Macquarie Global Infrastructure Total Return Fund Inc.
Form N-CSR
February 04, 2011

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)

JoEllen L. Legg, Esq.

ALPS Fund Services, Inc.

1290 Broadway, Suite 1100

Denver, CO 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, 2009 - November 30, 2010

Item 1. **Reports to Stockholders.**

CAUTION REGARDING FORWARD-LOOKING

STATEMENTS AND PAST PERFORMANCE

This Annual Report contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933. Forward-looking statements include statements regarding the goals, beliefs, plans or current expectations of Macquarie Capital Investment Management LLC (MCIM or Manager) and its respective representatives, 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 convey uncertainty of future 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 Annual Report, you are cautioned not to place undue reliance on these forward looking statements, which reflect the judgment of MCIM and its respective representatives 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.

Investments in the Macquarie Global Infrastructure Total Return Fund Inc. (MGU or Fund) are not deposits with or other liabilities of Macquarie Bank Limited ABN 46 008 583 542 (MBL) nor any Macquarie Group company and are subject to investment risk, including possible delays in repayment and loss of income and principal invested. Neither MBL nor any other member company of the Macquarie Group guarantees the performance of the Fund or the repayment of capital from the Fund or any particular rate of return.

Shareholder Letter

NOVEMBER 30, 2010 (unaudited)

Introduction

We are pleased to present this annual report to the shareholders of Macquarie Global Infrastructure Total Return Fund Inc. (MGU or Fund) for the twelve months (Fund Year) ended November 30, 2010 (Period). The Fund commenced operations and began trading on the New York Stock Exchange on August 26, 2005.

Performance &

Portfolio Review

The NAV total return for the Fund and certain indices for the Period are summarized in the table below. Although the Fund is not managed toward any benchmark, we believe the following indices offer a helpful frame of reference.

For the Year Ended November 30, 2010[1]	Total Returns (%)[2]
Macquarie Global Infrastructure Total Return Fund NAV	12.05%
Macquarie Global Infrastructure Total Return Fund Market Price	16.98%
Macquarie Global Infrastructure Index[3] (MGII)	2.01%
MSCI Net World USD Total Return Index[4]	5.98%

There were a number of drivers of the Fund s positive return during the Period:

- Strong recovery of listed infrastructure securities in global equity markets;
- Consistent positive performance of Pipelines, which includes holdings in U.S.-domiciled Master Limited Partnerships (MLPs);
- Strong performance of transportation infrastructure stocks; and
- The Fund s leverage which magnified the Fund s positive return Let s look at these reasons in further detail.

Strong Recovery of Listed

Infrastructure Securities in

global equity markets.

Following the severe market dislocation in 2008 through to March 2009, global listed infrastructure participated in the market rally that continued through much of the Period. Credit markets improved significantly, and investors began to allocate back into listed infrastructure and broader equities.

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: Bloomberg L.P.

(3) The Macquarie Global Infrastructure Index consists of approximately 238 infrastructure/utilities stocks in the FTSE Global All-Cap Index, and has a combined market capitalization after investability weighting of approximately $1.3 trillion as of November 30, 2010.

(4) The MSCI World is a stock market index of 1500 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. This secondary index is listed for informational purposes. The index is denominated in U.S. Dollars.

Overall, investor sentiment improved on generally stronger economic data and optimism that the worst had passed .

After lagging broader global equity markets early in 2010, the infrastructure sector outperformed for the remainder of the period. In addition to the sound operating results of many infrastructure companies, the sector also benefitted from the ongoing low interest rate environment which is supportive of the valuation of long duration infrastructure assets.

The regulated and contracted infrastructure sectors generally performed well as the market s focus on yield increased with interest rates anchored around record lows. These companies often have higher distribution yields - based on their stable businesses with high cash generating assets - and thus were keenly sought in the lower interest rate environment. A number of infrastructure companies were also able to take advantage of the low interest rate environment to lock in long term financing at very low rates.

The equity market consolidated towards the end of the period, following the Federal Reserve s announcement of additional quantitative easing, on renewed European sovereign debt concerns and policy tightening in China.

There was some corporate activity in the infrastructure sector during the year where the transaction prices were at a material premium to the listed market and were a tangible recognition by sophisticated investors of some of the inherent value within the listed infrastructure sector.

Pipelines sector

The Pipelines sector was the Fund s top sector contributor to performance for the Period. The sector performed strongly over the year, led by U.S.-listed MLPs such as Enterprise Product Partners, Magellan Midstream Partners, and Energy Transfer Partners, and Canada s Enbridge Inc.

These entities own pipeline and associated energy infrastructure assets. They strongly outperformed the broader infrastructure sector over the Period. They have continued to benefit from their solid operational performance and reliable dividend generation resulting from predictable and defensive cash flows. Their attractive yields have been keenly sought by investors in the prevailing low interest rate environment.

Several of these stocks are also taking advantage of organic growth opportunities to invest in new projects which are expected to generate attractive, low risk returns above their cost of capital.

Shareholder Letter

NOVEMBER 30, 2010 (unaudited)

We reduced exposure in several securities after strong performance and switched into stocks which, we believed, were more attractively priced.

Transportation Infrastructure

The transportation infrastructure sectors benefitted from volume growth over the year and contributed meaningfully to total return.

The Toll Roads sector was led by Intoll Group in Australia, China s Jiangsu Expressway, France s Vinci, and Australian s Transurban. Intoll accepted a takeover bid at a 42% premium, which realized the valuation upside we had identified in this stock(5). Jiangsu experienced solid traffic growth and, later in the year, there were market expectations that the government may approve a toll increase. Vinci also posted gains due to a steady improvement in traffic on its French motorways and the contracting business showing strong signs of a recovery. Despite the Board s rejection of a takeover offer, Transurban performed well as it continued to report solid traffic growth and earnings.

Seaports benefited from improved sentiment about the economic outlook and expected container volume growth. Both Hamburger Hafen und Logistik, which operates at the Port of Hamburg in Germany,

[5] Source: Intoll Group

([6] Source: National Grid Plc

and China Merchants, which owns a number of Chinese and Asian ports, experienced strong growth in container volumes, in keeping with the rebound in global trade.

The Airports sector was buoyed by the steady rebound in passenger traffic. Towards year-end, the International Air Transport Association reported that global passenger traffic had returned to pre-recession levels. Among the stronger stock performers were Fraport in Germany, Flughafen Zuerich in Switzerland, Grupo Aeroportuario del Pacifico in Mexico, and Aeroports de Paris.

Other Notable Contributors and Detractors

There was also a strong contribution from Electricity Transmission. The standout performer was ITC Holdings in the U.S. which was up strongly over the year, as the market began to re-rate its strong regulated growth profile. National Grid in the U.K. rebounded from its fall at the end of May after announcing a GBP 3.2 billion capital-raising to partly fund a large capital investment program over coming years(6). The Fund took advantage of the large share price fall to initiate a new position at an attractive entry point.

The Water sector made a good contribution, led by Severn Trent in the U.K. It performed well operationally and benefitted from improved market sentiment after the final regulatory determination improved on the draft ruling and removed uncertainty.

The Electricity Generation sector made a small detraction from the Fund s return, with slight declines in several stocks.

The significant fall in the U.S. Dollar made a material contribution to return last year, but this reversed to some extent this year. While the Australian Dollar appreciated by 5% and the Canadian Dollar gained 3%, the Euro depreciated by 13% and the British Pound by 5% relative to the U.S. Dollar[7]. These four currencies represented approximately 61% of the Fund at the Period s end.

Overall the Fund s foreign currency exposure detracted from total return over the Period.

Leverage

The Fund s leverage contributed positively to NAV performance as it magnified the Fund s positive return from the stronger equity prices.

To avoid magnifying the U.S. Dollar exposure due to leverage, the Fund also borrowed in Euro to

partially

match the currency exposure of the investments with the currency of the borrowings.

As of November 30, 2010, the Fund had $60 million, and 18 million in leverage outstanding and $40 million, and 2 million of available commitments. The Fund s leverage was 20.0% based on Total Assets, which is well within the limit outlined in the Fund s Prospectus.

As always, we balance the cost of leverage against the longer term potential for enhanced yield and capital returns.

Performance Relative to the MGII

The Fund, which is not managed against any benchmark, outperformed its reference index, the MGII.

The main contributors were stock selection and overweight positions in Pipelines and Toll Roads, the overweight position in Airports and Seaports and the underweight position and stock selection in Electric Utility sector and stock selection in Electricity Transmission. The Fund s leverage also contributed to the size of the outperformance.

[7] Source: Bloomberg L.P.

Shareholder Letter

NOVEMBER 30, 2010 (unaudited)

Fund Diversification by Country & Sector

At the end of the Period, the Fund held positions in 42 global infrastructure stocks representing 15 countries and 12 infrastructure sectors.

The table below shows the top ten holdings in the Fund as of November 30, 2010.

Rank	Stock	Country	Infrastructure Sector [8]	%[9]
1	Atlantia Spa	Italy	Toll Roads	4.5
2	National Grid	United Kingdom	Electricity Transmission	4.5
3	PG&E Corp	United States	Electric Utility	4.3
4	Spark Infrastructure	Australia	Electricity & Gas Distribution	4.3
5	Vinci	France	Toll Roads	4.2
6	Asciano	Australia	Seaports	3.8
7	Hamburger Hafen und Logistik	Germany	Seaports	3.5
8	American Electric Power	United States	Electric Utility	3.5
9	Tokyo Gas	Japan	Electricity & Gas Distribution	3.4
10	Aeroports De Paris	France	Airports	3.4

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

Country	% of Fund on November 30, 2009[9]	% Point Change over Period	% of Fund on November 30, 2010[9]

United States	19.4	1.9	21.3
Australia	11.6	3.4	15.0
France	10.5	2.5	13.0
China	8.8	0.1	8.9
United Kingdom	3.8	3.8	7.6
Italy	5.0	0.6	5.6
Spain	9.8	(4.7)	5.1
Canada	5.4	(0.7)	4.7
Germany	9.2	(5.7)	3.5
Japan	4.3	(0.9)	3.4
Brazil	2.5	0.2	2.7
Luxembourg		2.0	2.0
Switzerland	1.5	0.2	1.7
South Korea	1.0	0.5	1.5
Mexico	1.2		1.2
India	0.4	(0.4)	
New Zealand	0.9	(0.9)	
United Arab Emirates	1.6	(1.6)	
Other Net Assets	3.1	(0.3)	2.8

(8) 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.

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

Infrastructure Sector[8]	% of Fund on November 30, 2009[8][9]	% Point Change over Period	% of Fund on November 30, 2010[8][9]
Toll Roads	16.4	4.1	20.5
Electric Utility	13.9	3.9	17.8
Pipelines	17.8	(5.0)	12.8
Seaports	8.9	0.7	9.6
Electricity Transmission	6.8	2.2	9.0
Airports	12.3	(3.6)	8.7
Electricity & Gas Distribution	9.2	(1.5)	7.7
Water	5.4	(2.3)	3.1
Electricity Generation	2.0		2.0
Communications		2.0	2.0
Diversified	1.1	0.9	2.0
Social Infrastructure		2.0	2.0
Other	1.5	(1.5)	
Rail/Other Transportation	1.6	(1.6)	
Other Net Assets	3.1	(0.3)	2.8

Distributions

During the Period, the Fund paid four regularly scheduled quarterly distributions totaling $0.64 per share. The Fund also paid a distribution of $0.40 per share on September 30.

The Fund bases its quarterly distributions, in part, on good faith estimates of both current income for the year as well as any spillover income from the prior year. In connection with the recent completion of the Fund s prior year tax returns, the Fund determined that its actual income in 2009 exceeded its estimates due to the sale of U.S. MLP interests and business income associated with the MLPs. The special distribution paid

during the Period was attributable to these factors, a portion of which was required to be distributed in order for the Fund to maintain its status as a regulated investment company under the Subchapter M of the Internal Revenue Code.

On December 7, 2010, the MGU Board approved a 12.5% increase in the regular quarterly distribution to $0.18 per share to shareholders of record on December 23, 2010, payable on December 31, 2010. Based on the Fund s NAV of $19.31 and closing market price of $16.44 on November 30, 2010, the most recent $0.18 per share distribution represents an annualized distribution rate of 3.7% on NAV and 4.4% on market price, respectively.

Shareholder Letter

NOVEMBER 30, 2010 (unaudited)

Outlook

The global economic recovery continues to develop, with growth led by Asia followed by the United States, while Europe is expected to continue to lag.

The fiscal position of many governments, particularly those in developed countries (such as in Europe) has deteriorated sharply as a result of the financial support measures provided during the global financial crisis and the recession that ensued. In times of heightened financial stress, governments in a number of countries have historically needed to privatize assets and/or increase the private sector s involvement in financing the provision of major new infrastructure. We expect to see this trend in 2011, thereby creating further opportunities for listed infrastructure investors.

Late in the Period, several countries including Spain, Brazil and the Philippines announced major investment plans focused on infrastructure. The European Union s Commissioner for Energy said the EU needs to invest 200 billion over the next 10 years to extend its natural gas and energy grids, which are crucial to meeting its environmental goals and to support economic growth.

We continue to expect new opportunities for infrastructure investors flowing from government initiatives to increase private sector involvement in the provision of infrastructure.

We believe the operational performance and cash flow generation by the companies in the portfolio is sound. In the transportation infrastructure sectors, volumes continue to grow. A number of companies are reporting volumes above their previous (pre-recession) highs.

In our view, the ongoing low interest rate environment is supportive of the valuation of long duration infrastructure assets and infrastructure companies will likely continue to take advantage of the low interest rate environment to lock in attractively priced long term finance.

The Fund holds what we believe are high quality stocks, balanced between the regulated/contracted sectors, the user demand transportation infrastructure sectors and selective holdings among electricity utilities.

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 U.S. 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,

Andrew Maple-Brown

Portfolio Manager

Brad Frishberg

Chief Executive Officer

Schedule of Investments

NOVEMBER 30, 2010

(Expressed in U.S. Dollars)

Description	Shares	Value $
COMMON STOCKS - 114.97%		
Australia - 18.71%		
Asciano, Ltd.(1)(2)	10,113,671	$ 15,704,157
Intoll Group(2)	6,648,497	9,622,573
MAp Group(2)	2,158,928	6,290,752
Spark Infrastructure Group(2)(3)	16,705,813	17,853,907
Transurban Group(2)	2,625,280	13,084,881
		62,556,270
Brazil - 3.43%		
EDP Energias do Brasil SA(2)	396,800	8,470,127
LLX Logistica SA(1)	606,700	3,007,670
		11,477,797
Canada - 5.84%		
Enbridge, Inc.	122,230	6,803,587
TransCanada Corp.(4)	360,823	12,723,971
		19,527,558
China - 11.15%		
Beijing Capital International Airport Co., Ltd.	6,476,000	3,544,449
Beijing Enterprises Holdings, Ltd.	1,300,500	8,198,152
China Longyuan Power Group Corp.(1)	4,167,000	3,869,116
China Merchants Holdings International Co., Ltd.	9,101	35,923
Dalian Port PDA Co., Ltd.	15,410,000	6,767,215
Jiangsu Expressway Co., Ltd.	6,070,000	6,605,388
Zhejiang Expressway Co., Ltd.	8,782,609	8,279,185

Index

		High	Low
2008	First Quarter	4,339.23	3,431.82
	Second Quarter	3,882.28	3,340.27
	Third Quarter	3,445.66	3,000.83
	Fourth Quarter	3,113.82	2,165.91
2009		2,578.43	1,809.98

	First Quarter		
	Second Quarter	2,537.35	2,097.57
	Third Quarter	2,899.12	2,281.47
	Fourth Quarter	2,992.08	2,712.30
2010	First Quarter	3,017.85	2,631.64
	Second Quarter	3,012.65	2,488.50
	Third Quarter	2,827.27	2,507.83
	Fourth Quarter	2,890.64	2,650.99
2011	First Quarter	3,068.00	2,721.24
	Second Quarter	3,011.25	2,715.88
	Third Quarter	2,875.67	1,995.01
	Fourth Quarter	2,476.92	2,090.25
2012	First Quarter	2,608.42	2,286.45
	Second Quarter	2,501.18	2,068.66
	Third Quarter	2,594.56	2,151.54
	Fourth Quarter	2,659.95	2,427.32
2013	First Quarter	2,749.27	2,570.52
	Second Quarter	2,835.87	2,511.83
	Third Quarter	2,936.20	2,570.76
	Fourth Quarter	3,111.37	2,902.12
2014	First Quarter	3,172.43	2,962.49
	Second Quarter	3,314.80	3,091.52
	Third Quarter	3,289.75	3,006.83

	Fourth Quarter	3,277.38	2,874.65
2015	First Quarter	3,731.35	3,007.91
	Second Quarter	3,828.78	3,424.30
	Third Quarter	3,686.58	3,019.34
	Fourth Quarter	3,506.45	3,069.05
2016	First Quarter	3,178.01	2,680.35
	Second Quarter	3,151.69	2,697.44
	Third Quarter	3,091.66	2,761.37
	Fourth Quarter	3,290.52	2,954.53
2017	First Quarter	3,500.93	3,230.68
	Second Quarter	3,658.79	3,409.78
	Third Quarter	3,594.85	3,388.22
	Fourth Quarter	3,697.40	3,503.96
2018	First Quarter	3,672.29	3,278.72
	Second Quarter	3,592.18	3,340.35
	Third Quarter (through August 1, 2018)	3,527.18	3,372.21t