

Fund Update: 31 March 2022

Magellan Infrastructure Fund (Currency Hedged) (Managed Fund)

ARSN: 612 467 580

Ticker: MICH

Fund Facts

Portfolio Manager	Gerald Stack		
Structure	ASX-quoted Global Infrastructure Fund, A\$ Hedged		
Inception Date	19 July 2016		
Management Fee ¹	1.05%		
Fund Size	AUD \$911.3 million		
Distribution Frequency	Semi-annually		
Performance Fee ¹	10% of the excess return of the units of the Fund above the higher of the Index Relative Hurdle (S&P Global Infrastructure Net Total Return Index (A\$ Hedged)) and the Absolute Return Hurdle (the yield of 10-year Australian Government Bonds). Additionally, the Performance Fees are subject to a high water mark.		
iNAV tickers	Bloomberg Thomson Reuters IRESS	MICH AU Equity MICH.AX MICH.AXW	MICHIV Index MICHAUiv.P MICH-AUINAV.NGIF

¹All fees are inclusive of the net effect of GST

Fund Features

- ASX quoted version of Magellan Infrastructure Fund
- Fund is actively managed
- Minimum administration for investors; no paperwork needed to trade
- Units can be bought or sold on the ASX like any other listed security
- Efficient and live pricing
- Provision of liquidity by the Fund
- Settlement via CHESS
- Magellan has significant investment alongside unit holders

3 Year Rolling Returns (measured monthly)^{**}

Against S&P Global Infrastructure Net Total Return Index (A\$ Hedged)	1 Year	Since Inception
No of observations	12	33
Average excess return (% p.a.)	0.8	2.9
Outperformance consistency	75%	91%

Fund Performance[^]

	Fund (%)	Index (%) ⁺	Excess (%)
1 Month	6.8	5.5	1.3
3 Months	2.6	7.3	-4.7
1 Year	15.0	17.2	-2.2
3 Years (p.a.)	5.3	5.7	-0.4
5 Years (p.a.)	7.4	6.1	1.3
Since Inception (p.a.)	7.4	6.5	0.9

[^] Calculations are based on NAV prices with distributions reinvested, after ongoing fees and expenses but excluding individual tax, member fees and entry fees (if applicable). Fund Inception 19 July 2016.

⁺ 3-year returns are calculated and rolled monthly in AUD, with the outperformance consistency indicating the percentage of positive excess returns since inception.

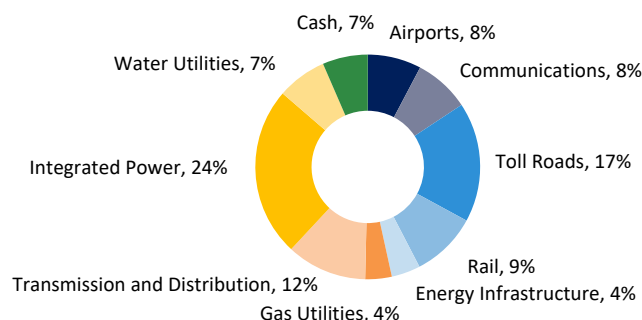
^{*} The index is the S&P Global Infrastructure Net Total Return Index (A\$ Hedged).

[#] Sectors are internally defined. Geographical exposures are by domicile of listing. Cash exposure includes profit/loss on currency hedging. Exposures may not sum to 100% due to rounding.

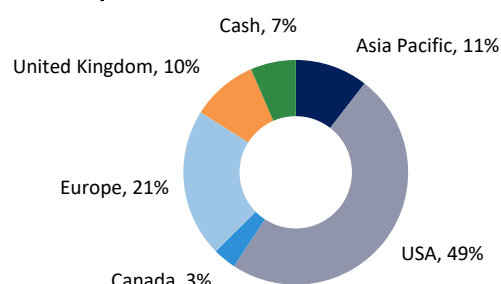
Top 10 Holdings

	Sector [#]	%
Transurban Group	Toll Roads	6.5
Sempra Energy	Integrated Power	5.0
Dominion Energy Inc	Integrated Power	4.9
Vinci SA	Toll Roads	4.4
Aena SME SA	Airports	4.3
Norfolk Southern Corporation	Rail	4.1
Eversource Energy	Transmission and Distribution	4.1
Crown Castle International	Communications	4.0
American Tower Corporation	Communications	3.9
Xcel Energy Inc	Integrated Power	3.9
TOTAL:		45.1

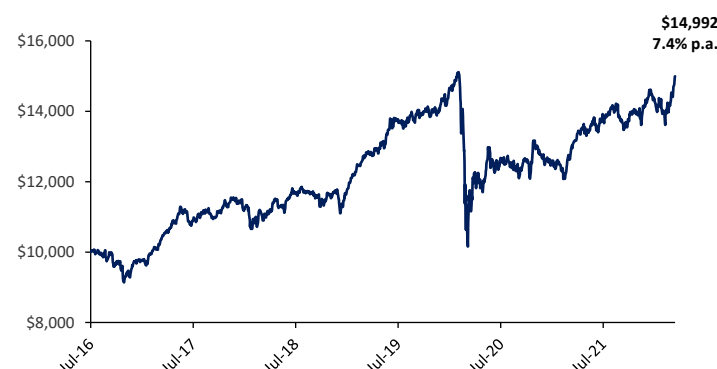
Sector Exposure[#]



Geographical Exposure[#]



Performance Chart growth of AUD \$10,000[^]



Fund Commentary

The portfolio recorded a positive return in the March quarter. Stocks that contributed the most included the investments in Sempra Energy of the US, Enbridge of Canada and Dominion Energy of the US. Sempra Energy rose after investors assessed that one fall-out of the Russia-Ukraine war is faster growth for the company's North American LNG export business. Enbridge, the owner and operator of the world's largest crude oil and liquids transportation system across Canada and the US, gained on a healthy full-year earnings report (gross profit of C\$7.7 billion in 2021 versus C\$4.2 billion in 2020) and as the oil price rose, despite having very limited direct exposure to the oil price. Dominion Energy gained after the power and energy company announced fourth-quarter earnings of US\$1.63 per share and initiated better-than-expected guidance for 2022 of between US\$3.95 and US\$4.25 a share.

The stocks that detracted the most were the investments in American Tower Corp, Crown Castle International of the US and American Water Works. US tower companies American Tower and Crown Castle, which have fixed near term price increases on much of their US tower portfolios, fell after US inflation hit a 40-year high. American Water slid after results for the fourth quarter 2021 of US\$3.55 per share fell short of expectations.

Stock contributors/detractors are based in local currency terms.

Topic in Focus

Infrastructure assets are well placed for an era of inflation

Global stocks struggled early in 2022 largely because investors were concerned about faster inflation, which has risen to its highest in four decades in the US, a record high in the eurozone and highest in three decades in the UK. Long-term bond yields are climbing (bond prices are falling) predominantly because inflation reduces the value of future bond payments. Short-term bond yields are rising as central banks have increased, or are poised to lift, cash rates and terminate, even reverse, their asset-buying programs that suppressed interest rates. In times of accelerating inflation and turbulent share markets, investors might find that holding global listed infrastructure securities can be one way to help protect a portfolio against inflation.

Inflation and asset values

Inflation tends to hurt stocks in two ways. One is that inflation reduces the present value of future cash flows, a key determinant of share prices. The other way a sustained increase in inflation can undermine stock valuations is that rising input costs and higher borrowing costs reduce profits – unless a business has the pricing power to boost the price of its goods or services to compensate. The lower the expected profits, the less people are willing to pay for shares.

Inflation and infrastructure assets

As inflation accelerates worldwide, many investors are turning to the few companies that are renowned for their inflation protection. Among these are infrastructure companies. The discussion here assumes companies defined as infrastructure meet two criteria. First, the company must own or operate assets that behave like monopolies. Second, the services provided by the company must be essential for a community to function efficiently. Such companies tend to have predictable cash flows that can make them attractive defensive assets. This is the essence of Magellan's definition of infrastructure.

The main sectors within infrastructure are utilities, toll roads, airports, railroads, energy infrastructure, communications (mobile phone and broadcast towers). Each sector exhibits diverse investment characteristics and reacts differently to faster inflation, as explained below. The key thing to note is that most of these businesses have strong protection against inflation, which could help support their share prices if inflation becomes entrenched.

Utilities

Utilities include water utilities, electricity transmission (high-voltage power lines) and electricity distribution (urban power lines) and gas transmission and distribution. In most countries, utilities are monopolies. Consequently, government regulators control the prices these entities charge and adjust rates to provide utilities with an appropriate return on invested capital. This process requires regulators to take into account the changes to borrowing, construction and operating costs and changes in the value of the assets that utilities own.

While all the regulatory regimes that Magellan considers to be investment-grade feature mechanisms that allow for the recovery of rising utility input and financing costs, the intricacies of different regulatory regimes affect the timeliness of that recovery. Regulatory systems that strike return allowances in real terms, escalate revenues with inflation, and index debt costs to market yields, including those in Australia

and the UK, provide the most timely protection against inflation. By contrast, regulatory systems such as those in Spain and the US that strike return and cost allowances in nominal terms protect against inflation with a modest lag.

Toll roads

The typical business model for a toll road is that a government signs a contract that allows a toll-road operator to collect tolls for a set time and increase those tolls on a regular basis in a defined way. At the end of this contract, the road is returned to government ownership in a good state of repair.

Often the toll road is not the only road route available to motorists. Consequently, the toll road is not a monopoly. The toll road, however, generally exists because alternative routes are much slower. The opening of a toll road inevitably reduces traffic on the free alternative. But over time, the free alternative can become congested more quickly than the toll road. As that occurs, the toll road behaves more like a monopoly and gives toll roads increased pricing power. However, toll price changes are generally pre-defined under a contract. Table 1 shows a cross-section of how toll prices are set in a range of contracts.

Table 1 – Toll pricing structure for different toll roads

Toll road	Location	Basis of toll increases	Frequency
407ETR	Canada	At owner discretion	Discretionary
ASF	France	70% of CPI	Annually
Cofiroute	France	70% of CPI	Annually
CityLink	Australia	>of 4.25% (equivalent) to June 2029 then CPI	Quarterly
Eastern Distributor	Australia	>of 1% or 67% AWE and 33% CPI	Quarterly
A25	Canada	CPI	Annually
M2	Australia	>of Quarterly CPI or 1% per quarter	Quarterly
M4	Australia	>of CPI or 4%	Annually
Gateway Motorway	Australia	Brisbane CPI	Annually

Sources: Company releases, Magellan

As can be seen, the pricing mechanism for many of these toll roads picks up any increases in inflation with minimal lag. Moreover, due to their strong pricing power, toll roads can expect that there will be minimal, if any, loss in traffic when tolls increase so revenues should fully recover the inflationary hit.

Additionally, one of the key characteristics of toll roads that insulates them from inflationary impacts is their high profit margins. Table 2 shows the gross profit margins of a selection of international toll roads. The average margin of 75% from the sample is substantially above other industrial companies.

Table 2 – Margins for different toll roads

Toll road	Location	2019 EBITDA margin
407ETR	Canada	87%
ASF	France	62%
Cofiroute	France	66%
CityLink	Australia	86%
Eastern Distributor	Australia	73%
M2	Australia	83%
Gateway Motorway	Australia	77%

Source: Company releases, Magellan

The other key area where inflation can hurt profits is by increasing the cost of capital expenditure companies need to undertake. With many toll roads, however, the capital expenditure on operating them can be minimal and generally limited to resurfacing and replacing crash barriers, etc.

Airports

When looking at airports and inflation, we consider airports as two businesses. The 'aeronautical' operations primarily involve managing the runways and taxiways of the airport. Aeronautical revenue is generated predominantly by a charge levied per passenger or a charge levied on the weight of the plane, or a combination. In many jurisdictions, the onus is on the airport to negotiate appropriate charges with the airlines with regulation as the fallback position. This side of the operation therefore behaves much like a regulated utility.

The other business is the 'non-aeronautical' operation that involves the remainder of the airport. These operations cover typically three primary areas: retail, car parking and property development. In most airports, the airport owner does not run the retail outlets. Instead, the owner acts as the lessor and receives a guaranteed minimum rental that is normally inflation-linked plus a share of sales. These revenues are therefore protected from a jump in inflation.

The parking operations at the airport generally behave like a monopoly although there is some substitution threat; for example, passengers can use taxis instead of driving. As such, airports have a significant ability to increase prices in response to higher inflation. In regard to costs, airport profit margins exhibit much greater variability than toll roads, as evident from Table 3.

Table 3: Profit margins for different airports

Airport	2019 EBITDA margin
Sydney	81%
Auckland	75%
Cancun	68%
Zurich	64%
Rome	63%
Heathrow	63%
Vienna	45%
Beijing	43%
Frankfurt	33%
Paris	37%

Source: Company releases, Magellan

Efficient airports such as those in Auckland and Sydney are more insulated from faster inflation than those (typically European) airports that are struggling to reduce the workforces that were in place when they were privatised. (Even these less-efficient airports still exhibit higher margins than the average industrial company.)

Finally, airports also have the highest capital expenditure requirements of any of the transport infrastructure subsectors. Aeronautical capital expenditure includes widening and extending runways and taxiways. It is generally only undertaken after consultation and agreement with the airlines and regulatory authorities. Over time, aeronautical charges will rise to recover these costs.

Non-aeronautical capital expenditure relates to increasing the retail, parking and general property leasing facilities. Higher inflation may change the financial viability of such capital expenditure. But airports, having an unregulated monopoly in these areas, can increase prices to compensate for inflation.

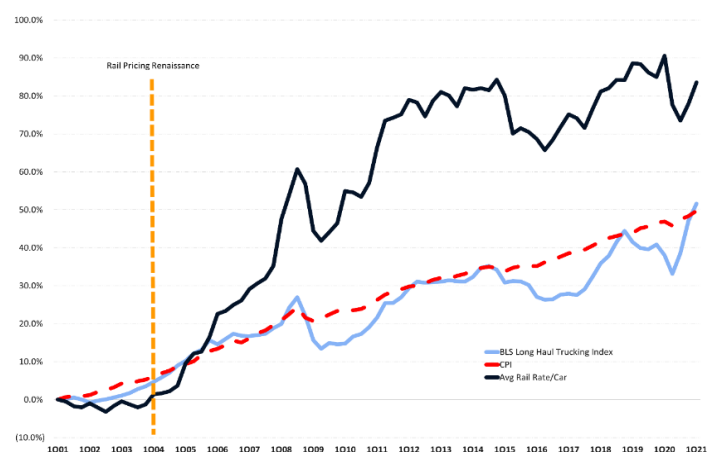
Consequently, inflation is unlikely to hurt the value of an airport asset.

Railroads (Class 1 freight rail)

The railroads that meet Magellan's definition of infrastructure are primarily North American Class 1 railroads. These railroads typically have no regulator-approved capability to pass through inflation. Instead, their respective national regulators provide for lighter economic regulation using a broad 'revenue adequacy' standard. Thus, regulations have allowed railroad operators to charge rates that support prudent capital outlays, assure the repayment of a reasonable level of debt, permit the raising of needed equity capital, and cover the effects of inflation whilst attempting to maintain sufficient levels of market-based competition.

Arguably, this framework has provided railroads with greater discretion around the rates they charge customers and thus, the ability to more than account for inflation. Chart 1 shows how North American railroads have increased rates at levels well ahead of inflation over the past 20 years.

Chart 1: Railroad rate increase versus truck rates and inflation (2001 to 2021)



Source: US Bureau of Labor Statistics; Federal Reserve and AAR

This isn't to suggest that regulation provides the key source of inflation protection for North American railroads. Rather, we think the rails generate most of their inflation protection from pricing power (which is derived from the lack of alternatives and the regional duopolistic regional markets) and operating efficiencies.

Energy infrastructure

The energy-infrastructure companies that meet our definition of infrastructure have dominant market positions and real pricing power, which is reflected in long-term, typically inflation-linked, take-or-pay contracts or regulated returns.

Given the long-term nature of energy infrastructure contracts, pipeline and storage operators typically use pre-agreed price increases to protect real revenues and hedge against rising costs. Given the strategic and monopolistic nature of some assets such as transmission pipelines, some of these pipelines are regulated. Australia, for instance, has a mix of regulated and unregulated gas pipelines. In Canada, tariffs are negotiated within a regulatory framework. In the US, the regulator sets pipeline rates to allow the operator to earn a fair return on their invested capital. All of these methods protect these companies from inflation.

Tank-storage providers that meet our definition of infrastructure need to have terminals in favourable locations and typically sell capacity, predominantly under long-term

contracts, with no exposure to movements in commodity prices. Long-term storage contracts are usually indexed in a similar way to pipeline contracts. Netherlands-based storage provider Royal Vopak has long-term contracts (longer than one year) linked to the CPI of the country where the storage takes place (with annual indexation), while the bulk of costs are in the local currency of those countries, which provides a strong hedge against inflation.

Communications infrastructure

Communications infrastructure, as defined by Magellan, comprises independently owned communication sites designed to host wireless communication equipment, primarily towers. Although these sites are mainly used by wireless carriers, they may host equipment for television, radio and public-safety networks.

Despite the complexities of the technology that underpins wireless communication networks, the business model for these tower companies is simple. These companies generate most of their revenue through leasing tower space to wireless carriers such as mobile-service providers that need a place to install equipment. In return for providing this space, the tower company receives a lease or services agreement that provides a long-term and reliable income stream. The terms of these contracts are usually favourable for tower companies because data demand is strong and competition is low. Thus, leases are typically long term and revenue increases are priced into the contract.

Table 4 – Gross profit margins for selected communications infrastructure companies

Company	2020 EBITDA margin
Crown Castle International	65%
American Tower	66%
Cellnex	48% ¹

Source: Magellan. ¹This is on a post-lease payments basis.

Even so, we consider some, primarily US-based, communication towers to be relatively more sensitive to changes in inflation than other infrastructure sectors. This is due to communication towers in the US typically having limited inflation protection on the revenue side in the near term. In sum, we consider their protection to be partial.

The second order effect of higher interest rates

The traditional policy approach from central banks in response to higher inflation is to raise nominal interest rates, which has potentially two effects on our investment universe: The impact of changes in interest rates on the underlying financial performance of the businesses in which we invest; and the impact on the valuation of those businesses.

As discussed above, regulated utilities can recover the cost tied to a rise in inflation through the periodic regulatory process. This generally includes the costs of servicing higher interest rates on their debt, thus exposure to interest rates will be limited to the length of time between reset periods, albeit in practice those utilities that are exposed to this kind of risk tend to hedge it by issuing fixed rate debt with a term that aligns with the regulatory period.

Overall, the past decade has witnessed a significant lengthening in the duration of the debt portfolio for the majority of infrastructure and utilities businesses. Many of these companies are well protected from higher rates because

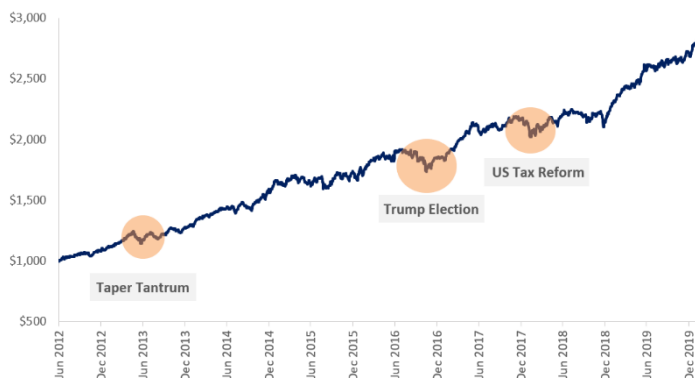
they have taken advantage of the low interest rates of recent years to lock in cheap, fixed rate debt for long periods. Ultimately, we are confident that any shifts in interest rates will not hamper the financial performance of the companies in the portfolio for the foreseeable future.

In terms of valuation, an increase in interest rates can be expected to lead to a higher cost of debt, and an increase in the rate at which investors value future earnings (the higher this 'discount rate', the less investors are willing to pay for future income streams). While our forecasts and valuations take these factors into account, the history of financial markets leads us to expect increasing uncertainty if rates rise or look like rising. Companies that are regarded as 'defensive' are often shunned when interest rates rise as investors may prefer higher-growth sectors. However, it is our experience that provided businesses have solid fundamentals, their stock prices over the longer term will reflect their underlying earnings.

In recent history, there have been three occasions where we have seen a spike in US 10-year yields of about 0.9%. At face value, these three increases in prevailing interest rates appear to have led to declines in the market value of listed infrastructure. However, if we look over the combined period then a different picture emerges. The following chart shows the performance of the Magellan Infrastructure Fund from June 2012 to December 2019. *Please note that the performance for Magellan Infrastructure Fund (Currency Hedged) is set out at page 1 of this Fund Update.*

The chart shows that on these three occasions, the negative impact of the interest rate rises to the share prices of listed infrastructure businesses was short term. Once the interest-rate rises were digested and it was established that the outlooks for infrastructure businesses were largely unaffected, then the share prices recovered.

Performance of the Magellan Infrastructure Fund from June 2012 to December 2019[^]



Source: Magellan

[^] Calculations are based on exit price with distributions reinvested, after ongoing fees and expenses but excluding individual tax, member fees and entry fees (if applicable).

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Conclusion

Infrastructure remains well placed in an environment of increasing inflation due to its inflation-linked revenues, low operating costs and consequent high margins, with the second order impact of higher interest rates being muted by the lengthening of company debt portfolios over the past decade. These characteristics offer investors a haven when inflation is at decade highs around the world.