MACQUARIE

MACQUARIE ASSET MANAGEMENT

Pathways

Infrastructure secondaries: New opportunities and greater liquidity for infrastructure investors

August 2022

Pathways is a proprietary publication for clients of Macquarie Asset Management. For more information, or to speak to the author of this issue, Aizhan Meldebek, CAIA, please contact your Macquarie Asset Management Relationship Manager.

Important information and disclaimers

This market commentary has been prepared for general informational purposes by the author, who is a part of Macquarie Asset Management (MAM), the asset management business of Macquarie Group (Macquarie), and is not a product of the Macquarie Research Department. This market commentary reflects the views of the author and statements in it may differ from the views of others in MAM or of other Macquarie divisions or groups, including Macquarie Research. This market commentary has not been prepared to comply with requirements designed to promote the independence of investment research and is accordingly not subject to any prohibition on dealing ahead of the dissemination of investment research.

Nothing in this market commentary shall be construed as a solicitation to buy or sell any security or other product, or to engage in or refrain from engaging in any transaction. Macquarie conducts a global full-service, integrated investment banking, asset management, and brokerage business. Macquarie may do, and seek to do, business with any of the companies covered in this market commentary. Macquarie has investment banking and other business relationships with a significant number of companies, which may include companies that are discussed in this commentary, and may have positions in financial instruments or other financial interests in the subject matter of this market commentary. As a result, investors should be aware that Macquarie may have a conflict of interest that could affect the objectivity of this market commentary. In preparing this market commentary, we did not take into account the investment objectives, financial situation or needs of any particular client. You should not make an investment decision on the basis of this market commentary. Before making an investment decision you need to consider, with or without the assistance of an adviser, whether the investment is appropriate in light of your particular investment needs, objectives and financial circumstances.

Macquarie salespeople, traders and other professionals may provide oral or written market commentary, analysis, trading strategies or research products to Macquarie's clients that reflect opinions which are different from or contrary to the opinions expressed in this market commentary. Macquarie's asset management business (including MAM), principal trading desks and investing businesses may make investment decisions that are inconsistent with the views expressed in this commentary. There are risks involved in investing. The price of securities and other financial products can and does fluctuate, and an individual security or financial product may even become valueless. International investors are reminded of the additional risks inherent in international investments, such as currency fluctuations and international or local financial, market, economic, tax or regulatory conditions, which may adversely affect the value of the investment. This market commentary is based on information obtained from sources believed to be reliable, but we do not make any representation or warranty that it is accurate, complete or up to date. We accept no obligation to correct or update the information or opinions in this market commentary. Opinions, information, and data in this market commentary are as of the date indicated on the cover and subject to change without notice. No member of the Macquarie Group accepts any liability whatsoever for any direct, indirect, consequential or other loss arising from any use of this market commentary and/or further communication in relation to this market commentary. Some of the data in this market commentary may be sourced from information and materials published by government or industry bodies or agencies, however this market commentary is neither endorsed nor certified by any such bodies or agencies. This market commentary does not constitute legal, tax accounting or investment advice. Recipients should independently evaluate any specific investment in consultation with their legal, tax, accounting, and investment advisors. Past performance is not indicative of future results.

This market commentary may include forward-looking statements, forecasts, estimates, projections, opinions and investment theses, which may be identified by the use of terminology such as "anticipate", "believe", "estimate", "expect", "intend", "may", "can", "plan", "will", "would", "should", "seek", "project", "continue", "target" and similar expressions. No representation is made or will be made that any forward-looking statements will be achieved or will prove to be correct or that any assumptions on which such statements may be based are reasonable. A number of factors could cause actual future results and operations to vary materially and adversely from the forward-looking statements. Qualitative statements regarding political, regulatory, market and economic environments and opportunities are based on the author's opinion, belief and judgment.

Other than Macquarie Bank Limited ABN 46 008 583 542 ("Macquarie Bank"), any Macquarie Group entity noted in this document is not an authorised deposittaking institution for the purposes of the Banking Act 1959 (Commonwealth of Australia). The obligations of these other Macquarie Group entities do not represent deposits or other liabilities of Macquarie Bank. Macquarie Bank does not guarantee or otherwise provide assurance in respect of the obligations of these other Macquarie Group entities. In addition, if this document relates to an investment, (a) the investor is subject to investment risk including possible delays in repayment and loss of income and principal invested and (b) none of Macquarie Bank or any other Macquarie Group entity guarantees any particular rate of return on or the performance of the investment, nor do they guarantee repayment of capital in respect of the investment.

Past performance is no guarantee of future results.

Diversification may not protect against market risk.

Investing in real assets securities includes the risk that the value of a fund's shares will be affected by factors particular to real assets securities and related industries or sectors (such as government regulation) and may fluctuate more widely than that of a fund that invests in a broad range of industries.

Natural or environmental disasters, such as earthquakes, fires, floods, hurricanes, tsunamis, and other severe weather-related phenomena generally, and widespread disease, including pandemics and epidemics, have been and can be highly disruptive to economies and markets, adversely impacting individual companies, sectors, industries, markets, currencies, interest and inflation rates, credit ratings, investor sentiment, and other factors affecting the value of the Portfolio's investments. Given the increasing interdependence among global economies and markets, conditions in one country, market, or region are increasingly likely to adversely affect markets, issuers, and/or foreign exchange rates in other countries. These disruptions could prevent the Portfolio from executing advantageous investment decisions in a timely manner and could negatively impact the Portfolio's ability to achieve its investment objective. Any such event(s) could have a significant adverse impact on the value and risk profile of the Portfolio.

Investment strategies that hold securities issued by companies principally engaged in the infrastructure industry have greater exposure to the potential adverse economic, regulatory, political, and other changes affecting such entities.

Infrastructure companies are subject to risks including increased costs associated with capital construction programs and environmental regulations, surplus capacity, increased competition, availability of fuel at reasonable prices, energy conservation policies, difficulty in raising capital, and increased susceptibility to terrorist acts or political actions.

The Bloomberg Global Aggregate Index provides a broad-based measure of the global investment grade fixed-rate debt markets.

The MSCI World Index represents large- and mid-cap stocks across 23 developed market countries worldwide. The index covers approximately 85% of the free float-adjusted market capitalization in each country. Index "net" return approximates the minimum possible dividend reinvestment, after deduction of withholding tax at the highest possible rate.

The Cambridge Associates Private Infrastructure Index is an index based on data compiled from 154 infrastructure funds, including fully liquidated partnerships, formed between 1994 and 2022. All returns are net of fees, expenses, and carried interest."

Macquarie Group, its employees and officers may act in different, potentially conflicting, roles in providing the financial services referred to in this document. The Macquarie Group entities may from time to time act as trustee, administrator, registrar, custodian, investment manager or investment advisor, representative or otherwise for a product or may be otherwise involved in or with, other products and clients which have similar investment objectives to those of the products described herein. Due to the conflicting nature of these roles, the interests of Macquarie Group may from time to time be inconsistent with the interests of investors. Macquarie Group entities may receive remuneration as a result of acting in these roles. Macquarie Group has conflict of interest policies which aim to manage conflicts of interest.

All third-party marks cited are the property of their respective owners.

Executive summary

Attractive characteristics. Properly structured, secondaries can deliver attractive investment characteristics, including partial or full mitigation of the J-curve effect, potential downside protection due to reduced blind pool risk, and higher diversification across vintages, sectors, and strategies.

Expanding asset class. The private infrastructure asset class continues to grow on the back of strong interest from institutional investors, an expanding investment universe, and supportive macroeconomic conditions. After growing at a compound annual growth rate (CAGR) of 15.2 per cent between 2014 and 2020, the asset class may reach $US2.1 trillion[1] of assets under management (AuM) globally by 2025, almost double its size in 2020.

Secondaries as natural evolution. When illiquid asset classes grow and mature, a secondary market tends to evolve as a tool to provide liquidity to Limited Partners (LPs) and flexibility to General Partners (GPs). The more mature secondary markets in private equity and real estate currently account for about 6.8 and 3.0 per cent[2] of total assets, respectively, well above the current 1.4 per cent for infrastructure.[3]

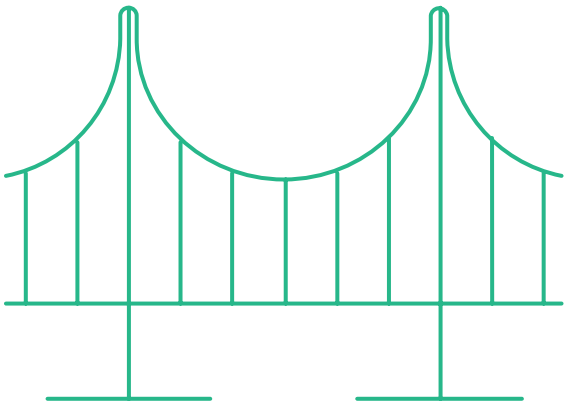
Potential growth ahead. If infrastructure secondaries were to follow the growth trajectory of their counterparts in real estate and private equity and the primary market grows to $US2.1 trillion by 2025,[4] infrastructure secondaries AuM could reach between $US50 billion and $US67 billion in 2025, up from $US18.6 billion[5] in 2021.

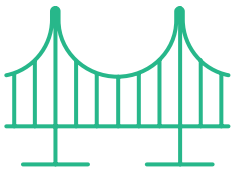
Deal volumes. Growing allocations to infrastructure and healthy capital deployment levels in the primary market create a favourable environment for the growth of secondary funds. Transaction volumes continue to grow on the back of both LP-led and GP-led deals. Secondary infrastructure deals were at $US9 billion in 2019, up from $US0.6 billion in 2010.[6]

Risks. While infrastructure secondaries may offer several attractive investment characteristics, they are not risk free. Investing in secondary funds may involve new risks – for example, a complexity risk – in addition to the risks associated with primary infrastructure funds.

1. PwC AWM Global Research Centre (2020), the base-case scenario assumes that the infrastructure AuM grows to $US2.1 trillion by 2025.
2. Real estate secondaries calculated as a percentage of closed-end real estate funds AuM.
3. Estimate is based on Preqin database, data as of September 2021.
4. As forecast by PwC AWM Global Research Centre (2020).
5. Based on Preqin database, data as of September 2021.
6. Inframation, Campbell Lutyens (October 2020).

Introduction: Secondaries as a differentiated way of accessing infrastructure assets

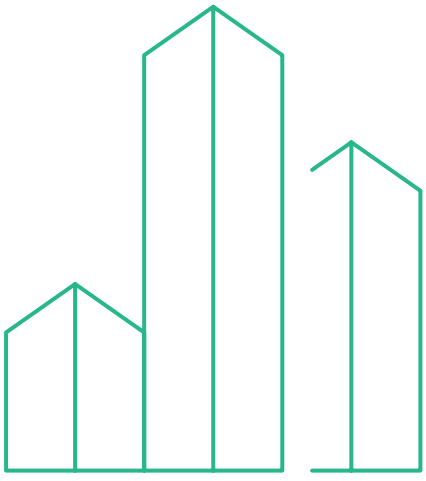




The history of private equity and real estate shows that the emergence of a secondary market is a natural evolution for an illiquid asset class. With allocations to unlisted infrastructure on the rise, liquidity is increasingly key for institutional investors. Secondary funds – or "secondaries" – buy pre-existing investor ownership rights and commitments in a primary fund. Since infrastructure investments are often held within closed-end fund structures with a long life – typically between 10 and 12 years – this creates an opportunity for secondary funds to accommodate portfolio repositioning for LPs and ownership realignment for GPs. In other words, they provide a differentiated way of accessing infrastructure assets.

This issue of Pathways is split into three sections. In the *first section*, we analyse the historical evolution of infrastructure secondaries and their potential growth prospects based on how peer asset classes – private equity and real estate – have evolved. The *second section* provides an overview of transaction volumes in both primary and secondary markets and their main drivers. We also discuss the difference between LP-led and GP-led secondary market transactions. The *third section* describes the benefits and risks of investing in infrastructure secondaries, including the potential mitigation of the J-curve effect, diversification, and portfolio benefits.

The evolution of unlisted infrastructure and its secondary market



Since its emergence as an asset class in Australia in the early 1990s following a wave of privatisations and extensive pension system reform, infrastructure has evolved considerably. In 2020, unlisted infrastructure had $US1.2 trillion of AuM, double the 2015 level. Over the next five years, its AuM is forecast to reach $US2.1 trillion,[7] effectively doubling again in just five years. Growth in the primary market tends to drive the expansion of the secondary market.

In this chapter, we discuss the historical evolution and potential development of infrastructure secondaries.

Infrastructure AuM growth: Outperforming the asset management industry

Global unlisted infrastructure AuM has grown substantially over recent years. In fact, private infrastructure AuM has expanded at a CAGR of 15.2 per cent[8] between 2014 and 2020 (Figure 1), nearly double the 7.7 per cent[9] of total global AuM growth over the same period (Figure 2). According to forecasts, infrastructure AuM may grow at 11.7 per cent to 2025, well above the asset management industry average growth forecast of 5.7 per cent.[10]

7. PwC AWM Global Research Centre (2020), the base-case scenario assumes that the infrastructure AuM grows to $US2.1 trillion by 2025.
8. PwC AWM Global Research Centre (2020).
9. Boston Consulting Group (BCG), "The $100 Trillion Machine" (July 2021).
10. PwC AWM Global Research Centre, the base-case scenario assumes that the infrastructure AuM grows to $US2.1 trillion by 2025.

Figure 1:
Unlisted infrastructure AuM has grown at a 15.2% CAGR between 2014 and 2020...

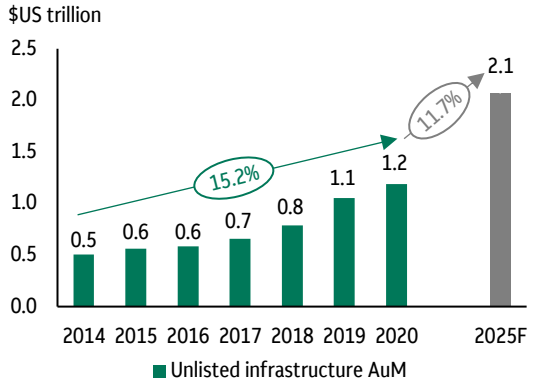
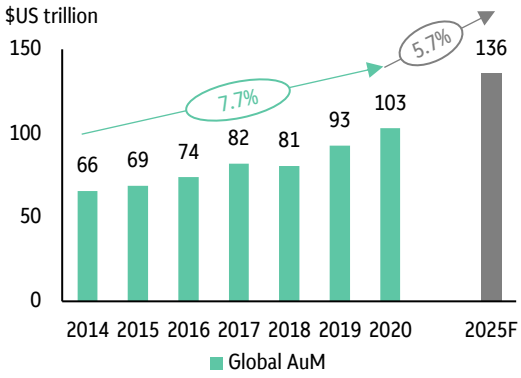


Figure 2:
...outperforming the 7.7% CAGR of the asset management industry



Sources: PwC AWM Global Research Centre; BCG, "The $100 Trillion Machine" (July 2021). Notes: F = Forecast. Past performance is not indicative of future results.

Infrastructure secondaries AuM: Insights from peers

The infrastructure secondary market has emerged on the back of strong growth in the primary market. This can be viewed as a natural evolution for an asset class in the alternative investments world, where closed-end funds dominate the market. Despite some differences, the more mature private equity and real estate secondary markets may provide insights into the potential growth trajectory of infrastructure secondaries:

- **Private equity secondaries.** Private equity secondaries emerged in the early 1980s with the first fund raising $US6 million.[11] While private equity's primary market grew dramatically in the 1990s, the secondary market remained relatively small. However, in the early 2000s, following the dot-com crisis, the secondary market expanded rapidly as investors looked to reposition their portfolios. Private equity secondaries AuM has grown from $US8.2 billion in 2000 to $US301 billion in 2020, a CAGR of 19.7 per cent.[12] In 2020, the private equity secondaries market was around 6.8 per cent of total private equity AuM (Figure 3).
- **Real estate secondaries.** The real estate secondaries market took off after the global financial crisis (GFC), with AuM more than doubling between 2009 and 2010. Since then, AuM has grown at a CAGR of 19.9 per cent, from $US4.5 billion in 2010 to $US27.7 billion in 2020. Since the role of secondaries is often to provide liquidity to investors in closed-end funds, it is more relevant to calculate the share of secondaries as a percentage of closed-end funds.[13] Estimates suggest that real estate secondaries accounted for about 3.0 per cent of closed-end real estate funds' AuM in 2021 (Figure 4).

11. Based on Pitchbook database.
12. Based on Pitchbook database.
13. According to INREV, "Fund Manager Survey 2022", the total real estate AuM managed by asset managers stood at €4.1 trillion in 2021, while closed-end real estate funds AuM accounts for about $US1.1 trillion, according to Preqin database.

Figure 3:
Private equity (PE) and real estate (RE) secondaries are more mature asset classes...

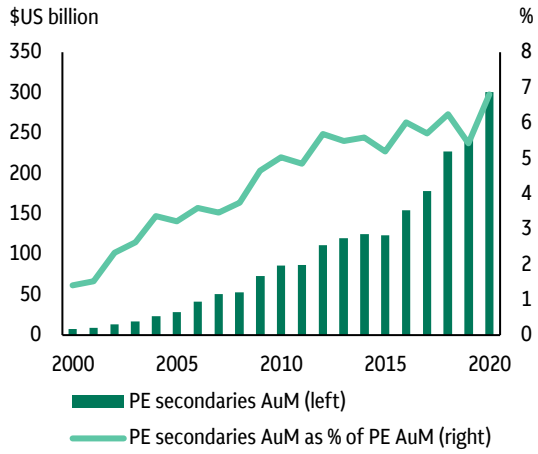
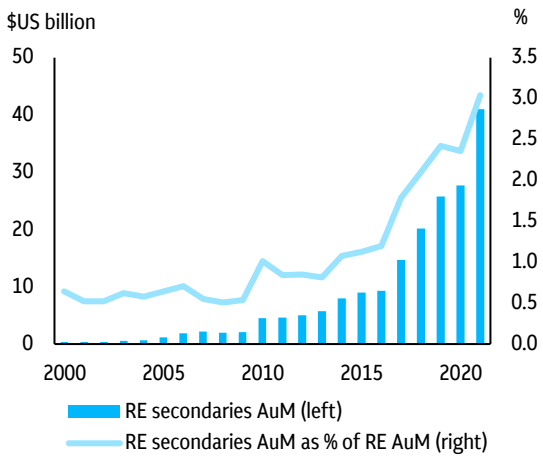


Figure 4:
...and currently account for around 6.8 and 3.0 per cent of total PE and RE AuM, respectively

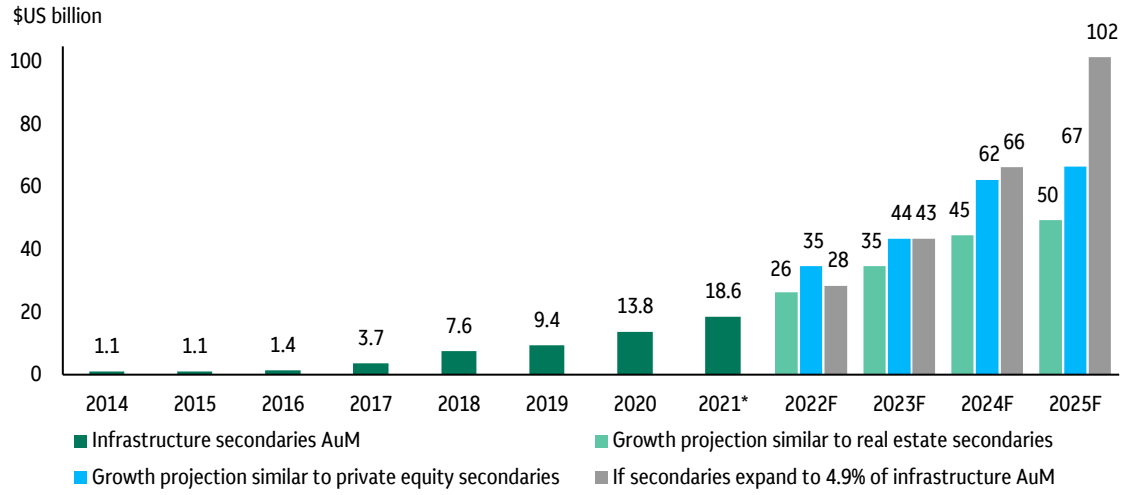


Source: Preqin data (June 2022). Notes: Real estate secondaries calculated as a percentage of closed-end real estate funds AuM. 2021 figure for real estate is based on September 2021.

As of September 2021, infrastructure secondaries AuM stood at $US18.6 billion[14] and accounted for about 1.4 per cent of total infrastructure assets. This is a similar position to that of private equity in 2001 and real estate in 2016. If infrastructure secondaries were to follow the growth pattern of their counterparts in real estate and private equity, this market could reach between 2.4 and 3.2 per cent of total infrastructure assets by 2025. Assuming the total infrastructure AuM reaches $US2.1 trillion in 2025,[15] this implies that infrastructure secondaries AuM could be between $US50 billion and $US67 billion (Figure 5). By comparison, if the infrastructure primary market grows to $US2.1 trillion by 2025[16] and the infrastructure secondary market expands to 4.9 per cent[17] of the primary market, infrastructure secondaries AuM could reach $US102 billion in 2025.

14. Based on Preqin database (June 2022).
15. As forecast by PwC AWM Global Research Centre (2020).
16. As forecast by PwC AWM Global Research Centre (2020).
17. The assumption of 4.9 per cent of AuM is based on a midpoint between the latest share for real estate secondaries and private equity secondaries of their respective asset classes' total AuM.

Figure 5:
Potential infrastructure secondaries AuM evolution



Source: Macquarie Asset Management calculations based on PwC AWM Global Asset Research Centre (2020) and Preqin data (June 2022). Note: *2021 figure is based on September 2021. All assumptions are conditional on primary market reaching $US2.1 trillion by 2025. Past performance is not indicative of future results.

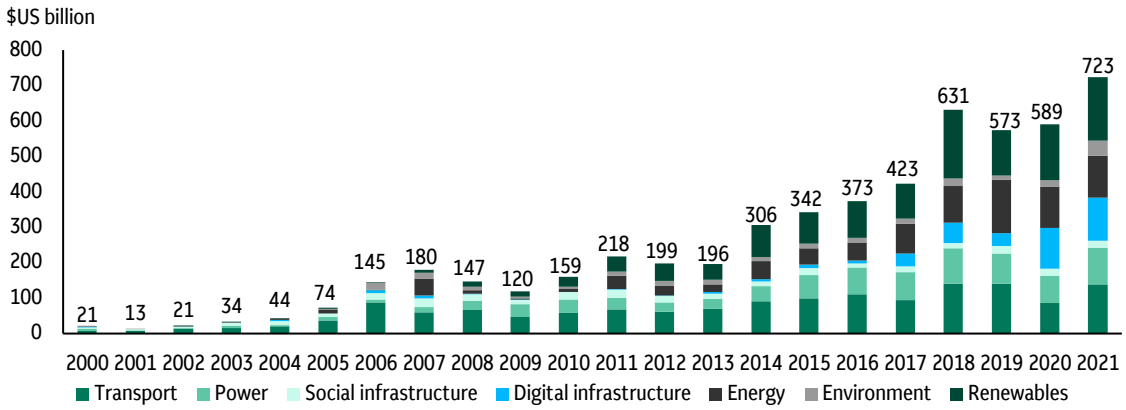
Deal activity in primary and secondary markets

Deal volumes in both primary and secondary markets continue to grow. Transaction activity in the secondary market is typically a function of primary funds activity. While institutional investors are increasing allocations to infrastructure funds, infrastructure managers continue to deploy capital across a diversified set of sectors and strategies. Together, these trends create a favourable environment for growth in the secondary market, in our view.

Primary infrastructure market: Record high volume in 2021

Since 2000, infrastructure equity volumes have increased at a CAGR of 18.4 per cent. In 2021, transaction volumes in the unlisted infrastructure equity market climbed to a record high, reaching an estimated deal value of $US722.9 billion (Figure 6).[18] From a sector perspective, renewables and power are the largest, accounting for 39 per cent of deal value, or $US281.1 billion. Transport – particularly passenger transport – was heavily impacted by COVID-19 but is now bouncing back. In 2021 transport deal volumes were back to $US139.4 billion, up from $US85.9 billion in 2020 and 99 per cent of their pre-pandemic level. Activity in digital infrastructure continues to grow rapidly with $US120.3 billion of transactions in 2021, representing a more than a threefold increase compared with $US36.7 billion in 2019.[19]

Figure 6:
Private infrastructure equity deal volume in primary market by sector



Source: Infralogic by Inframation database (May 2022). Energy excludes energy upstream and downstream assets.

18. Infralogic by Inframation database (June 2022). Energy excludes energy upstream and downstream assets.
19. Inframation database, accessed on 21 June 2022.

Infrastructure secondaries: Transaction activity on the rise

Secondary infrastructure deals grew substantially between 2010 and 2019, from just $US0.6 billion to $US9 billion, a CAGR of 35.1 per cent (Figure 7).[20] There are typically two types of secondary market transactions: LP-led and GP-led. LP-led deals are viewed as more traditional transactions and continue to form the backbone of the market.

An LP-led deal involves an LP initiating the sale of its ownership rights (including remaining commitments such as capital calls) to a new investor prior to the fund's expiration date. The sale could be motivated by the LP's changing portfolio allocation targets to increase or reduce exposure to certain sectors, regions, or managers (more details to follow). In this case, a secondary fund acts as a liquidity provider to accommodate the LP's needs. The fund may not only gain access to assets that were previously out of reach but can get an immediate diversification by gaining exposure to several assets in a single transaction. Figure 8 provides an illustrative example of an LP-led transaction.

Figure 7:
Transaction volume have grown significantly for infrastructure secondaries, driven by both LP-led and GP-led deals

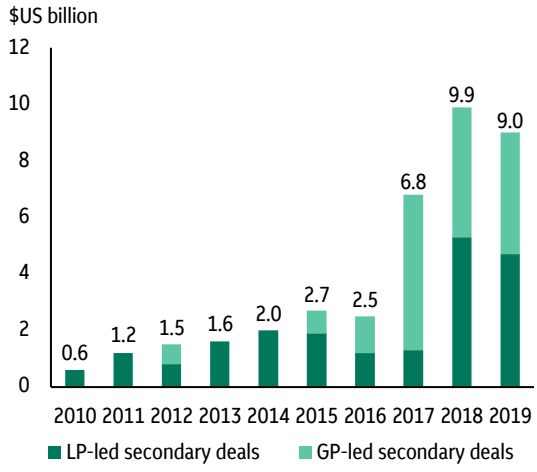
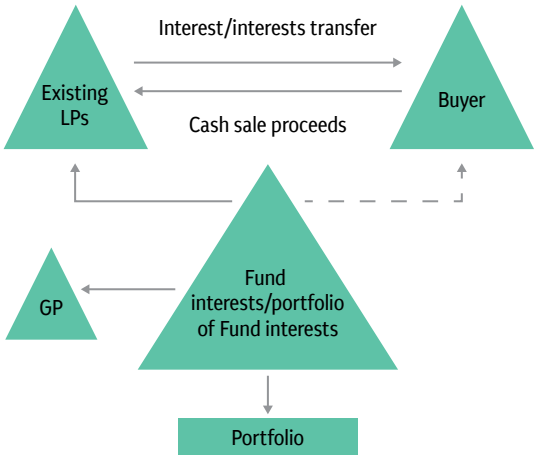


Figure 8:
Illustrative example of an LP-led secondary transaction

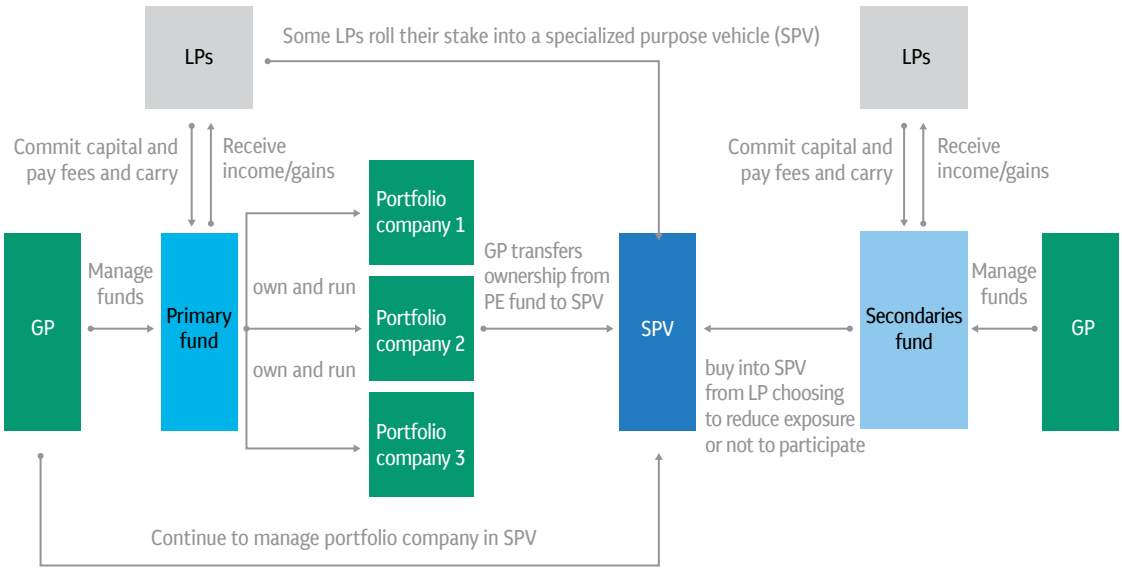


Sources: Inframation, Campbell Lutyens (October 2020), Clifford Chance (October 2019).

20. Inframation, Campbell Lutyens (October 2020).

GP-led transactions refer to the sale of one or more portfolio assets to a new investment vehicle managed by the same GP at the end of a fund's life. In such a transaction, existing LPs have an opportunity to either roll over their existing stake into the new vehicle or exit their position and reduce their exposure. It is worth noting that single-asset GP-led deals are not uncommon, in which case the diversification benefits could be reduced compared with an LP-led deal. Figure 9 provides an illustrative example of a GP-led transaction.

Figure 9:
Illustrative example of a GP-led secondary transaction



Source: Pitchbook (March 2020).

Infrastructure trends driving activity in the primary market

Driver 1. Continued allocations to infrastructure by institutional investors

Private infrastructure continues to attract significant interest from institutional investors. In 2021, unlisted infrastructure funds raised $US125 billion of capital, a more than threefold increase compared with 2012 (Figure 10). According to a survey by Infrastructure Investor, 65 per cent of institutional investors increased their allocation to infrastructure in 2021, a significantly higher proportion than the 33 per cent who did so in 2020 (Figure 11).[21] The growing appetite from investors could be due to several reasons:

- First, infrastructure has delivered an annualised 9.9 per cent[22] total return over the past decade, above global equities (8.7 per cent)[23] and global bonds (3.4 per cent).[24]
- Second, infrastructure assets tend to offer a relatively good hedge against higher inflation, courtesy of the relatively tight link between inflation and revenue that many assets possess.[25]
- Finally, infrastructure may be less affected by higher interest rates than asset classes with high-growth assets that have more of their value farther into the future.

Figure 10:
Robust fundraising levels by infrastructure funds continues...

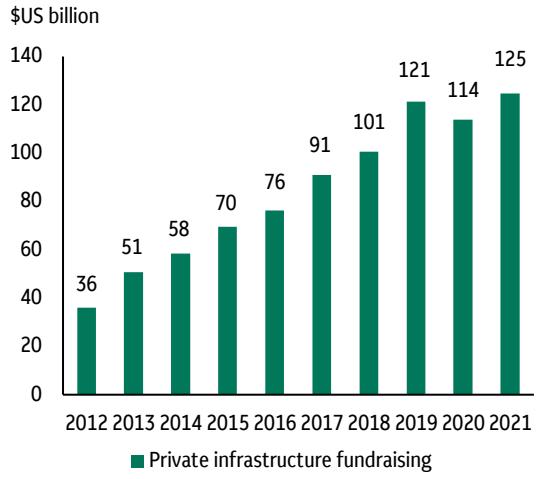
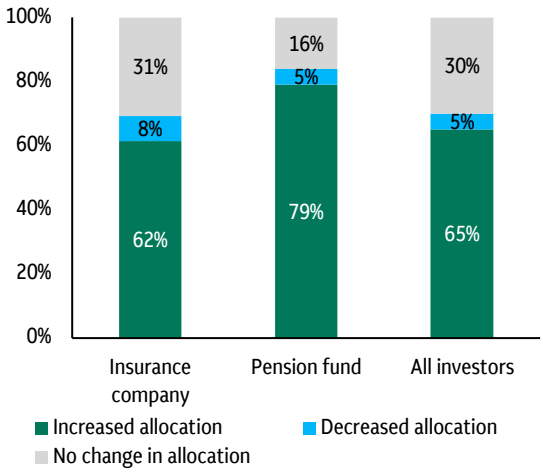


Figure 11:
...supported by investors increasing their allocations to infrastructure



Sources: Preqin database (June 2022); Infrastructure Investor, "Investor Report Full Year 2021".

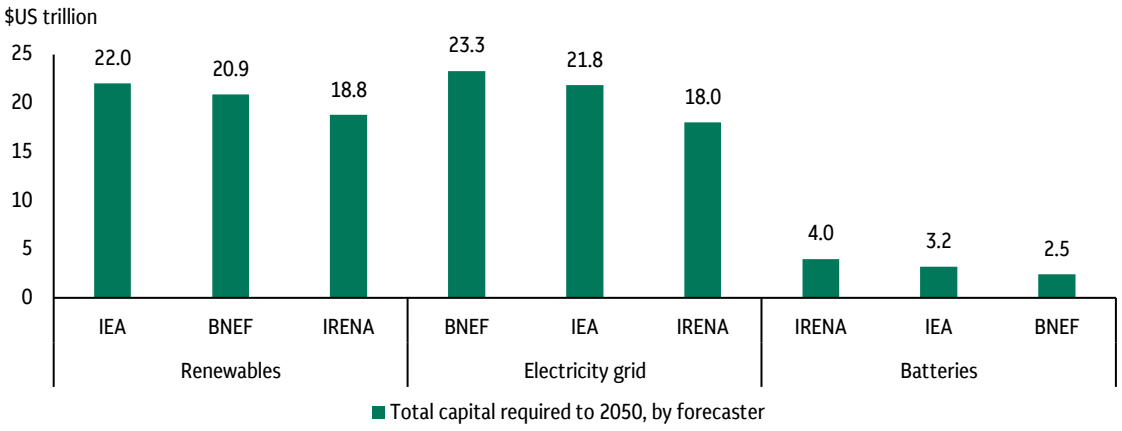
21. Infrastructure Investor, "Investor Report Full Year 2021".
22. Refers to the annualised total return of Cambridge Associates Private Infrastructure Index during the period from December 2003 to December 2021.
23. Refers to the annualised total return of MSCI World Index (net) during the period from December 2003 to December 2021.
24. Refers to the annualised total return of Bloomberg Global Aggregate Index during the period from December 2003 to December 2021.
25. For more details see our Pathways report, "Inflation risk and infrastructure as an inflation hedge" (November 2020).

Driver 2. Large investment required to upgrade existing infrastructure and reach net zero emissions

Estimates suggest the world may need $US94 trillion of infrastructure investment by 2040 to keep pace with economic growth and demographic changes.[26] Beyond the need to upgrade existing infrastructure, substantial investments are required to limit global warming and achieve net zero carbon emissions. According to Bloomberg New Energy Finance (BNEF), total investments required by 2050 in the energy infrastructure could be between $US92 trillion and $US173 trillion, or between $US3.2 trillion and $US6 trillion per year.[27]

Decarbonisation of the electricity system is expected to account for a large part of these investments. The average of the estimates by three major forecasters[28] suggests the total capital need for solar and wind capacity, energy storage, the expansion and reinforcement of grid infrastructure, and other technologies could be $US53.4 trillion[29] by 2050, or $US1.8 trillion per year (Figure 12).[30] Private infrastructure capital could play a vital role in helping the world transition to a greener and more sustainable energy system.

Figure 12:
Capital required to decarbonise the electricity system by 2050



Sources: IEA (June 2021), BNEF (July 2021), IRENA (June 2021). For more details see our recent Pathways report, "Decarbonisation of electricity generation: The foundation stone for achieving net zero" (June 2022).

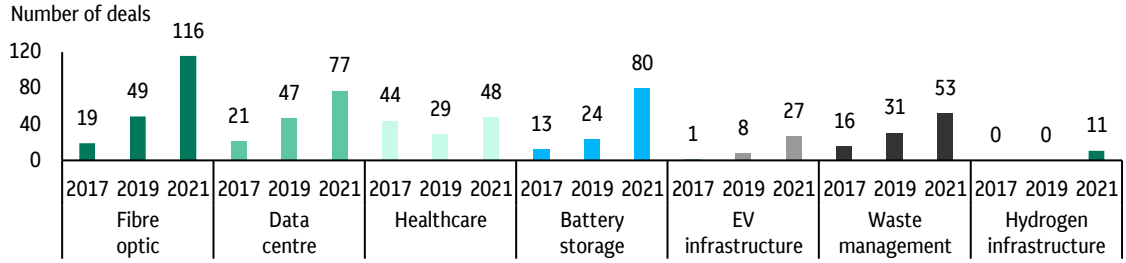
26. Global Infrastructure Outlook (A G20 Initiative).
27. BNEF New Energy Outlook (NEO) (June 2021).
28. The average across the International Energy Agency (IEA), International Renewable Energy Agency (IRENA), and BNEF.
29. For more details on the challenges and opportunities in power decarbonisation, see our recent Pathways report, "Decarbonisation of electricity generation: The foundation stone for achieving net zero" (June 2022).
30. Total capital need divided by 29 years.

Driver 3. Expanding investment universe

While power, renewables, and transport account for the majority[31] of primary deal value, relatively new sectors are also growing strongly (Figure 13). Digitalisation, ageing populations, the energy transition, urbanisation, and circular economy dynamics are driving the emergence of new opportunities. Since infrastructure's definition is based on a set of characteristics[32] rather than sector taxonomy, the investable universe may naturally adapt and expand over time to support and enable an evolving modern society.

- **Digitalisation.** Data proliferation and the need for reliable high-speed connectivity are driving demand for new and upgraded digital infrastructure. In addition to more traditional telecom tower deals, opportunities in residential and enterprise fibre as well as data centres continue to grow.[33]
- **Ageing population.** The number of people aged 60 years and older may increase from 1 billion in 2020 to 2.1 billion in 2050.[34] Parts of healthcare such as private hospitals and specialist care are increasingly targeted by infrastructure funds, attracted by stable revenues and growing healthcare expenditure.
- **Energy transition.** The transition to a net-zero world will require the transformation of existing energy infrastructure, electrification of end-use sectors where possible, and the development of new systems for energy storage (e.g. battery storage, hydrogen infrastructure).
- **Circular economy.** Infrastructure services such as waste management, recycling, water supply, and sanitation play a critical role in the transition from a linear economy to a circular one. Waste management is increasingly receiving policy support to meet national targets.[35]
- **Urbanisation.** By 2050, about 6.7 billion people could live in cities, up from around 4.4 billion in 2020.[36] Urbanisation creates the need to expand existing urban infrastructure, including roads, airports, and utilities, as well as new types of infrastructure such as electric vehicle (EV) charging.

Figure 13:
Examples of emerging infrastructure sectors on the back of megatrends



Source: Infralogic by Inframation database (June 2022).

31. In 2021, power, renewables, and transport accounted for 58 per cent of deal value, according to Inframation.
32. These include stable and predictable cash flows due to either the regulated or long-term contracted nature of assets, high barriers to entry, essential nature of services, inflation-hedge potential, and others.
33. For more details on digital infrastructure, see our recent Pathways report, "Digital infrastructure: Transmitting signals of growth" (May 2022).
34. World Health Organisation, "Ageing and health" (October 2021).
35. In the EU, Member States must recycle or prepare for reuse at least 60 per cent of their municipal waste by 2030.
36. United Nations, World Urbanisation Prospects 2018.

Infrastructure trends driving activity in the secondary market

Driver 1. LPs' growing portfolio management needs

With institutional investors increasing their allocations to infrastructure and gaining more expertise in the asset class, liquidity is becoming an increasingly important feature of the market. A portfolio repositioning could be motivated by various considerations including a natural portfolio rebalancing due to changes in the value of other asset classes, a change of investment strategy, and a desire to increase (or decrease) exposure to certain managers. COVID-19 has arguably further emphasised the importance of disciplined portfolio construction, including the need to diversify across different sectors, strategies, and regions.

Driver 2. Regulation steers capital towards sustainable investments

Sustainability has become one of the key strategic drivers of the asset management industry, including private markets. Policymakers continue to strengthen regulation around sustainable investments and promote transparency in financial markets. For example, the EU Sustainable Finance Disclosure Regulation (SFDR)[37] imposes mandatory sustainability disclosure requirements covering a broad range of environmental, social, and governance (ESG) metrics, effective from 10 March 2021. With increased transparency, investors may set target allocations to funds that meet certain requirements, leading to the need to rebalance their portfolios.

Driver 3. Changing macroeconomic environment

At the time of writing, inflation is continuing to rise around the world. Core infrastructure assets have been historically considered "safe haven" assets during periods of high inflation. They may have an even stronger inflation hedge[38] component to their returns than infrastructure in general, as core infrastructure has a greater concentration of utilities, which are usually the assets with the more direct link between returns and inflation, something which often comes courtesy of regulation.[39] Investors with liabilities linked to inflation may see benefits in pivoting their portfolios towards asset classes (such as core infrastructure) that offer greater inflation protection.

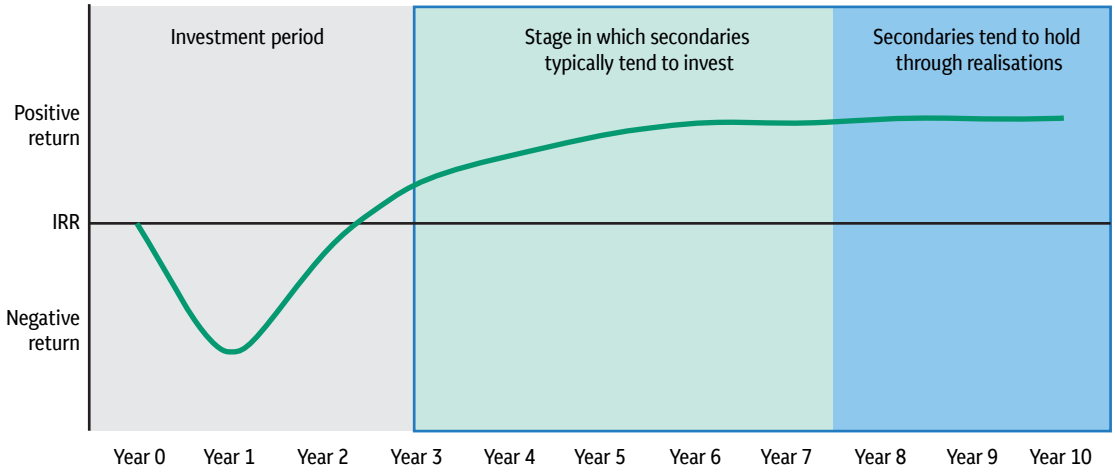
37. Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019.
38. For more detail, see our Pathways report, "Core infrastructure: Its inflation hedge characteristics and the search for yield" (June 2021).
39. This is generally true but does vary somewhat by geography. Some utilities regulation offers investors a direct real return on their capital, while for others allowed price increases are directly tied to inflation outcomes.

Benefits and risks of investing in infrastructure secondaries

Properly structured, secondaries can deliver attractive investment characteristics including the potential mitigation of the negative J-curve effect, higher diversification across vintages, sectors, and strategies, and potential downside protection compared with primary funds. In this section, we examine the advantages of investing in infrastructure secondaries, as well as the risks.

- **Mitigation of the J-curve effect.** The J-curve effect is the tendency of primary funds to deliver negative cash flows in the early years, and positive cash flows later in the investment fund's life. Secondaries typically invest in the primary fund at a point at which the primary fund is making distributions and/or commencing realisations, which could be around three to seven years into the life of the fund. This means that secondary investors may gain access to already-operating assets, which offers an opportunity to mitigate the J-curve effect partially or fully (Figure 14).

Figure 14:
Illustrative example of how secondaries could mitigate the negative J-curve



Source: Macquarie Asset Management (June 2022). For illustrative purposes only.

- **Potential downside protection.** Given the lack of data on infrastructure secondaries, we decided to look at how private equity secondaries had performed relative to private equity primary funds. Figure 15 shows that 70 per cent of private equity secondaries have historically delivered internal rates of return (IRRs) between 10 and 30 per cent, while only 58 per cent of primary funds delivered returns in this range. The shapes of the return distribution curves suggest that secondaries may have lower tail risk than primary funds.

  Figure 16 further supports this argument. Looking at private equity performance, minimum IRRs by vintage year for secondary funds tend to be higher compared with primary funds. Secondary funds tend to know which assets they are acquiring before they invest in a primary fund, something that substantially enhances visibility on future performance and reduces the blind pool risk.

Figure 15:
Density distributions of private equity returns suggest lower tail risk for secondary funds...

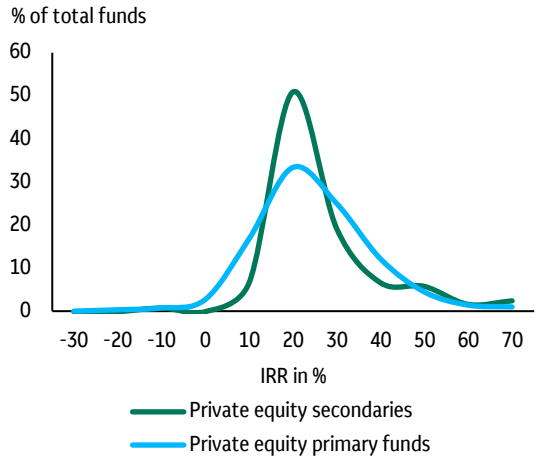
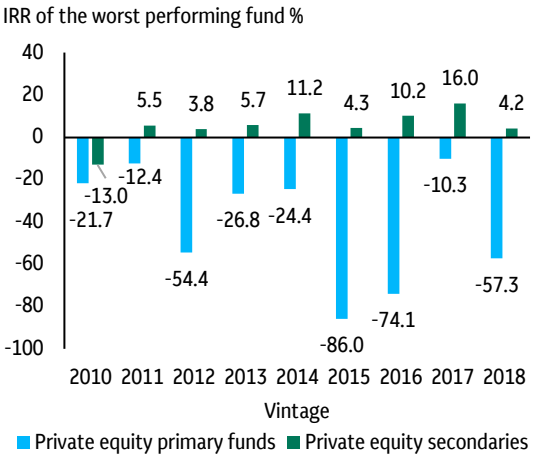


Figure 16:
...implying more potential downside protection than primary funds



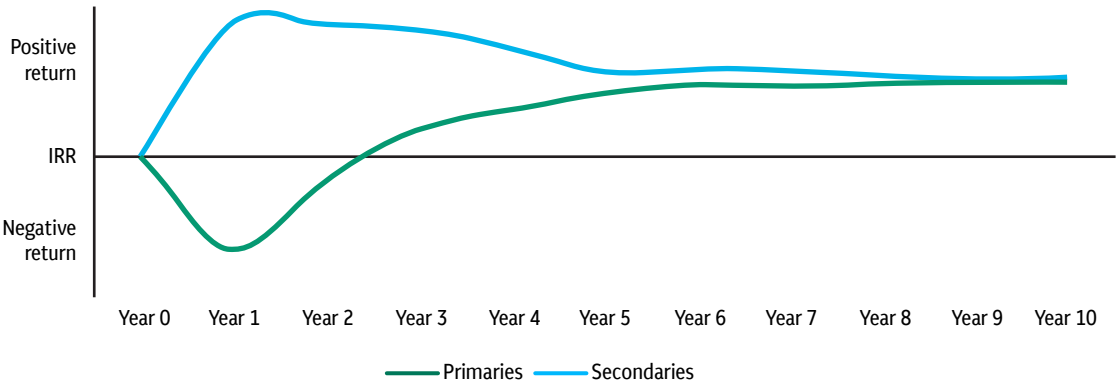
Source: Pitchbook data (June 2022). Return density distribution is calculated based on 1,216 primary private equity funds and 112 secondary private equity funds across vintages between 2010 and 2018.

- **Multidimensional diversification.** Secondary funds offer an opportunity to create a highly diversified portfolio by providing access to primary funds that vary by manager, vintage, geography, sector, revenue frameworks, and risk-return profiles. According to the Inframation database, infrastructure secondaries on average target 10.5 primary funds to include in a portfolio and on average have 6.5 different vintages.[40]

40. Inframation database (June 2022). Estimates are based on reported data only.

- **Complementary role to primary funds.** Investing in infrastructure secondaries could play a complementary role to investing in primary infrastructure funds. As discussed above, primary funds tend to generate negative cash flows in the early years, while secondary funds may mitigate the J-curve effect. Hence, if timed properly, adding secondaries to a portfolio of primary funds could result in a more stable and predictable overall IRR (Figure 17).

Figure 17:
Illustrative example of how the combination of a secondary fund and a primary fund in a portfolio could stabilise the return



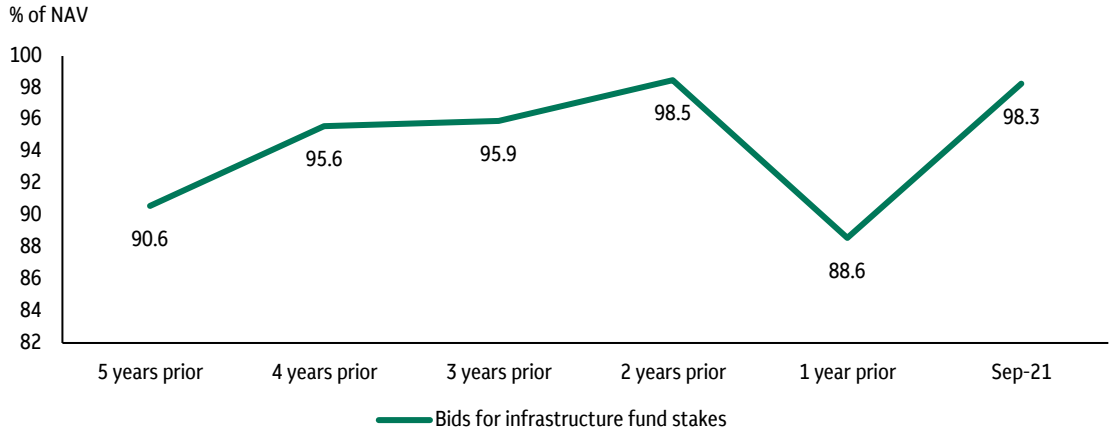
Source: Macquarie Asset Management (June 2022).

- **Pricing considerations.** Secondaries are typically priced at either a discount or a premium to net asset value (NAV), where 100 is par. One function of secondaries is to provide liquidity to an otherwise illiquid market. Investors who provide that liquidity should arguably be compensated for doing so, something that may manifest itself in the opportunity to acquire assets at an attractive price.

  When assessing what is an attractive price it is important to look at funds on a look through basis to the underlying assets. If the underlying assets' NAV is above their fair value, it is beneficial to buy at a discount to NAV. If the underlying assets' NAV is below their fair value,

buying at a premium to NAV could still represent an attractive deal. Hence, it is important to have a detailed understanding of infrastructure assets as well as the ability to price those assets accurately. Figure 18 shows the price evolution of infrastructure fund stakes over the last five years.

Figure 18:
Price evolution on the infrastructure secondaries market



Source: Setter Capital "Price Report" (September 2021).

- **Risks of investing in infrastructure secondaries.** While infrastructure secondaries may offer several attractive investment characteristics, they are still exposed to similar risks as primary fund investments – including political and regulatory risk, operational risk, contractual and counterparty risk, exchange rate risk, ESG risk, legal risk, leverage and interest rate risk, and refinancing risk.[41] Investing in secondary funds may also involve other risks including:
  - **Complexity risk.** As the secondary market evolves, the complexity of transactions increases. For example, GP-led restructurings and sales of large portfolios of LP interests (often in compressed time frames), may require significant specialist expertise. Strong knowledge of infrastructure portfolio companies and their structures is required to successfully price and execute complex secondary market deals.
  - **Conflict-of-interest risk.** With an increasing number of GP-led transactions in the market, some single-asset GP-deals may be exposed to potential conflict-of-interest risks. While such single-asset vehicles may contain a high-quality asset, they may also be associated with potential misalignment of interest. Knowledge of the underlying asset and detailed due diligence is required to help identify such risks.

41. Every infrastructure investment is different and may involve several additional risks depending on the nature of the project/company.

macq.co/MAM-Private-Markets

Pathways

For more information, or to speak to the author of this issue, Aizhan Meldebek, CAIA, please contact your Macquarie Asset Management Relationship Manager.

PATH-INF2NDS 2207 (2276796-08/22) V5 For institutional investors and investment professionals only.