

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM N-Q

**QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED
MANAGEMENT INVESTMENT COMPANY**

Investment Company Act file number: 811-21652

Fiduciary/Claymore MLP Opportunity Fund
(Exact name of registrant as specified in charter)

227 West Monroe Street, Chicago, IL 60606
(Address of principal executive offices)(Zip code)

Amy J. Lee

2227 West Monroe Street, Chicago, IL 60606
(Name and address of agent for service)

Registrant's telephone number, including area code: (312) 827-0100

Date of fiscal year end: November 30

Date of reporting period: June 1, 2016 – August 31, 2016

Item 1. Schedule of Investments.
Attached hereto.

Fiduciary/Claymore MLP Opportunity Fund
SCHEDULE OF INVESTMENTS (Unaudited)

August 31, 2016

	Shares	Value
MASTER LIMITED PARTNERSHIPS¹ - 155.1%		
Diversified Infrastructure - 38.7%		
Energy Transfer Partners, LP ¹	1,638,512	\$ 65,442,170
Enbridge Energy Partners, LP ¹	1,664,255	38,710,571
Tesororo Logistics, LP ¹	543,530	26,067,699
MPLX, LP ¹	695,114	23,029,127
Enterprise Products Partners, LP ¹	816,369	21,552,142
Enbridge Energy Management LLC ^{1,2}	820,985	18,685,621
Total Diversified Infrastructure		193,487,330
Midstream Oil - 38.7%		
Magellan Midstream Partners, LP ¹	774,827	54,493,582
Buckeye Partners, LP ¹	613,026	43,071,207
Plains All American Pipeline, LP ¹	1,499,132	42,065,644
Genesis Energy, LP ¹	551,775	19,748,026
Dalek Logistics Partners, LP ¹	385,285	10,052,086
NGL Energy Partners, LP ¹	404,810	7,343,253
USD Partners, LP ¹	563,625	6,983,314
JP Energy Partners, LP	531,345	3,974,461
World Point Terminals, LP ¹	168,065	2,588,201
PBF Logistics, LP ¹	77,085	1,564,055
Rose Rock Midstream, LP ¹	55,830	1,402,450
Total Midstream Oil		193,286,279
Midstream Natural Gas - 34.3%		
Williams Partners, LP ¹	2,777,601	105,826,598
Tallgrass Energy Partners, LP ¹	514,995	23,730,970
Crestwood Equity Partners, LP ¹	813,232	16,915,226
Enable Midstream Partners, LP ¹	1,139,975	16,085,047
ONEOK Partners, LP ¹	232,060	8,992,325
Total Midstream Natural Gas		171,550,166
Gathering & Processing - 23.6%		
DCP Midstream Partners, LP ¹	1,811,804	59,372,817
EnLink Midstream Partners, LP ¹	2,118,335	37,388,613
	Shares	Value
MASTER LIMITED PARTNERSHIPS¹ - 155.1% (continued)		
Gathering & Processing - 23.6% (continued)		
Summit Midstream Partners, LP ¹	839,021	\$ 20,992,305
Total Gathering & Processing		117,753,735
Marine Transportation - 9.6%		
Teekay Offshore Partners, LP	2,151,180	11,874,513
KNOT Offshore Partners, LP ¹	612,535	11,405,402
Navios Maritime Midstream Partners, LP ¹	700,620	8,393,428
Golar LNG Partners, LP ¹	392,360	7,619,631
Teekay Offshore Partners, LP ¹	1,346,402	7,432,139
Teekay LNG Partners, LP ¹	80,000	1,034,400
Total Marine Transportation		47,759,513
Natural Gas Pipelines & Storage - 6.6%		
TC PipeLines, LP ¹	626,740	32,910,117
Other Energy Infrastructure - 3.1%		
Archrock Partners, LP ¹	523,595	7,874,868
Sunoco, LP	254,793	7,587,736
Total Other Energy Infrastructure		15,462,604
Coal - 0.6%		
Alliance Holdings GP, LP	116,368	2,916,182
Total Master Limited Partnerships (Cost \$517,490,242)		775,125,926
SHORT-TERM INVESTMENTS¹ - 1.4%		
Dreyfus Treasury Prime Cash Management Fund – Investor Shares, 0.01% ³	7,125,492	7,125,492
Total Short Term Investments (Cost \$7,125,492)		7,125,492
	Face Amount	Value
TERM LOAN^{1†} - 0.0% **		
Clearwater Subordinated Note NR 4.75% due 12/31/20 ^{7,4,5,6}	413,329	\$ 4,133
Total Term Loan (Cost \$396,254)		4,133
Total Investments - 156.6% (Cost \$525,011,988)		\$ 782,255,551
Other Assets & Liabilities, net - (56.6)%		(282,660,291)
Total Net Assets - 100.0%		\$ 499,595,260

* Non-income producing security.

** Less than 0.05%.

¹ Value determined based on Level 1 inputs – See Note 2.

[†] Value determined based on Level 3 inputs – See Note 2.

¹ All or a portion of these securities have been physically segregated and pledged as collateral. As of August 31, 2016, the total amount segregated was \$700,517,163, of which \$700,517,163 is related to the outstanding line of credit.

² While non-income producing, security makes regular in-kind distributions.

³ Rate indicated is the 7-day yield as of August 31, 2016.

⁴ Security was fair valued by the Valuation Committee at August 31, 2016. The total market value of fair valued securities amounts to \$4,133, (cost \$396,254) or less than 0.05% of total net assets.

⁵ Security is restricted and may be resold only in transactions exempt from registration, normally to qualified institutional buyers. At August 31, 2016, restricted securities aggregate market value amount to \$4,133 or less than 0.05% of net assets.

⁶ Company has filed for protection in federal bankruptcy court.

Other Information (unaudited)

The following table summarizes the inputs used to value the Fund's investments at August 31, 2016 (See Note 2 in the Notes to Schedule of Investments):

	Level 1 Quoted Prices	Level 2 Significant Observable Inputs	Level 3 Significant Unobservable Inputs	Total
Assets				
Master Limited Partnerships	\$ 775,125,926	\$ -	\$ -	\$ 775,125,926
Short Term Investments	7,125,492	-	-	7,125,492
Term Loan	-	-	4,133	4,133
Total	\$ 782,251,418	\$ -	\$ 4,133	\$ 782,255,551

Please refer to the detailed portfolio for a breakdown of investment type by industry category.

The following is a summary of the significant unobservable inputs used in the fair valuation of assets and liabilities categorized within the Level 3 of the fair value hierarchy:

Category	Ending Balance at 8/31/16	Valuation Technique	Unobservable Inputs
Term Loan	\$4,133	Cash flow model	Royalties on coal produced

Significant changes in royalties on coal produced would generally result in significant changes in the fair value of the security.

Transfers between investment levels may occur as the markets fluctuate and/or the availability of data used in an investment's valuation changes. Transfers between valuation levels, if any, are in comparison to the valuation levels at the end of the previous fiscal year, and are effective using the fair value as of the end of the current fiscal period.

For the period ended August 31, 2016, there were no transfers between levels.

Summary of Fair Value of Level 3 Activity

Following is a reconciliation of Level 3 assets for which significant unobservable inputs were used to determine fair value for the period ended August 31, 2016:

LEVEL 3 – Fair Value measurement using significant unobservable inputs

Assets:		
Beginning Balance	\$	4,133
Purchases	-	-
Sales	-	-
Total change in unrealized gains or losses included in earnings	-	-
Transfers into Level 3	-	-
Transfers out of Level 3	-	-
Ending Balance	\$	4,133
Net change in unrealized appreciation (depreciation) for investments in securities still held at August 31, 2016	\$	-

For information on the Fiduciary/Claymore MLP Opportunity Fund's (the "Fund") policy regarding valuation of investments and other significant accounting policies, please refer to the Fund's most recent semiannual or annual shareholder report.

1. Significant Accounting Policies

The Fund operates as an investment company and accordingly follows the investment company accounting and reporting guidance of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 946 Financial Services – Investment Companies.

The following significant accounting policies are in conformity with U.S. generally accepted accounting principles ("GAAP") and are consistently followed by the Fund. This requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates. All time references are based on Eastern Time.

The Board of Trustees of the Fund (the "Board") has adopted policies and procedures for the valuation of the Fund's investments (the "Valuation Procedures"). Pursuant to the Valuation Procedures, the Board has delegated to a valuation committee, consisting of representatives from Guggenheim's investment management, fund administration, legal and compliance departments (the "Valuation Committee"), the day-to-day responsibility for implementing the Valuation Procedures, including, under most circumstances, the responsibility for determining the fair value of the Fund's securities or other assets.

Valuations of the Fund's securities are supplied primarily by pricing services appointed pursuant to the processes set forth in the Valuation Procedures. The Valuation Committee convenes monthly, or more frequently as needed and will review the valuation of all assets which have been fair valued for reasonableness. The Fund's officers, through the Valuation Committee and consistent with the monitoring and review responsibilities set forth in the Valuation Procedures, regularly review procedures used by, and valuations provided by, the pricing services.

Equity securities listed on an exchange (New York Stock Exchange ("NYSE") or American Stock Exchange) are valued at the last quoted sales price as of the close of U.S. business on the NYSE, usually 4:00 p.m. Eastern time on the valuation date. Equity securities listed on the NASDAQ market system are valued at the NASDAQ Official Closing Price on the valuation date, which may not necessarily represent the last sale price. If there has been no sale on such exchange or NASDAQ on such day, the security is valued at the mean of the most recent bid and ask prices on such day.

Investments for which market quotations are not readily available are fair valued as determined in good faith by Guggenheim Funds Investment Advisors, LLC ("GFIA" or the "Adviser"), subject to review by the Valuation Committee, pursuant to methods established or ratified by the Board. Valuations in accordance with these methods are intended to reflect each security's (or asset's) "fair value." Each such determination is based on a consideration of all relevant factors, which are likely to vary from one pricing context to another. Examples of such factors may include, but are not limited to: (i) the type of security, (ii) the initial cost of the security, (iii) the existence of any contractual restrictions on the security's disposition, (iv) the price and extent of public trading in similar securities of the issuer or of comparable companies, (v) quotations or evaluated prices from broker-dealers and/or pricing services, (vi) information obtained from the issuer, analysts, and/or the appropriate stock exchange (for exchange traded securities), (vii) an analysis of the company's financial statements, and (viii) an evaluation of the forces that influence the issuer and the market(s) in which the security is purchased and sold (e.g. the existence of pending merger activity, public offerings or tender offers that might affect the value of the security).

Investment professionals from Advisory Research, Inc. ("ARI" or the "Sub-Adviser") prepare preliminary valuations based on their evaluation of financial data, company specific developments, market valuations of comparable companies, market information and other factors. These preliminary valuations are reviewed by the Valuation Committee with subsequent deliberations until an appropriate price is determined for the Level 3 security.

2. Fair Value Measurement

In accordance with GAAP, fair value is defined as the price that the Fund would receive to sell an investment or pay to transfer a liability in an orderly transaction with an independent buyer in the principal market, or in the absence of a principal market, the most advantageous market for the investment or liability. GAAP establishes a three-tier fair value hierarchy based on the types of inputs used to value assets and liabilities and requires corresponding disclosure. The hierarchy and the corresponding inputs are summarized below:

Level 1 — quoted prices in active markets for identical assets or liabilities.

Level 2 — significant other observable inputs (for example quoted prices for securities that are similar based on characteristics such as interest rates, prepayment speeds, credit risk, etc.).

Level 3— significant unobservable inputs based on the best information available under the circumstances, to the extent observable inputs are not available, which may include assumptions.

The types of inputs available depend on a variety of factors, such as the type of security and the characteristics of the markets in which it trades, if any. Fair valuation determinations that rely on fewer or no observable inputs require greater judgment. Accordingly, fair value determinations for Level 3 securities require the greatest amount of judgment.

Independent pricing services are used to value a majority of the Fund's investments. When values are not available from a pricing service, they will be determined under the valuation policies that have been reviewed and approved by the Board. In any event, values are determined using a variety of sources and techniques, including: market prices; broker quotes; and models which derive prices based on inputs such as prices of securities with comparable maturities and characteristics or based on inputs such as anticipated cash flows or collateral, spread over Treasuries, and other information and analysis.

The inputs or methodologies used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. The suitability of the techniques and sources employed to determine fair valuation are regularly monitored and subject to change.

3. Federal Income Taxes

As of August 31, 2016, the cost of investments and accumulated unrealized appreciation/depreciation on investments for federal income tax purposes were as follows:

Cost of Investments for Tax Purposes	Gross Tax Unrealized Appreciation	Gross Tax Unrealized Depreciation	Net Tax Unrealized Appreciation
\$494,120,792	\$361,691,322	(\$73,556,563)	\$288,134,759

Item 2. Controls and Procedures.

- (a) The registrant's principal executive officer and principal financial officer have evaluated the registrant's disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the "Investment Company Act")) as of a date within 90 days of the filing date of this report and have concluded, based on such evaluation, that the registrant's disclosure controls and procedures were effective, as of that date, in ensuring that information required to be disclosed by the registrant on this Form N-Q was recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms.
- (b) There was no change in the registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the Investment Company Act) that occurred during the registrant's last fiscal quarter that has materially affected or is reasonably likely to materially affect the registrant's internal control over financial reporting.

Item 3. Exhibits.

A separate certification for each principal executive officer and principal financial officer of the registrant as required by Rule 30a-2(a) under the Investment Company Act (17 CFR 270.30a-2(a)), is attached hereto.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Fiduciary/Claymore MLP Opportunity Fund

By: /s/ Donald C. Cacciapaglia

Name: Donald C. Cacciapaglia

Title: President and Chief Executive Officer

Date: October 28, 2016

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.

By: /s/ Donald C. Cacciapaglia

Name: Donald C. Cacciapaglia

Title: President and Chief Executive Officer

Date: October 28, 2016

By: /s/ John L. Sullivan

Name: John L. Sullivan

Title: Chief Financial Officer, Chief Accounting Officer and Treasurer

Date: October 28, 2016

CERTIFICATIONS

I, Donald C. Cacciapaglia, certify that:

1. I have reviewed this report on Form N-Q of Fiduciary/Claymore MLP Opportunity Fund;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the schedule of investments included in this report fairly presents in all material respects the investments of the registrant as of the end of the fiscal quarter for which the report is filed;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended) and internal control over financial reporting (as defined in Rule 30a-3(d) under the Investment Company Act of 1940, as amended) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of a date within 90 days prior to the filing date of this report, based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 28, 2016

/s/ Donald C. Cacciapaglia
Donald C. Cacciapaglia
President and Chief Executive Officer

CERTIFICATIONS

I, John L. Sullivan, certify that:

1. I have reviewed this report on Form N-Q of Fiduciary/Claymore MLP Opportunity Fund;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the schedule of investments included in this report fairly presents in all material respects the investments of the registrant as of the end of the fiscal quarter for which the report is filed;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended) and internal control over financial reporting (as defined in Rule 30a-3(d) under the Investment Company Act of 1940, as amended) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of a date within 90 days prior to the filing date of this report, based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 28, 2016

/s/ John L. Sullivan
John L. Sullivan
Chief Financial Officer, Chief Accounting
Officer and Treasurer