

 AGF INSIGHTS AGF Systematic Global Infrastructure ETF (QIF)

Listed Infrastructure Explained

Making the case for investing in the backbone of the economy through publicly-traded equities.

by Hang Gao, Grant Wang, Robert Yan and Bill DeRoche

One can think of investing in infrastructure as investing in the backbone of an economy. Roads and bridges, oil and natural gas pipelines and utilities all support economic growth. These are still the mainstays of infrastructure, but the past few years have changed just about everything. Today, the cell towers that support mobile communication, the cloud that stores much of our data, and the renewable energy sources that deliver our electricity herald a new era in infrastructure investing.

Infrastructure investments can be made either directly or through a listed infrastructure stock. In direct investing, equity or debt is backed by a specific infrastructure asset or project; investing in listed infrastructure refers to exposure to stocks of publicly traded companies that either operate or manage an infrastructure asset. Institutional investors such as pension funds have typically been direct investors, because their time horizon is long and their liquidity needs are low. In their case, it makes sense to directly invest in an asset or project. Many retail investors, however, want a shorter time horizon and higher liquidity needs, so listed investing is often a better option.

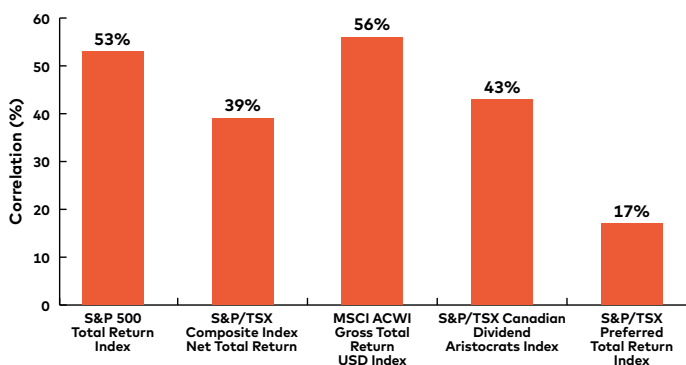
Whether the infrastructure investment is direct or listed, the potential benefits in comparison to the broad equity market are similar: diversification, lower price volatility, steady expected cash flow and a potential inflation hedge.

Key Benefits of Listed Infrastructure

Diversification

Infrastructure stocks trade globally and represent sectors/industries that may not be a core part of an investor's portfolio (Info Tech, Healthcare etc.). Therefore, infrastructure stocks typically have a lower correlation to broad indexes such as the global MSCI All Country World index (ACWI). A lower correlation means that infrastructure stocks tend not to move in lockstep with the broad market and can help reduce the overall risk of a portfolio.

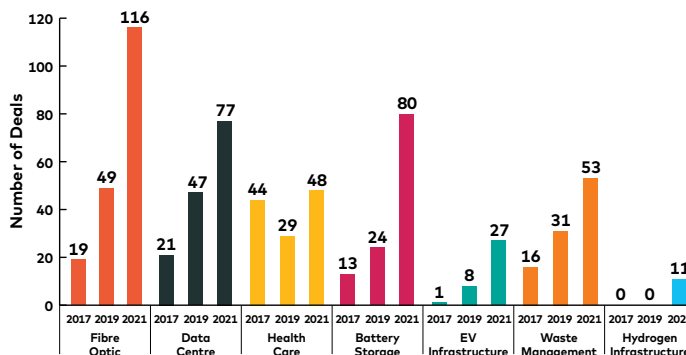
FIGURE 1
Correlations: Dow Jones Brookfield Global Infrastructure Index (DJBG I) versus different equity indexes



Source: AGF Investments using Bloomberg data from December 31, 2009 to September 30, 2022. Past performance is not a guarantee of future results. You cannot invest directly in an index.

Although infrastructure stocks generally share such features in common, there are variances within the infrastructure space itself across different businesses and styles. That can help investors navigate different full market cycles. For example, sectors like energy pipeline and transportation are more cyclical, deep value plays, while utilities and telecom infrastructure are more defensive; newly emerging themes like renewable energy and cloud infrastructure are more growth-oriented.

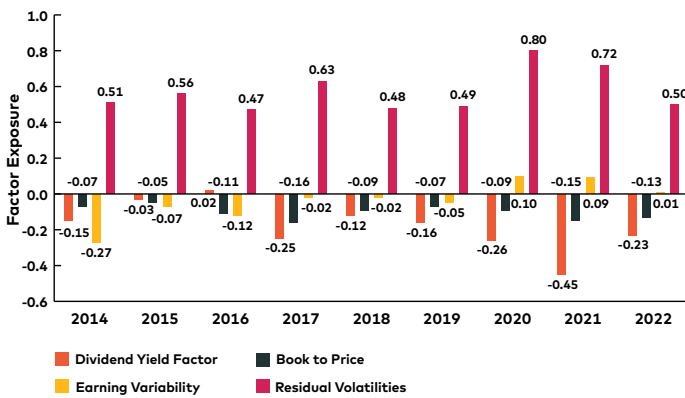
FIGURE 2
A diversified and growing universe of infrastructure businesses



Source: Infragolic by Inframation database (June 2022).

As well, style exposures of infrastructure stocks are generally different from the broader equity market. They tend to offer more exposure to certain style factors or attributes of stocks that may drive future performance such as Value (stocks that are discounted relative to their fundamentals) or Low Beta (stocks that move up and down to a lesser degree than the overall market).

FIGURE 3
Factor exposure between the Dow Jones Brookfield Global Infrastructure Index (DJBGI) and the MSCI All Country World Index (ACWI)

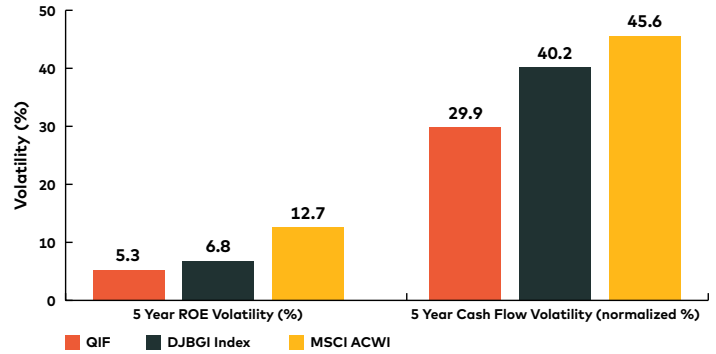


Source: AGF Investments Inc. using data from MSCI Barra as of September 30, 2022. Past performance is not a guarantee of future results. You cannot invest directly in an index. Exposure differential to each factor calculated at the end of each year shown using Z-scores measuring how many standard deviations a data point is from the mean in a distribution.

Lower volatility

Infrastructure stocks tend to have a lower volatility profile. They are typically backed by long-dated assets with high barriers to entry for competitors. This may result in steady dividends with yields that are typically higher than the broader equity index, lower price volatility and lower drawdowns during bouts of heightened market stress.

FIGURE 4
Volatility: AGF Systematic Global Infrastructure ETF's (QIF) and the Dow Jones Brookfield Global Infrastructure Index (DJBGI) versus the MSCI All Country World Index (ACWI)



Source: AGF Investments using Factset and Bloomberg data as of Dec 30, 2022. Past performance is not a guarantee of future results. You cannot invest directly in an index. Calculations represent the weighted average of the return on equity (ROE) and cash flow volatility of each individual security underlying the AGF Systematic Global Infrastructure ETF (QIF), the Dow Jones Brookfield Global Infrastructure Index (DJBGI) and the MSCI All Country World Index (ACWI).

	QIF Net Compounded Returns	1Y Net Compounded Return	3Y Net Compounded Return	5Y Net Compounded Return	Net Compounded Return Since Inception (Feb 12, 2018)
As of May 31, 2023		-3.4%	4%	5.9%	6.1%

Inflation protection and rising yields

Investors used to have an impression that a rising interest rate environment negatively impacts capital-intensive and bond-proxy sectors, such as Utilities and Telecom. However, it is important to understand the drivers of rising yields. Some parts of the infrastructure sector are well-positioned in an environment where rising inflation is driving rates higher, according to research from S&P Dow Jones Indices LLC (Approaches to Benchmarking Listed Infrastructure, June 2022) considers relative performance of the Dow Jones Brookfield Global Infrastructure Index and S&P Global Infrastructure Index against the S&P Global Broad Market Index in high and low inflation regimes.

One reason is that inflation-protection-like terms are quite often contractual in infrastructure projects. For example, some utility companies enjoy regulator-mandated inflation adjustments, and some telecom tower contracts embed price escalators to protect them from an inflation hit.

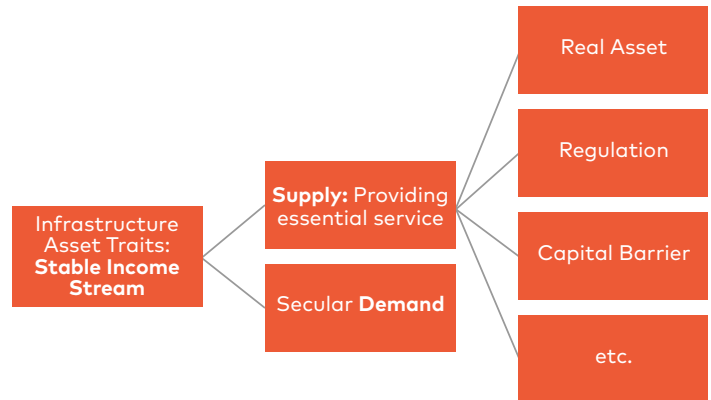
Exposure to commodities is another reason for infrastructure's potential to protect against inflation. Energy infrastructure (midstream in the supply chain) like pipelines have no direct exposure to the oil or natural gas price (therefore creating lower volatility than upstream E&P companies), but they do historically show high correlation with commodity prices, according to research from Brookfield Public Securities Group, (Why Listed Infrastructure May Benefit As Inflation Lifts Interest Rates, 2021). This is driven by increased upstream activity during periods of high energy prices, which leads to elevated flows through the midstream pipelines. During these periods of inflation and elevated energy prices, pipelines demonstrate increasing revenue, earnings and, potentially, increased dividends.

Income yield

Infrastructure companies own assets that will be around for a long time, and because of the certainty of the asset and its consistent cash flow generation, they can pay an attractive dividend.

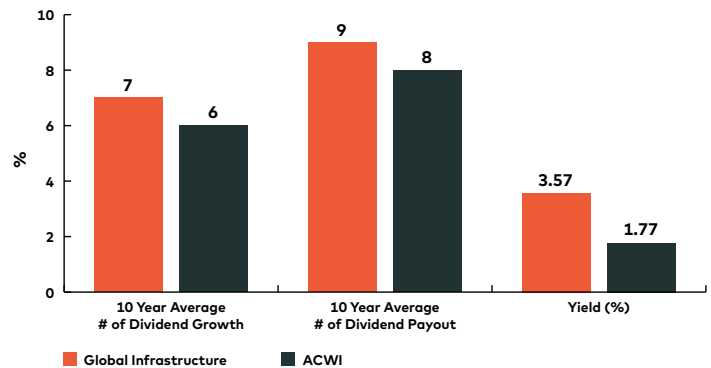
Infrastructure assets typically provide essential services for which there is relatively stable and secular demand from society as a whole. Those services could be based, for example, on owning and operating real assets like toll roads, or providing heavily regulated necessities like utilities do, or operating assets that have high capital barriers to entry, like cell towers. The steady demand for the services they provide enables infrastructure assets to generate stable revenue streams. As discussed above, consistent revenue streams contribute to the fact that, historically, infrastructure stocks have boasted higher dividend yields and higher payout ratios than the broader equity universe.

FIGURE 5
Infrastructure Asset Traits



Source: AGF Investments Inc. as of May 30, 2023

FIGURE 6
Paying Dividends: Dow Jones Brookfield Global Infrastructure Index (DJBG) versus the MSCI All Country World Index



Source: AGF Investments Inc. using Factset and Bloomberg data as of September 30, 2022. Past performance is not a guarantee of future results. You cannot invest directly in an index.

Liquidity

Listed and private infrastructure both provide such similar benefits as income yield (how much income an investment generates) and diversification. Listed infrastructure, however, has the added benefit of greater liquidity.

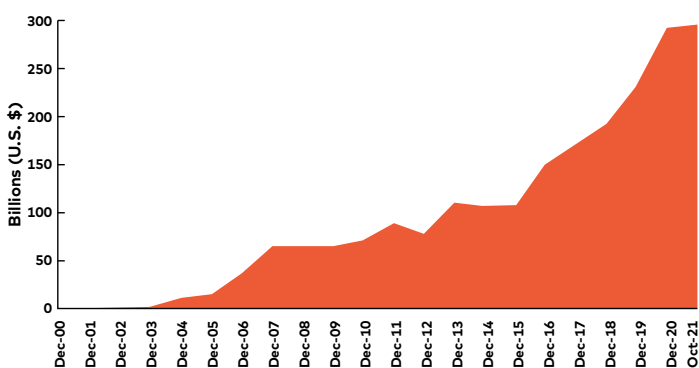
Listed infrastructure stocks trade on a public exchange and can be bought and sold daily. This enhances investor decision-making, rendering the allocation of infrastructure sectors under different macro regimes easier and more cost-effective. For example, the tactical reduction of cyclical investments like transportation during a macroeconomic slowdown, or decreasing regional allocation due to geopolitical risk, can be implemented in a timely manner without triggering large trading costs. Multi-asset allocators can make changes in listed infrastructure weights under different risk regimes easily, achieving better risk-adjusted returns.

Another benefit of high liquidity from listed infrastructure investments is their scalability. As new kinds of sector plays – like digital infrastructure – emerge and comprise a growing element in investor strategy and allocations, it is relatively easy to expand the investment universe and add new companies to a portfolio, using well-disclosed financial information for listed companies.

In the case of private infrastructure, daily trading and pricing typically are not available, and there is likely a set period to subscribe and redeem. As well, during periods where attractive private infrastructure assets are not available, the investor may have little opportunity to gain exposure to the asset class.

Accessibility and high liquidity make listed infrastructure strategy easier to deploy cash and invest globally, while private infrastructure strategies have accumulated dry powder in recent years.

FIGURE 7
Cash Accumulated by Private Infrastructure Globally Through 2020



Source: Preqin as of December 1, 2021. Based on unlisted infrastructure funds.

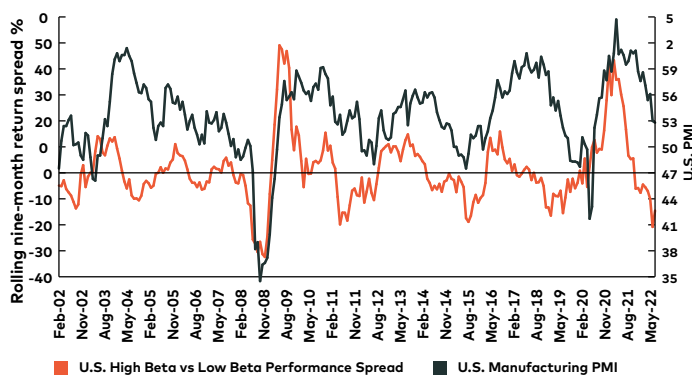
Drivers of Infrastructure Investments

Macro environment decelerating

The Purchasing Managers Index is a proxy for framing the economic cycle and may have a link to the potential performance of the AGF Systematic Global Infrastructure ETF's (QIF). A PMI (black line) above 50 indicates that the economy is expanding; a PMI line below 50 indicates the economy is contracting. Based on AGF's research, the direction of the PMI influences the performance of low-beta stocks that move up and down to a lesser degree than the overall market and high-beta stocks that move up and down to a lesser degree than the overall market. When the PMI is rising, the economy is thought to be improving and high-beta stocks outperform low-beta stocks. When the PMI is declining, the economy is thought to be weakening and low-beta stocks outperform high-beta stocks. QIF is primarily invested in listed infrastructure companies with lower correlation and lower beta relative to broad equity market indexes such as the S&P500 and MSCI ACWI. This means that when low-beta stocks outperform, QIF is likely doing better than the broader equity market.

This trend was evident earlier this decade. this cycle. The PMI bottomed at 40 in April 2020 and peaked in March 2021 at 65. At the end of July 2022, the PMI was 52.8. This is above the expansion line of 50 but slowing down from the peak in March 2021. As in prior cycles, low-beta stocks have started to outperform high-beta stocks. As we move through the economic cycle, we continue to expect the PMI to move lower, which should provide a favorable backdrop for QIF.

FIGURE 8
Monitoring Low Beta/High Beta stocks through the Purchasing Manager Index cycle



Source: AGF Investments Inc. using Bloomberg data as of July 31, 2022. Left axis represents the rolling nine-month return spread (%) between high beta and low beta stocks for the top 1200 U.S. securities by market capitalization. Right axis represents the monthly U.S. Purchasing Manager Index.

Government policy and capital needs

We believe the backdrop for global infrastructure is very supportive. Infrastructure spending has not kept pace with economic growth and requires trillions of dollars of investment over the next several years. Typically, infrastructure spending has been the domain of governments, but high debt burdens and the increasing shift to digital and green infrastructure should provide publicly listed infrastructure companies with significant investment opportunities.

A 2021 report from the American Society of Civil Engineers (ASCE) gave U.S. infrastructure a C-minus rating (MEDIocre, REQUIRES ATTENTION), highlighting funding gaps of up to US\$2.5 trillion in this decade.

FIGURE 9
Cumulative Investment Needs by System Based on Current Trends, 2020 to 2029.

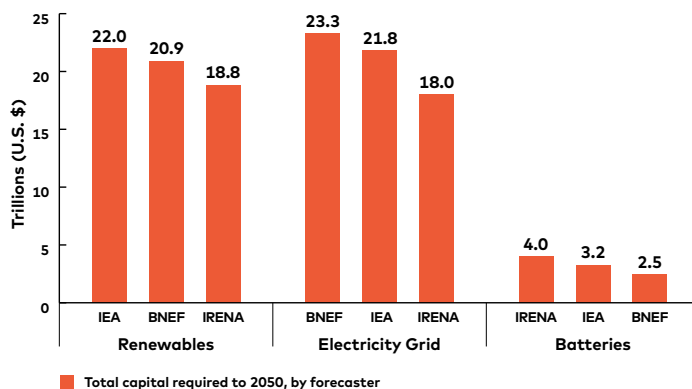
All values in billions

Infrastructure System	Total Needs	Funded	Funding Gap
Surface Transportation ¹	\$2,834	\$1,619	\$1,215
Drinking Water / Wastewater / Stormwater ²	\$1,045	\$611	\$434
Electricity ²	\$637	\$440	\$197
Airports ²	\$237	\$126	\$111
Inland Waterways & Marine Ports ²	\$42	\$17	\$25
Dams ³	\$93.6	\$12.5	\$81
Hazardous & Solid Waste ⁴	\$21	\$14.4	\$7
Levees ⁵	\$80	\$10.1	\$70
Public Parks & Recreation ⁶	\$77.5	\$9.5	\$68
Schools ⁷	\$870	\$490	\$380
Totals	\$5,937	\$3,350	\$2,588

Source: ASCE 2021 Report

Ambitious carbon-neutral targets from global governments further drive demand for upgrading current infrastructure.

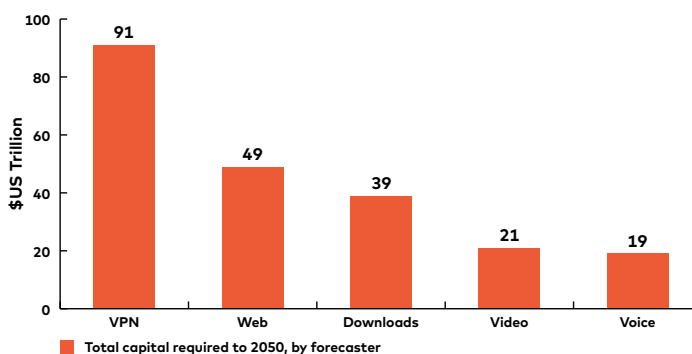
FIGURE 10
Capital required to decarbonize the electricity system by 2050



Source: Macquarie Asset Management Pathways August 2022, Infrastructure Secondaries: New opportunities and greater liquidity for infrastructure investors.

Lifestyle changes after pandemic also require investment in digital infrastructure.

FIGURE 11
U.S. digital infrastructure usage versus pre-COVID 19 levels



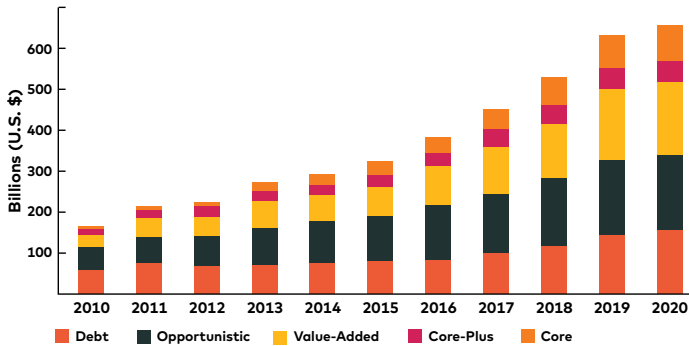
Source: Verizon Look Forward Study, March 26, 2021. <https://www.verizon.com/about/news/Verizon-study-reveals-lifestyle-changes>

Recently, Group of Seven (G7) leaders pledged to raise US\$600 billion in private and public funds over five years to finance needed infrastructure in developing countries. In the U.S., the Infrastructure Investment and Jobs Act passed in 2021 will provides US\$1.2 trillion for infrastructure ranging from roads to broadband networks, and more recently the Inflation Reduction Act targets more than US\$360 billion for energy security and climate change. In Canada, meanwhile, the federal Investing in Canada Plan will commit over C\$180 billion for infrastructure like public transit, trading ports, broadband networks and energy systems.

Investor Interest Growing

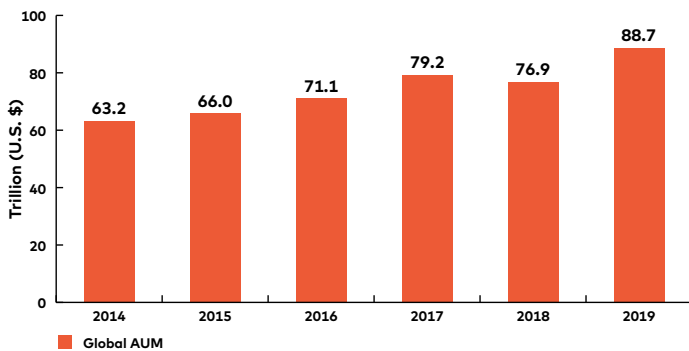
From an investor standpoint, infrastructure-related assets under management (AUM) grew at a faster pace in the previous decade than total global AUM.

FIGURE 12
Infrastructure's Assets Under Management has grown at 16.7% since 2014...



Source: Macquarie Infrastructure and Real Assets (MIRA) Pathways June 2021 Issue 24, Core infrastructure: Its inflation hedge characteristics and the search for yield.

...while total global AUM has been growing at about 7% per year



Source: Macquarie Infrastructure and Real Assets (MIRA) Pathways June 2021 Issue 24, Core infrastructure: Its inflation hedge characteristics and the search for yield.

Conclusion

In our view, the current macroeconomic climate, including rising rates and mounting fears of economic slowdown, provides a strong tailwind for infrastructure-related stocks as providers of steady dividend streams and low-beta equity exposures amid growing investor demand. Meanwhile, infrastructure stocks appear positioned to benefit from government spending and priority trends, as the need for infrastructure investment is arguably as pressing as ever. Furthermore, secular expansion of the sector – into developing services like data management and warehousing (cloud), "greening" of the energy grid and expansion of the economy's digital backbone generally – should provide not only support for infrastructure equities, but also a larger universe with which investors can diversify their portfolio allocations, mitigate risk and seek long-term opportunities.



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AGFiQ Global Infrastructure ETF was renamed AGF Systematic Global Infrastructure ETF on January 27, 2023. Effective January 27, 2023, AGF Investments LLC is a subadvisor to AGF Systematic Global Infrastructure ETF.

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