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REALIZING THE PROMISE OF LISTED INFRASTRUCTURE INVESTMENTS

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Introduction

How would you like to own stock in a company that processes sewage in the Philippines? Not your cup of tea? What if it provides solid long-term returns, above-average dividends and lower volatility than the overall market? Still not convinced? What if it has the potential to offset inflation? Do we have your attention? While these types of infrastructure companies rarely make front-page news, they have the attention of savvy institutional investors who need to fund long-term liabilities and guard against inflation. In an article published in November 2016, Pension and Investments reported that capital raised by unlisted infrastructure funds over the course of the first three quarters of 2016 (45.5bn USD) already exceeded the total capital raised in 2015 (45.3bn USD). This is an increase of 75% compared to a total of 26 bn USD raised just five years ago in 2011.[1]

Since most investors cannot afford to buy toll roads or airports, unlisted infrastructure investments are out of their reach. This means that listed equity is the only avenue for exposure to this asset class. The clear challenge for investment professionals is choosing pure infrastructure companies that capture the beneficial characteristics of unlisted infrastructure investments in a diversified portfolio. These characteristics include low business risk, high income, low market exposure and stable rates of return.

The STOXX Global Broad Infrastructure Index is designed to meet these criteria. This new index allows investors to understand the fundamental characteristics and performance track record of infrastructure companies listed around the world. The selection list is drawn from qualified companies in developed and emerging markets.

In the paragraphs that follow, we aim to spotlight the unique investment exposure provided by listed infrastructure companies. Our hope is that this paper will aid in planning and implementing investment decisions.

1 Defining infrastructure

Infrastructure refers to all physical and organizational structures needed for the functioning and development of a society and its economy. Practitioners distinguish between "hard" and "soft" infrastructure. Hard infrastructure refers to the large physical networks necessary for the functioning of an industrial nation; whereas soft infrastructure refers to all the institutions which are required to maintain the economic, health and cultural and social standards of a country, such as healthcare and government. We define infrastructure as a set of 17 subsectors covering "hard" as well as "soft" infrastructure that are, in turn, summarized into five supersectors (see Figure 1).

[1] Global unlisted infrastructure fund raising. Charles Mcgrath, Oct 5, 2016.

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FIGURE 1: OVERVIEW OF INFRASTRUCTURE SECTORS AND SUPERSECTORS

Supersectors	Communication	Energy	Government outsourcing / social	Transportation	Utilities
Subsectors	Cable & satellite	Energy utilities	Correctional facilities	Air transportation	Waste management
	Data centers	Midstream energy	Hospitals	Passenger transportation	Water utilities
	Wireless		Postal services	Rail transportation	
	Wireless towers			Road transportation	
	Wireline			Water transportation	

The underlying index universe was selected by our business partner Revere Data. While Revere's approach is proprietary, the underlying criteria are related to a company's fundamental characteristics, the services it provides and the assets it uses to generate revenue.

2 Infrastructure characteristics: low business risk, high dividend payout and high dividends

The principal characteristic of listed infrastructure companies is below-average business risk. Business risk refers to the chance that a company will not generate sufficient revenue to stay in operation. There are at least two reasons for this characteristic. First, infrastructure companies sell services that exhibit some degree of demand inelasticity. One can imagine that the demand for clean water or postal services is not heavily influenced by consumer preferences, for example. Second, many infrastructure companies have the advantage of operating in non-competitive business environments as a result of exclusive long-term contracts granted by local governments. The Manila Water Company, for instance, which operates in the Philippines, holds a 25-year concession agreement granting it exclusive rights to the use of land and facilities for the production, treatment and distribution of water, as well as the right to operate the sewer system. These types of exclusive contracts not only provide revenue protection for infrastructure companies but also frequently allow for price increases that are marked to inflation.

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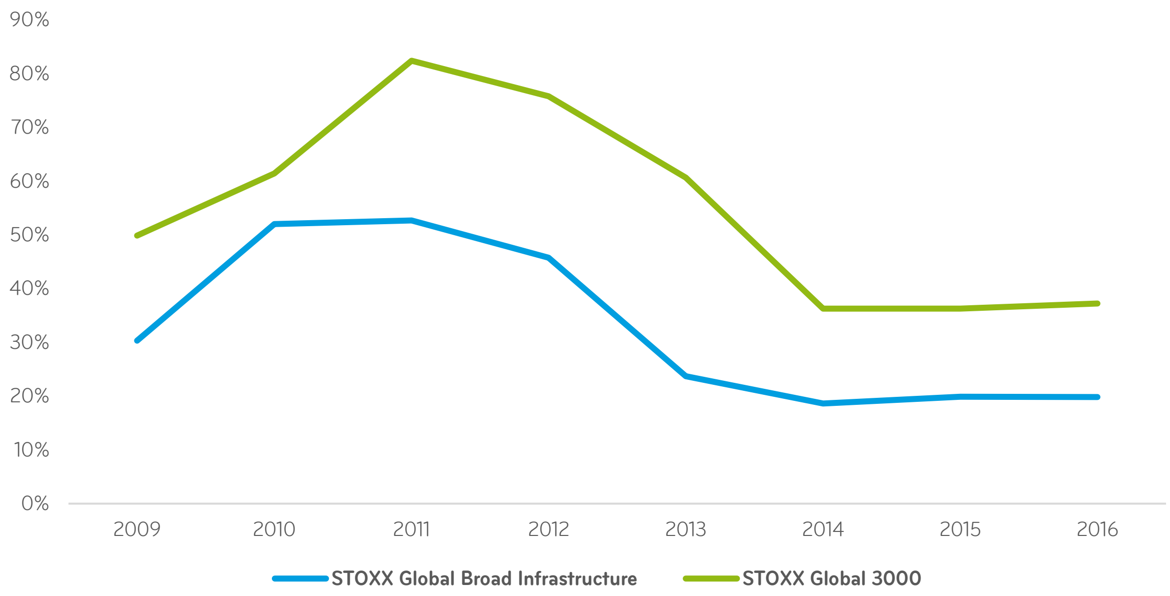
Figure 2 takes an empirical look at the business risk of infrastructure companies. It highlights the variability in operating income, an important measure of business risk, for the constituents of the STOXX Global Broad Infrastructure Index relative to those of the STOXX Global 3000 Index. The figure shows that the variability of annual changes in operating income (measured by standard deviation) covering 2009 to 2016 is about 22.14 percentage points lower for infrastructure companies compared to that of the market. This is important because lower business risk can equate to lower cost of capital.

FIGURE 2: THREE-YEAR AVERAGE OF CROSS-SECTIONAL STANDARD DEVIATION OF YEARLY CHANGES IN OPERATING INCOME (2009-2016)



Source: Factset (2009 to 2016)

Infrastructure companies also have high operating leverage. Operating leverage refers to a firm's level of fixed costs relative to variable costs and can result in significant free cash flow when unit volumes increase. Railroads, for example, benefit when freight volumes increase on their rail systems and communication companies profit when more subscribers use their networks.

More importantly, from an investment perspective, operating leverage combined with low business risk allows infrastructure companies to support comparatively high dividend payout ratios. Figures 3 and 4 show the annual median dividend payout ratio and the annual dividend yield for the STOXX Global Broad Infrastructure Index and the STOXX Global 3000 Index. It clearly shows a comparatively high dividend payout ratio for infrastructure companies. The average payout is 18.6 percentage points higher for infrastructure companies than non-infrastructure companies. In addition, the dividend itself has averaged almost 3.8% over the past nine years. The high dividend is a principal reason for the attractiveness of public infrastructure as an investment.

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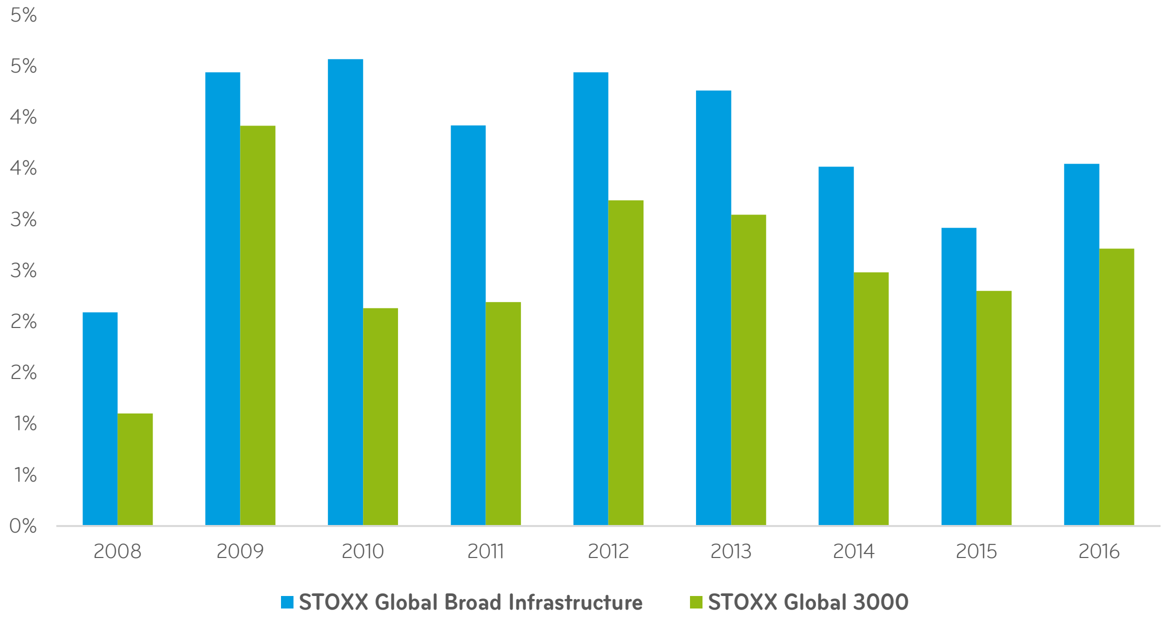
FIGURE 3: ANNUAL DIVIDEND YIELD OF THE STOXX GLOBAL BROAD INFRASTRUCTURE INDEX VERSUS THE STOXX GLOBAL 3000 INDEX



Source: STOXX data from 2008 to 2016


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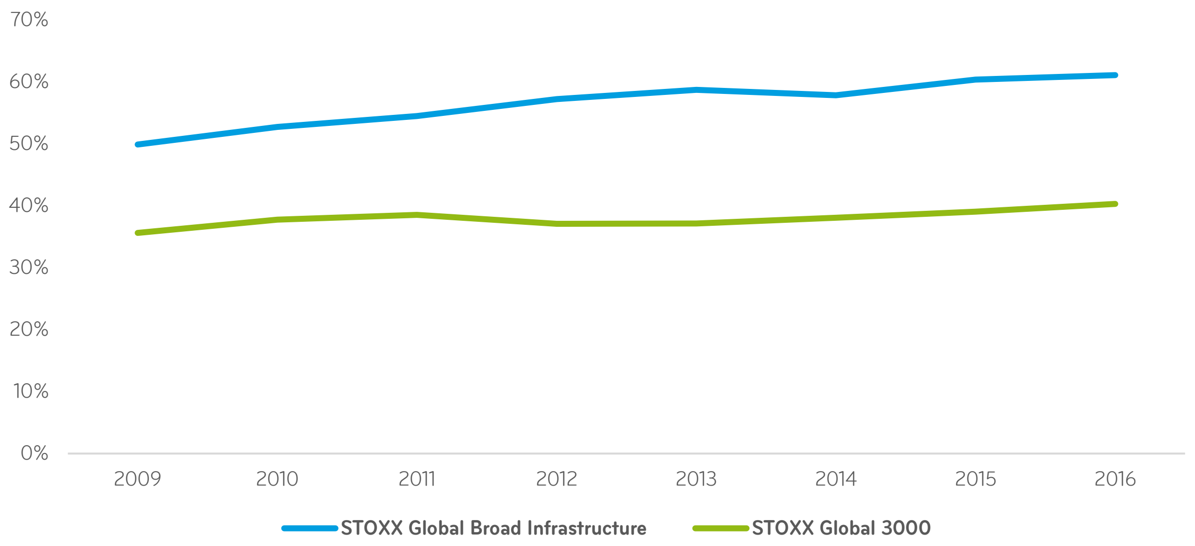
FIGURE 4: MEDIAN YEARLY DIVIDEND PAYOUT RATIOS (DPR) WITH DPR DEFINED AS DIVIDENDS PER SHARE DIVIDED BY EARNINGS PER SHARE



Source: STOXX data from 2009 to 2016

3 Investment, performance and risk

Low business risk and high dividend payments endow infrastructure companies with strong defensive investment characteristics. Figure 5 shows the beta and performance of the STOXX Global Broad Infrastructure Index relative to the STOXX Global 3000 Index. The average beta is 0.78 over the past nine years, which is low for listed equities and indicates that infrastructure companies as a whole had less exaggerated price movements than that market, although the investment performance was equivalent. Empirical analysis further shows that listed infrastructure assets provide lower total risk compared to the global equity market.

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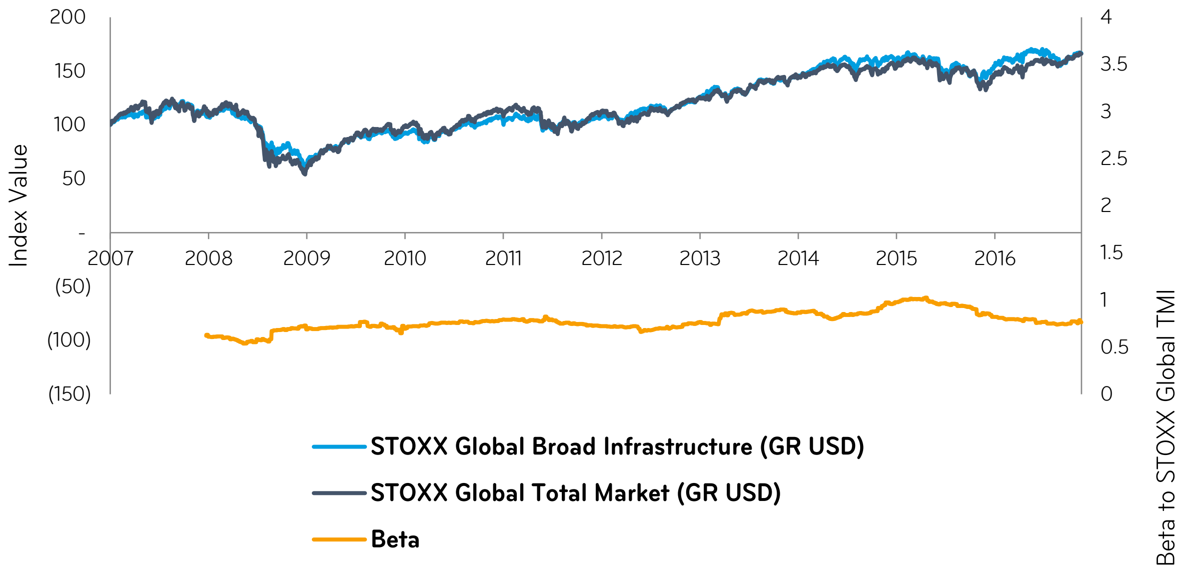
FIGURE 5: PERFORMANCE OF STOXX GLOBAL BROAD INFRASTRUCTURE INDEX VERSUS STOXX GLOBAL 3000



Source: STOXX daily data from Mar. 2007 to Jan. 2017

Compared to an annualized market volatility of 17.6% over the last nine years, volatility for the infrastructure index was 2.6 percentage points lower with 15.0%. This significant decrease in volatility further underscores the low-risk characteristics of listed infrastructure assets as the total market index (TMI) includes about 7300 companies and should provide much lower overall volatility compared to the infrastructure index that currently includes only 153 stocks.

4 Conclusion

Do we have your attention? We hope this piece has at least clarified the unique investment exposure offered by listed infrastructure companies. They are stable cash flow generators with strong commercial models protected by significant barriers to entry and inelastic consumer demand. These properties make the STOXX Global Broad Infrastructure Index an appropriate benchmark for equity investors who have long-term saving needs and require strong stable income and the potential for capital appreciation over time. In addition, the relative low market exposure is beneficial for investors who want to increase diversification in their overall portfolios.

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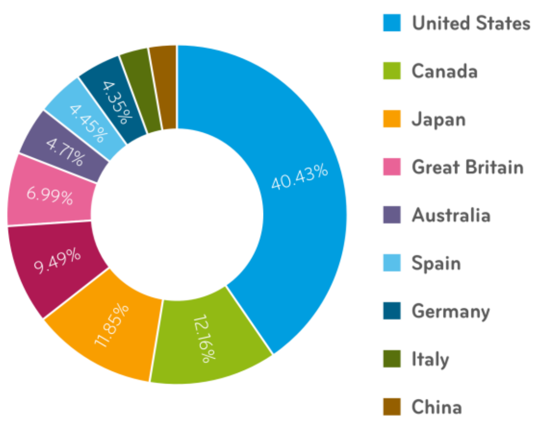
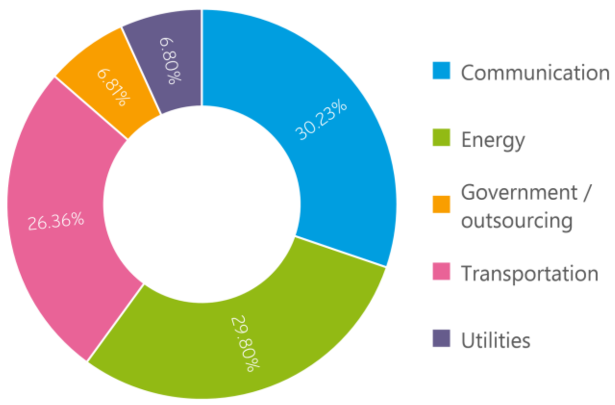
Appendix

COMPOSITION

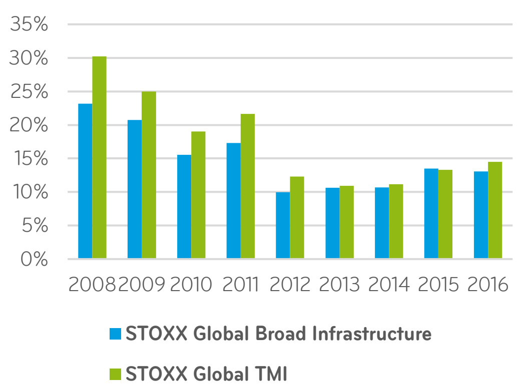
GEOGRAPHIC ALLOCATION



SUPERSECTOR ALLOCATION



VOLATILITY – ANNUALIZED VOLATILITY RETURNS (2008-2016)



PERFORMANCE – ANNUAL PERFORMANCE (2008-2016)

The views and opinions expressed in this paper are solely those of the author and do not necessarily represent the views and opinions of STOXX Ltd

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