Western Asset Mortgage Defined Opportunity Fund Inc.
Form N-CSR
February 28, 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 811-22369

Western Asset Mortgage Defined Opportunity Fund Inc.

(Exact name of registrant as specified in charter)

620 Eighth Avenue, 49th Floor, New York, NY 10018

(Address of principal executive offices) (Zip code)

Robert I. Frenkel, Esq.

Legg Mason & Co., LLC

100 First Stamford Place

Stamford, CT 06902

(Name and address of agent for service)

Registrant s telephone number, including area code: (888)777-0102

Date of fiscal year end: December 31

Date of reporting period: December 31, 2013

ITEM 1. REPORT TO STOCKHOLDERS.

The **Annual** Report to Stockholders is filed herewith.

Annual Report December 31, 2013

WESTERN ASSET

MORTGAGE DEFINED OPPORTUNITY FUND INC. (DMO)

What s inside

Fund objectives

The Fund s primary investment objective is to provide current income. As a secondary investment objective, the Fund will seek capital appreciation.

Letter from the chairman

Dear Shareholder,

We are pleased to provide the annual report of Western Asset Mortgage Defined Opportunity Fund Inc. for the twelve-month reporting period ended December 31, 2013. Please read on for a detailed look at prevailing economic and market conditions during the Fund s reporting period and to learn how those conditions have affected Fund performance.

As always, we remain committed to providing you with excellent service and a full spectrum of investment choices. We also remain committed to supplementing the support you receive from your financial advisor. One way we accomplish this is through our website, www.lmcef.com. Here you can gain immediate access to market and investment information, including:

- Fund prices and performance,
- Market insights and commentaries from our portfolio managers, and
- A host of educational resources.

We look forward to helping you meet your financial goals.

Sincerely,

Kenneth D. Fuller

Chairman, President and Chief Executive Officer

January 31, 2014

Investment commentary

Economic review

The U.S. economy continued to grow over the twelve months ended December 31, 2013 (the reporting period). Looking back, U.S. gross domestic product (GDP)[i] growth, as reported by the U.S. Department of Commerce, was 1.1% during the first quarter of 2013. The economic expansion then accelerated, as GDP growth was 2.5% during the second quarter. This was partially due to increases in exports and non-residential fixed investments, along with a smaller decline in federal government spending versus the previous quarter. The economy gained further momentum during the third quarter, with GDP growth of 4.1%, its best reading since the fourth quarter of 2011. Stronger growth was driven, in part, by an increase in private inventory investment, a deceleration in imports and accelerating state and local government spending. The U.S. Department of Commerce s initial reading for fourth quarter 2013 GDP growth, released after the reporting period ended, was 3.2%. Slower growth was due to several factors, including a deceleration in private inventory investment, declining federal government spending and less residential fixed investments.

The U.S. job market improved during the reporting period, although unemployment remained elevated from a historical perspective. When the period began, unemployment, as reported by the U.S. Department of Labor, was 7.9%. Unemployment fell to 7.7% in February 2013 and generally edged lower over the remainder of the period, falling to 6.7% in December. This represented the lowest level since October 2008. However, falling unemployment during the period was partially due to a decline in the workforce participation rate, which was 62.8% in December, its lowest level since 1978. In addition, the number of longer-term unemployed continues to be high, as roughly 37.7% of the 10.4 million Americans looking for work in December 2013 had been out of work for more than six months.

While sales of existing-homes declined at times throughout the reporting period given rising mortgage rates, they moved higher at the end of the year. According to the National Association of Realtors (NAR), existing-home sales rose 1.0% on a seasonally adjusted basis in December 2013 versus the previous month, although they were 0.6% lower than in December 2012. However, existing homes sales in 2013 were 9.1% higher than the previous year and 2013 s sales were the strongest since 2006. In addition, the NAR reported that the median existing-home price for all housing types was $198,100 in December 2013, up 9.9% from December 2012. The inventory of homes available for sale in December 2013 was 11% lower than the previous month at a 4.6 month supply at the current sales pace but 1.6% higher than in December 2012.

The manufacturing sector expanded during the majority of the reporting period, although it experienced a temporary soft patch. Based on the Institute for Supply Management s Purchasing Managers Index (PMI)[ii], manufacturing expanded during the first four months of the reporting period. It then contracted in May 2013, with a PMI of 49.0 (a reading below 50 indicates a contraction, whereas a reading above 50 indicates an expansion). This represented the PMI s lowest reading since June 2009. However, the contraction was a short-term setback, as the PMI rose over the next seven months and peaked at 57.3 in November,

Investment commentary (cont d)

the best reading since April 2011. The PMI then moderated somewhat in December 2013, edging back to a still strong 57.0.

The Federal Reserve Board (Fed)[iii] took a number of actions as it sought to meet its dual mandate of fostering maximum employment and price stability. As has been the case since December 2008, the Fed kept the federal funds rate[iv] at a historically low range between zero and 0.25%. At its meeting in December 2012, the Fed announced that it would continue purchasing $40 billion per month of agency mortgage-backed securities (MBS), as well as initially purchasing $45 billion per month of longer-term Treasuries. At its meeting that ended on June 19, 2013, the Fed did not make any material changes to its official policy statement. However, in a press conference following the meeting, Fed Chairman Bernanke said the Committee currently anticipates that it would be appropriate to moderate the monthly pace of purchases later this year. In a surprise to many investors, at its meeting that ended on September 18, 2013, the Fed did not taper its asset purchase program and said that it decided to await more evidence that progress will be sustained before adjusting the pace of its purchases. At its meeting that concluded on December 18, 2013, the Fed announced that it would begin reducing its monthly asset purchases, saying Beginning in January 2014, the Committee will add to its holdings of agency mortgage-backed securities at a pace of $35 billion per month rather than $40 billion per month, and will add to its holdings of longer-term Treasury securities at a pace of $40 billion per month rather than $45 billion per month. At the Fed s meeting that concluded on January 29, 2014, after the reporting period ended, it announced that in February 2014 it would further taper its asset purchases, to a total of $65 billion a month ($30 billion per month of agency mortgage-backed securities and $35 billion per month of longer-term Treasury securities).

As always, thank you for your confidence in our stewardship of your assets.

Sincerely,

Kenneth D. Fuller

Chairman, President and Chief Executive Officer

January 31, 2014

All investments are subject to risk including the possible loss of principal. Past performance is no guarantee of future results.

[i] Gross domestic product (GDP) is the market value of all final goods and services produced within a country in a given period of time.

[ii] The Institute for Supply Management s PMI is based on a survey of purchasing executives who buy the raw materials for manufacturing at more than 350 companies. It offers an early reading on the health of the manufacturing sector.

[iii] The Federal Reserve Board (Fed) is responsible for the formulation of policies designed to promote economic growth, full employment, stable prices and a sustainable pattern of international trade and payments.

[iv] The federal funds rate is the rate charged by one depository institution on an overnight sale of immediately available funds (balances at the Federal Reserve) to another depository institution; the rate may vary from depository institution to depository institution and from day to day.

Fund overview

Q. What is the Fund s investment strategy?

A. The Fund s primary investment objective is to provide current income. As a secondary investment objective, the Fund will seek capital appreciation. The Fund seeks to achieve its investment objectives by investing primarily in a diverse portfolio of mortgage-backed securities (MBS), consisting primarily of non-agency residential mortgage-backed securities (RMBS) and commercial mortgage-backed securities (CMBS).

The Fund also may invest, to a lesser degree, in other permitted investments, including cash and cash equivalents; Treasury securities; non-mortgage related asset-backed securities (ABS) backed by various asset classes including, but not limited to, small balance commercial mortgages, aircrafts, automobiles, credit cards, equipment, manufactured housing, franchises, recreational vehicles and student loans; and investment grade and below investment grade fixed income securities including bonds, debentures, notes, commercial paper and other similar types of debt instruments including hybrid securities. The Fund also may invest in any newly developed mortgage-related derivatives that may hereafter become available for mortgage investing.

The Fund may invest in derivative instruments, such as options contracts, futures contracts, options on futures contracts, indexed securities, credit linked notes, credit default swaps and other swap agreements for investment, hedging and risk management purposes with certain limitations. Notwithstanding the foregoing, the Fund may invest without limitation in Treasury futures, Eurodollar futures, interest rate swaps, swaptions or similar instruments and combinations thereof.

The Fund is not limited in its ability to invest in below investment grade or illiquid securities. Below investment grade securities are securities rated below the Baa or BBB categories at the time of purchase by one or more nationally recognized statistical rating organizations or unrated securities that we determine to be of comparable quality.

At Western Asset Management Company (Western Asset), the Fund s subadviser, we utilize a fixed-income team approach, with decisions derived from interaction among various investment management sector specialists. The sector teams are comprised of Western Asset s senior portfolio management personnel, research analysts and an in-house economist. Under this team approach, management of client fixed-income portfolios will reflect a consensus of interdisciplinary views within the Western Asset organization. The individuals responsible for development of investment strategy, day-to-day portfolio management, oversight and coordination of the Fund are Stephen A. Walsh, Greg E. Handler, Anup Agarwal and Benjamin L. Hunsaker. It is anticipated that Mr. Walsh will step down as a member of the Fund s portfolio management team effective on or about March 31, 2014 and that S. Kenneth Leech will join the Fund s portfolio management team at that time. Mr. Leech has been employed by Western Asset as an investment professional for more than 20 years.

Q. What were the overall market conditions during the Fund s reporting period?

A. The spread sectors (non-Treasuries) experienced several periods of heightened risk aversion but largely outperformed equal-duration[i] Treasuries over the twelve months ended December 31, 2013. However, most

Fund overview (cont d)

spread sectors posted negative absolute returns during the reporting period. Risk aversion was prevalent at times given mixed economic data, geopolitical issues, signs of shifting monetary policy by the Federal Reserve Board (Fed[ii]) and the U.S government s sixteen-day partial shutdown which ended on October 16, 2013.

Both short- and long-term Treasury yields moved higher during the twelve months ended December 31, 2013. Two-year Treasury yields rose from 0.25% at the beginning of the period to 0.38% at the end of the period. Their peak of 0.52% occurred on September 5, 2013 and they were as low as 0.20% in late April and early May 2013. Ten-year Treasury yields were 1.78% at the beginning of the period and reached a low of 1.66% in early May 2013. Their peak of 3.04% occurred on December 31, 2013, as fixed-income investors reacted negatively to the Fed s announcement that it would start tapering its asset purchase program. This was the highest level for the ten-year Treasury since July 2011. All told, the Barclays U.S. Aggregate Index[iii] returned -2.02% for the twelve months ended December 31, 2013, its first calendar year decline since 1999.

As was the case for the overall fixed-income market, agency MBS generated poor results during the reporting period. Agency MBS were negatively impacted by rising interest rates and expectations that the Fed would start paring it asset purchase program. During the twelve months ended December 31, 2013, the overall agency MBS market, as measured by the Barclays U.S. Mortgage Backed Securities Index[iv], returned -1.41%. RMBS generated significantly better results, with the BofA Merrill Lynch U.S. Floating Rate Home Equity Loan Asset Backed Securities Index[v] returning 5.10%. RMBS were supported by a lack of new supply and generally positive demand from investors looking to generate incremental yield in the low interest rate environment. While CMBS produced lackluster results during the twelve months ended December 31, 2013, they outperformed the overall fixed-income market, as the Barclays CMBS Index[vi] returned 0.18%. CMBS also benefited from overall positive demand.

Q. How did we respond to these changing market conditions?

A. We made several adjustments to the Fund s portfolio during the reporting period. We reduced our exposure to prime and Alt-A non-agency MBS and increased our exposure to subprime non-agency MBS. We also slightly increased our exposure to investment grade corporate bonds and increased the Fund s allocation to emerging market credit.

During the reporting period, we utilized credit default swaps on investment grade corporate bond and CMBS indices to hedge downside market risk. They detracted from performance during the period.

Finally, we actively utilized leverage in the Fund. When the reporting period began, the Fund s leverage as a percentage of gross assets was roughly 10%. At the end of the period, approximately 34% of the Fund s gross assets were levered. The use of leverage was beneficial for the Fund s absolute performance during the period.

Performance review

For the twelve months ended December 31, 2013, Western Asset Mortgage Defined Opportunity Fund Inc. returned 15.65% based on its net asset value (NAV[vii]) and

12.14% based on its New York Stock Exchange (NYSE) market price per share. The Fund s unmanaged benchmark, the BofA Merrill Lynch U.S. Floating Rate Home Equity Loan Asset Backed Securities Index, returned 5.10% for the same period. The Lipper U.S. Mortgage Closed-End Funds Category Average[viii] returned 2.71% over the same time frame. Please note that Lipper performance returns are based on each fund s NAV.

During the twelve-month period, the Fund made distributions to shareholders totaling $3.70 per share*. The performance table shows the Fund s twelve-month total return based on its NAV and market price as of December 31, 2013. **Past performance is no guarantee of future results.**

Performance Snapshot as of December 31, 2013

Price Per Share	12-Month Total Return**
$23.78 (NAV)	15.65%
$23.18 (Market Price)	12.14%

All figures represent past performance and are not a guarantee of future results.

**** Total returns are based on changes in NAV or market price, respectively. Returns reflect the deduction of a all Fund expenses, including management fees, operating expenses, and other Fund expenses. Returns do not reflect the deduction of brokerage commissions or taxes that investors may pay on distributions or the sale of shares.**

Total return assumes the reinvestment of all distributions at NAV.

Total return assumes the reinvestment of all distributions in additional shares in accordance with the Fund s Dividend Reinvestment Plan.

Q. What were the leading contributors to performance?

A. On an absolute basis, the leading contributor to the Fund s performance during the reporting period was its allocation to non-agency MBS. They were supported by attractive yields, continued principal paydowns and signs of improvement in the housing market. The leading subsectors were subprime, followed by Alt-A and option adjustable-rate mortgages.

The Fund s allocation to high-yield corporate bonds was also beneficial for performance. Their spreads narrowed as corporate profits often exceeded expectations, investor demand was strong and defaults remained low.

Q. What were the leading detractors from performance?

A. The largest detractor to the Fund s absolute performance during the reporting period was its allocation to emerging market credit. The emerging market asset class performed poorly given moderating growth in many developing countries, generally falling commodity prices and rising U.S. interest rates.

Elsewhere, several of the Fund s investment grade corporate bonds, primarily in the mining sector, also detracted from results during the twelve-month reporting period.

Looking for additional information?

The Fund is traded under the symbol DMO and its closing market price is available in most newspapers under the NYSE listings. The daily NAV is available on-line under the symbol XDMOX on most financial web-

* Distributions paid by the Fund may be comprised of income, capital gains and/or return of capital. For the character of distributions paid during the fiscal year ended December 31, 2013, please refer to page 25 of this report.

Fund overview (cont d)

sites. *Barron s* and the *Wall Street Journal s* Monday edition both carry closed-end fund tables that provide additional information. In addition, the Fund issues a quarterly press release that can be found on most major financial websites as well as www.lmcef.com.

In a continuing effort to provide information concerning the Fund, shareholders may call 1-888-777-0102 (toll free), Monday through Friday from 8:00 a.m. to 5:30 p.m. Eastern Time, for the Fund s current NAV, market price and other information.

Thank you for your investment in Western Asset Mortgage Defined Opportunity Fund Inc. As always, we appreciate that you have chosen us to manage your assets and we remain focused on achieving the Fund s investment goals.

Sincerely,

Western Asset Management Company

January 24, 2014

RISKS: The Fund s investments are subject to liquidity risk, credit risk, inflation risk and interest rate risk. As interest rates rise, bond prices fall, reducing the value of the Fund s fixed-income holdings. The Fund may invest in lower-rated high-yield bonds which are subject to greater credit risk (risk of default) than higher-rated obligations. Mortgage-backed securities are subject to additional risks, including prepayment risk, which can limit the potential gains in a declining interest rate environment. The Fund may invest in securities backed by subprime or distressed mortgages which involve a higher degree of risk and chance of loss. Leverage may result in greater volatility of NAV and the market price of common shares and increases a shareholder s risk of loss. The Fund may make significant investments in derivative instruments. Derivative instruments can be illiquid, may disproportionately increase losses, and have a potentially large impact on Fund performance. The Fund is not guaranteed by the U.S. government, the U.S. Treasury or any government agency.

All investments are subject to risk including the possible loss of principal. Past performance is no guarantee of future results. All index performance reflects no deduction for fees, expenses or taxes. Please note that an investor cannot invest directly in an index.

The information provided is not intended to be a forecast of future events, a guarantee of future results or investment advice. Views expressed may differ from those of the firm as a whole.

[i] Duration is the measure of the price sensitivity of a fixed-income security to an interest rate change of 100 basis points. Calculation is based on the weighted average of the present values for all cash flows.

[ii] The Federal Reserve Board (Fed) is responsible for the formulation of policies designed to promote economic growth, full employment, stable prices, and a sustainable pattern of international trade and payments.

[iii] The Barclays U.S. Aggregate Index is a broad-based bond index comprised of government, corporate, mortgage- and asset-backed issues, rated investment grade or higher, and having at least one year to maturity.

[iv] The Barclays U.S. Mortgage-Backed Securities Index is an unmanaged index composed of agency mortgage-backed pass-through securities, both fixed-rate and hybrid adjustable rate mortgages, issued by the Government National Mortgage Association, Federal National Mortgage Association and Federal Home Loan Mortgage Corporation.

[v] The BofA Merrill Lynch U.S. Floating Rate Home Equity Loan Asset Backed Securities Index tracks the performance of U.S. dollar-denominated investment grade floating-rate asset-backed securities collateralized by home equity loans publicly issued in the U.S. domestic market. Qualifying securities must have an investment grade rating, at least one year remaining to final stated maturity, a floating-rate coupon, and an original deal size for the collateral group of at least $250 million.

[vi] The Barclays CMBS Index measures the performance of the commercial mortgage-backed securities market.

[vii] Net asset value (NAV) is calculated by subtracting total liabilities and outstanding preferred stock (if any) from the closing value of all securities held by the Fund (plus all other assets) and dividing the result (total investments) by the total number of the common shares outstanding. The NAV fluctuates with changes in the market prices of securities in which the Fund has invested. However, the price at which an investor may buy or sell shares of the Fund is the Fund s market price as determined by supply of and demand for the Fund s shares.

[viii] Lipper, Inc., a wholly-owned subsidiary of Reuters, provides independent insight on global collective investments. Returns are based on the twelve-month period ended December 31, 2013, including the reinvestment of all distributions, including returns of capital, if any, calculated among the 12 funds in the Fund s Lipper category.

Fund at a glance (unaudited)

Investment breakdown (%) as a percent of total investments

The bar graph above represents the composition of the Fund s investments as of December 31, 2013 and December 31, 2012. This bar graph does not include derivatives, such as futures contracts and swap contracts. The Fund is actively managed. As a result, the composition of the Fund s investments is subject to change at any time.

Spread duration (unaudited)

Economic exposure December 31, 2013

Total Spread Duration

DMO	4.48 years
Benchmark	3.94 years

Spread duration measures the sensitivity to changes in spreads. The spread over Treasuries is the annual risk-premium demanded by investors to hold non-Treasury securities. Spread duration is quantified as the % change in price resulting from a 100 basis points change in spreads. For a security with positive spread duration, an increase in spreads would result in a price decline and a decline in spreads would result in a price increase. This chart highlights the market sector exposure of the Fund s sectors relative to the selected benchmark sectors as of the end of the reporting period.

ABS	Asset-Backed Securities
Benchmark	BofA Merrill Lynch U.S. Floating Rate Home Equity Loan Asset-Backed Securities Index
DMO	Western Asset Mortgage Defined Opportunity Fund Inc.
EM	Emerging Markets
IG Credit	Investment Grade Credit
MBS	Mortgage-Backed Securities

Effective duration (unaudited)

Interest rate exposure December 31, 2013

Total Effective Duration

DMO	3.54 years
Benchmark	0.05 years

Effective duration measures the sensitivity to changes in relevant interest rates. Effective duration is quantified as the % change in price resulting from a 100 basis points change in interest rates. For a security with positive effective duration, an increase in interest rates would result in a price decline and a decline in interest rates would result in a price increase. This chart highlights the interest rate exposure of the Fund s sectors relative to the selected benchmark sectors as of the end of the reporting period.

ABS	Asset-Backed Securities
Benchmark	BofA Merrill Lynch U.S. Floating Rate Home Equity Loan Asset-Backed Securities Index
DMO	Western Asset Mortgage Defined Opportunity Fund Inc.
EM	Emerging Markets
IG Credit	Investment Grade Credit
MBS	Mortgage-Backed Securities

Schedule of investments

December 31, 2013

Western Asset Mortgage Defined Opportunity Fund Inc.

Security	Rate	Maturity Date	Face Amount	Value
Residential Mortgage-Backed Securities 132.2%				
ABFS Mortgage Loan Trust, 2002-3 M1	5.902%	9/15/33	$ 1,332,926	$ 1,043,208
ABN Amro Mortgage Corp., 2003-9 B3	4.516%	8/25/18	97,581	82,610 [(a)]
Accredited Mortgage Loan Trust, 2003-3 A1	5.210%	1/25/34	1,465,056	1,409,294
ACE Securities Corp., 2003-NC1 M2	3.015%	7/25/33	370,309	179,649 [(b)]
AFC Home Equity Loan Trust, 2003-3 1A	0.915%	10/25/30	2,598,382	2,215,487 [(a)(b)]
American Home Mortgage Assets, 2005-2 2A1A	3.059%	1/25/36	2,063,435	1,426,180 [(b)(c)]
American Home Mortgage Assets, 2006-4 1A12	0.375%	10/25/46	2,890,955	1,886,475 [(b)(c)]
American Home Mortgage Investment Trust, 2005-1 6A	2.349%	6/25/45	138,504	130,011 [(b)(c)]
American Home Mortgage Investment Trust, 2005-SD1 1A1	0.615%	9/25/35	392,201	252,633 [(a)(b)(c)]
American Home Mortgage Investment Trust, 2007-1 GA1C	0.355%	5/25/47	1,922,227	1,381,724 [(b)(c)]
American Home Mortgage Investment Trust, 2007-2 11A1	0.395%	3/25/47	1,500,106	948,733 [(b)(c)]
American Home Mortgage Investment Trust, 2007-2 2A	0.965%	3/25/47	13,635,676	2,029,398 [(b)]
American Home Mortgage Investment Trust, 2007-A 4A	0.615%	7/25/46	2,827,671	646,144 [(a)(b)]
Ameriquest Mortgage Securities Inc., 2002-4 M3	5.415%	2/25/33	1,403,728	1,214,674 [(b)]
Ameriquest Mortgage Securities Inc., 2002-D M1	3.915%	2/25/33	2,220,000	1,677,820 [(b)]
Argent Securities Inc., 2005-W5 A2D	0.485%	1/25/36	4,712,517	3,130,723 [(b)]
Argent Securities Inc., 2006-M2 A2B	0.275%	9/25/36	3,079,581	1,243,741 [(b)]
Argent Securities Inc., 2006-M2 A2C	0.315%	9/25/36	2,723,790	1,103,862