MORGAN STANLEY MUNICIPAL INCOME OPPORTUNITIES TRUST Form N-Q April 29, 2010

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: 811-05597 Morgan Stanley Municipal Income Opportunities Trust

(Exact name of registrant as specified in charter)

522 Fifth Avenue, New York, New York (Address of principal executive offices)

10036 Zin code)

(Zip code)

Randy Takian 522 Fifth Avenue, New York, New York 10036

(Name and address of agent for service)

Registrant s telephone number, including area code: 212-296-6963

Date of fiscal year end: May 31, 2010 Date of reporting period: February 28, 2010

Item 1. Schedule of Investments.

The Fund s schedule of investments as of the close of the reporting period prepared pursuant to Rule 12-12 of Regulation S-X is as follows:

PRINCIPAL AMOUNT IN

IN THOUSANDS		COUPON RATE	MATURITY DATE	VALUE
	Tax-Exempt Municipal Bonds (103.1%) <i>Alabama</i> (0.7%)			
\$ 1,000	Colbert County-Northwest Alabama Health Care Authority, Helen Keller Hospital Ser 2003	5.75%	06/01/27	\$ 945,520
	Arizona (3.0%)			
1,550 1,225	Navajo County Pollution Control Corp., Ser B Pima County Industrial Development Authority,	5.50	06/01/34	1,638,784
	Constellation Schools Ser 2008	7.00	01/01/38	1,093,888
800	Pima County Industrial Development Authority, Water & Wastewater Global Water Resources LLC			
400	Ser 2007 (AMT)	6.55	12/01/37	782,784
400	Pinal County Electrical District No. 4, Electric System Ser 2008	6.00	12/01/38	400,224
				3,915,680
	California (4.7%)			
1,760	California County Tobacco Securitization Agency, Gold County Settlement Funding Corp. Ser 2006 (a)	0.00	06/01/33	220,053
335	California Municipal Finance Authority Educational	0.00	00/01/33	220,033
1,000	Facility, High Tech High-Media Arts Ser 2008 A (b) California Statewide Communities Development	5.875	07/01/28	295,731
1,000	Authority, California Baptist University, Ser 2007 A	5.50	11/01/38	810,170
400	California Statewide Communities Development Authority, Thomas Jefferson School of Law Ser			
	2008 A	7.25	10/01/38	410,360
400	County of Sacramento, Community Facilities District No. 5 Ser 2007 A	6.00	09/01/37	319,684
990	Daly City Housing Development Finance Agency,	0.00	07/01/37	317,001
	Franciscan Mobile Home Park Third Tier Refg Ser 2007 C	6.50	12/15/47	841,282
3,000	Golden State Tobacco Securitization Corp.,			
530	Enhanced Asset Backed Ser 2007 A-1 Quechan Indian Tribe of Fort Yuma, Indian	5.125	06/01/47	2,017,320
	Reservation Ser 2008	7.00	12/01/27	433,879
1,000	Santa Ana Unified School District, Unified School District Community Facilities, District No. 2004-1,			
12 000	California, Central Park Ser 2005	5.10	09/01/35	714,880
13,000	Silicon Valley Tobacco Securitization Authority, Santa Clara Tobacco Securitization Corp. Ser 2007 C	0.00	06/01/56	150,020

				6,213,379
	Colorado (3.7%)			
1,000	Colorado Health Facilities Authority, Christian			
	Living Communities Ser 2006 A	5.75	01/01/37	851,610
500	Colorado Health Facilities Authority, Christian			
	Living Communities Ser 2009 A	9.00	01/01/34	540,305
270	Colorado Housing & Finance Authority, 1998 Ser			
	D-2 (AMT)	6.35	11/01/29	281,175
1,000	Copperleaf Metropolitan District No. 2, Ser 2006	5.95	12/01/36	672,660
2,000	Elk Valley Public Improvement Corporation Ser			
	2001 A	7.35	09/01/31	1,848,140
800	Northwest Metropolitan District No. 3, Ser 2005	6.25	12/01/35	610,896
				4,804,786
	Connecticut (0.8%)			
1,970	Standard Life Legend Canadian Equity Pool, Ser 2006 A	5.125	10/01/36	1,006,552
540	District of Columbia (0.6%) District of Columbia, Income Tax Secured Revenue Refg Ser 2009 B (c)	5.00	12/01/25	603,445
	Keig Sci 2009 B (C)	3.00	12/01/23	003,443

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AMOUNT IN THOUSANDS		COUPON RATE	MATURITY DATE	VALUE
\$ 180	Metropolitan Washington Airports Authority, District of Columbia & Virginia, CaterAir International Corp. Ser 1991 (AMT) (d)	10.125%	09/01/11	\$ 178,151
				781,596
	Florida (16.1%)			
1,845	Beacon Lakes, Community Development District, Ser 2003 A	6.90	05/01/35	1,791,237
935	Bellalago Educational Facilities Benefits District, Bellalago Charter School Ser 2004 B	5.80	05/01/34	740,436
640	Brevard County Health Facilities Authority, Buena	3.80	03/01/34	740,430
	Vida Estates, Inc. Ser 2007	6.75	01/01/37	569,696
2,960	Broward County Professional Sports Facilities,			
	Civic Arena Refg Ser 2006 A (CR) (AGM & AMBAC Insd) (c)	5.00	09/01/23	3,123,097
800	County of Alachua Industrial Development, North	3.00	09/01/23	3,123,097
	Florida Retirement Village, Ser 2007	5.875	11/15/36	657,496
500	County of Alachua Industrial Development, North			
1.020	Florida Retirement Village, Ser 2007	5.25	11/15/17	478,690
1,930	County of Escambia, Pensacola Care Development Centers Ser 1989 (e)	10.25	07/01/11	1,947,389
450	County of Escambia, Pensacola Care Development	10.23	07/01/11	1,747,307
	Centers Ser 1989 A (e)	10.25	07/01/11	454,055
980	Fiddlers Creek Community Development District			
500	No. 1 Ser 2005 (f)	6.00	05/01/38	492,489
500	Fountainbleau Lakes Community Development District Ser 2007 B	6.00	05/01/15	272,740
750	Grand Bay at Doral Community Development	0.00	03/01/13	272,740
	District Ser 2007 A	6.00	05/01/39	385,680
1,000	Lee County Industrial Development Authority, Ser			
400	2007 A	5.375	06/15/37	755,430
490	Miami Beach Health Facilities Authority, Mount Sinai Medical Center Refg Ser 2004	6.75	11/15/21	494,058
1,000	Midtown Miami Community Development District,	0.73	11/13/21	494,036
1,000	Parking Garage Ser 2004 A	6.25	05/01/37	876,520
500	Orange County Health Facilities Authority, Orlando			•
	Lutheran Towers, Inc. Ser 2005	5.70	07/01/26	427,700
2,000	Orange County Health Facilities Authority, Orlando	5.50	07/01/22	1 505 600
1 000	Lutheran Towers, Inc. Ser 2007	5.50 6.75	07/01/32	1,585,680
1,000		0.73	04/01/34	958,120

	Orange County Health Facilities Authority, Westminister Community Care Services, Inc. Ser 1999			
600	Pinellas County Health Facilities Authority, Oaks of			
	Clearwater Ser 2004	6.25	06/01/34	606,528
950	Renaissance Commons Community Development	7 60	0.5.10.4.10.6	
2.060	District, 2005 Ser A	5.60	05/01/36	724,907
2,860	South Miami Health Facilities Authority, Baptist	<i>5</i> ,00	09/15/22	2 975 001
500	Health South Florida Obligated Group Ser 2007 (c) Split Pine Community Development District, Ser	5.00	08/15/32	2,875,901
300	2007 A	5.25	05/01/39	318,180
600	Tolomato Community Development District,	3.23	03/01/37	310,100
	Special Assessment Ser 2007	6.55	05/01/27	525,486
	•			
				21,061,515
400	Georgia (1.2%)		04/04/04	10.1.160
400	City of Atlanta, Beltline Ser 2009 B	7.375	01/01/31	404,468
1,000	City of Atlanta, Eastside Ser 2005 B	5.60	01/01/30	917,010
300	Clayton County Development Authority, Ser 2009	0.00	06/01/05	204.271
	B (AMT)	9.00	06/01/35	304,371
				1,625,849
				1,023,049
	Hawaii (2.2%)			
1,220	Hawaii State, Ser 2008 DK (c)	5.00	05/01/23	1,362,035
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OUNT IN USANDS		COUPON RATE	MATURITY DATE	VALUE
\$ 400	Hawaii State Department of Budget & Finance, 15 Craigside Project Ser 2009 A	8.75%	11/15/29	\$ 438,920
1,000	Hawaii State Department of Budget & Finance,			,
	Kahala Nui Ser 2003 A	8.00	11/15/33	1,068,570
				2,869,525
	Idaho (0.6%)			
945	Idaho Health Facilities Authority, Valley Vista Care			
	Corp Refg Ser 2007 (e)	6.125	11/15/27	827,149
	Illinois (8.0%)			
750	Bolingbrook, Will & Dupage Counties Special			
	Service Area No. 2005-1 Ser 2005	5.90	03/01/27	595,537
2,000	City of Chicago, Lake Shore East Ser 2002	6.75	12/01/32	1,889,040
1,000	City of United City of Yorkville,		00/04/00	007.070
5 00	Cannonball/Beecher Road Ser 2007	5.75	03/01/28	885,250
500	Hampshire Special Service Area No. 18 Ser 2007 A	6.00	03/01/44	382,275
800	Illinois Finance Authority, Elmhurst Memorial	5 605	01/01/27	724 200
1 000	Healthcare Ser 2008 A	5.625	01/01/37	734,288
1,000	Illinois Finance Authority, Landing at Plymouth	6.00	05/15/27	909 270
1 000	Place Ser 2005 A	6.00	05/15/37	808,270
1,000	Illinois Finance Authority, Luther Oaks Ser 2006 A	6.00	08/15/39	817,790
1,650	Illinois Finance Authority, Montgomery Place Ser 2006 A	5.75	05/15/38	1,357,554
1,200	Illinois State Toll Highway Authority, Ser 2008 B	5.75	03/13/36	1,557,554
1,200	(c)	5.50	01/01/33	1,287,548
725	Lincolnshire Special Service Area No. 1,	5.50	01/01/33	1,207,340
123	Sedgebrook Ser 2004	6.25	03/01/34	585,938
1,000	Village of Bolingbrook, Sales Tax Ser 2005	6.25	01/01/24	552,740
650	Will-Kankakee Regional Development Authority,	0.23	01/01/24	332,740
050	Senior Estates Supportive Living Ser 2007 (AMT)	7.00	12/01/42	565,520
				10,461,750
	Indiana (0.5%)			
400	City of Crown Point, Wittenberg Village Ser 2009 A	8.00	11/15/39	396,784
285	County of St. Joseph, Holy Cross Village at Notre	0.00	11,10,00	270,701
_ 30	Dame Ser 2006 A	6.00	05/15/26	266,749
				663,533
				,

	Iowa (1.5%)			
1,000	Iowa Finance Authority, Bethany Life Communities			
	Refg Ser 2006 A	5.55	11/01/41	782,870
750	Iowa Finance Authority, Madrid Homes Ser 2007	5.90	11/15/37	606,270
785	Jefferson County Iowa Hospital Revenue, Jefferson			
	County Hospital Project Ser C	5.95	08/01/37	644,242
				2,033,382
	Kansas (0.6%)			
900	City of Olathe, Catholic Care Ser 2006 A	6.00	11/15/38	758,169
	Louisiana (1.3%)			
794	Lakeshore Villages Master Community			
	Development District, Special Assessment Ser 2007	5.25	07/01/17	663,204
600	Louisiana Public Facilities Authority, Lake Charles			
	Memorial Hospital Refg Ser 2007 (b)	6.375	12/01/34	522,456
500	Parish of St John Baptist, Marathon Oil Corp. Ser			
	2007 A	5.125	06/01/37	469,475
				1,655,135
	Maryland (1.6%)			
1,000	Marlyland Economic Development Corp.,			
	Chesapeake Bay Conference Center Ser 2006 A	5.00	12/01/31	724,500

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1	OUNT IN ISANDS		COUPON RATE	MATURITY DATE	VALUE
\$	750	Maryland Health & Higher Educational Facilities Authority, King Farm Presbyterian Community Ser 2007 A	5.30%	01/01/37	\$ 531,255
	800	Maryland Health & Higher Educational Facilities Authority, Washington Christian Academy Ser 2006	5.50	07/01/38	384,008
	500	Maryland Industrial Development Financing Authority, Our Lady of Good Counsel High School Ser 2005 A	6.00	05/01/35	467,410
					2,107,173
	425	Massachusetts (3.0%) Massachusetts Development Finance Agency,			
	1,500	Linden Ponds, Inc. Facility Ser 2007 A Massachusetts Development Finance Agency,	5.75	11/15/42	302,774
	1,455	Loomis Communities Ser 1999 A Massachusetts Development Finance Agency, New	5.75	07/01/23	1,422,240
		England Center for Children Ser 1998	5.875	11/01/18	1,376,968
	400 390	Massachusetts Development Finance Agency, The Groves in Lincoln Facility Ser 2009 B-2 Massachusetts Health & Educational Facilities	7.75	06/01/39	400,056
		Authority, Massachusetts Institute of Technology Ser 2002 K (c)	5.50	07/01/32	471,969
					3,974,007
	500	Michigan (1.9%) Dearborn Economic Development Corp., Henry			
		Ford Village, Inc. Refg Ser 2008	7.00	11/15/28	464,580
	400	Michigan Strategic Fund, Limited Obligation Revenue Ser 2003 A-1 (AMT)	6.75	12/01/28	447,884
	2,000	Michigan Tobacco Settlement Finance Authority Ser 2007 A	6.00	06/01/48	1,585,480
					2,497,944
	450	Minnesota (1.4%) City of Brooklyn Park, Prairie Seeds Academy Ser			
		2009 A	9.25 6.75	03/01/39	490,248
	600		0.73	11/15/32	669,372

750	City of Minneapolis Health Care System, Fairview Health Services Ser 2008 A City of North Oaks, Presbyterian Homes of North Oaks Ser 2007	6.125	10/01/39	742,365
				1,901,985
	Mississippi (0.3%)			
400	Mississippi Business Finance Corp., System Energy Resources, Inc. Ser 1998	5.875	04/01/22	399,960
	Missouri (6.4%)			
750	Branson Hills Infrastructure Facilities Community	5.50	04/01/07	641.460
500	Improvement District, Ser 2007 A Branson Regional Airport Transportation	5.50	04/01/27	641,460
300	Development District Ser 2007 B (AMT)	6.00	07/01/37	327,195
2,000	City of Des Peres, West County Center Ser 2002	5.75	04/15/20	1,881,240
3,850	City of Fenton, Gravois Bluffs Redevelopment Ser	2.72	0 1/15/20	1,001,210
- ,	2001 A	7.00	10/01/11(g)	4,257,214
400	Kirkwood Industrial Development Authority,		ζ,	
	Aberdeen Heights Ser 2010 A	8.25	05/15/39	398,168
250	St Louis County Industrial Development Authority,			
	Ranken-Jordan Refg Ser 2007	5.00	11/15/22	227,125
750	St Louis County Industrial Development Authority,			
	St Andrews Resources for Seniors Ser 2007 A	6.375	12/01/41	634,620
				8,367,022
	Nevada (1.7%)			
450	City of Henderson, Local Improvement District			
	No. T-18 Ser 2006	5.30	09/01/35	179,104

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IN USANDS		COUPON RATE	MATURITY DATE	VALUE
\$ 600 1,000	City of Sparks, Local Improvement District No. 3 Ser 2008 Director of the State of Nevada, Department of	6.50%	09/01/20	\$ 586,188
·	Business & Industry, Las Vegas Monorail 2nd Tier Ser 2000 (h)	7.375	01/01/40	40,000
500	Las Vegas Redevelopment Agency, Tax Increment Ser 2009 A	8.00	06/15/30	562,835
1,015	Mesquite Special Improvement District No. 07-01, Local Improvement- Anthem at Mesquite Ser 2007	6.00	08/01/23	839,466
				2,207,593
400	New Hampshire (2.1%) New Hampshire Business Finance Authority, Huggins Hopsital Ser 2009	6.875	10/01/39	400,796
3,785	New Hampshire Housing Finance Authority, Single Family Residential 1983 Ser B (a)	0.00	01/01/15	2,297,381
				2,698,177
400	New Jersey (5.2%)			
400	New Jersey Economic Development Authority, Continental Airlines, Inc. Ser 1999 (AMT)	6.25	09/15/19	376,156
1,000	New Jersey Economic Development Authority, Franciscan Oaks Ser 1997	5.70	10/01/17	999,910
730	New Jersey Economic Development Authority, Lions Gate Ser 2005 A	5.875	01/01/37	606,725
700	New Jersey Economic Development Authority, Seashore Gardens Living Center Ser 2006	5.375	11/01/36	533,169
1,000	New Jersey Economic Development Authority, The			
2,000	Presbyterian Home at Montgomery Ser 2001 A New Jersey Economic Development Authority,	6.375	11/01/31	884,830
2,000	United Methodist Homes of New Jersey Ser 1998 New Jersey Health Care Facilities Financing	5.125	07/01/25	1,710,600
275	Authority, Raritan Bay Medical Center Ser 1994 (e) Tobacco Settlement Financing Corp., Ser 2007-1 A	7.25 4.625	07/01/27 06/01/26	1,465,040 228,030
				6,804,460
2.063	New York (5.3%)		40.01.00	
3,000		6.375	12/01/37	2,524,350

	Brookhaven Industrial Development Agency,			
	Woodcrest Estates Ser 1998 A (AMT)			
4,000	Brooklyn Arena Local Development Corp., Barclays			
	Center Ser 2009 (a)	0.00	07/15/46	320,360
625	Nassau County Industrial Development Agency,			
	Continuing Care Retirement Community Revenue,			
	Amsterdam at Harborside Project Ser 2007 A	6.50	01/01/27	602,056
1,500	New York City Industrial Development Agency, 7			
	World Trade Center LLC Ser 2005 A	6.50	03/01/35	1,505,985
500	New York City Industrial Development Agency,			
	Polytechnic University Refg Ser 2007 (ACA Insd)	5.25	11/01/37	435,105
1,000	New York Liberty Development Corp., National			
	Sports Museum, Ser 2006 A (h)	6.125	02/15/19	10
400	Seneca County Industrial Development Agency,			
	Seneca Meadows, Inc. Ser 2008 (AMT) (b)	6.625	10/01/35	400,952
1,470	Suffolk County Industrial Development Agency,			
	Medford Hamlet Ser 2006 (AMT)	6.375	01/01/39	1,161,506
				6,950,324
	North Carolina (0.2%)			
400	North Carolina Medical Care Commission Health			
	Care Facilities, Pennybyrn at Maryfield Ser 2005 A	6.125	10/01/35	302,864
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I	DUNT N SANDS		COUPON RATE	MATURITY DATE	VALUE
\$	1,500	North Dakota (0.9%) City of Grand Forks, Valley Square Ser 2006	5.30%	12/01/34	\$1,150,095
	1,900	Ohio (2.8%) Buckeye Tobacco Settlement Financing Authority, Asset-Backed Ser 2007 A-2	5.875	06/01/30	1,619,161
	600	City of Centerville Health Care, Bethany Lutheran Village Ser 2007 A	6.00	11/01/38	517,584
	850	County of Cuyahoga Health Care & Independent Living Facilities, Eliza Jennings Senior Care Ser 2007 A	5.75	05/15/27	726,742
	450	County of Tuscarawas Hospital Facilities, The Twin City Hospital Ser 2007	6.35	11/01/37	405,306
	400	Ohio Air Quality Development Authority, Pollution Control-Firstenergy Ser 2009	5.625	06/01/18	427,720
					3,696,513
	650 500	Oklahoma (0.9%) Chickasawa Nation Health Systems Ser 2007 (b) Citizen Potawatomi Nation Senior Tax Revenue,	6.25	12/01/32	652,093
		Ser 2004 A	6.50	09/01/16	488,975
					1,141,068
	1,800 1,500	Pennsylvania (6.1%) Allegheny County Hospital Development Authority, West Penn Allegheny Health Ser 2007 A Bucks County Industrial Development Authority,	5.375	11/15/40	1,360,062
	1,000	Ann s Choice Ser 2005 A	6.125	01/01/25	1,419,495
		Chester County Health & Education Facilities Authority, Jenner s Pond Inc. Ser 2002	7.625	07/01/12(g)	1,166,920
	750	Harrisburg Authority, Harrisburg University of Science & Technology Ser 2007 B	6.00	09/01/36	691,365
	1,000	Montgomery County Industrial Development Authority, Whitemarsh Community Ser 2005	6.25	02/01/35	740,840
	400	Pennsylvania Economic Development Financing Authority, Reliant Energy, Inc. Ser 2001 A (AMT)	6.75	12/01/36	400,384
	1,230	Pennsylvania Intergovernmental Cooperative Authority, Philadelphia Funding Project Ser 2009 (c)	5.00	06/15/21	1,366,075

995	Washington County Redevelopment Authority, Victory Centre/Tanger Outlet Redevelopment Authority Ser 2006 A	5.45	07/01/35	828,427
				7,973,568
	South Carolina (1.6%)			
1,250	City of Myrtle Beach, Myrtle Beach Air Force Base Ser 2006 A	5.30	10/01/35	816,612
300 750	County of Georgetown, Environment Improvement Revenue, International Paper Co. Ser 2000 A	5.95	03/15/14	321,912
	South Carolina Jobs-Economic Development Authority, Wesley Commons Ser 2006	5.30	10/01/36	563,603
625	South Carolina Jobs-Economic Development Authority, Woodlands at Furman Ser 2007 A	6.00	11/15/37	449,738
				2,151,865
	Tennessee (2.1%)			
800	Johnson City Health & Educational Facilities			
5 00	Board, Mountain States Health Alliance Ser 2006 A	5.50	07/01/31	801,632
500	Shelby County Health, Educational & Housing Facilities Board, Trezevant Manor Ser 2006 A	5.75	09/01/37	434,495
750	Shelby County Health, Educational & Housing Facilities Board, Village at Germantown Ser 2003	3.73	09/01/37	434,493
	A	7.25	12/01/34	713,183
475	Shelby County Health, Educational & Housing			
	Facilities Board, Village at Germantown Ser 2006	6.25	12/01/34	404,092

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AMOUNT IN THOUSANDS		COUPON RATE	MATURITY DATE	VALUE
\$ 400	Trenton Health & Educational Facilities Board, Ser 2009	9.25%	04/01/39	\$ 414,116
				2,767,518
	Texas (8.6%)			
500	Alliance Airport Authority, Federal Express Corp. Refg Ser 2006 (AMT)	4.85	04/01/21	496,335
2,000	Austin Convention Enterprises, Inc., Convention Center Hotel Ser 2006 B (b)	5.75	01/01/34	1,595,120
400	Brazos River Harbor Navigation District, The Dow Chemical Project Ser 2002A-4 (AMT)	5.95	05/15/33	400,868
1,000	Decatur Hospital Authority, Wise Regional Health Ser 2004 A	7.125	09/01/34	995,170
1,250	HFDC of Central Texas, Inc., Legacy at Willow Bend, Ser 2006 A	5.75	11/01/36	992,737
400 425	HFDC of Central Texas, Inc., Ser 2009 A	7.75	11/15/44	399,688
	Houston Airport System Special Facilities, Continental Airlines, Inc. Ser 2001 E (AMT)	6.75	07/01/21	408,701
425	Houston Airport System Special Facilities, Continental Airlines, Inc. Ser 2001 E (AMT)	6.75	07/01/29	403,746
1,000	Lubbock Health Facilities Development Corp., Carillon Ser 2005 A	6.50	07/01/26	911,810
400	Tarrant County Cultural Education Facilities Finance Corp., Mirador Ser 2010 A	8.125	11/15/39	394,536
450	Tarrant County Cultural Education Facilities Finance Corp., Northwest Senior Housing Corp Edgemere Ser 2006 A	6.00	11/15/36	400,329
2,975	Texas Department of Housing & Community Affairs, Ser 2007 B (AMT) (c)	5.15	09/01/27	3,052,620
400	Texas Private Activity Bond Surface Transportation Corp., Senior Lien Ser 2009	6.875	12/31/39	415,748
400	Travis County Health Facilities Development Corp., Westminster Manor Ser 2010	7.00	11/01/30	402,032
				11,269,440
1,000	Utah (0.8%) County of Emery Environmental Improvement, Pacificorp Ser 1996 (AMT)	6.15	09/01/30	997,220

2,000	Virginia (1.8%) Peninsula Ports Authority of Virginia, Baptist Homes Ser 2006 C	5.40	12/01/33	1,222,720
700	Peninsula Town Center Community Development	3.40	12/01/33	1,222,720
500	Authority Ser 2007 Virginia Small Business Financing Authority,	6.45	09/01/37	668,850
300	Hampton Ser 2009	9.00	07/01/39	521,145
				2,412,715
	Washington (1.8%)			
400	King County Public Hospital District No. 4,		10/01/00	
650	Snoqualime Valley Hospital Ser 2009 Port of Seattle Industrial Development Corp.,	7.25	12/01/38	414,212
030	Northwest Airlines, Inc. Ser 2001 (AMT)	7.25	04/01/30	651,105
500	Washington Health Care Facilities Authority,	7.120	0 1/01/20	351,135
	Seattle Cancer Care Alliance Ser 2008	7.375	03/01/38	554,300
1,000	Washington Housing Finance Commission, Skyline	5.625	01/01/00	717.070
	at First Hill Ser 2007 A	5.625	01/01/38	717,270
				2,336,887
	West Virginia (0.6%)			
825	West Virginia Hospital Finance Authority, Thomas			
	Health System, Inc. Ser 2008	6.50	10/01/38	770,393
	Wisconsin (0.5%)			
600	Wisconsin Health & Educational Facilities			
	Authority, ProHealth Care, Inc. Ser 2009	6.375	02/15/29	651,360
	Total Tax-Exempt Municipal Bonds (Cost			
	\$150,274,113)			135,153,671
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IN THOUSANDS			COUPON RATE	MATURITY DATE	VALUE
d	600	Short-Term Tax-Exempt Municipal Obligations (0.7%) Colorado (0.5%)			
\$	600	Colorado Educational & Cultural Facilities Authority (Demand 03/01/10)	0.17%(i)	02/01/34	\$ 600,000
		Illinois (0.2%)			
	300	Illinois Finance Authority (Demand 03/01/10)	0.14(i)	01/01/48	300,000
		Total Short-Term Tax-Exempt Municipal Obligations			
		(Cost \$900,000)			900,000
		Total Investments (<i>Cost</i> \$151,174,113) (<i>j</i>)(<i>k</i>)		103.8%	136,053,671
		Other Assets in Excess of Liabilities		1.8	2,251,236
		Floating Rate Note and Dealer Trusts			
		Obligations Related to Securities Held			
		Notes with interest rates ranging from 0.18% to			
		0.25% at 02/28/10 and contractual maturities of		(7 .0)	(7.2 00.000)
		collateral ranging from 06/15/21 to 01/01/33 (I)		(5.6)	(7,289,000)
		Net Assets		100.0%	\$ 131,015,907

AMT Alternative

Minimum Tax.

- CR Custodial Receipts.
- (a) Capital appreciation bond.
- (b) Resale is restricted to qualified institutional investors.

(c)

Underlying security related to inverse floater entered into by the Fund.

- (d) Joint exemption.
- (e) Illiquid security.
- (f) Illiquid security.

 Resale is

 restricted to

 qualified

 institutional

 investors.
- (g) Prefunded to call date shown.
- (h) Illiquid security. Security in default.
- (i) Current coupon of variable rate demand obligation.
- (j) Securities have been designated as collateral in connection with inverse floating rate municipal obligations.
- (k) The aggregate cost for federal income tax purposes approximates the aggregate cost for book purposes.
- (l) Floating rate note obligations related to securities held

The Fund enters

into

transactions in

which it

transfers to

Dealer Trusts

(Dealer Trusts),

fixed rate bonds

in exchange for

cash and

residual

interests in the

Dealer Trusts

assets and cash

flows, which are

in the form of

inverse floating

rate

investments. The

Dealer Trusts

fund the

purchases of the

fixed rate bonds

by issuing

floating rate

notes to third

parties and

allowing the

Fund to retain

residual interest

in the bonds.

The Fund enters

into shortfall

agreements with

the Dealer

Trusts which

commit the

Fund to pay the

Dealer Trusts,

in certain

circumstances,

the difference

between the

liquidation

value of the

fixed rate bonds

held by the

Dealer Trusts

and the

liquidation

value of the

floating rate

notes held by

third parties, as

well as any

shortfalls in

interest cash

flows. The

residual

interests held by

the Fund

(inverse floating

rate

investments)

include the right

of the Fund

(1) to cause the

holders of the

floating rate

notes to tender

their notes at

par at the next

interest rate

reset date, and

(2) to transfer

the municipal

bond from the

Dealer Trusts to

the Fund,

thereby

collapsing the

Dealer Trusts.

The Fund

accounts for the

transfer of

bonds to the

Dealer Trusts as

secured

borrowings,

with the

securities

transferred

remaining in the

Fund s

investment

assets, and the

related floating

rate notes

reflected as

Fund liabilities.

The notes issued

by the Dealer

Trusts have

interest rates

that reset

weekly and the

floating rate

note holders

have the option

to tender their

notes to the

Dealer Trusts

for redemption

at par at each

reset date. At

February 28,

2010, Fund

investments with

a value of

\$14,142,690 are

held by the

Dealer Trusts

and serve as

collateral for

the \$7,289,000

in floating rate

note obligations

outstanding at

that date.

Bond Insurance:

ACA ACA Financial

Guaranty

Corporation.

AGM Assured

Guaranty

Municipal

Corporation.

AMBAC AMBAC

Assurance

Corporation.

Morgan Stanley Municipal Income Opportunities Trust*

Notes to the Portfolio of Investments n February 28, 2010 (unaudited)

Fair Valuation Measurements

Fair value is defined as the price that the Fund would receive to sell an investment or pay to transfer a liability in a timely transaction with an independent buyer in the principal market, or in the absence of a principal market the most advantageous market for the investment or liability. GAAP utilizes a three-tier hierarchy to distinguish between (1) inputs that reflect the assumptions market participants would use in pricing an asset or liability developed based on market data obtained from sources independent of the reporting entity (observable inputs) and (2) inputs that reflect the reporting entity s own assumptions about the assumptions market participants would use in pricing an asset or liability developed based on the best information available in the circumstances (unobservable inputs) and to establish classification of fair value measurements for disclosure purposes. Various inputs are used in determining the value of the Fund s investments. The inputs are summarized in the three broad levels listed below.

Level 1 unadjusted quoted prices in active markets for identical investments

Level 2 other significant observable inputs (including quoted prices for similar investments, interest rates, prepayment speeds, credit risk, etc.)

Level 3 significant unobservable inputs (including the Fund s own assumptions in determining the fair value of investments)

The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities and the determination of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to each security.

The following is the summary of the inputs used as of February 28, 2010 in valuing the Fund s investments carried at fair value:

FAIR VALUE MEASUREMENTS AT FEBRUARY 28, 2010

	USING				
		UNADJUSTED			
		QUOTED			
		PRICES IN	OTHER		
		ACTIVE			
		MARKET			
		FOR	SIGNIFICANT	SIGNIFICANT	
		IDENTICAL	OBSERVABLE	JNOBSERVABLE	
		INVESTMENTS	INPUTS	INPUTS	
				(LEVEL	
INVESTMENT TYPE	TOTAL	(LEVEL 1)	(LEVEL 2)	3)	
Tax-Exempt Municipal Bonds	\$ 135,153,671		\$ 135,153,671		
Short-Term Tax-Exempt Municipal					
Obligations	900,000		900,000		
-					
Total	\$ 136,053,671		\$ 136,053,671		

<u>Valuation of Investments</u> (1) portfolio securities are valued by an outside independent pricing service approved by the Trustees. The pricing service uses both a computerized grid matrix of tax-exempt securities and evaluations by its staff, in each case based on information concerning market transactions and quotations from dealers which reflect the mean between the last reported bid and ask price. The portfolio securities are thus valued by reference to a combination of transactions and quotations for the same or other securities believed to be comparable in quality, coupon, maturity, type of issue, call provisions, trading characteristics and other features deemed to be relevant. The

Trustees believe that timely and reliable market quotations are generally not readily available for purposes of valuing tax-exempt securities and that the valuations supplied by the pricing service are more likely to represent the fair value of such securities; (2) futures are valued at the latest sale price on the commodities exchange on which they trade unless it is determined that such price does not reflect their market value, in which case they will be valued at their fair value as determined in good faith under procedures established by and under the supervision of the Trustees; (3) interest rate swaps are marked-to-market daily based upon quotations from market makers; (4) investments in open-end mutual funds, including the Morgan Stanley Institutional

Liquidity Funds, are valued at the net asset value as of the close of each business day; and (5) short-term debt securities having a maturity date of more than sixty days at time of purchase are valued on a mark-to-market basis until sixty days prior to maturity and thereafter at amortized cost based on their value on the 61st day. Short-term debt securities having a maturity date of sixty days or less at the time of purchase are valued at amortized cost, which approximates market value.

On October 19, 2009, Morgan Stanley announced that it has entered into a definitive agreement to sell substantially all of its retail asset management business to Invesco Ltd., a leading global investment management company. Subsequently, the Fund s Board of Trustees approved recommending to the Fund s stockholders the approval of a new Board for the Fund and a new investment advisory agreement with Invesco Advisers, Inc. and a master sub-advisory agreement with various affiliates of Invesco Advisers Inc. for the Fund in connection with a Special Meeting of

Stockholders of

the Fund anticipated to be held during the second quarter of 2010.

Item 2. Controls and Procedures.

- (a) The Fund s principal executive officer and principal financial officer have concluded that the Fund s disclosure controls and procedures are sufficient to ensure that information required to be disclosed by the Fund in this Form N-Q was recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission s rules and forms, based upon such officers evaluation of these controls and procedures as of a date within 90 days of the filing date of the report.
- (b) There were no changes in the Fund s internal control over financial reporting that occurred during the registrant s fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Fund 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 are attached hereto.

SIGNATURES

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. Morgan Stanley Municipal Income Opportunities Trust

/s/ Randy Takian Randy Takian Principal Executive Officer April 15, 2010

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

/s/ Randy Takian Randy Takian Principal Executive Officer April 15, 2010

/s/ Francis Smith Francis Smith Principal Financial Officer April 15, 2010