Keppel Capital

ResearchCOMMENTARY

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Infrastructure: Getting to the Core

- Highly defensive and essential asset class, offering stable returns and a good inflation hedge
- APAC offers immense investment opportunities given its favourable macro trends
- Critical to partner with established fund managers with strong sponsor support

The Push for Infrastructure

Rising interest rates, soaring inflation and the hunt for stable returns have undoubtedly been at the front and centre of investors' minds since the start of the year. In the 2022 Infrastructure Investor LP Survey, nearly two-thirds of institutional investors, including global pension funds, insurers and sovereign wealth funds, indicated plans to increase their infrastructure allocation over the next 12 months, the highest among alternative asset classes (Figure 1).

Figure 1: Investors' expected capital commitments to each asset class in the next 12 months

Source: Infrastructure Investor LP Perspectives Study 2022

Amid an increasingly volatile macro environment, the survey noted that investors are drawn to the highly defensive and resilient characteristics of infrastructure real assets. These include assets which provide services that are essential to the functioning of societies and economies, and thus able to deliver real, stable returns through market cycles, among other factors.

In this paper, we take a closer look at the characteristics and proposition of core infrastructure, and discuss how investors can capitalise on opportunities in Asia Pacific's (APAC) nascent infrastructure market through this investment strategy.

We also examine investors' key considerations when selecting the right fund manager. For instance, greater emphasis is being placed on the fund manager's ability to source proprietary transactions in an increasingly crowded market. Accordingly, having the support of a strong and reputable sponsor with extensive development and operating experience is critical in providing the fund manager with a robust deal pipeline, as well as access to certain highly regulated assets which are deemed to be critical to national security such as telecommunications and waste/water systems.

Understanding Infrastructure

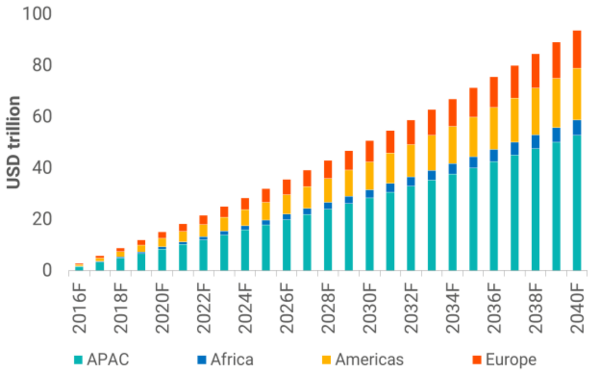
Infrastructure, as an asset class, first emerged in Australia back in the 1990s. It encompasses investment in high quality facilities, services and installations considered essential to the functioning and economic productivity of a society and thus tend to be resilient through market cycles. From traditional assets such as electricity generation, transportation (e.g. airport, rail, roads), as well as water and waste treatment plants, the infrastructure universe has evolved over time to include businesses with infrastructure-like characteristics such as credit bureaus and public registries.

Investing in APAC Infrastructure

Infrastructure Needs: 2016 - 2040

According to Oxford Economics, APAC's cumulative infrastructure investment needs are projected to total USD 52.7 trillion over the period 2016 to 2040. This is equivalent to 56.3% of the global infrastructure spending requirements (Figure 2) and covers regions including Southeast Asia, China, India, Japan and Australia.

Figure 2: Projected cumulative infrastructure investment by region, 2016 - 2040



Source: Oxford Economics

APAC's infrastructure needs are driven by the following five macro trends:

I) Rising urbanisation trends

APAC's urban population is projected to increase by close to 1 billion between 2018 and 2040, accounting for more than half of global urban population growth over the same period[1]. As the region's cities grow in both size and density, additional investments will be required to support and upgrade key infrastructure such as transport, network utilities, as well as water and waste treatment facilities.

II) Growing middle class

Underpinned by favourable demographic trends and productivity growth, APAC's middle-class population is projected to increase from 2.0 billion in 2020 to 3.5 billion in 2030, which is nearly two-thirds of the global middle class[2]. The region's growing affluence and corresponding drive for a higher standard of living is expected to fuel greater energy demand and electricity consumption. Correspondingly, APAC's power generation and distribution capacity need to be upgraded to meet the projected rise in electricity demand.

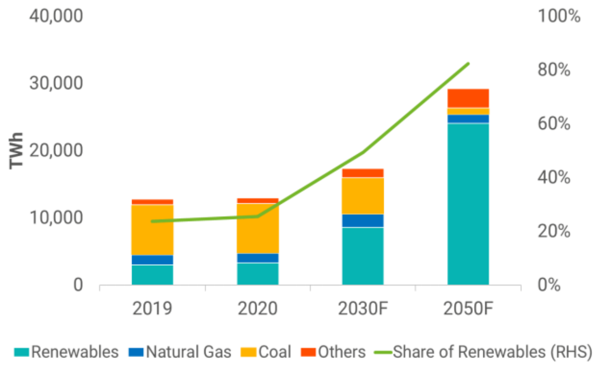
III) Supply chain shifts

APAC's trade flows are expected to rise over the medium to long term as multinational corporations (MNCs) continue to shift their production and procurement bases towards regions which offer greater cost competitiveness and access to raw materials. Within the region, geopolitical tensions and sporadic COVID-19 lockdowns in China have prompted some MNCs to diversify their origins of production towards Southeast Asian (SEA) markets. To fully capture the shift in supply chains, additional investments will be required to improve the quality of SEA's transport infrastructure which currently ranks below the global average[3].

IV) Climate change and energy sustainability

APAC's commitment to achieve net zero emissions is expected to catalyse investments in renewable energy capacity. According to the International Energy Agency (IEA), renewables will account for 82% of APAC's electricity generation mix by 2050, up from 26% in 2020 (Figure 3).

Figure 3: APAC Electricity Generation Mix



Source: IEA World Energy Outlook 2021

The recent Russia-Ukraine conflict, which has underscored the importance of energy security, is expected to further accelerate APAC's clean energy transition.

[1] UN, World Urbanisation Prospects: The 2018 Revision, May 2018

[2] World Economic Forum, This Chart Shows the Rise of the Asian Middle Class, 13 July 2020

[3] EIU Business Environment Ranking

V) Digitalisation

With the COVID-19 pandemic accelerating the rise of the digital economy, there is greater imperative for APAC countries to strengthen their information and communication (ICT) infrastructure (e.g. data centres, subsea cables, transmission towers) to sustain their economic competitiveness. For example, the deployment of 5G mobile technology will help to unlock new capabilities (e.g. augmented / virtual reality, remote manufacturing, smart cities) that will add an estimated USD 295 billion to APAC's economy by 2030[4].

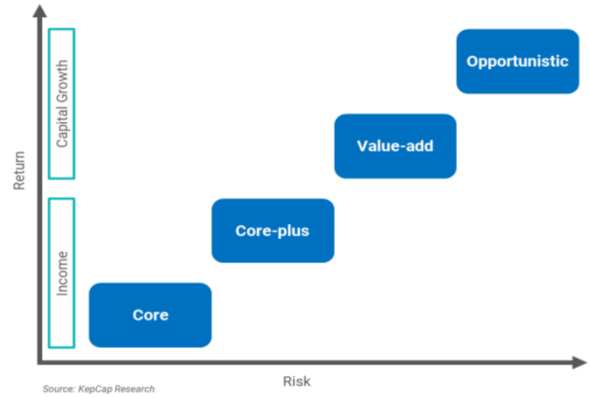
Opportunities for investors

Based on the current pace of infrastructure spend, Oxford Economics estimated that APAC will need to commit an additional USD 4.7 trillion to achieve the region's cumulative infrastructure investment needs of USD 52.7 trillion over the period 2016 to 2040. This has raised concerns whether APAC governments have sufficient fiscal space or debt headroom to meet this infrastructure gap[5], especially when many governments have already tapped on their fiscal reserves in providing COVID-19 relief measures. Within the private sector, stricter regulations (e.g. Basel III) have curbed commercial banks' capacity to finance infrastructure projects. To sustainably address the region's infrastructure gap, governments in APAC will need to rely more on alternative sources of private capital. These include sovereign wealth funds (SWF) and non-bank financial institutions such as insurers and pension funds.

There are four types of infrastructure equity investment strategies available to investors, with each strategy distinguished by its risk exposure and type of return achieved. Opportunistic strategy sits at the highest end of the risk spectrum and mainly targets assets which are under development or require significant repositioning. Returns are generated almost entirely from capital appreciation.

Meanwhile, core strategy focuses on secondary stage or fully-operational assets and is considered the most stable form of infrastructure equity investment. Returns are primarily derived from income (Figure 4).

Figure 4: Infrastructure Strategy Risk-Return Scale



Key sources of core infrastructure deals include:

I) Privatisation

Sale of state-owned assets by the government to reduce debt burden or free up fiscal resources. However, prevailing regulations such as those related to national security could limit the level of investments and control in certain critical assets such as electricity generation, telecommunications and waste/water systems.

II) Public-private partnership (PPP)

PPP is a mechanism for governments to procure and implement public infrastructure and/or services using the resources and expertise of the private sector[6]. There are various types of PPP contracts which can be used to develop, upgrade and manage greenfield and brownfield projects. Critical success factors for PPP projects include political stability, rule of law (e.g. contract enforcement, property rights) and a sound business environment, areas which APAC has generally lagged the western markets[7].

III) Acquisitions and Proprietary Deals

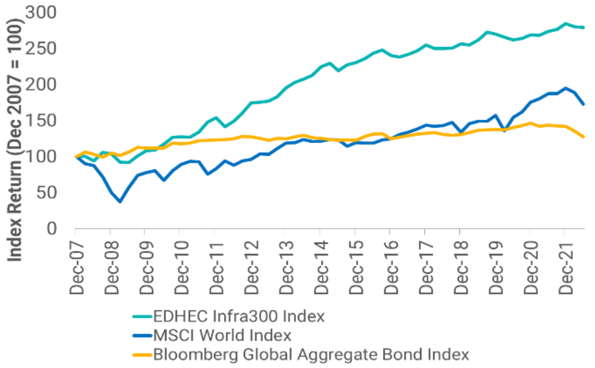
Acquisition of stabilised assets from related (e.g. sponsor) or third-party private infrastructure developers and fund managers.

[4] GSMA, The Socio-economic Benefits of Mid-band 5G Services, 9 March 2022
[5] For example, a 2017 study by the Asian Development Bank of 25 developing APAC economies estimated that public financing can only cover just over half of their infrastructure gap even after undertaking fiscal reforms.
[6] World Bank PPP Legal Resource Centre
[7] Global Infrastructure Hub InfraCompass

The Appeal of Core Infrastructure

Having barely emerged from the acute phase of the COVID-19 pandemic, the global economy is facing renewed headwinds from the Russia-Ukraine conflict, which has exacerbated supply chain disruptions and raised the spectre of stagflation. There are also mounting concerns that major central banks could overtighten monetary policies in their bid to tame inflation and indirectly raising the risks of recession. The resultant turmoil across global financial markets, which is likely to persist in the near term, has highlighted the importance of diversifying into infrastructure which has a strong track record of delivering consistent returns through market cycles (Figure 5).

Figure 5: Historical return comparison between infrastructure, public equities and bonds



Source: Bloomberg, EDHEC Infra, KepCap Research

Core infrastructure offers the best defensive play for investors given its three key characteristics:

I) Stable and predictable returns

Core infrastructure assets typically provide essential services in markets which are regulated or have high barriers of entry. As a result of their monopolistic position, demand for their services is less sensitive to economic cycles. Their cashflows are also relatively predictable as they are backed by rate regulation, availability agreements or long-term contracts with highly creditworthy counterparties such as governments, municipalities and top-tier industrial companies.

II) Low correlations with other asset classes

Given their stable returns, core infrastructure tend to have a low correlation with other asset classes. Over the period 2008 and 2021, the correlation coefficient of global core infrastructure to both global equities and bonds was -0.1[8]. Core infrastructure also has a low correlation with other alternative asset classes such as hedge funds (0), private equity (0) and real estate (~0.2)[9]. Consequently, asset allocation into core infrastructure can play an important role in institutional portfolio diversification, particularly in times of economic and market uncertainties.

III) Inflation hedge

Core infrastructure assets such as utilities and toll roads typically have clauses within the contracts, concession agreements or regulatory framework which allow end-user rates to rise in line with, or above inflation rates. This unique characteristic enables core infrastructure assets to generate positive real returns which is critical in the current high inflation environment. For example, a study by JP Morgan showed that the allowed return on equity (RoE) of US electric utilities was positively correlated to inflation over a 45-year period.

Market Trends

Rising allocation to core infrastructure

A recent study by World Pensions Council indicated that infrastructure investment flows are projected to increase further over the next four years as large institutional investors double their allocation to private capital markets.

For insurers and pension funds, factors such as an ageing population, rising healthcare costs and climate-related losses are expected to increase the amount and duration of their liabilities, which need to be matched by a corresponding growth in long-term, stable income-generating assets such as core infrastructure. Regulatory changes will also compel insurers to increase their allocation to core infrastructure. Under the European Union's (EU) Solvency II Framework, which was implemented for insurers from 1 January 2016, investments in infrastructure projects that generate predictable cashflows among other criteria are subject to lower capital charges[10]. IFRS 9, which is scheduled to come into force for insurers from 2023, may require

[8] JP Morgan Asset Management, Guide to Alternatives 4Q2021
[9] Ibid
[10] European Commission, New EU Rules to Promote Investments in Infrastructure Projects, 30 September 2015

them to value an increasing number of financial assets at full fair value[11]. Correspondingly, insurers could shift their portfolio allocation towards less liquid and stable assets such as core infrastructure to minimise their earnings volatility.

For SWFs, investments in core infrastructure provide their respective governments with additional streams of stable and sustainable income, which can be used to supplement the financing of counter-cyclical fiscal policies as well as the secular rise in healthcare and social spending. For example, the world's fourth largest SWF, Abu Dhabi Investment Authority, highlighted that it will increase its exposure to core infrastructure to bolster its portfolio returns[12].

Increased focus on investment deal origination capabilities

A 2022 Infrastructure Investor survey showed that 91% of respondents cited the fund manager's investment capacity and team size as an important consideration, up from 88% in 2020[13]. In particular, investors are placing greater emphasis on the fund managers' ability to source proprietary deals in an increasingly crowded core infrastructure space.

Shift towards ESG

The rise in the frequency and severity of extreme weather events, coupled with the emergence of the COVID-19 pandemic has catalysed the shift towards ESG-focused investments. This is especially so for infrastructure which plays a critical role in all three dimensions of sustainable development: the economy, environment and society. According to Infrastructure Investor's 2022 LP survey, more than 60% of investors plan to allocate more capital towards renewable and digital infrastructure over the next 12 months. In addition, 74% of investors believed that the adoption of a strong ESG policy will lead to better long-term returns in their private market portfolios. With ESG becoming an increasingly critical investment consideration, fund managers need to step up the frequency and quality of ESG measurement and reporting and demonstrate their commitment to sustainability.

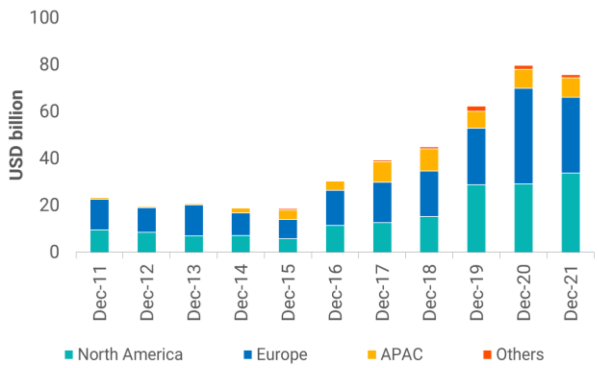
Regulators have also put in place measures to promote ESG investing and improve ESG disclosure standards. For example, the European Commission introduced the EU Taxonomy and Sustainable Finance Disclosure Regulations (SFDR) in July 2020 and March 2021 respectively. Within APAC, similar measures were also introduced by the Monetary Authority of Singapore and South Korea's Financial Services Commission in December 2020 and January 2021 respectively to enhance the level of ESG disclosure. With the increased emphasis on ESG benchmarking, GRESB reported that the gross asset value (GAV) of participating infrastructure assets worldwide has increased by 50% from 2019 to reach USD 738 billion in 2021.

Investment Considerations

Increase Exposure to APAC

Despite APAC's immense infrastructure potential, the region tends to be overlooked by both fund managers and investors due partly to its relatively complex market and more fragmented regulatory environment[14]. According to Preqin, only 12% of global core infrastructure dry powder was deployed to APAC over the past 10 years, compared to the more mature markets of Europe (47%) and North America (39%) (Figure 6).

Figure 6: Core infrastructure dry powder by region



Source: Preqin

This is where partnering with a fund manager with strong track record and understanding of APAC's diverse business and regulatory landscape to mitigate transaction risks will be critical for investors seeking exposure to APAC.

[11] KPMG, IFRS 9 for Insurers, 27 September 2021
[12] Asian Investor, ADIA Boosts Exposure to Digital and Core Infrastructure Assets, 24 February 2022
[13] Infrastructure Investor, LP Perspective Study 2022 and 2020
[14] PwC, Investing in the ASEAN Infrastructure Asset Class, May 2018

Capitalise on sponsor capabilities

As competition for core infrastructure assets continues to intensify, having a strong sponsor which can provide a pipeline of proprietary deals will allow fund managers to deliver strong and sustainable returns for investors.

In the case of Keppel Core Infrastructure Fund (KCIF), the fund has access to a diverse portfolio of pan-APAC assets (e.g. power generation, water and waste treatment) which are developed, managed and held by an ecosystem of business units (including Keppel Infrastructure, Keppel Renewable Energy, Keppel Capital) and funds (including Keppel Asia Infrastructure Fund, Keppel Infrastructure Trust) operating under Keppel Corporation, a leading conglomerate in Singapore. This includes acquiring certain core-plus like assets which have the potential to generate higher returns though process reengineering.

Through this unique OneKeppel Infrastructure platform, we are able to pursue opportunities across the projects' development stages and offer investors a full-suite of solutions spanning different investment strategies from value-add to core, as well as various themes, such as economic and social development, energy transition and digital solutions. Post-acquisition, KCIF can continue to tap on the sponsor's collective capabilities and proprietary technologies to sustain the assets' operational efficiency.

KCIF can also leverage the sponsor's strength as a leading sustainable solutions provider to build up a portfolio of internationally-recognised, green-certified assets and advance investors' ESG agenda. This is especially critical in APAC, where the level of sustainability disclosure has generally lagged the western markets. In terms of GAV, APAC accounted for just 18% of all assets which participated in GRESB's 2021 Infrastructure Assessment, compared to Europe (45%) and Americas (36%). As a testament to Keppel's commitment to sustainability, the organisation has been awarded numerous ESG accreditations, such as attaining the highest triple-A rating in the Morgan Stanley Capital International (MSCI) ESG ratings, a title it has held since February 2020.

Conclusion

Against the backdrop of heightened economic and market volatilities and elevated inflationary pressures, diversifying into core infrastructure may bolster the resilience of investors' portfolio given the asset class's ability to generate stable, real returns which are lowly correlated with other asset classes. Due to their long economic lives, core infrastructure assets are well-suited to help insurers, pension funds and sovereign wealth funds hedge against the increase in long-term liabilities and their durations.

With demand for core infrastructure assets expected to intensify going forward, investors could consider increasing their exposure to APAC which offer more compelling valuations. Investors can also expect to do well by partnering with fund managers with strong track records of developing and operating infrastructure assets in the region, as well as possessing strong ESG credentials.

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