

## Response to the May 2021 consultation on Your Future, Your Super Regulations and associated measures (treasury.gov.au/consultation/c2021-162375)

25<sup>th</sup> May 2021

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### Summary

In the April 2021 exposure regulation of the “Your Future Your Super” reform, the Treasury put forward the MSCI Australia Quarterly Private Infrastructure Index as the proposed benchmark for the unlisted infrastructure asset class in the forthcoming performance tests to be conducted by the Australian Prudential Regulatory Authority. **This response to the consultation highlights several reasons why this choice is flawed, reports the results of a survey of the superannuation industry about the proposed benchmark, and presents our proposal to adopt an alternative index.** The benchmark put forward by the Treasury poses a number of methodological and practical issues and is not the preferred choice of the superannuation industry (90% against). The infra300® index is a better, cheaper and fairer alternative benchmark that should be preferred.

The main issues include:

- **The proposed benchmark is unfair and creates toxic incentives:** This index suffers from significant survivorship bias due to the contributed nature of the data, which tends to include ‘winners’ only. It exhibits double-digit returns (c.12%) for the most recent 8-year period (the relevant ‘look back’ period for the performance test) and is either impossible to beat for most investors in infrastructure or, where this is an option, require significant additional leverage to magnify returns. As a result, instead of investing in real assets that diversify portfolio risk, investors would be exposed to concentrated, financial risks.
- **The proposed benchmark is not representative** of the investments in unlisted infrastructure equity made by Superannuation funds and exhibits a large bias towards the transport sector. Furthermore, the control over its data sources is insufficient to guarantee that the benchmark provides an accurate and reliable representation of the interest it seeks to measure. As such **it is at odds with the objectives of the IOSCO Principles for Financial Benchmarks and their implementation under Australian law (i.e., the ASIC Financial Benchmark Rules)**. Specifically, its data inputs keep changing as contributions increase or submitters unilaterally withdraw from data provision and its provider cannot determine whether the data that are contributed are accurate or valid. Controls over the quantity and quality of submissions are sorely lacking.
- **The lag of the proposed benchmark makes it unusable for annual performance testing and the suggestion to mix unlisted and listed data creates further unfair and random biases.** Due to its contributed nature, the proposed index suffers from a time lag. Even its limited contributions can only be fully reported 2 or 3 quarters after the index date and the lag may extend in times of crisis (e.g., Covid-19). The suggestion to combine unlisted data with clearly incompatible listed data in the APRA test to palliate the lag of the proposed benchmark is methodologically unsound and wholly rejected by the industry (100% against).

- Because of the limitations of the MSCI index, it has been proposed by the Treasury to combine this data with another index of listed infrastructure companies. However, by mixing two indices to create a benchmark, **the Treasury and APRA would jointly become a benchmark administrator**. Arrangements should thus be in place for compliance with applicable standards and laws, notably ASIC Financial Benchmark (Administration) Rules 2018, where relevant. The Treasury and APRA would also find themselves both judge and jury in the performance tests of MySuper products, **creating a potential case of abuse of power for which they could be held liable by Superannuation funds**.

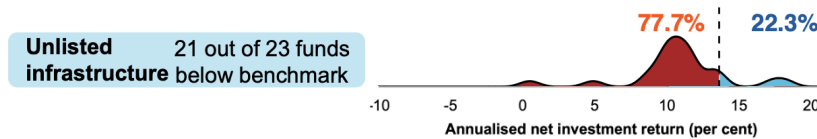
We believe this initial choice was misguided and due to a lack of appreciation of the limitations of the underlying data. **The infra300® index provides a genuine alternative: it is a fair, representative, unbiased, timely and free-of-charge index already widely used by Superannuation funds representing 485bn AUD of Assets Under Administration i.e., a quarter of all Superannuation assets.**

### 1. KEY ISSUES WITH THE PROPOSED BENCHMARK FOR UNLISTED INFRASTRUCTURE

#### The proposed benchmark is unfair and creates toxic incentives

In its review of contributed indices including the one currently proposed by the Treasury, the Productivity Commission report already highlighted the significant survivorship bias issues found in this data (see figure 1). This bias is a well-known phenomenon (see for example Brown et al, 1992) and occurs because only well-performing funds/assets are available to report on an ongoing basis.

**Figure 1: Distribution of unlisted infrastructure net returns and proposed benchmark survivorship bias, 2011-2017**



Source: Superannuation: Assessing Efficiency and Competitiveness, Inquiry Report no. 91, Technical Supplement 4, Pg67. Productivity Commission, 2018.

In practice, the vast majority of investors would be unlikely to beat the proposed benchmark, which exhibits double-digit returns (circa 12% post fees) for the past 8 years, including an 8% 12-month return as of Q1 2021, which is an extremely high number, which given the impact of Covid-19 on transport infrastructure companies since Q1 2020, is unlikely. On a net-of-fee basis, the infra300 index, which covers 300 investments in 22 countries returned less than 10% post-fees for the same 8-year lookback window and is negative for the past 12 months to Q1 2021 due to the impact of Covid-19 on expected dividends, risk premia and higher interest rates worldwide in Q1 2021 (see table 1). Clearly the proposed benchmark is a ‘winners only’ index. See below on why the infra300 is more accurate.

**Table 1: MSCI Australia Quarterly Private Infrastructure and infra300 index, net of fees returns, AUD, Q1 2021**

	12-month	3 years	5 years	8 years
MSCI Australia Qrtly	8.0%	8.1%	10.2%	12.3%
Infra300 AUD net	-15.0%	0.5%	1.1%	9.5%

Source: MSCI, EDHECinfra

In order to beat the proposed benchmark, fund managers would have to increase fund leverage or invest in riskier ‘PE-like’ assets instead of the lower risk, stable assets that long-term investors typically target when considering allocations to the infrastructure asset class. In the end, to meet the high benchmark returns, excessive risk taking would be encouraged. Instead of providing superannuation plan members with exposure to stable, long-term infrastructure, the proposed benchmark would create incentives for fund managers to increase exposure to financial risks.

**Promoting such excessive risk-taking with an ill-suited benchmark is contrary to the regulator's mandate to promote prudent investing.**

**The proposed benchmark is not representative**

The design of the proposed benchmark offers insufficient control over data sources to guarantee that the benchmark provides an accurate and reliable representation of the interest it seeks to measure. The benchmark is inherently at odds with the IOSCO Principles for Financial Benchmarks (and the guiding obligations of the ASIC rules in terms of quality, integrity, availability, reliability and credibility of benchmarks). Indeed, MSCI argues that benchmarks based on voluntary submissions cannot be held to the same standards of quality control and representativeness as other types of benchmarks ; in its 2013 response to the IOSCO consultation on principles for financial benchmarks, MSCI notes that, as far as contributed indices are concerned: "it will often be impossible to ensure representativeness when the full universe of eligible portfolios is not knowable and enforced participation is not an available option. Moreover, frequency specification cannot be dictated to participants." (MSCI 2013, pg7)

As a result, the proposed benchmark is biased towards high returns because a changing group of fund managers choose whether or not to report performance data. In effect, the composition of this index has been changing continuously:

- In a 2017 report to the G20, the OECD noted that the MSCI Australia index included data for 23 funds (OECD 2017, pg31).
- In February 2019, MSCI announced "a change in the composition of the MSCI Australia Quarterly Private Infrastructure Fund Index (Unfrozen) for December 2018." The December 2018 results would now include one new contributing fund, resulting in an increase of 19.94% in the overall Net Asset Value of the Index. (MSCI, 2019)
- In May 2020, MSCI announced changes in the composition of the MSCI Australia Quarterly Private Infrastructure Fund Index (Unfrozen) for March 2020." The March 2020 results would exclude information on seven funds which have not provided data, resulting in a decrease of 69.0% in the overall Net Asset Value of the Index. (MSCI, 2020a)
- In August 2020, MSCI announced "changes in the composition of the MSCI Global Quarterly Private Infrastructure Index (Unfrozen) for December 2019." The index would include two new contributing funds, resulting in an increase of 125.0% in the overall Net Asset Value of the Index. (MSCI 2020e)

As per the index methodology, the historical data for funds that stopped reporting remains in the index history as per data provision. These constant changes in the composition and granularity of the underlying data add to the selection and survivorship biases already reported in the Productivity Commission in 2018.

The 2018 Productivity Commission report already included concerns about the representativity of this index for superannuation funds with several contributors stating that "(t)he MSCI/IPD unlisted infrastructure benchmark is too high or not representative of investments in the system." (Productivity Commission, 2018, pg26 and 28.)

Today, the index includes data for 12 funds (from 6 fund managers) i.e., half as much as it did in 2017. Realistically, its biases and lack of representativity can only have increased. Its composition is highly concentrated: for Q1 2021, 63% of the MSCI Australia Quarterly index consist of investments in the transport sector (one quarter of the index is made of airports) and 2.6% of investments in renewable energy. Over time these weights have changed in an ad hoc manner as contributions kept changing (see table 2). Some sectors have all but disappeared (e.g., power generation) and others more than doubled in weight (e.g., power transmission).

**Table 2: Sector weights of different vintages of the proposed benchmark**

	Transport (airports)	Renewables	Power generation	Power transmission	Water	Public facilities
Q1 2015	59% (34%)	3%	9%	8%	10%	4%
Q2 2017	61% (27%)	2%	11%	14%	6%	3%
Q1 2021	62.8% (24.2%)	2.6%	1%	21.2%	6.7%	4.5%

Source: MSCI

As of 2019, Superannuation funds only invested a third of their infrastructure assets in transport and already close to 10% in renewable energy projects (see Blanc-Brude et al, 2020). Going forward, the decarbonisation of Superannuation portfolios is likely to make the available coverage and high concentration in carbon-intensive transport assets of the proposed benchmark even less relevant given the gradual shift of large investors towards net zero emissions.

### **The lag of the proposed benchmark makes it unusable for annual performance testing**

"Unfrozen" contributed indices such as the proposed benchmark can be released with only partial data from their contributors and be updated later. In effect, the Q1 2021 release of the proposed benchmark is unlikely to include all the data for its 12 contributing funds.

Data contribution can be delayed for numerous reasons: in an April 2020 press release, MSCI clarified that events like Covid-19 could make contributed data unavailable for substantial periods of time: "As a result of the impacts of the COVID-19 pandemic, certain valuers have included a significant uncertainty disclosure to their valuation data as of March 2020." (MSCI, 2020c) In effect, such delays are frequent. In March 2017 and in June, September and December 2020 MSCI announced "a delay to the release of the (Quarterly) results for the Global Quarterly Infrastructure Asset Index (...) to allow for collecting and processing missing data from particular index participants" (MSCI, 2017, 2020b, 2020c, 2020d). This is far from respecting the IOSCO principle that ensuring "that the benchmark reflects changes to the assets underpinning a benchmark," (IOSCO, 2013, pg20)

To address these issues, the draft regulation proposes that "where the index value for those covered asset classes for the last quarter in the lookback period (...) is not publicly available within 28 days after the end of the financial year for which the performance test is conducted (...) the regulations provide that the assumed index for 'Australian Listed Infrastructure' is instead to be used in relation to the final 2 quarters in the lookback period for the product." (2021 Exposure Draft Explanatory Statement, pg12)

This means that each annual performance test will include listed benchmark data mixed with the unlisted benchmark. If data contribution to the unlisted benchmark is delayed, it will require either using more than 2 quarters of listed data or using only partially contributed and even thinner unlisted data, increasing the concentration, bias and randomness of the benchmark and with no option to revise the results of the test once the private data become available.

This approach combining ad hoc and effectively random data to assess the performance of the unlisted infrastructure equity asset class, which now represents about 5% of the asset allocation of the Superannuation sector and more than 7.5% of the allocation of the top 20 Superannuation funds (Blanc-Brude et al 2020), does not take the APRA performance test seriously.

### **The decision to mix indices to create the benchmark also creates the potential for abuse of power by the regulator.**

Finally, under IOSCO principles, creating the benchmark from the combination of two indices makes the Treasury and APRA joint administrators of the benchmark i.e., "an organisation that controls the creation and operation of the benchmark administration process, whether or not it

owns the intellectual property relating to the benchmark.” (IOSCO, 2013, pg38). The Treasury and APRA should ensure this activity is performed in compliance with ASIC Financial Benchmark (Administration) Rules 2018.

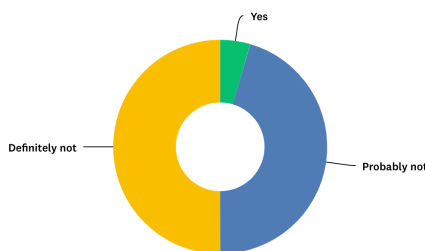
It also creates a potential conflict of interest by making the regulator, as administrator of the benchmark, both judge and jury of the performance of Superannuation funds. Whether this could amount to a case of **abuse of power by the regulator** is a legitimate legal question.

## 2. INDUSTRY SURVEY ON THE CHOICE OF BENCHMARK FOR UNLISTED INFRASTRUCTURE IN THE DRAFT REGULATION

In May 2021, we conducted a survey of 22 Superannuation funds (CIO or Head of Infrastructure) and their consultants. Superannuation respondents represent circa 380bn AUD of assets under management i.e., circa 20% of all Superannuation AUM in 2020 and range between 2 and 70bn AUD of AUM. The survey shows that the superannuation section is unconvinced by the proposed benchmark and does not support its intended use in the draft regulation.

Q1: Is this index sufficiently granular and representative to benchmark the unlisted infrastructure investments made by Superannuation funds fairly? **95% of respondents say no.**

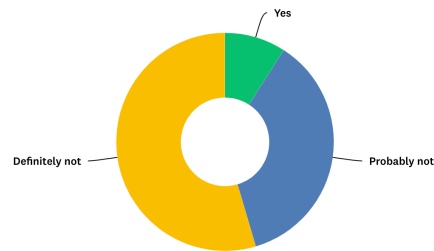
Answered: 22 Skipped: 0



ANSWER CHOICES	RESPONSES
Yes	4.55% 1
Probably not	45.45% 10
Definitely not	50.00% 11
<b>TOTAL</b>	<b>22</b>

Q2: This index is ‘unfrozen’ meaning that it can change retrospectively if new data is contributed. Is this acceptable for an index used in a time-based performance test? **91% of respondents say no**

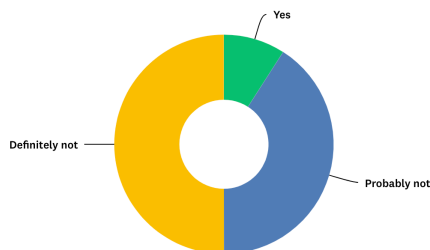
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ANSWER CHOICES	RESPONSES
Yes	9.09% 2
Probably not	36.36% 8
Definitely not	54.55% 12
<b>TOTAL</b>	<b>22</b>

Q3: This index exhibits survivorship bias. Would this index be a fair benchmark for Superannuation investors in infrastructure? **91% of respondents say no**

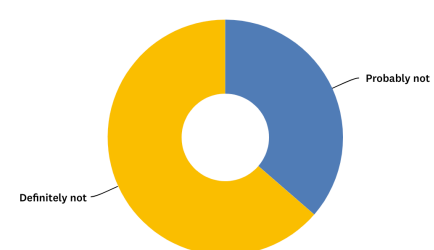
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ANSWER CHOICES	RESPONSES
Yes	9.09% 2
Probably not	40.91% 9
Definitely not	50.00% 11
<b>TOTAL</b>	<b>22</b>

Q4: Is it reasonable and fair to mix unlisted and listed indices to conduct the annual APRA performance test? **100% of respondents say no.**

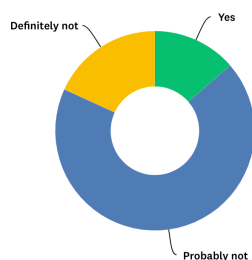
Answered: 22 Skipped: 0



ANSWER CHOICES	RESPONSES
Yes	0.00% 0
Probably not	36.36% 8
Definitely not	63.64% 14
<b>TOTAL</b>	<b>22</b>

Q5: Should the MSCI Australia Quarterly Private Infrastructure Index be the preferred benchmark for the annual APRA performance test? **86% of respondents say no.**

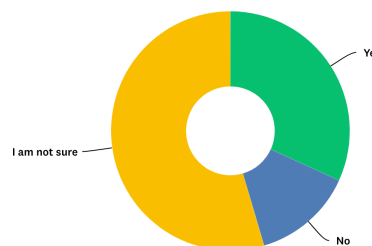
Answered: 22 Skipped: 0



ANSWER CHOICES	RESPONSES
Yes	13.64% (3)
Probably not	68.18% (15)
Definitely not	18.18% (4)
TOTAL	22

Q6: Would you prefer the infra300 index to be used in the APRA performance tests? **86% say yes or maybe.**

Answered: 22 Skipped: 0



ANSWER CHOICES	RESPONSES
Yes	31.82% (7)
No	13.64% (3)
I am not sure	54.55% (12)
TOTAL	22

### PROPOSED ALTERNATIVE: THE INFRA300® index

Under IOSCO principles (IOSCO 2013, section 6), benchmark design should take into account a) the adequacy of the sample used, b) the size and liquidity of the relevant market, c) the relative size of the underlying market in relation to the volume of trading in the market that references the benchmark, d) the distribution of trading among market participants (market concentration) and e) market dynamics (e.g., to ensure that the Benchmark reflects changes to the assets underpinning a Benchmark). The data used to construct a benchmark determination should also be sufficient to accurately and reliably represent the asset class measured by the benchmark and should a) be based on prices that have been formed by supply and demand and b) be anchored by observable transactions entered into at arm's length between buyers and sellers in the market. (IOSCO 2013, pg20)

In the survey described above, we asked superannuation funds about the importance of certain characteristics of the chosen benchmark: representativity, timeliness, absence of biases and the use of unlisted data only were all reported to matter and to be either 'important' or 'essential' by the overwhelming majority of respondents (see figure 4 below), echoing IOSCO principles.

The infra300 index is in line with IOSCO principles. It does not rely on contributed data but is a calculated index using a bottom-up data collection strategy to capture a representative sample of the investable universe: **its 300 constituents represent a sample of a broader universe of 6,800 unlisted infrastructure equity investments.** This universe is based on the detailed analysis of the 25 most active markets for private infrastructure companies, the availability of such investments at each point in time and the relative size of each segment of this universe (see EDHECinfra Universe Standard, 2020).

Its calculation methodology includes the calibration of an asset pricing model for each constituent using the latest transactions available in the secondary market: **it is based on market prices formed by supply and demand** at the time of valuation and captures both the structure of the market by sector and type of infrastructure, but also the latest price of risk and term structure of interest rates.

Contrary to the proposed benchmark, the infra300 addresses the 4 main issues identified above:

- It is not a 'winners only' index but instead reports the fair level of market returns
- It is representative of the global universe in which Superannuation funds invest
- It is published in a timely manner each quarter on the tenth working day of the quarter.



- It benefits from a proper index governance

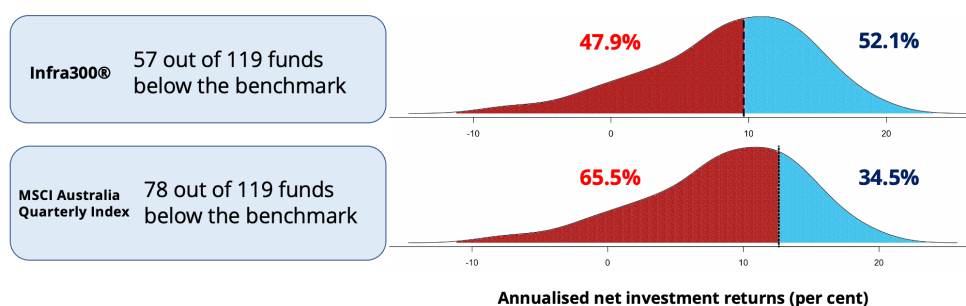
### A fair benchmark: no survivorship bias in the infra300 index

Superannuation funds do not publish their unlisted infrastructure investment returns to provide a direct comparison with the infra300 or the proposed benchmark, but a reasonable proxy might be obtained from the net fund returns of 119 unlisted infrastructure equity funds investing in core, core+ and opportunistic strategies for the past 8 years (2016-2020 vintages). While Superannuation funds are only one category of LP present in these funds, they represent in aggregate the strategies to which the superannuation sector is exposed.

Consistent with the 2018 PC Report, figure 2 shows that the MSCI index exhibits likely survivorship bias while the infra300 corresponds to the average net 8-year return for a global population of unlisted infrastructure equity funds. Indeed, if 65% of funds underperform the MSCI index it is because this index is not representative of the average performance, which is the result of the survivorship bias discussed above. Conversely, because the infra300 index is representative of the universe, its average return is very close to the mean net return of these funds.

The infra300 does not exhibit survivorship bias because it is build using a bottom-up approach which captures the investible market at each point in time and includes numerous assets that fail, go bankrupt or into default. The EDHECinfra database documents 150+ defaults or dividend lockups, and dozens of bankruptcies over the past 20 years.

**Figure 2: distribution of net 8-year returns 2016-2020 – infra300 vs MSCI Australia Quarterly Index**



Source: Preqin, MSCI, EDHECinfra

### The infra300 is representative of Superannuation funds target universe

The infra300 index includes a consistent set of 300 unlisted equity investments in the 22 most active markets since Q1 2000. It is designed to match the weight of the unlisted infrastructure equity universe by TICCS<sup>1</sup> segments i.e. by business risk, industrial activity and corporate structure, as shown on figure 4.

### Timely publication of the infra300 index

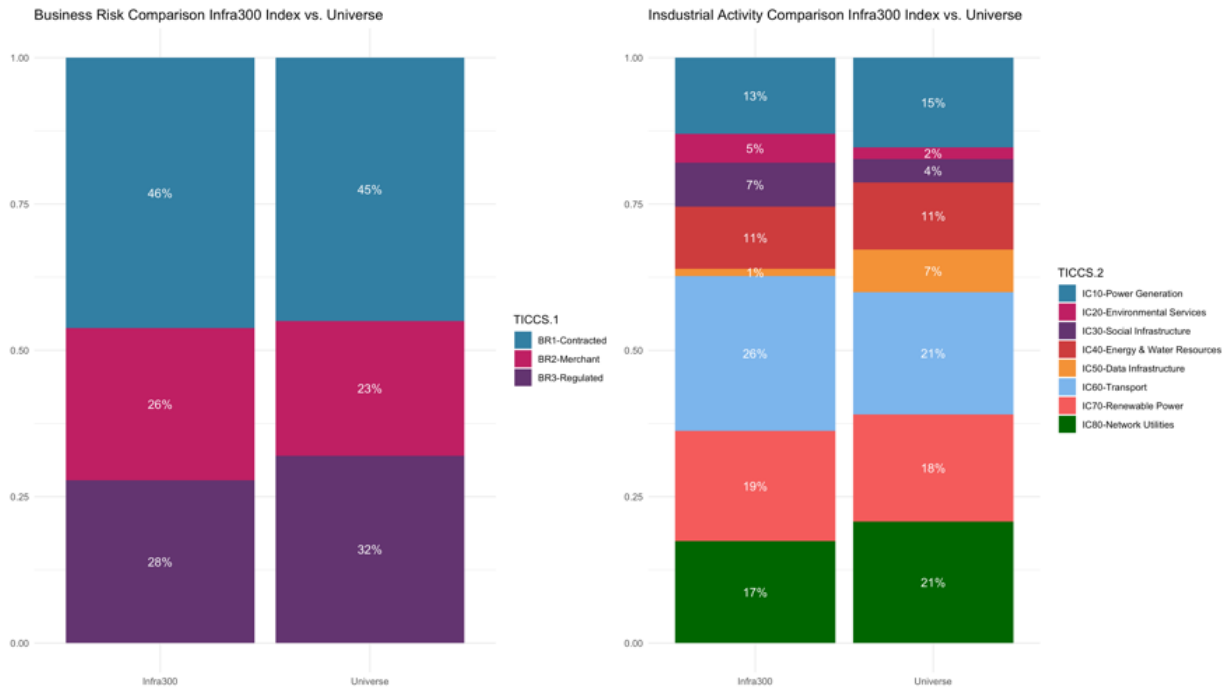
Table 3 shows the publication and index value date for the infra300 index since Q1 2020. The index is available on the EDHECinfra platform and via Bloomberg (ticker:infra300) on the tenth working day of the quarter.

**Table 3: infra300 Index Release Dates**

Release name	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021
Release date	13-Apr-2020	10-Jul-2020	13-Oct-2020	18-Jan-2021	12-Apr-2021
Index value date	31-Mar-2020	30-Jun-2020	30-Sep-2020	31-Dec-2020	31-Mar-2021

<sup>1</sup> The Infrastructure Company Classification Standard, see docs.edhecinfra.com/display/TICCS

**Figure 3: Investible universe (rhs) vs infra300® (lhs) weights by business risk and industrial activity TICCS® segment.**

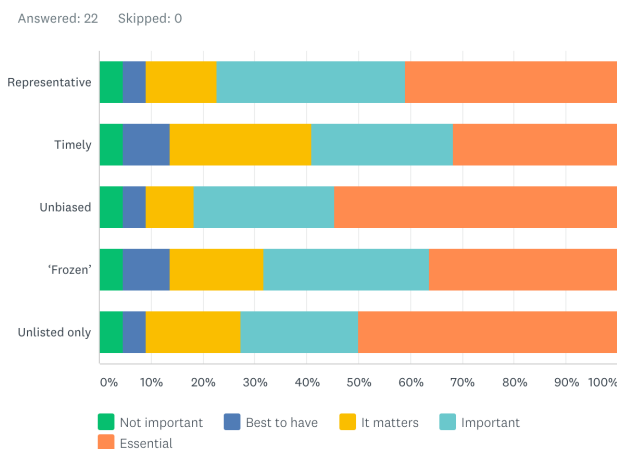


**The infra300 index governance is aligned with IOSCO principles**

The composition of the infra300 index is determined and reviewed annually and quarterly by the EDHECinfra index committee in the context of a control framework and internal oversight ensuring the quality of the benchmark as described above, including ensuring that the benchmark relies on market prices observed in active markets and uses a transparent methodology.

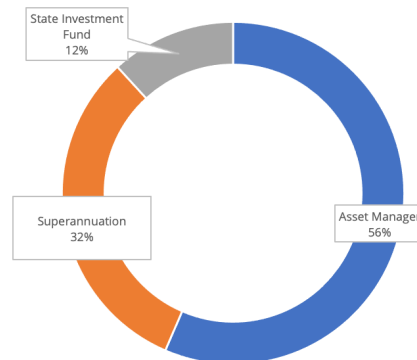
See appendix B for details on how the infra300 index satisfies the IOSCO principles for financial benchmark.

**Figure 4: What would be an appropriate benchmark for the annual performance test of the Superannuation sector unlisted infrastructure equity investments?**



May 2021 Survey of Australian investors, EDHECinfra

**Figure 5: Breakdown of current users of EDHECinfra Index data – Australian users only, AUM: 1.5Tr AUD**





### CURRENT USAGE OF THE INFRA300® INDEX BY AUSTRALIAN INVESTORS

The EDHECinfra data is currently used by a wide range of Australian investors. In total, the superannuation funds, state investment funds and asset managers that access the infra300® index represent 1.5Tr AUD of assets under management (see figure 5).

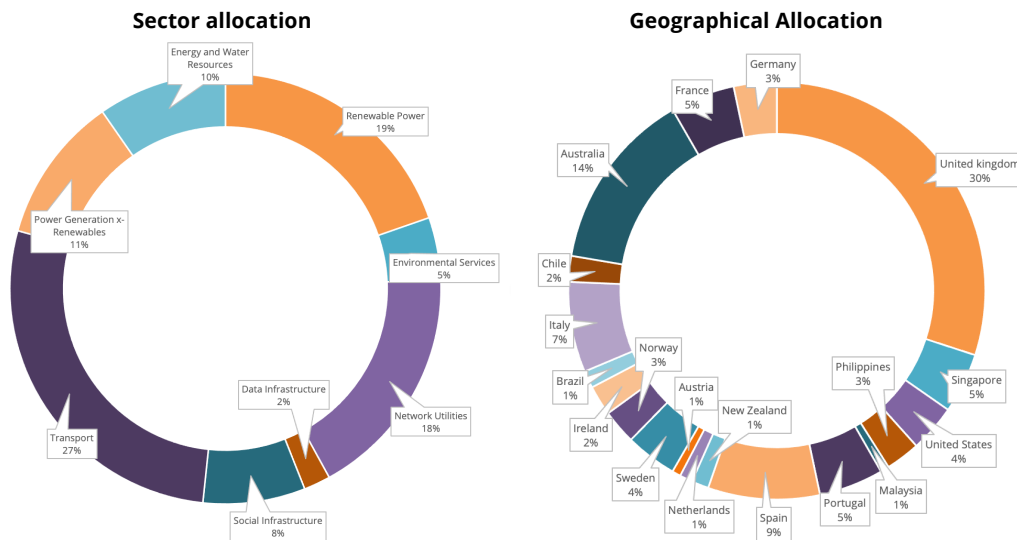
If we exclude asset managers to avoid some double counting, superannuation and state investment funds using EDHECinfra data represent 520bn AUD of AUM. Super funds alone represent 380bn AUD of AUM, of circa 24% of the superannuation total.

### APPENDIX A: infra300® Index Factsheet – Q1 2021 (Gross and net AUD returns)

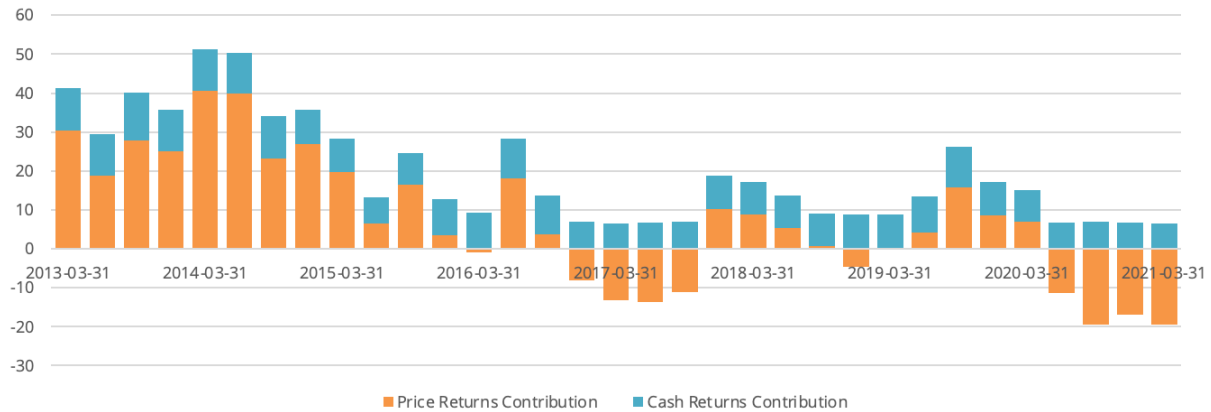
The infra300 equity index represents the quarterly performance of 300 unlisted infrastructure companies. The companies are selected to form a representative sample by TICCS categories of an underlying universe of close to 6800 firms in 22 countries. The index is equally weighted to minimize the impact of a few large firms and better represent the market accessible to the average investor. Since inception (Q1-2000), a total of 467 firms have been included in this index.

	Latest quarter*	1-year	3-year	5-year	10-year	Inception
Gross Total Returns	-4.22%	-12.80%	2.97%	3.60%	14.30%	12.67%
Net Total Returns	-4.84%	-15.02%	0.46%	1.07%	11.58%	9.98%
Volatility (gross returns)	-	-	11.45%	11.97%	15.47%	13.95%
Sharpe Ratio	-	-	0.19	0.20	0.79	0.63
Value-at-Risk	-	-	27.74%	28.18%	28.31%	24.00%

*Total returns include cash yield and price returns. Volatility is the standard deviation of total returns. Sharpe Ratio is the ratio of excess returns to the standard deviation of returns. Value-at-Risk is the 99.5% Cornish-Fisher VaR. Net returns computed using blended fee assumption of 2.5% pa.*



### Capital and income returns (gross) of the infra300 (AUD) Q1-2013 to Q1-2021



## APPENDIX B: Compliance of the infra300 index with IOSCO principles for financial benchmarks (IOSCO, 2013)

### Governance

Appropriate governance arrangements are in place in order to protect the integrity of the Benchmark determination process and to address conflicts of interest:

- A single entity is responsible for all aspects of the benchmark determination process.
- No activities related to the benchmark determination process are undertaken by third parties
- There are no conflicts of interests related to the entity responsible for the benchmark determination process
- A control framework is in place to monitor and validate the inputs and outputs of the benchmark determination process

### Quality and transparency of the Benchmark

- The data used to construct the infra300 is based on prices formed by the competitive forces of supply and demand in the 25 most active markets and are anchored by hundreds of observable transactions entered into at arm's length between buyers and sellers in the market for unlisted infrastructure equity.
- The benchmark is built on the basis of clear rules regarding the hierarchy of data inputs and the exercise of expert judgment used for the determination of infra300 index.
- Each publication of the infra300 index is the object of a concise explanation sufficient to facilitate a subscriber's or market authority's ability to understand how the index determination was developed, as well as a concise explanation of the extent to which and the basis upon which judgment, if any, was used in establishing a determination. This data is published on the EDHECinfra website each quarter.
- EDHECinfra conducts periodic reviews (annual and bi-annual) of the conditions in the underlying market for unlisted infrastructure equity to determine whether it has undergone structural changes that might require changes to the design of the methodology.

### Quality of the Methodology

- Detailed methodology and technical documentation of the approach and methods used to make infra300 determinations, with sufficient detail to allow stakeholders to understand how the infra300 is derived and to assess its representativeness, its relevance to particular Stakeholders, and its appropriateness as a reference for financial instruments are available on the EDHECinfra website ([docs.edhecinfra.com](https://docs.edhecinfra.com)).
- The rationale of any proposed material change in the infra300 methodology and procedures for making such changes are made available on the same website.

- Guidelines for data submitters (Data Contributor Code of Conduct) is available on the EDHECinfra website.

### Accountability

- Stakeholders may submit complaints concerning whether a specific infra300 determination
  - EDHECinfra preserves an audit trail and cooperates with regulators at their demand.
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