

The Overview and Risks of Fund Finance

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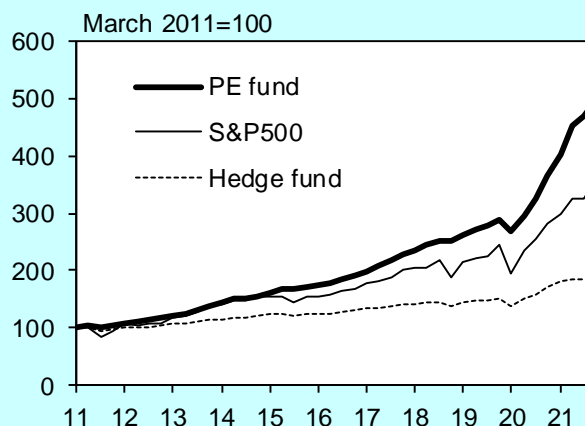
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The funds see an increase in their financing demand, depending on their own investment stage, as the inflow into private equity funds and other funds continues. Under these circumstances, financial institutions promote their businesses based on the high profitability of Fund Finance. In addition, they have established a risk management system that pays attention to the risk characteristics associated with such finance. On the other hand, the funds lengthen loan terms and increase the leverage of Fund Finance in order to boost investment returns to investors, and increasing risks associated with Fund Finance have been identified. Therefore, it is important to understand the real picture of Fund Finance and carefully monitor its potential risks.

Introduction

In recent years, as the low interest rate environment had continued worldwide, investors have intensified their pursuit of yields and have been increasingly investing in funds. Data on assets under management (AUM) of funds in the U.S. show that, while mutual funds are larger in terms of value, private equity (PE) funds and other funds, which invest in private assets (unlisted assets), have significantly outpaced mutual funds in terms of the pace of increase in AUM (Chart 1). This is due to the fact that the relatively high returns of PE funds and other funds attract investors (Chart 2).¹ Although some of the foreign central banks move to raise interest rates against a backdrop

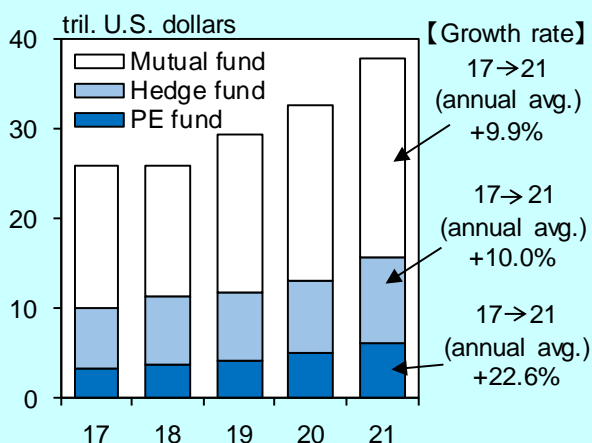
[Chart2] Price Index of PE Fund



Note: Latest data as of the end of 2021.

Source: Bloomberg, Eurekahedge, Preqin

[Chart1] AUM of Funds in the U.S.



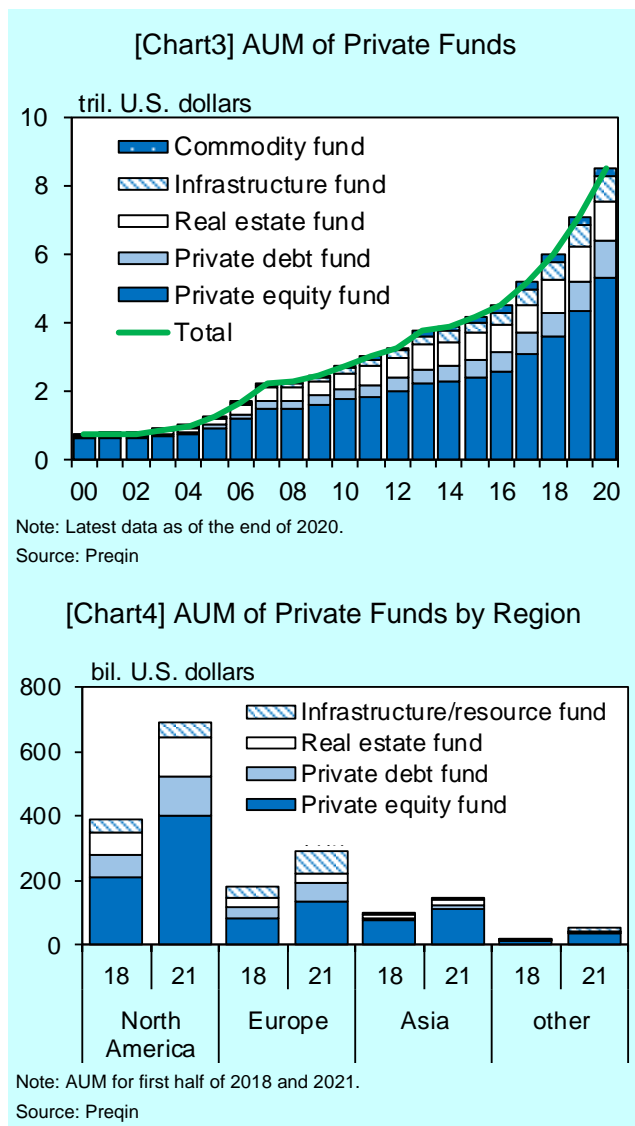
Note: Latest data as of 2021.

Source: FRB, Preqin

of rising global inflation, there has been no significant change in investment demand for PE funds and other funds so far.

Under these circumstances, we also can see an expansion in the investment assets and areas of PE funds and other funds. Data on the balance of AUM by the type of assets under investment indicate that there has been a marked increase in the balance of AUM of PE funds, which engage in buyout strategies to increase corporate value by acquiring majority stakes in companies. However, there also has been an increase in private debt funds, which provide direct financing rather than equity to companies with low credit ratings, and also infrastructure funds, which invest in power generation facilities, transportation networks, etc. (Chart 3). In terms of investment

regions, North America has been the main battlefield for PE fund investment, but there are also signs of expansion into Europe, Asia, and other areas (Chart 4).



As the balance of AUM of PE funds and other funds continues to grow, fund managers see an increase in their demand for funds for new investments and replacement of invested assets.² In this environment, financial institutions aggressively pursue Fund Finance in order to meet the capital needs of PE funds and other funds.

In this regard, Japanese financial institutions have expanded their services and provided various forms of products to the funds and the sponsors by strengthening their relationships with sponsors, who set up and manage PE funds, in order to obtain ancillary transactions.³ However, Japanese financial institutions have little knowledge and experience with regard to this business, which they have promoted while developing risk management systems, given the

individuality of deals and data constraints.

In this report, we introduce the trends and provide an overview of Fund Finance, for which the market size has been expanding in recent years, and then describe risk management considerations and potential risks when financial institutions engage in Fund Finance.

Trends in Fund Finance

As mentioned above, the balance of AUM of PE funds and other funds has increased. Fund managers try to maximize returns to equity investors using financing methods other than equity.⁴ In this regard, the financing methods that are required will differ depending on a fund's strategy, investment stage, and other factors. For this reason, financial institutions promote Fund Finance after establishing a system for providing funds to meet a fund's capital needs.

The incentive for financial institutions to promote this business is the continuing expansion of the market size (business opportunity), as well as the high profitability of the business as a whole.⁵ In other words, one of the attractions of Fund Finance is that the spread level is higher than that of business loans, and ROE is determined to be high due to the relatively long unused commitment line and low cost of capital.⁶ In addition, as the financial institutions continue to build and strengthen their relationships with PE sponsors, the prospect of non-interest income through various ancillary transactions, such as foreign exchange and derivatives transactions, further increases the incentive to engage in this business.⁷

In this regard, when a Japanese financial institution gets into this business, it establishes cooperative frameworks among different types of businesses and entities to optimize the overall fund-related business for the financial institution while building relationships with PE sponsors and acquiring ancillary transactions. There are a wide range of businesses that can be related to Fund Finance: banks and other financial institutions provide financing for various types of funds, trust banks provide settlement, payment, and other administrative services, and securities companies provide derivative products and issue bonds for companies invested in by PE funds and other funds.

Overview of Fund Finance

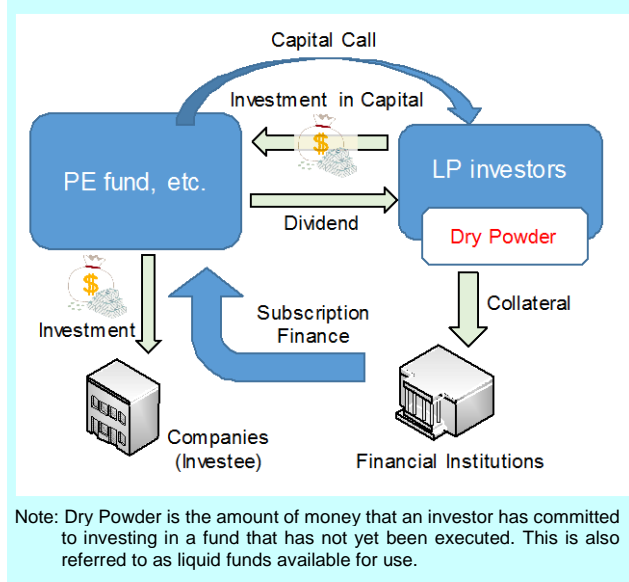
This chapter provides an overview of two widely used

types of Fund Finance: Subscription Finance and Net Asset Value Finance (NAV Finance).^{8,9} In terms of the size of outstanding loans in the banking sector, Subscription Finance is significantly larger than NAV Finance, and thus is currently the main type of Fund Finance.

Overview of Subscription Finance

Subscription Finance is a type of loan where financial institutions provide a commitment line to funds secured by a capital call right to Limited Partners who have committed to investing in a closed-end fund (Chart 5). Incentives for fund managers to use this type of finance include (1) responding to short-term liquidity gaps, (2) raising fund returns, (3) reducing administrative burdens, etc.

[Chart5] Schematic of Subscription Finance



In fact, the use of Subscription Finance has increased, and the surveys reported that about 90% of private funds used Subscription Finance as of the end of 2018.¹⁰

(1) Responding to short-term liquidity gaps

Generally, the PE funds and other funds solicit investments from multiple institutional investors after a fund is launched. Institutional investors commit to investing as LP investors, and their capital is tied up for a long period of time. The PE funds and other funds then raise funds for investment from time to time by requesting that LP investors pay in capital through capital calls in phases over an investment period of about 4-5 years. However, it usually takes several weeks or a month for LP investors to complete payment of funds in response to a capital call from a fund manager. If the fund manager wants to acquire

attractive investment opportunities quickly, notifying LP investors of a capital call and waiting for the payment to be completed would increase the risk of a deal loss in a highly competitive environment. Therefore, when such a short-term liquidity gap arises, Subscription Finance can be used to secure the necessary investment capital without waiting for LP investors to complete their disbursements.

(2) Raising fund returns

The performances of PE funds and other funds are evaluated by the Internal Rate of Return (IRR).¹¹ The later the cash flows are accrued by LP investors, the higher the IRR is calculated.¹² Therefore, if a fund manager of PE funds uses Subscription Finance to make an investment as bridge capital and then requests a capital call from LP investors, the fund manager can increase the IRR in the calculation for the period of time that the actual cash flow disbursement from investors is delayed (Chart 6).

[Chart6] Simulation of IRR Raising Effect

		Case1	Case2	Case3
1st yr	Investment amount	▲100	0	0
	Administration rewards	▲2	▲2	▲2
2nd yr	Capital Call	0	▲100	0
	Administration rewards	▲2	▲2	▲2
3rd yr	Capital Call	0	0	▲100
	Administration rewards	▲2	▲2	▲2
4th yr	Administration rewards	▲2	▲2	▲2
5th yr	Administration rewards	▲2	▲2	▲2
6th yr	Administration rewards	▲2	▲2	▲2
	Return on investment	162	162	162
IRR (Internal Rate of Return)		8.1%	10.0%	13.2%
TVPI (Total Value Paid-in Capital)		1.45	1.45	1.45

Note: Case 1 is based on the case where no Subscription Finance is used and the investment amount (100) is funded solely by capital calls to LP investors in the first year of investment, and the IRR is calculated to be 8.1%. Case 2 is the case where Subscription Finance is used for one year and capital calls to LP investors are stretched over that period, and the IRR is calculated to be 10.0%. Case 3 is the case where the capital call is stretched over two years using Subscription Finance, and the IRR is calculated to be 13.2%. In each case, although the investment multiple (the amount of return on investment/amount paid in) remains the same, the results show that IRR increases with the length of time over which the capital call is delayed using Subscription Finance. For simplicity, the estimates do not take into account the interest burdens associated with the use of Subscription Finance and assume that Subscription Finance is available for two years. The simulation also assumes 2 administration rewards each year and a payback in the sixth year of investment. The simulation is carried out based on the example of ILPA (2020), "Recommended Disclosures Regarding Exposure, Capital Calls and Performance Impacts".

(3) Reducing administrative burdens, etc.

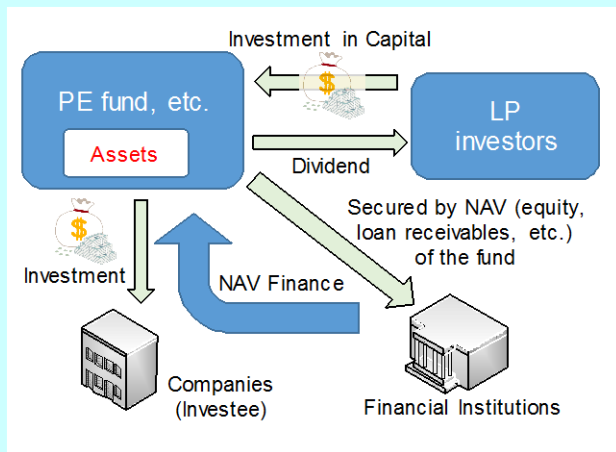
Investment opportunities for PE funds and other funds do not always exist. Furthermore, even when a target

company is selected for M&A, it is not certain whether the company would be able to win the deal, due to acquisition terms and competition with other PE sponsors, etc. Therefore, it is difficult for both fund managers and LP investors to predict the actual timing of investment. Thus, forecasting the actual timing of investment execution is difficult for both fund managers and LP investors. In other words, in cases where the number of M&A deals exceeds expectations, fund managers may make high frequency capital calls to LP investors to raise funds for investment. However, there are considerable administrative burdens in terms of notifying all LP investors of capital calls, monitoring the payment status, and managing cash positions. Subscription Finance makes it possible to reduce the frequency of capital calls to LP investors, reduce administrative burdens, and increase the predictability of cash flows for both fund managers and LP investors.

Overview of NAV Finance

NAV Finance is a type of loan where financial institutions provide a commitment line up to the value of the investment assets held by the fund or the fund's Net Asset Value (Chart 7).¹³

[Chart7] Schematic of NAV Finance



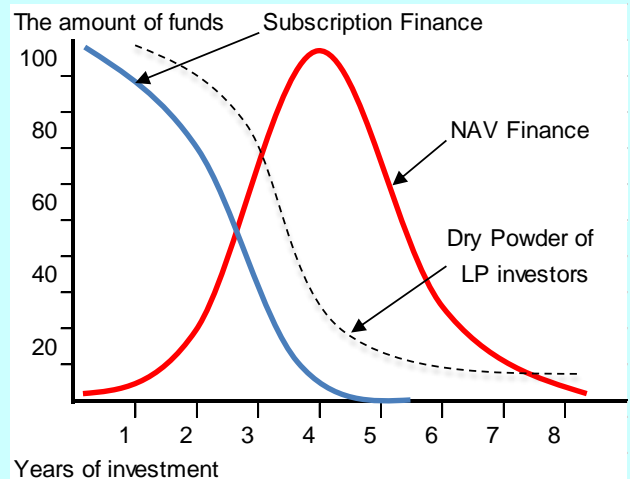
NAV Finance has traditionally been used in mutual funds that invest in listed equities and bonds with high market liquidity to pay for investors' cancellation requests or for short-term liquidity needs during asset replacement of portfolios.

In recent years, however, the use of NAV Finance by PE funds and other funds that invest in illiquid assets has been increasing, reflecting the growing liquidity needs of such funds as their investments progress.

In many cases, this type of finance is used as a

switch from Subscription Finance. In other words, PE funds and other funds that have expended the dry powder of LP investors will no longer be able to use Subscription Finance and will switch to using NAV Finance as a flexible and available funding source for asset replacement purposes (Chart 8).

[Chart8] Image of a fund's investment stage and required financing methods



Note: As LP investors spend more and more of their dry powder over the course of investment years, a switch from the use of Subscription Finance to NAV Finance is a transition that owes to the investment stage of the general financing methods.

Similar to Subscription Finance, the use of such finance can also raise the IRR of the fund. For example, if the PE funds use the proceeds from such finance to make distributions to LP investors before completing the exit from the investment deal, the calculated IRR would increase by the period over which the fund is leveraged by the financing.

Thus, NAV Finance is often used in a relatively flexible manner, and the use of NAV Finance has increased significantly, especially among PE funds and other funds that were highly aware of their liquidity needs during the Corona Shock and other events.

Risks of Fund Finance

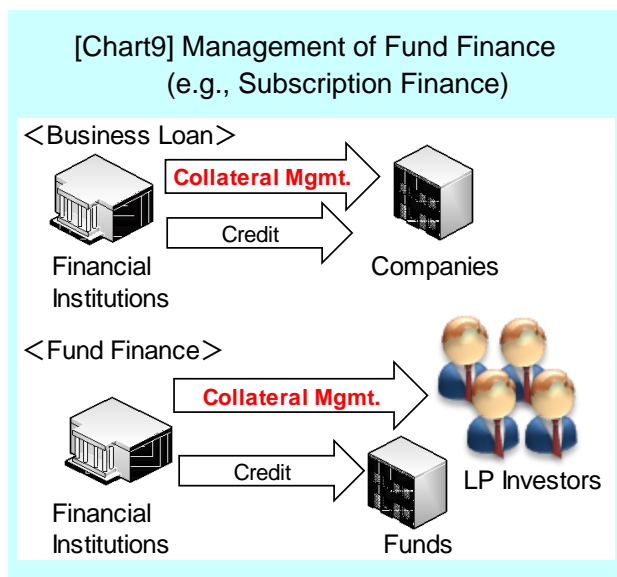
Financial institutions have expanded their business in the Fund Finance field, and this has led them to enhance their risk management. In this chapter, we describe the risks of Subscription Finance and NAV Finance, as well as financial institutions' management of these risks.

Subscription Finance

As we have previously described, Subscription Finance is a type of loan where lenders provide a

commitment line to a fund, secured by the right to demand a capital call to LP investors. Lenders tend to consider Subscription Finance to be a relatively low-risk product, as LP investors in funds are generally well-diversified and well-credited large institutional investors, such as sovereign wealth funds.

However, due to data limitations, the risk management of Subscription Finance often faces difficulties compared to corporate lending. Collateral management requires monitoring (1) the concentration of LP investors in a fund and (2) LP investors' ability to meet capital calls (Chart 9). In particular, regarding the second point, financial institutions analyze the sufficiency of individual investors' liquidity on hand, compared to the total amount of the uncalled capital call commitment to all the funds in which they invest. The financial information of major LP investors (e.g., U.S. pension funds) is available with quarterly (or at least annual) frequency, and detailed information could be provided by fund managers. However, for small and mid-sized LP investors with relatively small AUM (e.g., hedge funds, fund of funds, family offices, etc.), the information provided to financial institutions is limited.



Additionally, the potential risks associated with Subscription Finance have increased as the borrowing periods are generally becoming longer, and now borrowers tend to use this product for leverage purposes. Traditionally, Subscription Finance is designed for short-term facilities, hence it was often arranged to be repaid within 90 days after drawdown from the commitment line. However, in recent years, there are a number of transactions for which the repayment period exceeds 90 days, and the use of Subscription Finance for leverage purposes has been increasing as lending conditions have become more

flexible than ever before.¹⁴

NAV Finance

Unlike Subscription Finance, financial institutions tend to regard NAV Finance as relatively risky because it involves the credit risk of the borrowing funds, while Subscription Finance relies on the creditworthiness of LP investors. Collateral for NAV Finance varies depending on the assets held by the fund, such as (1) the right to manage all bank accounts of the fund that retain cash flow from investee companies/assets and dividends to LP investors, and (2) illiquid assets, such as loans and equity interests in investee companies, held by the fund.¹⁵

In this regard, when bank accounts are pledged as collateral, the business stability of investee companies or assets is important; hence, financial institutions typically focus on infrastructure funds that could generate relatively stable cash flows.

On the other hand, when illiquid assets are pledged, there may be cases where it is virtually impossible to fully recover full loan amounts through asset liquidation. In addition, the frequency of reassessing the collateral value of assets held by overseas funds is only limited to once a quarter, and in such cases, the stock market valuation (enterprise value/EBITDA multiple) of the last quarter is used for reference, unlike mutual funds, which are priced daily. Hence, there could be a time lag to reflect current market price movements in the value of the collateral.¹⁶

Under these circumstances, financial institutions focus on transactions with which fund managers and sponsors have stable investment performance to minimize the underlying fund's performance risk, such as instability in the business of investee companies and sudden fluctuations in collateral values.¹⁷ Financial institutions pay further attention to the risk characteristics of NAV Finance and conduct businesses while maintaining a cautious approach, such as setting collateral haircuts conservatively and managing the LTV ratio (ratio of the amount drawn down by the fund and the amount available for lending to the NAV), so as not to exceed a certain limit that they set.^{18,19,20}

Concluding Remarks

This report has provided an overview of the Fund

Finance conducted by financial institutions and described risk management considerations and potential risks associated with Fund Finance.

As the AUM of PE funds and other funds continues to rise worldwide, fund managers increase their demand for liquidity/cash finance, which can be used flexibly to manage their portfolios.

Against this demand and the high profitability, financial institutions promote Fund Finance and establish the risk management that takes into account the risk characteristics associated with Fund Finance.

On the other hand, the funds increase their leverage and lengthen the repayment period in order to increase returns to investors, resulting in a rise of the risks of Fund Finance. Therefore, it is important to understand the real picture of Fund Finance, which continues to expand globally, and to carefully monitor the potential risks associated with changes in the purpose of using Fund Finance.

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¹ The sources of high returns for PE funds include liquidity risk premiums, PE funds' discovery of portfolio companies, and the existence of excess profits through effective governance of portfolio companies (see Watanabe, K., Igarashi, K., and Inaba, H. (2018), "The recent growing momentum of private equity funds", Bank of Japan Review (18-J-1)).

² A fund manager belongs to a General Partner (GP) who has full responsibility for the business operations of PE funds. Their main role is to determine the investment destination, asset allocation, etc. of funds collected from investors.

³ Major management sponsors are not only involved in PE funds, but also in the management of various alternative assets, such as private debt and real estate.

⁴ Fund managers of investment funds consider the selection of fund-raising instruments and the timing of exits from investment projects with the aim of maximizing IRR. When evaluating a fund manager's investment skill, as for the track record of past funds, being in the top 25% is said to be one evaluation perspective compared to the investment projects of the same year in which the fund was raised.

⁵ However, it is said that the amount of risk-weighted assets would increase due to the finalization of Basel III starting in FY2023, and it would no longer be possible to enjoy the high ROE as at present.

⁶ The commitment line provided under the facility of Fund Finance is often described as a Revolving Credit Facility (RCF) or a Revolver.

⁷ PE sponsors are involved in equity investments and also manage bonds on a reasonable scale. Therefore, there are high needs for derivatives transactions such as interest rate swaps for hedging purposes, and financial institutions are building relationships with sponsors with a view to acquiring ancillary transactions.

⁸ In this paper, the term "Subscription Finance" is used, but there are multiple designations, such as bridge facility, subscription line, and aftercare facility. Financial institutions use different names for subscription finance.

⁹ There are several Fund Finance types besides Subscription Finance and NAV Finance, such as Private Debt Fund Finance

secured by leveraged loan and other loan receivables, and Equity Margin Lending secured by listed equities, etc.

¹⁰ See Mercer LLC (2021), "Dry powder meets low interest rates – Time for a private market boom or bust?"

¹¹ There are two types of IRR calculations: (1) gross IRR before excluding administration rewards, etc. and (2) net IRR after excluding administration rewards, etc. The latter is often used by LP investors when assessing a fund's investment track record.

¹² The IRR is defined as the discount rate at which the total present value becomes zero, where the total present value is defined as all cash flows from the investment process (e.g., payments from investors to the funds and distributions from the funds to investors) discounted by the discounted cash flow (DCF) method. In general, investors who committed to investing in a PE fund will experience accumulated cash outflow for the first few years as a result of capital calls each time an investment project arises but proceeds from investment do not pay out. Later, as the amount of new investment declines and the investment harvesting progresses, funds begin to pay out to investors, their accumulated cash flow improves, and they gradually enjoy cash inflow. These cash flow developments are often described as the "J-curve effect," after its shape. Fund managers can increase IRR by making this J-curve milder (reducing cash outflow).

¹³ NAV Finance may be categorized as Asset Based Lending (ABL). Although definitions may differ among financial institutions, ABL is generally considered to be a type of financing where a financial institution provides a loan by pledging a borrower's liquid assets (collective property, inventory, accounts receivable, etc.). On the other hand, in many NAV Finance cases for PE funds, the fund's equity interest in the investee company, its equity interest to a Holdco, and its collection accounts, etc. are pledged as collateral. It is also noted that senior lending in the Fund Finance, including NAV Finance, is often provided by nonbank institutions, and the banking sector is only involved in a limited volume.

¹⁴ In recent years, financial institutions have conducted transactions that encompass risks not anticipated in a pure Subscription Finance transaction, such as Hybrid Finance, which takes an LP investor's capital and the fund's underlying assets as collateral.

¹⁵ In many cases, financial institutions expect several repayment sources in NAV Finance, such as proceeds from sales of investee companies, dividends from investee companies, and cash payment from capital call, etc.

¹⁶ Lenders update funds' latest NAV with more than a quarter lag due to the valuation process, in which fund managers conduct valuation and request third-party institutions to verify the valuation with a quarter lag.

¹⁷ Fund performance can vary depending on the fund manager's capabilities, in addition to market conditions and asset class factors, etc. In light of this, many financial institutions analyze and evaluate the fund manager's (sponsor's) performance over the past 10 years, the size and change in AUM, and reputation in the industry in the NAV Finance underwriting process. (In many cases, Subscription Finance underwriting is conducted in the same manner.) In addition, although the risk characteristics of each Fund Finance are different, financial institutions identify the points at which the risk lies for fund managers by consolidating all Fund Finance-related exposure to each fund manager.

¹⁸ Calculation of NAV for PE funds differs depending on whether they are domiciled domestically or overseas. For details, see e.g., Washimi, K., (2020), "Prospects of Private Equity Funds in Japan" (Bank of Japan research paper).

¹⁹ The Borrowing Base is defined as the lower of the following two values: (1) contracted facility amount and (2) the amount calculated by multiplying the advance rate, which considers the risk characteristics of underlying assets, and the value of collateral assets held by the fund.

²⁰ In underwriting the NAV Finance, financial institutions analyze future cash flows from investee companies using the DCF method, for example.

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