Madison Strategic Sector Premium Fund
Form N-CSR
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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, 2011

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.

ANNUAL REPORT

December 31, 2011

Madison Strategic Sector
Premium Fund (MSP)

Active Equity Management combined with a Covered Call Option Strategy

Madison Asset Management

www.mosaicfunds.com

MSP | Madison Strategic Sector Premium Fund

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Management's Discussion of Fund Performance
What happened in the market during 2011?

2011 began with considerable optimism as stock indices rose briskly in the first quarter, a continuation of the upward trend which began in the summer of 2010. Stock prices had on their side the strength of corporate profits and balance sheets combined with reasonable market valuations as measured by price/earnings ratios. But these positives were continuously tested by extraneous events as the year moved forward. The first blow came with the chain reaction of freedom movements in the Mideast and North Africa. Change and uncertainty are never well received by stock markets, particularly given the potentially negative effect on oil prices. The tragic earthquake and tsunami in Japan soon followed, with the recognition that this much damage to one of the world's largest economies would likely have serious global impact. During this period, equity markets ended their upward trend and moved sideways with an uptick in volatility. The U.S. debt downgrade in early August coupled with intensifying risks in Europe resulted in a meaningful market correction and a steep increase in volatility. Beyond the initial impact of the downturn, the second half of the year was primarily focused on the deteriorating European debt crisis and its potential to negatively impact global economic growth. During this phase, stock prices fluctuated extensively but recovered from the correction and resumed an upward bias, particularly as the calendar year came to a close. Despite what appeared to be a very troubling year with significant uncertainty, the S&P 500 managed a 2.11% return while the CBOE S&P BuyWrite Index (BXM) rose 5.72% on the heels of a very strong December.

As the stock market began its long recovery from the March 2009 lows, volatility had steadily declined from historic highs and trended lower since then with only minor interruptions. With the exception of short-lived spikes due to the North Africa and Japan situations, the CBOE Market Volatility Index (VIX) remained in the 15 to 20 range for much of the first half of 2011. The ensuing correction in the stock market raised fear levels significantly and the VIX Index surged above the 45 level. As the dust settled toward year end, volatility, again, retreated steadily and ended the year at 23.4. Despite the decline from recent highs, volatility will likely remain elevated given the abundance of ongoing economic and geo-political uncertainty.

How did the fund perform given the marketplace conditions during 2011?

For the year ended December 31, 2011, on a Net Asset Value (NAV) basis, the fund declined 2.80%, compared to the 2.11% return on the S&P 500 and the 5.72% return of the CBOE S&P BuyWrite Index (BXM). On a share price basis, the fund declined 9.24%. MSP closed the year trading at a 15.7% discount to NAV, with discounts in most closed end funds widening through the turbulent second half of the year. The fund's discount to NAV ranged from 7.2% to 16.7% during the full year. The fund provided a yield of 8.23% on NAV or 9.77% on market price.

Although the fund's performance lagged the S&P 500 and the CBOE S&P BuyWrite Index (BXM) on a one year basis, much of the underperformance occurred during the first quarter and early second quarter of the year as stock prices continued to trend higher. The S&P 500 surged over 30% from early September 2010 to mid February 2011 which resulted in many call options in the fund moving deeply into the money (stock price moved above the option strike price). As a consequence, an unusually high level of the fund's equity holdings were assigned (sold by virtue of the call option being exercised), which resulted in an elevated level of cash. Given the unabated upward move in the market over the preceding 5 month period and the manager's disciplined valuation philosophy, the high levels of cash were not immediately reinvested into what was determined to be unattractive valuation levels. As the equity prices continued to move higher through mid-year, the fund's short term relative performance suffered.

The manager is cognizant that cash levels cannot remain at elevated levels for an extended period of time given the fund's objective of generating high income from call writing. However, the manager also believes that purchasing the underlying equity positions at reasonable, not extended, valuations is extremely important in generating sustainable long term total returns. Short term results can vary substantially from index or benchmark returns, however, longer term results over a market cycle are more indicative of potential returns of this investment strategy.

As the market corrected in late July and early August, the fund's cash levels were reduced significantly as underlying stock valuations became more attractive. The duration of most short term market moves is often impossible to gauge and the market continued to move sharply lower following the fund's new purchases. The entry point was, however, quite attractive relative to levels earlier in the year and the fund benefitted as the markets trended higher through year-end.

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's investment strategy is geared toward investing in sectors which have historically provided high quality growth opportunities, reasonable valuations and attractive option premiums. These sectors typically include Technology, Consumer Discretionary & Retail, Health Care and Financials. In 2011, these sectors did not lead, with the exception of Health Care. Other defensive sectors such as Utilities and Consumer Staples were the leaders as uncertainty prevailed. These sectors are under-represented in the fund. Strong stock performance in the Health Care, Consumer Discretionary sectors and selective Technology holdings helped to offset weakness in the Financial sector.

In summary, the fund's underperformance was primarily related to higher cash levels early in the year as a number of holdings were called away due to market strength. This is not an abnormal occurrence in a covered call strategy, particularly given our valuation discipline which is focused on reinvesting cash in companies with reasonable valuations. Following market surges, reinvestment opportunities are typically more scarce and valuation discipline becomes increasingly critical. The fund's ability to "catch up" in the second half of the year was hindered somewhat by the leadership of the most defensive sectors which had limited representation in the fund.

Describe the fund's portfolio equity and option structure.

As of December 31, 2011, the fund held 41 equity securities and unexpired covered call options had been written against 86.4% of the fund's stock holdings. During 2011, the fund generated premiums of $6.3 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, 2011, 70% of the fund's call options (48 of 69 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 fund's manager has 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 most recent upward trend.

Which sectors are prevalent in the fund?

From a sector perspective, the fund's largest exposure as of December 31, 2011 was to the Technology (and technology related) Sector, followed by Health Care, Financials, Consumer Discretionary, and Energy. The fund had no representation in the Consumer Staples, Industrials, Materials, Telecommunication Services and Utilities Sectors as of year-end.

SECTOR ALLOCATION AS A PERCENTAGE OF TOTAL INVESTMENTS AS OF 12/31/11	
Consumer Discretionary	13.0%
Energy	6.9%

Financials	16.2%
Health Care	22.9%
Information Technology	26.8%
Investment Companies	5.0%
US Treasury Note	1.6%
Cash & Other	7.6%

Discuss the fund’s security and option selection process.

The fund is managed by two teams of investment professionals. We like to think of these teams as a "right hand" and "left hand" meaning they work together to make common stock and option decisions. 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. 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 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.

Discuss how risk is managed through the fund's investment process.

Risk management is a critical component of the investment manager's overall philosophy and investment process. The primary means for managing risk are as follows:

1. Focus on the underlying security. The manager's bottom-up stock selection process is geared toward investing in companies with very strong fundamentals including market leadership, balance sheet strength, attractive growth prospects, sustainable competitive advantages, predictable cash flows, and high-quality management teams. Purchasing such companies at attractive valuations is vital to providing an added margin of safety and the manager's "growth-at-a-reasonable-price" (GARP) philosophy is specifically tuned to such valuation discipline.

2. Active covered call writing. The manager actively sells (writes) individual equity call options on equities that are owned by the fund. The specific characteristics of the call options (strike price, expiration, degree of coverage) are dependent on the manager's outlook on the underlying equity and/or general market conditions. If equity prices appear over-valued due to individual company strength or surging markets, the manager may choose to become more defensive with the fund's option strategy by selling call options that are closer to the current equity market price, generating larger option premiums which would help defend against a market reversal. The manager may also sell call options on a greater percentage of the portfolio in an effort to provide for more downside protection. Following a market downturn, the manager may sell options further out of the money in order to allow the fund to benefit from a market recovery. In such an environment, the manager may also determine that a lesser percentage of the portfolio be covered by call options in order to more fully participate in market upside.

3. Cash management and timing. Generally, the manager believes that the fund should be fully invested under normal market conditions. A covered call strategy is rather unique relative to most equity portfolios as the short term nature of call options can lead to the assignment or sale of underlying stock positions on a fairly regular basis. As a result, the fund's cash levels are likely to frequently fluctuate based on the characteristics of the call options and the market conditions. The thoughtful reinvestment of cash levels adds a layer of risk management to the investment process. This is most evident following a strong surge in equity prices above the strike prices of call options written against individual stocks in the fund (call options move in-the-money). This could lead to a larger than normal wave of stock sales via call option assignment which would increase the fund's cash position following a period of very strong stock price gains. Given the manager's disciplined focus on purchasing underlying securities at appropriate valuation levels, the immediate reinvestment of cash may be delayed until market conditions and valuations become more attractive. If market conditions continue to surge for a period of time, the fund may underperform due to higher than normal cash

levels; however, it is the manager's belief that maintaining a strong valuation discipline will provide greater downside protection over a full market cycle.

What is management's outlook for the market and fund in 2012?

Looking forward, we are impressed with the resiliency of the U.S. economy. Still, we expect below-average economic growth for 2012 as the debt deleveraging process continues. Many of the cautionary macroeconomic issues that loomed at the start of 2011 still persisted at year end: weak housing, strained government budgets, and stagnant wage growth. Europe remained a wild card, and the progression of the debt crisis appears likely to lead to continued periods of "risk on" and "risk off" for global financial markets throughout the coming year. All told, we believe volatility is here to stay until the heightened level of global uncertainty begins to subside. In terms of stocks, although the year-end economic backdrop was far from optimal, we believe attractive valuations on high-quality U.S. and international stocks are reasonable. Filtering out the daily market "noise," many high-quality multinationals appeared to offer good long-term return potential. When attractive valuations are paired with strong free cash flow generation and high earnings predictability, we believe high-quality companies offer the ideal characteristics to navigate through a growth challenged economic environment.

The fund begins the new year with high quality, well diversified equity holdings, a relatively low level of cash and a high level of option coverage (percentage of the portfolio holdings with call options written). We believe this positions the fund well to weather the uncertainty surrounding the current investment environment.

TOP TEN STOCK HOLDINGS AS OF DECEMBER 31, 2011

	% of net assets
Visa Inc., Class A	4.85%
Microsoft Corp.	4.08%
Google Inc., Class A	3.53%
Gilead Sciences Inc.	3.35%
State Street Corp.	3.30%
Affiliated Managers Group Inc.	3.28%
Cisco Systems Inc.	3.21%
Powershares QQQ Trust Series 1	3.05%
Wells Fargo & Co.	2.82%
Target Corp.	2.80%

SHARE PRICE AND NAV PERFORMANCE FOR MADISON STRATEGIC SECTOR PREMIUM FUND

MSP | Madison Strategic Sector Premium Fund

Portfolio of Investments | December 31, 2011

	Shares	Value
COMMON STOCK - 90.0%**		
Consumer Discretionary - 13.7%		
American Eagle Outfitters Inc.	80,000	$ 1,223,200
Best Buy Co. Inc.	80,000	1,869,600
Kohl’s Corp.	35,000	1,727,250
Lowe’s Cos. Inc.	80,000	2,030,400
Staples Inc.	80,000	1,111,200
Target Corp.	40,000	2,048,800
		10,010,450
Energy - 7.2%		
Apache Corp.	15,000	1,358,700
Canadian Natural Resources Ltd.	40,000	1,494,800
Noble Corp.*	30,000	906,600
Schlumberger Ltd.	22,000	1,502,820
		5,262,920
Financials - 17.0%		
Affiliated Managers Group Inc.*	25,000	2,398,750
American Express Co.	35,000	1,650,950
Bank of America Corp.	200,000	1,112,000
Goldman Sachs Group Inc./The	14,000	1,266,020
Morgan Stanley	100,000	1,513,000
State Street Corp.	60,000	2,418,600
Wells Fargo & Co.	75,000	2,067,000
		12,426,320
Health Care - 24.0%		
Celgene Corp.*	10,000	676,000
Community Health Systems Inc.*	75,000	1,308,750
Gilead Sciences Inc.*	60,000	2,455,800
Laboratory Corp. of America Holdings*	20,000	1,719,400
Medtronic Inc.	40,000	1,530,000
Mylan Inc.*	90,000	1,931,400
Pfizer Inc.	39,800	861,272
St Jude Medical Inc.	50,000	1,715,000
Stryker Corp.	40,000	1,988,400
Teva Pharmaceutical Industries Ltd., ADR	45,000	1,816,200
Zimmer Holdings Inc.*	30,000	1,602,600

		17,604,822
Information Technology - 28.1%		
Adobe Systems Inc.*	65,000	1,837,550
Applied Materials Inc.	90,000	963,900
Cisco Systems Inc.	130,000	2,350,400
Flextronics International Ltd.*	184,900	1,046,534
	Shares	Value
FLIR Systems Inc.	65,000	$ 1,629,550
Google Inc., Class A*	4,000	2,583,600
Hewlett-Packard Co.	60,000	1,545,600
Microsoft Corp.	115,000	2,985,400
Symantec Corp.*	80,000	1,252,000
Visa Inc., Class A	35,000	3,553,550
Yahoo! Inc.*	50,000	806,500
		20,554,584
Total Common Stock (Cost $74,802,462)		65,859,096
	Par Value	
INVESTMENT COMPANIES - 5.2%		
SPDR S&P MidCap 400 ETF Trust	10,000	1,595,400
Powershares QQQ Trust Series 1 ETF	40,000	2,233,200
Total Investment Companies (Cost $3,832,500)		3,828,600
U.S. GOVERNMENT AND AGENCY OBLIGATIONS - 1.7%		
U.S. Treasury Note - 1.7%		
0.875%, 1/31/12	550,000	550,308
1.5%, 7/15/12	700,000	705,387
Total U.S. Government and Agency Obligations (Cost $1,255,670)		1,255,695
Repurchase Agreement - 8.0%		
With U.S. Bank National Association issued 12/30/11 at 0.01%, due 01/03/12, collateralized by $5,956,905 in Freddie Mac Pool #782472 due 10/01/34. Proceeds at maturity are $5,840,048 (Cost $5,840,042)		5,840,042
TOTAL INVESTMENTS - 104.9% (Cost $85,730,674)		76,783,433
NET OTHER ASSETS AND LIABILITIES - (0.3%)		(240,445)
TOTAL CALL & PUT OPTIONS WRITTEN - (4.6%)		(3,330,890)
TOTAL ASSETS - 100.0%		$73,212,098

*Non-income Producing
**All or a portion of these securities' positions represent covers (directly or through conversion rights) for outstanding options written.
ADR American Depository Receipt
ETF Exchange Traded Fund

See accompanying Notes to Financial Statements.

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Call Options Written	Contracts	Expiration	Strike Price	Market Value
Adobe Systems Inc.	300	January 2012	$28.00	$ 29,250
Adobe Systems Inc.	350	April 2012	30.00	49,700
Affiliated Managers Group Inc.	150	June 2012	100.00	132,750
American Eagle Outfitters Inc.	500	January 2012	14.50	50,000
American Eagle Outfitters Inc.	300			