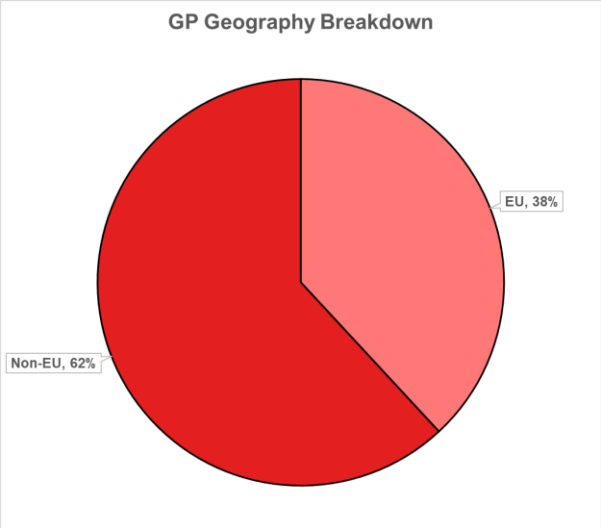
SOF ESG / PAI Research for Illiquid Assets (2022)

Version: 5 September 2023

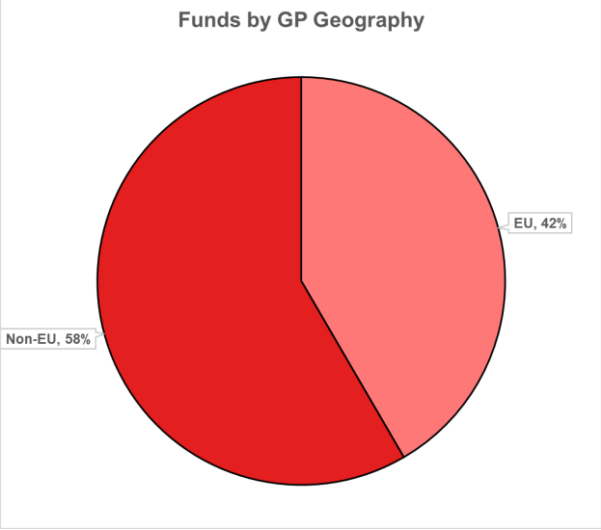
1. General Overview

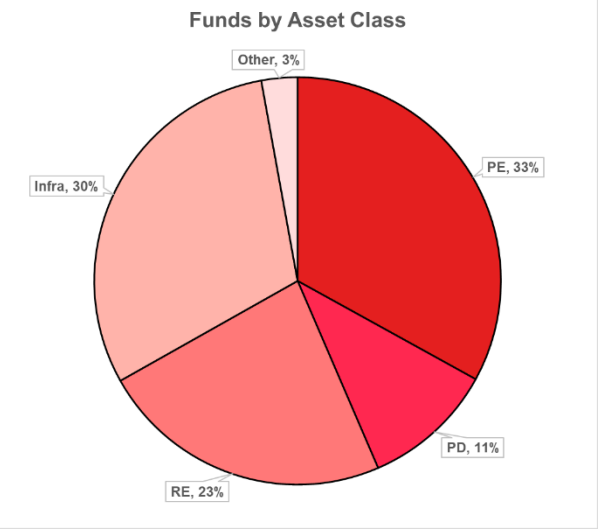
- Timing:
  - Reference Period of ESG data: 1.1.2022 – 31.12.2022 (partly 1.1.2021 – 31.12.2021)
  - Engagement Period with GPs: 1.1.2023 – 15.6.2023

- Total number of GPs covered in the SOF EET Input Management: ca. 300
  - GP Geography: 38% EU, 62% non-EU

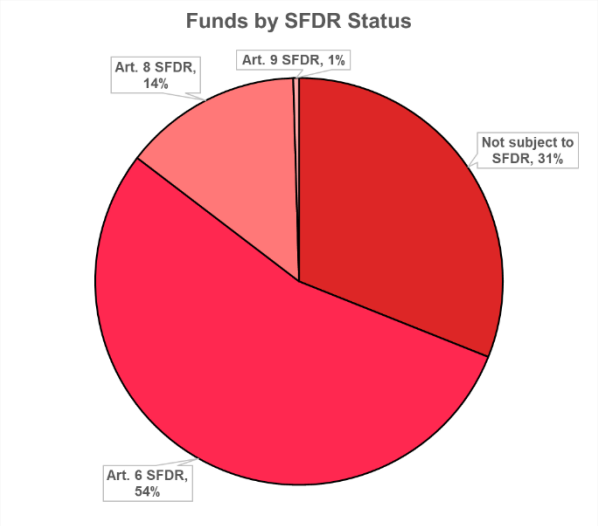


- Total number of target funds covered in the SOF EET Input Management: ca. 800
  - Funds by GP Geography: 42% EU, 58% non-EU
  - Asset Class: 33% PE, 30% Infra, 23% RE, 11% PD, 3% Other





- SFDR status as % of funds reporting their SFDR status (219 funds):
  - Not subject to SFDR: 31%
  - Art. 6 SFDR: 54%
  - Art. 8 SFDR: 14%
  - Art. 9 SFDR: < 0.5%



SOF Comment:
The assumption that the majority of funds is subject to Art. 8 SFDR doesn't hold for existing funds, whereby the majority is either Art. 6 SFDR funds or not subject to SFDR. Art. 9 SFDR funds are extremely rare (< 1%) in the illiquid space.

2. EET Delivery Ratio & Quality

EET Delivery Ratio - % of funds that delivered EETs:

- Total: 43% of all funds in SOF scope (over 300 EETs).

SOF Comment:
The assumption that illiquid funds don't provide EETs may not be correct given that almost half of illiquid funds (incl. funds that launched prior to SFDR) do provide EETs.

- GP Geography: 50% funds managed by EU GPs, 37% funds managed by non-EU GPs delivered EETs.

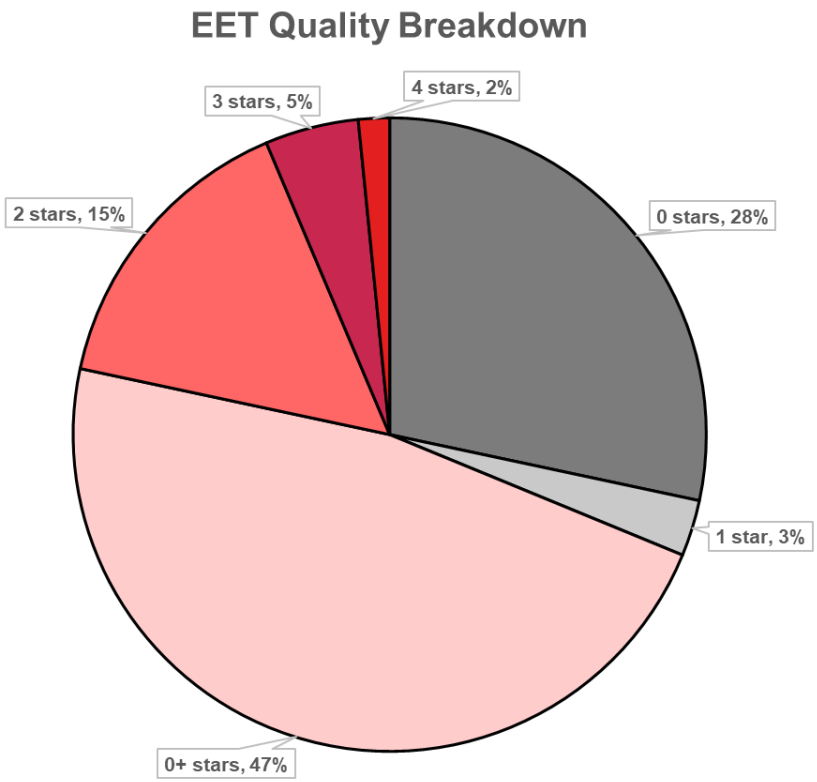
SOF Comment:
While non-EU GPs tend to provide less EETs than EU GPs, > 1/3 of them still does provide EETs. Therefore, it may be an incorrect assumption that non-EU GPs generally don't provide EETs.

- Fund Strategy: EETs received from 50% PE funds, 43% PD fund, 41% Infra funds, 36% RE funds.

SOF Comment:
PD, Infra and RE have a comparable EET delivery ratio of ca. 40%, while PE has a higher ratio of 50%. The delivery ratio is 43% on average ranging from 36% to 50% dependant on the asset class.

EET Quality[1]:

- Total funds that delivered EETs:
  - 0 stars: 28.34%
  - 1 star: 2.87%
  - 0+ stars: 47.13%
  - 2 stars: 15.29%
  - 3 stars: 4.78%
  - 4 stars: 1.59%



SOF Comment:
While it seems that only ca. 22% of received EETs contain valuable PAI data (2 stars and more), it may be worth looking at 47% of funds with 0+ stars EETs including at least one PAI value although PAI eligibility ratios are not correct or consistent. Since such funds have a rather high potential of increasing the quality in a simple way, it is fair to state that ca. 70% of EETs may deliver (potentially) usable PAI values, with less than 7% EETs providing all mandatory PAIs without data gap.

Nearly 30% of 0 stars EETs don't provide any useful information regarding PAI. However, our expectation is that GPs that generally started delivering EETs are more likely to increase the quality over time than GPs that generally don't deliver any EETs.

[1] SOF EET quality assessment mechanism:
- **0 stars**: Incorrect or inconsistent PAI eligibility ratios for any PAI categories incl. NACE-specific PAIs.
- **1 star**: At least one correct and consistent PAI eligibility ratio for each PAI category incl. NACE-specific PAIs.
- **0+ stars**: 0 star criteria fulfilled + at least one PAI coverage ratio and corresponding PAI value correct.
- **2 stars**: 1 star criteria fulfilled + at least one PAI coverage ratio and corresponding PAI value correct.
- **3 stars**: 2 stars criteria fulfilled + all mandatory PAI coverage ratios = PAI eligibility ratios and PAI values correct.
- **4 stars**: 3 stars criteria fulfilled + all mandatory and additional PAI coverage ratios = PAI eligibility ratios and PAI values correct.
- **5 stars**: 4 stars criteria fulfilled + all periodic SFDR Art.11 sustainable and taxonomy aligned investments complete and correct.

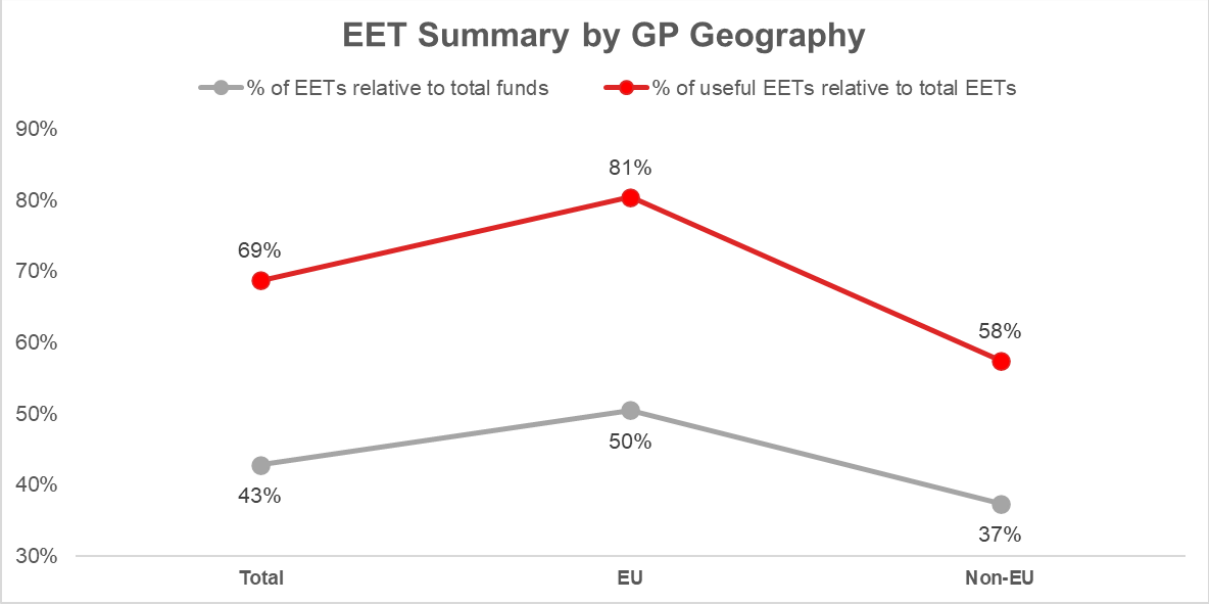
- Funds that delivered EETs by GP geography[2]:

	% of total EETs delivered by EU GPs	% of total EETs delivered by non-EU GPs
0 stars	15%	41%
1 star	5%	1%
0+ stars	53%	42%
2 stars	19%	12%
3 stars	8%	2%
4 stars	1%	2%

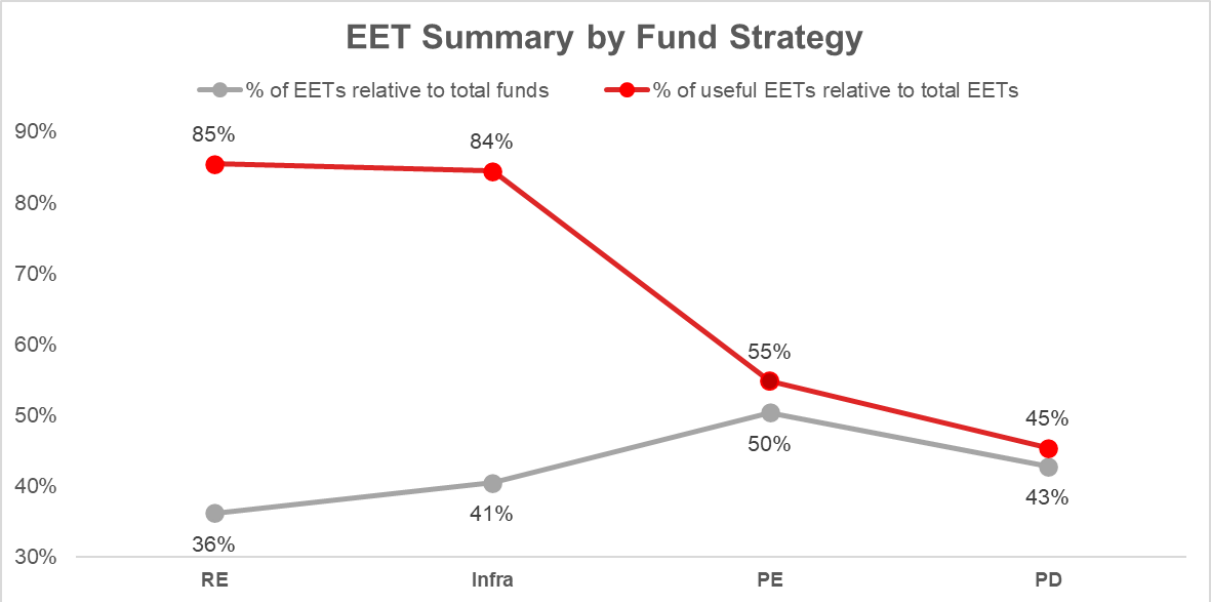
SOF Comment: The comparison shows that EU GPs seem to generally deliver PAIs in a higher quality compared to their non-EU GP peers (28% EU vs. 16% non-EU for 2-4 stars; 81% EU vs. 58% non-EU for 2-4 and 0+ stars).

- Funds that delivered EETs by Fund Strategy:

	% of total EETs delivered for RE funds	% of total EETs delivered for Infra funds	% of total EETs delivered for PE funds	% of total EETs delivered for PD funds
0 stars	10%	12%	43%	52%
1 star	5%	4%	2%	3%
0+ stars	40%	62%	43%	27%
2 stars	24%	17%	10%	18%
3 stars	19%	2%	1%	0%
4 stars	2%	3%	1%	0%



[2] The legend "useful EET" shown in charts of this section indicate the EET with a quality of 0+, 2 or above.



SOF Comment:
*Despite the lowest delivery ratio (37%) **RE funds** seem to have the highest quality (45% 2-4 stars; **85%** 0+ and 2-4 stars). This finding is in line with our expectations provided that RE is the asset class with significantly less mandatory and additional PAIs as well as a lower complexity for calculations of certain PAIs compared to other asset classes. Therefore, once a GP makes a decision to provide an EET, normally at least some RE PAIs can be delivered. Only 15% of RE funds fail to disclose any PAI KPIs in their EETs.*

*Though only 22% EETs delivered for **Infra funds** are 2-4 stars (less than half of RE funds), over 60% of them are 0+ stars resulting in the actual rate of infra EETs delivering (potentially) useful PAI values rather high as **84%** and quite close to the level of RE funds. While investee company PAIs required for infrastructure investments are significantly more complicated than the RE PAIs, a potential explanation for both asset classes may be that collecting at least some PAIs for project finance structures is generally feasible due to the high degree of control and standardisation as well as the narrow strategy in a SPV.*

***PE funds** offer a significantly lower PAI quality in their delivered EETs (12% 2-4 stars, **55%** 0+ and 2-4 stars) compared to Infra/RE funds while showing the highest delivery ratio (50%). The lower quality may be explained by different reasons incl. (i) the non-EU location of many portfolio companies and therefore lack of knowledge of requirement to report PAIs and (ii) no ESG resources on the portfolio company level for the calculation of PAIs. However, we strongly expect the PAI quality to significantly increase over time due to multiple reasons incl. (i) the increase of the reporting scope for CSRD companies as well as (ii) the negotiation and engagement power of a PE GP especially compared to debt strategies.*

***PD funds** seem to have the lowest PAI quality across asset classes (0% with 3-4 stars; 18% with 2 stars; **45%** 0+ and 2 stars). This can be explained by multiple factors in our view including (i) a generally higher amount and complexity of investee companies PAIs compared to real estate PAIs as well as (ii) less negotiation power from the position of a private debt investor, especially for existing loans, and compared to project finance strategies in RE and infrastructure.*

3. PAI Disclosure & Core PAI KPI Analyses

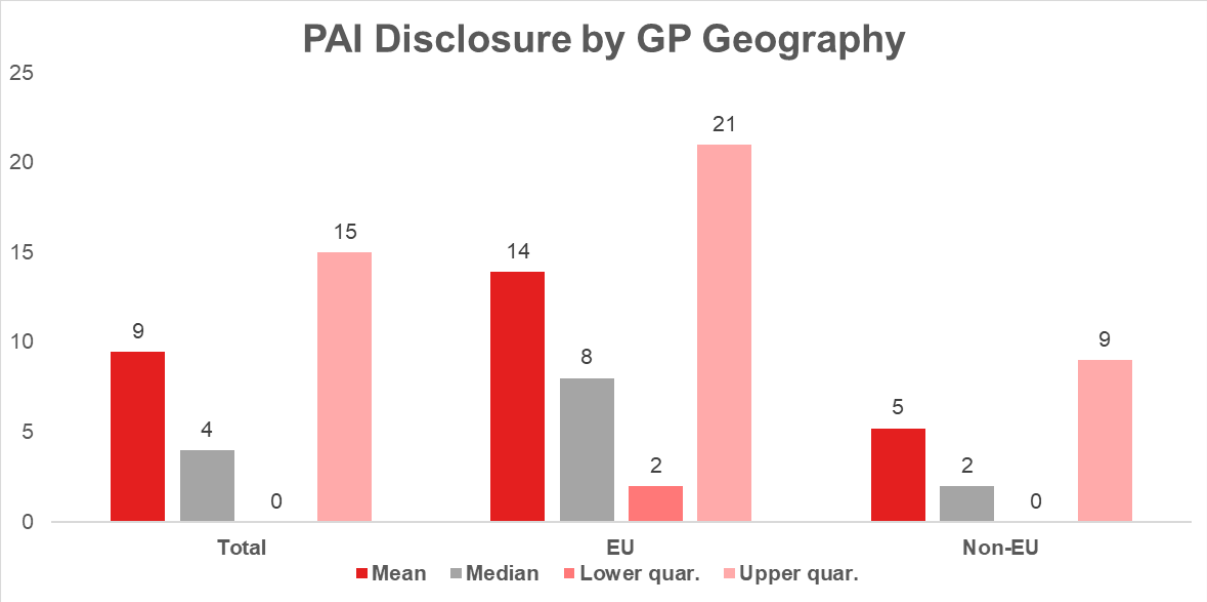
PAI Disclosure[3] – Number of reported PAI values (PAI coverage ratios > 0):

- Total: Received EETs report 9.5 PAIs in average, 4 PAIs in median, 15 PAIs in upper quartile, and 73 PAIs as maximum.

SOF Comment:
The assumption that illiquid funds cannot disclose principal adverse impact indicators may be not correct given that half EETs report at least 4 PAIs and 1/4 EETs report over 15 PAIs. The average PAI values reported is nearly 10 under the circumstance that 30% EETs report even no PAI values (1 star or 0 stars).

- PAIs in EETs by GP Geography:

	PAI values in EETs delivered by EU GPs	PAI values in EETs delivered by non-EU GPs
Mean	14	5
Median	8	2
Lower Quartile	2	0
Upper Quartile	21	9
Maximum	73	42

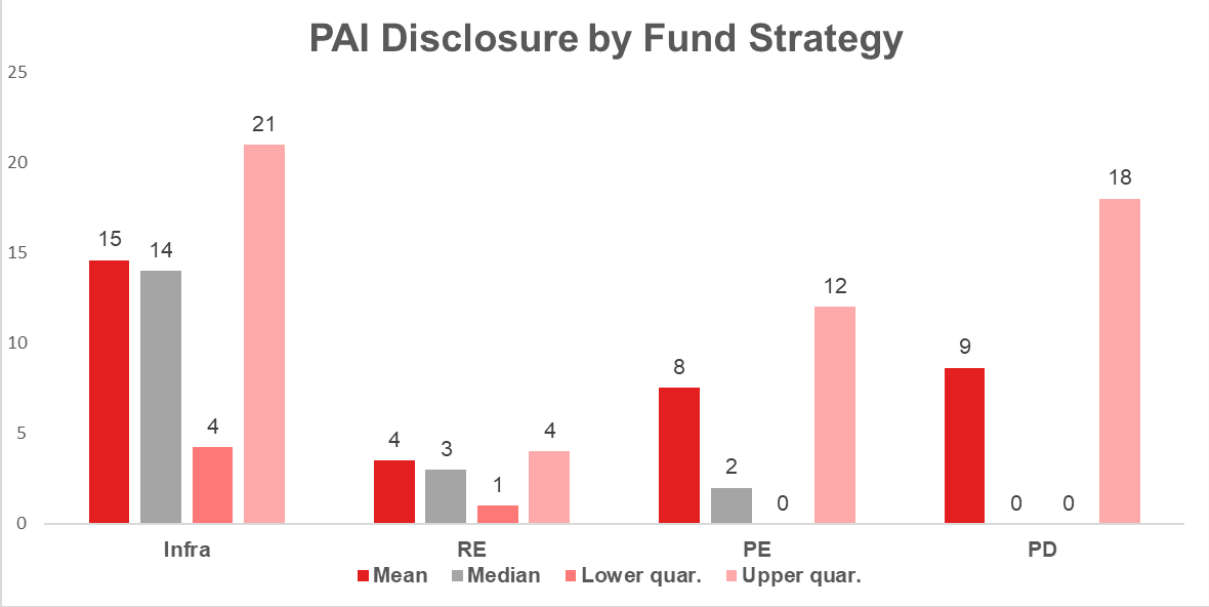


SOF Comment:
The comparison shows that EU GPs seem to generally disclose substantially more amount of PAI values than their non-EU GP peers (14 EU vs. 5 non-EU in average; 8 EU vs. 2 non-EU in median). This finding offers further support for the previous arguments that not only EU GPs tend more to provide EETs, but they also deliver EETs with a generally higher quality than non-EU GPs.

[3] The statistical results in this section are presented after SOF internal validations on received EETs and auto-deletions of non-valid PAI values. For instance, if one EET reports a PAI value without populating the corresponding PAI coverage ratio, this PAI value will be auto deleted and would not be taken into account for subsequent analysis.

- PAIs in EETs by Fund Strategy:

	PAI values in EETs delivered for Infra funds	PAI values in EETs delivered for RE funds	PAI values EETs delivered for PE funds	PAI values in EETs delivered for PD funds
Mean	15	4	8	9
Median	14	3	2	0
Lower Quartile	4	1	0	0
Upper Quartile	21	4	12	18
Maximum	51	11	53	57



SOF Comment:
It should be noted that the amount of PAI values significantly differs between investee companies such as Private Equity, Private Debt and Infrastructure (29 mandatory and 38 additional PAI values) and Real Estate (2 mandatory and 9 additional PAI values).

*The comparisons indicate that **Infra funds** seem to report the highest amount of PAI values in both average (15) and median (14) than other asset classes, which is consistent with previous findings that Infra funds deliver EETs with rather high qualities and the large proportions of 0+ stars EETs (>60%) do benefit to the Infra fund's sustainability metric disclosures.*

***PE and PD funds** disclose significantly fewer numbers of PAI values compared to Infra funds, particularly in median (only 2 for PE and 0 for PD). This pattern can be attributed by the EET quality that 45% PE (55% PD) EETs are either 0 stars or 1 star indicating no PAI values are reported.*

*Since **RE funds** generally have to report less PAI values than investee companies, the mean of 4 and the median of 3 indicate that the majority of funds reports at least all 2 mandatory PAI values.*