Gold, Inc., Strike Price USD 45, Expires 3/19/12 | 405 | (126,562) |
| Goldcorp, Inc., Strike Price USD 46, Expires 3/19/12 | 565 | (200,575) |
| Halliburton Co., Strike Price USD 36, Expires 2/20/12 | 570 | (92,055) |
| Harry Winston Diamond Corp., Strike Price CAD 11, Expires 2/20/12 | 470 | (40,780) |
| Hess Corp., Strike Price USD 62.50, Expires 3/19/12 | 170 | (9,095) |
| IAMGOLD Corp., Strike Price CAD 17, Expires 3/19/12 | 415 | (37,456) |
| International Paper Co., Strike Price USD 32, Expires 3/19/12 | 1,290 | (104,490) |
| James River Coal Co., Strike Price USD 8, Expires 3/19/12 | 260 | (7,150) |
| Key Energy Services, Inc., Strike Price USD 15, Expires 3/19/12 | 965 | (74,788) |
| Kinross Gold Corp., Strike Price USD 12, Expires 2/20/12 | 825 | (17,738) |
| Kodiak Oil & Gas Corp., Strike Price USD 10, Expires 2/20/12 | 100 | (1,750) |
| Kosmos Energy Ltd., Strike Price USD 13.50, Expires 3/26/12 | 165 | (6,653) |
| Monsanto Co., Strike Price USD 82.50, Expires 3/19/12 | 230 | (62,330) |
| The Mosaic Co., Strike Price USD 57.50, Expires 3/19/12 | 90 | (17,595) |
| Newmont Mining Corp., Strike Price USD 60, Expires 3/19/12 | 215 | (70,950) |
| Noble Energy, Inc., Strike Price USD 97.50, Expires 2/20/12 | 250 | (117,500) |
| Occidental Petroleum Corp., Strike Price USD 105, Expires 3/19/12 | 355 | (59,462) |
| Olin Corp.: | | |
| Strike Price USD 20, Expires 2/20/12 | 495 | (110,138) |
| Strike Price USD 22.50, Expires 3/19/12 | 95 | (5,700) |
| Patriot Coal Corp., Strike Price USD 11, Expires 2/20/12 | 180 | (360) |
| Patterson-UTI Energy, Inc.: | | |
| Strike Price USD 23, Expires 2/20/12 | 270 | (2,700) |
| Strike Price USD 20, Expires 3/19/12 | 270 | (20,250) |
| Peabody Energy Corp.: | | |
| Strike Price USD 38, Expires 2/20/12 | 175 | (2,625) |
| Strike Price USD 39, Expires 3/19/12 | 395 | (16,788) |
| PetroBakken Energy Ltd., Class A, Strike Price CAD 17, Expires 3/19/12 | 106 | (2,114) |
| PetroChina Co. Ltd. - ADR, Strike Price USD 120, Expires 2/20/12 | 50 | (128,500) |
| Plains Exploration & Production Co.: | | |
| Strike Price USD 35, Expires 2/20/12 | 270 | (80,055) |
| Strike Price USD 39, Expires 3/19/12 | 230 | (33,235) |
| Potash Corp. of Saskatchewan, Inc.: | | |
| Strike Price USD 40, Expires 2/20/12 | 315 | (213,412) |
| Strike Price USD 42.50, Expires 2/20/12 | 315 | (138,600) |
| Options Written | Contracts | Value |
| Exchange-Traded Call Options (concluded) | | |
| Praxair, Inc., Strike Price USD 110, Expires 3/19/12 | 530 | \$ (47,700) |
| QEP Resources, Inc., Strike Price USD 35, Expires 3/19/12 | 190 | (9,500) |
| Range Resources Corp., Strike Price USD 65, Expires 2/20/12 | 330 | (18,150) |
| Rosetta Resources, Inc.: | | |
| Strike Price USD 50, Expires 2/20/12 | 130 | (13,325) |
| Strike Price USD 50, Expires 4/23/12 | 130 | (41,600) |
| Royal Dutch Shell Plc, Class A - ADR: | | |
| Strike Price USD 75, Expires 2/20/12 | 85 | (1,700) |
| Strike Price USD 75, Expires 3/19/12 | 36 | (1,620) |
| Schlumberger Ltd., Strike Price USD 75, Expires 3/19/12 | 185 | (60,125) |
| Southern Copper Corp., Strike Price USD 36, Expires 3/19/12 | 250 | (24,375) |
| Southwestern Energy Co.: | | |
| Strike Price USD 34, Expires 2/20/12 | 240 | (7,680) |
| Strike Price USD 35, Expires 2/20/12 | 240 | (5,040) |

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| Suncor Energy, Inc.: | | |
| Strike Price USD 28, Expires 2/20/12 | 223 | (143,835) |
| Strike Price USD 29, Expires 2/20/12 | 223 | (122,092) |
| Teck Resources Ltd., Class B, Strike Price CAD 44, Expires 3/19/12 | 980 | (145,138) |
| Trican Well Service Ltd., Strike Price CAD 18, Expires 3/19/12 | 470 | (21,093) |
| United States Steel Corp., Strike Price USD 29, Expires 3/19/12 | 135 | (36,315) |
| Vale SA - ADR: | | |
| Strike Price USD 23, Expires 2/20/12 | 625 | (151,250) |
| Strike Price USD 25, Expires 3/19/12 | 1,765 | (227,685) |
| Weyerhaeuser Co. - REIT, Strike Price USD 21, Expires 3/19/12 | 817 | (24,510) |
| Whiting Petroleum Corp.: | | |
| Strike Price USD 50, Expires 2/20/12 | 204 | (33,660) |
| Strike Price USD 52.50, Expires 2/20/12 | 196 | (13,720) |
| Strike Price USD 55, Expires 2/20/12 | 110 | (2,750) |
| Strike Price USD 52.50, Expires 3/19/12 | 100 | (19,250) |
| Strike Price USD 55, Expires 3/19/12 | 110 | (12,650) |

Total Exchange-Traded Call Options (6,564,686)

Over-the-Counter Call Options (0.7)%

| | | |
|---|---------|-----------|
| African Rainbow Minerals Ltd.: | | |
| Strike Price ZAR 176.75, Expires 2/29/12, Broker Citigroup Global Markets, Inc. | 46,000 | (62,864) |
| Strike Price ZAR 184.44, Expires 3/07/12, Broker Citigroup Global Markets, Inc. | 46,000 | (41,875) |
| Alumina Ltd., Strike Price AUD 1.15, Expires 2/15/12, Broker JPMorgan Chase Securities | 667,500 | (92,531) |
| Anglo American Platinum Ltd., Strike Price ZAR 573.69, Expires 3/07/12, Broker Citigroup Global Markets, Inc. | 16,700 | (26,463) |
| Anglo American Plc, Strike Price GBP 26.75, Expires 3/07/12, Broker Citigroup Global Markets, Inc. | 25,800 | (44,651) |
| BHP Billiton Plc, Strike Price GBP 21.59, Expires 3/07/12, Broker Deutsche Bank Securities Corp. | 290,000 | (308,499) |

JANUARY 31, 2012

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Schedule of Investments (continued)

BlackRock Real Asset Equity Trust (BCF)

(Percentages shown are based on Net Assets)

| Options Written | Contracts | Value |
|---|------------------|--------------|
| Over-the-Counter Call Options (continued) | | |
| EQT Corp., Strike Price USD 57.25, Expires 2/09/12, Broker Citigroup Global Markets, Inc. Eramet: | 28,500 | \$ (90) |
| Strike Price EUR 108.53, Expires 2/14/12, Broker UBS Securities LLC | 2,500 | (31,519) |
| Strike Price EUR 122.81, Expires 3/07/12, Broker Credit Suisse First Boston | 2,400 | (18,399) |
| Fibria Celulose SA - ADR, Strike Price USD 7.99, Expires 2/27/12, Broker Deutsche Bank Securities Corp. | 104,000 | (50,340) |
| Fresnillo Plc: | | |
| Strike Price GBP 17.49, Expires 2/29/12, Broker Morgan Stanley & Co., Inc. | 82,500 | (120,867) |
| Strike Price GBP 17.83, Expires 3/07/12, Broker Citigroup Global Markets, Inc. | 74,300 | (105,069) |
| Glencore International Plc: | | |
| Strike Price GBP 3.97, Expires 2/03/12, Broker Morgan Stanley & Co., Inc. | 33,000 | (8,636) |
| Strike Price GBP 4.20, Expires 3/07/12, Broker Morgan Stanley & Co., Inc. | 41,300 | (9,745) |
| Iluka Resources Ltd., Strike Price AUD 15.65, Expires 2/15/12, Broker Citigroup Global Markets, Inc. | 376,600 | (1,104,896) |
| Impala Platinum Holdings Ltd., Strike Price ZAR 173.17, Expires 3/07/12, Broker Citigroup Global Markets, Inc. | 138,000 | (132,834) |
| Industrias Penoles SAB de CV: | | |
| Strike Price MXN 600.52, Expires 2/10/12, Broker Deutsche Bank Securities Corp. | 42,700 | (100,817) |
| Strike Price MXN 607.24, Expires 2/22/12, Broker Credit Suisse First Boston | 42,700 | (111,896) |
| Strike Price MXN 621.26, Expires 3/08/12, Broker Citigroup Global Markets, Inc. | 42,700 | (112,202) |
| Strike Price MXN 631.88, Expires 3/22/12, Broker Citigroup Global Markets, Inc. | 41,500 | (112,286) |
| Jiangxi Copper Co. Ltd., Class H, Strike Price HKD 17.17, Expires 2/15/12, Broker Morgan Stanley & Co., Inc. | 535,000 | (174,161) |
| Kazakhmys Plc, Strike Price GBP 11.12, Expires 3/07/12, Broker Morgan Stanley & Co., Inc. | 88,700 | (100,379) |
| Kodiak Oil & Gas Corp., Strike Price USD 10.10, Expires 3/06/12, Broker Morgan Stanley & Co., Inc. | 53,000 | (17,343) |
| Kosmos Energy Ltd., Strike Price USD 14.17, Expires 2/15/12, Broker Morgan Stanley & Co., Inc. | 15,500 | (821) |
| MeadWestvaco Corp.: | | |
| Strike Price USD 29.60, Expires 2/02/12, Broker Citigroup Global Markets, Inc. | 49,000 | (3,480) |
| Strike Price USD 30.96, Expires 2/27/12, Broker Morgan Stanley & Co., Inc. | 94,000 | (23,759) |
| Options Written | Contracts | Value |
| Over-the-Counter Call Options (concluded) | | |
| Minsur SA: | | |
| Strike Price PEN 2.79, Expires 2/10/12, Broker Credit Suisse First Boston | 319,500 | \$ (31,547) |
| Strike Price PEN 2.81, Expires 3/08/12, Broker Citigroup Global Markets, Inc. | 639,000 | (66,060) |
| Strike Price PEN 2.99, Expires 3/22/12, Broker Citigroup Global Markets, Inc. | 319,500 | (20,783) |
| Mondi Plc, Strike Price GBP 5.08, Expires 3/07/12, Broker UBS Securities LLC | 107,000 | (40,956) |
| Newcrest Mining Ltd., Strike Price AUD 30.82, Expires 2/15/12, Broker Citigroup Global Markets, Inc. | 53,500 | (172,798) |
| OGX Petroleo e Gas Participacoes SA, Strike Price BRL 15.85, Expires 3/08/12, Broker Citigroup Global Markets, Inc. | 132,400 | (87,802) |
| OZ Minerals Ltd., Strike Price AUD 10.42, Expires 2/15/12, Broker JPMorgan Chase Securities | 184,700 | (108,590) |
| QEP Resources, Inc., Strike Price USD 30.01, Expires 2/07/12, Broker Deutsche Bank Securities Corp. | 18,000 | (2,754) |
| Rex Energy Corp., Strike Price USD 15.11, Expires 2/23/12, Broker Morgan Stanley & Co., Inc. | 43,500 | (16) |
| Rio Tinto Plc - ADR, Strike Price GBP 37.48, Expires 3/07/12, Broker Deutsche Bank Securities Corp. | 171,000 | (556,354) |
| Royal Dutch Shell Plc, Class A - ADR, Strike Price USD 73.48, Expires 2/08/12, Broker UBS Securities LLC | 7,500 | (1,305) |
| Seadrill Ltd., Strike Price NOK 214.71, Expires 2/29/12, Broker Morgan Stanley & Co., Inc. | 28,400 | (38,458) |
| Statoil ASA, Strike Price NOK 150.75, Expires 3/07/12, Broker Morgan Stanley & Co., Inc. | 61,800 | (26,774) |
| Technip SA, Strike Price EUR 73.75, Expires 2/29/12, Broker UBS Securities LLC | 8,600 | (20,103) |
| Vedanta Resources Plc, Strike Price GBP 10.81, Expires 3/07/12, Broker Morgan Stanley & Co., Inc. | 143,000 | (358,655) |
| Weyerhaeuser Co. - REIT, Strike Price USD 16.92, Expires 2/08/12, Broker Morgan Stanley & Co., Inc. | 68,000 | (210,800) |
| Xstrata Plc, Strike Price GBP 10.80, Expires 3/07/12, Broker Citigroup Global Markets, Inc. | 356,000 | (321,330) |
| | 2,056,000 | (108,037) |

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Zijin Mining Group Co. Ltd., Class H, Strike Price HKD 3.01, Expires 2/15/12, Broker Credit
Suisse First Boston

| | | |
|--|--|----------------|
| Total Over-the-Counter Call Options | | (5,089,544) |
| Total Options Written | | |
| (Premiums Received \$8,352,292) (1.6)% | | (11,654,230) |
| Total Investments Net of Outstanding Options Written 100.2% | | 718,386,128 |
| Liabilities in Excess of Other Assets (0.2)% | | (1,370,279) |
| Net Assets 100.0% | | \$ 717,015,849 |

Schedule of Investments (continued)

BlackRock Real Asset Equity Trust (BCF)

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

| | |
|-------------------------------|----------------|
| Tax cost | \$ 676,241,909 |
| Gross unrealized appreciation | \$ 156,395,618 |
| Gross unrealized depreciation | (102,597,169) |
| Net unrealized appreciation | \$ 53,798,449 |

- (a) All or a portion of security has been pledged/segregated as collateral in connection with outstanding options written.
- (b) Non-income producing security.
- (c) Security, or a portion of security, is on loan.
- (d) Represents the current yield as of report date.
- (e) Security was purchased with the cash collateral from loaned securities.

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

| Affiliate | Shares/ Beneficial Interest Held at October 31, 2011 | Net Activity | Shares/ Beneficial Interest Held at January 31, 2012 | Realized Gain | Income |
|--|--|-----------------|--|------------------|----------|
| BlackRock Liquidity Funds, TempFund, Institutional Class | 29,314,451 | 2,064,497 | 31,378,948 | \$688 | \$11,961 |
| BlackRock Liquidity Series, LLC, Money Market Series | \$11,645,567 | \$(1,298,588) | \$10,346,979 | | \$4,237 |

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

| Currency Purchased | Currency Sold | Counterparty | Settlement Date | Unrealized Appreciation |
|-----------------------|------------------|--------------|--------------------|----------------------------|
|-----------------------|------------------|--------------|--------------------|----------------------------|

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| | | | | | | | |
|-----|---------|-----|-----------|---------------------|---------|----|-------------|
| | | | | Deutsche Bank | | | |
| USD | 4,994 | CAD | 5,000 | Securities Corp. | 2/01/12 | \$ | 7 |
| | | | | Citigroup Global | | | |
| USD | 159,254 | MXN | 2,075,000 | Markets, Inc. | 2/02/12 | | 56 |
| | | | | Total | | | <u>\$63</u> |

For Trust compliance purposes, the Trust's industry classifications refer to any one or more of the industry sub-classifications used by one or more widely recognized market indexes or ratings group indexes, and/or as defined by Trust management. These definitions may not apply for purposes of this report, which may combine 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 Trust's own assumptions used in determining the fair value of investments and derivative financial instruments)

Changes in valuation techniques may result in transfers in or out of an assigned level within the disclosure hierarchy. The categorization of a value determined for investments and derivative financial instruments is based on the pricing transparency of the investment and derivative financial instrument and does not necessarily correspond to the Trust's perceived risk of investing in those securities. For information about the Trust's policy regarding valuation of investments and derivative financial instruments and other significant accounting policies, please refer to the Trust's most recent financial statements as contained in its annual report.

JANUARY 31, 2012

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Schedule of Investments (concluded)

BlackRock Real Asset Equity Trust (BCF)

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

| Valuation Inputs | Level 1 | Level 2 | Level 3 | Total |
|-----------------------------|---------------|-------------|---------|---------------|
| Assets: | | | | |
| Investments: | | | | |
| Long-Term Investments: | | | | |
| Common Stocks: | | | | |
| Chemicals | \$ 79,448,647 | | | \$ 79,448,647 |
| Containers & Packaging | 8,271,724 | | | 8,271,724 |
| Energy Equipment & Services | 30,429,082 | \$5,660,119 | | 36,089,201 |
| Machinery | 31,120,641 | | | 31,120,641 |
| Metals & Mining | 132,469,474 | 175,932,577 | | 308,402,051 |
| Oil, Gas & Consumable Fuels | 181,168,964 | 4,710,654 | | 185,879,618 |
| Paper & Forest Products | 27,449,772 | 2,571,705 | | 30,021,477 |

| Valuation Inputs | Level 1 | Level 2 | Level 3 | Total |
|---------------------------------------|----------------|----------------|---------|----------------|
| Real Estate Investment Trusts (REITs) | 9,081,072 | | | 9,081,072 |
| Short-Term Securities | 31,378,948 | 10,346,979 | | 41,725,927 |
| Total | \$ 530,818,324 | \$ 199,222,034 | | \$ 730,040,358 |

| Valuation Inputs | Level 1 | Level 2 | Level 3 | Total |
|---|----------------|---------------|---------|-----------------|
| Derivative Financial Instruments ¹ | | | | |
| Assets: | | | | |
| Foreign currency exchange contracts | \$63 | | | \$ 63 |
| Liabilities: | | | | |
| Equity contracts. | (6,457,924) | \$(5,196,306) | | (11,654,230) |
| Total | \$ (6,457,861) | \$(5,196,306) | | \$ (11,654,167) |

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

Portfolio Abbreviations

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

| | | | |
|------------|-----------------------------|-------------|------------------------------|
| ADR | American Depositary Receipt | MXN | Mexican Peso |
| AUD | Australian Dollar | NOK | Norwegian Krone |
| BRL | Brazil Real | PEN | Peruvian Nuevo Sol |
| CAD | Canadian Dollar | REIT | Real Estate Investment Trust |
| EUR | Euro | USD | US Dollar |
| GBP | British Pound | ZAR | South African Rand |
| HKD | Hong Kong Dollar | | |

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

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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 Real Asset Equity Trust

By: /s/ John M. Perlowski
John M. Perlowski
Chief Executive Officer (principal executive officer) of
BlackRock Real Asset Equity Trust

Date: March 23, 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 Real Asset Equity Trust

Date: March 23, 2012

By: /s/ Neal J. Andrews
Neal J. Andrews
Chief Financial Officer (principal financial officer) of
BlackRock Real Asset Equity Trust

Date: March 23, 2012