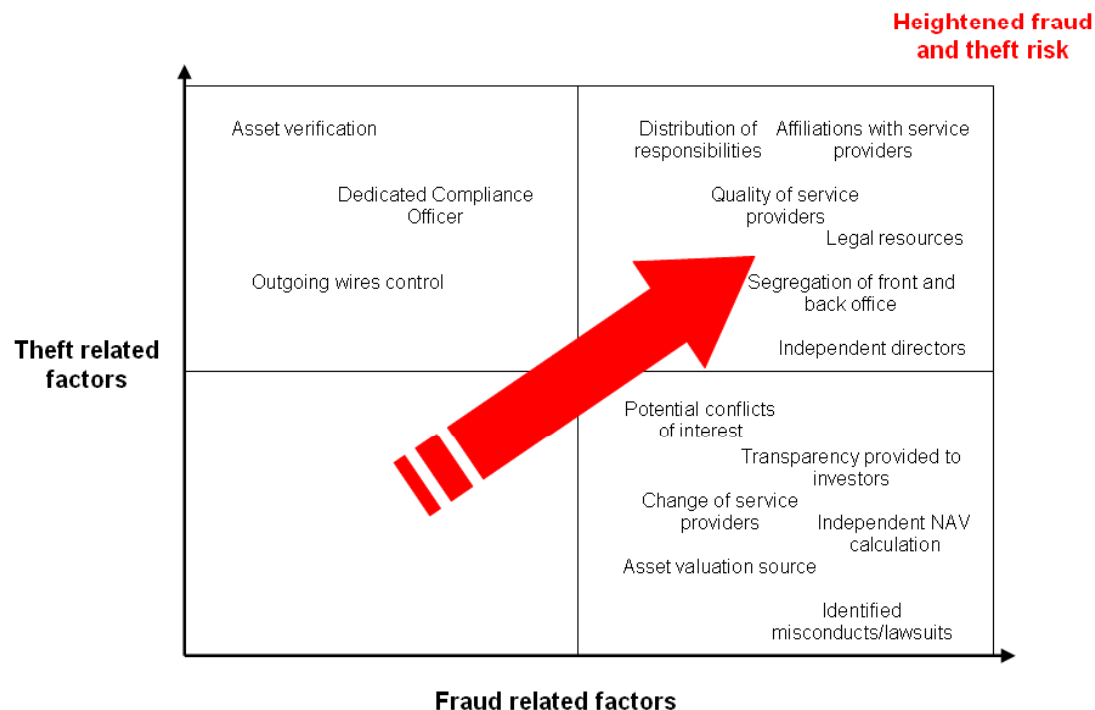


Introduction (1/2)

Due Diligence is as much an art as it is a science.

In this month's paper, we explore sources of fraud and theft risk as examples where operational risks are derived from several sources of information. In order to properly complete due diligence, professional analysts must have the experience to step into the role of an investigator as they move through their research process.

Some of the major factors contributing to fraud and theft risk are illustrated in the below diagram:



Introduction (2/2)

Moving beyond simple checklists, a due diligence process must be designed to account for cross-checks of risks and independent verification of information. Only a well-thought-through process will allow analysts to uncover these hidden, compound risks.

The following three risk factors illustrate how one can detect a heightened risk of fraud or theft:

- Lack of corporate governance
- Valuation uncertainty
- Inadequate wire controls

We will also discuss how these risks can be identified and what measures can be taken to mitigate them.

Example 1: Corporate Governance (1/2)

Situation:

- Standard Cayman Master-Feeder structure in place
- The fund employs two independent directors
- The fund has independent, high-profile service providers (administrator, brokers and auditor)
- Experienced Chief Compliance Officer implemented tight monitoring framework at manager level

Initial analysis:

Through a cursory review of the fund's set-up, corporate governance seems to be in line with industry standards.



So, independent oversight is really not an issue here, right? **WRONG!**

Example 1: Corporate Governance (2/2)

- Directors have delegated some of their powers and duties to the investment manager (e.g. opening of accounts)
- The fund invests substantially all of its assets into the master fund which is a limited partnership and not an exempted limited company, as is the case with the feeder fund. A limited partnership does not require independent directors.

Conclusion:

- The general partner (the manager!) entirely controls the master fund.
- For this entity, which effectively holds investors' assets, corporate governance is non-existent. The manager has broad discretion.



It is not sufficient to read through a feeder fund PPM. An analyst needs to consider the entire fund structure when conducting due diligence including the various legal documents in order to get the full picture of the fund set-up and identify potential pitfalls not covered in the feeder's documentation alone.

Example 2: Valuation Uncertainty (1/3)

Situation:

- The Event-Driven manager under analysis recently increased his exposure towards distressed credit
- Distressed credit investments such as bank debt and litigation claims cannot be priced 'to market'
- An independent fund administrator is in charge for position valuation AND net asset value calculation using independent exchange quotes for listed instruments and requesting multiple broker quotes for less liquid or illiquid assets
- Overall, 80% of the fund's NAV is derived from multiple broker quotes and 20% is valued by 'other valuation methodologies'

Initial Analysis:

The situation presented above is not atypical for an Event-Driven manager. Investing in unlisted securities is part of the strategy. His expertise in realizing value from distressed investments makes him capable of determining a 'fair value' for such investments. However, a portion of the fund's NAV is subject to considerable valuation uncertainty.

Example 2: Valuation Uncertainty (2/3)

Nowadays, investors are concerned with the valuation of illiquid assets and want more confidence from the manager. So, how does the manager respond?

Measures taken by the manager to increase valuation confidence:

- The portion of the fund's NAV priced by the manager is now reviewed by an independent 3rd party valuation agent on a quarterly basis
- A pricing policy is put in place and forwarded to the administrator in order to guarantee a consistent valuation approach

Using an 3rd-party valuation agent is in-line with industry best practice. Is the uncertainty now gone? Unfortunately, the answer is 'no'. Valuation uncertainty is still not resolved.

Conclusion:

- Interviewing the administrator has revealed that he can rely on manager prices for certain illiquid positions if the manager can adequately document his 'fair value' pricing methodology ('other valuation methodologies' means fair value valuation by the manager -> confirmed by audited financial statements)
- The manager's internal valuation committee (VC) consists of portfolio managers and analysts -> pricing review process is not independent!
- Due to confidentiality, it is impossible to independently verify the valuation process with the 3rd party valuation firm
- Copies of the administration and 3rd party valuation agreement were not available -> one can not independently verify the terms and responsibilities of both service providers

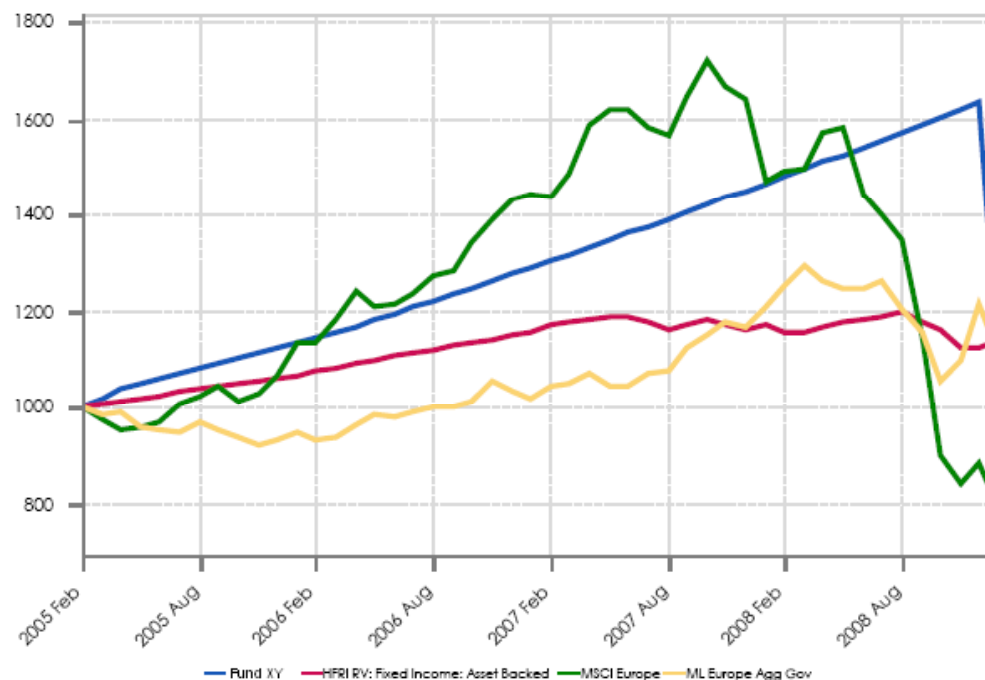


The manager can still substantially influence/inflate the position pricing - valuation uncertainty remains!

Example 2: Valuation Uncertainty (3/3)

Further side-effects inherent in illiquid assets:

- Hard-to-price assets lead to an underestimation of the true volatility of the fund through 'smoothed returns' and a subsequently inflated Sharpe Ratio
- Potential Conflict of Interest: The manager has an incentive not to adjust the valuation of the self-priced portion of the portfolio downward so that revenues from management and incentive fees remain high
- Valuation uncertainty almost always goes hand in hand with illiquidity. The redemption terms of the fund need to reflect the low liquidity of the underlying assets. Otherwise, investors may face gates or suspensions at the worst time (when they want/need to get out) as well as sharp drops in NAV in case of fire sales triggered through excessive redemption requests.



Example 3: Wire Controls (1/3)

Situation:

- Wire controls are in place: Funds can only be wired to accounts defined in standing instructions by the fund with the custodian
- A clearly defined set of authorized signatures exists (two signatures from the manager required to move cash)
- The entire subscription and redemption process has been outsourced to the administrator
- Payment of fees and reimbursement of costs out of the fund's account for credit to the manager's account always need approval of the administrator
- The fund manager has not allowed their operational partners to directly deliver any documentation to analysts without their approval

Initial Analysis:

- Requiring two signatures from the manager is reasonable (better than the still often seen one-only), however industry best practice is to include at least one independent signature
- Maintaining a list of authorized signatories is in line with industry best practice
- Outsourcing the processing of subscription and redemption requests including arranging proceeds and the payment of costs reduces the control of the manager of fund accounts which is beneficial from an operational risk perspective
- The manager seems to apply adequate practices and procedures to reduce the risk of fraud or theft

However, due diligence is more than a checklist. In order to **properly derive** fraud risk, one can not solely rely upon the manager's own Due Diligence Questionnaire and internal process manual.



Experience tells us that we need to dig deeper!

Example 3: Wire Controls (2/3)

In no case can proper due diligence be based on information provided by the manager alone. Relying solely on that information is like trusting a used car dealer to tell you the truth about a car's history. In this case, **being diligent** means that one needs to **independently** verify the wire controls in place.



Independent verification is paramount!

Conclusion:

By interviewing different administrator representatives and manager employees onsite, we learned the following:

- In practice, the custodian also accepts only one signature if a second person on the manager's side is not available
- Only one signature from the manager is needed to change wiring instructions
- Only one signature from the manager is needed to set up new fund accounts with other brokers



Heightened risk of fraud and theft detected!



Example 3: Wire Controls (3/3)

How can an investor reduce fraud and theft opportunities in this case?

... by requiring that the manager adopt best practice wire controls.

This means that the manager creates and complies with a new authorized signatory list, requiring the fund director's signature to cover:

- Bank account openings
- Cash and securities transfer
- Change of wire instructions

Note that the transfer of large amounts (in percentage of NAV) should require additional signatures. It furthermore increases confidence if the manager installs pre-defined locations to wire monies to and an independent fund director to act as additional signatory. Some funds also set up a board resolution which clearly defines wire controls.

Closing comment:

In the example provided, independent verification with brokers and custodians was not possible due to reasons of "confidentiality".

Nevertheless, our approach revealed the existing weaknesses (transfer, account opening and change of wiring instructions based on one signature) even without being able to speak with all operational partners. Proper due diligence can thus reduce risk, even in the case of less-transparent, high-profile managers.

Summary – Be aware of hidden fraud and theft risks

- **Theft and Fraud** are examples of alternative investment risks that **can not be assessed through a check list**. Proper evaluation requires a structured derivation of inter-related factors. In addition to having a complete understanding of industry best-practices, investors and/or their due diligence partners must actively engage the various operational partners for additional cross-referencing of information for a professional assessment of these risks.
- When conducting onsite due diligence, it is paramount to also interview assistants and request demonstrations of internal processes at their desks. This is the only way to verify that the purported checks and balances are effectively in place. By simply relying on information provided by key people onsite, one does not have the opportunity to identify inconsistencies. Sometimes, the omission of specific information is of minor importance. However, in other cases, the omission or misrepresentation of such may be of big concern.
- Remember: Studies have shown that substantial investor losses usually happen due to operational weaknesses or failures and not due to the investment strategy. The likelihoods of fraudulent activity or thievery are functions of the operational set up.



Onsite due diligence together with directly liaising with operational partners offers investors the **opportunity to verify and challenge the assertions** which the manager has made **regarding all aspects of their operations**. In many instances, it is indeed the only manner in which to detect hidden risks of fraud and theft.