XTAL Strategies Srl | Corso Matteotti 1 | 20121 Milan | Italy
www.xtalstrategies.com | info@xtalstrategies.com

Vanessa Countryman, Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-1090

VIA ELECTRONIC MAIL: rule-comments@sec.gov

February 28, 2022

Re: **File No. S7-03-22**
Private Fund Advisers, Documentation of Registered Investment Adviser Compliance Reviews

Dear Ms. Countryman,

XTAL Strategies welcomes the opportunity to respond to the SEC's request for comments on **Release Nos. IA-5955; File No. S7-03-22**, (the "Release") proposing new rules under the Investment Advisers Act of 1940 (the "Advisers Act" or the "Act").

Our comments are based on proprietary research and extensive experience in the analysis of private markets and the broader illiquid assets, which have led to the development of patented performance calculation metrics in time-weighted terms for private funds (USPTO No. 8,386,356 B2, Registry of Patents of Singapore No. 194993, Japan Patent Office No. 6014124).

Consequently, our comments are mainly directed toward section II.A.2 ("Performance Disclosure") of the Release.

At the same time, we acknowledge that the other rules proposed, in particular the section II.A.2 ("Fee and Expense Disclosure") of the Release, influence the quality of Performance Disclosure. We welcome the availability of detailed information about the costs of investing in Private Funds. In this respect, we stress the fact that only performance readings calculated in time-weighted terms can unambiguously incorporate fees and expenses incurred over time, making those figures accurately comparable with those of other private funds, both in dollar amounts and percentage terms. The fact that, for example, <u>management fees have a time-weighting connotation</u> (charged on a notional amount and over time) makes it hard to properly compare them with the money-weighted performance metrics traditionally used for illiquid funds.

In this respect, while we appreciate the SEC's guidance and stated intent of enabling "*investors to compare private fund investments and comprehensively understand their existing investments and determine what to do holistically with their overall investment portfolio*", we believe that **maintaining the use of money-weighted returns** (internal rate of return or IRR and multiple of invested capital or MOIC) for illiquid funds as primary metrics for performance disclosure, <u>**hinders the achievement of the objectives of comparability, transparency and standardization**</u> set by the SEC in the Release.

Before providing comments to the specific questions of section II.A.2 and II.A.2b of the Release, which can be found in the Appendix to this letter, we would like to draw the Commission's attention to the rationale of the point we are making about <u>discontinuing the use of money-weighted returns for illiquid funds as primary metrics for performance disclosure to investors</u>.

We acknowledge the Commission's awareness of the drawbacks of internal rate of return and multiple of invested capital. Also, we appreciate the proposed inclusion of a *statement of contributions and distributions* to "*help investors holistically understand the fund's performance, allow investors to diligence the fund's performance, and calculate other performance metrics they may find helpful.*"

Nevertheless, without properly calculated time-weighted returns, any *quarterly reporting series of information* only apparently add consistency and informative value for investors in the illiquid fund category. The *since inception* attribute, proposed in rule 211(h)(1)-2(e)(2)(c), only highlights the limitations of IRR and MOIC in delivering accurate inter-temporal and cross-asset comparability. In fact, the nature of a private fund's net asset value (NAV), which varies not just for fair valuation changes but also because of contributions and distributions, already prevents a meaningful comparison from quarter to quarter for the same fund (absent a true reinvestment possibility). Even more evident are the difficulties to unbiasedly compare peers within the same illiquid fund universe, not to say the comparison of an illiquid fund with listed assets or across vintages.

In table 1. below, a simplified comparison among three funds of the same 2008 vintage (with identical commitment of 10 dollars made on Dec. 31st, 2007) shows that different amounts of drawn capital (Drawn % column) and cash flows, happening with different timing (contributions with negative readings in parentheses and distributions with positive readings), can lead anyway to identical IRR and TVPI/MOIC results.

	Commitment	Time	12/31/07	12/31/08	12/31/09	12/31/10	12/31/11	12/31/12	Drawn %	IRR	TVPI
Fund X	10.00		(2.00)	(4.00)	2.00	10.00	-	-	60.0%	**37.4%**	**2.00**
Fund Y	10.00		-	(3.00)	(6.00)	3.00	15.00	-	90.0%	**37.4%**	**2.00**
Fund Z	10.00		-	-	(2.50)	(5.00)	2.50	12.50	75.0%	**37.4%**	**2.00**

Table 1.: Comparison among buyout funds' cashflow patterns and performance metrics. Source: XTAL for illustrative purposes only.

With this simplified example, we would like to draw the Commission's attention to the fact that both IRR and MOIC take into account neither the time nor the amounts of the measured transactions.

- This is in contrast with what the following excerpt from the Release states: *Unlike the definition of internal rate of return, the multiple of invested capital definition would not take into account the amount of time it takes for a fund to generate a return (meaning that the multiple of invested capital measure would focus on "how much" rather than "when")*".
- From the example above, not only do not both these measures weigh the "when" (and "how much"), but they also do not consider the "how long" attribute required for an accurate performance measurement. IRR and MOIC, being money-weighted metrics, give up, by construction, any reference to the time. While seemingly spot measures, IRR and MOIC are in reality atemporal metrics.

Also, we would like to draw the Commission's attention to the fact that the proposed "*since inception*" attribute, which we believe the Commission adopts from commonly used industry performance measurement jargon, if associated with IRR or MOIC, creates substantial ambiguity. **The *since inception* notion can mislead investors** to interpret the IRR, at the reporting date, as the actual return earned by the capital invested, over the full time period spanning from *the inception* of the fund to the same reporting date.

- With a *since inception* label, the IRR can be misread (and misused) as a compounded average rate of return, potentially being interpreted as an annualized figure, with misleading consequences.
- As an example of inaccurate use, since inception IRRs are compounded as if they were time-weighted returns to build indices for illiquid private fund.

Furthermore, for illiquid / self-liquidating private funds, there cannot be a mathematically (and financially) correct disclosure of 1-year, 3-year, 5-year, 10-year IRR or MOIC figures. Distributions (if the artificial reinvestment assumption is removed, as it should be, for proper benchmarking purposes) shorten the financial duration of the private fund. Distributions increase the IRR, the earlier they occur, the higher the IRR reading. At the same time, they shorten the duration of the fund, as less capital is at work in the compounding of returns (as it happens with coupon bonds). A high distribution during a 1-year period fuels a high IRR, which does not translate into a 1-year return.

Private funds are "forward-forward" financial contracts because contributions are not paid upfront in full (indeed they are forward on average vis-à-vis the fund's inception) and distributions occur on average further forward in time. Without the proper consideration of the distributions and the consequent impact on the financial duration of private funds, <u>the" how long" and the reference capital underlying any IRR-related performance figure can be easily misunderstood</u>.

- On the typical 10-12 years maturity of private funds, the total capital deployed generates returns only for the shorter time period calculated according to the duration (and typically for a period of 3 to 6 years, starting at a later time than the inception of the fund – hence a "net forward duration" notion).

More information about the importance of the duration for illiquid funds can be found in an article published on the CFA Institute blog that XTAL Strategies' CEO Massimiliano Saccone recently authored. It illustrates how the patented methodology of DARC (Duration Adjusted Return on Capital), which leverages a fixed income framework for the valuation of private equity funds, improves upon IRR – https://blogs.cfainstitute.org/investor/2020/10/12/times-up-for-the-irr-resetting-the-clock-on-private-equity/: "The DARC and IRR are indeed quite similar: They both represent the period return produced during the timespan when the capital is deployed. But just the DARC carries along the precise timespan "ID card" information."

- **<u>Illiquid funds, without precise information on duration, cannot be properly put in the time-weighted context of all other asset classes</u>**. *It is inaccurate to compute duration using IRR, MOIC and PME (and similar methods)* because these methodologies lack additivity and time transferability properties. In fact, the non-homogeneous timeframes and notional cash flows references used in the calculations mean that their averages and rankings are mathematically incorrect. Furthermore, compounding (as computed with geometric means) implies asset realization and reinvestment assumption. Here is where, for IRR, the chickens have come home to roost. In fact, one of the major flaws of IRR is its reinvestment assumption, i.e., the fact that capital distributed to LPs early on will be reinvested over the life of the PE fund at the same IRR as calculated at the early exit.

Adding duration to the reporting requirements is a critical (and equitable) step to substantially improve reporting effectiveness, transparency, and comparability of private funds performance. Private fund advisers will enhance the robustness and unbiasedness of fund performance figures whenever that information is complemented with duration readings, with total value creation (in annualized time-weighted or actual dollar terms) easily comparable with total fees (in annualized time-weighted or actual dollar terms), and other peer funds, across vintages and against any other asset classes.

Finally, from an economic perspective, which we understand is a critical element of consideration for the Commission, we believe that basic standardized information about performance for illiquid funds in time-weighted duration-adjusted terms can be made inexpensive in both cost and maintenance terms. We see the possibility, through cooperation, to build efficient ways to centralize accurate, comparable, and standardized data to the benefit of all industry participants. Our company is fully committed to contributing to the next phase of institutionalization of the private fund industry.

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Thank you for the opportunity to comment on these matters of critical importance to the investing public. Should you have any questions, please feel free to contact me.

Respectfully yours,

Massimiliano Saccone, CFA
Founder and CEO
XTAL Strategies

Enc.: No.1

APPENDIX

II.A.2

- Investor quarterly statements should include performance information to provide a standardized time-series-like comparability framework. However, in that respect the type of performance information provided makes all the difference.
- The rule introduces a categorization that is useful as it forces advisers to provide a clear categorization of their funds.
- The definition liquid / illiquid is useful. The Commission should consider the third category of “hybrid funds”. Going forward, even though differentiating funds based on the definition of annual return is correct, for proper comparability, in a time-series-like fashion and across assets, all funds should provide annual return (i.e., time-weighted – but not Modified-Dietz TWR, which is not a true time-weighted metric, as per https://en.wikipedia.org/wiki/Modified_Dietz_method).
- The six factors in the definition of illiquid funds are appropriate and whether a fund produces regular or irregular cashflow should not matter from the categorization viewpoint, as it should not the compensation methodology.
- Other terms or phrases for illiquid funds are not necessary to achieve objectives of effective performance measurement standardization.
- Other characteristics for liquid funds are not necessary to achieve objectives of effective performance measurement standardization.
- As mentioned above, hybrid funds should be a standalone category. For the purposes of proper standardized comparability only time-weighted methodologies deliver unbiased results.
- A proper time-weighted performance calculation methodology adopted as primary disclosure reference also for illiquid funds eliminates any consequence on performance calculation due to a change of classification.
- As above, a proper time-weighted performance calculation methodology simplifies performance calculation in hybrid liquid/illiquid situations with side pockets.
- A proper time-weighted performance calculation methodology should be given prominence because is the only methodology that addresses effective performance measurement and comparability standardization, across vintages, in a time-series-like fashion and among assets.

II.A.2b

- The proposed metrics (IRR/MOIC) are obsolete, since portfolios are multi-assets and proper rules for benchmarking require the comparison among fully diluted, self-financing, time-weighted performance data.
  PMEs are at best the IRR of the public markets or relative performance ratios, but do not overcome the drawbacks of the IRR. In addition, since PME measures the wealth multiple effect of investing in the private equity fund versus the index, the result is cumbersome given the current debate on private equity risk-adjusted returns and the lack of consensus on the appropriate private market benchmarks to consider. The situation is similar for a Modified IRR version that includes a statutory cost of capital. In this respect, I provide hereby a link to an article published on the CFA Institute blog that I recently authored: https://blogs.cfainstitute.org/investor/2021/07/05/pointless-market-equivalence-if-not-the-irr-why-the-pme/
- Different types of illiquid funds would all benefit from a proper time-weighted performance calculation methodology.
- Quarterly reporting is an adequate frequency. With proper time-weighted performance information, it would be possible for the investors to produce more frequent estimates of NAV and performance – within an adequate probabilistic framework.

- The quarterly statement is a very useful addition, in particular whether the charges for fees and costs are clearly identified in the statement of contributions and distributions.
  This would help investor to produce better estimates without any prejudice to the "privacy" of the funds.
- The proposed definitions are formally very clear but do not achieve the higher standard set by the Commission for the information requirements sought over time and among funds and asset classes for illiquid funds.
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- Also, the GIPS for illiquid funds are challenged by the higher standard set by the Commission for the information requirements. Adopting a proper time-weighted performance calculation methodology would not require any special adjustment to cumulative committed capital for composite calculation, also in case of illiquid funds.
- The amounts committed by the Related persons and Advisers may be identified and excluded from the calculation of the whole fund performance. Nevertheless, it is more a policy decision than a structural requirement if the data are properly and transparently disclosed.
- The term "computed without the impact of any fund-level subscription facilities" seems adequately explained.
- A proper time-weighted performance calculation methodology correctly detects the impact of subscription lines, reducing the fully diluted returns (the effect of the subscription lines is a shortening of the net forward duration at a cost).
- Indeed, providing a statement ex-subscription lines is possible since the operational cash flows are known. Nevertheless, it might be a time and resources consuming exercise, and it might require significant assumptions if instruments like preferred equities financing are taken into account.
- The realized versus unrealized information presents weaknesses, as it requires significant assumptions that might be unrealistic. How would an investment that has gone through a recapitalization that repaid the principal be treated? How would preferred equity financing events be treated? In time-weighted terms, the de-risking information associated with realized / distributed returns (both gross and net) is clearly shown by the trajectory of the total duration of the fund (technically the decay of the duration of the distributions). The higher the distributions, the lower the residual capital at risk, the bigger becomes the difference between ex post duration and time elapsed since inception.
- A fully diluted time-weighted indexed performance would eliminate the issue, as the investor could precisely calculate both the performance for the time a given NAV is outstanding, and the average performance of capital over time (a proper CAGR of the notional capital).
- With respect to the disclosure of the realized and unrealized portions of the portfolio, it is equivalent to provide dollar amounts or percentages. What matters for the investor is the ability to assess cumulated distributions (free from recycling), residual committed capital and NAV (and its fair valuation quality).
- When the Commission proposes temporal notions for the quarterly reported metrics for illiquid funds (e.g., since inception, annual basis, etc.) the objective of effective comparability becomes not feasible. It is correct to require since inception information if the intent is to compare performance over time. However, in this case, the performance notion utilized has to be coherent, as it will be better clarified in the following points.
- For illiquid funds (as well as for liquid funds), any periods, any temporal reference in performance reporting requires proper time-weighted performance metrics. As mentioned earlier, IRR and MOIC

give up the connection, by construction, to any notional reference of time and capital that allow standardized comparability. A since-inception, or a five-year IRR instills the impression that that return has been produced on average over the referenced period. In reality, over 10 years, the average net forward duration of IRR is 3-6 years. What this means is that on average the capital for the rest of the time is cash. If this point is not properly incorporated (with the concept of duration and time-weighting), the current information (compounding IRRs, horizon IRRs, etc.) is cumbersome, although it will be justified and reinforced by the published readings. To the benefit of no one. Reinvestment risk is a major component of investors agenda as well as the pacing of investments, which leads to systematic overcommitment to reach the allocation targets.

- For liquid funds, the term is a non-issue as time-weighted metrics apply. It should be the same for illiquid funds.
- The most practical date is a fair notion. The critical additional information is about the fair valuation policy adopted for the NAV, which is the "temporal carrier" of value for the fund. Any contributions and distributions that are usually tied to marked-to-market transactions, such as fund investments and divestments, are less of an issue..
- IRR and MOIC only make reference to the amount contributed – this is why an apple-to-apple comparison always requires proper time-weighted performance information. The notion is fully diluted, and self-financing, so that it is understood "*that an investor's actual return on its capital commitment will depend on how the investor invests its uncalled commitments*". Not only does the "how" matter, but it is the "if", the "when", and the "how long" that make the difference in an unbiased performance measurement framework.
- Once a proper time-weighted performance methodology is adopted the impact of subscription lines would be clear and all associated cost borne by the fund should be included to derive a net performance.
- Indeed, the statement of contributions and distributions should include uncalled commitment, cumulated distributions and important information about the NAV, its valuation approach, and, more importantly, it should be net of the performance fee accruals – otherwise this may lead to an overestimation of all performance measures.
- The statement of contributions and distributions integrated with the info as per the bullet above, should be sufficient for the scope of fund level comparison. Information about the underlying portfolio companies would be a great addition (even if I reckon it may be too "private" to show, and too time consuming to calculate every quarter).
- With respect to the prominence of the information, it is critical to underline that in no circumstances (including horizon IRRs), illiquid fund metrics can be annualized and compounded, unless they are calculated with a proper time-weighted performance methodology.

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