Edward Neeck’s speech on the work of ISSA’s working group addressed the „Hidden Risks for Custodians, Clearers and (I)CSDs“. These risks are in fact visible, but since industry participants do not adequately focus on them appear to be less apparent. Edward Neeck is the Working Group 2 leader and Risk Management Executive in J.P. Morgan's Worldwide Securities Services business. He began by acknowledging the contribution of approximately 100 people at various ISSA member organizations to this effort. The presentation covered a sampling of less obvious risks that are encountered in post-trade processing and recordkeeping, as well as methods of mitigating these risks. Six specific risks are analyzed in the report:

- Administrative risks related to Hedge Funds, Fund of Funds and Complex Master Feeder Arrangements
- Hidden risks of disruptive change due to regulatory evolution or shifts in servicing conventions: The "Global Custodian Liability" example
- Disclosure risks in Securities Lending
- Hidden risks for Fund Administrators and Custodians in Complex Instrument Valuation
- Hidden risks in servicing non-standard („Out of Network“) assets
- Hidden risks involved in relying on Third Parties.

The report is aimed at suggesting steps that can be taken to help mitigate risks where feasible or make them more transparent where they are not easily overcome.
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- A sampling of less obvious risks that are encountered in post-trade processing and recordkeeping
- Background information and commentary as to how the various servicing entities have created, or continue to work toward, best practices to mitigate or ring-fence these risks
- This Report will hopefully help industry participants and investors gain a better understanding of the risks and risk management implications discussed herein
- The Report outlines suggested steps that can be taken to help mitigate risks where feasible or make them more transparent where they are not easily overcome.

Six hidden risks analyzed:
1. Administrative Risks Related to Hedge Funds, Funds of Funds, and Complex Master Feeder Arrangements
2. Hidden Risks of Disruptive Change Due to Regulatory Evolution or Shifts in Servicing Conventions: The Global Custodian Liability Example
3. Disclosure Risks in Securities Lending
6. Hidden Risks Involved in Relying on Third Parties

Hidden Risks for Custodians/Clearers and ICSDs/CSDs

Risk #1: Administrative Risks Related to Hedge Funds, Funds of Funds, and Complex Master Feeder Arrangements

Global custodians, depositaries, or administrators are asset-servicing providers that perform three primary functions on behalf of their institutional investor clients:
- Holding investment assets entrusted to them via a network of sub-custodians and clearing & settlement systems administered by securities intermediaries and infrastructure entities;
- Facilitating settlements of client portfolio transactions and entitlements upon client instructions;
- Servicing client assets pursuant to contractual arrangements with the various local market custodians.

Hedge funds, funds of funds and complex master/feeder structures have a global reach across a wide variety of market instruments through systems that expose their fund servicing providers, including their depositaries, to a wide spectrum of risks, most of which are not plainly visible.
- In view of such funds’ complexity and their special product characteristics summarized in this Chapter, it is critical that hedge funds, funds of funds, and complex master feeders increase the transparency of their relationships with their various service providers, notably through disclosure and investor/provider due diligence.

AIFMD legislation in Europe is already primed to address many risks associated with complex funds:
- Monitoring of the investor cash flows
- Independent recordkeeping and external verification of the ownership of fund assets
- Due diligence of any safekeeping delegated functions (e.g., subcustodians, prime brokers)
**Working Group 2:**

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**Risk #1: Administrative Risks Related to Hedge Funds, Funds of Funds, and Complex Master Feeder Arrangements**

Risks can often be mitigated through a combination of protective actions, including (i) transparency between funds and servicer providers, and (ii) due diligence.

- Agent responsibilities, disclaimers and disclosures in servicing agreements, offering memorandums & investor statements promote investor and servicer protection.
- Only service funds that certify that it does not invest in its own self-administered funds.
- Service Agreements specifying the dependence on evidence of, and a valuation for, the fund holdings; the provider is not responsible for verification of the data; the fund will indemnify the service provider for errors or inaccuracies;
- Provision of a copy of the offering memorandum (and updates) for each holding in an underlying hedge fund.

The purpose of performing due diligence is to assess the quality and nature of the risks associated with the fund-appointed parties, including complete due diligence on:

- Investment Manager
- Prime Broker and Trading Counterparty
- Fund Bankers
- Fund Auditors and Attorneys

As arrangements become more complex and include special purpose vehicles and multiple layers, the broad due diligence regime must understand each successive layer between beneficial investors and the ultimate investment.

**Conclusions:**

A service provider to a hedge fund or structured arrangement of funds must structure and conduct a tailored due diligence that takes into account the structure of the fund and all interrelated funds or vehicles.

- The diligence must include a clear articulation of responsibilities and liabilities and a full disclosure of terms, disclaimers and limitations or specifications concerning the investments as well as participants across all levels of the structure.
- Custodians for a hedge fund must understand and examine related fund vehicles to ensure that they are appropriately registered, administered and documented in lieu of a right to directly audit or examine the books and records of the related fund.

Regardless of increased due diligence or other mitigating actions employed by service providers, it is ultimately the investor’s responsibility to perform its own careful and complete due diligence review of the structure, management and investment guidelines of any investment vehicle before making an investment decision.
Working Group 2:
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Risk #2: Hidden Risks of Disruptive Change Due to Regulatory Evolution or Shifts in Servicing Conventions: The Global Custodian Liability Example

- Global custodians perform three primary functions: they hold assets; they facilitate the settlement of transactions; and they service client assets e.g., the collection of income.
  - A global custodian has a responsibility to perform its duties properly, exercising due care
  - A global custodian typically bears liability for its own negligence or for misappropriating customers’ assets. In addition, it must exercise due care in the selection and monitoring of local market subcustodians.
- Forces have emerged to promote the introduction of strict global custodian liability - not necessarily based on fault or matters within the custodian's control - coupled with the proposed imposition of responsibility for a wide variety of "losses" of assets or value, and a remedial duty to replace "lost" assets, regardless of the source or nature of the loss.

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Risk #2: Hidden Risks of Disruptive Change Due to Regulatory Evolution or Shifts in Servicing Conventions: The Global Custodian Liability Example

**Losses beyond the reasonable control of a custodian (e.g.)**
- Sub-custodian or Third Party insolvency despite reasonable due diligence and monitoring
- Sub-custodian fraud not detected through reasonable supervision
- Failure of a Central Securities Depository
- Failure of Counterparties to settle transactions
- Losses caused by appointed third parties, e.g. brokers

Strict liability could mean the global custodian must buy replacements of securities held or pay their full value to a fund in advance of securing access to the sub-custodied securities.
- The Global Custodian would bear market risk or financing costs until securities are retrieved, & absorb the risk of being expropriated or distributed during insolvency proceedings.
- The Global Custodian may need to sell the securities –at a materially discounted value.

- This risk transfer would effectively make a Global Custodian financially responsible for the efficient functioning of the insolvency or administrative laws of third countries.
Working Group 2:
Hidden Risks of Custodians/Clearers and ICSDs/CSDs

Risk #2: Hidden Risks of Disruptive Change Due to Regulatory Evolution or Shifts in Servicing Conventions: The Global Custodian Liability Example

Increased custodian liability could directly or indirectly lead to systemic complications:
- A global custodian that is strictly liable for events beyond its control could abandon a market or local subcustodian at the first sign of instability, triggering further instability & a “rush to the exit.”
- Global custodians perceived as having significant exposure to emerging markets might in times of crises have difficulties obtaining short term funding.
- Impairment of the operation of one regional fund industry could adversely affect the liquidity of the securities held by cross-border investors worldwide.
- Banks providing Global Custody services are necessarily sizable institutions; increased industry concentration over time could well distort the services market and market expectations

Conclusions:
The current standard of care observed by Global Custodians and fund depositaries ...
Reasonable care, with liability based on faulty performance of particular custodian duties ...
has evolved over a long period of time, and includes the input and participation of institutional investor clients. Changing the standard of care to increase custodian liability by imposing liability for events and actions beyond the custodian’s reasonable control -- however much that change might seem to advance investor protection – will produce unintended consequences, potentially leading to unpredictable, possibly dramatic ripple effects.

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Risk #3: Disclosure Risks in Securities Lending

A debate in the securities lending industry and press - how best to increase transparency
- No clear consensus has emerged across the spectrum of players,
- Principal lenders should be made well aware of the potential risks and the collateral options available as part of using a securities lending agent.
- It is the lending agent’s obligation to clearly describe the associated risks to the lender and ensure that clients receive adequate and up to date information for all lending and collateral management activity.
- Collateral choices enable clients to mitigate potential counterpart risks and any cash re-investment risk.
- The cost of different types of collateral is increasing, driven by regulatory changes

Broadly, the risks can be grouped into the following segments:
- Counterpart and credit risk;
- Operational risk;
- Legal, tax and regulatory risk; and
- Cash collateral investment risk.
### Working Group 2 Discussion: Hidden Risks for Custodians/Clearers and ICSDs/CSDs

#### Risk #3: Disclosure Risks in Securities Lending

**Securities Collateral versus Cash Collateral**

- The use of cash and equity securities as collateral has expanded across a wider range of lending transactions.
- The demand for high quality government bonds has increased, the cost involved in posting these securities as collateral has risen, borrowers are moving to cheaper forms of collateral where possible.
- Acceptance and use of cash as a form of collateral does not in itself create any additional risk for the lender compared to taking non-cash collateral.
- Securities collateral is often exchanged free of payment creating risk of non-receipt
- Cash collateral allows the loan to be settled versus payment, mitigating some intra-day risk.
- ‘DbV’ – Delivery by Value processing also mitigates this risk, where available

- The issue is how cash collateral is invested by the lender or lending agent.
- Confusion may lead beneficial owners to disregard cash collateral as a viable and safe opportunity and cause them to give up additional return without decreasing the risk profile.
- Lenders should carefully consider the full breadth of collateral options available before deciding how best to achieve the required risk-reward profile.

#### Guiding Questions for Lender Planning

- What are the benefits/risks for using different types of collateral?
- Which types of collateral are suitable for the underlying asset class/portfolio being lent?
- What type of securities should be included in a collateral set and what haircuts applied?
- What happens to the collateral in case of insolvency of the borrower or lending agent?
- In what type of money market instruments should any cash collateral be invested?
- What is the best vehicle for managing cash collateral – using a fund or using a segregated account with explicit guidelines?
- Who invests cash collateral – in-house team, lending agent, or 3rd party asset manager?
- How often will collateral be priced compared to frequency of pricing for the other assets?
- What type and frequency of reporting is required for cash and non-cash collateral?
Working Group 2 Discussion: Hidden Risks for Custodians/Clearers and ICSDs/CSDs

Risk #3: Disclosure Risks in Securities Lending

Intrinsic Value Lending Versus GC Lending

- Intrinsic value relates to the inherent value of a specific security in the securities lending and repo markets. High intrinsic value securities typically extract greater returns.

- General Collateral (GC), relates to a general asset class and security market - a wide range of securities. The term is mainly used in fixed income markets, predominantly for government bonds. GC Lending produces lower returns but higher volumes.

- Regulatory changes coupled with the recent governmental debt crisis in the Eurozone have increased the demand for high quality securities such as core Euro government bonds as an asset class. Market and regulatory changes now require collateral to be posted for more transaction types, and this has further increased the demand for high grade collateral in the repo and securities lending markets.

  - Against this backdrop of change, lenders are set to continue benefiting from both intrinsic value lending as well as the continued strong demand for GC such as high quality government bonds. These benefits lead to increased overall portfolio return while keeping collateral risk low.

Conclusions:

- The particular collateral accepted by any party lending securities has significant implications for the party’s ability to lend securities, for the risks presented by the particular lending agreement and arrangement, and for the return(s) associated with the lending. Post crisis, significant attention is being paid to increasing the transparency around decisions regarding collateral, and the cost of collateral itself is evolving as more business transactions require collateralization and compete for the highest quality (lowest risk) instruments.

- The need to understand the mechanics and risk considerations around different collateral options, particularly cash, is less obvious, but likely more important than even considerations regarding the securities borrower.

  The industry should promote increased awareness of the implications of different types of collateral requirements, and that should help increase the level of transparency and ensure that lenders act with complete understanding of their available options.

  Lending Agents are encouraged to guide lenders toward efficient collateral management by leveraging tools like the lender planning questions.
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Risk #4: Hidden Risks for Fund Administrators & Custodians in Complex Instrument Valuation

A fund’s asset valuation is critical to ensuring investor protection.

- Typically, a fund’s net asset value (NAV) calculation is delegated to the fund administrator who in turn will rely on various data feeders and valuers, depending on the asset class. In the event of valuation inaccuracy, the fund administrator may incur liability.

- Two broad types of investment structures hold complex instruments:
  1. funds such as hedge funds, real estate funds and mutual funds
  2. segregated portfolios such as pension plans and investment companies.

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Working Group 2 Discussion:
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Risk #4: Hidden Risks for Fund Administrators & Custodians in Complex Instrument Valuation

- Asset Valuation Governance
  Funds should have a “valuation policy document” that is agreed upon and approved by the fund’s governing body. This document should outline the role of the independent valuation service provider and the level of involvement of the fund manager in the valuation process.

- Accounting / Regulatory Requirements
  - US – Accounting Standards Codification classifies pricing sources at three levels which should be employed in a descending order of priority. Fund administrators should adhere to the pricing hierarchy:
    - Level 1) Publicly available
    - Level 2) Model prices
    - Level 3) Manager prices

  - Europe
    A fund “shall employ a process for accurate and independent assessment of the value of OTC derivatives.”
    - AIFMD requires AIF managers to either use an external appraiser independent from the fund manager, or if the fund manager itself performs the valuation, the valuation must be done by a unit that is independent from portfolio management.
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Risk #4: Hidden Risks for Fund Administrators & Custodians in Complex Instrument Valuation

- Third Party Valuations
  - Fund manager requests to perform their own valuations should be resisted.
  - Fund administrators should review their procedures, including their valuation process and templates, with fund clients.
  - To minimize the risk of operational errors associated with template inputs, it is prudent to automate the process as far as possible.

- Secondary Pricing Sources
  - A secondary pricing source should be identified and should be used as a check on the primary source price.

- Verification of Positions with Trade Repositories/Exchanges-Clearing Houses/Brokers' Data
  - Where instruments are centrally cleared, it is best practice to verify details with the relevant central counterparty.
  - Similarly, it is a good practice to see that the fund administrator receives trade confirmations directly from the prime broker or the relevant trade broker-dealers.
  - The use of Straight Through Processing (STP) will ensure that comprehensive data on executed daily trades made by the fund manager are reported directly to the fund administrator by the relevant broker-dealers or the prime broker.

Conclusions:

- The search for return on investment that has driven institutional investors beyond traditional asset classes heightens the risks inherent in pricing complex instruments and striking fund valuations.

- Complex instruments valuation is risky and there are complications and pitfalls of obtaining prices from various sources,
  - Fund administrators and funds should carefully document policies and procedures
  - Investors understand the protocols used with respect to instrument valuations, notably through careful review of offering materials.
### Working Group 2 Discussion:
**Hidden Risks for Custodians/Clearers and ICSDs/CSDs**

#### Risk #5: Hidden Risks in Servicing Non-Standard (“Out-of-Network”) Assets

- **Non-standard assets** are instruments that can only be overseen through position recordkeeping actions, unlike instruments that are held in safekeeping by custodians, directly or indirectly through their network of sub-custodians & CSDs for which ownership is recorded in book-entry accounts at each level of the custody chain.
- **Non-standard assets** typically are contract rights, interests in derivatives, securities reflected on books or registers maintained on behalf of issuers outside the custody chain, such as money market instruments & shares not available for trading on regulated markets, specialized assets, e.g. real estate properties, where title to ownership relies on records maintained by public authorities.
- **Title to non-standard assets** relies on reporting from 3rd parties appointed by fund managers or the client; title changes are beyond the control of the custodian. Also described as assets “held elsewhere,” they involve use of custodians merely to perform position keeping & information monitoring and reporting – typically with limited supervisory responsibilities. Services for these assets cannot involve full “custody-safekeeping”

In general, non-standard assets have the following features raising hidden risks:
- Custodians do not have effective control over these asset types
- Evidence of interest and title is controlled by third parties
- Settlement or post-settlement of those type of assets raise materially higher risks as compared to settlements involving transferable securities.

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### Factors and Considerations Relating to Particular Non-standard Asset Types

- **Assets which can be disposed of or transferred (or acquired) without the authorization and direct intervention of the custodian or depository or its contractually appointed agents.**
  - Examples - Third party time deposits (or certificates of deposit, “CDs”), bank loans and private equity holdings
  - Mitigant - servicing these assets through careful and thorough drafting of the services agreement, including suitable liability limitations and prescribed standards of care.

- **Assets whose safekeeping and/or settlement stage involves significant counterparty or other credit risks which cannot be mitigated without changes to practices or infrastructures.**
  - Examples - Contract rights vis-à-vis OTC derivatives counterparties in swaps, forwards or FX contracts
  - Mitigant - essential steps are to: cover worst case scenarios through contractual liability provisions, work to ensure that adequate information exchange procedures are duly in place, set out reporting rights clearly, and place escalation processes in the hands and under the control of the custodian.
Working Group 2 Discussion:
Hidden Risks for Custodians/Clearers and ICSDs/CSDs

Risk #5: Hidden Risks in Servicing Non-Standard ("Out-of-Network") Assets

Factors and Considerations Relating to Particular Non-standard Asset Types

- Real estate/Private equity assets
  - Examples - Real estate assets (including properties, land, and infrastructure assets) or private equity shareholdings
  - Mitigant - request direct access to verify that the transfer of ownership interests is correctly recorded with intermediaries and authorities. The custodian should request electronic access to all relevant share/interest registers. In addition, the custodian should request minutes of board meetings that might affect the ownership chain.

- Fine art – exotic assets
  - Examples - investments in non-market specialty assets such as artwork, wine, and antiques.
  - Mitigant - where a client seeks recordkeeping custodial services in respect of assets so stored, the custodian should include in its contractual arrangements a provision that each chosen warehouses must be pre-approved by the custodian and subject to in-site visits. The custodian should also request receipt of updated inventory reports at least on a semi-annual basis.

Conclusions:

- The relentless search for Alpha has driven institutional investors beyond traditional asset classes into products such as interests in derivatives, bank loans and real estate that do not lend themselves to established securities safekeeping techniques.
- Non-standard assets have features that make them riskier and more expensive to include in a portfolio with traditional equity and fixed income products.
- The Chapter also calls the industry in general to arms, encouraging collective steps to mitigate risks where possible (e.g. by leveraging clearing center facilities and carefully drafting and regularly noting liability arrangements) or to ring fence certain asset classes where challenges cannot be readily addressed.
Working Group 2 Discussion:
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Risk #6: Hidden Risks Involved in Relying on Third Parties

- The phrase “hidden risks” in the context of securities services implies a lack of visibility/transparency and therefore, likely, the absence of a clear understanding of the business process details that are the source of the risk(s) in question.
- One obvious location for hidden risks for any organization are the external entities on which the organization relies for services of one form or another.
  - Such external providers are by definition not under direct oversight, which makes it difficult to be steadily aware of process or handling risks.
  - The degree of visibility into the management of operational risk within third party entities is considerably less than within the organization’s own operation. This risk paradigm applies equally to custodian banks and CSDs.
- Key Types of Third Party Reliances
  1. Entities to which the organization has outsourced critical services
  2. Entities on which the organization relies for timely and accurate information
  3. Entities that provide complementary functions that are inherent in or an extension of the regular operation of the organization
  4. Entities that are allowed to perform critical functions on their own behalf within the organization’s systems

Controls Around Third-Party Reliances

1. Identification/recognition of the reliance that generates the risk
   - Explicitly identify where third party reliances exist
2. Risk analysis
   - Analyze risks in terms of the operational risk or financial exposure they could bring to the organization
3. Relationship definition
   - The legal relationship that governs the interaction between the organization and the third party, including applicable provisions of service agreements and implicit expectations, must be reviewed in detail.
4. Direct controls
   - Industry organizations should have in place preventive, detective, and corrective controls.
5. Indirect controls
   - Indirect controls include use of third party audits (e.g., SAS 70 audits) or reference to publicly available information or data such as that included in questionnaire responses (e.g., global custodian questionnaire to CSDs and/or sub-custodians).
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Risk #6: Hidden Risks Involved in Relying on Third Parties

- Typical examples of Custodian’s complementary service providers that must be managed:
  - Central securities depositories (CSDs)
  - Local-market sub-custodians, notably service providers located in jurisdictions not home to the global custodian or service providers for unique assets
  - Matching utilities
  - Communication providers from and to clients and infrastructures
  - Tri-party collateral managers
  - Other trustees and tax withholding agents
  - Banker(s)

- CSDs have a similar range of third party reliance. Typical examples:
  - Stock exchanges and other organized markets and/or their clearing CCPs
  - Matching utilities
  - Banker(s), including the central bank
  - External custodians including other CSDs
  - Transfer agents, particularly where no physical securities are issued
  - Tri-party collateral managers
  - Trustees and other services, e.g., tax withholding services

Conclusions:

- There are third party providers relevant to -- and embedded in -- securities settlements undertaken by a contractually-bound provider. These parties effectively provide “embedded” support services that are critical to achieving the full services subject to agreement between investor and custodian, although often neither custodian nor investor has a choice in designating or leveraging the provider.

- Understanding these 3rd party relationships, the role and services these parties perform, and the incidental risks they impose on the process is an essential component of a complete investment due diligence exercise.
Working Group 2 Discussion:
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WG2: Summary Conclusions:

The working group hopes this Report will help industry participants and investors gain a better understanding of the risks and risk management implications discussed herein as well as the ways in which change can disrupt, or challenge assumptions about how particular risks are managed or are allocated among servicers or between investors and servicers – in order to help mitigate risks where feasible or make them more transparent where they are not easily overcome.

The working group hopes that, together, ISSA’s diverse membership will take up the baton and continue the effort to create and provide more standards to mitigate issues like Out of Network Assets and more policies and procedures aimed at Complex Funds Structures in order to help clarify and mitigate risks for investors and service agents; facilitating the search for alpha while not triggering the law of unintended consequences.

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