PIONEER MUNICIPAL & EQUITY INCOME TRUST Form N-Q April 30, 2008

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM N-Q

CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-21448

Pioneer Municipal and Equity Income Trust (Exact name of registrant as specified in charter)

60 State Street, Boston, MA 02109 (Address of principal executive offices) (ZIP code)

Dorothy E. Bourassa, Pioneer Investment Management, Inc., 60 State Street, Boston, MA 02109 (Name and address of agent for service)

Registrant's telephone number, including area code: (617) 742-7825

Date of fiscal year end: November 30

Date of reporting period: February 29, 2008

Form N-Q is to be used by management investment companies, other than small business investment companies registered on Form N-5 (239.24 and 274.5 of this chapter), to file reports with the Commission, not later than 60 days after close of the first and third fiscal quarters, pursuant to Rule 30b1-5under the Investment Company Act of 1940 (17 CFR 270.30b-5). The Commission may use the information provided on Form N-Q in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-Q, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-Q unless the Form displays a currently valid Office of Management and Budget ("OMB") control number. Please direct comments concerning the accuracy of the information collection burden estimate and any suggestions for reducing the burden to Secretary, Securities and Exchange Commission, 450 Fifth Street, NW, Washington, DC 20549-0609. The OMB has reviewed this collection of information under the clearance requirements of 44 U.S.C. ss. 3507.

ITEM 1. Schedule of Investments. Pioneer Municipal and Equity Income Trust SCHEDULE OF INVESTMENTS 2/29/08 (unaudited) Principal Amount(\$) Value TAX EXEMPT OBLIGATIONS - 78.9% of Net Assets Alabama - 1.4% 5,000,000 Huntsville-Redstone Village Special Care Facilities Fina \$4,025,550 1,500,000 Sylacauga Health Care Authority Revenue, 6.0%, 8/1/35 1,318,095 5,343,645 Arizona - 1.1% 1,000,000 Maricopa County Hospital Revenue, 5.0%, 4/1/35 838,840 470,000 + Pima County Industrial Development Authority, 6.375%, 7/ 533,544 Pima County Industrial Development Authority, 6.375%, 7/ Pima County Industrial Development Authority, 6.75%, 7/1 530,000 507,645 989,000 990,048 1,000,000+ Pima County Industrial Development Authority, 7.5%, 7/1/ 1,174,520 4,044,597 California - 5.0% 1,000,000 California Health Facilities Authority Revenue, 5.25%, 7 974,240 9,000,000 Golden State Tobacco Securitization Corp., 5.125%, 6/1/4 7,218,090 4,000,000+ Golden State Tobacco Securitization Corp., 6.75%, 6/1/39 4,547,880 9,655,000(a)Golden State Tobacco Securitization Corp., RIB, 8.463%, 5,892,157 18,632,367 Colorado - 0.7% 3,000,000 Colorado Educational & Cultural Facilities Authority Rev 2,503,920 Connecticut - 1.0% 1,500,000 Mohegan Tribe Indians Gaming Authority, 5.25%, 1/1/33 (1 1,216,770 2,470,000 Mohegan Tribe Indians Gaming Authority, 6.25%, 1/1/31 (1 2,309,524 3,526,294 District of Columbia - 1.1% 4,000,000 District of Columbia Tobacco Settlement Financing Corp., 4,021,200 Florida - 4.2% 1,105,000 Highlands County Health Facilities Authority Revenue, 5. 1,038,125 5,000,000+ Highlands County Health Facilities Authority Revenue, 6. 5,534,350 2,000,000 Lee County Industrial Development Authority Revenue, 5.3 1,544,780 Madison County First Mortgage Revenue, 6.0%, 7/1/25 585,000 539,429 2,025,000 Miami Beach Health Facilities Authority Revenue, 5.375%, 1,697,780 500,000 Miami Beach Health Facilities Authority Revenue, 6.7%, 1 503,895 1,400,000 Orange County Health Facilities Authority Revenue, 5.5%, 1,141,532 3,970,000(a)Tampa-Hillsborough County Expressway Authority Revenue, 3,493,243 15,493,134 Georgia - 3.7% 9,580,000(a) Georgia Municipal Electric Authority Power Revenue, RIB, 11,111,171 2,500,000+ Milledgeville-Baldwin County Development Authority Reven 2,801,850 13,913,021 Illinois - 4.6% 3,000,000 Chicago Illinois General Obligation, 5.0%, 1/1/28 2,890,140 4,580,000 Illinois Development Finance Authority Revenue, 5.25%, 1 4,446,539 5,000,000 Illinois Educational Facilities Authority Revenue, 5.0%, 4,694,050 2,000,000+ Illinois Finance Authority Revenue, 5.5%, 8/15/43 2,210,380 2,055,000(a)Illinois Finance Authority Revenue, RIB, 11.196%,8/15/4 2,789,971 17,031,080 Indiana - 2.8% 5,000,000 Indiana Health & Educational Facilites Financing Authori 4,275,350 4,135,000 Indiana State Development Finance Authority Revenue, 5.7 4,079,591

2,570,000	Vigo County Hospital Authority Revenue, 5.8%, 9/1/47 (14	2,185,965 10,540,906
4,000,000	Iowa - 0.9% Iowa Financing Authority Senior Housing Revenue, 5.625%,	
750,000 2,000,000	Kansas - 0.6% Manhattan Health Care Facilities Revenue, 5.125%, 5/15/3 Manhattan Health Care Facilities Revenue, 5.125%, 5/15/4	596,925 1,568,000
5,000,000 8,335,000	Louisiana - 3.3% Louisiana Public Facilities Authority Revenue, 5.5%, 5/1 Tobacco Settlement Financing Corp., 5.875%, 5/15/39	7,693,455
3,000,000 1,000,000 660,000 1,000,000 2,000,000+	Maryland - 1.9% Frederick County Educational Facilities Revenue, 5.625%, Maryland State Economic Development Revenue, Series A, 5 Maryland State Economic Development Revenue, Series B, 5 Maryland State Economic Development Revenue, 5.0%, 12/1/ Maryland State Health & Higher Educational Facilities Au	
4,500,000 2,000,000 1,550,000 2,120,000 900,000 2,750,000 500,000 1,100,000 1,000,000	Massachusetts - 4.5% Massachusetts Health & Educational Facilities Authority Massachusetts State Development Finance Agency, 5.5%, 1/ Massachusetts State Development Finance Agency, 5.7%, 10	3,880,890 1,919,420 1,485,272 1,519,856 2,003,527 891,513 2,793,147 412,830 1,071,609 930,290 16,908,354
5,000,000 1,595,000 3,340,000 2,000,000 1,000,000	Michigan - 3.0% Macomb County Hospital Finance Authority Revenue, 5.875% Meridian Economic Development Corporate Ltd. Obligation Michigan Public Educational Facilities Authority Revenue Michigan State Hospital Finance Authority Revenue, 5.25% Michigan State Hospital Finance Authority Revenue, 5.5%,	4,514,200 1,401,654 2,799,688 1,678,860 825,830 11,220,232
2,000,000 1,500,000 1,000,000 1,000,000	Minnesota - 1.4% Duluth Economic Development Authority Health Care Facili Duluth Economic Development Authority Health Care Facili North Oaks Senior Housing Revenue, 6.0%, 10/1/33 North Oaks Senior Housing Revenue, 6.5%, 10/1/47	
1,720,000	Missouri - 0.4% Missouri State Health & Educational Authority Health Fac	1,607,478
1,000,000	Montana - 0.3% Montana Finance Authority Hospital Facilities Revenue, 5	941,520
1,500,000	Nevada - 0.4% Henderson Nevada Health Care Facilities Revenue, 5.625%,	1,504,230
	New Hampshire - 0.7% New Hampshire Business Finance Authority Revenue, 6.05%, New Hampshire Health & Education Facilities Authority Re	
	New Jersey - 5.9% Camden County Improvement Authority Revenue, 5.75%, 2/15 a)Garden State Preservation Trust, RIB, 12.487%, 11/1/22	

710,000 New Jersey Economic Development Authority Revenue, 5.75% 642,443 1,000,000 New Jersey Economic Development Authority Revenue, 5.875 869,330 1,000,000 New Jersey Health Care Facilities Financing Authority Re 927,920 5,000,000 New Jersey Health Care Facilities Financing Authority Re 4,487,550 3,500,000 New Jersey Health Care Facilities Financing Authority Re 3,302,215 3,000,000+ Tobacco Settlement Financing Corp., 6.25%, 6/1/43 3,391,500 21,938,254 New Mexico - 0.6% 1,000,000 Dona Ana County PILT Revenue, 5.25%, 12/1/25 955,440 1,500,000 Farmington New Mexico Hospital Revenue, 5.0%, 6/1/23 1,349,925 2,305,365 New York - 6.4% 2,500,000 Albany Industrial Development Agency Civic Facilities Re 2,224,500 2,000,000 Dutchess County Industrial Development Agency Revenue, 7 2,090,800 3,255,000(a)Lehman Municipal Trust Receipts, RIB, 9.103%, 6/15/38 2,770,949 1,700,000 Nassau County Industrial Development Agency, 6.7%, 1/1/4 1,626,747 1,000,000 New York City Industrial Development Agency, 5.0%, 7/1/2 980,500 1,000,000 New York City Industrial Development Agency, 5.25%, 7/1/ 1,010,120 5,000,000 Port Authority of New York & New Jersey Revenue, 5.0%, 9 4,752,600 1,000,000 Suffolk County Industrial Development Agency Civic Facil 805,710 4,900,000 Triborough Bridge & Tunnel Authority, 5.25%, 11/15/30 4,899,608 3,000,000 Ulster County Industrial Development Agency Civic Facili 2,697,690 23,859,224 North Carolina - 0.7% 1,000,000 North Carolina Capital Facilities Finance Agency Student 919,810 1,000,000 North Carolina Capital Facilities Finance Agency Student 884,600 1,000,000 North Carolina Medical Care Commission Health Care Facil 914,440 2,718,850 Ohio - 1.0% 1,500,000 Cuyahoga County Health Care & Independent Living Facilit 1,312,575 1,500,000 Cuyahoga County Health Care & Independent Living Facilit 1,300,710 1,000,000 Hamilton County Hospital Facilities Revenue, 5.125%, 5/1 930,300 3,543,585 Oregon - 0.8% 2,935,000 Oregon State Housing & Community Services Department Mul 2,936,966 Pennsylvania - 3.0% 5,000,000+ Pennsylvania State Turnpike Commission Oil Franchise Tax 5,390,900 1,315,000+ Sayre Health Care Facilities Authority Revenue, 5.875%, 1,442,792 685,000 Sayre Health Care Facilities Authority Revenue, 5.875%, 685,767 280,000 Scranton-Lackawanna Health and Welfare Authority Hospita 279,723 700,000 Scranton-Lackawanna Health and Welfare Authority Hospita 698,243 Scranton-Lackawanna Health and Welfare Authority Hospita 460,000 458,077 2,165,000 Swarthmore Borough Authority College Revenue, 5.0%, 9/15 2,078,162 11,033,664 Puerto Rico - 1.2% 75,000 + Puerto Rico Public Buildings Authority Revenue, 5.25%, 7 81,159 4,925,000 Puerto Rico Public Buildings Authority Revenue, 5.25%, 7 4,548,878 4,630,037 Rhode Island - 1.2% 1,640,000 Tobacco Settlement Financing Corp., 6.125%, 6/1/32 1,576,630 3,100,000 Tobacco Settlement Financing Corp., 6.25%, 6/1/42 2,932,972 4,509,602 South Carolina - 4.0% 4,000,000 Berkeley County School District Installment Lease, 5.0%, 3,629,760 5,000,000 Florence County Hospital Revenue, 5.25%, 11/1/34 4,812,250 3,500,000+ Lexington County Health Services District, Inc., Hospita 3,842,580 540,000 + South Carolina Jobs Economic Development Authority Reven 588,535 1,960,000 South Carolina Jobs Economic Development Authority Reven 1,947,613 14,820,738 Tennessee - 0.7% 2,500,000 Knox County Health Educational & Housing Facilities Boar 2,512,700

	Texas - 4.6%	
1,552,000 2,750,000	Houston Housing Financing Corp., 6.25%, 9/20/31 Lower Colorado River Authority, 5.0%, 5/15/31	1,558,037 2,629,743
1,711,000	Panhandle Regional Housing Finance Corp., 6.6%, 7/20/31	1,744,878
3,000,000 1,000,000	Richardson Hospital Authority, 6.0%, 12/1/34 Seguin Higher Education Facilities Corp. Revenue, 5.0%,	2,814,150 919,860
1,500,000	Texas State Student Housing Revenue, 6.5%, 9/1/34	1,479,480
3,000,000	Willacy County Local Government Corp. Revenue, 6.0%, 9/1	2,972,820
3,000,000	Willacy County Local Government Corp. Revenue, 6.875%, 9	2,867,310 16,986,278
3 750 000/	Vermont - 1.1% a)Lehman Municipal Trust Receipts, RIB, 10.718%, 10/31/46	2,706,150
	Vermont Educational & Health Buildings Financing Agency	1,207,173
	Virginia - 1.3%	3,913,323
1,500,000	Prince William County Industrial Development Hospital Re	1,414,635
3,925,000	Prince William County Industrial Development Hospital Re	3,607,036 5,021,671
	Washington - 2.6%	
3,000,000 7,000,000	King County Washington Sewer Revenue, 5.0%, 1/1/35 Tobacco Settlement Authority Revenue, 6.625%, 6/1/32	2,794,590 7,006,720
,,000,000	Tobacco Sectlement Authority Revenue, 0.0258, 0/1/52	9,801,310
	Wisconsin - 0.8%	
3,500,000	Wisconsin State Health & Educational Facilities Authorit	3,149,440
	TOTAL TAX-EXEMPT OBLIGATIONS	
	(Cost \$311,894,811) (b) 2	93,649,541
Shares		
	COMMON STOCKS - 37.5% of Net Assets Energy - 1.5%	
	Oil & Gas Drilling - 0.6%	
19,566	Diamond Offshore Drilling, Inc.	2,364,160
	Oil & Gas Storage & Transportation - 0.9%	
142,876	Spectra Energy Corp. Total Energy	3,301,864 5,666,024
	local hielgy	3,000,024
	Materials - 0.5% Diversified Chemicals - 0.5%	
94,000	Olin Corp.	1,806,680
	Total Materials	1,806,680
	Commercial Services & Supplies - 0.8%	
70 024	Commercial Printing - 0.7%	0 515 650
79,034	R.R. Donnelley & Sons Co.	2,515,652
21 400	Office Services & Supplies - 0.1%	220 020
31,486	Kimball International, Inc. Total Commercial Services & Supplies	329,029 2,844,681
	Consumer Durables & Apparel - 0.1% Home Furnishings - 0.1%	
50,000	Bassett Furniture Industries, Inc.	587,000
	Total Consumer Durables & Apparel	587,000
	Media - 1.5%	
206 407	Movies & Entertainment - 1.1%	4 072 000
206,487	Regal Entertainment Group	4,073,988

	Publishing - 0.4%	
295,935	Idearc, Inc.	1,426,407
	Total Media	5,500,395
		, ,
	Food, Beverage & Tobacco - 8.8%	
	Packaged Foods & Meats - 2.2%	
E 2 2 7 E 0		E 20E (14
532,758	B&G Foods, Inc.	5,295,614
92,828	Kraft Foods, Inc.	2,893,449
		8,189,063
	Tobacco - 6.6%	
134,140	Altria Group, Inc.	9,811,000
172,872	Loews Corp Carolina Group	13,015,533
29,704	Reynolds American, Inc.	1,892,739
20,101	Reynords function, the.	24,719,272
	Total Food, Beverage & Tobacco	32,908,335
	Pharmaceuticals, Biotechnology & Life Sciences - 4.6%	
	Pharmaceuticals - 4.6%	
329,758	Bristol-Myers Squibb Co.	7,455,828
216,536	Merck & Co., Inc.	9,592,545
210,000	Total Pharmaceuticals, Biotechnology & Life Sciences	17,048,373
	iotal filalmateucitais, biotechnology & bile Sciences	11,040,575
	Banks - 1.6%	
	Diversified Banks - 0.2%	
28,642	Wachovia Corp.	877 , 018
	Regional Banks - 0.9%	
81,550	KeyCorp	1,798,178
67,800	Regions Financial Corp.	1,437,360
		3,235,538
	Thrifts & Mortgage Finance - 0.5%	
222,700	TrustCo Bank Corp., NY	1,926,355
	Total Banks	6,038,911
	Diversified Financials - 0.5%	
	Other Diversified Financial Services - 0.5%	
40 500		1 (00 050
42,500	Bank of America Corp.	1,688,950
	Total Diversified Financials	1,688,950
	Telecommunication Services - 9.8%	
	Integrated Telecommunication Services - 9.8%	
187,900	AT&T, Inc.	6,544,557
529,946	Citizens Communications Co.	5,691,620
406,745	Verizon Communications, Inc.	14,772,978
790,184	Windstream Corp.	9,292,564
	Total Telecommunication Services	36,301,719
	Utilities - 7.8%	
	Electric Utilities - 0.7%	
138,400	Empire District Electric Co.	2,838,584
100,100	Empire District Diettie co.	2,000,001
	Con Utilition 2 FS	
01.010	Gas Utilities - 3.5%	0.017.51
81,249	AGL Resources, Inc.	2,817,715
395,466	Atmos Energy Corp.	10,282,116
		13,099,831
	Multi-Utilities - 3.6%	
100,000	Consolidated Edison, Inc.	4,089,000
285,753	Duke Energy Corp.	5,012,108
134,112		
104,114	NSTAR	4,144,061
		13,245,169
	Total Utilities	29,183,584

	TOTAL COMMON STOCKS (Cost \$134,909,957)	139,574,652
	NON-CONVERTIBLE PREFERRED STOCKS - 26.7% of Net Assets Energy - 1.1%	
49,300	Oil & Gas Exploration & Production- 1.1% Apache Corp., Series B, 5.68% Total Energy	4,242,881 4,242,881
126,542	Automobiles & Components - 1.2% Automobile Manufacturers - 1.2% Ford Motor Co. Capital Trust II, 6.5% Total Automobiles & Components	4,180,857 4,180,857
105,000 120,000 120,000 170,579 71,000	Banks - 6.9% Diversified Banks - 3.8% Bank One Capital VI, 7.2% Barclays Bank Plc, Series 2, 6.625% HSBC Holdings Plc, Series A, 6.2%, Royal Bank of Scotland Group Plc, Series Q, 6.75% Wachovia Preferred Funding Corp., Series A, 7.25%	2,593,766 2,947,200 2,709,600 4,245,711 1,764,350
56,980 171,677 57,000 39,000 58,000	Thrifts & Mortgage Finance - 3.1% Countrywide Capital V, 7.0% Fannie Mae, Series N, 6.75% Freddie Mac, 5.81% Freddie Mac, Series F, 5.0% Freddie Mac, Series K, 5.79%	14,260,627 973,163 4,082,479 2,422,500 1,472,250 2,436,000
	Total Banks	11,386,392 25,647,019
49,000 120,000 120,000 150,000	Diversified Financials - 7.2% Other Diversified Financial Services - 2.8% ABN Amro Capital Fund Trust VII, 6.08% Bank of America Corp., Series D, 6.204% Deustche Bank Capital Funding Trust VIII, 6.375% JPMorgan Chase Capital Trust XVI, 6.35%	1,095,150 2,719,200 2,932,500 3,556,500 10,303,350
18,000 71,300	Consumer Finance - 1.0% MBNA Capital, Series D, 8.125% SLM Holdings Corp., Series A, 6.97%	449,373 3,362,508
57,000 40,000 100,000 19,000 50,800 65,000 87,000	Investment Banking & Brokerage - 3.4% Bear Stearns Companies, Inc., Series F, 5.72% Bear Stearns Companies, Inc., Series G, 5.49% Lehman Brothers Holdings, Inc., 6.5% Lehman Brothers Holdings, Inc., Series C, 5.94% Lehman Brothers Holdings, Inc., Series D, 5.67% Merrill Lynch Preferred Capital Trust IV, 7.12% Merrill Lynch Preferred Capital Trust V, 7.28%	3,811,881 2,309,070 1,560,000 2,270,000 804,650 2,131,060 1,579,293 2,113,230 12,767,303
	Total Diversified Financials	26,882,534
159,000	Insurance - 3.4% Life & Health Insurance - 0.4% Scottish Re Group, Ltd., 7.25%	1,590,000
160,000 161,000	Property & Casualty Insurance 2.1% ACE, Ltd., Series C, 7.8% Berkley W.R. Capital Trust II, 6.75% Reinsurance - 0.9%	3,996,800 3,706,119 7,702,919

158,000	RenaissanceRE Holdings, Ltd., Series D, 6.6% Total Insurance	3,476,000 12,768,919
32,440 13,000 119,200	Real Estate – 3.1% Diversification Real Estate Investment Trust – 0.9% PS Business Parks, Inc., Series I, 6.875% PS Business Parks, Inc., Series L, 7.6% PS Business Parks, Inc., Series P, 6.7%	697,785 300,040 2,491,280
40,000	Industrial Real Estate Investment Trust – 0.3% Prologis Trust, Series G, 6.75%	3,489,105 940,400
15,000 34,500	Office Real Estate Investment Trust - 0.3% Brandywine Realty Trust, Series C, 7.5% Brandywine Realty Trust, Series D, 7.375%	323,550 730,020 1,053,570
94,000 53,500	Retail Real Estate Investment Trust - 0.9% Regency Centers Corp., Series C , 7.45% Regency Centers Corp., Series E, 6.7%	2,232,500 1,145,970 3,378,470
118,000	Specialized Real Estate Investment Trust – 0.7% Public Storage, Inc., Series L, 6.75% Total Real Estate	2,677,420 11,538,965
98,000 113,000 78,000 40,000 7,700 73,000 94,000	Utilities - 3.8% Electric Utilities - 3.4% Alabama Power Co., 5.3% Alabama Power Co., 5.83% Interstate Power and Light Co., Series B, 8.375% Mississippi Power Co., 5.25% PPL Electric Utilities Corp., 4.5% Southern California Edison Co., 4.32% Virginia Power Capital Trust II, 7.375%	2,198,140 2,719,910 2,303,340 986,000 619,850 1,441,750 2,357,800 12,626,790
62,000	Gas Utilities - 0.4% Southern Union Co., Series C, 7.55% Total Utilities TOTAL NON-CONVERTIBLE PREFERRED STOCKS (Cost \$111,664,059)	1,562,400 14,189,190 99,450,365
15,000	CONVERTIBLE PREFERRED STOCKS - 3.0% of Net Assets Capital Goods - 0.6% Aerospace & Defense - 0.6% Northrop Grumman Corp., 7.0% Total Capital Goods	2,147,700 2,147,700
60,000	Commercial Services & Supplies - 0.8% Office Services & Supplies - 0.8% Avery Dennison Corp., 7.875% Total Commercial Services & Supplies	3,066,000 3,066,000
161,000	Diversified Financials – 1.4% Other Diversified Financial Services – 1.4% Lazard, Ltd., 6.625% Total Diversified Financials	5,172,930 5,172,930
47,919	Insurance – 0.2% Property & Casualty Insurance – 0.2% XL Capital, Ltd., Class A, 7.0% Total Insurance	682,846 682,846

	TOTAL CONVERTIBLE PREFERRED STOCKS (Cost \$10,175,221)	11,069,476
	TAX-EXEMPT MONEY MARKET MUTUAL FUND - 0.1% of Net Asse	ts
405,000	BlackRock Liquidity Funds MuniFund Portfolio TOTAL TAX-EXEMPT MONEY MARKET MUTUAL FUND	405,000
	(Cost \$405,000)	405,000
	TOTAL INVESTMENTS IN SECURITIES - 146.2% (Cost \$569,049,048) (c) OTHER ASSETS AND LIABILITIES 1.2% PREFERRED SHARES AT REDEMPTION VALUE, INCLUDING DIVIDENDS PAYABLE - (47.4%)	\$544,149,034 4,497,171 (176,414,160)
	NET ASSETS APPLICABLE TO COMMON SHAREOWNERS - 100.0%	\$372,232,045
	Portfolio Abbreviations RIB Residual Interest Bonds	
(144A)	Security is exempt from registration under Rule 144A of the Securities Act of 1933. Such securities may be resold normally to qualified institutional buyers in a transaction exempt from registration. At February 29, 2008, the value of these securities amounted \$44,979,751, or 12.1% of total net assets.	
+	Prerefunded bonds have been collateralized by U.S. Treasury securities or U.S. Government Agencies, which are held in escrow to pay interest and principal on the tax exempt issue and to retire the bonds in full at the earliest refunding date.	
(a)	The interest rate is subject to change periodically and inversely based upon prevailing market rates. The interest rate shown is the rate at February 29, 2008.	
(b)	The concentration of tax-exempt investments by type	
	of obligation/market sector is as follows:	
	Insured	20.0%
	General Obligation	3.5
	Revenue Bonds:	
	Health Revenue	31.9
	Tobacco Revenue	17.0
	Development Revenue	10.1
	Education Revenue	6.6
	Housing Revenue	3.7
	Facilities Revenue	3.1
	Transportation Revenue Gaming Revenue	1.6 1.2
	School District Revenue	1.2
	Other Revenue	0.1
	OCHET VERENGE	100.0%
		100.00
(C)	At February 29, 2008, the net unrealized loss on invest	tments
	based on cost for federal income tax purposes	

of \$568,812,984 was as follows: Aggregate gross unrealized gain for all investments in \$25,325,590 which there is an excess of value over tax cost Aggregate gross unrealized loss for all investments in which there is an excess of tax cost over value (49,989,540)

Net unrealized loss

(\$24,663,950)

For financial reporting purposes net unrealized loss on investments was \$24,900,014 and cost of investments aggregated \$569,049,048.

FAS 157 Footnote Disclosures

Various inputs are used in determining the value of the Fund's investments. These inputs are summarized in the three broad levels listed below.

Highest priority is given to Level 1 inputs and lowest priority is given to Level 3. Level 1 - quoted prices in active markets for identical securities Level 2 - other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.) Level 3 - significant unobservable inputs (including the Fund's own assumptions in determining fair value of investments)

The following is a summary of the inputs used as of February 29, 2008, in valuing the Fund's assets:

		Other
	Investments	Financial
Valuation Inputs	in Securities	Instruments
Level 1 - Quoted Prices	\$242,919,111	
Level 2 - Other Significant Observable Inputs	\$301,229,923	(\$1,240,178)
Level 3 – Significant Unobservable Inputs		
Total	\$544,149,034 (\$1,240,178)

ITEM 2. CONTROLS AND PROCEDURES.

(a) Disclose the conclusions of the registrant's principal executive officer or officers and principal financial officer or officers, or persons performing similar functions, about the effectiveness of the registrant's disclosure controls and procedures (as defined in Rule 30a-3(c) under the Act (17 CFR 270.30a-3(c))) as of a date within 90 days of the filing date of the report that includes the disclosure required by this paragraph, based on their evaluation of these controls and procedures required by Rule 30a-3(b) under the Act (17 CFR270.30a-3(b))) and Rule 13a-15(b) or 15d-15(b) under the Exchange Act (17 CFR240.13a-15(b) or 240.15d-15(b)).

The registrant's principal executive officer and principal financial officer have concluded that the registrant's disclosure controls and procedures are effective based on their evaluation of these controls and procedures as of a date within 90 days of the filing date of this report.

(b) Disclose any change in the registrant's internal controls over financial reporting (as defined in Rule 30a-3(d) under the Act (17 CFR270.30a-3(d)) that occurred during the registrant's last fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

There were no significant changes in the registrant's internal control over financial reporting that occurred during the second fiscal quarter of the period covered by this report that have materially affected, or are reasonably likely to materially affect, the registrant's internal control over financial reporting.

ITEM 3. EXHIBITS.

(a) A separate certification for each principal executive officer and principal financial officer of the registrant as required by Rule 30a-2 under the Act (17 CFR 270.30a-2).

Filed herewith.

SIGNATURES

[See General Instruction F]

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.

(Registrant) Pioneer Municipal and Equity Income Trust

By (Signature and Title)* /s/ John F. Cogan, Jr. John F. Cogan, Jr, President

Date April 29, 2008

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 (Signature and Title)* /s/ John F. Cogan, Jr. John F. Cogan, Jr., President

Date April 29, 2008

By (Signature and Title)* /s/ Vincent Nave Vincent Nave, Treasurer

Date April 29, 2008

* Print the name and title of each signing officer under his or her signature.