Madison Strategic Sector Premium Fund Form N-CSR March 01, 2011

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#### UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

#### FORM N-CSR

#### CERTIFIED SHAREHOLDER REPORT OF REGISTERED

#### MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-21713

Madison Strategic Sector Premium Fund (Exact name of registrant as specified in charter)

550 Science Drive, Madison, WI 53711 (Address of principal executive offices)(Zip code)

Pamela M. Krill Madison/Mosaic Legal and Compliance Department 550 Science Drive Madison, WI 53711 (Name and address of agent for service)

Registrant's telephone number, including area code: 608-274-0300

Date of fiscal year end: December 31

Date of reporting period: December 31, 2010

Form N-CSR is to be used by management investment companies to file reports with the Commission not later than 10 days after the transmission to stockholders of any report that is required to be transmitted to stockholders under Rule 30e-1 under the Investment Company Act of 1940 (17 CFR 270.30e-1). The Commission may use the information provided on Form N-CSR in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-CSR, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-CSR 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, 100 F Street, NE, Washington, DC 20549-0609. The

OMB has reviewed this collection of information under the clearance requirements of 44 U.S.C. s 3507.

Item 1

Annual Report December 31, 2010

Madison Strategic Sector Premium Fund (MSP)

Active Equity Management combined with a Covered Call Option Strategy

Madison Asset Management, LLC www.madisonfunds.com

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#### Management's Discussion of Fund Performance

What happened in the market during 2010?

After bottoming in July, risk-based assets continued their relentless climb through year-end 2010. Mid-year fears of a spreading sovereign debt crisis in Europe were at least temporarily pushed aside as investors were emboldened by soothing words and actions from the Federal Reserve. This monetary stimulus, along with a splash of fiscal stimulus in the form of lower social security payroll taxes, signaled to investors that authorities were willing to take whatever measures necessary to support economic growth. The stock market responded positively to this environment as increased investor confidence led to a move toward higher risk assets. This was clearly evident in the S&P 500's 23% advance in the second half of the year. The fourth quarter's 10.8% gain was a virtually unabated upward surge. The incredibly strong second half of the year offset a tumultuous first half in which the market moved higher through late April, continuing the strong rally from the March 2009 lows and then corrected sharply in May and June as economic news suggested sluggishness and the European sovereign debt crisis threatened to impact global markets. Despite this correction, the trend for the market was broadly positive for 2010 with the S&P 500 posting a healthy 15.1% return.

As sentiment toward economic stability and growth improved through the year, investors increasingly gravitated to the most economically sensitive areas of the market leading to strong leadership from cyclical sectors such as Consumer Discretionary and Industrials as well as commodity sensitive sectors such as Energy and Materials. Apart from the market correction during the second quarter of the year, traditionally defensive sectors such as Health Care, Consumer Staples and Utilities lagged. In addition, investors were more fixated on macroeconomic issues in 2010 and less on company fundamental issues. This resulted in a high level of correlation among individual stocks and a lack of distinction between higher quality, fundamentally strong companies and lower quality, higher risk companies.

As the stock market began its long recovery from the March 2009 lows, volatility began to retreat from historic highs and trended lower through the rest of 2009. That trend continued in early 2010 as the CBOE Market Volatility Index (VIX) began the year at 21.7 and fell below 16 by mid April. The ensuing correction in the stock market raised fear levels significantly and the VIX Index surged above the 45 level. As the market returned to an upward bias in the second half of the year, volatility, again, retreated steadily and ended the year below 18. Over the past 5 years, this level has seemingly been a low point for volatility and a high point of investor comfort or complacency.

How did the fund perform given the marketplace conditions during 2010?

During the previous year of 2009 MSP significantly outperformed both the S&P 500 and the CBOE S&P BuyWrite Index (BXM) by allowing underlying stock positions to recover with the overall market. Acknowledging the strong stock performance, the strategy of the fund in 2010 was to become more fully covered as the market returned to a more normalized return pattern. This was accomplished opportunistically throughout the year and particularly during the fourth quarter following the strong upswing in stock prices. As such, with a larger percentage of portfolio stock positions covered by call options, MSP lagged the S&P 500 as would be expected during sharp market run-ups. For the year ending December 31, 2010, the fund, on a share price basis, returned 14.01% compared to the 15.1% return on the S&P 500. However, MSP's performance was very strong relative to the CBOE S&P BuyWrite Index (BXM) return of 5.9%. The BXM Index represents the passive version of a covered call strategy on the S&P 500. On a Net Asset Value (NAV) basis, MSP returned 9.79%, again, outperforming the BXM Index while lagging the S&P 500. MSP closed the year trading at an 8.9% discount to NAV, compared to the 11.6% discount level at which it opened the year. The fund's discount to NAV ranged from 6.2% to 14.9% during the full year.

During the year, the fund was re-positioned from a tax perspective. In prior years, the fund has distributed net income and capital gains and has not returned invested capital. However, in 2010, certain longer term stock positions were sold following the upward move in overall stock prices and realized losses were taken.

MSP | Madison Strategic Sector Premium Fund | Management's Discussion of Fund Performance | continued

The realized losses on these positions exceeded other income generated by the fund resulting in the current year distributions being classified as a return of invested capital (if we had temporarily stopped distributions, the net asset value of the fund would have increased an additional \$1.04, the amount of your capital distributed back to you). With the re-positioning complete, the fund is positioned to return to its normalized managed distribution approach with the goal of distributing net income and capital gains in the future.

Overall stock performance during the year was muted by the high level of correlation in the market and the fund's sector exposure. The fund had little exposure to hot sectors such as Industrials and Materials as these areas typically provide fewer companies meeting our consistent growth criterion and, in the case of Industrials, offer very low option premiums. Also, an over-weighted positioning in Health Care related stocks weighed on performance as this defensive sector lagged throughout the year. Stock performance in Technology, Financial, Energy and Consumer Discretionary holdings provided a positive offset. The surge in the market during the second half of the year proved to be a headwind to the fund as more option positions moved in-the-money resulting in some stock positions being called away and a corresponding increase in cash which was reinvested in an opportunistic fashion. A higher level of cash during a surging market was a hindrance to short term performance, however, it was our preference to tread cautiously following such a sharp upward market move. Our defensive posture was echoed in the option strategy whereby at year end 88% of the equity positions were covered by call options, many written close-to-the-money in order to obtain maximum protection in the form of higher premiums.

Describe the fund's portfolio equity and option structure.

As of December 31, 2010, the fund held 48 equity securities and unexpired covered call options had been written against 87.8% of the fund's stock holdings. During 2010, the fund generated premiums of \$8.1 million from its covered call writing activities. It is the strategy of the fund to write "out-of-the-money" call options, as of December 31, 44% of the fund's call options (31 of 71 different options) remained "out-of-the-money." (Out-of-the-money means the stock price is below the strike price at which the shares could be called away by the option holder.) The number of "out-of-the-money" options has declined from the beginning of the year as the strength of the market rally has moved many share prices above their corresponding option strike prices. The fund's managers have also begun writing options "closer-to-the-money" in order to capture higher premium income and provide the fund added protection from a reversal in the market's upward surge.

Which sectors are prevalent in the fund?

From a sector perspective, MSP's largest exposure as of December 31, 2010 was to the Technology (and technology related) Sector, followed by Health Care, Financials, Consumer Discretionary, and Energy. The fund was not invested in the Consumer Staples, Telecommunication Services and Utilities Sectors as of year-end.

#### SECTOR ALLOCATION AS A PERCENTAGE OF TOTAL **INVESTMENTS AS OF 12/31/10** Consumer Discretionary 15.3% Energy 15.3% Financials 17.2% Health Care 20.5% Information Technology 21.1% **Investment Companies** 4.8% Materials 2.6%

Cash & Other 3.2%

Discuss the fund's security and option selection process.

The fund is managed by two teams of investment professionals. We use fundamental analysis to select solid companies with good growth prospects and attractive valuations. We then seek attractive call options to write on those stocks. It is our belief that this partnership of active management between the equity and option teams provides investors with an innovative, risk-moderated approach to equity investing. The fund's portfolio managers seek to invest in a portfolio of common stocks that have favorable "PEG" ratios (Price-Earnings ratio to Growth rate) as well as financial strength and industry leadership. We seek companies that have sustainable competitive advantages, predictable cash flows, solid balance sheets and high-quality management teams. By concentrating on long-term prospects and circumventing

MSP | Madison Strategic Sector Premium Fund | Management's Discussion of Fund Performance | concluded

the "instant gratification" school of thought, we believe we bring elements of consistency, stability and predictability to our shareholders.

Once we have selected attractive and solid names for the fund, we employ our call writing strategy. This procedure entails selling calls that are primarily out-of the-money, meaning that the strike price is higher than the common stock price, so that the fund can participate in some stock appreciation. By receiving option premiums, the fund receives a high level of investment income and adds an element of downside protection. Call options may be written over a number of time periods and at differing strike prices in an effort to maximize the protective value to the strategy and spread income evenly throughout the year.

What is management's outlook for the market and fund in 2011?

The U.S. economy looks better than it did at this time last year, and we've upgraded our view going forward. The holiday retail season proved a pleasant surprise with retail sales growth exceeding initially gloomy estimates. The manufacturing sector has a firmer tone, and state claims for unemployment insurance have resumed their downward trend after a choppy period this summer. Despite the more buoyant economic mood and our upgraded assessment of future prospects, we still consider the outlook for 2011 to be somewhat below where the economy should be at this stage of the recovery for several reasons. The housing market remains an issue and has exhibited renewed softness with the expiration of tax incentives for home purchase. Mortgage rates have recently edged higher as overall market interest rates have increased, and the inventory of unsold homes is still near record highs. Housing starts are still near the lows recorded in the spring of 2009. Despite some recent improvement, the labor market remains extremely challenging. Gains in productivity are allowing businesses and workers to do more with less, and it is unlikely that payroll growth will advance in earnest until productivity growth levels off. The plus side of strong productivity growth has been low inflation and sustained earnings improvement in corporate America, leading to a firmer stock market. Corporate balance sheets are, by and large, in excellent shape, and creditworthiness is strong.

Looking forward, we are encouraged by recent economic data. It would appear that moderate economic growth is in the cards for at least the first half of 2011. Generally, this would be considered a good backdrop for investors. Nonetheless, significant and cautionary macroeconomic issues persist. As with past economic recoveries, the economic data will likely be volatile and capital markets will respond similarly. Ironically, one of our current concerns is the level of investor complacency that has rather suddenly returned to the stock market. Current sentiment is strongly bullish, while volatility has declined to near three-year lows; from our perspective, this is cause for some short-term caution. Over the near term, we expect the stock market to consolidate its recent gains with increasing risk relating to the possibility that expectations of economic growth are proven to be overly optimistic. While we wait for economic and corporate reality to catch up with expectations, we remain relatively defensively postured.

# TOP TEN STOCK HOLDINGS AS OF DECEMBER 31, 2010

	% of net assets
Biogen Idec Inc.	3.54%
Lowe's Cos. Inc.	3.38%
Goldman Sachs Group	
Inc./The	3.30%
Cisco Systems Inc.	3.22%
Affiliated Managers Group	
Inc.	3.04%
Visa Inc., Class A	3.02%

Best Buy Co. Inc.	2.94%
Celgene Corp.	2.90%
American Express Co.	2.84%
Powershares QQQ Nasdaq	
100	2.67%

# SHARE PRICE AND NAV PERFORMANCE FOR MADISON STRATEGIC SECTOR PREMIUM FUND

Portfolio of Investments	December Shares/	31, 2010
	Par Value	Value
COMMON STOCK -	I di Value	value
92.0%		
Consumer		
Discretionary - 15.3%		
American Eagle		
Outfitters Inc.	\$ 80,000	0\$ 1,170,400
Bed Bath & Beyond		
Inc.*	30,000	1,474,500
Best Buy Co. Inc.	70,000	2,400,300
Garmin Ltd.	19,600	607,404
Home Depot Inc.	30,000	1,051,800
Kohl's Corp.*	11,500	624,910
Lowe's Cos. Inc.	110,000	2,758,800
Target Corp.	25,000	1,503,250
Williams-Sonoma Inc.	24,300	867,267
Energy 15.207		12,458,631
Energy - 15.3% Apache Corp.	13,400	1 507 692
EOG Resources Inc.	19,000	1,597,682 1,736,790
EXX Mobil Corp.	28,392	2,076,023
Noble Corp.*	60,000	2,070,023
Schlumberger Ltd.	22,000	1,837,000
Southwestern Energy	22,000	1,007,000
Co.*	40,000	1,497,200
Weatherford	,	, ,
International Ltd.*	70,000	1,596,000
		12,486,895
Financials - 17.2%		
Affiliated Managers		
Group Inc.*	25,000	2,480,500
Aflac Inc.	17,000	959,310
American Express Co.	54,000	2,317,680
Bank of America		
Corp.	127,000	1,694,180
Goldman Sachs Group	16,000	0 (00 5(0
Inc./The	16,000	2,690,560
Morgan Stanley	80,000	2,176,800
T Rowe Price Group	7,100	458,234
Inc. Wells Fargo & Co.	40,000	438,234
	+0,000	1,239,000
Health Care - 20.5%		1,010,004
Biogen Idec Inc.*	43,100	2,889,855
Celgene Corp.*	40,000	2,365,600
P	,	-, ,0 0 0

Genzyme Corp.*	23,600	1,680,320
Gilead Sciences Inc.*	55,000	1,993,200
Medtronic Inc.	35,000	1,298,150
Mylan Inc./PA*	70,000	1,479,100
Pfizer Inc.	109,800	1,922,598
UnitedHealth Group	,	, ,
Inc.	53,200	1,921,052
Zimmer Holdings	,	<i>y- y-</i> -
Inc.*	21,000	1,127,280
	,	16,677,155
	Shares/	10,077,100
	Par Value	Value
Information	i ui vuiue	vulue
Technology - 21.1%		
Adobe Systems Inc.*	\$ 55,000	0\$ 1,692,900
Applied Materials Inc.	60,000	843,000
Cisco Systems Inc.*	130,000	2,629,900
•	· · · ·	
eBay Inc.*	60,000	1,669,800
EMC	20.000	(07 000
Corp./Massachusetts*	30,000	687,000
Flextronics	104.000	1 451 465
International Ltd.*	184,900	1,451,465
Google Inc., Class A*	3,500	2,078,895
Microsoft Corp.	50,000	1,396,000
QUALCOMM Inc.	21,800	1,078,882
Symantec Corp.*	25,000	418,500
Visa Inc., Class A		
Shares	35,000	2,463,300
Yahoo! Inc.*	50,000	831,500
		17,241,142
Materials - 2.6%		
Freeport-McMoRan		
Copper & Gold Inc.	17,700	2,125,593
Total Common Stock (Co	ost	
\$73,080,022)		75,006,280
U.S. GOVERNMENT		
AND AGENCY		
<b>OBLIGATIONS</b> -		
4.9%		
U.S. Treasury Note -		
4.9%		
0.875%, 2/28/2011	4,000,000	4,003,459
Total U.S. Government a		.,,
Agency	110	
Obligations (Cost \$4,003	459)	4,003,459
INVESTMENT	,,	т,000,т07
COMPANIES - 4.8%		
iPATH S&P 500 VIX		
Short-Term Futures		
	10 000	1 502 600
ETN*	40,000	
	40,000	2,178,800

Powershares QQQ Nasdaq 100 SPDR S&P 500 ETF Trust 2,100 264,138 Total Investment Companies (Cost \$3,844,381) 3,946,538 Repurchase Agreement - 13.2% With U.S. Bank National Association issued 12/31/10 at 0.01%, due 1/3/11, collateralized by \$10,962,933 in Freddie Mac MBS Pool #E99143 due 9/1/18. Proceeds at maturity are \$10,747,790 (Cost \$10,747,782) 10,747,782 TOTAL INVESTMENTS -114.9% (Cost \$91,675,644) 93,704,059 NET OTHER ASSETS AND LIABILITIES - (6.1%) (4,964,168)Total Call & Put Options Written -(8.8%) (7, 168, 157)TOTAL ASSETS - 100.0%\$81,571,734

Non-income \*Producing Exchange Traded ETFFund Exchange Traded ETNNote

See accompanying Notes to Financial Statements.

MSP   Madison Strategic Sector Premium Fund   Portfolio of Investments   continued
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Call Options Written	Contracta	ExpirationS	trika Drica	Market Value	
Adobe Systems Inc.		April 2011	33.00	\$ 40,650	
Adobe Systems me.	500	January	55.00	\$ 40,050	
Adobe Systems Inc.	250	2011	34.00	2,250	
Affiliated Managers Group	200	January	2 1100	2,200	
Inc.	150	2011	75.00	362,250	
Affiliated Managers Group		January		,	
Inc.	100	2011	85.00	145,500	
		January			
Aflac Inc.	170	2011	47.00	161,075	
American Eagle Outfitters		August			
Inc.	300	2011	16.00	33,000	
American Eagle Outfitters					
Inc.	144	May 2011	16.50	9,000	
American Eagle Outfitters	1.40	January	14.50	0.050	
Inc.	140	2011	14.50	8,050	
American Express Co.	300	July 2011	47.50	52,200	
American Express Co.	240 134	April 2011	44.00	50,640	
Apache Corp. Applied Materials Inc.	200		110.00 13.00	204,350 34,200	
Applied Materials Inc.	200 200	July 2011 July 2011	13.00	34,200 22,300	
Bank of America Corp.		April 2011	14.00	68,400	
Dunk of America Corp.	700	January	14.00	00,100	
Bed Bath & Beyond Inc.	200	2011	39.00	203,000	
		January		,	
Bed Bath & Beyond Inc.	100	2011	40.00	91,500	
Best Buy Co. Inc.	600	June 2011	45.00	18,300	
		January			
Best Buy Co. Inc.	100	2011	40.00	350	
		January			
Biogen Idec Inc.	431	2011	60.00	312,475	
Celgene Corp.	100	April 2011	60.00	31,750	
	• • • •	January			
Celgene Corp.	300	2011	57.50	78,000	
eBay Inc.	300	April 2011	26.00	89,100	
a Davy Inc	300	January 2011	24.00	119 500	
eBay Inc. EMC Corp./Massachusetts		April 2011	24.00 22.00	118,500 54,450	
EVIC Corp./Wassachuseus EOG Resources Inc.		April 2011 April 2011	22.00 95.00	34,430 82,175	
EOO Resources Inc. Exxon Mobil Corp.		April 2011 April 2011	93.00 72.50	59,300	
Erron moon corp.	200	January	12.30	57,500	
Exxon Mobil Corp.	80	2011	45.00	54,400	
Freeport-McMoRan Copper		January		2 .,	
& Gold Inc.	177	2011	64.00	991,200	
Garmin Ltd.		April 2011	32.00	35,672	
Genzyme Corp.	236	•	52.50	460,790	
· •					

		January		
		2011		
		August		
Gilead Sciences Inc.	250	2011	39.00	55,250
Gilead Sciences Inc.	300	May 2011	39.00	45,300
Goldman Sachs Group		January		
Inc./The	160	2011	145.00	376,000
		January		
Google Inc.	35	2011	530.00	231,875
Home Depot Inc.	244	May 2011	32.00	96,380
		January		
Home Depot Inc.	56	2011	30.00	28,560
iPATH S&P 500 VIX		February		
Short-Term Futures ETN	200	2011	40.00	49,000
		January		
Kohl's Corp.	115	2011	50.00	50,600
Lowe's Cos. Inc.	400	July 2011	26.00	61,800
Lowe's Cos. Inc.	300	April 2011	23.00	81,900
		January		
Lowe's Cos. Inc.	200	2011	25.00	11,800
Medtronic Inc.	200	May 2011	38.00	35,000
Microsoft Corp.	500	April 2011	25.00	166,250
Morgan Stanley	400	July 2011	28.00	82,200
Mylan Inc./PA	500	July 2011	21.00	90,750
Mylan Inc./PA	200	April 2011	21.00	27,100
Noble Corp.	300	June 2011	38.00	63,450
		March		
Noble Corp.	300	2011	39.00	22,950
		March		
Pfizer Inc.	400	2011	17.00	37,200
Powershares QQQ Nasdaq				
100	308	April 2011	55.00	63,756
Powershares QQQ Nasdaq		January		
100	92	2011	47.00	69,092

See accompanying Notes to Financial Statements.

# MSP | Madison Strategic Sector Premium Fund | Portfolio of Investments | concluded

Call Options Written	Contracts	ExpirationS January	trike Price	Marke Valu	
QUALCOMM Inc.	51	2011 January	38.00	\$ 5	8,777
QUALCOMM Inc.	167	2011	45.00	77,65	5
Schlumberger Ltd.	220	May 2011	80.00	182,60	
Southwestern Energy Co.	200	June 2011 March	39.00	54,80	0
Southwestern Energy Co.	200	2011 January	39.00	31,00	0
SPDR S&P 500 ETF Trust	21	2011	112.00	29,39	0
Symantec Corp.	250	July 2011 January	18.00	27,62	5
T Rowe Price Group Inc.	71	2011 January	50.00	103,66	0
Target Corp.	250	2011	55.00	131,25	0
UnitedHealth Group Inc.	300	June 2011 March	37.00	70,80	0
Visa Inc.	150	2011 January	72.50	46,87	5
Visa Inc.	200	2011	80.00	1,10	0
Weatherford International		February			
Ltd.	120	2011	17.00	70,50	0
Weatherford International		January			
Ltd.	580	2011	17.50	308,85	0
Wells Fargo & Co.	200	April 2011 January	31.00	42,50	0
Wells Fargo & Co.	200	2011	30.00	31,60	0
C C		February			
Williams-Sonoma Inc.	243	2011	30.00	144,58	5
Yahoo! Inc.	500	July 2011	18.00	56,75	0
Zimmer Holdings Inc. Total Call Options Written (Premit	210 1ms	June 2011	55.00	69,30	0
received \$4,331,449)			\$	7,160,65	7
Put Options Written Microsoft Corp. Total Put Options Written (Premiums received	200	April 2011	24.00	7,50	0
\$21,551)				\$	7,500

See accompanying Notes to Financial Statements.

Statement of Assets and Liabilities | December 31, 2010

ASSETS	
Investments, at value (Note 1 and 2)	
Short term investments	\$14,751,241
Investment securities	78,952,818
Total investments (cost \$91,675,644)	93,704,059
Cash	212,094
Receivables	
Investment securities sold	337,055
Dividends and interest	28,386
Total assets	94,281,594
LIABILITIES	
Options written, at value (premiums received of \$4,353,000)	7,168,157
Payables	7,100,157
Investment securities purchased	5,518,589
Auditor fees	10,000
Independent trustee fees	4,500
Other expenses	8,614
Total liabilities	12,709,860
Total habilities	12,709,800
NET ASSETS	\$81,571,734
Net assets consist of:	104.050.000
Paid in capital	104,350,926
Accumulated net realized loss on investments and options	
transactions	(21,992,450)
Accumulated net unrealized depreciation on investments and	
options transactions	(786,742)
Net assets	\$81,571,734
CAPITAL SHARES ISSUED AND OUTSTANDING	
An unlimited number of capital shares authorized,\$.01 par	
value per share (Note 8)	5,798,291
-	
NET ASSET VALUE PER SHARE	\$14.07

See accompanying Notes to Financial Statements.

Statement of Operations | For the year ended December 31, 2010

INVESTMENT INCOME (Note 1)		
Interest income	\$	9,865
Dividend income	607,39	9
Total investment income	617,26	4
EXPENSES (Notes 3 and 4)		
Investment advisory	637,05	
Administration	19,90	
Fund accounting	20,29	
Auditor fees	20,00	
Independent trustee fees	18,00	
Other	65,13	
Total expenses	780,39	3
NET INVESTMENT LOSS	(163,129	))
REALIZED AND UNREALIZED GAIN (LOSS) ON		
INVESTMENTS		
Net realized gain (loss) on:		
Investments	(21,111,898	3)
Options	3,344,60	,
Net unrealized appreciation (depreciation) on:		
Investments	26,784,41	9
Options	(1,430,216	5)
NET GAIN ON INVESTMENTS AND OPTIONS		
TRANSACTIONS	7,586,90	6
NET INCREASE IN NET ASSETS RESULTING FROM		
OPERATIONS	\$7,423,77	7

See accompanying Notes to Financial Statements.

Statements of Changes in Net Assets

	Year Ended December 31,		
	2010 2009		
INCREASE (DECREASE) IN NET ASSETS			
RESULTING FROM OPERATIONS			
Net investment loss	\$ (163,129)\$ (193,842)		
Net realized loss on investments and options			
transactions	(17,767,297) (4,225,153)		
Net unrealized appreciation on investments and options transactions	25,354,203 28,920,982		
Net Increase in net assets resulting from operations	7,423,777 24,501,987		
DISTRIBUTION TO SHAREHOLDERS			
From net capital gains	-(6,656,638)		
Return of capital	(6,030,223) -		
Total distributions	(6,030,223) (6,656,638)		
CAPITAL SHARE TRANSACTIONS			
NET INCREASE IN NET ASSETS	1,393,554 17,845,349		
NET ASSETS			
Beginning of period	\$80,178,180\$62,332,831		
End of period (including accumulated undistributed net investment income of \$0 and			
\$0, respectively)	\$81,571,734\$80,178,180		

See accompanying Notes to Financial Statements.

# Financial Highlights

Per Share Operating Performance for One Share Outstanding Throughout the Period

	2010	Year Ei 2009	nded Dec 2008	ember 31 2007	, 2006
Net asset value, beginning of					
period	\$13.83	\$10.75	\$17.52	\$20.25	\$19.87
Investment operations:					
Net investment income (loss)	(0.03)	(0.03)	0.03	0.28	0.06
Net realized and unrealized gain					
(loss) on investments					
and options transactions	1.31	4.26	(5.30)	(1.21)	2.12
Total from investment operations	1.28	4.23	(5.27)	(0.93)	2.18
Less distributions:					
From net investment income	_	_	(0.03)	(0.28)	(0.06)
From capital gains	_	(1.15)	(1.47)	(1.52)	(1.74)
Return of capital	(1.04)	—	-	—	—
Total distributions	(1.04)	(1.15)	(1.50)	(1.80)	(1.80)
Net asset value, end of period	\$14.07			\$17.52	\$20.25
Market value, end of period	\$12.82	\$12.23	\$8.75	\$15.53	\$20.60
Total investment return					
Net asset value (%)	9.79	41.21	(31.94)	· /	11.61
Market value (%)	14.01	55.81	(36.18)	(16.85)	11.30
Ratios and supplemental data					
Net assets, end of period					
(thousands)	\$81,572	\$80,178	\$62,333	\$101,607	\$116,223
Ratios to Average Net Assets:					
Total expenses, excluding interest					
expense (%)	0.98	1.04	1.07	0.98	0.98
Total expenses, including interest					
expense (%)	0.98	1.23	1.50	0.98	0.98
Net investment income, including		(0.0)			
interest expense (%)	(0.20)	(0.27)	0.19	1.41	0.33
Ratios to Average Managed					
Assets:1					
Total expenses, excluding interest		0.07	0.07		
expense (%)	_	0.97	0.96	_	_
Total expenses, including interest		1 1 2	1.25		
expense (%)	_	1.13	1.35	_	—
Net investment income, including		(0.05)	0.17		
interest expense (%)	-	(0.25)	0.17	-	_
Portfolio turnover (%)	61	25	41	93	64
Senior Indebtedness	1				
Outstanding balance, end of period	l		10.000		
(thousands)	_	—	10,000	—	-
Average outstanding balance		5 671	0 706		
during the period (thousands)	_	5,671	9,706	_	_

Average fund shares during the					
period (thousands)	_	5,798	5,798	_	_
Average indebtedness per share	_	0.98	1.67	_	_
Asset coverage per \$1,000 of					
indebtedness	_	_	7,2332	-	_

1Managed assets is equal to net assets plus average outstanding leverage.

2Calculated by subtracting the fund's total liabilities (not including borrowings) from the fund's total assets and dividing by the total borrowings at year-end.

Net asset value figures are based on average daily shares outstanding during the year.

See accompanying Notes to Financial Statements.

Notes to Financial Statements | December 31, 2010 Note 1 – Organization.

Madison Strategic Sector Premium Fund (the "Fund") was organized as a Delaware statutory trust on February 4, 2005. The Fund is registered as a diversified, closed-end management investment company under the Investment Company Act of 1940, as amended, and the Securities Act of 1933, as amended. The Fund commenced operations on April 27, 2005. The Fund's primary investment objective is to provide a high level of current income and current gains, with a secondary objective of long-term capital appreciation.

The Fund will pursue its investment objectives by investing in a portfolio consisting primarily of common stocks of large and mid-capitalization issuers that are, in the view of the Fund's Investment Adviser, selling at a reasonable price in relation to their long-term earnings growth rates. Under normal market conditions, the Fund will seek to generate current earnings from option premiums by writing (selling) covered call options on a substantial portion of its portfolio securities. There can be no assurance that the Fund will achieve its investment objectives. The Fund's investment objectives are considered fundamental and may not be changed without shareholder approval.

Note 2 – Significant Accounting Policies.

#### (a) Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions. Such estimates affect the reported amounts of assets and liabilities and reported amounts of increases and decreases in net assets from operations during the reporting period. Actual results could differ from those estimates.

#### (b) Portfolio Valuation

Securities traded on a national securities exchange are valued at their closing sale price except for securities traded on NASDAQ which are valued at the NASDAQ official closing price ("NOCP") and options which are valued at the mean between the best bid and best ask price across all option exchanges. Repurchase agreements and other securities having maturities of 60 days or less are valued at amortized cost, which approximates market value. Securities having longer maturities, for which quotations are readily available, are valued at the mean between their closing bid and ask prices. Securities for which market quotations are not readily available are valued at their fair value as determined in good faith under procedures approved by the Board of Trustees.

The Fund has adopted Financial Accounting Standards Board ("FASB") applicable guidance on fair value measurements. Fair value is defined as the price that each fund would receive upon selling an investment in a timely transaction to an independent buyer in the principal or most advantageous market of the investment. A three-tier hierarchy is used to maximize the use of observable market data "inputs" and minimize the use of unobservable "inputs" and to establish classification of fair value measurements for disclosure purposes. Inputs refer broadly to the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk (for example, the risk inherent in a particular valuation technique used to measure fair value including such a pricing model and/or the risk inherent in the inputs to the valuation technique). Inputs may be observable or unobservable. Observable inputs are inputs that reflect the assumptions market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the reporting entity. Unobservable inputs are inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances. The three-tier hierarchy of inputs is summarized in the three broad Levels listed below:

Level 1 - quoted prices in active markets for identical investments

Level 2 – other significant observable inputs (including quoted prices for similar investments, interest rate volatilities, prepayment speeds, credit risk, benchmark yields, transactions, bids, offers, new issues, spreads and other relationships observed in the markets among comparable securities, underlying equity of the issuer;

MSP | Madison Strategic Sector Premium Fund | Notes to Financial Statements | continued

and proprietary pricing models such as yield measures calculated using factors such as cash flows, financial or collateral performance and other reference data, etc.)

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

The valuation techniques used by the Fund to measure fair value for the period ended December 31, 2010 maximized the use of observable inputs and minimized the use of unobservable inputs. As of December 31, 2010, the Fund held no securities deemed as a Level 3.

The following table represents the Fund's investments carried on the Statement of Assets and Liabilities by caption and by level within the fair value hierarchy as of December 31, 2010:

	T 11	1 10	1 10	Value at	
Description	Level 1	Level 2	Level 3	12/31/10	
Assets:					
Common Stocks	\$75,006,280	\$	-\$	\$75,006,280	
Investment					
Companies	3,946,538	_		3,946,538	
U.S. Government					
and Agency					
Obligations	_	4,003,459		4,003,459	
Repurchase					
Agreement	_	10,747,782		10,747,782	
Total	\$78,952,818 \$14,751,241		\$	\$ \$93,704,059	
Liabilities:					
Written options	\$ 7,168,157	\$	-\$	\$ 7,168 <del>,</del> 157	
Total	\$ 7,168,157	\$	-\$	\$ 7,168 <del>,</del> 157	
Please see Portfolio of Investments for common stock sector breakdown and					

listing of all securities within each caption.

The Fund has adopted the Accounting Standard Update, Fair Value Measurements and Disclosures; Improving Disclosures about Fair Value Measurements which provides guidance on how investment assets and liabilities are to be valued and disclosed. Specifically, the amendment requires reporting entities to disclose i) the input and valuation techniques used to measure fair value for both recurring and nonrecurring fair value measurements, for Level 2 or Level 3 positions, ii) transfers between all levels (including Level 1 and Level 2) will be required to be disclosed on a gross basis (i.e. transfers out must be disclosed separately from transfers in) as well as the reason(s) for the transfer and iii) purchases, sales, issuances and settlements must be shown on a gross basis in the Level 3 rollforward rather than as one net number. The effective date of the amendment is for interim and annual periods beginning after December 15, 2009, however, the requirement to provide the Level 3 activity for purchases, sales, issuance and settlements on a gross basis will be effective for interim and annual period beginning after December 15, 2010. There were no transfers between classification levels during the period ended December 31, 2010.

In March 2008, FASB issued guidance on enhanced disclosures about a fund's derivitive and hedging activities in order to enable investors to understand: a) how and why a fund uses derivative investments, b) how derivative instruments and related hedge fund items are accounted for, and c) how derivative instruments and related hedge fund

items affect a fund's financial position, results of operations and cash flows.

The following table presents the types of derivatives in the Fund and their effect:

Statement of Asset & Liability Presentation of Fair Values of Derivative Instruments Asset Derivatives Liability Derivatives Statement of Derivatives not Statement of Assets accounted Assets for as hedging and Liabilities and Liabilities instruments Location Fair Value Location Fair Value Equity contracts Options written \$7,168,157 ----

MSP | Madison Strategic Sector Premium Fund | Notes to Financial Statements | continued

The following table presents the effect of Derivative Instruments on the Statement of Operations for the year ended December 31, 2010:

	Realized Gain on Derivatives:	Change in Unrealized Depreciation on Derivatives
Derivatives not accounted		
for as hedging		
instruments		
Equity contracts – options	\$3,344,601	\$(1,430,216)

#### (c) Investment Transactions and Investment Income

Investment transactions are recorded on a trade date basis. The cost of investments sold is determined on the identified cost basis for financial statement and federal income tax purposes. Dividend income is recorded on the ex-dividend date and interest income is recorded on an accrual basis.

#### (d) Repurchase Agreements

The Fund may invest in repurchase agreements, which are short-term investments in which the Fund acquires ownership of a debt security and the seller agrees to repurchase the security at a future time and specified price. Repurchase agreements are fully collateralized by the underlying debt security. The Fund will make payment for such securities only upon physical delivery or evidence of book entry transfer to the account of the custodian bank. The seller is required to maintain the value of the underlying security at not less than the repurchase proceeds due the Fund.

#### (e) Clarification of Investment Strategy.

When options are exercised and stocks are called away, the Fund will see its cash level materially increase. Although the Fund intends to invest at least 80% of its assets in securities under normal circumstances, there may be times when the Fund's cash and cash equivalents represent more than 20% of the Fund's assets for indeterminate periods until it is opportune to re-invest these amounts in securities pursuant to the Fund's equity and option strategies. The Fund monitors this credit risk and has not experienced any losses related to this risk.

Note 3 - Investment Advisory Agreement and Other Transactions with Affiliates.

Pursuant to an Investment Advisory Agreement between the Fund and Madison Asset Management, LLC (the "Adviser"), the Adviser, under the supervision of the Fund's Board of Trustees, will provide a continuous investment program for the Fund's portfolio; provide investment research and make and execute recommendations for the purchase and sale of securities; and provide certain facilities and personnel, including officers required for the Fund's administrative management and compensation of all officers and trustees of the Fund who are its affiliates. For these services, the Fund will pay the Adviser a fee, payable monthly, in an amount equal to 0.80% of the Fund's average daily managed assets.

Under a separate Services Agreement, Madison Investment Advisors, LLC, an affiliate of the Adviser, provides fund administration services, fund accounting services, and arranges to have all other necessary operational and support

services, for a fee, to the Fund. Prior to December 1, 2010, Madison Investment Advisors, Inc., another affiliate of the Adviser, provided such services. Such services include transfer agent, custodian, legal, and other operational expenses. These fees are accrued daily and shall not exceed 0.18% of the Fund's average daily net assets. The Adviser assumed responsibility for payment of all expenses greater than 0.18% of average daily net assets for the first five years of the Fund's operations, other than investment expenses such as brokerage commission costs or interest and fees on loans. The Adviser renewed this expense limit for another year through April 26, 2011.

Note 4 – Federal Income Taxes.

No provision is made for federal income taxes since it is the intention of the Fund to comply with the provisions of Subchapter M of the internal Revenue Code available to investment companies and to make the requisite distribution to shareholders of taxable income which will be sufficient to relieve it from all or substantially all federal income taxes.

The Regulated Investment Company ("RIC") Modernization Act of 2010 (the "Modernization Act") modernizes several of the federal income and excise tax provisions related

MSP | Madison Strategic Sector Premium Fund | Notes to Financial Statements | continued

to RICs. The Modernization Act contains simplification provisions effective for taxable years beginning after December 22, 2010, which are aimed at preventing disqualification of a RIC for "inadvertent" failures of the asset diversification and/or qualifying income tests. Additionally, the Modernization Act allows capital losses to be carried forward indefinitely, and retain the character of the original loss, exempts RICs from the preferential dividend rule, and repealed the 60-day designation requirement for certain types of pay-through income and gains.

As of and during the year ended December 31, 2010, the Fund did not have a liability for any unrecognized tax benefits. The Fund recognizes interest and penalties, if any, related to unrecognized tax benefits as income tax expense in the statement of operations. During the period, the Fund did not incur any interest or penalties.

As of December 31, 2010, for federal income tax purposes, the Fund had available to offset future capital gains the following capital loss carryovers and the year they expire:

Expiration Date December 31, 2017 \$ 3,853,762 December 31, 2018 18,127,591

Information on the tax components of investments, excluding option contracts, as of December 31, 2010 is as follows :

Aggregate Cost	\$91,686,740
Gross unrealized	
appreciation	7,335,507
Gross unrealized	
depreciation	(5,318,188)
Net unrealized	
appreciation	\$ 2,017,319

Net realized gains or losses may differ for financial reporting and tax purposes primarily as a result of the deferral of losses relating to wash sale transactions and post-October transactions.

Due to inherent differences in the recognition of income, expenses, and realized gains/losses under U.S. generally accepted accounting principles and federal income tax purposes, permanent differences between book and tax basis reporting have been identified and appropriately reclassified on the Statement of Assets and Liabilities. A permanent book and tax difference relating to net investment losses in the amount of \$163,129 was reclassified from accumulated undistributed net investment income to paid in capital.

For the years ended December 31, 2010 and 2009, the tax character of distributions paid to shareholders was \$6,030,223 return of capital for 2010, and \$6,656,638 of ordinary income for 2009, respectively.

As of December 31, 2010, the components of distributable earnings on a tax basis were as follows:

Accumulated net realized losses \$ (21,981,353) Net unrealized depreciation on investments

(797,839) \$(22,779,192)

Tax years open to examination by tax authorities under the statute of limitations include 2007 through 2010.

Note 5 – Investment Transactions.

During the year ended December 31, 2010, the cost of purchases and proceeds from sales of investments, excluding short-term investments, were \$42,275,944 and \$44,033,050, respectively. No long term U.S. Government securities were purchased or sold during the period.

Note 6 – Covered Call Options.

The Fund will pursue its primary objective by employing an option strategy of writing (selling) covered call options on common stocks. The number of call options the Fund can write (sell) is limited by the amount of equity securities the Fund holds in its portfolio. The Fund will not write (sell) "naked" or uncovered call options. The Fund seeks to produce a high level of current income and gains generated from option writing premiums and, to a lesser extent, from dividends.

When an option is written, the premium received is recorded as an asset with an equal liability and is subsequently marked to market to reflect the current market value of the option written. These liabilities are reflected as options written in the Statement of Assets and Liabilities. Premiums received from writing options which expire unexercised are recorded on the expiration date as a realized gain. The difference between the premium received and the amount paid on effecting a closing purchase transaction, including brokerage commissions, is also treated as a realized gain, or if the premium is less than the amount paid for the closing purchase transitions,

MSP | Madison Strategic Sector Premium Fund | Notes to Financial Statements | concluded

as a realized loss. If a call option is exercised, the premium is added to the proceeds from the sale of the underlying security in determining whether there has been a realized gain or loss.

Transactions in option contracts during the year ended

December 31, 2010 were as follows:

Number of Premiums Contracts Received Options outstanding beginning of period 20,335 \$4,874,874 Options written 35,440 7,980,072 Options expired (8,650)(1,952,909)Options closed (19,237)(4,234,009)Options assigned (10,757)(2,315,028)Options outstanding end of period 17,131 4,353,000

Note 7 – Capital.

The Fund has an unlimited amount of common shares, \$0.01 par value, authorized and 5,798,291 shares issued and outstanding as of December 31, 2010.

In connection with the Fund's dividend reinvestment plan, there were no shares reinvested for the year ended December 31, 2010 and 2009, respectively.

Note 8 – Indemnifications.

In the normal course of business, the Fund enters into contracts that provide general indemnifications. The Fund's maximum exposure under these arrangements is dependent upon claims that may be made against the Fund in the future and, therefore cannot be estimated; however, the risk of material loss from such claims is considered remote.

Note 9 – Leverage.

The Fund has a \$25 million revolving credit facility with U.S. Bank N.A. to permit it to leverage its portfolio under favorable market conditions. The interest rate on the outstanding principal amount is equal to the prime rate less 1%. The Fund did not draw on the facility during 2010 and the full facility is available as of December 31, 2010.

Note 10 – Subsequent Events.

Management has evaluated the impact of all subsequent events on the Funds' financial statements. No events have taken place that meet the definition of a subsequent event that requires adjustment to, or disclosure in the financial

statements.

Report of Independent Registered Public Accounting Firm | December 31, 2010

To the Board of Trustees and Shareholders of Madison Strategic Sector Premium Fund

We have audited the accompanying statement of assets and liabilities, including the portfolio of investments of the Madison Strategic Sector Premium Fund (the "Fund"), as of December 31, 2010 and the related statement of operations for the year then ended and the statements of changes in net assets for each of the two years in the period then ended, and financial highlights for the five years in the period then ended. These financial statements and financial highlights are the responsibility of the Fund's management. Our responsibility is to express an opinion on these financial statements and financial highlights based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and financial highlights are free of material misstatement. The Fund is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Fund's internal control over financial reporting. Accordingly we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. Our procedures included confirmation of securities owned as of December 31, 2010 by correspondence with the Fund's custodian and brokers. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements and financial highlights referred to above present fairly, in all material respects, the financial position of the Fund as of December 31, 2010, and the results of its operations for the year then ended and the changes in its net assets for each of the two years in the period then ended, and financial highlights for the five years in the period then ended, in conformity with accounting principles generally accepted in the United States of America.

Chicago, Illinois February 22, 2011

#### Other Information

Results of Shareholder Vote. The Annual Meeting of shareholders of the Fund was held on July 28, 2010. At the meeting, shareholders voted on the election of two trustees, Katherine L. Frank and James R. Imhoff, Jr. The votes cast in favor of election for Ms. Frank were 5,127,965 with 258,502 shares withheld and Mr. Imhoff were 5,122,959 with 263,508 shares withheld. The other trustees of the Fund whose terms did not expire in 2010 are Frank E. Burgess, Lorence D. Wheeler and Philip E. Blake.

Additional Information. Notice is hereby given in accordance with Section 23(c) of the Investment Company Act of 1940 that from time to time, the Fund may purchase shares of its common stock in the open market at prevailing market prices.

This report is sent to shareholders of the Fund for their information. It is not a prospectus, circular or representation intended for use in the purchase or sale of shares of the Fund or any securities mentioned in the report.

Forward-Looking Statement Disclosure.

One of our most important responsibilities as investment company managers is to communicate with shareholders in an open and direct manner. Some of our comments in our letters to shareholders are based on current management expectations and are considered "forward-looking statements." Actual future results, however, may prove to be different from our expectations. You can identify forward-looking statements by words such as "estimate," "may," "will," "expect," "believe," "plan" and other similar terms. We cannot promise future returns. Our opinions are a reflection of our best judgment at the time this report is compiled, and we disclaim any obligation to update or alter forward-looking statements as a result of new information, future events, or otherwise.

#### Proxy Voting Information.

The Fund adopted policies that provide guidance and set forth parameters for the voting of proxies relating to securities held in the Fund's portfolios. Additionally, information regarding how the Fund voted proxies related to portfolio securities, if applicable, during the period ended June 20, 2010, is available upon request and free of charge, by writing to Madison Strategic Sector Premium Fund, 550 Science Drive, Madison, WI 53711 or by calling toll-free at 1-800-368-3195. The Fund's proxy voting policies and voting information may also be obtained by visiting the Securities and Exchange Commission ("SEC") web site at www.sec.gov. The Fund will respond to shareholder requests for copies of our policies within two business days of request by first-class mail or other means designed to ensure prompt delivery.

#### N-Q Disclosure.

The Fund files its complete schedule of portfolio holdings with the SEC for the first and third quarters of each fiscal year on Form N-Q. The Fund's Forms N-Q are available on the SEC's website. The Fund's Forms N-Q may be reviewed and copied at the SEC's Public Reference Room in Washington, DC. Information about the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. Form N-Q and other information about the Fund are available on the EDGAR Database on the SEC's Internet site at http://www.sec.gov. Copies of this information may also be obtained, upon payment of a duplicating fee, by electronic request at the following email address: publicinfo@sec.gov, or by writing the SEC's Public Reference Section, Washington, DC 20549-0102. Finally, you may call the Fund at 800-368-3195 if you would like a copy of Form N-Q and we will mail one to you at no

charge.

#### Trustees and Officers

The address of each trustee and officer of the funds is 550 Science Drive, Madison, WI 53711, except that Mr. Mason's address is 8777 N. Gainey Center Drive, #220, Scottsdale, AZ, 85258. The Statement of Additional Information, which includes additional information about the trustees and officers, is available at no cost on the SEC's website at www.sec.gov or by calling Madison Mosaic Funds at 1-800-368-3195.

#### Interested Trustees and Officers

Name and Year of Birth Katherine L. Frank1 1960	Time Served	Principal Occupation(s) During Past Five Years Madison Investment Holdings, Inc. ("MIH") (affiliated investment advisory firm of Madison), Executive Director and Chief Operating Officer, 2010 - Present; Managing Director and Vice President 1986 - 2010; Madison Asse Management, LLC ("MAM") (affiliated investment advisory firm of Madison), Executive Director and Chief Operating Officer, 2010 - Present; Vice President, 2004 - 2010; Madison Investment Advisors, LLC ("Madison"), Executive Director and Chief Operating Officer, 2010 - Present; President, 1996 - 2010; Madison Mosaic Funds (13 funds, including the Funds), President, 1996 - Present; Madison Strategio	
		e	

		Present; MEMBERS Mutual Funds (13) and Ultra Series Fund (17) (mutual funds), President, 2009 - Present	
Frank E.	Trustee	MIH, Founder, Executive	Madison Mosaic Funds
Burgess1	and	Director and President,	(13), 1996 - Present;
1942	Vice	2010 - Present; Managing	Madison
	,	Director and President,	Strategic Sector Premium
	2005 -	1973 - 2010; MAM,	Fund and
	Present	Executive Director and	Madison/Claymore
		President, 2010 - Present;	Covered Call & Equity
		President, 2004 -	Strategy Fund, 2005 -
		2010; Madison, Executive	Present; Capitol Bank of
		Director and President,	Madison, WI, 1995 -
		2010 - Present; Madison	Present; American Riviera
		Mosaic Funds	Bank of Santa Barbara,
		(13 funds, including the	CA, 2006 - Present
		Funds), Vice President,	
		1996 - Present; Madison	
		Strategic Sector Premium	
		Fund, Vice President, 2005	
		- Present; MEMBERS	
		Mutual Funds (13) and	
		Ultra Series Fund (17),	
		Vice President, 2009 -	
		Present	

1 "Interested person" as defined in the 1940 Act. Considered an interested Trustee because of the position held with the investment adviser of the Funds.

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MSP | Madison Strategic Sector Premium Fund | Trustees and Officers | continued

N	Position(s) and	)	
Name and Year of Birth Jay R. Sekelsky	Time Served Vice	Principal Occupation(s) During Past Five Years MIH, Executive Director and Chief Investment	Other Directorships/Trusteeships N/A
1959	2005 - Present	Officer, 2010 - Present; Managing Director and Vice President, 1990 - 2010; MAM, Executive Director and Chief	
		Investment Officer, 2010 - Present; Madison, Executive Director and Chief Investment Officer,	
		2010 - Present; Vice President, 1996 - 2010; Madison Mosaic Funds (13 funds, including the Funds). Vice President, 1996 -	,
		Present; Madison Strategic Sector Premium Fund and Madison/Claymore Covered Call and Equity Strategy	1
		Fund, Vice President, 2005 - Present; MEMBERS Mutual Funds (13) and Ultra Series Fund (17), Vice President, 2009 - Present	
Paul Lefurgey 1964	Vice President, 2009 - Present	MIH, Managing Director and Head of Fixed Income Investments, 2005 - Present MAM and Madison,	N/A ;
		Managing Director and Head of Fixed Income Investments, 2010 - Present MEMBERS Capital	;
		Advisors, Inc. ("MCA") (investment advisory firm), Madison, WI, Vice President 2003 - 2005; Madison Mosaic Funds (13	
		funds, including the Funds), Vice President, 2009 - Present; Madison Strategic Sector Premium Fund, Vice	

	President, 2010 - Present; MEMBERS Mutual Funds	
	(13) and Ultra Series Fund	
	(17), Vice President, 2009 -	
	Present	
Treasurer,	MIH and Madison, Vice N/A	4
2009 -	President, 1999 - Present;	
Present;	MAM, Vice President, 2009	
Chief	- Present; Madison Mosaic	
Financial	Funds (13 funds, including	
Officer,	the Funds), Treasurer, 2009	
2005 -	- Present; Chief Financial	
2009	Officer, 1999 - 2009;	
	Madison Strategic Sector	
	Premium Fund, Treasurer,	
	2005 - Present; Chief	
	Financial Officer, 2005 -	
	2009; Madison/Claymore	
	Covered Call and Equity	
	Strategy Fund, Vice	
	President,	
	2008 - Present; MEMBERS	
	Mutual Funds (13) and	
	Ultra Series Fund (17),	
	Treasurer, 2009 - Present	

Greg D. Hoppe 1969

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MSP | Madison Strategic Sector Premium Fund | Trustees and Officers | continued

l	Name and	Position(s) and Length		
	Year of	of Time	Principal Occupation(s)	Other
	Birth	Served	During Past Five Years	Directorships/Trusteeships
	Holly S.	Secretary	MIH and Madison, Vice	N/A
	Baggot	and	President, 2010 - Present;	
	1960	Assistant	MAM, Vice President, 2009	)
		Treasurer,	- Present; Madison Mosaic	
		2009 -	Funds (13 funds, including	
		Present	the Funds), Secretary and	
			Assistant Treasurer, 2009 - Present: Medison Strategie	
			Present; Madison Strategic Sector Premium	
			Fund, Secretary and	
			Assistant Treasurer, 2010 -	
			Present; MEMBERS	
			Mutual Funds (13) and	
			Ultra Series Fund (17),	
			Assistant Treasurer,	
			2009 - Present; Secretary,	
			1999 - Present; Treasurer,	
			2008 - 2009; Assistant	
			Treasurer, 1997 - 2007;	
			MCA, Director-Mutual	
			Funds, 2008 - 2009;	
			Director-Mutual Fund	
			Operations, 2006 - 2008;	
			Operations Officer-Mutual Funds, 2005 - 2006; Senior	
			Manager-Product & Fund	
			Operations, 2001 - 2005	
V	W. Richard	Chief	MIH, MAM, Madison, and	N/A
	Mason		Madison Scottsdale, LC (an	
]	1960	Officer,	affiliated investment	
		2005 -	advisory firm of Madison),	
		Present;	Chief Compliance Officer	
		Corporate	and Corporate Counsel,	
			2009 - Present; General	
		Assistant	Counsel and Chief	
		Secretary,	Compliance Officer, 1996 -	
		2009 - Present:	2009; Mosaic Funds	
		Present; General	Distributor, LLC (an affiliated brokerage firm of	
			Madison), Principal, 1998 -	
		Secretary,	Present; Concord Asset	
		•	Management, LLC	
		_000 2000	("Concord") (an affiliated	

investment advisory firm of Madison), General Counsel, 1996 - 2009; NorthRoad Capital Management LLC ("NorthRoad") (an affiliated investment advisory firm of Madison), Chief Compliance Officer and Corporate Counsel, 2011 -Present; Madison Mosaic Funds (13 funds, including the Funds), Chief Compliance Officer, Corporate Counsel, and Assistant Secretary, 2009 -Present; Secretary, General Counsel, Chief Compliance Officer, 1992 - 2009; Madison Strategic Sector Premium Fund, Chief Compliance Officer, Corporate Counsel and Assistant Secretary, 2009 -Present; Secretary, General Counsel and Chief Compliance Officer, 2005 -2009; MEMBERS Mutual Funds (13) and Ultra Series Fund (17), Chief Compliance Officer, Corporate Counsel and Assistant Secretary, 2009 -Present

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MSP | Madison Strategic Sector Premium Fund | Trustees and Officers | continued

	Position(s) and	)	
Name and Year of Birth Pamela M. Krill 1966	and Length of Time Served General Counsel, Chief Legal Officer and Assistant	Principal Occupation(s) During Past Five Years MIH, MAM, Madison, Madison Scottsdale, LC, Mosaic Funds Distributor, and Concord, General Counsel and Chief Legal Officer, 2009 - Present; NorthRoad, General Counsel & Chief Legal Officer, 2011 - Present; Madison Mosaic Funds (13 funds, including the Funds), General Counsel, Chief Legal Officer and Assistant Secretary, 2009 - Present; Madison Strategic Sector Premium Fund, General Counsel, Chief Legal Officer and Assistant Secretary, 2010 - Present; MEMBERS Mutual Funds (13) and Ultra Series Fund (17), General Counsel, Chief Legal Officer and Assistant Secretary, 2009 - Present; CUNA Mutual Insurance Society (insurance company with affiliated investment advisory, brokerage and mutual fund operations), Madison, WI, Managing	
		mutual fund operations),	
		Counsel-Securities & Investments, 2007 - 2009; Godfrey & Kahn, S.C. (law firm), Madison and Milwaukee,	
		WI, Shareholder, Securities Practice Group, 1994-2007	

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	Position(s)		Portfolios	
	and	Principal	Overseen	
Name and	Length of	Occupation(s)	in	
Year of	Time	During Past	Fund	Other
Birth	Served1	Five Years	Complex2	Directorships/Trusteeships
Philip E.	Trustee,	Retired	44	Madison Newspapers, Inc.,
Blake	2005 -	investor; Lee		1993 - Present; Meriter
1944	Present	Enterprises,		Hospital & Health
		Inc (news		Services, 2000 - Present;
		and		Edgewood College, 2003 -
		advertising		Present; Chairman of the
		publisher),		Board, 2010 - Present;
		Madison, WI,		Nerites Corporation
		Vice		(technology company),
		President,		2004 - Present; Madison
		1998 - 2001;		Mosaic Funds (13 funds,
		Madison		including the Funds), 2001
		Newspapers,		- Present; Madison
		Inc., Madison,		Strategic Sector Premium
		WI, President		Fund, 2005 - Present;
		and Chief		MEMBERS Mutual Funds
		Executive		(13) and Ultra Series Fund
		Officer, 1993	-	(17), 2009 - Present
		2000		

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MSP | Madison Strategic Sector Premium Fund | Trustees and Officers | concluded

Name and Year of Birth James R Imhoff, Jr. 1944	Time Served1 Trustee,	Principal Occupation(s) During Past Five Years First Weber Group (real estate brokers), Madison, WI, Chief Executive Officer, 1996 - Present	Fund Complex2 44	Other Directorships/Trusteeships Park Bank, 1978 - Present; Madison Mosaic Funds (13 funds, including the Funds), 1996 - Present; Madison Strategic Sector Premium Fund, 2005 - Present; Madison/Claymore Covered Call and Equity Strategy Fund, 2005 - Present; MEMBERS Mutual Funds (13) and Ultra Series Fund (17), 2009 - Present
Lorence D. Wheeler 1938	Trustee, 2005 - Present	Retired investor; Credit Union Benefits Services, Inc. (a provider of retirement plans and related services for credit union employees nationwide), Madison, WI, President, 1986 - 1997	44	Grand Mountain Bank FSB and Grand Mountain Bancshares, Inc. 2003 - Present; Madison Mosaic Funds (13 funds, including the Funds), 1996 - Present; Madison Strategic Sector Premium Fund. 2005 - Present; Madison/Claymore Covered Call and Equity Strategy Fund, 2005 - Present; MEMBERS Mutual Funds (13) and Ultra Series Fund (17), 2009 - Present

1 Independent Trustees serve in such capacity until the Trustee reaches the age of 76, unless retirement is waived by unanimous vote of the remaining Trustees on an annual basis.

2 As of the date of this report, the fund complex consists of the Fund, the MEMBERS Mutual Funds with 13 portfolios, the Ultra Series Fund with 17 portfolios, and the Madison Mosaic Equity, Income, Tax-Free and Government Money Market Trusts, which together have 13 portfolios, for a grand total of 44 separate portfolios in the fund complex. Not every Trustee is a member of the Board of Trustees of every fund in the fund complex, as noted above.

The Statement of Additional Information contains more information about the Trustees and is available upon request. To request a free copy, call Madison Mosaic Funds at 1-800-368-3195.

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#### Dividend Reinvestment Plan | December 31, 2010

Unless the registered owner of common shares elects to receive cash by contacting Computershare Trust Company, Inc. (the "Plan Administrator"), all dividends declared on common shares of the Fund will be automatically reinvested by the Plan Administrator in the Fund's Dividend Reinvestment Plan (the "Plan") in additional common shares of the Fund. Participation in the Plan is completely voluntary and may be terminated or resumed at any time without penalty by notice if received and processed by the Plan Administrator prior to the dividend record date; otherwise such termination or resumption will be effective with respect to any subsequently declared dividend or other distribution. Some brokers may automatically elect to receive cash on your behalf and may re-invest that cash in additional common shares of the Fund for you. If you wish for all dividends declared on your common shares of the Fund to be automatically reinvested pursuant to the Plan, please contact your broker.

The Plan Administrator will open an account for each common shareholder under the Plan in the same name in which such common shareholder's common shares are registered. Whenever the Fund declares a dividend or other distribution (together, a "Dividend") payable in cash, non-participants in the Plan will receive cash and participants in the Plan will receive the equivalent in common shares. The common shares will be acquired by the Plan Administrator for the participants' accounts, depending upon the circumstances described below, either (i) through receipt of additional unissued but authorized common shares from the Fund ("Newly Issued Common Shares") or (ii) by purchase of outstanding common shares on the open market ("Open-Market Purchases") on the New York Stock Exchange or elsewhere. If, on the payment date for any Dividend, the closing market price plus estimated brokerage commission per common share is equal to or greater than the net asset value per common share, the Plan Administrator will invest the Dividend amount in Newly Issued Common Shares on behalf of the participants. The number of Newly Issued Common Shares to be credited to each participant's account will be determined by dividing the dollar amount of the Dividend by the net asset value per common share on the payment date; provided that, if the net asset value is less than or equal to 95% of the closing market value on the payment date, the dollar amount of the Dividend will be divided by 95% of the closing market price per common share on the payment date. If, on the payment date for any Dividend, the net asset value per common share is greater than the closing market value plus estimated brokerage commission, the Plan Administrator will invest the Dividend amount in common shares acquired on behalf of the participants in Open-Market Purchases.

If, before the Plan Administrator has completed its Open-Market Purchases, the market price per common share exceeds the net asset value per common share, the average per common share purchase price paid by the Plan Administrator may exceed the net asset value of the common shares, resulting in the acquisition of fewer common shares than if the Dividend had been paid in Newly Issued Common Shares on the Dividend payment date. Because of the foregoing difficulty with respect to Open-Market Purchases, the Plan provides that if the Plan Administrator is unable to invest the full Dividend amount in Open-Market Purchases during the purchase period or if the market discount shifts to a market premium during the purchase period, the Plan Administrator may cease making Open-Market Purchases and may invest the uninvested portion of the Dividend amount in Newly Issued Common Shares at net asset value per common share at the close of business on the Last Purchase Date provided that, if the net asset value is less than or equal to 95% of the then current market price per common share; the dollar amount of the Dividend will be divided by 95% of the market price on the payment date.

The Plan Administrator maintains all shareholders' accounts in the Plan and furnishes written confirmation of all transactions in the accounts, including information needed by shareholders for tax records. Common shares in the account of each Plan participant will be held by the Plan Administrator on behalf of the Plan participant, and each shareholder proxy will include those shares purchased or received pursuant to the Plan. The Plan Administrator will forward all proxy solicitation materials to participants and vote proxies for shares held under the Plan in accordance with the instruction of the participants.

There will be no brokerage charges with respect to common shares issued directly by the Fund. However, each participant will pay a pro rata share of brokerage commission incurred in connection with Open-Market Purchases. The automatic reinvestment of Dividends will not relieve participants of any Federal, state or local income tax that may be payable (or required to be withheld) on such Dividends.

The Fund reserves the right to amend or terminate the Plan. There is no direct service charge to participants with regard to purchases in the Plan; however, the Fund reserves the right to amend the Plan to include a service charge payable by the participants.

All correspondence or questions concerning the Plan should be directed to the Plan Administrator, Computershare Trust Company, N.A., 250 Royall St., Canton, MA 02021, Phone Number: 1-877-373-6374.

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Board of Trustees

Philip E. Blake

Frank Burgess

Katherine L. Frank

James Imhoff, Jr.

Lorence Wheeler

Officers Katherine L. Frank President

Frank Burgess Vice President

Jay Sekelsky Vice President

Paul Lefurgey Vice President

Ray DiBernardo Vice President

W. Richard Mason Chief Compliance Officer & Asst. Secretary

Greg Hoppe Treasurer

Holly S. Baggot Secretary & Assistant Treasurer

Pam Krill General Counsel, CLO & Asst. Secretary

Investment Adviser Madison Asset Management, LLC 550 Science Drive Madison, WI 53711 Administrator Madison Investment Advisors, LLC 550 Science Drive Madison, WI 53711

Custodian U.S. Bank, N.A. Milwaukee, Wisconsin

Transfer Agent Computershare Investor Services, LLC Canton, Massachusetts

Independent Registered Public Accounting Firm Grant Thornton LLP Chicago, Illinois

Privacy Principles of Madison Strategic Sector Premium Fund for Shareholders

The Fund is committed to maintaining the privacy of shareholders and to safeguarding its non-public information. The following information is provided to help you understand what personal information the Fund collects, how we protect that information and why, in certain cases, we may share information with select other parties.

Generally, the Fund does not receive any nonpublic personal information relating to its shareholders, although certain nonpublic personal information of its shareholders may become available to the Fund. The Fund does not disclose any nonpublic personal information about its shareholders or former shareholders to anyone, except as permitted by law or as is necessary in order to service shareholder accounts (for example, to a transfer agent or third party administrator).

The Fund restricts access to nonpublic personal information about the shareholders to Madison Asset Management, LLC and Madison Investment Advisors, LLC employees with a legitimate business need for the information. The Fund maintains physical, electronic and procedural safeguards designed to protect the nonpublic personal information of its shareholders.

Question concerning your shares of Madison Strategic Sector Premium Fund?

If your shares are held in a Brokerage Account, contact your Broker

If you have physical possession of your shares in certificate form, contact the Fund's Transfer Agent: Computershare Trust Company, N.A., 250 Royall Street, Mail Stop 1A Canton, MA 02021

This report is sent to shareholders of Madison Strategic Sector Premium Fund for their information. It is not a Prospectus, circular or representation intended for use in the purchase or sale of shares of the Fund or of any securities mentioned in this report.

In July 2010, the Fund submitted a CEO annual certification to the NYSE in which the Fund's principle executive officer certified that she was not aware, as of the date of the certification, of any violation by the Fund of the NYSE's Corporate Governance listing standards. In addition, as required by Section 302 of the Sarbanes-Oxley Act of 2002 and related SEC rules, the Fund's principle executive and principle financial officer have made quarterly certifications, including in filings with the SEC on forms N-CSR and N-Q, relating to, among other things, the Fund's disclosure

controls and procedures and internal control over financial reporting.

Madison Asset Management, LLC 550 SCIENCE DRIVE MADISON, WI 53711 1-800-767-0300 www.madisonfunds.com Item 2. Code of Ethics.

(a) The Madison Strategic Sector Premium Fund (hereinafter referred to either as the "Trust" or the "Fund") has adopted a code of ethics that applies to the Trust's principal executive officer, principal financial officer, principal accounting officer or controller or persons performing similar functions, regardless of whether these individuals are employed by the Trust or a third party. The code was first adopted during the fiscal year ended December 31, 2005.

(c) The code has not been amended since it was initially adopted.

(d) The Trust granted no waivers from the code during the period covered by this report.

(f) Any person may obtain a complete copy of the code without charge by calling the Trust at 800-767-0300 and requesting a copy of the "Madison Strategic Sector Premium Fund Sarbanes Oxley Code of Ethics."

Item 3. Audit Committee Financial Expert.

In July 2010, Philip E. Blake, an "independent" Trustee and a member of the Trust's audit committee, was elected to serve as the Trust's audit committee financial expert among the three Madison Mosaic independent Trustees who so qualify to serve in that capacity. He succeeded James Imhoff, Jr. who served in that capacity from August 2009 through July 2010.

Item 4. Principal Accountant Fees and Services.

(a) Total audit fees paid to the registrant's principal accountant for the fiscal year ended December 31, 2010 were approved not to exceed \$20,000 (plus typical expenses in connection with the audit such as postage, photocopying, etc.). For the fiscal year ended December 31, 2009, this amount was \$22,700. The registrant is affiliated with the Madison Mosaic family of open-end investment companies which paid the registrant's principal accountant an additional \$85,300 and \$85,300, respectively, for audit services provided to such funds for such periods.

(b) Audit-Related Fees. None.

(c) Tax-Fees. None incurred during the period covered by this report.

(d) All Other Fees. None.

(e) (1) Before any accountant is engaged by the registrant to render audit or non-audit services, the engagement must be approved by the audit committee as contemplated by paragraph (c)(7)(i)(A) of Rule 2-01of Regulation S-X.

(2) Not applicable.

(f) Not applicable.

(g) Not applicable.

(h) Not applicable.

Item 5. Audit Committee of Listed Registrants.

(a) The registrant has a separately-designated standing audit committee established in accordance with Section 3(a)(58)(A) of the Exchange Act (15 U.S.C. 78c(a)(58)(A)). The members of the committee include all the disinterested Trustees of the registrant, namely, Philip Blake, James Imhoff and Lorence Wheeler.

(b) Not applicable.

Item 6. Schedule of Investments

Included in report to shareholders (Item 1) above.

Item 7. Disclosure of Proxy Voting Policies and Procedures for Closed-End Management Investment Companies.

The following discloses our current policies and procedures that we use to determine how to vote proxies relating to portfolio securities. Because we manage portfolios for clients in addition to the registrant, the policies and procedures are not specific to the registrant except as indicated.

## Proxy Voting Policies

Our policies regarding voting the proxies of securities held in client accounts depend on the nature of our relationship to the client. When we are an ERISA fiduciary of an account, there are additional considerations and procedures than for all other (regular) accounts. In all cases, when we vote client proxies, we must do so in the client's best interests as described below by these policies.

## Regular Accounts

We do not assume the role of an active shareholder when managing client accounts. If we are dissatisfied with the performance of a particular company, we will generally reduce or terminate our position in the company rather than attempt to force management changes through shareholder activism.

#### Making the Initial Decision on How to Vote the Proxy

As stated above, our goal and intent is to vote all proxies in the client's best interests. For practical purposes, unless we make an affirmative decision to the contrary, when we vote a proxy as the Board of Directors of a company recommends, it means we agree with the Board that voting in such manner is in the interests of our clients as shareholders of the company for the reasons stated by the Board. However, if we believe that voting as the Board of Directors recommends would not be in a client's best interests, then we must vote against the Board's recommendation.

As a matter of standard operating procedure, all proxies received shall be voted (by telephone or Internet or through a proxy voting service), unless we are not authorized to vote proxies. When the client has reserved the right to vote proxies in his/her/its