Guggenheim Enhanced Equity Income Fund (f/k/a Old Mutual/Claymore Long-Short Fund)
Form N-CSR
March 07, 2014

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

FORM N-CSR

CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-21681

Guggenheim Enhanced Equity Income Fund
(Exact name of registrant as specified in charter)

2455 Corporate West Drive, Lisle, IL 60532
(Address of principal executive offices) (Zip code)

Amy J. Lee
2455 Corporate West Drive, Lisle, IL 60532
(Name and address of agent for service)

Registrant's telephone number, including area code: (630) 505-3700

Date of fiscal year end: December 31

Date of reporting period: January 1, 2013 to December 31, 2013

Item 1. Reports to Stockholders.

The registrant's annual report transmitted to shareholders pursuant to Rule 30e-1 under the Investment Company Act of 1940, as amended (the "Investment Company Act") is as follows:

GUGGENHEIMINVESTMENTS.COM/GPM

... YOUR LINK TO THE LATEST, MOST UP-TO-DATE INFORMATION ABOUT
GUGGENHEIM ENHANCED EQUITY INCOME FUND

The shareholder report you are reading right now is just the beginning of the story. Online at guggenheiminvestments.com/gpm, you will find:

- Daily, weekly and monthly data on share prices, distributions and more
- Portfolio overviews and performance analyses
- Announcements, press releases and special notices
- Fund and adviser contact information

Guggenheim Partners Investment Management, LLC and Guggenheim Funds Investment Advisors, LLC are constantly updating and expanding shareholder information services on the Fund's website in an ongoing effort to provide you with the most current information about how your Fund's assets are managed and the results of our efforts. It is just one more small way we are working to keep you better informed about your investment in the Fund.

December 31, 2013

DEAR SHAREHOLDER

We thank you for your investment in the Guggenheim Enhanced Equity Income Fund (the “Fund”). This report covers the Fund’s performance for the 12-month period ended December 31, 2013.

The Fund’s primary investment objective is to seek a high level of current income and gains with a secondary objective of long-term capital appreciation.

For the 12 months ended December 31, 2013, the Fund provided a total return based on market price of 20.27% and a total return net of fees based on NAV of 17.60%. All Fund returns cited—whether based on net asset value (“NAV”) or market price—assume the reinvestment of all distributions. Past performance does not guarantee future results. NAV performance data reflects fees and expenses of the Fund.

On December 31, 2013, the Fund’s closing market price of $8.85 per share represented a discount of 6.55% to its NAV of $9.47 per share. On December 31, 2012, the Fund’s closing market price of $8.20 per share represented a discount of 8.17% to its NAV of $8.93 per share. The market price of the Fund’s shares fluctuates from time to time, and it may be higher or lower than the Fund’s NAV. Past performance is not a guarantee of future results.

In each quarter of 2013, the Fund paid a distribution of $0.24, continuing a practice in effect since June 2009. The most recent distribution represents an annualized distribution rate of 10.85% based on the Fund’s closing market price of $8.85 as of December 31, 2013.

Guggenheim Funds Investment Advisors, LLC (“GFIA” or the “Adviser”) serves as the investment adviser to the Fund. Guggenheim Partners Investment Management, LLC (“GPIM” or the “Sub-Adviser”) serves as the Fund’s investment sub-adviser and is responsible for the management of the Fund’s portfolio of investments. Each of the Adviser and the Sub-Adviser is an affiliate of Guggenheim Partners, LLC (“Guggenheim”), a global diversified financial services firm.

GPIM seeks to achieve the Fund’s investment objective by obtaining broadly diversified exposure to the equity markets, currently through a portfolio of exchange-traded funds (“ETFs”), and utilizing a covered call strategy which follows GPIM’s proprietary dynamic rules-based methodology pursuant to which the Fund sells (writes) covered call options on all or a portion of the securities held in the Fund’s portfolio. The Fund seeks to generate income and gains through underlying equity security performance, dividends paid on securities owned by the Fund, and cash premiums received from selling (writing) covered call options.

As part of GPIM’s strategy, the Fund utilizes financial leverage. The goal of the use of financial leverage is to enhance shareholder value, consistent with the Fund’s investment objective, and to seek to provide superior risk-adjusted returns. The Fund’s use of financial leverage is intended to be flexible in nature and is monitored and adjusted, as appropriate, on an ongoing basis by GFIA and GPIM. The Fund may utilize financial leverage up to the limits imposed by the Investment Company Act of 1940 (the “1940 Act”), as amended. Under current market conditions, the Fund intends to utilize financial leverage in an amount generally not to exceed 30% of the Fund’s total assets (including the proceeds of such financial leverage) at the time utilized. The Fund employs financial leverage through a line of credit with a major European bank. As of December 31, 2013, the amount of leverage was approximately 25.3% of the Fund’s total assets.

We encourage shareholders to consider the opportunity to reinvest their distributions from the Fund through the Dividend Reinvestment Plan (“DRIP”), which is described in detail on page 22 of this report. When shares trade at a discount to NAV, the DRIP takes advantage of the discount by reinvesting the quarterly dividend distribution in common shares of the Fund purchased in the market at a price less than NAV. Conversely, when the market price of the Fund's common shares is at a premium above NAV, the DRIP reinvests participants' dividends in newly-issued common shares at the greater of NAV per share or 95% of the market price per share. The DRIP provides a cost-effective means to accumulate additional shares and enjoy the potential benefits of compounding returns over time.

DEAR SHAREHOLDER continued December 31, 2013

To learn more about the Fund's performance and investment strategy for the 12 months ended December 31, 2013, we encourage you to read the Questions & Answers section of the report, which begins on page 5. We appreciate your investment and look forward to serving your investment needs in the future. For the most up-to-date information on your investment, please visit the Fund's website at guggenheiminvestments.com/gpm.

Sincerely,

Donald C. Cacciapaglia
Chief Executive Officer
Guggenheim Enhanced Equity Income Fund

January 31, 2014

QUESTIONS & ANSWERS December 31, 2013

The Guggenheim Enhanced Equity Income Fund (the "Fund") is managed by a team of seasoned professionals at Guggenheim Partners Investment Management, LLC ("GPIM" or the "Sub-Adviser"). This team includes B. Scott Minerd, Global Chief Investment Officer; Anne Bookwalter Walsh, CFA, JD, Assistant Chief Investment Officer; Farhan Sharaff, Assistant Chief Investment Officer, Equities; Jayson Flowers, Senior Managing Director; and Jamal Pesaran, Portfolio Manager. In the following interview, the investment team discusses the market environment and the Fund's performance for the annual period ended December 31, 2013.

Please describe the Fund's investment objective and explain how GPIM's investment strategy seeks to achieve it.
The Fund's investment objective is to seek a high level of current income and gains with a secondary objective of long-term capital appreciation. Under normal market conditions, the Fund invests at least 80% of its net assets, plus the amount of any borrowings for investment purposes, in equity securities.

GPIM seeks to achieve the Fund's investment objective by obtaining broadly diversified exposure to the equity markets and utilizing a covered call strategy developed by GPIM pursuant to which the Fund sells (writes) covered call options on all or a portion of the securities held in the Fund's portfolio. The Fund may seek to obtain exposure to equity markets through investments in exchange-traded funds or other investment funds that track equity market indices, through investments in individual equity securities and/or through derivative instruments that replicate the economic characteristics of exposure to equity securities or markets. To the extent GPIM's equity exposure strategy is implemented through investment in broad-based equity exchange-traded funds or other investment funds or instruments, the Fund's portfolio may comprise fewer holdings. At present, the Fund obtains exposure to equity markets by investing primarily in a portfolio of exchange-traded funds.

The Fund seeks to generate income and gains through underlying equity security performance, dividends paid on securities owned by the Fund, and cash premiums received from selling (writing) covered call options. The Fund has the ability to write call options on indices and/or securities, which will typically be at or out of the money. GPIM's strategy typically targets one-month options, although options of any strike price or maturity may be utilized. Although the Fund will receive premiums from the options written, by writing a covered call option, the Fund forgoes any potential increase in value of the underlying securities above the strike price specified in an option contract through the expiration date of the option. To the extent GPIM's strategy seeks to achieve broad equity exposure through a portfolio of common stocks, the Fund would hold a diversified portfolio of stocks.

As part of GPIM's strategy, the Fund utilizes financial leverage. The goal of financial leverage is to enhance shareholder value, consistent with the Fund's investment objective, and to seek to provide superior risk-adjusted returns. The Fund may utilize financial leverage up to the limits imposed by the 1940 Act. The Fund's use of financial leverage is intended to be flexible in nature and is monitored on an ongoing basis by Guggenheim Funds Investment Advisers, LLC ("GFIA") and GPIM and adjusted, as appropriate, by GPIM. Under current market conditions, the Fund intends to utilize financial leverage in an amount generally not to exceed 30% of the Fund's total assets (including the proceeds of such financial leverage) at the time utilized. The Fund employs financial leverage through a line of credit with a major European bank. Use of financial leverage creates an opportunity for increased income and capital appreciation but, at the same time, creates special risks. There can be no assurance that a leveraging strategy will be successful. Financial leverage may cause greater changes in the Fund's net asset value and returns than if leverage had not been used.

Please provide an overview of the economic and market environment during the 12 months ended December 31, 2013.
The year 2013 wound down with a series of stronger-than-expected economic data releases. Institute for Supply Management manufacturing data (historically indicative of expansion or contraction) rose to its highest levels in over

two years, consumer confidence rebounded following the government shutdown, housing starts surged, and the job market strengthened. Citing improved labor market conditions and a sustainable economic expansion, the U.S. Federal Reserve (the "Fed") announced in December that it would reduce its monthly bond purchases by $10 billion, to $75 billion, starting in January 2014. Yet, at the same time, the Fed lengthened the time frame before which it will raise rates by promising to keep the Fed funds target rate at 0-0.25% at least as long as the unemployment rate remains above 6.5% and perhaps "well past" the time this target is reached. For the first time, the Fed also added a lower-bound target for inflation of 2%–lengthening the expected time frame before rates rise.

Last January, the global economy faced myriad headwinds, choppiness lay ahead, and we expected plenty of volatility in 2013. Nevertheless, we believed at that point that risk assets were the best choice for investors. Now, the headwinds of 2013 have largely dissipated, and the outlook appears benign for risk assets for the first three to six months of 2014, if not longer.

Many pundits may have underestimated the strength in the U.S. economy. Although we will likely see the unwinding of the inventory that built up in the third quarter, fourth quarter economic growth could beat expectations.

QUESTIONS & ANSWERS continued December 31, 2013

The final three months of 2013 were exceptionally good for U.S. equities, which produced a wealth effect that probably boosted holiday sales.

Market conditions could be even stronger in Europe. Economic data from the euro area's periphery is improving faster than from the core, where inflation is also rising at a faster pace, giving the peripheral nations a competitive advantage. In Asia, markets have priced for a more negative scenario that now appears less likely. With the U.S. and Europe now out of recession, they are ready to underpin a recovery in export growth in the Asian region. As a synchronous global expansion gets under way, investors will become more comfortable with taking risk, and this should be reflected in asset prices in many regions around the globe.

How did the Fund perform for the 12 months ended December 31, 2013?
For the 12 months ended December 31, 2013, the Fund provided a total return based on market price of 20.27% and a total return net of fees based on NAV of 17.60%. All Fund returns cited—whether based on net asset value ("NAV") or market price—assume the reinvestment of all distributions. Past performance does not guarantee future results. NAV performance data reflects fees and expenses of the Fund.

On December 31, 2013, the Fund's closing market price of $8.85 per share represented a discount of 6.55% to its NAV of $9.47 per share. On December 31, 2012, the Fund's closing market price of $8.20 per share represented a discount of 8.17% to its NAV of $8.93 per share. The market price of the Fund's shares fluctuates from time to time, and it may be higher or lower than the Fund's NAV. Past performance is not a guarantee of future results.

In each quarter of 2013, the Fund paid a distribution of $0.24, continuing a practice in effect since June 2009. The most recent distribution represents an annualized distribution rate of 10.85% based on the Fund's closing market price of $8.85 as of December 31, 2013.

Compared with the Fund's one-year price return of 20.27%, the S&P 500 Index returned 32.39% and the CBOE S&P 500 BuyWrite Index ("BXM") returned 13.26%. The outperformance over the covered call benchmark was driven by our use of leverage as well as our portfolio construction which dynamically targets the volatility risk premium through the sale of call options.

The outperformance of the price return versus NAV return shows that the Fund's discount narrowed over the course of the year, from 8.17% at the end of 2012 to 6.55% at the end of 2013. The distribution rate of the Fund exceeds the distribution rate of the S&P 500, which currently stands at 2%. The Fund's risk is generally measured by the standard deviation of returns, which was 10% for the Fund during the period, compared with 11% for the S&P 500. Hence, the Fund delivered attractive returns with less risk than the market risk.

What decisions had the greatest effect on the Fund's performance?
Equity market performance during 2013 was primarily driven by central bank quantitative easing leading to equity multiple expansion. With central banks providing liquidity to the markets implied volatility levels were greatly reduced during the year.

The gradual up-trending market further combined with event risk in the form of central bank announcements as to timing of the reduction in QE, which led to sharp market moves higher, and created a challenging environment for a volatility capture strategy.

The use of leverage was the overriding positive contributor to Fund performance, with leverage averaging approximately 24% over the year. The impact of underlying security selection and derivative selection were also largely positive—but with implied volatility and correlation low, alpha from portfolio construction was more limited in 2013. Low correlation combined with low levels of implied volatility means portfolio construction decisions in a covered call portfolio are more challenging as we cap the upside of portfolio exposures but retain downside exposure after the premiums received. Hence with low call premiums and low correlation the Fund is more exposed to exposures to the downside.

Can you discuss the impact of leverage in the Fund?
In a strongly rising market with few market drawdowns leverage was a major positive to the Fund's performance during 2013. Average leverage ratios were approximately 24% during the year.

To reduce the risk from the use of leverage within the strategy, GPIM aims to reduce leverage after extended moves to the upside when accompanied by low implied volatility, and may add leverage when the market is at period lows or selling off where implied volatility levels are more attractive. This dynamic approach means that, when volatility is low, the Fund limits the potential for leverage to hurt the portfolio if the market has a significant drop. However, the lower leverage may mean the Fund misses some of the positive impact leverage can deliver if the underlying market continues to move higher.

Leverage decisions challenged the Fund in May and June, as the market continued to go higher after leverage was reduced in May, restraining performance of the Fund, and in June as leverage was added as the market moved lower, the subsequent move lower in the market hurt performance.

The Fund employs financial leverage through the use of a bank line of credit, generally maintaining leverage not to exceed 30% of the Fund's total assets. As of December 31, 2013, the Fund's outstanding leverage was 25.3% of the Fund's assets, compared with 27% at the end of December 2012. There is no guarantee that the Fund's leverage strategy will be successful, and the Fund's use of leverage may cause the Fund's NAV and market price of common shares to be more volatile.

What else should shareholders know about the Fund?
Although both market and NAV return clearly trailed the broad market, they exceeded that of the covered call benchmark by a considerable margin. The Fund typically underperforms the equity market when it is rising strongly and implied volatility is low. However, the Fund seeks to outperform flat and down markets, as the sale of option premiums buffers Fund returns.

The Fund focuses on seeking to smooth the experience of an equity allocation by seeking to contribute positive dividend yields in flat and down markets as opposed to only delivering returns in up markets.

The Fund continues to seek to deliver over time total return similar to the S&P 500 with similar risk and greater income.

Index Definitions
Indices are unmanaged, reflect no expenses and it is not possible to invest directly in an index.

The S&P 500 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 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 BuyWrite 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) calls of one-month duration against those positions.

Risks and Other Considerations
The views expressed in this report reflect those of the portfolio managers only through the report period as stated on the cover. These views are subject to change at any time, based on market and other conditions and should not be construed as a recommendation of any kind. The material may also include forward looking statements that involve risk and uncertainty, and there is no guarantee that any predictions will come to pass.

There can be no assurance that the Fund will achieve its investment objectives. The value of the Fund will fluctuate with the value of the underlying securities. Historically, closed-end funds often trade at a discount to their net asset value. Risk is inherent in all investing, including the loss of your entire principal. Therefore, before investing you should consider the risks carefully.

Please see guggenheiminvestments.com/gpm for a detailed discussion about Fund risks and considerations.

FUND SUMMARY (Unaudited) December 31, 2013

Fund Statistics	
Share Price	$8.85
Common Share Net Asset Value	$9.47
Premium/(Discount) to NAV	-6.55%
Net Assets ($000)	$180,499

Total Returns(1) (Inception 8/25/05)	Market	NAV
One Year	20.27%	17.60%
Three Year - average annual	9.38%	10.21%
Five Year - average annual	14.46%	9.57%
Since Inception - average annual	1.24%	1.74%

Performance data quoted represents past performance, which is no guarantee of future results and current performance may be lower or higher than the figures shown. NAV performance data quoted reflects the total net expense ratio, which includes net operating expenses, and interest expense. For the most recent month-end performance figures, please visit guggenheiminvestments.com/gpm. The investment return and principal value of an investment will fluctuate with changes in the market conditions and other factors so that an investor's shares, when sold, may be worth more or less than their original cost.

Long-Term Holdings	% of Long-Term Investments
SPDR S&P 500 ETF Trust	49.8%
SPDR S&P MidCap 400 ETF Trust	15.1%
iShares Russell 2000 Index	12.6%
PowerShares QQQ Trust, Series 1	10.0%
Technology Select Sector SPDR	5.0%
Materials Select Sector SPDR	2.5%
Consumer Discretionary Select Sector SPDR	2.5%
Energy Select Sector SPDR	2.5%

Portfolio composition and holdings are subject to change daily. For more information, please visit guggenheiminvestments.com/gpm. The above summaries are provided for informational purposes only and should not be viewed as recommendations. Past performance does not guarantee future results.

(1) Performance prior to June 22, 2010, under the name Old Mutual/ Claymore Long-Short Fund was achieved through an investment strategy of a long-short strategy and an opportunistic covered call writing strategy by the previous investment sub-adviser, Analytic Investors, LLC, and factors in the Fund's fees and expenses.

Fund Breakdown	% of Net Assets
Long-Term Investments	136.7%
Short-Term Investment	0.2%
Total Investments	136.9%
Total Value of Options Written	-2.4%
Other Assets in excess of Liabilities	0.1%
Borrowings	-34.6%
Total Net Assets	100.0%

PORTFOLIO OF INVESTMENTS December 31, 2013

Number of Shares	Description	Value
	Long-Term Investments – 136.7%	
	Exchange-Traded Funds(a) – 136.7%	
92,100	Consumer Discretionary Select Sector SPDR	$ 6,155,043
69,500	Energy Select Sector SPDR	6,151,445
268,700	iShares Russell 2000 ETF	30,983,797
133,400	Materials Select Sector SPDR	6,165,748
281,400	PowerShares QQQ Trust, Series 1	24,751,944
665,500	SPDR S&P 500 ETF Trust	122,897,885
152,200	SPDR S&P MidCap 400 ETF Trust	37,167,240
346,500	Technology Select Sector SPDR	12,383,910
	(Cost $239,012,896)	246,657,012
	Short-Term Investments – 0.2%	
	Money Market Fund – 0.2%	
388,222	Dreyfus Treasury Prime Cash Management Institutional Shares	388,222
	(Cost $388,222)	
	Total Investments – 136.9%	
	(Cost $239,401,118)	247,045,234
	Other Assets in excess of Liabilities – 0.1%	188,428
	Total Value of Options Written – (2.4%) (Premiums received $1,706,913)	(4,234,191)
	Borrowings – (34.6% of Net Assets or 25.3% of Total Investments)	(62,500,000)
	Net Assets – 100.0%	$ 180,499,471

Contracts (100 shares per contract)	Options Written	Expiration Month	Exercise Price	Value
	Call Options Written(b) – (2.4%)			
921	Consumer Discretionary Select Sector SPDR	January 2014	$ 65.00	$ (190,647)
695	Energy Select Sector SPDR	January 2014	87.00	(144,213)
2,687	iShares Russell 2000 ETF	January 2014	114.00	(662,345)
1,334	Materials Select Sector SPDR	January 2014	46.00	(78,706)
2,814	PowerShares QQQ Trust, Series 1	January 2014	87.00	(471,345)
6,655	SPDR S&P 500 ETF Trust	January 2014	184.00	(1,537,305)
1,522	SPDR S&P MidCap 400 ETF Trust		240.00	(844,710)

		January 2014		
3,465	Technology Select Sector SPDR	January 2014	35.00	(304,920)
	Total Value of Call Options Written (Premiums received $1,706,913)			$ (4,234,191)

S&P – Standard & Poor's

(a) Securities represent cover for outstanding options written. All of these securities have been physically segregated as collateral for borrowings outstanding.

(b) Non-income producing security.

See notes to financial statements.

STATEMENT OF ASSETS AND LIABILITIES December 31, 2013

Assets	
Investments, at value (cost $239,401,118)	$247,045,234
Cash	124,470
Dividends receivable	320,851
Other assets	28,233
Total assets	247,518,788
Liabilities	
Borrowings	62,500,000
Options written, at value (premiums received of $1,706,913)	4,234,191
Advisory fee payable	162,231
Administration fee payable	5,330
Interest due on borrowings	2,389
Accrued expenses	115,176
Total liabilities	67,019,317
Net Assets	$180,499,471
Composition of Net Assets	
Common stock, $.01 par value per share; unlimited number of shares authorized,	
19,054,684 shares issued and outstanding	$190,547
Additional paid-in capital	221,895,365
Net unrealized appreciation on investments and options	5,116,838
Accumulated net realized loss on investments and options	(46,703,279)
Net Assets	$180,499,471
Net Asset Value (based on 19,054,684 common shares outstanding)	$9.47

See notes to financial statements.

STATEMENT OF OPERATIONS For the year ended December 31, 2013

December 31, 2013

Investment Income		
Dividends	$1,919,775	
Total income		$1,919,775
Expenses		
Advisory fee	2,088,053	
Interest expense	527,726	
Professional fees	127,560	
Trustees' fees and expenses	72,021	
Fund accounting	64,779	
Administration fee	61,390	
Printing expense	43,760	
Insurance	25,487	
NYSE listing fee	21,258	
Custodian fee	21,011	
Transfer agent fee	20,253	
Miscellaneous	1,840	
Total expenses		3,075,138
Advisory fees waived		(232,006)
Net expenses		2,843,132
Net investment loss		(923,357)
Realized and Unrealized Gain (Loss) on Investments and Options:		
Net realized gain (loss) on:		
Investments		$50,410,879
Options		(25,362,299)
Net change in unrealized appreciation (depreciation) on:		
Investments		7,645,286
Options		(3,231,647)
Net realized and unrealized gain on investments and options		29,462,219
Net Increase in Net Assets Resulting from Operations		$28,538,862

See notes to financial statements.

STATEMENT OF CHANGES IN NET ASSETS December 31, 2013

	For the Year Ended December 31, 2013	For the Year Ended December 31, 2012
Increase in Net Assets from Operations		
Net investment loss	$(923,357)	$(2,024,367)
Net realized gain on investments and options	25,048,580	15,530,979
Net change in unrealized appreciation (depreciation) on investments and options	4,413,639	(1,696,367)
Net increase in net assets resulting from operations	28,538,862	11,810,245
Distributions to Shareholders		
From and in excess of net investment income	(13,159,351)	(18,289,205)
Return of capital	(5,133,146)	—
Total distributions to shareholders	(18,292,497)	(18,289,205)
Capital Share Transactions		
Net proceeds from common shares issued through dividend reinvestment	—	64,197
Net increase from capital share transactions	—	64,197
Total increase (decrease) in net assets	10,246,365	(6,414,763)
Net Assets		
Beginning of period	170,253,106	176,667,869
End of period (including accumulated net investment income of $0 and $0, respectively)	$180,499,471	$170,253,106

See notes to financial statements.