Madison Strategic Sector Premium Fund Form N-CSRS September 01, 2017

OMB APPROVAL

OMB Number: 3235-0570 Expires: September 30, 2017

Estimated average burden hours per response...20.6

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

FORM N-CSRS

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)

Kevin S. Thompson Chief Legal Officer 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: June 30, 2017

Form N-CSRS 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-CSRS in its regulatory, disclosure review, inspection, and policymaking roles.

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

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

Item 1. Certified Financial Statement

Semi-annual Report June 30, 2017

MADISON STRATEGIC SECTOR
PREMIUM FUND (MSP)
Active Equity Management combined with a Covered Call Option Strategy

MSP Madison Strategic Sector Premium Fund June 30, 2017	
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MSP | Madison Strategic Sector Premium Fund | June 30, 2017 Review of Period

What happened in the market during the first half of 2017?

Facebook, Amazon, (some use Apple), Netflix and Google (actually another "A" for Alphabet but who wants to wreck a good acronym) ... these stocks make up what the financial media has crowned the FANG stocks. What the FANG stocks have in common is they're big (although Netflix is "biggish" at a \$64 B market cap), they're sharp competitors and they stick out ... at least their performance has stuck out this year. Through the end of May, these five companies (if we include Apple as the second "A") had contributed almost one-third of the S&P 500's year-to-date performance. Alphabet (Google) was the laggard in the performance race, rising a mere 25% while the others all soared more than 30%. Plainly, if you didn't own these stocks or not enough of them, you were going to underperform. But how long could such blistering stock performance continue? Well, as the second quarter came to a close, the FANGs retracted somewhat. Apple, Alphabet and Netflix have all dropped below their 50 day moving averages, while Amazon and Facebook have fallen only slightly less. Similar to their positive impact on the S&P 500's performance earlier in the year, in June, the FANGs contributed to the S&P's first negative monthly performance since October 2016. As the equity markets have continued their mostly upward climb in 2017, volatility has gone on early vacation. The VIX Index, a common measure of the S&P 500's short term volatility, has rarely in its history fallen below 10, indicating an extreme low level of volatility. Since 1990, the VIX has closed below 10 on only 16 days, however, 8 of those days have occurred in the past 4 months. In fact, prior to early May of this year, the previous time the VIX closed below 10 was in January 2007, more than a decade ago. These low volatility levels mask, to some extent, the actual volatility among sectors and individual stocks. When stocks exhibit a low level of correlation as they currently do, diversification among a large number of stocks can create the appearance of very little volatility. During the second quarter, we saw big industry winners and big losers. Technology stocks, led by the FANGs, were winners, while Energy and Telecom stocks were down significantly. Amazon's growing dominance in the retail space led to very significant underperformance among traditional

retailers. Through the end of February, bank stocks continued their post-election moon-shot only to give back most of their performance by mid-April. Then, as focus was shifted toward their excess capital positions that were built in the years following the recession and the potential for renewed dividend and stock buyback activity, bank stocks rallied back strongly by the end of the second quarter. That's volatility. However, the perceived low volatility environment as depicted in measures such as the VIX Index, concealed the reality that large performance swings have occurred in the market during the year and that a reversal of these trends can meaningfully impact an investor's performance if they are too complacent about market conditions.

How did the Fund perform given the marketplace conditions during the first six months of 2017? For the six months ending June 30, 2017, the Fund's market price rose 5.65%, lagging the CBOE S&P BuyWrite Index (BXM) return of 7.21%. The S&P 500 rose 9.34% during the period. The Fund's Net Asset Value (NAV) rose 2.39%. The Fund's discount to NAV narrowed during the period from 5.3% to 2.4% following the trend of most equity based closed-end funds. The Fund entered the year with a very conservative posture following the post-election surge, however, the surge continued without pause through early March. Much of this was driven by improving economic data from 2016 and investors' reluctance to buy bonds given the rising interest rate trend. The S&P 500 peaked in early March and weakened as the first quarter came to a close with some investors beginning to worry that price targets that were meant to be reached by year end, had already been achieved thereby leaving little opportunity for the rest of the year. As extended as the market appeared, during the second quarter, the S&P 500 continued higher, although the rise wasn't smooth and steady, but rather, had a few bumps along the way. The BXM, which represents a passive, index focused covered call approach, somewhat surprisingly kept up with the overall market's uptrend. The natural covered call hedging within the BXM can vary

MSP | Madison Strategic Sector Premium Fund | Review of Period (unaudited) - continued | June 30, 2017 significantly during periods of market volatility, moving from extremely hedged to virtually unhedged in a short period of time. The BXM benefitted from very good timing during the quarter as it was heavily hedged during periods of market decline and largely unhedged as the market rebounded. This short-term timing of market swings is rather happenstance and can lead to periods during which the BXM's short-term performance is not in step with expectations. For example, one would not normally expect a hedged benchmark such as the BXM to essentially match market performance in a strong, upward trending environment such as we've recently witnessed. The Fund, which does not attempt to replicate the short term swings in the BXM's hedging characteristics, is more consistently hedged and less likely to benefit from short-term market swings, nor get hurt by them.

SHARE PRICE AND NAV PERFORMANCE FOR

MADISON STRATEGIC SECTOR PREMIUM FUND

Call option coverage was relatively high throughout the period, beginning the year at 94.6% and ending at 81.4%. The post-election euphoria led to a spike in consumer and investor confidence but has not parlayed into real economic momentum. As many of the promised investor friendly reforms continue to be delayed or may be unattainable, we expect confidence to reverse somewhat. Given this expectation and the relatively high levels of stock prices and valuations, the Fund remains defensively postured. We continue to believe that the primary market risk is to the downside rather than the upside yet stock prices have defied gravity so far this year. The rising market resulted in very active stock assignment activity during the quarter which gave rise to higher cash levels as we reinvested opportunistically given what we believe to be extended market levels. This added

caution contributed somewhat to the short-term underperformance.

Individual sector performance has rotated significantly since last year's election. The Energy sector which was a big beneficiary of the post-election reflationary trade was among the worst performing sectors for the second quarter in a row. Profit taking amid concerns of inventory buildups in oil and natural gas has pressured short-term performance although we continue to be relatively constructive on the sector expecting inventory levels to recede in the second half of the year. The Information Technology sector continues to lead the pack on a year to date basis for reasons mentioned above, but was overtaken by a somewhat resurgent Health Care sector in the second quarter. Lack of movement on repealing and replacing the Affordable Care Act and a pause on the assault on drug prices allowed stocks in this sector to rebound. All of this movement resulted in a small headwind for the Fund with an overweight in Energy being the most negative contributor, partially offset by an underweight in Consumer Staples which was a laggard mainly due to the impact on packaged goods companies from Amazon's purchase of Whole Foods. Describe the Fund's portfolio equity and option structure.

As of June 30, 2017, the Fund held 41 equity securities and unexpired call options had been written against 81% of the Fund's stock holdings. It is the strategy of the Fund to write "out-of-the-money" call options, as of June 30, 77% of the Fund's call options (55 of 72 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). On average, the time to expiration of the Fund's call options was 48 days.

Which sectors are prevalent in the Fund?

From a sector perspective, the Fund's largest exposure as of June 30, 2017 was to the Energy sector which was higher than that within the S&P 500 followed by the Consumer Discretionary sector which was slightly lower than the 3

MSP | Madison Strategic Sector Premium Fund | Review of Period (unaudited) - continued | June 30, 2017 S&P 500 weight. This was followed by an underweighting in the Information Technology sector as a number of holdings were assigned during the second quarter, and an underweighting in the Financials sector. The Fund's next largest sector exposure was in the Health Care sector followed by the Consumer Staples sector. The Fund had smaller exposure to Materials, Telecommunication Services, Real Estate and Utilities sectors.

ALLOCATION AS A PERCENTAGE OF

TOTAL INVESTMENTS AS OF 6/30/17

Consumer Discretionary	11.2	2%
Consumer Staples	7.4	%
Energy	13.1	%
Financials	10.1	%
Health Care	9.3	%
Industrials	6.7	%
Information Technology	10.7	<i>1</i> %
Materials	5.7	%
Real Estate	2.7	%
Telecommunication Services	4.0	%
Utilities	2.4	%
Exchange Traded Funds	5.4	%
Short-Term Investments	5.8	%
U.S. Government and Agency Obligations	5.5	%

Discuss the Fund's security and option selection process.

The Fund is managed by primarily focusing on active stock selection before adding the call option overlay utilizing individual equity call options rather than index options. 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 of the equity and option strategies 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. As bottom-up investors, we focus on the fundamental businesses of our companies. Our stock selection philosophy strays away from the "beat the street" mentality, as we seek companies that we believe have

sustainable competitive advantages, predictable cash flows, solid balance sheets and high-quality management teams. By concentrating on long-term prospects and circumventing 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 the management's outlook for the market and Fund for the remainder of 2017?

The "animal spirits" that have been mentioned in the financial press have been driving stock prices generally higher this year. A big part of this phenomenon was the sharp rise in consumer and investor confidence following the 2016 election. However, measures of consumer confidence, such as the Conference Board or University of Michigan Consumer Sentiment Index, have trended lower in recent months. The NFIB Small Business Optimism Survey, which spiked following the election, has also trended lower. In the absence of true economic revival, which is not yet evident, markets have traded higher on sentiment rather than reality. Volatility, as mentioned above, is near historic lows, suggesting a very high level of investor complacency. In an investment context, complacency can be defined as implying a state of comfort that is out of sync with perceived levels of risk. There appears to be a lack of preparedness

or expectation of anything other than a continuation of the bull market. This can lead to very painful results if those expectations are not fully met. As such, we feel that the path of least resistance for the market may be lower rather than higher. The Fund has remained positioned to provide protection against any downward movement in the market. In our minds, this is exactly what a covered call strategy is supposed to accomplish. Rather than accept a higher level 4

MSP | Madison Strategic Sector Premium Fund | Review of Period (unaudited) - concluded | June 30, 2017 of risk in order to more fully participate when markets go up, we remain highly convicted to lowering risk and protecting capital. We have been early in our more defensive posture but would rather err on the side of protection rather than being overly aggressive.

TOP TEN EQUITY HOLDINGS AS

OF 6/30/17

% of Total Investments

FedEx Corp.	4.3%
T-Mobile U.S. Inc.	4.0%
Lowe's Cos. Inc.	3.3%
Marathon Petroleum Corp.	3.0%
Dow Chemical Co./The	2.9%
QUALCOMM Inc.	2.9%
EI du Pont de Nemours & Co.	2.8%
Gilead Sciences Inc.	2.7%
JPMorgan Chase & Co.	2.7%
Weyerhaeuser Co.	2.7%

INDEX DEFINITIONS

Indices are unmanaged and reflect no expenses. It is not possible to invest directly in an index.

The S&P 500® Index is an unmanaged, capitalization weighted index of 500 stocks. The index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

The Chicago Board Options Exchange (CBOE) Market Volatility Index, often referred to as the VIX (its ticker symbol), the fear index or the fear gauge, is a measure of the implied volatility of S&P 500® Index options. It represents a measure of the market's expectation of stock market volatility over the next 30-day period. Quoted in percentage points, the VIX represents the expected daily movement in the S&P 500® Index over the next 30-day period, which is then annualized.

The CBOE S&P 500 Buy/Write Index (BXM) is a benchmark index designed to show the hypothetical performance of a portfolio that purchases all the constituents of the S&P 500® Index and then sells at-the-money (meaning same as

purchase price) call options of one-month duration against those positions. Past performance is no guarantee of future results.

MSP | Madison Strategic Sector Premium Fund | June 30, 2017 Portfolio of Investments (unaudited)

Portiono of investments (unaudited)		
		Value
	Shares	(Note
		2)
COMMON STOCKS - 84.4%		
Consumer Discretionary - 11.3%		
Discovery Communications Inc., Class C *	53,800	\$ 1,356,298
Dollar General Corp. (A)		1,672,488
General Motors Co. (A)	44,700	1,561,371
Lowe's Cos. Inc. (A)	31,400	2,434,442
Whirlpool Corp. (A)	5,500	1,053,910
		8,078,509
Consumer Staples - 7.5%		
Costco Wholesale Corp. (A)	7,800	1,247,454
CVS Health Corp. (A)	21,200	1,705,752
Diageo PLC, ADR (A)	9,000	1,078,470
JM Smucker Co./The (A)	11,000	1,301,630
` '		5,333,306
Energy - 13.3%		
Apache Corp. (A)	37,500	1,797,375
Baker Hughes Inc. (A)	32,000	1,744,320
Marathon Petroleum Corp. (A)	41,300	2,161,229
National Oilwell Varco Inc. (A)		938,790
Occidental Petroleum Corp. (A)	21,700	1,299,179
Range Resources Corp. (A)		1,554,707
• • • • • • • • • • • • • • • • • • • •		9,495,600
Financials - 10.2%		
Bank of America Corp. (A)	77,400	1,877,724
Citigroup Inc. (A)	15,000	1,003,200
JPMorgan Chase & Co. (A)	21,100	1,928,540
State Street Corp. (A)		574,272
T. Rowe Price Group Inc. (A)		1,922,039
1 ,	ŕ	7,305,775
Health Care - 9.4%		
Biogen Inc. * (A)	5,500	1,492,480
Cerner Corp. * (A)		957,168
Express Scripts Holding Co. * (A)	26,900	1,717,296
Gilead Sciences Inc. (A)	-	1,946,450
McKesson Corp. (A)		625,252
1 ()	•	6,738,646
Industrials - 6.8%		•
Delta Air Lines Inc. (A)	28,100	1,510,094
FedEx Corp. (A)		3,151,285
United Technologies Corp. (A)		219,798
5 r· ()	,	4,881,177
		, , ,

Information Technology - 10.9%

Shares Value (Note 2)

Ciena Corp. * (A) Intel Corp. (A) Microsoft Corp. (A) QUALCOMM Inc. (A) Xilinx Inc. (A)	59,700 38,700 20,800 38,000 22,300	\$ 1,493,694 1,305,738 1,433,744 2,098,360 1,434,336 7,765,872
Materials - 5.8%		
Dow Chemical Co./The (A)	32,900	2,075,003
EI du Pont de Nemours & Co. (A)	25,100	2,025,821 4,100,824
Real Estate - 2.7%		1,100,021
Weyerhaeuser Co. (A)	57,800	1,936,300
Telecommunication Services - 4.0%	27,000	1,500,000
T-Mobile U.S. Inc. * (A)	47,600	2,885,512
Utilities - 2.5%	.,	, ,-
NRG Energy Inc. (A)	103,000	1,773,660
Total Common Stocks		60 205 101
(Cost \$64,801,593)		60,295,181
INVESTMENT COMPANIES - 5.5%		
PowerShares DB Gold Fund *	37,200	1,474,236
SPDR S&P Oil & Gas Exploration & Production ETF (A)	43,100	1,375,752
VanEck Vectors Gold Miners ETF (A)	48,700	1,075,296
Total Investment Companies		3,925,284
(Cost \$4,166,853)		3,723,204
SHORT-TERM INVESTMENTS - 5.8%		
State Street Institutional U.S. Government Money Market Fund, 0.88%, Premier Class Total Short-Term Investments	4,179,275	4,179,275
(Cost \$4,179,275)		4,179,275
(COSt \$4,177,273)	Par Value	
U.S. GOVERNMENT AND AGENCY OBLIGATIONS - 5.6%	1 01 / 0100	
U.S. Treasury Bill (B) (C), 1.011%, 10/5/17	\$4,000,000	03,989,400
Total U.S. Government and Agency Obligations (Cost \$3,989,392)	, , , , , , , , ,	3,989,400
TOTAL INVESTMENTS - 101.3% (Cost \$77,137,113**)		72,389,140
NET OTHER ASSETS AND LIABILITIES - 0.8%		607,506
TOTAL CALL & PUT OPTIONS WRITTEN - (2.1%)		(1,532,717)
TOTAL NET ASSETS - 100.0%		\$ 71,463,929

- * Non-income producing.
- ** Aggregate cost for Federal tax purposes was \$78,397,193.
- (A) All or a portion of these securities' positions represent covers (directly or through conversion rights) for outstanding options written.
- (B) All or a portion of these securities are segregated as collateral for put options written. As of June 30, 2017, the total amount segregated was \$3,989,400.
- (C) Rate noted represents annualized yield at time of purchase.

ADR American Depositary Receipt

ETF Exchange Traded Fund

PLC Public Limited Company

See accompanying Notes to Financial Statements.

MSP | Madison Strategic Sector Premium Fund | Portfolio of Investments (unaudited) - continued | June 30, 2017

· ·	Contracts			
Call Options Written	(100 Shares	Expiration Date	Strike Price	Value (Note 2)
•	Per Contract)	•		,
Apache Corp.	150	July 2017	\$ 52.50	\$ (1,950)
Baker Hughes Inc.	160	July 2017	60.00	(2,400)
Baker Hughes Inc.	78	July 2017	62.50	(507)
Bank of America Corp.	310	July 2017	25.00	(8,525)
Bank of America Corp.	320	August 2017	24.00	(32,160)
Bank of America Corp.	144	September 2017	25.00	(10,224)
Biogen Inc.	55	July 2017	275.00	(22,550)
Cerner Corp.	144	September 2017	70.00	(23,400)
Ciena Corp.	180	July 2017	25.00	(12,870)
Ciena Corp.	230	July 2017	26.00	(7,705)
Ciena Corp.	187	October 2017	27.00	(22,066)
Citigroup Inc.	150	July 2017	62.50	(70,500)
Costco Wholesale Corp.	40	August 2017	165.00	(8,580)
CVS Health Corp.	212	August 2017	80.00	(53,212)
Delta Air Lines Inc.	281	September 2017	55.00	(51,845)
Diageo PLC	14	July 2017	120.00	(2,135)
Diageo PLC	76	October 2017	125.00	(11,590)
Dollar General Corp.	232	August 2017	75.00	(30,740)
Dow Chemical Co./The	100	August 2017	65.00	(10,350)
Dow Chemical Co./The	127	September 2017	65.00	(19,050)
EI du Pont de Nemours & Co.	65	July 2017	80.00	(11,375)
EI du Pont de Nemours & Co.	186	July 2017	82.50	(10,695)
Express Scripts Holding Co.	134	August 2017	62.50	(43,885)
Express Scripts Holding Co.	135	August 2017	65.00	(25,988)
FedEx Corp.	90	July 2017	195.00	(205,650)
FedEx Corp.	55	July 2017	200.00	(99,963)
General Motors Co.	149	September 2017	35.00	(19,370)
General Motors Co.	150	September 2017	36.00	(12,900)
Gilead Sciences Inc.	135	August 2017	67.50	(61,763)
Gilead Sciences Inc.	140	August 2017	70.00	(42,700)
Intel Corp.	130	July 2017	37.00	(195)
Intel Corp.	130	August 2017	35.00	(6,760)
Intel Corp.	127	September 2017	35.00	(8,509)
JM Smucker Co./The	55	August 2017	125.00	(3,025)
JPMorgan Chase & Co.	106	July 2017	90.00	(22,737)
JPMorgan Chase & Co.	105	September 2017	90.00	(37,275)
Lowe's Cos. Inc.	130	July 2017	82.50	(1,625)
Lowe's Cos. Inc.	110	August 2017	80.00	(12,155)
Marathon Petroleum Corp.	146	July 2017	52.50	(16,790)
Marathon Petroleum Corp.	267	October 2017	55.00	(51,398)
McKesson Corp.	38	August 2017	160.00	(31,730)
Microsoft Corp.	43	July 2017	70.00	(4,773)
Microsoft Corp.	165	August 2017	72.50	(12,540)

National Oilwell Varco Inc. 100 August 2017 34.00(11,650) National Oilwell Varco Inc. 145 August 2017 37.00(5,075) NRG Energy Inc. 250July 2017 17.00(18,125)

See accompanying Notes to Financial Statements.

MSP | Madison Strategic Sector Premium Fund | Portfolio of Investments (unaudited) - concluded | June 30, 2017

	Contracts			
Call Options Written	(100 Shares	Expiration Date	Strike Price	Value (Note 2)
	Per Contract)			
NRG Energy Inc.	280	August 2017	\$ 18.00	\$ (17,500)
NRG Energy Inc.	500	September 2017	18.00	(43,750)
QUALCOMM Inc.	190	July 2017	57.50	(13,965)
QUALCOMM Inc.	190	August 2017	62.50	(5,035)
Range Resources Corp.	18	July 2017	25.00	(855)
Range Resources Corp.	205	September 2017	27.00	(17,937)
SPDR S&P Oil & Gas Exploration & Production ETF	180	July 2017	37.00	(270)
SPDR S&P Oil & Gas Exploration & Production ETF	96	September 2017	37.00	(2,784)
State Street Corp.	64	August 2017	85.00	(39,040)
T-Mobile U.S. Inc.	117	July 2017	70.00	(702)
T-Mobile U.S. Inc.	130	August 2017	67.50	(4,680)
T-Mobile U.S. Inc.	125	August 2017	70.00	(1,812)
T. Rowe Price Group Inc.	90	July 2017	70.00	(41,850)
T. Rowe Price Group Inc.	169	October 2017	75.00	(45,208)
United Technologies Corp.	18	August 2017	125.00	(2,169)
VanEck Vectors Gold Miners ETF	250	July 2017	24.00	(2,000)
Weyerhaeuser Co.	150	July 2017	34.00	(4,875)
Weyerhaeuser Co.	165	July 2017	35.00	(825)
Weyerhaeuser Co.	127	October 2017	34.00	(13,652)
Whirlpool Corp.	55	September 2017	210.00	(11,632)
Xilinx Inc.	73	August 2017	67.50	(11,169)
Xilinx Inc.	73	September 2017	65.00	(21,024)
Xilinx Inc.	77	September 2017	67.50	(15,746)
Total Call Options Written (Premiums received \$1,337	7,819)			\$(1,499,490)
Put Options Written				
Apache Corp.	125	July 2017	47.50	(14,750)
Occidental Petroleum Corp.	95	August 2017	60.00	(18,477)
Total Put Options Written (Premiums received \$74,124		riagust 2017	00.00	\$ (33,227)
Total Options Written at Value (Premiums received \$14,124				\$(1,532,717)
Total Options withen, at value (Flemhulls leceived \$1	,+11,743)			$\phi(1,332,111)$

See accompanying Notes to Financial Statements.

MSP | Madison Strategic Sector Premium Fund | June 30, 2017 Statement of Assets and Liabilities as of June 30, 2017 (unaudited)

Assets:	
Investments in securities, at cost	
Unaffiliated issuers	\$ 77,137,113
Net unrealized depreciation	
Unaffiliated issuers	(4,747,973)
Total investments, at value	72,389,140
Receivables:	
Investments sold	623,209
Dividends and interest	42,372
Total assets	73,054,721
Liabilities:	
Payables	
Advisory agreement fees	47,408
Service agreement fees	10,667
Options written, at value (premiums received \$1,411,943) (Note 6)	1,532,717
Total liabilities	1,590,792
Net assets	\$ 71,463,929
Net assets consist of:	
Common Stocks/Shares:	
Par value (\$0.001 per common stock and \$0.000001 per share, respectively)	\$ 5,798
Paid-in capital in excess of par	77,224,274
Accumulated undistributed net investment loss	(2,887,357)
Accumulated net realized gain on investments sold, options and foreign currency related transactions	1,989,961
Net unrealized depreciation of investments (including appreciation (depreciation) of options and foreign	(4,868,747)
currency related transactions)	(4,000,747)
Net Assets	\$ 71,463,929
Capital Shares Issued and Outstanding (Note 7)	5,798,291
Net Asset Value per share	\$12.32
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See accompanying Notes to Financial Statements.

MSP | Madison Strategic Sector Premium Fund | June 30, 2017 Statement of Operations For the Period Ended June 30, 2017 (unaudited)

Investment Income:		
Interest	\$	29,199
Dividends		
Unaffiliated issuers	453,50	2
Total investment income	482,70	1
Expenses (Note 3):		
Advisory agreement fees	289,75	3
Service agreement fees	65,194	
Total expenses	354,94	7
Net Investment Income	127,75	4
Net Realized and Unrealized Gain (Loss) on Investments		
Net realized gain on investments (including net realized gain (loss) on foreign currency related		
transactions)		
Options	2,838,4	123
Unaffiliated issuers	1,354,8	347
Net change in unrealized appreciation (depreciation) on investments (including net unrealized appreciation	n	
(depreciation) on foreign currency related transactions)		
Options	480,28	8
Unaffiliated issuers	(3,105,	(645)
Net Realized and Unrealized Gain on Investments and Option Transactions	1,567,9	913
Net Increase in Net Assets from Operations	\$ 1,6	595,667

Statements of Changes in Net Assets

	(unaudited) Six-Months Ended 6/30/17	Year Ended 12/31/16
Net Assets at beginning of period	\$ 72,783,37.	3\$ 72,796,342
Increase (decrease) in net assets from operations:		
Net investment income	127,754	328,098
Net realized gain	4,193,270	1,421,488
Net change in unrealized appreciation (depreciation)	(2,625,357)	4,267,668
Net increase (decrease) in net assets from operations	1,695,667	6,017,254
Distributions to shareholders from:		
Net investment income and capital gains	(3,015,111)	(4,213,638)
Return of capital	_	(1,816,585)
Total distributions	(3,015,111)	(6,030,223)
Total decrease in net assets	(1,319,444)	(12,969)
Net Assets at end of period	\$ 71,463,929	9\$ 72,783,373
Undistributed net investment loss included in net assets	\$ (2,887,	3\$ 7) –

See accompanying Notes to Financial Statements.

MSP | Madison Strategic Sector Premium Fund | June 30, 2017 Financial Highlights for a Share of Beneficial Interest Outstanding

	(unaudited)	Year Ended December 31,				
	Six-Months					
	Ended	2016	2015	2014	2013	2012
	6/30/17					
Net Asset Value at beginning of period	\$12.55	\$12.55	\$13.70	\$13.88	\$12.83	\$12.63
Income from Investment Operations:						
Net investment income (loss) ¹	0.02	0.06	0.07	(0.01)	0.01	0.03
Net realized and unrealized gain (loss) on investments	0.27	0.98	(0.18)	0.87	2.08	1.21
Total from investment operations	0.29	1.04	(0.11)	0.86	2.09	1.24
Less Distributions From:						
Net investment income and capital gains	(0.52)	(0.73)	(0.93)	(1.04)	(1.04)	(0.03)
Return of capital	_	(0.31)	(0.11)	_	_	(1.01)
Total distributions	(0.52)	(1.04)	(1.04)	(1.04)	(1.04)	(1.04)
Net increase (decrease) in net asset value	(0.23)	_	(1.15)	(0.18)	1.05	0.20
Net Asset Value at end of period	\$12.32	\$12.55	\$12.55	\$13.70	\$13.88	\$12.83
Market Value at end of period	\$12.04	\$11.89	\$10.77	\$11.87	\$11.96	\$11.09
Total Return						
Net asset value (%)	2.39	² 8.55	(0.86)	6.30	16.81	9.92
Market value $(\%)^3$	5.65	2 20.64	(0.60)	7.91	17.71	13.97
Ratios/Supplemental Data:						
Net Assets at end of period (in 000's)	\$71,464	\$72,783	3\$72,796	5\$79,439	9\$80,474	1\$74,417
Ratios of expenses to average net assets (%)	0.98	4 0.98	0.98	0.98	0.98	0.98
Ratio of net investment income to average net assets (%)	0.35	4 0.45	0.51	(0.07)	0.09	0.22
Portfolio turnover (%)	94	² 138	120	139	153	53

¹Based on average shares outstanding during the year.

See accompanying Notes to Financial Statements.

²Not annualized.

³Total investment return is calculated assuming a purchase of a share of common stock at the market price on the first day and a sale of a share of common stock at the market price on the last day of each period reported. Dividends and distributions, if any, are assumed, for purposes of this calculation, to be reinvested at prices obtained under the Fund's dividend reinvestment plan. Total investment return does not reflect brokerage commissions or sales charges in connection with the purchase or sale of Fund stock.

⁴Annualized.

MSP | Madison Strategic Sector Premium Fund | June 30, 2017

Notes to Financial Statements (unaudited)

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 ("1940 Act"), 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 primarily in large and mid-capitalization common stocks that are, in the view of Madison Asset Management, LLC, the Fund's investment adviser (the "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.

2. SIGNIFICANT ACCOUNTING POLICIES

The Fund is an investment company that applies the accounting and reporting guidance in the Financial Accounting Standards Board (FASB) Accounting Standards Codification Topic 946, Financial Services - Investment Companies (ASC 946). The following is a summary of significant accounting policies consistently followed by the Fund in the preparation of its financial statements.

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.

Portfolio Valuation. Securities traded on a national securities exchange are valued at their closing sale price, except for securities traded on

the National Association of Securities Dealers Automated Quotation System ("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. Debt securities having maturities of 60 days or less are valued at amortized cost, which approximates market value. Debt securities having longer maturities are valued on the basis of the last available bid prices or current market quotations provided by dealers or pricing services approved by the Fund. Mutual funds are valued at their Net Asset Value ("NAV"). 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.

At times, the Fund maintains cash balances at financial institutions in excess of federally insured limits. The Fund monitors this credit risk and has not experienced any losses related to this risk.

The Fund has adopted Financial Accounting Standards Board ("FASB") applicable guidance on fair value measurements. Fair value is defined as the price that a 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 under the circumstances.

MSP | Madison Strategic Sector Premium Fund | Notes to Financial Statements (unaudited) - continued | June 30, 2017

The three-tier hierarchy of inputs is 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 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; 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 June 30, 2017, maximized the use of observable inputs and minimized the use of unobservable inputs.

There were no transfers between classifications levels during the period ended June 30, 2017. As of and during the period ended June 30, 2017, the Fund did not hold securities deemed as Level 3 securities.

The following is a summary of the inputs used as of June 30, 2017, in valuing the Fund's investments carried at fair value:

Description	Quoted Prices in Active Markets for Identical Investments (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservab Inputs (Level 3)	le Value at 6/30/17
Assets:1				
Common Stocks	\$ 60,295,181	\$ -	\$	-\$ 60,295,181
Investment Companies	3,925,284	_	_	3,925,284
Short-Term Investments	4,179,275	_	_	4,179,275
U.S. Government and Agency Obligations	_	3,989,400	_	3,989,400
	\$ 68,399,740	\$ 3,989,400	\$	-\$ 72,389,140
Liabilities:				
Written Options	\$ (1,532,717)	\$ -	\$	-\$ (1,532,717)
1mi a macar cr				

¹Please see the Portfolio of Investments for a listing of all securities within each category.

Derivatives. The FASB issued guidance intended to enhance financial statement disclosure for derivative instruments and hedging activities and 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 items affect a Fund's financial position, results of operations and cash flows.

The following table presents the types of derivatives in the Fund by location as presented on the Statement of Assets and Liabilities for the period ended June 30, 2017:

Statement of Asset & Liability Presentation of Fair Values of Derivative Instruments

Liability Derivatives

Derivatives not accounted for as hedging instruments Statement of Assets and Liabilities Location Fair Value Equity contracts Options written \$(1,532,717)

The following table presents the types of derivatives in the Fund by location as presented on the Statement of Operations for the period ended June 30, 2017:

Derivatives not accounted for as hedging	Realized Gain on	Change in Unrealized Appreciation on
instruments	Derivatives	Derivatives
Equity contracts	\$2,838,423	\$480,288

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.

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MSP | Madison Strategic Sector Premium Fund | Notes to Financial Statements (unaudited) - continued | June 30, 2017

Distributions to Shareholders. The Fund declares and pays quarterly distributions to shareholders. Distributions to shareholders are recorded on the ex-dividend date. The amount and timing of distributions are determined in accordance with federal income tax regulations, which may differ from Generally Accepted Accounting Principles (GAAP). These distributions consist of investment company taxable income, which generally includes qualified dividend income, ordinary income and short-term capital gains, including premiums received on written options. Distributions may also include a return of capital. Any net realized long-term capital gains are distributed annually to shareholders.

Recently Issued Accounting Pronouncements. In October 2016, the U.S. Securities and Exchange Commission adopted new rules and amended existing rules (together, "final rules") intended to modernize the reporting and disclosure of information by registered investment companies. In part, the final rules amend Regulation S-X and require standardized, enhanced disclosure about derivatives in investment company financial statements, as well as other amendments. The compliance date for the amendments to Regulation S-X is reporting periods occurring after August 1, 2017. Management has evaluated the impact of the amendments and expects the adoption of final rules will be limited to additional financial statement disclosures.

Board of Trustees Changes. At the Board of Trustees meeting held on May 11, 2017, Philip Blake retired as Trustee and the Board appointed Richard Struthers to fill the vacancy. Mr. Struthers will serve as a Class I Trustee. Effective August 16, 2017, Katherine Frank resigned her position as Trustee. On August 16, 2017 at a special meeting of the Board of Trustees, Carrie Thome was appointed as a Class II Trustee to fill the vacancy created by Ms. Frank's resignation.

3. INVESTMENT ADVISORY AND SERVICES AGREEMENTS

Pursuant to an Investment Advisory Agreement with the Fund, the Adviser, under the supervision of the Fund's Board of Trustees, provides a continuous investment program for the Fund's portfolio; provides investment research and makes and executes recommendations for the purchase and sale of securities; and provides certain facilities and personnel, including officers required for the Fund's administrative management and compensation of all officers

and trustees of the Fund and its affiliates. For these services, the Fund pays the Adviser a fee, payable monthly, in an amount equal to an annualized rate of 0.80% of the Fund's average daily net assets on the first \$500 million of assets, and 0.60% of the Fund's average daily net assets on assets in excess of \$500 million.

Under a separate Services Agreement, the Adviser also provides or arranges to have a third party provide the Fund with such services as it may require in the ordinary course of its business. Services to the Fund include: compliance services, transfer agent services, custodial services, fund administration services, fund accounting services, and such other services necessary to conduct the Fund's business. In addition, the Adviser shall arrange and pay for independent public accounting services for audit and tax purposes, legal services, the services of independent trustees of the Fund, a fidelity bond, and directors and officers/errors and omissions insurance. In exchange for these services, the Fund pays the Adviser a service fee, payable monthly, equal to 0.18% of the Fund's average daily net assets. Not included in this service fee and, therefore, the responsibility of the Fund, are "excluded expenses." Excluded expenses consist of (i) any fees and expenses relating to portfolio holdings (e.g., brokerage commissions, interest on loans, etc.); (ii) extraordinary and non-recurring fees and expenses (e.g., costs relating to any borrowing costs or taxes the Fund may owe, etc.); and (iii) the costs associated with investment by the Fund in other investment companies (i.e., acquired fund fees and expenses). The Board approved for the Fund to pay for any extraordinary expenses related to this year's annual meeting. Two outside candidates were included for nomination on the annual meeting's proxy ballot as Class I Trustees, along with two other shareholder proposals. The Board deems the potential election of the outside candidates and shareholder proposals to not be in the best interest of shareholders.

Certain officers and trustees of the Fund may also be officers, directors and/or employees of the Adviser or its affiliates. The Fund does not compensate its officers or trustees who are officers, directors and/or employees of the Adviser or its affiliates. The fees for the independent trustees are paid out of the Services Agreement fee and totaled \$9,000 for the period ended June 30, 2017.

MSP | Madison Strategic Sector Premium Fund | Notes to Financial Statements (unaudited) - continued | June 30, 2017

4. FEDERAL INCOME TAX INFORMATION

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 of 1986 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.

Information on the tax components of investments, excluding option contracts, as of June 30, 2017, is as follows:

Cost \$ 78,397,193

Gross appreciation 952,712

Gross depreciation (6,960,765)

Net depreciation \$ (6,008,053)

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.

5. INVESTMENT TRANSACTIONS

During the period ended June 30, 2017, the cost of purchases and proceeds from sales of investments, excluding short-term investments, were \$59,257,837 and \$59,191,749, respectively. No long-term U.S. Government securities were purchased or sold during the period.

6. COVERED CALL AND PUT OPTIONS

An option on a security is a contract that gives the holder of the option, in return for a premium, the right to buy from (in the case of a call) or sell to (in the case of a put) the writer of the option the security underlying the option at a specified exercise or "strike" price. The writer of an option on a security has an obligation upon exercise of the option to deliver the underlying security upon payment of the exercise price (in the case of a call) or pay the exercise price upon delivery of the underlying security (in the case of a put).

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, a liability is recorded equal to the premium received. This liability for

options written is marked-to-market on a daily basis 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 that 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 transactions, 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 written option contracts during the period ended June 30, 2017 were as follows:

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)
9)
9)
-3
9)

Purchased option activity was not significant for the period ended June 30, 2017. Details of option contracts purchased and held at June 30, 2017, are included in the Fund's Portfolio of Investments.

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 June 30, 2017. Additionally, no capital stock activity occurred for the period ended June 30, 2017 and for the period ended December 31, 2016 and 2015, respectively.

In connection with the Fund's dividend reinvestment plan, there were no shares reinvested for the period ended June 30, 2017 and for the years ended December 31, 2016 and 2015, respectively.

8. INDEMNIFICATIONS

In the normal course of business, the Fund enters into contracts that provide general indemnifications. The Fund's 15

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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 Fund considers the risk of material loss from such claims as remote.

9. DISCUSSION OF RISKS

Equity Risk. The value of the securities held by the Fund may decline due to general market and economic conditions, perceptions regarding the industries in which the issuers of securities held by the Fund participate, or factors relating to specific companies in which the Fund invests.

Derivatives Risk. The risk that loss may result from investments in options, forwards, futures, swaps and other derivatives instruments. These instruments may be illiquid, difficult to price and leveraged so that small changes in the value of the underlying instruments may produce disproportionate losses to the fund. Derivatives are also subject to counterparty risk, which is the risk that the other party to the transaction will not fulfill its contractual obligations. In December 2015, the SEC proposed new regulations relating to a mutual fund's use of derivatives and related instruments. If these or other regulations are adopted, they could significantly limit or impact a fund's ability to invest in derivatives or other instruments and adversely affect such fund's performance and ability to pursue its investment objective.

Option Risk. There are several risks associated with transactions in options on securities. For example, there are significant differences between the securities and options markets that could result in an imperfect correlation between these markets, causing a given transaction not to achieve its objectives. A decision as to whether, when and how to use options involves the exercise of skill and judgment, and even a well-conceived transaction may be unsuccessful to some degree because of market behaviour or unexpected events.

As the writer of a covered call option, the Fund forgoes, during the option's life, the opportunity to profit from increases in the market value of the security covering the call option above the sum of the premium and the strike price of the call, but retains the risk of loss should the price of the underlying security decline. The writer of an option has no control over the time when it may be required to fulfill its obligation as a writer of the option. Once an option writer has received an exercise notice, it cannot effect a closing

purchase transaction in order to terminate its obligation under the option and must deliver the underlying security at the exercise price.

When the Fund writes covered put options, it bears the risk of loss if the value of the underlying stock declines below the exercise price. If the option is exercised, the Fund could incur a loss if it is required to purchase the stock underlying the put option at a price greater than the market price of the stock at the time of exercise. While the Fund's potential gain in writing a covered put option is limited to the interest earned on the liquid assets securing the put option plus the premium received from the purchaser of the put option, the Fund risks a loss equal to the entire value of the stock.

Foreign Investment Risk. Investing in non-U.S. issuers may involve unique risks such as currency, political, and economic risks, as well as lower market liquidity, generally greater market volatility and less complete financial information than for U.S. issuers.

Mid-Cap Company Risk. Mid-Cap companies often are newer or less established companies than larger companies. Investments in mid-cap companies carry additional risks because earnings of these companies tend to be less predictable; they often have limited product lines, markets, distribution channels or financial resources; and the management of such companies may be dependent upon one or a few key people. The market movements of equity securities of mid-cap companies may be more abrupt or erratic than the market movements of equity securities of larger, more established companies or the stock market in general.

Fund Distribution Risk. In order to make regular quarterly distributions on its common shares, the Fund may have to sell a portion of its investment portfolio at a time when independent investment judgment may not dictate such action. In addition, the Fund's ability to make distributions more frequently than annually from any net realized capital gains by the Fund is subject to the Fund obtaining exemptive relief from the Securities and Exchange Commission, which cannot be assured. To the extent the total quarterly distributions for a year exceed the Fund's net investment company

income and net realized capital gain for that year, the excess will generally constitute a 16

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return of the Fund's capital to its common shareholders. Such return of capital distributions generally are tax-free up to the amount of a common shareholder's tax basis in the common shares (generally, the amount paid for the common shares). In addition, such excess distributions will decrease the Fund's total assets and may increase the Fund's expense ratio

Financial Leverage Risk. The Fund is authorized to utilize leverage through the issuance of preferred shares and/ or the Fund may borrow or issue debt securities for financial leveraging purposes and for temporary purposes such as settlement of transactions. Although the use of any financial leverage by the Fund may create an opportunity for increased net income, gains and capital appreciation for common shares, it also results in additional risks and can magnify the effect of any losses. If the income and gains earned on securities purchased with financial leverage proceeds are greater than the cost of financial leverage, the Fund's return will be greater than if financial leverage had not been used. Conversely, if the income or gain from the securities purchased with such proceeds does not cover the cost of financial leverage, the return to the Fund will be less than if financial leverage had not been used. Financial leverage also increases the likelihood of greater volatility of the NAV and market price of, and dividends on, the common shares than a comparable portfolio without leverage.

Market Developments Risk. Global and domestic financial markets periodically experience episodes of turmoil. Recently, markets have witnessed mostly growing economic activity with muted inflation in developed countries as expectations for continued economic growth have persisted. However, risks to continued economic growth remain. Long-term effects of the UK withdrawal from the European Union, along with ongoing challenges among weaker EU countries, are among risks to growth and currency market stability. The U.S. Federal Reserve continues to pursue a policy of monetary normalization after many years of highly accommodative monetary conditions in the wake of the financial crisis. Any unforeseen departure from expected economic growth or inflation could result in a meaningful change in Fed policy, possibly destabilizing financial markets. Domestic political and global geopolitical risks remain a flashpoint that could ignite market turmoil. Financial markets have come to expect significant legislative

developments in the U.S. in the areas of health care, taxes, and infrastructure spending. Legislative outcomes which depart from expectations could result in increased market volatility. Ongoing fears of terror-related attacks in developed markets, and concerns over geopolitical conflict, especially in Southeast Asia, could contribute to increased market volatility and may have long-term effects on the United States and worldwide financial markets and cause further economic uncertainties or deterioration in the United States and worldwide. The Fund's Investment Adviser does not know how long the financial markets will continue to be affected by these events and cannot predict the effects of these or similar events in the future on the United States and global economies and securities markets. Cybersecurity Risk, The Fund is also subject to cybersecurity risk, which includes the risks associated with computer systems, networks and devices to carry out routine business operations. These systems, networks and devices employ a variety of protections that are designed to prevent cyberattacks. Despite the various cyber protections utilized by the Fund, the Investment Adviser, and other service providers, their systems, networks, or devices could potentially be breached. The Fund, its shareholders, and the Investment Adviser could be negatively impacted as a result of a cybersecurity breach. The Fund cannot control the cybersecurity plans and systems put in place by service providers or any other third parties whose operations may affect the Fund. The Fund does monitor this risk closely. Additional Risks, While investments in securities have been keystones in wealth building and management, at times these investments have produced surprises. Those who enjoyed growth and income of their investments generally were rewarded for the risks they took by investing in the markets. Although the Investment Adviser seeks to appropriately address and manage the risks identified and disclosed to you in connection with the management of the securities in the Fund, you should understand that the very nature of the securities markets includes the possibility that there may be additional risks of which we are not aware. We certainly seek to identify all applicable risks and then appropriately address them, take appropriate action to reasonably manage them and to make you aware of them so you can determine if they

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exceed your risk tolerance. Nevertheless, the often volatile nature of the securities markets and the global economy in which we work suggests that the risk of the unknown is something to consider in connection with an investment in securities. Unforeseen events could under certain circumstances produce a material loss of the value of some or all of the securities we manage for you in the Fund.

10. SUBSEQUENT EVENTS

Management has evaluated all subsequent events through the date the financial statements were available for issue. Effective August 16, 2017, Katherine Frank resigned her position as Trustee. On August 16, 2017 at a special meeting of the Board of Trustees, Carrie Thome was appointed as a Class II Trustee to fill the vacancy created by

Other Information (unaudited)

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 this 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.

Ms. Frank's resignation. A Special Meeting of shareholders, originally scheduled for August 18, 2017, to vote on the reorganization of the Fund into the Madison Covered Call & Equity Strategy Fund ("MCN") has been postponed until September 15, 2017. If approved by shareholders, the reorganization is expected to be completed in the second half of 2017. The Annual Meeting of shareholders for the Fund is planned for August 22, 2017. Included on this year's proxy ballot are two trustees nominated by a shareholder of the Fund. Additionally, the shareholder has included two proposals. Further information regarding either of the proxies related to each meeting noted above is available on the SEC's website at www.sec.gov. Other than the events noted above, no events have taken place that meet the definition of a subsequent event that requires adjustment to, or disclosure in, the financial statements.

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 1-202-551-1520. 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.

MSP | Madison Strategic Sector Premium Fund | June 30, 2017 Dividend Reinvestment Plan (unaudited)

Unless the registered owner of common shares elects to receive cash by contacting Computershare Trust Company, Inc. (the "Plan Administrator"), all distributions 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 distribution 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 distributions 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 "Distribution") 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 Distribution, 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 Distribution 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 Distribution 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 Distribution will be divided by 95% of the closing market price per common share on the payment date. If, on the payment date for any Distribution, the net asset value per common share is greater than the closing market value plus estimated brokerage commission, the Plan Administrator will invest the Distribution 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 Distribution had been paid in Newly Issued Common Shares on the Distribution 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 Distribution 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 Distribution 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 Distribution 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

MSP | Madison Strategic Sector Premium Fund | Dividend Reinvestment Plan (unaudited) - concluded | June 30, 2017 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 Distributions will not relieve participants of any Federal, state or local income tax that may be payable (or required to be withheld) on such Distributions.

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: 1-781-575-4523.

Investment Adviser and Administrator Madison Asset Management, LLC

550 Science Drive Madison, WI 53711

Custodian

State Street Bank Kansas City, Missouri

Transfer Agent

Computershare Investor Services, LLC

Canton, Massachusetts
Independent Registered
Public Accounting Firm
Deloitte & Touche LLP

Milwaukee, Wisconsin

Board of Trustees Paul Lefurgey Frank Burgess Vice President Carrie J. Thome Lisa R. Lange

Richard E. Struthers Chief Compliance Officer James R. Imhoff, Jr. & Assistant Secretary Steven P. Riege Kevin Thompson Officers Chief Legal Officer Katherine L. Frank Greg D. Hoppe

President Treasurer
Jay R. Sekelsky Holly S. Baggot

Vice President Secretary & Assistant Treasurer

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.

A description of the Fund's proxy voting policies and procedures related to portfolio securities is available without charge, upon request, by calling the Fund at (800) 368-3195 and is available on the SEC's website at www.sec.gov. Information regarding how the Fund voted proxies for portfolio securities, if applicable, during the most recent 12-month period ended June 30, is also available, without charge and upon request by calling the Fund at (800) 368-3195 or by accessing the Fund's Form N-PX on the SEC's website at www.sec.gov.

In August 2016, the Fund submitted a CEO annual certification to the NYSE in which the Fund's principal 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 principal executive and principal financial officers 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.

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Item 2. Code of Ethics. Not applicable in semi-annual report. Item 3. Audit Committee Financial Expert. Not applicable in semi-annual report. Item 4. Principal Accountant Fees and Services. Not applicable in semi-annual report. Item 5. Audit Committee of Listed Registrants. Not applicable in semi-annual report. 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. Not applicable in semi-annual report. Item 8. Portfolio Managers of Closed-End Management Investment Companies. Not applicable in semi-annual report. Item 9. Purchases of Equity Securities by Closed-End Management Investment Company and Affiliated Purchasers (a) None* (b) None* *Note to Item 9: As announced and disclosed in the registrant's prospectus, the registrant maintains a Dividend Reinvestment Plan. The plan has no expiration date and no limits on the dollar amount of securities that may be purchased by the registrant to satisfy the plan's dividend reinvestment requirements. Item 10. Submission of Matters to a Vote of Security Holders.

Item 11. Controls and Procedures.

Not applicable.

(a) The Trust's principal executive officer and principal financial officer determined that the registrant's disclosure controls and procedures are effective, based on their evaluation of these controls and procedures within 90 days of the date of this report. There were no significant changes in the registrant's internal controls or in other factors that could significantly affect these controls subsequent to the date of their evaluation. The officers identified no significant deficiencies or material weaknesses.

(b) There have been no changes in the registrant's internal control over financial reporting that occurred during the second fiscal quarter of the period covered by this report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

Item 12. Exhibits.

- (a)(1) Not applicable in semi-annual report.
- (a)(2) Certifications of principal executive and principal financial officers as required by Rule 30a-2(a) under the Act.
- (b) Certification of principal executive and principal financial officers as required by Rule 30a-2(b) under the Act.

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.

Madison Strategic Sector Premium Fund

/s/ Kevin S. Thompson Kevin S. Thompson, Chief Legal Officer

Date: September 1, 2017

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

/s/ Katherine L. Frank Katherine L. Frank, Principal Executive Officer

Date: September 1, 2017

/s/ Greg Hoppe Greg Hoppe, Principal Financial Officer

Date: September 1, 2017