The power of more: a case for a global approach to core infrastructure investing

Serkan Bahceci
Head of Infrastructure Research,
Infrastructure Investments Group
J.P. Morgan Asset Management

For investors tasked with matching long-term liabilities, such as UK local authorities, a well-diversified portfolio of core infrastructure investments can provide compelling opportunities.

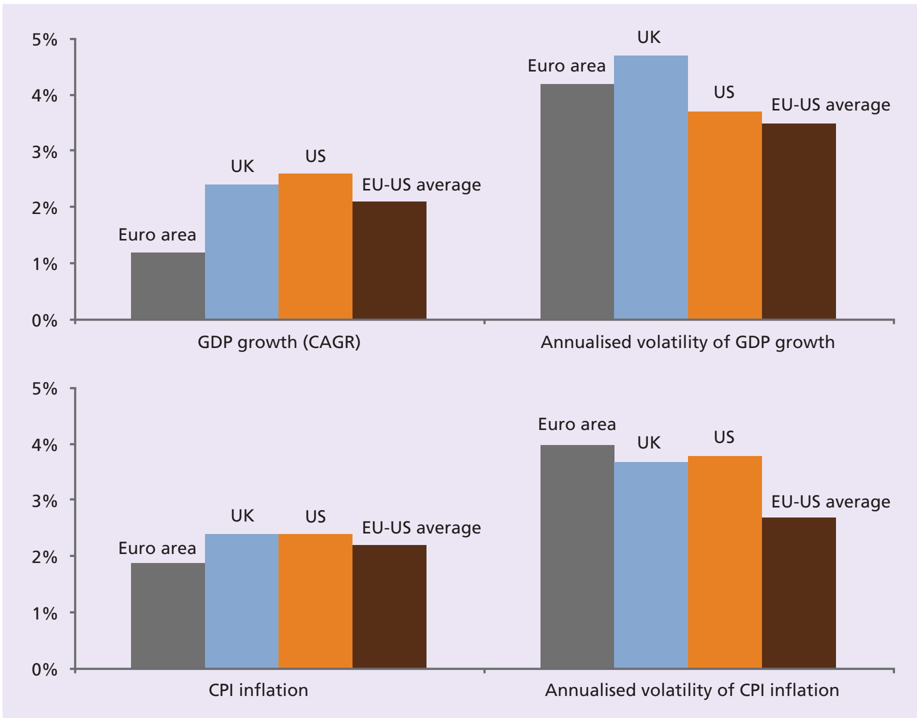
But what are core infrastructure investments? An infrastructure investment is generally classified as being "core" if it produces a stable cash flow stream, is mature (i.e. beyond its demand ramp-up phase), and if it is located in a transparent and consistent regulatory environment. These core investment opportunities include public utilities (water, electricity, gas), as well as other long-term infrastructure assets, such as toll roads, seaports and airports.

For long-term investors, investing in a well-diversified portfolio of core infrastructure assets across sectors and geographies could potentially provide enhanced cash flow stability. However, core infrastructure can also provide many other benefits, including helping investors to:

- Create a broader investment opportunity set
- Construct a portfolio that is fully diversified by sector and geography
- Mitigate the impact of volatility and foreign exchange fluctuations

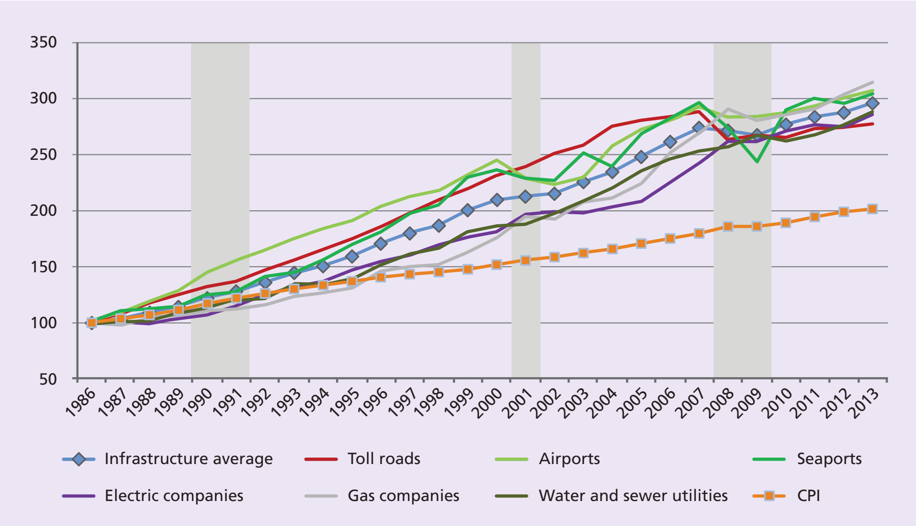
"...core investment opportunities include public utilities (water, electricity, gas), as well as other long-term infrastructure assets, such as toll roads, seaports and airports"

Figure 1: Real GDP growth rates and Consumer Price Index (CPI) inflation averages between 1991 - 2013



Source: J.P. Morgan, Bureau of Economic Analysis and Eurostat. Data as of July 2014.

Figure 2: Indices of annual cash flows in the US and EU-15 of core infrastructure against CPI



Source: J.P. Morgan. Data as of July 2014. Annual cash flow volatility estimates are in local currencies and based on 229 actual infrastructure entities in the US and in EU-15 between 1986 and 2013, summarised in J.P. Morgan Asset Management's Insights paper: "Infrastructure Investing: A portfolio diversifier with stable cash yields.." EU-15 denotes the member countries in the European Union before 2004 accession: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the UK

A global approach may also provide valuable optionality to the investor. For example, infrastructure asset values are increasing across the globe as investor allocations and commitments are increasing; however, the highest value increases are witnessed in Europe.

Going forward, with increasing but relatively lower values compared to Europe, the US market is positioned to provide relatively better returns. However, European assets provide strong longer-term potential. Established strategies with global mandates can capitalise on both the US and European markets simultaneously. This differing market environment further demonstrates why a global approach to core infrastructure can be more beneficial for investors as opposed to a regional approach.

Broad diversification benefits

When it comes to investing in core infrastructure, diversification at both the geographic and sector levels helps to lower cash flow volatility. As various infrastructure sectors face different trends in important underlying variables (such as commodity prices, consumption patterns, regulatory trends, etc) it is easy to see the benefit of a diversified portfolio across sectors. A portfolio diversified across service areas and geographies also provides similar benefits since infrastructure assets depend on the economic and demographic trends of their service areas.

Figure 1 presents basic macroeconomic statistics for major OECD economies, and demonstrates the obvious point that the volatility for the average is always lower than that of individual economies.

One of the chief appeals of infrastructure investing is its relative performance stability in various economic environments. As GDP growth trends move in an unsynchronised manner[1] and regulators behave differently in their jurisdictions, geographic diversification brings stability in the long term.

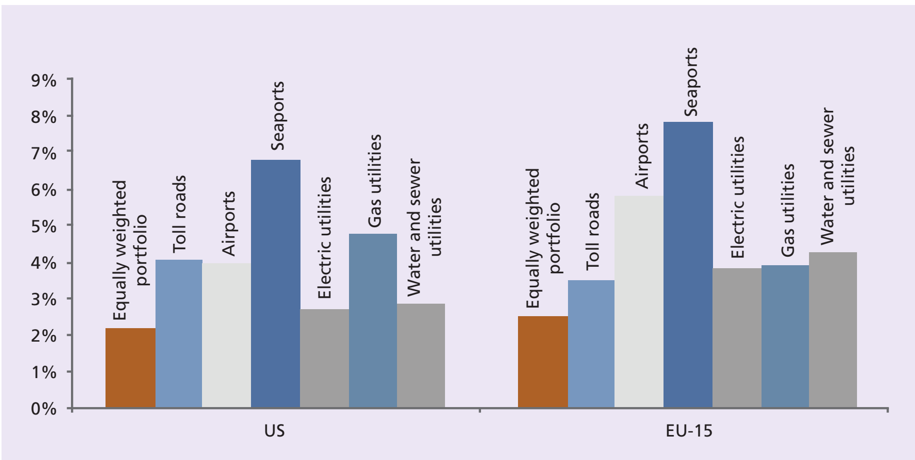
Figure 2 provides empirical evidence for the benefits of diversification by looking at historical infrastructure cash flow performance data. Based on actual cash flow data of mature infrastructure assets in the EU-15* and the US, the correlation coefficients between different sectors in the same geography, and between the same sectors in different geographies, are low to moderate.[2]

This empirical evidence is backed up by actual market data. First, as Figure 3 shows, diversification across sectors within each region can significantly lower cash flow volatility. The chart shows the annualised volatilities and cash flow streams of an illustrative portfolio of equally weighted sectors in both the US and Europe (based on the same dataset presented above). In both regions, the equally-weighted sector portfolios have lower cash flow volatilities, suggesting that an infrastructure strategy with a wider focus could be less volatile than sector specific strategies, at least in cash flows.

Second, and more importantly, Figure 4 shows that diversification across the two regions also lowers cash flow volatility. Either at the sector level or at the regional portfolio level, combining US and European assets provides lower volatility levels for cash flow streams.

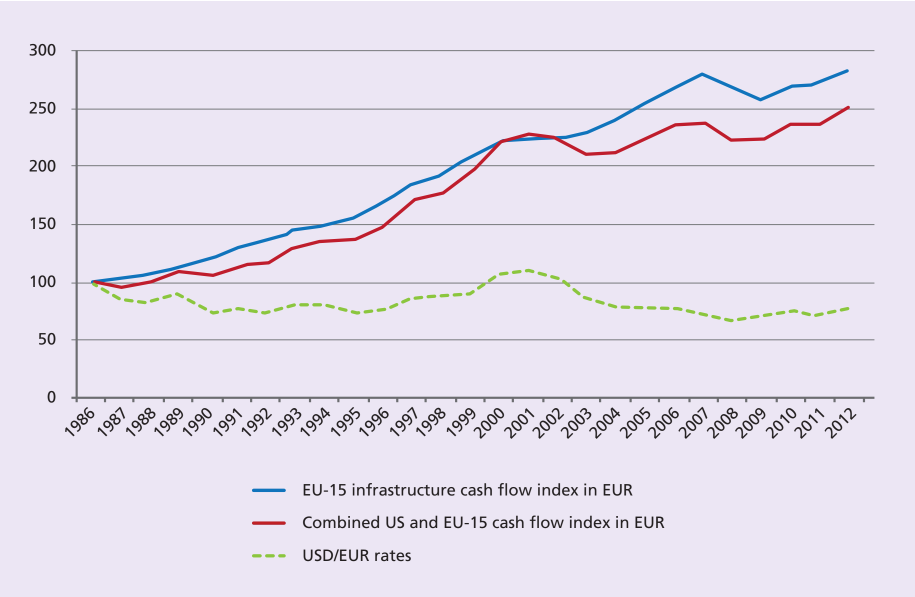
Of course, investing in multiple regions introduces a degree of currency risk. The cash flows demonstrated so far have been

Figure 3: Annualised cash flow volatility



Source: J.P. Morgan. Data as of July 2014.

Figure 4: EU-15 and combined cash flow indices in EUR



Source: J.P. Morgan. Data as of November 2013.

in local currencies, and our analysis has not looked at currency volatility and exchange rate risk. However, for long-term investors, currency fluctuations should have minimal impact. This is because, beyond a five-year hold period the currency volatility diminishes as long-term trends in currency exchange rates are dominated by mean-reversion.

Short-term currency impact

Multi-currency infrastructure portfolios face currency risk, especially in the short term; exchange rates fluctuate continuously and create a currency impact on portfolio returns. It is important to highlight that while the currency impact can potentially be quite large in the short run, it nevertheless diminishes in the long run. Among economies with comparable long-term inflation rates, the purchasing power parity condition implies a mean-reversion for nominal currency exchange rates, lowering the currency impact.

Global portfolios capitalise on relative value opportunities

Another important benefit of a geographically diversified approach is that it opens up a wider range of investments for investors to choose from, helping long-term investors take advantage of different investment cycles.

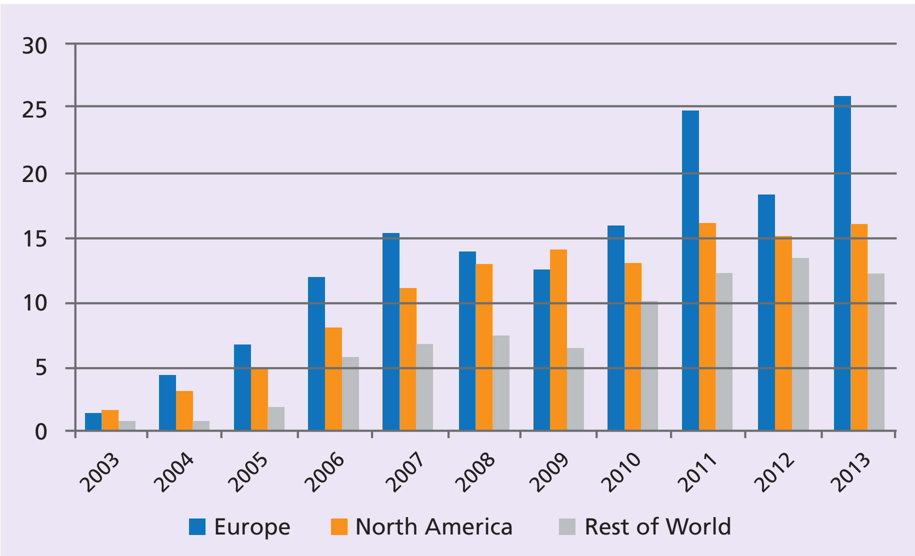
Infrastructure investing is undergoing a regime change as target allocations are increasing across all investor types and geographies. For example, the interest for European infrastructure is visibly higher than for infrastructure in the rest of the world. Considering unlisted infrastructure funds that have explicit geographical focuses only, the first chart of Figure 5 shows the aggregate “dry powder” these funds have to invest in core infrastructure (excluding the energy exploration sector) in their corresponding geographies.

Figure 6 shows the number of completed deals in Europe and North America since 2008. As the amount of dry powder has increased while the number of deals (and the average deal size) has not radically changed, The chart provides evidence that investor commitments to infrastructure have also been steadily increasing.

While commitments to invest have consistently grown across all areas, Europe-only commitments have been significantly higher than the US-only ones, especially since 2011. As a result, infrastructure asset values have increased faster in Europe than the US. Figure 7 shows EBITDA[3] multiples for regulated utility transactions in Europe and the US. In both markets the trends are upwards, but it is more pronounced in Europe.

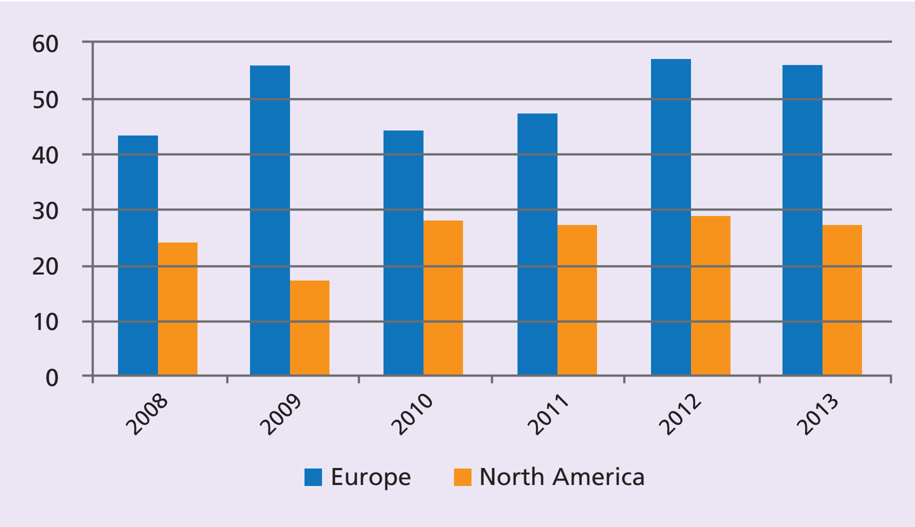
Infrastructure multiples in Europe are, for now, rising to the higher levels that acknowledge the improved transparency

Figure 5: Uncalled capital for unlisted infrastructure funds with regional focus, €billion



Source: J.P. Morgan, Infrastructure Journal, Preqin. Data as of February 2014.

Figure 6: Number of core infrastructure deals in Europe and North America



Source: J.P. Morgan, Infrastructure Journal, Preqin. Data as of February 2014.

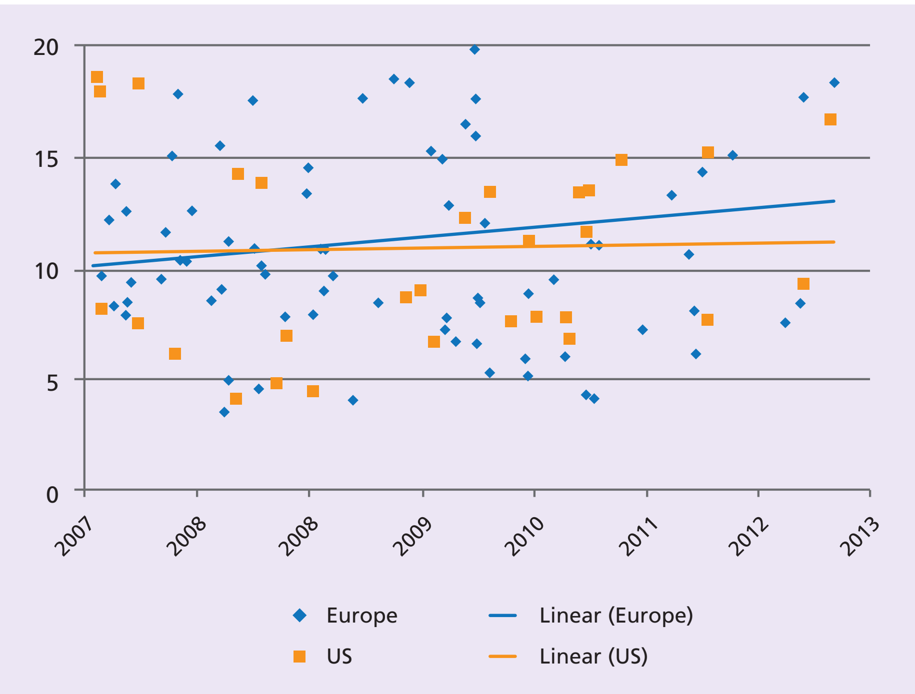
and maturity of the asset class. Going forward, we expect the valuations in the US to catch up, and as more investors reach their target allocation ranges, we expect values to stabilise in both markets. The investors that determined the attractiveness of the asset class ahead of others will enjoy a well-earned early mover advantage – more so in the US.

To summarise, while the infrastructure asset class provides meaningful diversification to an established portfolio, it is important to consider globally-focused infrastructure strategies given the added benefits and attributes we have outlined, as opposed to strategies focused only on certain regions or sectors.

Based on historical performance and the overall correlation of the infrastructure asset class, long-term investors can expect a globally focused core infrastructure strategy to deliver several benefits to their portfolios, including:

- Attractive stable cash flows
- Inflation sensitivity through positive real returns, even during periods of rising or elevated inflation
- Moderate volatility and portfolio risk through sector and geographic diversification, which can be attributed to varying economic, demographic and regulatory trends
- Low currency fluctuations through diverse developed market and in different market cycles

Figure 7: EBITDA multiples for regulated utility transactions in US and European Union



Source: J.P. Morgan, Asset Management, Bloomberg, Dealogic and FactSet. Data as of February 2014.

* the number of member countries in the European Union prior to the accession of ten candidate countries on 1 May 2004

1. Diversification does not guarantee investment returns and does not eliminate the risk of loss.
2. J.P. Morgan Asset Management Insights Paper *"Infrastructure Investing: A Portfolio Diversifier with Stable Cash Flows"*, Q1 2014.
3. Earnings before interest, tax, depreciation, amortisation