

The J-Curve and Building a *Self-Funding* Private Equity Portfolio



→ The J-Curve visualises the cash flow from a private equity fund investment.

→ Investors who allocate to a portfolio of private equity funds, each with their own J-shaped cash flow profile, can build a self-funding portfolio that grows over the long term.

What is a J-Curve? Definitions and parameters

Down and then up: the net cash flows of a private equity fund investment resemble the letter J.

The J-Curve provides private equity fund managers, academics and Moonfare a way to discuss different dynamics associated with private equity investments. The depth and height of the J and the width of its trough, for example, all reflect different aspects of private equity funds' performance — aspects that will be discussed in more detail below.

For starters, the J-Curve plots a private equity investor's net cash flow on the y-axis against the private equity fund's lifetime, usually around 12 years, measured on the x-axis. Net cash flow refers to how much the investor has paid into the fund, or received as profits from its investments at any given point in time.

Certain J-Curves use the fund's internal rate of return, or "IRR", on the y-axis. For the sake of clarity, Moonfare uses net cash flow for the y-axis of our J-Curves.

Net cash flow provides a simpler measurement and captures the essential dynamics at play: whether or not the investor made a loss or a gain. IRR on the other hand is a function of net cash flow and also time, which the x-axis already captures in the J-Curve context.

The limited partner refers to the institution or individual who provides capital to a private equity fund to invest. Moonfare clients, taken as a whole, form a limited partner-like interest in the funds of different general partners.¹

The general partner refers to the private equity fund manager, namely the investment team responsible for investing capital to build a portfolio of equity in various companies and then later for selling it for a profit.

Both limited partners and general partners are investors with aligned interests, so these terms help to disambiguate the two parties.

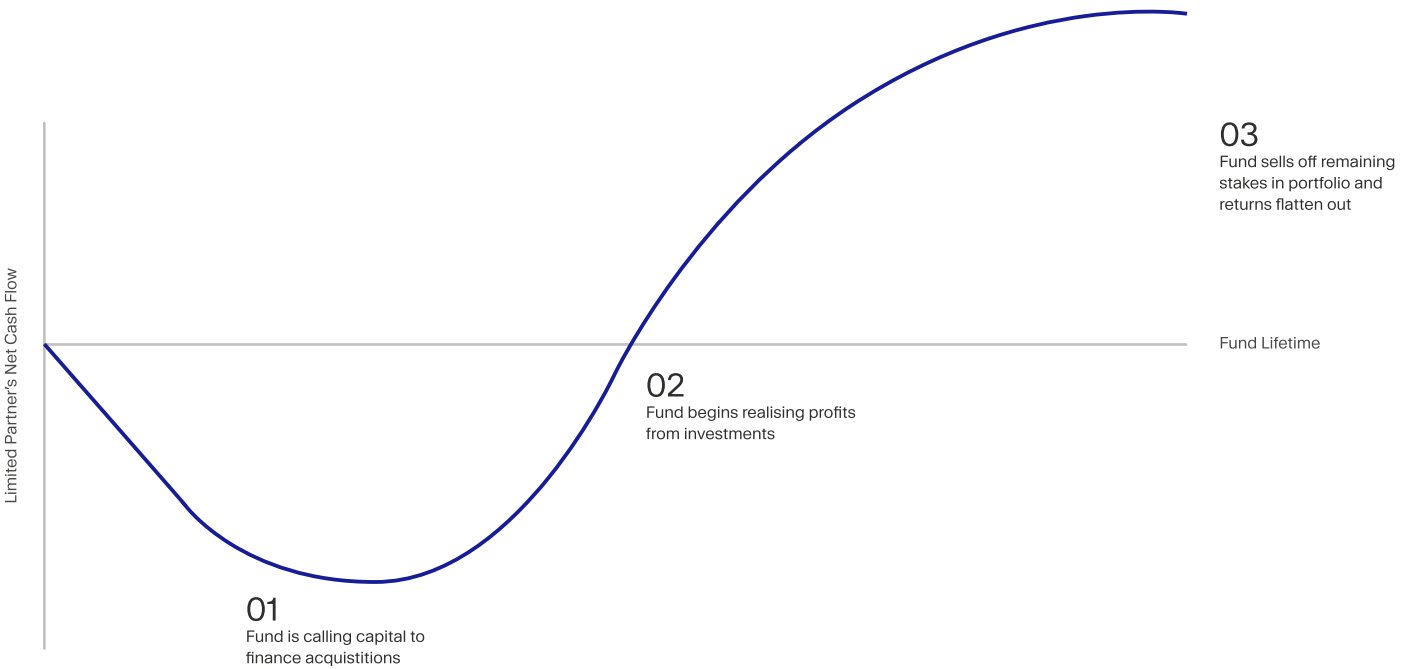


Figure 1: Traditional Private Equity Fund J-Curve

01 Moonfare clients invest in private equity funds through Moonfare's feeder fund vehicles. Moonfare clients are limited partners in Moonfare feeder fund vehicles, which in turn allocate to underlying private equity funds as limited partners. The J-Curve of these feeder funds generally track the J-Curve of a true limited partner in the main fund.

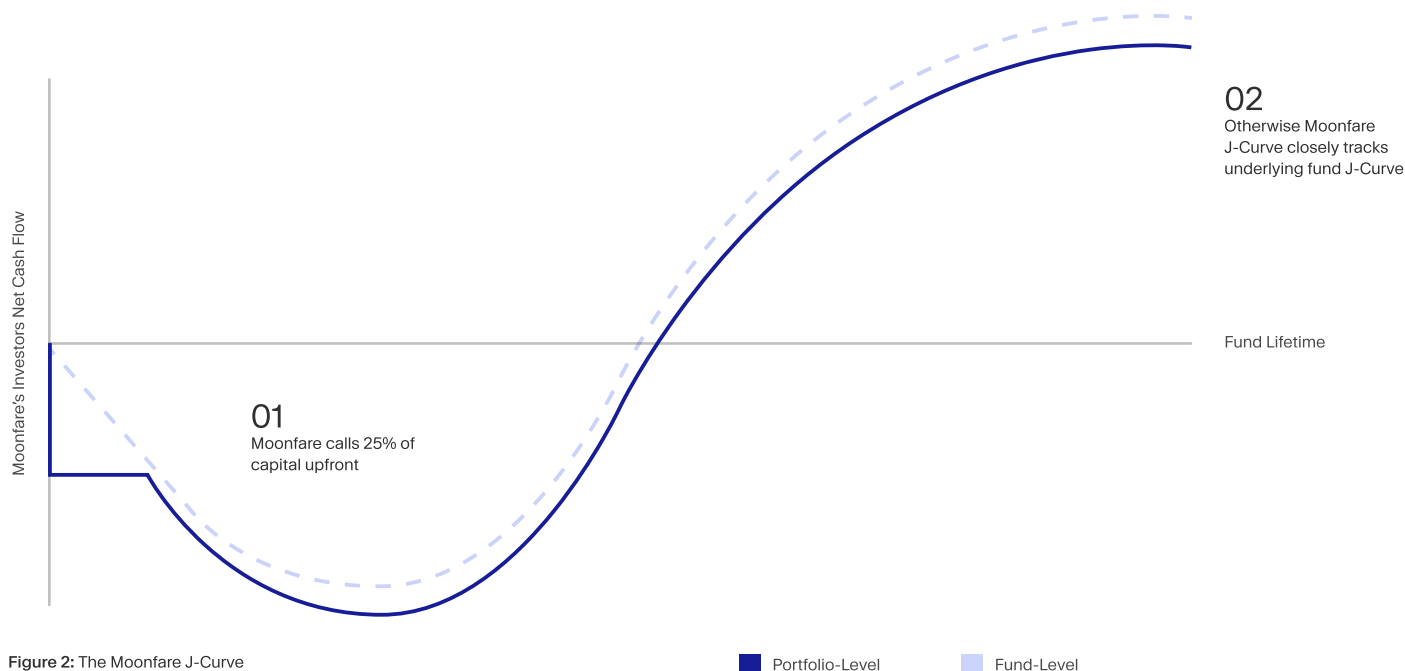


Figure 2: The Moonfare J-Curve

J-Curves in a Single Fund

The Investment Period

The J-Curve slopes downward at the beginning of a fund's lifetime while the limited partners are paying money into the fund. The general partners meanwhile are working to source deals and execute the fund's first acquisitions to begin building a portfolio. The limited partners' paid-in capital finances these acquisitions.

Finding the right opportunities and building a portfolio of companies usually takes time: A fund's investment period typically lasts 3-6 years. Each step along the way requires focused work to ensure the ultimate profitability of the fund, from finding companies and conducting due diligence, to negotiating terms with the sellers and finalising the documents that govern the fund's acquisitions.

The duration of this process and the role of time in calculating IRR — a key performance metric for general partners and their funds — are two reasons why general partners do not call all their limited partners' committed capital in one lump sum at the beginning of a fund's lifetime. It would bring down IRR. General partners only want to call capital when they need it, and thus the J-Curve's more measured downward slope.

The gradual nature of these capital calls benefit limited partners. Until general partners call capital, limited partners have the chance to invest in other assets or projects, so long as they can assure they can cover their commitments to the general partner when the time comes.

The Harvesting Period

It can take a number of years for the general partner to complete operational value creation initiatives at their portfolio companies. Only then, and depending on the availability of buyers in the market, will the general partner begin to realise the fund's first investments by selling

equity in portfolio companies. These sales generate distributions of profits to limited partners, net of the general partner's fees.

Just as the number of capital calls outnumbered distributions in the beginning of the J-Curve, the opposite holds true in the second half of the curve. These distributions, in the case of a profitable fund, turn the limited partner's net cash flow positive as profits from investing with the general partner materialise. Once the fund's investments are fully realised, the curve begins to flatten at its peak. In recent years, distributions from private equity buyout funds globally have reliably outstripped contributions. "Investors were cash flow positive for the ninth year running, meaning distributions have outstripped contributions each year," wrote leading private equity research consultancy Bain & Company in its 2020 industry analysis².

J-Curves at Moonfare

The J-Curve for a Moonfare investor shows one significant departure from the J-Curve of a typical limited partner. This difference occurs at the very beginning of the curve. Moonfare typically calls 25% of committed capital upfront in the feeder fund vehicles it manages³. This capital forms a buffer that assures that we are ready to meet the capital calls of the general partners we work with. Calling capital upfront also ensures that Moonfare clients have skin in the game early and helps mitigate default risk. Once the general partner has called 25% of capital from Moonfare and their other limited partners, the Moonfare capital call and distribution schedule closely resembles the J-Curve of the underlying fund for the remaining lifetime of the fund.

J-Curve Flattening

J-Curve flattening refers to different forces that work together to create a shallower trough — and less initial cash outlay for limited partners — in the investment period. One way J-Curve flattening can occur: A general partner briskly exits an investment made early in the fund lifetime and returns capital to their limited partners, which can be

02 Moonfare operates a feeder fund vehicle to pool allocations for each underlying target fund that is intended for an investment. Capital called into each feeder is used exclusively to cover capital calls from the underlying target fund.

03 "Global Private Equity Report 2020," Bain & Company, 2020. Data from Cambridge Associates Private Investments Database.

used to offset any remaining capital calls. As a rule of thumb, private equity investors usually only have to pay in about 60% of the capital they commit, according to data from research platform Pitchbook⁰⁴

In certain situations, limited partners may even over commit to private equity funds in order to meet their target commitment. "To have a cumulative net cash investment that reaches \$1.0 million, an investor would need to commit \$1.25 million to the fund," wrote the private equity allocator Cohesive Capital Management in a white paper⁰⁵

Flatter J-Curves are good news for limited partners. Smaller, more gradual capital calls allow the limited partner greater latitude in managing his or her broader portfolio. The cash committed to a private equity fund may be partially committed to another security, like a stock or bond, or be invested in another way in the limited partner's portfolio. A flatter J-Curve affords the limited partner more room to accommodate other strategies and positions because, simply put, he or she does not have to give as much cash to the fund at once.

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J-Curves in a Portfolio of Fund

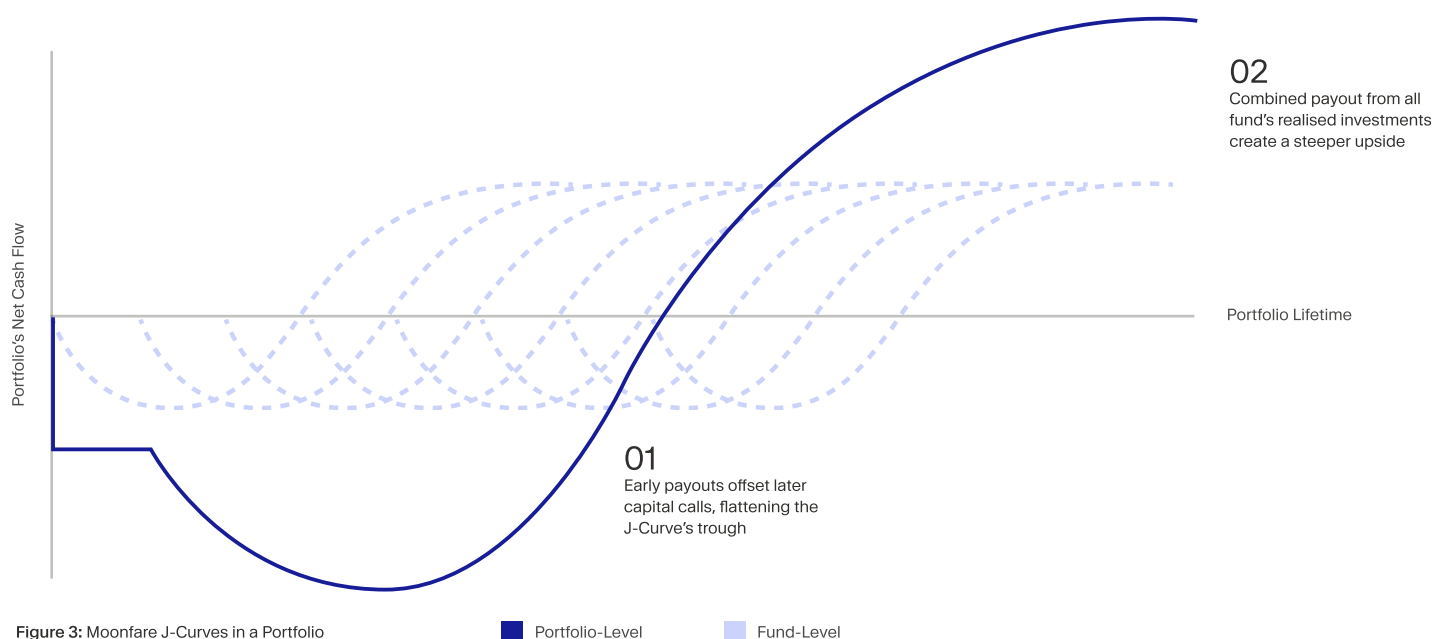
Building a portfolio of private equity investments provides another way to achieve a flatter overall J-Curve.

When a limited partner builds a portfolio of private equity investments, he or she is building a collection of J-Curves that, taken together as a weighted average, represent the total net cash flow across his or her entire portfolio of private equity investments.

Now consider this: Each of the underlying funds has its own investment metabolism and thus its own schedule of capital calls and distributions. Each underlying fund has therefore its own J-Curve, and these distinct J-Curves will not be perfectly correlated, especially if the limited partner invests in different private equity funds staggered over time.

Capital calls across this diversified portfolio will happen more gradually and early distributions from some funds may even offset capital calls from later funds. Investing in several different funds could even out potential outliers and earn the limited partner a flatter J-Curve overall.

Patient and persistent limited partners will use this dynamic to their favor. They will build a self-funding portfolio by continuing to reinvest profits from one private equity investment to fund the capital calls from new fund investments. In this way and over time, their portfolio of private equity investments will grow to become both self-funding and increasingly valuable.



04 "Global Fund Performance Report", Pitchbook, Oct 2019, based on data from Dec.2018

05 "Understanding private equity cash flows and exposure over multiple fund commitments," Cohesive Capital Management, 2018

Investing with Moonfare

To learn more about opportunities to invest in private equity funds, please contact our team or your dedicated relationship manager. Please note that for regulatory reasons, Moonfare is only permitted to share specific investment opportunities with qualified registered users.

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