PERFORMANCE MEASUREMENT OF PRIVATE EQUITY REAL ESTATE INVESTMENTS
Dear Investors and Prospective Investors,

This short paper deals with performance measurement in our business because it is assessed on a different basis than traditional investment portfolios.

Indeed, the performance of wealth portfolio is generally measured in annualized percentage increases (or decreases unfortunately) on its value at the beginning of the period under consideration.

This implies that net asset value ("NAV") of the different elements that compose the portfolio are readily available (such as in liquid listed markets) at two points in time to make the calculation.

Fundamental characteristics of our business make this traditional performance measure difficult to use. There are two principal reasons that support this statement:

- NAV is an inaccurate and volatile indicator of performance in our activity in normal times (albeit we recognize it is a useful indication of poor performance if it drops down excessively!) because:
  - ImmoFinRe is mainly involved indirectly in real estate project development. Projects are generally carried on the books at cost until they are either pre-sold or completed, meaning that the NAV of the shares of our funds should be below our investment costs until projects completions. And NAV is almost always significantly below the pro rata of exit value even when projects in process are carried at marked-to-market¹. This NAV then jumps up towards the completion of each successful underlying real estate project, but drops back below investment cost rapidly for the second reason hereunder.
  - ImmoFinRe operates for the time being "distribution" as opposed to "capitalization" funds. This means that capital and profits are distributed to investors rapidly after the exit from any successful underlying project development. NAV of the shares of the funds then drops back below investment costs until the next successful project is sold.

- More importantly, ImmoFinRe currently operates in the private equity segment of real estate. Projects normally take 3 years or more to complete. Money is committed upfront, is used and put at work to progressively create value in each underlying project, and sent back to investors at exit, sometimes with intermediary distributions. The only meaningful performance assessment measures must therefore be cash flow - based, as described hereunder.

Our industry (and the private equity world in general) uses two principal standard cash flow – based performance indicators where capital calls, capital reimbursement and profit distributions are the basis for calculation: they are the internal rate of return ("IRR") and the equity multiple ("EM").

1. **INTERNAL RATE OF RETURN OR IRR**

Mathematically, this is the rate at which the net present value of a stream of cash inflows and outflows is equal to zero. In other words, the internal rate of return on an investment or project is the "annualized effective compounded return rate" or "rate of return" that makes the net present value of all cash flows (both positive and negative) from a particular investment equal to zero.

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NPV = 0 = \sum_{t=0}^{n} \frac{CF_t}{(1 + IRR)^t}
\]

In layman’s terms, it corresponds to a compounded annual return on the money at work at any point in time (hence on the capital called from investors, net of all distributions).

It is important to realize that IRR is calculated on money at work and not on total commitment.

One must distinguish Gross IRR (the fund IRR) and Net Investors’ IRR (after the fund’s costs).

The principal advantage of using IRR as a performance measure is twofold:

- First and foremost it takes into account the time value of money. Indeed an identical cash outflow is more expensive today than tomorrow because the money can be invested overnight. And a cash inflow

¹ The marked-to-market of interest Rate Swaps also has a impact on NAV; acquisition of income producing distressed properties show more gradual increases in NAV as the asset work is normally carried out progressively
is more valuable today that tomorrow for the same reason. This is a critical point as real estate projects span several years.

- It can be used ex ante to make an investment decision ("expected IRR") and ex post ("realized IRR") to assess performance.

Most managers of real estate private equity funds strive to optimize net investors' IRR because they are economically incentivized to do so, as their compensation usually includes a sharing of profits (called “carried interest” or “promote” in the industry jargon) after investors receive a given, pre-set IRR (called the “hurdle rate”).

2. **EQUITY MULTIPLE OR EM**

This is the multiple that an investors expects (ex ante) or actually receives (ex post) from an investment on its maximum cash exposure (or maximum amount of money at work) during that investment.

It is therefore the multiple on the peak of capital called less distributions of any kind during the investments.

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\text{Equity Multiple} = \frac{\text{profit} + \text{max Equity Exposure}}{\text{max Equity Exposure}}
\]

Profits and capital distributions to investors are netted out of cumulated capital calls to calculate this peak exposure and therefore this indicator would be best called peak cash exposure multiple instead of Equity Multiple.

So again here, this is a return indicator of money at work, not of the total commitment of an investor.

There seems to be a recent trend to include a minimum EM as a hurdle before a manager shares into the profits of their fund, but it remains the exception for now.

3. **IRR versus EM**

IRR and EM can be optimized individually by choosing within investment of similar characteristics those that last shorter or longer.

It is indeed the time duration of an investment that set the mathematical relationship between its IRR and its EM. A 15% compounded annual rate of return for 5 years will mathematically result in a multiple of 2 times. The same 15% over a shorter time period will provide a lower multiple and a longer time period at the same return will give a higher multiple. A purchase of a secondary position into an advanced real estate private equity fund at cost should provide a higher IRR than the one achieved by earlier investors because of the time value of money, but the EM should be identical for all investors if the secondary purchase is realized before the time of investors’ peak cash exposure.

The issue becomes a bit more complicated in our business if the same money gets reinvested in successive projects by a manager (which is usually the case during the investment period of a fund). The manager will only normally do so to optimize both IRR and EM, not one at the expense of the other. The problem is that in doing so, the manager increases the length (or the time duration) of the investment, therefore increasing uncertainty and risk (macroeconomic, market, political, foreign exchange, etc…) for investors, which is not always compensated by the excess return.

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We remain at your disposal to further discuss this paper if you wish.

Sincerely Yours,

For the ImmoFinRe Group

Albéric Braas, CEO