Special Report on South Korea: New Valuation Rules for Private Equity Funds

Restoring trust in the aftermath of the DLF and Lime scandals

July 2020

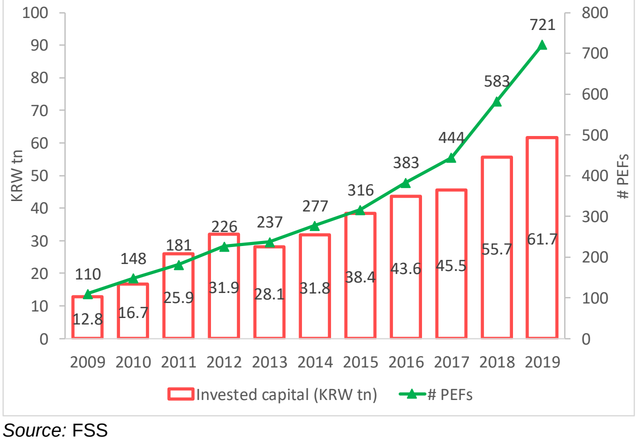
Introduction

In April 2020 the South Korean supervisory authorities - the Financial Services Commission (FSC) and Financial Supervisory Service (FSS) - announced new regulations for private equity funds (PEFs). The latest measures come on the heels of two major investment scandals in the last year that undermined consumer trust - the derivative-linked funds crisis and the Lime Asset Management fiasco - resulting in large scale redemption delays. Both scandals can be attributed to the demand for high-risk, high-return investments from wealthy investors attempting to avoid low interest rates, and financial firms taking advantage of such demand through means such as mis-selling, liquidity management, and other unfair sales practices.

Industry background

South Koreas' PEF market has grown significantly since their introduction in 2004 into the Indirect Asset Management Business Act (now part of the Financial Investment Services and Capital Market Act or 'FSCMA'). In the ten-year period between 2004 to 2014 the number of PEFs increased from 2 with an aggregate KRW 300 billion of invested capital, to 277 with KRW 32 trillion of invested capital. At the close of 2019 these figures stood at 721 and KRW 62 trillion respectively.

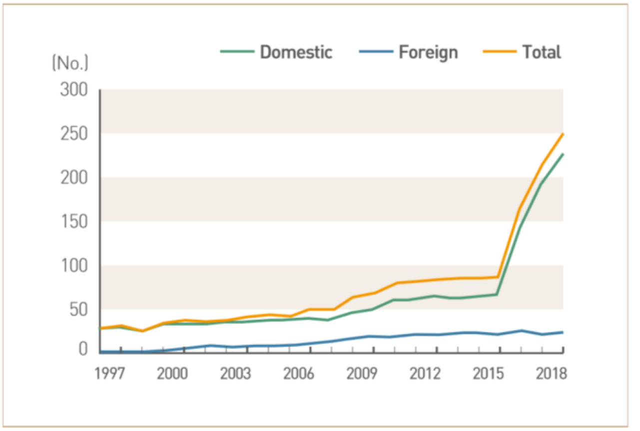
Figure 1: PEFs Growth in Invested Capital & Number of Funds



Source: FSS

The rise in South Koreas' exposure to private equity has also been fueled by the hedge fund industry, which grew steadily following deregulation which permitted funds to be set up in 2011 as part of the government's efforts to broaden financing channels to smaller companies. The main catalyst however came in 2015, when the regulatory minimum ticket size for investing in hedge funds was lowered from USD 500,000 to USD 100,000. Since then the number of asset management companies surged to 250 by the end of 2018.

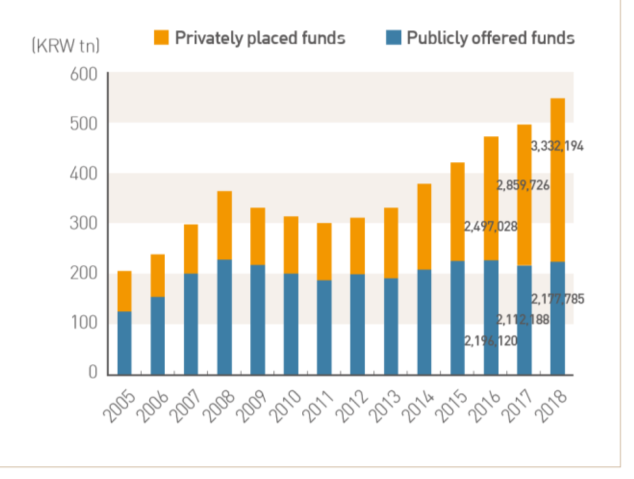
Figure 2: Number of Asset Management Companies



Source: Korea Financial Investment Association (KOFIA)

South Koreas' private funds now manage more assets than public funds, reaching KRW 330 trillion at the end of 2018.

Figure 3: Fund AUM



Source: KOFIA

The derivative-linked funds crisis

The derivative-linked funds (DLFs) crisis resulted from the sale of 'complex' private funds to retail investors by commercial banks. By selling private funds, banks were able to circumvent more stringent rules that govern public funds and take advantage of loopholes in investor protection measures.

The DLFs in question tracked the yield on 10-year German bonds and the constant maturity swap (CMS) rates of the U.S. and UK. The products guaranteed returns of 3-4 percent if interest rates stayed within a predetermined range until maturity. However, when major economies around the world began lowering interest rates in 2019 to stave off economic slowdown, investors began incurring massive losses. By November 2019 the FSC had reported losses of 53% for KRW 208 billion worth of DLFs that had matured. In total, KRW 795 billion worth of DLFs has been sold to 3,500+ retail investors, many of whom were aged over fifty.

Since the DLFs were sold by commercial banks rather than dedicated investment brokers, questions were raised as to whether it was appropriate for them to sell high-risk, high-return derivative products. In March 2020 the regulators concluded that Woori Bank and KEB Hana Bank had violated laws on selling DLFs, fining them KRW 20 billion and KRW 17 billion respectively. The two banks were also banned from selling private funds for six months and their chief executives given severe warnings.

See Appendix for more details on the government response to the DLF crisis.

The Lime Asset Management fiasco

Lime Asset Management (LAM) was founded in 2012 as an investment adviser and was granted a license to operate private funds in 2015. At its peak in June 2019, LAM was South Koreas' largest hedge fund, overseeing KRW 5.7 trillion in assets under management, a fifty-fold increase compared to just three years earlier.

LAMs problems started in July 2019 when the FSS launched a regulatory probe into the fund. Although the FSS kept the probe a secret, months of local media speculation fueled investor distrust, resulting in a surge in redemption requests. On 10 October 2019 LAM was forced to suspend withdrawals on two of its master funds (Tethys II and Pluto FI D-1) worth KRW 1.1 trillion due to insufficient liquidity to meet redemption requests. Four days later, LAM froze a further KRW 235 billion related to its trade finance master fund, Pluto TF-1.

Figure 4: LAM Troubled Funds

Master Fund	Fund Type	Feeder Funds (#)	Fund Value (KRW bn)	Affected Feeder Funds (#)	Frozen Value (KRW bn)
Tethys II	Mezzanine Instruments	33	400	18	219
Pluto FI D-1	Private Bonds	78	693	37	384
Suspended 10 October 2020		***111***	***1,093***	***55***	***603***
Pluto TF-1	Trade Finance	38	235	38	244
Suspended 14 October 2020		***149***	***1,336***	***93***	***847***

Source: LAM

As the crisis engulfing LAM worsened, additional funds were affected until an estimated KRW 1.6 trilion of funds was suspended. This represented four master funds (that were supposed to be open-ended) and 173 feeder funds.

In mid-April 2020, LAMs losses were estimated to be approximately KRW 700 billion based on due diligence reports on Tethys II and Pluto FI D-1 by Samil PricewaterhouseCoopers. The total loss is likely to exceed KRW 1 trillion once due diligence results on the remaining master funds are included, representing a loss rate of over 60%.

What led to LAMs spectacular fall from grace? Next, we examine five factors that contributed to its demise.

1. South Korea's private debt boom

The biggest problem LAM faced was it had too many illiquid assets in an open-ended style fund[1]. The funds frozen were heavily invested in unlisted assets such as private placement loans, convertible bonds, and bond warrants, making them vulnerable to massive redemptions and forcing LAM to liquidate assets at fire-sale prices to meet investor redemption demands.

Sales of mezzanine instruments, especially convertible bonds, have surged in South Korea in recent years as investors have shifted out of traditional asset classes in the hunt for higher yields. Hedge funds were the main buyers of the bonds, which are usually sold by unrated SMEs on the Kosdaq. According to the Korea Capital Market Institute (KCMI), a record KRW 5.5 trillion of convertibles were issued in 2018 compared to KRW 1 trillion in 2013.

Figure 5: Mezzanine Debt Issuance by Year

Source: KCMI

Three main factors contributed to this boom:

- In 2011 the government introduced measures to boost economic growth by encouraging hedge funds to provide financing to developing firms by buying SME bonds.
- Investors were lured by a "refixing" clause that is unique to Korean convertibles which allowed the conversion strike price to fall by up to 30% if the stock price falls. Refixing is favorable to investors because this option recalculates the conversion price and thus increases the number of converted stocks when the stock price declines. Such benefits provide investors incentives to invest in mezzanine debt despite the low yields.
- In 2018 the government introduced "Kosdaq Venture Funds" that offer preferential access to IPOs and tax incentives to fund managers in return for them investing in convertible bonds of developing companies.

As demand for convertibles grew, critics raised concerns that too much risk could end up in retail investor hands[2] and that the market could face liquidity risk in the event of a rush for withdrawals. On 10 October 2019 these fears came true when LAM suspended withdrawals with the CEO admitting "*due to the recent drop in the Kosdaq[3] and also declines in stocks of companies we've invested in, it* *became hard to obtain liquidity by converting the bonds into the stocks as we planned*".

The experience with LAM has stoked investor fears about the industry and has now resulted in regulatory intervention to ensure market stability, enhance transparency, and improve measures to protect investors.

2. The role of total return swaps

Total return swaps (TRS) help hedge funds enjoy leverage by allowing them to control underlying assets with minimal cash outlay upfront. Under a TRS, the hedge fund enters effectively into a loan with a financial firm (broker, insurer or bank) whereby the financial firm purchases the assets and holds legal ownership over them. The hedge fund then pays the financial firm a fee in exchange for receiving the total return (distributions plus capital gains/losses) on the reference assets. Importantly, TRS agreements endow institutional lenders with priority ranking over individual investors in the event of liquidation.

LAM entered into TRS contracts worth KRW 670 billion for the troubled master funds with local prime brokerage firms: Shinhan Investment & Securities (KRW 500 billion), KB Securities (KRW 100 billion) and Korea Investment & Securities (KRW 70 billion).

As of April 2020, LAMs confirmed losses were estimated at KRW 700 billion, implying a recovery rate of 56 percent to investors (see Recovery Scenario I below). However, this ignores the impact of TRS on retail investors who make up roughly 60 percent of the KRW 1.6 trillion frozen assets[4]. As the financial institutions that provided TRS-based leverage to the fund have senior rights in liquidation, retail investors will be left with only KRW 230 billion (25 percent recovery). Financial institutions will start to incur losses when the fund loss rate exceeds 58% (Recovery Scenario II). After this point, retail investors will lose all their money.

Figure 6: Recovery Scenarios

Investor Type	Fund Value	Recovery Scenario I		Recovery Scenario II	
	(KRW bn)	(KRW bn)	(%)	(KRW bn)	(%)
Institutional	670	670	100	670	100
Retail	930	230	25	0	0
Total	***1,600***	***900***	***56***	***670***	***42***

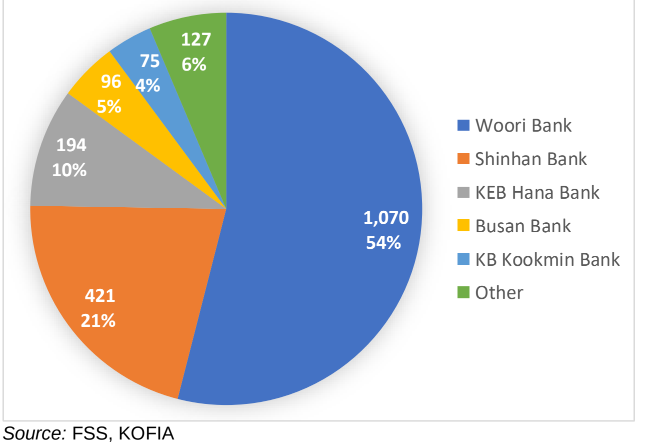
Source: pulsenews.co.kr

The role of TRS has also created conflict between brokerages over their roles in the LAM fiasco. For example, Shinhan, KB Securities and Korea Investment & Securities jointly refused Daishin Securities request that they redeem their investments before Daishins' customers. This decision means Daishins' customers will likely incur significantly bigger losses and put huge pressure on Daishin to pay compensation to victims that were largely unaware they had become subordinated.

3. The commercial bank controversy

In July 2019 LAM fund sales had reached a high of KRW 5.7 trillion. However, KRW 2 trillion was sold via local commercial banks who are now being investigated by regulators on allegations of mis-selling risky financial products. Investors claim the banks failed to explain the risks associated with the fund and promoted it as a 'safe' investment.

Figure 7: Commercial Bank Sales of LAM funds, July 2019 (KRW bn)



Source: FSS, KOFIA

An unexpected beneficiary of the scandal has been the foreign banks, which are free from involvement in the DLF and LAM cases. In January 2020 it was reported that a growing number of retail investors had pulled their money out of local banks and put into foreign banks that they believe are more reliable and will manage their assets in a safer and more systematic manner.

4. The Ponzi scheme

In December 2019 the FSS launched an investigation into LAM for concealing losses from its investors related to its Pluto TF-1 fund which had invested KRW 240 billion (via TRS with Shinhan) in Structured Trade Finance Fund (STFF) – a fund operated by International Investment Group (IIG) based in New York[5].

In November 2019 the U.S. SEC had revoked IIGs license and frozen its assets on charges of securities fraud, including concealing losses from its investors and selling USD 60 million in fake loan assets to clients. According to the SEC, IIG had engaged in a Ponzi scheme by overvaluing troubled loans to hide losses and replacing defaulted loans with fake "performing" loan assets. To meet redemption requests, IIG would then sell the overvalued or fictitious loans to new investors and use the proceeds to pay off earlier investors.

The FSS suspects LAM knew in advance that IIG was in trouble and failed to notify clients of the related risks. In June 2019, LAM sold its stake in STFF to a Singaporean commodity trader in return for promissory notes, which was meant to secure a lump-sum to repay investors in the Pluto TF-1 fund. However, LAMs failure to notify investors about the transaction, which effectively altered the method of its investment in STFF, could constitute fraud.

More recently, the FSS has also accused Shinhan of financial fraud, saying they colluded with LAM to deliberately cover losses and continue selling the fund by adjusting the price of Pluto TF-1, raising it 0.45 percent each month from June to November 2019 when IIG had suspended fund reporting.

European Perspective:

Given the protections that Europe has enjoyed in the post-Madoff era could this factor in the crisis have been avoided as the feeder vehicle used isn't inherently different from many that fall under AIFMD? Under AIFMD, investment funds are obliged to appoint an independent depositary that supervises the investment fund's transactions and acts as a custodian over the investment fund's assets. The depositary is the 'legal conscience' of the investment fund and acts as a safekeeper in the interest of investors. The fact that Madoff was able to deceive investors for so long was in part because the appointed depositary had delegated its custody tasks to an entity run by Madoff itself, i.e. was not independent

This practice raised questions on the role and liabilities of depositaries of investment funds. In response, UCITS V and AIFMD have introduced rules on (the liability of) the depositary and on the delegation of its tasks to sub-custodians.

Under Article 24(1) UCITS V and Article 21(12) AIFMD, Member States need to ensure that a depositary is liable to investment funds and investors for the loss of assets held in custody and for all other losses that result from a depositary's negligent or intentional failure to fulfil its obligations under UCITS V or AIFMD.

5. Portfolio company embezzlement

The ex-chief investment officer of LAM along with senior executives in two LAM portfolio companies have been charged with embezzlement:

- Kim Bong Hyun, former chairman of Star Mobility (a circuit board manufacturer) is accused of embezzling LAMs KRW 20 billion investment in the company, in which he is said to have colluded with LAMs ex-CIO, Lee Jong-pil. Kim is also accused of bribing a former presidential official in return for information related to the FSS probe into LAM to dodge criminal charges[6]. In December 2019 prosecutors filed an arrest warrant for Kim for separate counts of embezzlement including a funeral company and local bus operator worth KRW 16 billion, however he had gone missing.
- In October 2019, six executives of Leed Corporation (a Kosdaq-listed display equipment manufacturer) were indicted for allegedly siphoning company funds. The following month, Lee Jong-pil was due to appear in court for allegedly mediating a KRW 85 billion embezzlement of Leed funds with executives at the firm, however prosecutors were unable to find him. A fugitive warrant was subsequently issued for his arrest. On 24 April 2020 the Vice Chairman of Leed was found guilty of embezzlement and received a prison sentence of eight years. Other executives were sentenced to between three to four years for collusion. Trading in Leeds shares was suspended and the company is pending a court decision to delist from the Kosdaq.

In late April 2020, Kim Bong Hyun and Lee Jong-pil were arrested along with an ex-Shinhan Investment wealth manager named Shim Moon-sup. They had been on the run for several months. At time of writing, the financial authorities are investigating LAMs other portfolio companies for further evidence of foul play.

Implications for asset managers

The DLF and LAM scandals have exposed investor protection vulnerabilities in the system following problems of mis-selling, liquidity management and other unfair practices. To prevent similar instances from arising and restore confidence in the system, asset managers will need to bolster their risk management procedures. As shown, this becomes particularly important when a fund faces higher than usual redemptions, increasing the liquidity risk with potentially catastrophic results for remaining investors.

NAV and PEF valuation

The sale or purchase price for a PEF is determined by the Net Asset Value per share or NAV. NAV is equal to the net assets of the fund divided by the number of shares or units held by investors so pricing and valuation of the assets are clearly important.

For investors to have confidence in a PEF, they must be able to trust the valuations it uses for individual assets and for the NAV. Investors buy shares or units in a PEF without knowing the exact price, which is only established after the deal has been placed. As a rule, the latest official market closing prices must be used to value publicly-traded securities, otherwise a 'fair market value' must be provided. This is designed to offer protection against late trading, market timing and other practices that can affect the value of a fund.

When a fund contains illiquid assets, it makes the valuation process more complicated and introduces greater subjectivity into the NAV calculation. The fund manager may appoint an outside firm to carry out such valuations. If the manager carries out valuations in-house, the process must be independent of the portfolio management to avoid conflicts of interest.

Improving guidelines for valuing unlisted equities

Capturing the risks and appropriately valuing unlisted assets may be a challenge for the manager. This matter was recognised by the FSS on March 2019 when they released guidance outlining when Cost may be used as a proxy for Fair Value to “ease the corporate burden”. However, in the aftermath of the LAM scandal the FSS released new guidance in January 2020 which allows managers to use the Cost Method only in very limited circumstances. This change brings FSS guidance more closely aligned with global best practices such as those recommended by the International Private Equity and Venture Capital Valuation Guidelines Board (IPEV), which in December 2018 issued a revised guidance note that *“Removed ‘Price of a Recent Investment’ as a Valuation Technique to reinforce the premise that Fair Value must be estimated at each Measurement Date.”* This removes the possibility that funds or valuation advisors rely on historical funding data for too long, and accordingly, valuation and risk policies become extremely important for illiquid assets.

The IPEV guideline update also follows IFRS9 which went live in January of 2018 (replaced IAS 39 as of January 1, 2018). Management teams and specifically CFOs have made important choices over the measurement and reporting of private debt investments. The new standard effectively sets out three major classifications; namely Amortised Cost (AC), Fair Value Through Profit or Loss (FVTPL) and Fair Value Through Other Comprehensive Income (FVOCI). The standard encourages the movement to Fair Value from Cost which in turn aids investors / LPs in the following ways:

- Fair Value is the norm for real money investors for their own financial reporting purposes. In Europe, Solvency II reporting / prudential valuation requirements have made this even more important for insurance groups.
- Liability driven investors use Fair Value as a common basis to make asset allocation and specific investment manager selection decisions, track-record appraisals over different time horizons are vital.
- Fair Value assessment forms part of allocator performance evaluation and can be an important consideration in compensation decisions.

Valuation Considerations for Early-Stage Innovative Companies

When valuing convertible bonds issued by early stage innovative companies such as those on the Kosdaq, a number of factors should be considered including:

1. The change in market and sector pricing conditions.
2. Funding risk, cash burn and liquidity profile of the company.
3. The seniority of the bond in the capital structure of the company.
4. Recent developments in the underlying technology and innovation of the business and the industry.
5. The probability of default, loss given default and expected volatility in the listed share price of the company (or its closest comparables).

Due to the difficulty of gauging the probability and financial impact of the success or failure of development activities of early stage companies, one should consider that the traditional valuation techniques cannot be used in all cases. In their latest valuation guidelines, the IPEV and the AICPA recommend the use of more complex valuation methodologies, when necessary. These may include:

1. Scenario-Based Model (or PWERM).
2. Option Pricing Models.
3. Milestone-Based Model (or adjusted price of recent investment).
4. Monte Carlo Simulation.

For Level 3 assets such as private debt, one should incorporate different techniques in order to build a robust valuation process due to the transactionless nature of the assets (in secondary terms). Hence observed transactions are mostly in additional rounds of funding (new debt issuance), recaps or proxies to the portfolio company asset.

Various techniques and sources of market data could be used to create proxies for a particular mix of risk attributes which form a Bespoke Beta very comparable in terms of aggregate risk to the portfolio company debt. Even then it’s possible the valuer still needs to employ specific adjustments to best reflect the risks embedded in the deal structure. This could include sub-sector adjustments, credit ratings adjustments, duration adjustments, region of risk adjustments, etc. Bespoke Beta is normally achieved via a tailored baskets of referenceable assets. Alternatively, it can be done using curves generated by multi-variant factor curves or term structures of comparable entities and then adjusting for the points of difference. All these techniques really act as mechanisms to incorporate a variety of views to create a robust valuation which draws on best available data and techniques in capital markets.

For senior mid-market loans, often the best place to find suitable discount factors is among syndicated or more visible mid-market loans. Alternatively, for mezzanine loans and distressed debt, methodologies may include Enterprise Valuation based on a market approach (multiples) or an income approach (DCF) to establish if the value breaks into the debt capital structure and if so how deep is the value break. If there is sufficient value in the equity classes and no break into the debt, the valuation agent (and fund policy) may choose to use a market approach again on the debt to account for dynamic credit risk reflected via the spreads of comparable assets. Within a given approach, the best practice is to corroborate multiple techniques and assumptions to gain a point of centrality to the valuation or justify the chosen methodology through a range of values. Having the ability to view asset valuation from multiple vantage points is clearly a benefit of Fair Value.

IPEV Special Valuation Guidance, March 2020

As the impact of COVID-19 continues to ripple across the globe and affect the fundamental outlook of a wide array of sectors, the need to apply additional valuation techniques to estimate the fair value of investments is becoming increasingly necessary. This point was recognized by the International Private Equity and Venture Capital Valuation Guidelines Board (IPEV) who recently issued a Special Valuation Guidance note to assist with 31 March valuations.

Key aspects of the Special Guidance:

- Fair value must capture current market conditions. Fair value does not equal a "fire sale" price.
- Valuation inputs such as performance metrics and/or future cash flows need to be adjusted for the impact of the crisis.
- Greater uncertainty may translate into greater risk which may translate into greater required returns which may translate into lower asset values.
- It may no longer be appropriate for recent transaction prices, especially those from before the expansion of the pandemic to receive significant, if any, weight in determining fair value. This will increase the need for mark-to-model valuation techniques.

The board further highlights the following key aspects with respect to valuing certain types of equity and debt investments which should be considered on an investment by investment basis:

- The impact of the crisis on the portfolio company's revenue/customers, supply chain, and operations must be rigorously considered.
- Adjustments to performance projections and/or metrics are likely to be necessary to reflect current conditions and uncertainty in projections.
- Scenario analysis is likely to be necessary to assess and incorporate the probability of the crisis extending for 3-, 6-, 12-, 18-months or longer.
- Liquidity needs must be evaluated more than ever. What is the likelihood of a loan covenant breach? What is the impact of customers delaying payments or nonpayment and the impact on reduced cash flow? What is the source of working capital required to "restart" the business if impacted by the crisis? A scenario analysis that weighs various potential outcomes (including the risk of default or potential government support) may be appropriate to assist in estimating fair value.
- Par value or face value or cost value is not automatically fair value. Credit spreads have widened for various industries, credit ratings, and terms, which will put downward pressure on fair valuation of debt instruments.

It's important to note that the key difference when dealing with Level 3 assets (and particularly early-stage unlisted equity assets or convertibles) is the heavily analyst-driven approach to valuation. Valuations analysts in such investments must have the aptitude to understand legal documentation of the deal, corporate finance theory, financial performance and the relevance of milestones and disclosures, as well as the modelling skills to ensure these are appropriately captured at inception and throughout the life of the deal. Due to the heterogeneous nature of investments, this requires significant access to the correct market data, research, model infrastructure, people and control oversights.

Closing remarks

At time of writing, the fallout from both the DLF and LAM scandals continues to play out:

- Woori and Hana Bank have filed objections against the fines imposed by the financial authorities for mis-selling derivative products, meaning the final decision must now be made by a court ruling.
- A "bad bank" that was supposed to be established in May 2020 to take over the troubled funds of LAM has been delayed. The new entity will be co-managed by 19 distributors of LAMs funds, however no agreement has yet been reached on who will become the largest shareholder7. Legal action against LAM is expected to commence in June 2020.

The recent scandals are concerning for the hedge and private equity fund management industry, which may suffer reputation damage, but also for SMEs that rely on convertible bonds and other mezzanine instruments for funding. The latest supervisory measures (see Appendix for more details) are therefore seen as a necessary and welcome step towards restoring public trust in the fund management industry. The rules will bring PEF-related regulations including risk management (in particular the valuation of non-marketable assets), investor protection, and regulatory oversight into closer alignment with global best practice standards, whilst ensuring that the critical function of PEFs, such as the supply of capital, is not compromised.

Footnotes

[1] A situation described by the FSS as “maturity mismatch”.

[2] Unlike the U.S., South Korea has no equivalent of the 144A rule which only permits QIIs to trade in convertibles.

[3] The Kosdaq lost roughly 15% of its value in 2018 and a further 8% between 1 January – 10 October 2019.

[4] Roughly 4,000 retail accounts were invested to the funds, equivalent to KRW 230 million per account.

[5] IIG specializes in lending to SMEs in emerging markets via a diversified portfolio of fund products and investment vehicles such as CLOs.

[6] The official in question (also named Kim) was arrested on 18 April 2020 on charges of bribery and leaking of state secrets.

[7] The entities seem to be trying to avoid becoming the largest shareholder as this would stigmatize them as the financial firm with the greatest involvement in the Lime scandal (source: koreatimes.co.kr)

Author contact details

Peter Alleston
Asia-Pacific Head of Business Development
Private Equity & Debt Services, IHS Markit
peter.alleston@ihsmarkit.com

Leon Sinclair
Global Head
Private Equity & Debt Services, IHS Markit
Leon.sinclair@ihsmarkit.com

Appendix: FSC Measures to Improve the Regulatory Framework on PEFs

Background

The Korean private equity market has grown significantly, backed by the government's policy to promote its development:

2004	PEF introduced
2011	Hedge fund introduced
2015	PEF rules eased to promote new entrants
2018	PEF rules eased to harmonize with hedge fund regulations: • PEFs no longer need to hold more than a 10 percent stake in a company to participate in its management; • PEFs allowed to increase their investor base to 100 investors (previously 49); • Introduction of "institution-only PEFs" that raise funds only from institutions; • PEFs able to take out loans up to 400 percent of their net assets.

However, investor protection has become an issue due to problems of mis-selling, liquidity management and other unfair practices following the recent DLF and LAM fiascos. To ensure these incidents are not repeated, the government has recently begun to tighten rules on PEFs.

In November 2019 the government introduced reform measures to strengthen investor protection with high-risk investment products and maintain financial stability:

2019	• Ban on public offering funds being sold in the form of private funds to avoid stricter regulations. • Ban on banks selling 'complex' private funds whose investment products include derivatives that carry risks of losing 20 percent of more of its principal. • Raised threshold for minimum investment in private funds by retail investors from KRW 100 million to KRW 300 million (if funds are over 200 percent levered the threshold increases from KRW 300 million to KRW 500 million). • Bank sales practices will be subject to enhanced regulatory monitoring and supervision. Banks must improve internal controls on the sale of financial products, including more regular reviews of investor risk appetites. • Larger fines for mis-selling financial products.

Between November 2019 and January 2020 the government conducted a study on 68 PEFs to check for potential risks and vulnerabilities. They concluded that while most PEFs are not considered 'high risk', some shortcomings were found that could hinder market trust in terms of investor protection. In April 2020 the FSS and FSC released measures to improve the regulatory framework on PEFs, focusing on three principles:

I. *Strengthening risk management.* Establish a foundation in which different market participants can provide a supervisory role and provide 'checks and balances' against one another.

II. *Improving investor protection.* Regulation to address fund structures that are vulnerable to liquidity risk.

III. *Strengthen supervision and inspection by FSS/FSC.*

New Valuation Measures

As part of I., *Fund Management Companies (FMCs)* will need to comply with measures aimed at bolstering *valuation best practice*:

1. Submit standardised internal control and risk management 'check-list' reports to the FSS. As part of this requirement FMCs will need to establish fund:

   - *Valuation policy*. The policy should contain guidelines for valuing non-marketable assets including unlisted equity, hybrid securities, private debt and suspended stocks. In preparing the guidelines FMCs should refer to global best practices, such as the *U.S. AICPA Accounting and Valuation Guide (June 2019)*

   - *Valuation committee*. Asset pricing decisions should be made in consideration of multiple inputs including purchase price, recent transactions, and valuations performed by independent third-party advisors.

2. Ensure assets are evaluated on a *Fair Value* basis:

   - This renewed emphasis on Fair Value is a shift from prior years where supervisory guidance focused on how Cost can be used to alleviate the burden on managers from Fair Value requirements.

   - For unlisted stocks, FMCs should follow the "*Guidelines for Fair Valuation of Unlisted Stocks*" ("*비상장주식에 대한 공정가치 평가 관련 가이드라인*"), issued by the FSS in January 2020. The guidance recommends using calibration techniques in conjunction with Fair Value methodologies that are appropriate to the investment. In addition, unlisted stocks may only be held at Cost in limited circumstances:

     - Total assets of the invested company are less than KRW 12 billion, or

     - Less than two years have lapsed since the fund purchased the stock, and

     - None of the eight scenarios as described on page 8 of the Guidelines (or para B5.2.4 of K-IFRS1109) have occurred.

   - For private debt, the FSS advises against using amortised cost as exit values can differ considerably, particularly for troubled issuers.

3. Use of *independent third-party advisors*:

   - To limit manager discretion when appraising asset values, the FSS recommends using independent agent to provide Fair Value assessments for all non-marketable assets.

   - For cross-investments, every non-marketable asset must be valued by an independent agent. The size of cross-investing within PEFs is limited to 20 percent of assets.

   - Mandatory external audit for funds whose assets exceed KRW50 billion, or between KRW30 billion and KRW50 billion and plan to fundraise in 2020.

4. Deliver *quarterly investor reports* that include fund NAV, valuation by asset type, and other risk disclosures related to liquidity stress testing, complex investment structures, and leverage.

Other Measures

1. In case of delayed redemption, PEFs will no longer be able to arbitrarily decide when and how to return money to investors. Plans must be formulated and communicated to investors within three months.

2. Checks and balances:

   - *Fund sellers* must provide investors with a prospectus in a standardized format to help them make informed investment decisions at their own risk. Sellers must then monitor PEF activities to ensure consistency with the prospectus.

   - *Prime Brokers* must monitor PEFs for any unfair activities. They must also evaluate PEF leverage (including TRS) and manage risk levels.

3. The minimum capital requirement has changed from KRW 700 million to KRW 700 million plus additional reserves proportional to 0.03 percent of the trust.

4. Vulnerable fund structures:

   - *Open-ended funds* must undertake stress tests once a year and establish emergency plans for liquidity risks. Funds may not be open-ended if more than 50 percent of their assets are illiquid.

   - FMCs must provide investors with information on *complex structures* and their underlying risks.

   - Include the amount of *leverage via TRS* in a funds leverage ratio (capped at 400 percent of assets).

5. *FSC/FSS* will enhance monitoring for unfair sales practices and strengthen reporting requirements. A fast-track revocation of registration will be introduced for FMCs that fail to satisfy the minimum capital requirements or other operational requirements.

6. *KOFIAs'* role will be expanded to include regular internal control and risk assessments on FMCs.

For more information ihsmarkit.com

CUSTOMER CARE AMERICAS

T +1 800 447 2273

+1 303 858 6187 (Outside US/Canada)

CUSTOMER CARE EUROPE, MIDDLE EAST, AFRICA

T +44 1344 328 300

CUSTOMER CARE ASIA PACIFIC

T +604 291 3600

E CustomerCare@ihsmarkit.com

About IHS Markit

IHS Markit (S&P: INFO) is a world leader in critical information, analytics and solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 key business and government customers, including 80 percent of the Fortune Global 500 and the world's leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.