Macquarie Global Infrastructure Total Return Fund Inc.
Form N-CSRS
August 05, 2016

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: 811-21765

Macquarie Global Infrastructure Total Return Fund Inc.
(Exact name of registrant as specified in charter)

125 West 55th Street, New York, NY 10019
(Address of principal executive offices) (Zip code)

Sareena Khwaja-Dixon, Esq.
ALPS Fund Services, Inc.
1290 Broadway, Suite 1100
Denver, Colorado 80203
(Name and address of agent for service)

Registrant's telephone number, including area code: (303) 623-2577

Date of fiscal year end: November 30

Date of reporting period: December 1, 2015 - May 31, 2016

Item 1. Reports to Stockholders.

Section 19(b) Disclosure
MAY 31, 2016 (unaudited)

Macquarie Global Infrastructure Total Return Fund Inc. ("MGU" or the “Fund”), acting pursuant to a Securities and Exchange Commission (“SEC”) exemptive order and with the approval of the Fund’s Board of Directors (the “Board”), has adopted a plan, consistent with its investment objectives and policies, to support a level distribution of income, capital gains and/or return of capital (the “Plan”). In accordance with the Plan, the Fund currently distributes $0.37 per share on a quarterly basis.

The fixed amount distributed per share is subject to change at the discretion of the Fund’s Board. Under the Plan, the Fund will distribute all available investment income to its shareholders, consistent with its primary investment objectives and as required by the Internal Revenue Code of 1986, as amended (the “Code”). If sufficient investment income is not available on a quarterly basis, the Fund will distribute long-term capital gains and/or return of capital to shareholders in order to maintain a level distribution. Each quarterly distribution to shareholders is expected to be at the fixed amount established by the Board, except for extraordinary distributions and potential distribution rate increases or decreases to enable the Fund to comply with the distribution requirements imposed by the Code.

Shareholders should not draw any conclusions about the Fund’s investment performance from the amount of these distributions or from the terms of the Plan. The Fund’s total investment return on net asset value is presented in its financial highlights table.

The Board may amend, suspend or terminate the Fund’s Plan without prior notice if it deems such action to be in the best interest of the Fund or its shareholders. The suspension or termination of the Plan could have the effect of creating a trading discount (if the Fund’s stock is trading at or above net asset value) or widening an existing trading discount. The Fund is subject to risks that could have an adverse impact on its ability to maintain level distributions. Examples of potential risks include, but are not limited to, economic downturns impacting the markets, increased market volatility, companies suspending or decreasing corporate dividend distributions and changes in the Code. Please refer to the Fund’s prospectus for a more complete description of its risks.

A cumulative summary of the Section 19(a) notices for the Fund’s current fiscal period, if applicable, are included in Additional Information. Section 19(a) notices for the Fund, as applicable, are available on the Fund website www.macquarie.com/mgu.

CAUTION REGARDING FORWARD-LOOKING STATEMENTS AND PAST PERFORMANCE

This Semi-Annual Report contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended. Forward-looking statements include statements regarding the goals, beliefs, plans or current expectations of Macquarie Capital Investment Management LLC ("MCIM" or "Manager"), taking into account the information currently available to them. Forward-looking statements include all statements that do not relate solely to current or historical facts. For example, forward-looking statements may include the use of words such as "anticipate," "estimate," "intend," "expect," "believe," "plan," "may," "should," "would" or other words that convey uncertain events or outcomes. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the Fund's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Past performance is not a reliable indication of future performance. When evaluating the information included in this Semi-Annual Report, you are cautioned not to place undue reliance on these forward looking statements, which reflect the judgment of MCIM only as of the date hereof. We undertake no obligation to publicly revise or update these forward-looking statements to reflect events and circumstances that arise after the date hereof.

Capitalized terms used but not defined herein have the meaning assigned to them in the Fund's Prospectus.

Macquarie Global Infrastructure Total Return Fund Inc. is not an authorised deposit-taking institution for the purposes of the Banking Act 1959 (Commonwealth of Australia). Macquarie Global Infrastructure Total Return Fund Inc.'s obligations do not represent deposits or other liabilities of Macquarie Bank Limited ABN 46 008 583 542 ("MBL"). MBL does not guarantee or otherwise provide assurance in respect of the obligations of Macquarie Global Infrastructure Total Return Fund Inc., unless noted otherwise.

Stockholder Letter
MAY 31, 2016 (unaudited)

Introduction

We are pleased to present this Semi-Annual report to the shareholders of Macquarie Global Infrastructure Total Return Fund Inc. ("MGU" or "Fund") for the six months ended May 31, 2016 ("Period"). The Fund commenced operations and began trading on the New York Stock Exchange on August 26, 2005.

Performance & Portfolio Review

Global listed infrastructure securities strongly outperformed global equities which were down 1.6% (as per the MSCI World Index in local currency terms) in the Period.

The Period began with significant moves by central banks, particularly the U.S. Federal Reserve (Fed) which, as generally expected, raised its benchmark rate by 25 basis points – the first rate hike since 2006. The rate hike marks a significant milestone in the evolution of U.S. monetary policy, and its impact will be felt for some time. Expectations of higher U.S. rates have driven strength in the U.S. dollar, impacting emerging markets, which have suffered from capital outflows and U.S. dollar liabilities. The European Central Bank (ECB) eased policy, cutting the deposit rate further into negative territory (to -0.30%) and explicitly lengthening the timeframe for bond purchases to at least March 2017. Markets had expected more significant easing and were very disappointed with the announcement, again highlighting the amount of central bank intervention that is priced into global markets.

The Chinese currency was weaker in December, indicating concern about the economy and echoing devaluation moves that sparked market weakness in August. Most commodities remained weak, due to a combination of increased supply, weak demand, and the strong U.S. dollar (in which most commodities are priced).

Markets were turbulent moving into 2016, with sentiment moving on significantly from the calm that allowed the Fed to raise rates in December. The downtrend continued in commodities, with oil falling as much as 28% intra-month before rebounding.

Developments in China were also a key focus. The central Chinese bank's slow depreciation of the currency was a key trigger, causing markets to become increasingly skeptical of the Chinese economy, with reports of significant outflows and a decline in central bank reserves. Fears over a significant devaluation of the Chinese currency (CNY) subsided somewhat in February, after the People's Bank of China governor indicated that there was "no basis for devaluation", after not publicly commenting for six months. The weakening CNY had troubled markets for weeks and was a key driver of the poor sentiment to start 2016, as there was no clarity on the direction or motives behind the moves.

Following significant volatility, commodity markets stabilized later in the Period. A proposed OPEC production freeze (at historically high volumes) didn't get buy-in from key countries such as Iran, but the possibility of a deal and the better sentiment helped put a temporary floor under the oil price, which rose above US $30 by month end. Oil prices continued their rebound in March and April, with a willingness to cut or freeze production from some OPEC members buoying optimism that some of the excess supply may be curtailed. The boost in the oil price supported energy-related markets, but commodity prices overall remain subdued and below profitable levels for many producers.

Late in the first quarter of 2016, the Fed also appeared more supportive at its Federal Open Market Committee (FOMC) meeting, and in subsequent comments from Chair Janet Yellen. The Fed emphasized the external environment and financial conditions, lowered its confidence in the inflation outlook, and cut the outlook for interest rate hikes from 4 to 2 for this year (the market was already pricing less than 1 for 2016). Overall, the Fed's tone was very accommodative, which has reduced investors' concerns that policymakers were less willing to support markets.

Additionally, the risk of a UK departure from the EU continued to hang over some markets. Through most of May, polls and bookmaker pricing were heavily weighted to "remain", with the implied probability of an "exit" vote at around only 15%. However, late in the month, polls showed a resurgence in the "exit" vote, which pressured the Pound and supported UK government bond yields.

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MAY 31, 2016 (unaudited)

For the Six-Month Period Ended May 31, 2016[1]	Total Return (%)[2]
Macquarie Global Infrastructure Total Return Fund – NAV	7.79
Macquarie Global Infrastructure Total Return Fund – Market Price	11.70
S&P Global Infrastructure Index (Net Total Return)[3]	7.35
Macquarie Global Infrastructure Index[4] (“MGII”)	9.26
MSCI World Index (Net Total Return)[5]	0.01

One cannot invest directly in an index.
Past performance is not indicative of future results.

The major positive contributors to the Fund's performance during the Period were:

- The strong performance of the Electric Utility sector;
- The Toll Road sector; and
- The strong rebound from the Pipeline sector.

The negative contributors were:

- Underperformance in Electricity Generation sector and
- Weakness in the Seaport sector.

Let’s look at these reasons in further detail.

Electric Utility

Within the Electric Utility sector, North American utilities such as NextEra Energy, Duke Energy and Edison International were the largest contributors. While there was company specific news which led to differentiation within the space, the primary catalyst for high returns among U.S. utilities was a falling 10 year bond and a general increase in risk aversion.

Toll Roads

Australian Toll Road owner and operator Transurban (TCL) was a strong performer as the company made several significant announcements in late 2015.

TCL and the Virginia Department of Transportation have reached agreement on a development framework to progress the 395 Express Lanes project. The plan includes an 11 kilometer extension north to the I-395 and Washington DC border. The project would significantly reduce congestion in the I-395 corridor and increase capacity by adding an additional high occupancy vehicle lane to make three reversible lanes on I-395.

While this is a relatively small project for the company, it is yet another example of the "option value" in TCL’s network (i.e. the ability to propose value-enhancing projects to governments which should improve the flow of traffic).

Unless otherwise indicated, all references to currency are to USD.

(1) Calculated on a total return basis, adjusting for distributions and assuming dividend reinvestment.

(2) Source: ALPS Fund Services Inc., Bloomberg L.P.

(3) The S&P Global Infrastructure Index (Net Total Return) consists of approximately 75 infrastructure/utilities stocks and is selected by Standard & Poor's Financial Services LLC.

(4) The Macquarie Global Infrastructure Index consists of approximately 250 infrastructure/utilities stocks in the FTSE Global All-Cap Index.

(5) The MSCI World Index (Net Total Return) is a stock market index of approximately 1600 'world' stocks maintained by MSCI Inc. The index includes a collection of stocks of all the developed markets in the world, as defined by MSCI.

Transurban also announced the purchase of AirportlinkM7 in Brisbane for A$1.87bn and a $1bn equity raising. TCL paid only 51% of the original construction cost. We believe the asset fits with the company's strategy of enhancing its network position and provides new opportunities for network optimization. The market response to the acquisition was positive.

Pipelines

TransCanada had an auspicious start to the period as it exercised its option to acquire an additional interest in Bruce Power for C$236m from the Ontario Municipal Employees Retirement System (OMERS). TransCanada and OMERS will each hold a 48.5% interest in Bruce Power, which in turn announced an agreement with the Ontario Independent Electricity System Operator (IESO) to extend the operating life of its facility to 2064. Magellan Midstream Partners was also up strongly, amid a general rebound in the sector in 2016. Columbia Pipeline Group also performed well after an acquisition announcement by TransCanada for US$13bn in an all cash transaction. We view the combination of assets favorably with Columbia's natural gas pipeline assets providing TransCanada with a strategic footprint in the Marcellus and Utica shale plays, adjacent to its existing network. Estimates of the combined near-term project portfolio are around US$23bn which, combined with operational synergies, supports TransCanada's 8-10% annual dividend growth goal to 2020. Buckeye was another contributor as the company reported strong 4Q15 results ahead of street expectations. Management's outlook for 2016 includes continued quarterly distribution increases and no plans to issue debt.

Electricity Generation

Chinese electricity generation stocks Huadian Fuxin and Longyuan Power underperformed following reports of higher curtailment, that is, electricity generated which is unable to access the network. In addition, generation was lower due to weaker than usual wind speeds. The Chinese government is well aware of curtailment issues, and has tabled a draft proposal to guarantee minimum utilization hours for wind farms.

Seaports

Positions in the Seaport sector also detracted in the Period. Hutchison Port declined late in the Period after the company announced debt reduction plans. Hutchison Port Holdings Trust announced it will target to improve its core debt metrics over the 5 year period from 2017 to 2021 and this will entail repaying a minimum of HK$1bn of debt annually beginning in 2017. The market viewed this negatively as it means the company will have to cut its dividend in 2017.

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China Merchants Port Holdings also underperformed as the market looked negatively upon its purchase of a 21% stake in Dalian Port in January. The purchase was viewed as expensive by many leading to concerns regarding future acquisitions by the company.

Leverage

Leverage made a positive contribution to the Fund's return during the Period.

As of May 31, 2016, the Fund had USD 88 million and EUR 32 million in leverage outstanding. At Period-end, the Fund's leverage was 28.4% of its Total Assets, which is within the limit outlined in the Fund's Prospectus. To avoid magnifying the USD exposure due to leverage, the Fund also borrows in Euro to help offset the currency exposure of the investments with the currency of the borrowings.

In determining the leverage level for the Fund, we balance the cost of leverage against our views of the longer term potential for enhanced yield and capital returns.

Performance Relative to reference benchmarks

The Fund, which is not managed against any benchmark, outperformed the S&P Global Infrastructure Index (Net Total Return) and the MSCI World Index (Net Total Return). The Fund under performed against the Macquarie Global Infrastructure Index ("MGII"). The main contributors to the Fund's outperformance were the benefit of leverage and stock selection across the portfolio.

Fund Diversification by Country & Sector

At the end of the Period, the Fund held positions in 51 global infrastructure stocks representing 16 countries and 11 infrastructure sectors.

The table below shows the top ten holdings in the Fund as of May 31, 2016.(6)

Rank	Stock	Country	Infrastructure Sector(7)	%(8)
1	Enbridge Inc	Canada	Pipelines	5.8
2	Groupe Eurotunnel	France	Rail / Other Transportation	5.5
3	Sempra Energy	United States	Electricity And Gas Distribution	5.0
4	Transurban Group	Australia	Toll Roads	4.3
5	Abertis Infraestructuras	Spain	Toll Roads	4.1
6	TransCanada	Canada	Pipelines	4.1
7	Duke Energy	United States	Electric Utility	3.7
8	National Grid	United Kingdom	Electricity Transmission	3.4
9	NextEra Energy	United States	Electric Utility	3.2
10	Kinder Morgan	United States	Pipelines	2.9

(6) Subject to change.
(7)

Industry sectors are based on the Manager's own evaluation of issuers and industries, and do not necessarily track any standard industry or sector classification. Classifications are made by the Investment team and based on the primary business sector of the issuer.

(8) Based on Total Assets as defined in the Prospectus.

The tables below show the structure of the portfolio by country and sector.[6]

Country	% of Fund on May 31, 2016[8]	% Point Change over Period	% of Fund on November 30, 2015[8]
United States	35.4	(6.7)	42.1
Canada	11.4	2.7	8.7
Spain	9.2	3.9	5.3
China	7.3	(0.3)	7.6
France	6.9	(0.9)	7.8
Australia	6.6	(1.8)	8.4
United Kingdom	5.5	(0.3)	5.8
Italy	5.0	1.2	3.8
Germany	1.9	(0.1)	2.0
Switzerland	1.8	0.1	1.7
Singapore	1.7	(0.5)	2.2
Japan	1.0	1.0	—
Mexico	0.8	—	0.8
Netherlands	0.8	0.8	—
Brazil	0.5	—	0.5
Luxembourg	0.2	—	0.2
Poland	—	(0.3)	0.3
Other Net Assets	4.0	1.2	2.8

Infrastructure Sector[7]	% of Fund on May 31, 2016[8]	% Point Change over Period	% of Fund on November 30, 2015[8]
Pipelines	27.8	0.9	26.9
Electric Utility	16.4	0.0	16.4
Toll Roads	13.2	(2.6)	15.8
Seaports	8.3	0.1	8.2
Electricity and Gas Distribution	7.5	(1.0)	8.5
Rail / Other Transportation	6.6	2.5	4.1
Airports	5.1	1.3	3.8
Communications	4.2	(0.5)	4.7
Electricity Transmission	3.4	(1.0)	4.4
Water	2.0	(0.6)	2.6
Electricity Generation	1.5	(0.3)	1.8
Other Net Assets	4.0	1.2	2.8

(6) Subject to change.

(7)

Industry sectors are based on the Manager's own evaluation of issuers and industries, and do not necessarily track any standard industry or sector classification. Classifications are made by the Investment team and based on the primary business sector of the issuer.

(8) Based on Total Assets as defined in the Prospectus.

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Distributions

The Fund maintained its quarterly distribution to $0.37 per share during this Period.

Based on current estimates, we anticipate this has been paid from net income and capital gains. The final determination of the source of all distributions in 2016, including the percentage of qualified dividend income, will be made by the Fund after December 31, 2016.

Outlook

The Fed put rate hikes back on the medium term agenda, reflecting its desire to move further away from zero interest rates. The Fed needs markets to remain supportive to continue to underpin growth. While it may take opportunities to raise rates, we do not expect it to do so aggressively.

We continue to monitor the U.S. Dollar (as a key indicator of financial conditions) and developments in China, where fiscal and monetary stimulus, which boosted sentiment early this year, has begun to fade. We expect markets to reflect a contained environment, where volatility is likely but will be met by continued support from central banks.

The infrastructure assets owned and operated by the diversified range of infrastructure companies in the portfolio continue to perform well. The portfolio strategy is little changed overall. Fund positioning continues to exhibit a diversity of exposures across different geographies and sectors. Recent Fund performance partially reflects some unwinding of the significant discounts to valuation we observed in the pipeline sector at the start of the calendar year.

Conclusion

The Fund's investment strategy is to invest in the listed securities of companies globally that own and/or operate infrastructure assets that we believe provide essential services, have strong strategic positions, and are well positioned to generate sustainable and growing cash flow streams for shareholders from their infrastructure assets.

We believe that MGU provides investors with an attractive vehicle to access the broad global universe of listed infrastructure securities. We continue to appreciate your investment in the Fund. For any questions or comments you may have, please call us at 1-800-910-1434 or visit us online at www.macquarie.com/mgu.

Yours sincerely,

Brad Frishberg
Chief Executive Officer
Co-Portfolio Manager

Jonathon Ong
Co-Portfolio Manager

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Schedule of Investments
MAY 31, 2016 (unaudited)
(Expressed in U.S. Dollars)

Description	Shares	Value $
COMMON STOCKS - 127.44%		
Australia - 9.21%		
APA Group[1]	950,665	$6,025,808
Sydney Airport	809,353	4,141,517
Transurban Group[1]	2,133,752	18,583,143
		28,750,468
Brazil - 0.70%		
Prumo Logistica SA[1][2]	1,273,249	2,173,995
Canada - 15.85%		
Enbridge, Inc.	636,960	25,393,883
TransCanada Corp.	429,803	17,810,268
Veresen, Inc.[1]	799,600	