

JOINT REPORT

Addressing Challenges in Safekeeping and Supervisory Services for Out-of-Network Assets

April 2014

Abstract

To address current challenges in providing safekeeping and supervisory services for out-of-network assets, a working group of AGC and ISSA members with external counsel have generated a legal and practice framework that (i) analyzes those challenges under comparative U.S., UK and French legal regimes and market practices, (ii) demonstrates the extent to which advancements by market infrastructure and other market participants have helped to close the safekeeping and supervising gaps for out-of-network assets, and (iii) identifies possible approaches to close the remaining safekeeping and supervisory gaps for those asset classes. In so doing, this joint report is intended to enhance informational transparency of the legal and practice contexts for these assets, enable more effective management of the risks associated with these assets, and increase operational efficiencies among market participants in servicing these assets.

Target Audience

Market intermediaries such as custodian banks, brokers, asset managers, issuers, industry associations/groups, market infrastructures and regulators.

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Disclaimer

None of the products, services, practices or standards referenced or set out in this joint report are intended to be prescriptive for market participants and should not be viewed as express or implied required market practice. Instead, they are meant to be informative reference points which may help market participants manage the challenges in providing safekeeping and supervisory services for out-of-network assets and develop approaches to close remaining gaps identified in this joint report.

This document does not represent professional or legal advice and may be subject to changes in regulation, interpretation, or practice that are not reflected in this version of the joint report.

Neither the AGC nor ISSA (nor the members of the working group listed above) warrant the accuracy or completeness of the information or analysis contained in this joint report.

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Executive Summary

Out-of-network assets present exceptional challenges and risks to global custodians providing custodial services, namely safekeeping and supervisory services, to clients with respect to such assets. These challenges and risks are the result of a combination of factors. On the one hand, global custodians have less control over out-of-network assets than traditional asset classes, which limits the ability of custodians to provide safekeeping and supervisory services. On the other hand, evolving regulations are dramatically increasing the responsibilities of depositaries and other market participants, including global custodians, with respect to the assets they are deemed to hold in custody, which include out-of-network assets.

The purpose of this report is to provide a legal and practice framework to discharge those responsibilities more effectively in whichever legal context applies by (i) demonstrating the extent to which advancements by market infrastructure and other market participants have helped to close the safekeeping and supervising gaps for out-of-network assets, and (ii) identifying possible approaches to close the remaining safekeeping and supervisory gaps for those asset classes. In so doing, this report is intended to enhance informational transparency of the legal and practice contexts for these assets, enable more effective management of the risks associated with these assets, and increase operational efficiencies among market participants in servicing these assets.

To achieve the above-mentioned purpose, the AGC and ISSA have collaborated to generate this report analyzing the following points. By focusing on certain out-of-network asset classes, (i.e., third-party time deposits, interests funds/collective investment schemes and private equity funds, bank loans, derivatives, and precious metals), this report analyzes the legal nature of each asset class and what evidences the asset, in each case, under the laws of the U.S., the United Kingdom and France. Based on an understanding of the market practice for each asset class, the report then describes which market participant or participants have access to the indicia of ownership for each out-of-network asset class and/or the information that may be required by global custodians for each out-of-network asset class. Further, in the case of funds/collective investment schemes and private equity funds, bank loans and derivatives in particular, this report discusses key infrastructure solutions that exist in the marketplace for each such asset class which have helped to close the respective safekeeping and supervisory gaps. The report describes the functionality of these infrastructure solutions and the safekeeping and supervisory gaps that remain for those asset classes.

In addition, this report identifies best practice efforts undertaken by other associations in the financial services industry and other best practice references arising in local legal contexts that address these safekeeping and supervisory gaps. Finally, looking forward, the report identifies possible approaches to be considered in order to close remaining gaps.

Introduction

Global custodians face exceptional challenges and risks in providing custodial services with respect to “out-of-network” asset classes; that is, asset classes which, by their nature, are not held through traditional network structures involving depository banks and central securities depositories. These asset classes include the following: third-party time deposits, interests in funds/collective investment schemes and private equity funds, bank loans, derivatives, and precious metals.

Global custodians do not have the same degree of possession of, or control over, these assets as they do in the case of more traditional asset classes such as shares or interests held via central securities depositories or traded on regulated exchanges. Similarly, they frequently lack direct information concerning asset ownership identification, distributions, valuations, rights, restrictions and encumbrances on these assets. Accordingly, their ability to provide core safekeeping services, ancillary value-added services, and oversight services, now increasingly expected in a growing number of jurisdictions, is constricted and dependent upon the services performed and information provided by brokers, investment fund managers, collateral agents, transfer agents, and other market participants.

The duties of a custodian with respect to assets can vary across jurisdictions and by the type of asset. Broadly speaking, these duties can be characterized as a duty of “safekeeping,” which implies a degree of ownership or control over the asset and a “general obligation of supervision,” which implies a duty of oversight that does not necessarily entail the elements of ownership or control implicit in safekeeping.

To illustrate, SEC Rules 17f-5 and 17f-7 under the U.S. Investment Company Act are examples of a detailed treatment of safekeeping criteria and duties, including (i) the incorporation of prescribed safekeeping provisions in contractual documentation with the relevant parties in the custody network, and (ii) the selection and monitoring of securities depositories.¹ The Association of the Luxembourg Fund Industry (“ALFI”) has articulated best practices for global custodians with respect to the broader approach that entails safekeeping and supervision of assets, including out-of-network assets.² These best practices are based on facilitating compliance by global custodians’ with their “general obligation of supervision” as established under relevant European law and practice. With respect to out-of-network assets in particular, which may be held by and dealt with through third parties outside the global custodian’s network, ALFI states that the global custodian shall satisfy its supervisory responsibility by:

- “a) Ensuring that the board of the Fund or its Management Company has adequate procedures in place with respect to the selection and the monitoring of those third parties,
- b) Implementing checks on financial resources, competence and reputation of the counterparty,
- c) Reconciling records (at least on balances) periodically. Differences are identified, investigated and resolved on a timely basis.”

Further, ALFI expects that terms allowing the release of asset-related information to the global custodian should be built into contractual documentation with all of the relevant parties so that the custodian can perform its supervisory role.

The European Securities and Markets Authority (“ESMA”) takes a somewhat different approach in the Alternative Investment Fund Managers Directive (“AIFMD”) by distinguishing between certain financial

¹ 17 C.F. R. §270.17(f)-5(c) and §270.17(f)-7 (2012).

² “Best practice guidelines for depository banks in relation to the safekeeping of assets from UCITS funds *NOT held through the traditional custody network*” published by the Association of the Luxembourg Fund Industry.

instruments that can be held in custody versus all other assets for which the custodian owes supervisory and record-keeping responsibilities.³ The assets that are capable of being held in custody include (i) those financial instruments that can be delivered to and held by the custodian and (ii) those financial instruments that can be registered in an account opened on the books and records of the custodian. With respect to the custodian's record-keeping responsibilities for all other assets, AIFMD bifurcates the record-keeping duty into two duties: (i) verifying the ownership of assets annually for its customers and (ii) maintaining records of those assets.

Broadly speaking, this approach of distinguishing between asset classes to determine which are capable of safekeeping/custody and which are not is consistent with, and flows from, conceptual approaches followed in certain EU jurisdictions. In **France**, for example, changes made to the French Monetary and Financial Code in January of 2009 established an approach that divides assets into two categories: (i) **financial securities** and (ii) **financial contracts**.⁴ The fundamental conceptual distinction is that **financial securities** are represented by entries in accounts whereby the holder of the account is the owner of the securities recorded in that account,⁵ while the holder of a **financial contract** is broadly characterized as a credit counterparty of the issuer of the contract.

- **Financial securities** include equity securities, meaning shares or other securities providing access to capital and voting rights, including convertible securities, warrants, etc. as well as bonds and government securities, but excluding short term commercial paper. This category also explicitly includes units of collective investment vehicles irrespective of their legal form: i.e. (i) body corporate (SICAV) which issue shares or (ii) contractual partnerships (FCP) which issue partnership interests.
- **Financial contracts** include derivatives, swap contracts, forward contracts and other contractual obligations.

Generally, **financial securities** are subject to safekeeping/custody requirements (including the duty to return/replace lost securities under AIFMD/UCITS V) and **financial contracts** are subject to a duty of supervision.

Although the laws of the **U.K.** also establish certain categories of assets, the nature of the attendant custodial obligations has not been differentiated with regard to these categories of assets. The rules in Chapter 6 of the Financial Services Authority's ("FSA") Client Assets Sourcebook ("CASS," and Chapter 6 thereof, "CASS 6") apply to a firm when it (a) holds **financial instruments** belonging to a client in the course of the firm's **MiFID business** and/or (b) carries on the **designated investment** business of safeguarding and administering investments in the course of business that is not a MiFID business (i.e., where it holds assets that are **safe custody investments** or **custody assets**).

- **Designated Investment** includes a security or a contractually-based investment, for example life insurance policies, shares, debentures, government and public securities, warrants, certificates representing certain securities, units in a collective investment scheme, stakeholder pension schemes, personal pension scheme, options, futures or contracts for differences.
 - **Safe Custody Investment** is essentially a Designated Investment which a firm receives or holds on behalf of a client.

³ Article 21(8) of the Alternative Investment Fund Managers Directive 2011/61/EU dated 8 June 2011. *See also*, ESMA Consultation on AIFM Relevant to Assets Held Away and the European Commission's Delegated Regulation (EU) No. 231/2013 of 19 December 2012 Supplementing Directive 2011/61/EU.

⁴ Bank deposits are generally subject to separate categorization.

⁵ French Monetary and Financial Code L.211-4(1).

- **Custody Asset** includes Designated Investments, and any other assets that the firm holds or may hold in the same portfolio as a designated investment held for or on behalf of a client.
- **Financial Instrument** encompasses many of the same assets as are covered by Designated Investments, with the exception of life insurance policies, long-term insurance contracts and pension schemes.
- **MiFID business** generally means a firm which has its head or registered office in the European Economic Area and carries on investment services such as receiving and transmitting orders on behalf of clients in relation to securities, money market instruments, units in collective undertakings and derivative instruments.

The primary objective of the CASS client asset rules is to “restrict the commingling of client and the firm's (i.e., the custodian's) assets and minimize the risk of the client's safe custody assets being used by the firm without the client's agreement or contrary to the client's wishes, or being treated as the firm's assets in the event of its insolvency” (CASS 6.1.23G). Under CASS 6, various obligations are placed on firms requiring the segregation of client assets from the assets of the custodian. Related obligations arise requiring the custodian to ensure the registration of legal title to client assets in favor of the clients so that the assets are identifiably distinct from those of the custodian.

The purpose of this report is not to determine, let alone advocate, which asset classes should give rise to which safekeeping or supervising responsibilities under all relevant legal regimes. Instead, this report is intended to provide a legal and practice framework to discharge those responsibilities more effectively in whichever legal context applies by (i) demonstrating the extent to which advancements by market infrastructure and other market participants have helped to close the safe-keeping and supervisory gaps for out-of-network assets, and (ii) identifying possible approaches to close the remaining safekeeping and supervisory gaps for those asset classes. In so doing, this report is intended to enhance informational transparency of the legal and practice contexts for these assets, enable more effective management of the risks associated with these assets, and increase operational efficiencies among market participants in servicing these assets.

To achieve the above-mentioned purpose, this report discusses indicative assets for each of these classes in terms of (i) their legal nature and what determines their ownership, (ii) which parties possess or control those assets and/or relevant information concerning those assets, (iii) what happens to these assets when they are provided as collateral by way of a perfected security interest as compared to a title transfer arrangement, and (iv) what approach should be taken and what recommendations should be considered to address the safekeeping and supervisory challenges that these asset classes present.

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Discussion

- I. **Legal Nature/Ownership**: What is the legal nature of the following assets, and what determines ownership (or is commonly considered in the market to be indicative of ownership) of each of the following asset classes (the “Covered Asset Classes”)?

A. **Third-party Time Deposits**

1. **Legal Nature**

a) **U.S.**

- The legal nature of a time deposit is that it is a debt obligation of the depository institution to repay the depositor at a given maturity date.
- Time deposits under the UCC may be categorized as time deposit accounts and certificates of deposit.
- Section 3-104(j) defines a certificate of deposit as “an instrument containing an acknowledgment by a bank that a sum of money has been received by the bank and a promise by the bank to repay the sum of money. A certificate of deposit is a note of the bank.” The term “instrument” is further defined in Section 3-104 to mean a “negotiable instrument,” which is defined, with certain limited qualifications, as “an unconditional promise or order to pay a fixed amount of money . . . if (1) is payable to bearer or to order at the time it is issued or first comes into possession of a holder; (2) is payable on demand or at a definite time; and (3) does not state any other undertaking or instruction by the person promising or ordering payment to do any act in addition to the payment of money”
- A “deposit account” under the UCC includes “a demand, time, savings, passbook, or similar account maintained with a bank” and specifically excludes “accounts evidenced by an instrument” (Section 9-102(29)).

b) **France**

- The legal nature of a time deposit varies depending on the type of time deposit, which may either be a time deposit account or a certificate of deposit.
- A time deposit account is a bilateral contract between a bank and a depositor where the bank will receive funds from the depositor in consideration for the obligation to return an equivalent amount plus interest at maturity. The depositor transfers the ownership of the cash and has a claim against the bank.
- A certificate of deposit is a negotiable debt security issued by a bank to the depositor of funds. The certificate records the amount of money deposited, the

term of the deposit and the fixed interest rate payable, and entitles the bearer to repayment under those terms. If the depositor needs money before the end of the fixed term, he can sell the certificate to a third party, usually a discount house. Certificates of deposit qualify as financial securities under Article L. 211-1 of the French Monetary and Financial Code.

c) U.K.

- A deposit is defined under the Financial Services and Markets Act 2000 (Regulated Activities) Order 2001 (the “RAO”), in summary, as a sum of money paid on terms on which it will be repaid with or without interest on demand or in agreed circumstances.
- Where a client deposits money with a bank, the client transfers ownership of the funds deposited to the bank and no longer has any proprietary interest in those funds. The client acquires a chose in action against the bank, being a right to the repayment of the funds transferred to the bank. English law is not generally prescriptive around the other features of a deposit, the key characteristic of a deposit being that the funds must be accepted on terms on which they are repayable. As noted, under the RAO definition of a deposit, the funds in question must be repayable on demand or in agreed circumstances. In the case of a time deposit, the “agreed circumstances” are that the funds are transferred to the bank on the basis that they will be repaid at the expiry of an agreed period of time. The parties may also agree to other features such as periodic payments of interest.
- A certificate of deposit is likely to fall within the description of a financial instrument. Article 77 of the RAO contains a definition of *Instruments creating or acknowledging indebtedness* for regulatory purposes. Such instruments are stated as including “certificates of deposit”. The contrast between a certificate of deposit and a deposit made with a bank is that the former is in the nature of a negotiable instrument.

2. What Determines Ownership

a) U.S.

- As suggested by the foregoing points, ownership interests in time deposits may be represented by several forms including a certificate, instrument, pass-book, statement or book-entry notation.

b) France

- In the case of the time deposit account, the ownership interest of the depositor/account holder in the deposit account is established by the agreement signed between the parties specifying the deposited amount, duration and interest rate. The claim of the depositor under the time deposit account is not assignable

and is evidenced also by a record in the books of the bank and by a bank statement remitted to the depositor by the bank.

- The ownership of certificates of deposit is established by holding a financial security. Such financial security takes the form of an electronic record in a securities account opened (i) with the issuer if the certificate is in nominative form (i.e. registered form in U.S. terms) or (ii) with an investment firm or credit institution if the certificate is in bearer form. The transfer of ownership of a certificate of deposit is effective upon the recording of the financial security in the securities account of the purchaser.

c) U.K.

- In the case of a deposit the depositor obtains a chose in action against the bank by virtue of being the other contracting party to the bank. Accordingly, the contract or the bank mandate will provide evidence of “ownership” of the deposit. In principle, the chose in action being the right to the debt due from the bank to the customer, could be assigned to another party.
- Issuers of certificates of deposit are able to issue non-material certificates of deposit into CREST (the central securities depository for the U.K.) in the form of eligible debt securities. Legal title to the certificates of deposit will be held by a nominee. The beneficial holder will need to be recorded in the books of its custodian as the owner of the certificates of deposit. Certificates of deposit may be issued and held in non-security printed form within any depository or clearing system for immobilised securities. They may be transferred within a depository or clearing system in this plain paper form. The beneficial owner will need to be recorded in the books of the custodian as the beneficial owner.

B. Interests in Funds/Collective Investment Schemes, and Private Equity Funds

1. Legal Nature

a) U.S.

- In the U.S., funds and collective investment schemes can take several different forms. For example, “mutual funds,” which are open-end funds and are regulated pursuant to the U.S. Investment Company Act of 1940, are usually organized as corporations or trusts. Mutual funds continuously issue their shares to the public and shares can be purchased from the fund directly or through an intermediary (e.g. a broker, a bank, etc.). “Closed-end funds” are similar, however, these funds offer a fixed number of non-redeemable securities which can be bought and sold in the secondary market. Banks can offer Collective Investment Funds (“CIFs”) pursuant to a trust arrangement that complies with certain regulatory requirements

including the preparation of a written “plan” addressing various prescribed matters.⁶

- Investments in private equity funds most commonly take the form of limited partnership interests. Limited partnership interests are generally characterized as general intangibles under the UCC (Section 9-102(42)). Their treatment may be different, however, if the limited partnership interest in question constitutes a “security” under Section 8-103(c), which requires that such interest be (i) traded on a securities exchange or in securities markets, (ii) by its terms, expressly governed by Article 8, or (iii) in a registered investment company (e.g., a mutual fund).
- Investments in private equity vehicles that are corporate in structure (including limited liability companies) are generally treated as shares in corporations and are treated as a “security” under the UCC.

b) France

- French collective investment schemes may either take the body corporate form or contractual partnership form. Under the corporate form they issue shares whereas under contractual form they issue partnership interests.
- Shares and partnership interests of collective investment schemes are financial securities within the meaning of Article L. 211-1 of French Monetary and Financial Code.

c) U.K.

- Collective investment schemes are defined very broadly in section 235 of the Financial Services and Markets Act 2000 as “*any arrangements with respect to property of any description, including money, the purpose or effect of which is to enable persons taking part in the arrangements (whether by becoming owners of the property or any part of it or otherwise) to participate in or receive profits or income arising from the acquisition, holding, management or disposal of the property or sums paid out of such profits or income*”. Certain other requirements must also be satisfied in relation to the characteristics of the arrangements, but the extract from the definition demonstrates that all arrangements are caught irrespective of their nature. That said, the most commonly encountered schemes include unit trusts, limited partnerships and open-ended investment companies (“OEICS”). Limited partnerships are most commonly used in private equity investments. Unit trusts and OEICS are often used in the case of retail funds, including UCITS funds. Interests in vehicles that are corporate in structure (e.g., OEICS) are treated as shares.

⁶ See 12 CFR 9.18.

- Both shares and units in collective investment schemes are “securities” within the meaning of Section 3(1) of the RAO.

2. What Determines Ownership

a) U.S.

- In the case of mutual funds, the fund’s transfer agent maintains an electronic record of the investors in the fund. If the mutual fund shares were purchased directly from the fund, ownership of the shares may be reflected in the name of the purchaser. If the shares were purchased through an intermediary, ownership may be recorded in the nominee name or “street name” used by such intermediary. An investment in a CIF is known as a “participating interest” and each bank sponsoring a CIF is required to maintain a detailed ownership register.
- For private equity funds, the interest of each initial investor in a fund is typically evidenced by a subscription agreement between the investor and the fund.
- Transfers of investments are consummated through a transfer agreement, to which the fund or the general partner is often a party in addition to the transferor and the transferee, as well as a purchase and sale agreement between the seller and buyer of the interest in the fund.

b) France

- The ownership of shares or partnership interests in collective investment schemes is established by holding a financial security. Such financial security takes the form of an electronic record in a securities account opened (i) with the issuer if the share or partnership interest is in nominative form or (ii) with an investment firm or credit institution if the share or partnership interest is in bearer form. The transfer of ownership of the share or partnership interest is effective upon registration of such financial securities in the securities account of the transferee (purchaser).

c) U.K.

- What determines ownership will depend on the nature of the arrangements that constitute the collective investment scheme. For example, open-ended investment companies are required to maintain a register of persons who hold shares in the company. A unit trust will maintain a register of unit holders, which provides evidence of the title to the units. A subscription agreement entered into by an investor seeking to become a limited partner in a limited partnership will evidence the partnership interest of that investor.

C. Bank Loans

1. Legal Nature

a) U.S.

- The legal nature of a bank loan is that it is a contractual debt obligation.
- A document evidencing a bank loan will be categorized as an instrument under the UCC where such document constitutes a “promissory note,” which the UCC defines as “an instrument that evidences a promise to pay a monetary obligation, does not evidence an order to pay (e.g. a check), and does not contain an acknowledgment by a bank that the bank has received for deposit a sum of money or funds” (Section 9-102(65)). If the document does not constitute a promissory note under the UCC, it may still be a writing that evidences a payment obligation and otherwise satisfies the criteria for what constitutes an “instrument,” as set forth in the discussion of Third-party Time Deposits above.
- Interests in bank loans may also take the form of participations, which allow a lender to transfer all or part of its beneficial interest in a loan to one or multiple participants while remaining a counterparty to the loan agreement and retaining the rights and obligations of a lender thereunder.
- Loans, to the extent not evidenced by an instrument (as defined in the UCC), and participations in loans are likely to be considered general intangibles, and specifically, payment intangibles (which term is described in the discussion of Derivatives below).

b) France

- A bank loan is an agreement whereby a bank transfers the ownership of cash to the borrower against the obligation to repay in one or several instalments such amount plus interest. The borrower therefore owes a monetary debt towards the bank.
- Interests in bank loans may also take the form of participations, which allow a lender to transfer all or part of its beneficial interest in a loan to one or multiple credit institutions while remaining a counterparty to the loan agreement and retaining its portion of rights and obligations of a lender thereunder.

c) U.K.

- The legal nature of a bank loan is a contractual arrangement whereby a borrower agrees to repay to a bank the funds advanced by the bank. The loan will usually require payment of interest from the borrower. The bank has a contractual right against the borrower to enforce repayment and/or payment of interest. Lending may take place on a syndicated basis whereby there are multiple lenders to a single borrower.

2. What Determines Ownership

a) U.S.

- The loan documentation among the parties determines the interest of the lender and borrower in the loan agreement. This documentation may be in the form of a promissory note and/or a loan agreement. An assignee's ownership interest will be reflected by an assignment and assumption agreement and a participant's interest will be evidenced by a participation agreement.
- The Loan Syndications and Trading Association ("LSTA") in the U.S. has created standardized documentation for the transfers of loan assets. Confirmed and binding trades of loan interests are documented within one to two days after the trade date using a form document called a "Confirm," which includes all of the economics of the trade and identifies the underlying loan asset. Typically within several days thereafter, in the case of an assignment, the parties execute and deliver an assignment and assumption agreement (a form of which is proposed by LSTA), which is typically attached as an exhibit to the loan agreement. In the case of a participation, the LSTA Standard Terms and Conditions for Participation Agreement is used, which document again remains as is, along with the corresponding Transaction Specific Terms. Though the trade Confirm is a binding agreement, it is superseded by the execution and delivery of the foregoing transfer documentation. In addition to the transfer documentation, the seller also delivers a funding memo to the buyer which contains sufficient information to describe the underlying loan including principal, tenor, purchase price, CUSIP, if any, interest rate, etc.

b) France

- Ownership interests in a bank loan are determined by contractual documentation. Rights and obligations under loan agreements may be transferred through assignment or novation agreements.
- Syndication among financial institutions is effected through contractual documentation entered into by the parties. The standard documentation in France is based on the Loan Market Association forms. Such standard documentation is not mandatory. Under such documentation, the transfer of rights and obligations of a lender shall take the form of an assignment of rights and accession to the loan documentation.

c) U.K.

- Ownership interests in a bank loan are determined by the loan contract entered into between the parties, and those ownership interests may be transferred through an assignment or novation agreement.

- With respect to syndicated facilities, the ownership interests are governed by the contractual documentation entered into between the parties. The Loan Market Association publishes template loan agreements which are commonly used as a starting point for loan documentation in the U.K. However, the Loan Market Association template agreements are not mandatory. Under such documentation, the most common form of transferring the lender's rights and obligations take the form of an assignment or novation.

D. Derivatives

1. Legal Nature

a) U.S.

- The legal nature of a derivative is that it is a contractually vested financial interest which can generate both “assets” and “liabilities” during the term of the contract.
- While the UCC does not specifically reference derivatives contracts as an asset class, given their nature as executory contracts under which, post-netting, one or the other party would likely have a payment obligation on a payment date, such cash-settled derivatives contracts would likely constitute “general intangibles” and specifically “payment intangibles.” Payment intangibles are defined as general intangibles “under which the account debtor’s principal obligation is a monetary obligation” (Section 9-102(61)). A right to receive cash in connection with a physically settled derivatives contract would likely be characterized either as a general intangible or an account (but not a payment intangible since the debtor’s principal obligation of delivering the underlying physical asset would not be a monetary obligation). And finally a right to receive a physical asset in connection with a physically settled derivatives contract would likely be characterized as a general intangible.

b) France

- Derivatives are financial instruments that are either financial securities or financial contracts. Their value depends on the value of the underlying assets.
- Derivatives in the form of financial contracts are contractual agreements which may, under certain conditions, be traded on regulated/organized markets or on OTC markets.

c) U.K.

- In broad terms, derivatives are financial instruments the value of which is determined by reference to the fluctuations in value of and underlying asset, benchmark or other variable. Although the term “derivative” is not defined under the Financial Services and Markets Act 2000, the RAO lists various categories of

financial instruments that constitute derivatives. These instruments are options (article 83 of the RAO), futures (article 84 of the RAO), contracts for differences (article 85 of the RAO) and rights to and interests in investments (article 89 of the RAO). In addition to this it should be noted that the Markets in Financial Instruments Directive (“MiFID”) in Annex 1 Section C lists various categories of financial instruments. These include a broad range of derivative financial instruments. U.K. legislation gives effect to both the U.K. and MiFID definitions.

- Derivatives are contractual investments and the nature of the rights of the parties to the transaction are contractual in nature. Derivatives may be collateralized involving the transfer of collateral from one party to another. Derivatives may be OTC or may be standardized contracts traded on an exchange.

2. What Determines Ownership

a) U.S.

- The ISDA Master Agreement contains the standard terms and conditions central to any OTC derivatives transaction. Any modifications to the Master Agreement are made via the Schedule to the Master Agreement and, together with the Credit Support Annex, applicable to the extent the transaction is being supported by collateral, contain the transaction-specific terms.
- Transfers or novations of derivatives contracts are effected most commonly by entry into the ISDA Form Novation Agreement by the transferor, transferee and the remaining contract party.

b) France

- Ownership of derivatives in the form of financial securities is established by holding a financial security. Such financial security takes the form of an electronic record in a securities account opened (i) with the issuer if the financial security is in nominative form or (ii) with an investment firm or credit institution if the financial security is in bearer form. The transfer of ownership of the financial securities results from the registration of such securities in the securities account of the transferee.
- The rights and obligations under a derivative in the form of a financial contract are usually set forth in standard documentation based on templates issued by associations such as ISDA or the French Banking Federation. The French practice does not call for transfers of derivatives financial contracts, but the party to such contract that wants to exit will enter into a new derivative financial contract the terms and conditions of which will be similar, so that the rights and obligations of both agreements trigger a technical set-off from which will arise a gain or loss.

c) U.K.

- As noted, derivatives are contractual in nature, and the contract sets forth the rights of the parties. OTC transactions will generally involve a framework master agreement (such as the ISDA Master Agreement) with specific transactions taking place pursuant to the terms of individual confirmations. Transfers or novations of derivative contracts are effected most commonly by entry into the ISDA Form Novation Agreement by the transferor, transferee and the remaining contracting party.
- Standardised transactions on a market or exchange will take place pursuant to the rules of the exchange which will provide specifically for the rights of the contracting parties (together with the standardized contracts). A client may enter into a back to back contract with the exchange/clearing member.

E. Precious Metals

1. Legal Nature

a) U.S.

- The legal nature of a precious metal is that it is a “good,” as such term is defined by Section 2-105 of the UCC, which essentially describes goods as moveable property.
- If the collateral is instead a precious metal certificate, it may be considered a “document of title” per Section 1-201(16) if it is a document “(i) that in the regular course of business or financing is treated as adequately evidencing that the person in possession or control of the record is entitled to receive, control, hold, and dispose of the record and the goods the record covers and (ii) that purports to be issued by or addressed to a bailee and to cover goods in the bailee’s possession which are either identified or are fungible portions of an identified mass.” Documents of title may be in tangible or electronic form, and “electronic document of title” is defined in Section 1-201(16) to mean “a document of title evidenced by a record consisting of information stored in an electronic medium.”

b) France

- Precious metals are tradable assets and are deemed to be fungible goods. It means that such goods are not individualized but can be exchanged for the same amount and kind of goods.

c) U.K.

- Precious metals are physical assets. An investor may hold precious metals on an allocated or an unallocated basis. Given practical issues around storage it is

usually the case that investors will use a third party to store precious metals held for investment purposes.

2. What Determines Ownership

a) U.S.

- Typically, possession of the metal or the certificates and supporting sale/transfer documentation evidencing how ownership interest in the same was acquired demonstrates ownership in such assets. This is similar to the manner in which title transfers of other objects of tangible personal property in the ordinary course of business are substantiated.

b) France

- The ownership of the precious metal is constituted by its physical possession.
- The transfer of ownership of precious metal is effective upon remittance to the transferee and may be evidenced by sale/transfer agreements.

c) U.K.

- The nature of the investor's ownership rights will depend on whether the metal is held for the investor on an allocated or unallocated basis. Where the precious metals are held on an allocated basis, the investor will have a proprietary right to the allocated metal. The person providing the storage facilities for the metal will be a bailee of the precious metals and will not acquire rights to them.
- Where precious metals are held on an unallocated basis, then the investor may have no more than a contractual right to call for the delivery of metals to an equivalent quantity to that stored. This will depend on the way in which the person providing the storage facilities accounts for the metals and what the agreement is with the investor. Generally, however, the person providing the storage services will not have any proprietary right to the metals and will again be a bailee. The investor will have an interest in the fungible pool held for all clients.
- In some cases a custodian of metals will hold metals as trustee. This will only arise where the arrangements are structured in this way.
- The evidence of the investor's interest will be the agreement that the investor has with the person providing the storage of the metals. In the case of Exchange Traded Funds ("ETFs") or other funds relating to metals (e.g., gold ETFs), the investor may not have a property interest in the underlying metals, but merely a contractual right to benefit from movements in the price of the metals. In some cases the investor may acquire a stapled security where the investor acquires a security with a stapled right to the underlying metal (e.g., a stapled trust interest).

II. Possession/Control: Ownership Interest and Asset Information

A. Ownership Interest: Who has possession of, or control over, that which constitutes or evidences an ownership interest in each of the Covered Asset Classes?

1. Third-party Time Deposits

- Under **U.S. law**, in the case of certificates of deposit, the party holding the physical certificate or a bailee possessing the certificate on behalf of the payee possesses the physical evidence of the ownership interest in a certificate of deposit.
- Under **French law**, the party that has possession and control over a certificate of deposit remains the account holder of the securities account in which the certificate has been recorded.
- Under **U.K. law**, evidence of ownership depends on the nature of the certificate of deposit. If the certificate of deposit is a paper bearer certificate of deposit, the owner is the party holding the physical certificate and the holder of the certificate therefore also possesses the physical evidence of the ownership interest in the certificate of deposit. If the certificate is held in dematerialised form within a depository, the legal owner will be the nominee and the beneficial owner will be the party recorded in the books of the custodian. The custodian will therefore possess the evidence of the ownership interest in such certificate of deposit.
- In the case of deposit accounts, under U.S., French and U.K. law, each of (i) the depository bank with whom the account is established and whose records reflect the existence and beneficiary of the account and (ii) the account beneficiary holding any passbook tied to the account or possessing any other information permitting access to the account (e.g. account number, passwords, etc.) possesses the physical evidence of the ownership interest in the deposit account.

(i) Extent to Which Infrastructure Closes Gaps in Asset Custody.

1. Custodians provide safekeeping and supervisory services to customers whose third party time deposit assets they hold in custody. However, unlike with some of the other asset classes discussed in this report for which considerable infrastructure support exists (e.g. funds, bank loans and derivatives), there are few, if any, infrastructure tools available, of which custodians are aware, that better enable them to satisfy their safekeeping and supervisory responsibilities towards their clients owning third party time deposit assets. Consequently, infrastructure does little to help custodians close any custody gap that exists with respect to these assets.

2. Interests in Funds/Collective Investment Schemes, and Private Equity Funds

- Under **U.S. law**, mutual funds must appoint a transfer agent that is registered with the SEC under the Securities Exchange Act of 1934, as amended, to record changes of ownership, maintain the issuer’s record of security holders, cancel and issue certificates and issue dividends. Alternatively, banks may provide similar services to mutual funds by registering with their appropriate federal or state bank regulator. In the case of collective investment funds, banks must maintain the evidence of ownership pursuant to the applicable trust agreement and “plan.” For limited partnerships, the general partner and the investor will each typically have the subscription agreement and any transfer agreement evidencing a sale or assignment. Where a fund is a limited liability company or other corporate entity, a fund administrator or other independent party may act as transfer agent, and ownership is maintained and represented by means similar to those that apply to publicly offered funds, albeit in a less formal regulatory environment.
- Under **French law**, the person that has possession and control over the shares or partnership interests of collective investment schemes remains the account holder of the securities account on which the shares or partnership interests have been recorded.
- Under **U.K. law**, evidence of ownership depends on the nature of the arrangements that constitute the collective investment scheme. For example, for open-ended investment companies, the person that is recorded on the register of shareholders will typically be issued a share certificate to evidence ownership of the shares in the open-ended investment company. A unit trust will maintain a register of unitholders which provides evidence of title to the units. In respect to a limited partnership structure, the general partner and investor will each typically have the subscription agreement to evidence ownership of the partnership interests, including any transfer agreement in the event of a transfer/assignment of such interests.
- The ownership interests in private equity company portfolio assets are more commonly held by the owners of such interests in their own names rather than in the nominee name of a custodian bank. By contrast, ownership interests in fund assets are typically held by a custodian acting as a nominee. Where custodian banks do hold such assets in a nominee name, they are thereby able to monitor changes in asset ownership. We note, however, that custodians holding such assets in nominee name may very well decide to discontinue serving as a nominee to avoid the imposition of liability for loss of assets under AIFMD by virtue of its determination that such an asset held by a custodian as nominee would be deemed “in custody.”

(i) *Extent to Which Infrastructure⁷ Closes Gaps in Asset Custody.*

⁷ Includes market infrastructure in the U.S. and Europe.

1. Fund/SERV by DTCC

- a. Fund/SERV, a product of DTCC, is a centralized platform with standardized communication protocols whereby fund companies, banks, trust companies, third-party administrators, broker dealers and other distribution firms can complete order entry (purchases, exchanges and redemptions), confirmations, registrations and money settlement. Products served include funds regulated by the Investment Company Act of 1940 (including loads, no loads, open-end funds, money market funds), and other pooled investment products (e.g. non-US funds including UCITS⁸, SICAVs⁹, ICVC¹⁰ and AUTs¹¹, bank collective investment funds, unit investment trusts and US state qualified tuition programs). Fund/SERV does not serve closed-end, exchange traded funds.
- b. Fund/SERV acts as a conduit for the transmission of information between funds, brokers and/or investors and third parties. Fund/SERV is not a data repository and transaction documents for transactions consummated through Fund/SERV may not be transmitted or stored on Fund/SERV.

2. Alternative Investment Products (AIP) by DTCC

- a. AIP, also offered by DTCC, caters to market participants including asset managers, custodians, administrative agents and broker dealers to provide end-to-end processing of private equity, hedge funds, fund of funds, non-publically traded real estate investment trusts (REITs) and limited partnerships. Through AIP, trading firms can transmit trade and customer-specific information, purchases and redemptions/tender offer transactions, and the exchange or “switch” of shares and monies within the same fund family. Funds can initiate the transmission of redemption and tender-offer transactions, the transfer of shares and monies within the same fund family and can transmit various types of information, including relating to the fund profile, commission and fee reporting (including settlement), payment information, periodic (daily, weekly and/or monthly) position and performance information, and actual or estimated net asset values for individual securities within a fund family.

⁸ Undertakings for collective investment in transferable securities.

⁹ *Société d'investissement à capital variable*.

¹⁰ Investment company with variable capital.

¹¹ Authorized unit trust.

- b. The “Paper Workflow” functionality on AIP permits users to transmit documents in digital format along with their orders or other communications. Such documents remain available for collection by the intended recipient for a period of seven business days. AIP, like Fund/SERV, is also not a data repository and does not permit the storage of transaction-specific or other underlying documentation. No documentation evidencing confirmed or settled trades is generated by AIP.

3. FundSettle by Euroclear

- a. FundSettle, a product of Euroclear, is a platform that brings together third-party fund distributors with investors, brokers, fund management companies, custodians and transfer agents for automated fund transaction processing and servicing. FundSettle serves cross-border, offshore and domestic funds from 26 domiciles. Funds organized as private partnerships or other organizational forms, the ownership interest in which is neither represented by shares nor units, are ineligible. FundSettle supports funds organized in a corporate form (e.g. SICAV or OIEC¹²) or as trusts (e.g. FCP¹³ or unit trusts), be they mutual funds, money market funds, hedge funds or exchange-traded funds. FundSettle allows trading, settlement, asset servicing and reconciliation of such funds. The platform supports different communication channels, such as SWIFT, an online browser, and secured file transfer. In line with fund market practices, FundSettle reflects securities positions on a trade-date basis, while the cash is processed on settlement date.
- b. As described in detail in Section (II)(B)(2)(i)(3) below, FundSettle is a data repository. However, since ownership in the fund types served by FundSettle is evidenced by book-entry rather than by means of documents evidencing ownership, FundSettle accordingly does not permit the storage of documents. FundSettle provides clients with statements of holdings on a daily basis. The information is provided electronically (either through SWIFT or an online browser). No paper document is required.

4. Vestima by Clearstream

- a. Vestima is a platform that permits the trade, settlement and reconciliation of funds globally. The DVP exchange of cash and

¹² Open-ended investment company.

¹³ *Fonds commun de placement*.

fund units occurs via Clearstream's CreationOnline portal (where settlement takes place) through an online browser, secured file transfer protocol (SFTP) or SWIFT messaging. Similar to FundSettle, Vestima supports fund products that are unitized as shares, units of trusts or other securities that can be transferred via book-entry in Clearstream (including mutual funds, hedge funds, money market funds and exchange traded funds).

- b. As described in detail in Section (II)(B)(2)(i)(4) below, Vestima is a data repository. Unlike FundSettle, Vestima does permit the storage of documents by customers. However, Vestima only caters to fund entities the ownership interests in which can be transferred by book-entry methods. Therefore, while document storage is available, it is not likely that Vestima customers would utilize this service to store documents evidencing their ownership interest in assets traded through Vestima. Documents stored on Vestima are available for online retrieval for a period of 13 months. However, such documents can subsequently be accessed for as long as ten years.

(ii) Remaining Asset Custody Gaps

1. While the products discussed above make information about fund assets available to custodians to varying degrees and assist with the booking of transactions in fund assets, there presently exists no independent repository for fund assets (i.e. a "control location"), either in the U.S. or Europe, that (i) controls the flow of transactions with a standardized naming convention, (ii) supervises DVP settlement, and (iii) provides access to the relevant, independent evidence of asset ownership. The absence of an infrastructure solution that gives custodians greater access and or control over fund assets is of particular concern in areas of existing practice in the custody market where custodians hold fund assets in their customers' names rather than in the name of a nominee or of the custodian bank for the benefit of the customer. Increasingly, custodian banks are choosing to hold fund assets in the latter manner to increase their control over such assets, mainly with regard to the disposition of such assets.
2. In the case of book-entry fund interests (e.g. interests in mutual funds, money market funds, or exchange-traded funds), asset verification gaps can be either closed or significantly minimized to the extent that the custodian is able to reconcile its records with either (i) the transfer agent or other agent responsible for maintaining the fund's records or ownership register or (ii) a data repository that is connected to such agents (e.g. FundSettle and Vestima).

3. Non-book-entry funds and/or collective investment schemes that are not served by any infrastructure platform would require alternative means for custodians to verify their customers' ownership of such assets. This might be necessary, for example, in the European context where Vestima and FundSettle only serve book-entry fund assets, or in the U.S. in cases where infrastructure products such as AIP are not being used. In lieu of supportive infrastructure for these types of assets, custodians must ensure that they receive or otherwise have access to the requisite ownership documents from their customers.
4. To the extent that fund assets are not held by the transfer agent or other intermediary in the name of the custodian for the benefit of the customer, cash disbursements could be made with respect to the asset or fraudulent transfers conducted with the custodian gaining knowledge, at best, only after the fact. Custodians should consider weighing the risks and benefits of holding fund assets, including private equity fund assets, in nominee name, recognizing that any liability to which the custodian bank might be exposed varies across jurisdictions.
5. In any case, the infrastructure products serving alternative fund assets (e.g. non-book-entry funds and collective investment schemes) do not address the challenge that custodian banks face in assessing the authenticity of the documents provided to them purporting to evidence ownership of such fund assets by their customers.

3. Bank Loans

- The agent of the bank syndicate and potentially the other loan parties will have copies of the loan documents (i.e. the loan agreement and/or promissory note and related loan and security documentation). In the case of an assignment, the assignor, assignee and agent will have a copy of the assignment and assumption agreement and any related transfer documentation, and in the case of a participation, the seller and buyer of the participation will have copies of the participation purchase agreement.

(ii) Extent to Which Infrastructure¹⁴Closes Gaps in Asset Custody.

1. Primary Market Transactions¹⁵: Lenders, custodians and other participants seeking to access loan documentation may be able to do so via web-based transaction and document management tools, if Agents

¹⁴ Includes market infrastructure in the U.S. and Europe.

¹⁵ "Primary Market Transactions" includes bilateral loans and original syndicated loan transactions, whether or not using LSTA/LMA form documents.

choose to use them. Document management tools are split into two distinct categories:

- a. those focused on credit agreements and deal related documents. Examples of these tools include DebtDomain, SyndTrak and Intralinks. Although Agents can grant access to the folders on these sites containing the relevant loan documentation to lenders and custodians, more typically, custodians are provided with their customers' loan documentation through direct electronic transmission (i.e. by e-mail or facsimile) rather than by means of granting access to the aforementioned document sites; and
- b. those focused on the lender specific settlement documentation required for the issuance and placement of primary market transactions. The primary example is Markit ClearPar, which enables the generation, execution and dissemination to each specific lender of the documentation required for settlement.

Currently, there does not appear to exist any infrastructure supporting primary market transactions that integrates the ability to store and manage transaction documents along with transaction processing and settlement. However, the online tools listed above do offer a means by which custodians can at a minimum access stored documents evidencing the bank loan assets of their customers. These documents are typically available through the aforementioned services for a period of seven years.

2. Secondary Market Transactions¹⁶: Lenders party to secondary loan transactions and their custodians or other participants may also maintain asset transfer documents on web-based transaction and document management tools, again, to the extent that Agents choose to use them. One prevalent example is Markit ClearPar, which, in addition to being a document repository, is also a trade workflow, matching and settlement instruction platform. Linking each of the parties to a transaction (including the Agent, the buyer, the seller and, with permission, a custodian), a trade processing platform (such as Markit ClearPar), and counterparty accounts permits the transfer of cash and legal ownership of transferred assets to occur simultaneously on the settlement date. Custodians typically require copies of the asset transfer documents to be included in the "trade packs" to be provided to them as a condition to the release of funds in a purchase and sale transaction. Although these documents are typically provided to custodians by electronic transmission (e.g. e-mail or facsimile) in

¹⁶ "Secondary Market Transactions" refers to transfers of loan assets using LSTA/LMA documentation as described in Section I(C)(2)(a).

connection with the funding of the transaction, they could be made available to custodians through Markit ClearPar or other such electronic platforms. Ultimately, custodians can gain access to the asset transfer documents whether or not they are participants in an electronic document management tool such as Markit ClearPar.

Unlike in the case of Primary Market Transactions, which are not currently supported by infrastructure that provide DVP capability, the link between DTCC's Cash on Transfer service and Markit ClearPar, which does provide DVP capability, suggests the potential for the market to broadly embrace a more integrated platform whereby transaction documents are made effective and available among transaction participants (including custodians) simultaneous with trade settlement. Functionality to allow delivery versus payment is in the testing phase with LoanReach (which tool is further discussed in Section II(B)(3)(i)(2) below). However, rather than the actual, effective asset transfer documents being made available through LoanReach, it is contemplated that an authenticated instruction would be issued to the Agent directing it to record the transfer of ownership interests in its books.

(iii) Asset Custody Gaps that Persist

1. With regard to the gap in asset verification, although the current prevailing practice is for custodians to acquire the requisite bank loan asset documents from their clients, much of that gap can be closed via document management sites, provided Agents and broker dealers use them and custodians gain access. Close to 100% of the leveraged loan market is reportedly served by online document management sites (e.g. largely DebtDomain, SyndTrak and Intralinks in the primary market and primarily Markit ClearPar, with reportedly approximately 95% of market share, in the secondary market). Coverage is less for smaller and middle-market deals, bilateral loans and participations. In the absence of such document management sites, lenders and custodians must ensure that they receive the requisite documents via e-mail, post or otherwise.
2. In the case of primary and most secondary market transactions, both whether to use any online document management tool for a given transaction and which one to use remains a choice of the Agent banks and the broker dealers respectively. The combination of this circumstance and the sheer number of agents active in the market can create substantial variations in the processes and procedures of completing transactions.

3. In the case of bank loan assets, transfer documents are often finalized and executed by the parties ahead of the payment and receipt of funds. The risks presented by this time lag, including failure to make timely payment or fraudulent conveyance, can be mitigated by means of a DVP mechanism, such as Cash on Transfer, which links the execution of asset transfer documentation directly with the receipt or payment of funds. However, Cash on Transfer's market share (and that of any similar products) is very limited and must grow significantly to close this gap.
4. Generally speaking, apart from the document repository support described above and the product solution provided through Cash on Transfer, there is less infrastructure support for bank loans than for the other asset classes discussed in this report. There is no prominent infrastructure platform that serves as a comprehensive, independent asset and information repository for bank loan assets in the primary and secondary markets and that facilitates transactions. Accordingly, for these other areas of support, custodians are only able to access documents through the document repositories populated by the Agent banks.
5. In any case, the infrastructure products serving the market for bank loan assets do not address the challenge that custodian banks face in assessing the authenticity of the documents provided to them purporting to evidence the ownership of such bank loan assets by their customers.

4. Derivatives

- Under **U.S. law**, the derivatives contract parties and/or their respective broker dealers will have the signed ISDA documentation reflecting the interests of the respective parties. Where collateral support is offered, often third party derivatives collateral management agents are engaged to provide administrative services, including to ensure that valuation calculations required under the ISDA Master Agreement are correctly performed and that appropriate collateral positions are maintained.
- Under **French law**, the person that has possession and control over derivatives in the form of financial securities is the account holder of the securities account in which the derivatives in the form of financial securities have been recorded.
- Under **U.K. law**, the derivatives contract parties and/or their respective broker dealers will have the signed relevant framework agreement (e.g. ISDA documentation) reflecting the interests of the respective parties.

(i) *Extent to Which Infrastructure¹⁷ Closes Gaps in Asset Custody.*

1. Global Trade Repository (GTR) by DTCC

- a. GTR, a product of DTCC, is a trade repository for derivatives and covers cleared and non-cleared OTC derivatives. The kinds of derivatives served include credit-default swaps, interest rates, equities, FX and commodities. GTR also covers listed derivatives, but custodians often access reliable records through margin statements from clearing brokers.
- b. GTR does not support the storage of principal underlying documents such as the ISDA Master Agreement or the Credit Support Annex. DTCC is in the process of establishing a Client Data and Documentation service that will permit the storage of such underlying documents. However, GTR does permit the storage of images of transaction/trade-specific documentation such as the ISDA Form Novation Agreement and trade confirmations.
- c. Upon the requisite permissions being granted, custodians and other third parties may access documentation available on GTR. However, in circumstances where a given fund has multiple custodians, it is not common that custodians are granted access to such fund accounts on GTR. Custodians may be permitted by their customers to upload or modify documents or information on GTR on their customers' behalf, although this is not typically done. Documents for standard transactions are available within seconds or minutes after the completion of a trade, but can take several days to become available in the case of more complex, non-standard transactions. Documents are stored on GTR for as long as is required by regulators (the practice in the U.S. and in Europe is reportedly to store such documents for a period of 10 years).
- d. GTR is reportedly linked to over twenty swap execution facilities (SEFs), which include inter-dealer brokers (e.g. Tullet and ICAP) and electronic trading platforms (e.g. Bloomberg and MarketAxess), whereby electronic representations of the trade confirms issued by such SEFs for trades executed on such SEFs can be immediately uploaded to GTR and made available to GTR users. In instances of highly complex derivative transactions, SEFs will report to GTR an electronic summary of the key trade terms

¹⁷ Includes representative market infrastructure in the U.S. and Europe. Other trade repositories are available and emerging as noted in Section II(B)(3)(ii) infra.

and attach an image of the full confirmation. Three jurisdictions (Europe, the US and Japan) are “live” in the reporting of OTC derivative transactions. GTR’s market share reportedly is approximately 90% of non-cleared transactions. For greater access to transfer documents pertaining to cleared transactions, Custodians would need to look elsewhere (including e.g. futures commission merchants (FCMs)). In the case of commodities, GTR’s market share reportedly is approximately 50%, with the other major commodities trade repository being the International Commodities Exchange.

- e. In the case of Credit Default Swaps (CDSs) in particular, DTCC’s Trade Information Warehouse (TIW) reportedly contains 98% of all CDS contracts globally and reportedly maintains the most current CDS contract details in the form of “gold records” for both cleared and non-cleared bilateral CDS transactions. “Gold records” are intended to replace the trade confirmation or other document evidencing the trade between parties and constitute an agreement between the parties that such gold record will represent the entire agreement between the parties to the trade and have the same legal effect as that of the trade confirmation or other fully executed transaction document. Gold records are peculiar to CDSs and, among other things, contain the schedule of payments due under the contracts. Given that DTCC provides asset servicing for CDSs, which is a service not provided for other derivative assets, DTCC must ensure that the gold records contain the complete, definitive set of the governing terms agreed by the parties to be so that DTCC may correctly discharge its service. Gold records therefore constitute an authoritative source for asset verification and reconciliation.¹⁸

2. REGIS-TR by Clearstream

- a. While GTR has been functioning in the marketplace, REGIS-TR, a product of collaboration between Clearstream and Iberclear, has just gone “live” in the first quarter of 2014. REGIS-TR will serve OTC derivatives and also listed derivatives.
- b. REGIS-TR will not have the functionality to permit the storage of transaction documents within the repository and will only contain data concerning the trades reported to it.

(ii) Remaining Asset Custody Gaps

¹⁸ We note that not all custodians rely on Gold Records for their asset verification purposes.

1. GTR, which is presently active in the marketplace, serves credit-default swaps, interest rates, equities, FX and commodities. Types of derivatives that are out of network and which are not served by infrastructure products such as GTR or, in the future, by REGIS-TR would presumably present asset verification gaps. In lieu of these (and any other similar tools), custodians must ensure that they receive the requisite ownership documents from their customers. In the case of any trades not conducted on an SEF, including bilateral trades, a custodian must rely on the customer or its counterparty to report that trade and submit the trade confirmation and related documentation to the relevant infrastructure platform.
2. For instances where GTR is not connected to an SEF on which a custody bank's customer has consummated a trade, the custodian would presumably then be dependent on its customer or the trade counterparty to provide the trade confirm and trade related information to the custodian, unless there is another source for this information. In the case of an SEF that does not supply the physical trade confirm or other ownership documentation to GTR, the custodian would be dependent on its customer to supply the same.
3. Where a given customer has multiple custodians and therefore does not grant to its custodians access to GTR, or in other circumstances in which customers do not grant custodians access to GTR, such custodians must rely on their customers to supply the asset ownership documentation.
4. Custodians with customers using REGIS-TR and needing access to copies of the transaction documents evidencing their customer's ownership interest in such customers' derivative assets will need to seek such documents from their customers or identify alternative means of accessing and maintaining such documents.
5. With the exception of perhaps Gold Records described above, which are created and maintained by DTCC for credit-default swaps and which may not be relied upon by all custodians, the infrastructure products serving derivatives assets do not address the challenge that custodian banks face in assessing the authenticity of the documents provided to them purporting to evidence ownership of such derivatives assets by their customers. The extent to which Gold Records displace the original CDS documentation as dispositive legal evidence of the rights of the swap parties is a question that is beyond the scope of this report.

5. Precious Metals

- In the case of ownership of the actual metal or precious metal certificates, the owner him or herself or the depository institution with which the metal or the certificates have been deposited for safekeeping likely possess and control the metal or the certificates and whatever sale/transfer documentation that reflects how the owner gained title to the same.

B. Asset Information: Who has possession of, or control over, information related to the identification, ownership, valuation, and income of each of the Covered Asset Classes?

1. Third-party Time Deposits

- The account beneficiary or an investment manager, if any, trading interests in time deposits on behalf of the account beneficiary as well as the depository bank are the parties that will have all relevant information concerning the time deposits including the account balance, maturity, interest rate, early withdrawal penalties, negotiability, etc.

(i) *Extent to Which Infrastructure Closes Gaps in Asset Information.*

1. As mentioned with respect to gaps in asset custody in subsection (A) above, the limited availability of infrastructure tools catering to third party time deposits means that, presently, infrastructure cannot meaningfully help custodians to close any asset information gaps that may exist.

2. Interests in Funds/Collective Investment Schemes, and Private Equity Funds

- In the case of mutual funds, as described above, transfer agents or banks that may be providing the services typically provided by transfer agents must maintain complete information on ownership of the fund. With respect to CIFs, the bank administering the CIF would have an accurate record of the participants in the trust.
- With limited exceptions, since the general partner must consent to any transfer by any limited partner of its interest in the fund, the general partner, or the fund manager, who often serves as the fund's general partner, is aware at any given time of the identity and remaining commitments of the investors in the fund.
- Investors serviced by portfolio managers typically require in their fund documents that their portfolio manager be authorized to communicate on their behalf and be provided with copies of all fund documents and correspondence. Such portfolio managers would therefore also be privy to the investor's fund positions.
- Where a fund is a limited liability company or similar corporate fund, a fund administrator or other independent party may act as transfer agent, and ownership

is maintained and represented by means similar to those that apply to publicly offered funds, albeit in a less formal regulatory environment.

- Typically, investments by a private equity fund in portfolio companies are held through one or more interposed special purpose vehicles (“SPVs”), which make asset monitoring challenging. The private equity funds holding ownership interests in the SPVs will be able to control asset information via the status of shareholders/unit-holders notably evidenced by the shareholders register. Given the market practice to date of appointing custodian banks as nominees to hold fund portfolio investments, a custodian bank would generally have access to information about such portfolio assets for oversight services that it has agreed or is obligated to provide. In the event that a custodian discontinues serving as a nominee for the reasons explained in Section II(A)(2) above, then the custodian would be reliant on third party information and sources such as asset managers, audited financial statements, updated fund documentation, board/governance committee minutes, legal repositories, and accounts/records held by other third parties to acquire the asset information it needs.
- In addition to reporting requirements under the applicable GAAP (whether US, IFRS, or other), the International Private Equity and Venture Capital Board’s (the “IPEV Board”) proposed Investor Reporting Guidelines (April 2012) sets forth the “essential disclosures” and “additional disclosures” that the IPEV Board expects fund managers should be able to provide to their investors to avoid the need to consult the fund formation documents. This information includes the fund’s legal structure and investor-specific information including total and unfunded commitment, percentage ownership, cumulative distributions, cumulative realized portfolio gains and losses, and capital account at “fair value” (as defined in the guidelines) at the end of the reporting period.

(i) Extent to Which Infrastructure¹⁹ Closes Gaps in Asset Information.

1. Fund/SERV by DTCC

- a. As mentioned above, Fund/SERV acts as a conduit for messaging and trade execution between brokers and funds. Fund/SERV does not itself maintain a database of information on trades or customer assets. Fund/SERV and Networking, a complementary additional DTCC service to share non-trade related data, collect information submitted to it in bulk by funds, disaggregates such information and makes it available to the relevant Fund/SERV users. Fund/SERV can relay information such as for completed trades, while Networking shares client positions and valuation as frequently as daily. However, the frequency with which

¹⁹ Includes market infrastructure in the U.S. and Europe.

information is made available to Fund/SERV and Networking, and therefore the customer, is determined pursuant to the arrangement that exists between the fund itself and the broker. As a general matter, Fund/SERV transactions are included in DTCC's daily settlement at the close of the US business day, thereby offering accurate, daily information on trades confirmed and settled through Fund/SERV/DTCC.

- b. Custodians may interact on Fund/SERV and Networking with the full functionality that is available to brokers and other firms. Custodians may receive reporting provided by funds and may transmit updates/revisions to reconcile their records with those of the funds.
- c. Fund/SERV and Networking do not themselves provide any reconciliation or information audit service given that it serves more as a medium of communication than as a repository. It does, however, facilitate regular reporting to allow the parties to perform reconciliation functions as frequently as desired.

2. AIP by DTCC

- a. AIP functions similarly to Fund/SERV in that it also serves as a conduit for order delivery, reporting and other communication between brokers/firms and funds. Full order, payment and settlement functionality is available through AIP as it is with Fund/SERV. AIP supports initial and subsequent subscriptions, redemptions, tender offers, exchanges, position reporting, valuation and price reporting as well as non-financial reporting. As with Fund/SERV, AIP facilitates the transmission of reporting provided by the funds to the brokers/client, however, Fund/SERV permits the communication of more retail information that is not relevant to the products served by AIP, which are traded more in the wholesale market.
- b. In addition, given the illiquid nature of the asset types served by AIP and the fact that the valuation of, and positions in, these assets change less frequently, financial reporting is ordinarily less frequent. However, AIP is available daily to report this information when provided.

3. FundSettle by Euroclear

- a. FundSettle offers order routing, settlement, asset servicing and reconciliation to its clients. Clients have access to all information in real time through the FundSettle online browser or SWIFT or secured file transfers.

- b. FundSettle offers custodians two methods in particular by which to permit their customers to place orders and trade through FundSettle. One method, referred to as the “plug and play” model, allows custodians to grant their customers access to interact directly with FundSettle. In this model, once orders are transmitted and confirmations are received by the customer, FundSettle issues confirmations and settlement instructions to the custodian. The customer receives consolidated reporting on the customer’s activity through the custodian. In the other model, referred to as the “fully integrated” model, custodians can provide value-added services to their customers by taking orders from the customer and otherwise dealing on behalf of the customer (rather than permitting the customer direct access to FundSettle).
 - c. FundSettle offers its users trade date accounting (in addition to settlement date accounting). The contract note, issued by the transfer agent as evidence of the payment for and confirmation of the trade and containing the trade particulars, is what FundSettle refers to in order to update its records to reflect the trade. In this way, FundSettle’s records match the books of the transfer agent and the shareholder register of the fund.
 - d. FundSettle reconciles its records against those of the funds on a monthly basis as reported to FundSettle by the transfer agents. The process is automated. FundSettle staff review and reconcile identified discrepancies with the support of the transfer agent as needed. Daily reconciliation is also performed where transfer agents are able to provide reporting on a straight through process (STP) basis.
 - e. Given that it is the custodian, rather than the trading party/customer, that is the account holder on FundSettle, the custodian has full access to all of the reporting services provided by FundSettle as regards order routing, settlement and asset servicing and has full authorization to input and update information concerning customer asset information on FundSettle.
4. Vestima by Clearstream
- a. Vestima allows for trade, cash payment, settlement and asset servicing all to occur on its platform. Therefore, information on trades as well as orders and positions is available on Vestima in real time via web browser, SFTP or SWIFT. Customers receive statements on transactions and positions on a daily basis.

- b. Vestima can organize the account structure to permit the custodian to act as a “settlement agent” on behalf of its customer and directly settle trades with the trade counterparty on Clearstream. In this manner, the custodian would be privy to all reporting provided by Vestima on each trade and the corresponding assets.
- c. In addition to the daily statements issued to Vestima customers that facilitate their ability to identify and address any discrepancies in Vestima’s transactions and holdings records, Vestima also reconciles on a daily basis with the funds side through its product Central Facility for Funds (CFF). CFF provides services to fund distributors and transfer agents to support and increase the degree of automation in the settlement and custody process. Through CFF, Vestima is able to ensure that its records (and therefore the statements it issues to its customers) align with those of the funds and the transfer agents.

(ii) *Asset Information Gaps that Persist*

1. Given that Fund/SERV and AIP are not data repositories, custodians using either of these products would themselves have to maintain current, accurate records concerning their customer’s fund assets and would use either Fund/SERV or AIP to receive reports provided by the fund to update their records. Asset information would not be available to the custodian on demand, but rather would be made available upon the fund sharing the same based on the frequency that has been agreed with such fund, or the transfer agent thereof.

3. Bank Loans

- In the case of loan assets trading in the secondary market, the agent for the banks possesses the loan documentation and maintains an accounting of interests/participations in a given loan pool regarding the interests in the assets at any given time. An assigning lender is typically required to notify the agent and sometimes to seek the consent of the borrower (so long as no event of default is continuing) in advance of consummating a loan assignment, but typically, unless the documentation otherwise provides, a lender need not notify the borrower or the agent of any participation of its interest in a loan.

(i) *Extent to Which Infrastructure²⁰ Closes Gaps in Asset Information.*

1. Loan/SERV Reconciliation Service by DTCC (“LSR”)

²⁰ Includes market infrastructure in the U.S. and Europe and, in this case, refers to services provided by DTCC and Euroclear, with Clearstream collaborating with DTCC.

- a. To the extent that Agents have opted to use LSR, custodians and lenders would, through this web-based tool, gain access to agent records for a given lender for primary transactions, secondary trade activity, and underlying corporate actions effecting lender balances and loan details. Records available on LSR would include loan-specific information, including asset identifiers (including ISINs and CUSIPs), facility type and credit agreement dates, lender and borrower-specific information, loan balance, information on transactions that affect outstanding balance, including pay downs, drawdowns, or assignments and transfers. Some agents may also provide contract level data, which could include information on individual drawings, ancillary contracts and other related data to accurately track payments of interest and the various fees due on the loans. Currently 8,000 facilities from 40 countries are available on LSR for reconciling purposes.
- b. LSR does not permit the storage of the underlying loan or transfer documentation itself. However, through its Cash on Transfer service, DTCC integrates trade settlement and document management platforms, such as Markit ClearPar, to permit trade settlement and payment upon the execution and delivery of transfer documentation and results in real-time and more accurate information about the transaction and the transaction parties' interests in LSR.
- c. LSR permits full two-way reconciliation between the Agent and a designated party, which may be the lender, its administrator or its custodian. The designated party would load data on a daily, weekly or intermittent basis, at the position, transaction or contract level for reconciliation with the Agent's records. The lender designating a third party to perform reconciliation on its behalf retains the ability on LSR to access and monitor the data being uploaded by the Agent and the lender's representative. LSR provides "exception management" and a challenge process to address any data inconsistencies that emerge in the reconciliation process and work towards a resolution.

2. LoanReach by Euroclear

- a. Similar to LSR, LoanReach is an online application by means of which Agents are expected to upload data concerning loan assets into LoanReach's Centralized Global Database. The categories of data supplied to LoanReach are similar to that made available on LSR. Agents should submit this data on a daily basis, and may submit in real time or overnight. LoanReach does not support the storage of transaction documents.

- b. The data uploaded by an Agent to LoanReach is subject to reconciliation by lenders and the Agent. LoanReach identifies inconsistent information supplied by the Agent and the lenders to then be resolved by the parties. The Agent controls who has access to information on LoanReach. A custodian acting on behalf of a lender can be granted access to LoanReach, along with the ability, on behalf of the lender, to reconcile data uploaded to LoanReach via a specific account structure whereby the lender's account becomes a sub-account to that of the Custodian.

(ii) *Asset Information Gaps that Persist*

1. As mentioned earlier, currently 8,000 facilities from 40 countries are reportedly available on LSR for reconciling purposes. Further, reportedly, most fund managers are indicating 50-80% coverage on LSR for their US portfolios. Coverage in Europe, which is provided by LSR and LoanReach, is limited. To the extent that either of these data repositories is being used and a custodian has been granted access to its customer's accounts and information stored in each repository, such custodian's informational needs concerning its customer's loan assets is satisfied to a significant degree. Some limitations on the asset types covered by these platforms and the asset information available through them are described below.
2. In the case of either LSR or LoanReach, both whether to use these tools for a given transaction and which one to use remains a choice of the Agent banks.²¹ Under such circumstances, lenders and custodians are dependent on the Agents to opt for the use of these online tools. Where these tools are not being used, lenders and custodians must manually request this information from Agent banks, which can be a time consuming process.
3. Given the nature of participations and bilateral loans, the parties to transactions involving these assets do not generally make information about such transactions available on LSR or LoanReach. Further, given that in the context of bank loan assets, demand for services has been driven largely by the syndicated loan market, these tools are designed with the Agent in mind as the central actor rather than the lenders and are under-utilized and may be less developed for use by lenders.
4. Although existing infrastructure products do not appear to offer reconciliation audits to ensure that asset information being uploaded by a

²¹ However, to the extent that bank loan assets are maintained with Euroclear, LoanReach must be used.

participant is consistent with the Agents' books and records, LSR has discrepancy logic to ensure that transactions and balances are in sync between the Agents' books and records and those showing on LSR. Given that Loan/SERV Cash on Transfer facilitates simultaneous payment and settlement through its link to Markit ClearPar, a link to LSR to permit the upload to LSR of data from transactions consummated through Loan/SERV Cash on Transfer and Markit ClearPar might be expected to be more real-time and therefore potentially more accurate. Markit ClearPar reportedly serves approximately 90% of the U.S. market in secondary loan trading and approximately 50% of the European market. Linking LoanReach to Markit ClearPar and other prominent trade settlement platforms in Europe could serve to improve the quality and timeliness of data available on LoanReach.

5. While some progress has been made²², there remains no single, standard industry asset identifier that is consistently applied to syndicated loan facilities. CUSIPs and LoanX IDs are often used for US issued leveraged loans, but coverage is not 100%. ISINs are less often used in Europe to identify syndicated loan facilities. Identifiers are essential for effective system-to-system communication to support issuance, secondary trading, settlement, ongoing corporate action events tracking and reconciliation.

4. Derivatives

- The derivatives contract parties and/or their respective broker dealers are typically the persons that will have the information regarding the positions of the parties. If appointed, the collateral management agent will also be aware of asset value to ensure that appropriate collateral positions are maintained.

(i) Extent to Which Infrastructure²³ Closes Gaps in Asset Information.

1. GTR by DTCC

- a. Custodians with access to their customers' accounts on GTR will have access to information concerning customers' trades (i) to the extent such information is populated in GTR through the SEF on which the trade was executed or, (ii) in the case of trades not concluded on an SEF, including bilateral trades, or in the case of block trades allocated post execution, to the extent such information was reported by the reporting party/user on GTR. Real time pricing information is reported at the time of trade execution

²² More than 90% of the 8,000 facilities within LSR include an ISIN or CUSIP.

²³ Includes market infrastructure in the U.S. and Europe.

by the SEF, is made publically available, and includes, without limitation, price, product type, and the notional amount of the underlying traded asset (e.g. in the case of commodities, barrels, bushels, etc.). Pricing/valuation data is then reportedly updated daily by one of the trading parties.²⁴ Also provided to GTR at the time of trade execution are certain “primary economic terms” which consist of several data points including the identity of the buyer and seller and any applicable payments schedule. Following execution of the trade, the primary economic terms provided upon execution are supplemented by the trading parties to the extent that the information provided initially is incomplete. Unlike the pricing information, the primary economic terms are maintained confidentially and disclosed to the relevant regulators and available to the trading parties.

- b. GTR provides both “snapshot” and “lifecycle” reporting. Snapshot reporting provides a daily, point-in-time report of a company’s portfolio, whereas lifecycle, or transaction-based reporting provides a transaction history with respect to any given contract. Both of these are available to custodians upon permission granted by the customer.
- c. Either party to a trade can submit information to GTR for reconciliation purposes and GTR provides reconciliation reports to either or both parties on a daily basis. Revisions to information on GTR are only accepted if submitted by a reporting party. The information supplied to GTR is the information that reporting parties make available to regulators, which incentivizes accurate reporting.

2. REGIS-TR by Clearstream

- a. REGIS-TR will permit trade information to be reported to it from multiple sources including reporting participants, trading platforms and third party service providers, including custodians. REGIS-TR will comply with ESMA’s requirements for the data fields that must be maintained by a derivatives data repository, and the information captured will include information concerning the trade counterparties, contract terms (including any payment schedules), pricing information, etc. Mark-to-market valuation data will be required to be updated daily. Data on derivatives contracts will be maintained on REGIS-TR for a period of 10 years after their termination.

²⁴ In Europe, these updates can reportedly occur up to 180 days apart.

- b. Trade-related information reported to REGIS-TR by a reporting participant will be populated in the master account and subaccounts of that reporting participant. Such information will be viewable by that reporting participant and by third parties, including custodians, for whom subaccounts have been created and to whom the requisite permission has been granted to access particular information. Upon the granting of permission, custodians will also be able to upload asset information to REGIS-TR on behalf of their customers. However, the custodian will not be permitted to modify information submitted by the customer. In the event that a custodian is itself a reporting participant on REGIS-TR (with its own master account), it will not be permitted to manage asset information on REGIS-TR under any other master account.

(ii) *Asset Information Gaps that Persist*

1. The role of the custodian is different with respect to derivatives than it is for the other asset classes discussed in this report. Custodians with customers maintaining derivatives assets are less concerned with asset custody and more interested in maintaining current and accurate asset information. Custodians with access to their customers' accounts on GTR will have access to information concerning customers' trades to the extent such information is populated by an SEF or the transaction parties, as applicable, in GTR, as described above. This information will include, among other things, pricing information, which is updated daily, product type, the notional amount of the underlying traded asset, and any applicable payments schedule. In instances where clients do not consent to a custodian accessing relevant trade repositories, custodians must rely on their customers to ensure reconciliation of the information available to the custodians with that available on GTR. Certain alternatives to GTR, including MarketSERV PortRec and TriOptima triResolve are also used by custodians to manage their derivatives assets in custody, but these are similarly dependent on counterparties to report position and other trade information into these tools.
2. In circumstances where the customer's transaction is not being reported to GTR or REGIS-TR or another trade repository, custodians would presumably need to resort to other means to obtain access to the same information. Such access would also be dependent upon how quickly such information becomes available.
3. Custodians would also be subject to the consistency and reliability of the trading parties in making the necessary asset information available

on the relevant trade repository where such information is not being populated automatically through a relevant trading platform.

4. The preceding analysis relates to trade repositories owned and operated by DTCC (GTR) and Clearstream (REGIS-TR). We note that in the US, ICE and CME also operate trade repositories and that in Europe, which is expected to go “live” in Q1 of 2014, five trade repositories have been approved to date and others may follow. It should be noted that the proliferation of trade repositories may require custodians to link to several different repositories to access the information described above.

5. Precious Metals

- In the case of ownership of the actual metal or precious metal certificates, the owner or the depository institution with which the metal or the certificates have been deposited for safekeeping, or in the case of precious metal certificates, the issuer, are likely the parties that possess information regarding the asset and ownership thereof.

III. Collateralized Assets: What happens to assets in the Covered Asset Classes when they are provided as collateral by way of a perfected security interest as compared to a title transfer arrangement? The below commentary sets forth how collateral interests can be created and perfected in the case of assets in each Covered Asset Class. It also demonstrates the effects of creating collateral interests in these assets, which may include (i) changes directly affecting the asset, for example, a change in the physical location of an instrument (as defined in the UCC) in the event that the secured party has taken possession of the instrument as a means of perfecting its lien thereon, and (ii) the addition of new interested parties that may either take possession of the asset or possess relevant information about the asset (e.g. secured lenders or new owners of the asset (in the title transfer context, as discussed below), and collateral agents). By understanding how collateral interests in the below-discussed assets are created and perfected and how such assets are affected by the creation of such interests, custodians can better appreciate the impact of the same on their safe-keeping and oversight responsibilities.²⁵

A. Perfected Security Interests

1. Third-party Time Deposits

- The attachment of a security interest in a certificate of deposit occurs upon the secured party giving value in exchange for any security interest, the debtor having

²⁵ [Drafting Note: consider adding other representative local country analysis for time deposits, fund investments, bank loans, derivatives, precious metals (and real estate)]

rights in the collateral or rights to transfer the collateral, and the authentication of a security agreement by the debtor that adequately describes the certificate of deposit. While filing is a means of perfecting a security interest in instruments including certificates of deposit (Section 9-312), good faith purchasers of instruments can take priority over secured parties with a security interest in such instruments that have perfected only by filing (9-330(d)). It behooves secured parties attempting to perfect a security interest in a certificate of deposit, and instruments generally, to both file a financing statement and take possession of the certificate of deposit.

- In addition to the elements required for attachment of a security interest in a certificate of deposit, deposit accounts further require, both for attachment and perfection (Section 9-314(a)), that the secured party have control thereof, which, according to Section 9-104, can be accomplished through (i) the secured party being the bank with which the deposit account is maintained, (ii) the secured party, the debtor and the bank having entered into an account control agreement wherein the bank states that it “will comply with instructions originated by the secured party directing disposition of the funds in the deposit account without further consent by the debtor,” or (iii) the secured party becoming a customer of the bank with respect to the deposit account.

2. Interests in Funds/Collective Investment Schemes, and Private Equity Funds

- Where a fund or collective investment scheme is a limited liability company or similar corporate fund, a fund administrator or other independent party may act as transfer agent, and ownership is maintained and represented by means similar to those that apply to publicly offered funds, albeit in a less formal regulatory environment.
- With respect to private equity funds, to the extent that the limited partnership interests are characterized as general intangibles, security interests in general intangibles attach upon the secured party giving value, the debtor having rights in the collateral, and the authentication of a security agreement by the debtor that adequately describes the general intangible collateral. Security interests in general intangibles are perfected upon the filing of a financing statement (Section 9-310(a)).
- If the partnership interest is a security governed by Article 8, then the secured party’s interest therein shall attach and become perfected upon the giving of value, the debtor having rights in the collateral or the power to transfer rights in the collateral, and the secured party taking “control” thereof. Pursuant to Section 8-106(b), (a) control of a certificated security in ***bearer form*** is established by delivering the security to the secured party, (b) control of a certificated security in ***registered form*** (wherein the security certificate specifies a person entitled to the security and transfer of the security can be registered upon the issuer’s books) is established through the certificate being delivered to the secured party and being

indorsed to the secured party or being indorsed in blank by an effective indorsement, and (c) control of an *uncertificated security* is established if the security is delivered to the secured party, or the issuer has agreed to heed the instructions of the secured party without further consent of the registered owner.

- In any event, irrespective of the types of collateral granted, a private equity fund must, for perfection purposes, transfer the ownership interest in its private equity assets. The custodian is thus not in a position to carry out its verification duties and must rely on the information (including the value) provided by the collateral taker or its agents. Should the collateral be granted via transfer of ownership, the custodian must assess the counterparty risk, and where appropriate, address warnings in case of doubt about the creditworthiness of collateral fund counterparty.

3. Bank Loans

- In the event that the loan document constitutes a promissory note under the UCC, such a loan document is considered an instrument under the UCC and the same analysis applies for purposes of attachment and perfection as previously described for instruments generally. As mentioned earlier, while Section 9-312(a) states that a security interest in instruments may be perfected by filing, Section 9-330(d) provides that perfection by filing alone may be defeated by a subsequent purchaser for value who takes possession of an instrument without knowledge of the existing security interest. Section 9-331 adds that a filed financing statement is not sufficient to constitute notice to such a purchaser.
- Loans and participations characterized as general intangibles would be secured and perfected in the same manner as described for general intangibles in Section III(A)(2) above.

4. Derivatives

- The method of attachment and perfection of a security interest in derivatives contracts, as with other general intangibles, would be as described in Section III(A)(2) above.

5. Precious Metals

- A security interest in a precious metal attaches upon the giving of value, the borrower having rights in the metal or the power to transfer rights in the metal to the secured party and the authentication of a security agreement by the debtor that adequately describes the metal. Perfection of a security interest in precious metals may be achieved through the filing of a financing statement. However, perfection is also possible through possession of the metal (Section 9-313(a)) and in this case, if the secured party has possession of the metal, it need not file a financing statement to properly perfect (Section 9-310(6)). Given that in some

circumstances, buyers of goods can take free and clear of prior perfected security interests even if they know of the existence of prior liens (e.g. buyers in the ordinary course business per Section 9-320(a)), it is prudent for a secured party to both file a financing statement and take possession of the metal to ensure that perfection and priority of the secured party's interest in the metal is maintained.

- If the collateral is a precious metal certificate, which qualifies as a document of title (as defined in the UCC), security interests in documents of title attach similarly to the manner in which attachment occurs for goods, as described above. Sections 9-312(c) and (d) instruct that the method for perfection of security interests in documents of title depends on whether the document is a negotiable or nonnegotiable document. Section 7-104 provides that a document of title is negotiable “if by its terms the goods are to be delivered to bearer or to the order of a named person,” and “a document is nonnegotiable if, at the time it is issued, the document has a conspicuous legend, however expressed, that it is nonnegotiable.” If the document of title is negotiable, the secured party may perfect its interest therein by filing, but for reasons discussed earlier relating to the priority of holders in due course, it would be prudent for the secured party also to have possession. If the document of title is nonnegotiable, a security interest therein may be perfected by (i) having the document of title be issued in the name of the secured party (ii) notifying the bailee of the secured party's interest, or (iii) filing a financing statement as to the goods covered by the document of title. In the event that the precious metal certificate constitutes an electronic document of title, Sections 9-314(a) and (b) provide that a security interest in electronic documents of title may be perfected by control in accordance with the terms of Section 7-106²⁶.

²⁶ UCC Section 7-106. Control of Electronic Documents of Title.

- (a) A person has control of an electronic document of title if a system employed for evidencing the transfer of interests in the electronic document reliably establishes that person as the person to which the electronic document was issued or transferred.
- (b) A system satisfies subsection (a), and a person is deemed to have control of an electronic document of title, if the document is created, stored, and assigned in such a manner that:
 - (1) a single authoritative copy of the document exists which is unique, identifiable, and, except as otherwise provided in paragraphs (4), (5), and (6), unalterable;
 - (2) the authoritative copy identifies the person asserting control as:
 - (A) the person to which the document was issued; or
 - (B) if the authoritative copy indicates that the document has been transferred, the person to which the document was most recently transferred;
 - (3) the authoritative copy is communicated to and maintained by the person asserting control or its designated custodian;
 - (4) copies or amendments that add or change an identified assignee of the authoritative copy can be made only with the consent of the person asserting control;
 - (5) each copy of the authoritative copy and any copy of a copy is readily identifiable as a copy that is not the authoritative copy; and
 - (6) any amendment of the authoritative copy is readily identifiable as authorized or unauthorized.

B. Title Transfer Arrangements

- In some jurisdictions, the conveyance of collateral, often in the case of financial instruments such as debt and equity securities and derivatives, is more commonly effected by means of a title transfer arrangement whereby title to the asset, rather than only a security interest therein, is transferred to the secured party/transferee pursuant to a transfer agreement that provides for the reversion of title to the grantor/transferor upon the satisfaction of the secured obligation.
- For example, a repurchase agreement, commonly referred to as a “repo” and employed in the case of securities, will provide for the sale of securities with an obligation by the seller to repurchase such securities, either at a fixed maturity date or a later date in accordance with extension provisions, at the same price at which the securities were first sold plus interest or at a pre-determined price that effectively incorporates accrued interest.
- In the case of derivatives, the English law ISDA Credit Support Annex, is entered into between the collateral provider and the collateral taker whereby full legal and beneficial title to the collateral is transferred to the collateral taker, subject to an obligation of the collateral taker to return “equivalent” property in the form either of payment in relation to cash collateral or delivery of equivalent fungible securities in relation to securities collateral as part of the final netting mechanism provided for in the ISDA Master Agreement, of which the Credit Support Annex is a part.
- The title transfer agreement may be accompanied by supporting documentation evidencing the transfer of title (e.g. in the context of stock repurchase agreements, an extract of the share register of the issuing company may be provided indicating the purchaser as the new owner of the shares being sold).

IV. Approaches to Close Gaps: In identifying approaches to close the remaining gaps in the safekeeping and supervision of the Covered Asset Classes, it is helpful to consider best practice efforts undertaken by other associations in the financial services industry and other best practice references arising in local legal contexts. That input would seem particularly relevant given the interdependence among market participants in establishing control over the Covered Asset Classes and in acquiring information needed to supervise those assets. These best practice references address the following practice areas:

A. Relevant Best Practice and Legal References

1. Asset Information: generation, verification, and reconciliation of asset information.

Some associations within the financial services industry have undertaken to define best practices and recommend market standards with respect to the generation, verification, and reconciliation of asset information that would apply to the Covered

Asset Classes. One such association, the International Securities Association for Institutional Trade Communication (“ISITC”), has developed a market practice publication that outlines best practices and recommended such market standards among various market participants. Various classes of assets are addressed in this publication, including time deposits, bank loans, derivatives, repos, various equity and debt securities.²⁷

- **Kinds of Information and Process:** ISITC’s Reconciliation Publication outlines best practice in the kinds of information that should be standardized in message content during the verification and reconciliation process. It prescribes the categories of data and other information to be included in the messaging such as financial instrument identification, asset classification, quantity, and price. This publication also produces process diagrams depicting prototypical sequencing of messages among participants for purposes of reconciliation, investment decisions, client reporting, and fund administration (i.e. compliance, performance, and financial reporting).

As noted earlier, other industry associations and boards have issued standardized information to be generated in other contexts. For example, the IPEV Board has proposed “Reporting Guidelines” that require fund managers in a private equity context to provide investors with two categories of information: “essential disclosures” and “additional disclosures.” This approach is similar to the categories of “Mandatory Information” and “Optional Information” utilized in the standards and best practices developed by ISITC.

- **Role of Custodian and Other Market Participants:** The “Market Practice Rules” in ISITC’s Reconciliation Publication were developed by market participants including account owners, investment managers, agents, subcustodians, CSDs, and third party service providers. These rules proceed from the premise that the messaging best practices and standards are intended to “be used by investment managers, account owners and other interested parties to reconcile their holdings information to the custodian’s holdings information.”²⁸ This premise seems to assume that custodians will be best placed to provide asset reconciliation information desired among market participants even though, as explained above, they may neither possess nor control the assets and information against which such reconciliation would be made. Nevertheless, these and similar efforts by other associations and market participants would appear to offer opportunities and vehicles for custodians to clarify which market participants should be looked to for particular asset information and what practices should be defined and perhaps endorsed as “standards” to foster increased market efficiency and transparency in the generation and reconciliation of key categories of asset information.

²⁷ See ISITC’s publication, “Market Practice Custody Holdings Reconciliation,” version 6.6.9, dated August 1, 2011 (the “Reconciliation Publication”).

²⁸ *Id.* at p. 11.

2. Accounts and Records: establishing appropriate account structures.

- **Asset Custody: Supervision v. Record-keeping** The account structures that are established for financial assets should reflect legal distinctions made between those assets that are held “in” a custodian’s network (thus benefiting from safekeeping and oversight services), and those held “out” of a custodian’s network (thus benefiting from record-keeping services only). For example, in the case of securities, Article 8 of the UCC follows the distinction between securities held “in” and those held “out” of network in determining which securities may be credited to a “securities account” giving rise to “securities entitlements” that entitle the custodian’s customer to exercise rights with respect to the underlying securities.²⁹
- **Custodian Held:** With respect to a typical account structure for a security held by a custodian, UCC 8-501(a) and (b) provide for the creation of a security entitlement in favor of the customer where the custodian has been delivered a financial asset which it has credited to a securities account established for such customer.
- **Non-Custodian In-Network:** UCC 8-501(c) provides for treatment of a financial asset credited to the customer’s account as a security entitlement even if the custodian is not itself holding the asset (which might instead be in the possession of a CSD or a sub-custodian).

²⁹ UCC Section 8-501. Securities Account; Acquisition of Security Entitlement from Securities Intermediary.

(a) "Securities account" means an account to which a financial asset is or may be credited in accordance with an agreement under which the person maintaining the account undertakes to treat the person for whom the account is maintained as entitled to exercise the rights that comprise the financial asset.

(b) Except as otherwise provided in subsections (d) and (e), a person acquires a security entitlement if a securities intermediary:

(1) indicates by book entry that a financial asset has been credited to the person's securities account;

(2) receives a financial asset from the person or acquires a financial asset for the person and, in either case, accepts it for credit to the person's securities account; or

(3) becomes obligated under other law, regulation, or rule to credit a financial asset to the person's securities account.

(c) If a condition of subsection (b) has been met, a person has a security entitlement even though the securities intermediary does not itself hold the financial asset.

(d) If a securities intermediary holds a financial asset for another person, and the financial asset is registered in the name of, payable to the order of, or specially indorsed to the other person, and has not been indorsed to the securities intermediary or in blank, the other person is treated as holding the financial asset directly rather than as having a security entitlement with respect to the financial asset.

(e) Issuance of a security is not establishment of a security entitlement.

- **Out-of-Network:** Finally, UCC 8-501(d) provides that a financial asset in a custodian's possession in a customer's securities account, but which asset is not freely transferable by the custodian without further action/consent by the customer, remains technically held by the customer, does not create a security entitlement with respect to such asset, and requires only a duty of record-keeping with respect to such account.

[A similar analysis should be performed with respect to others of the Covered Asset Classes, including from the EU perspective, to determine the appropriate account structures for those assets.]

- **Segregation of Assets** (e.g. ALFI best practices, SEC Rule 17f-5, and ISSA recommendation).

B. Possible Approaches

1. **Multilateral Practice Standards/Conventions** Attached as Annexures A and B are practice reports for two of the Covered Asset Classes, i.e., Third-Party Time Deposits and Bank Loans, that have incorporated best practice standards and references produced by other associations and market participants, including those mentioned above in Section IV (A). Those reports also identify other topics and functions pertaining to safekeeping and supervisory responsibilities for those asset classes in need of additional market harmonization or standardization such as asset identifiers and registration, methods of transaction instruction, settlement practices, record-keeping methodologies, documentation standards, asset verification and reconciliation protocols, etc. Certain of those topics and functions could be prioritized for the development of multilateral practice standards or conventions involving relevant-market participants.
2. **Market Infrastructure**
 - **Additional Neutral and Expert Market Infrastructure Facilities** to close remaining gaps identified in this report for the remaining safekeeping and supervisory gaps for the covered asset classes.
 - **Multilateral Contractual Arrangements and Clearing Center Facilities**
 - **Central Banks and Central/International Securities Depositories**
3. **Express Third-Party Undertakings and Service Agreements/Reasonable Reliance on unrelated Third parties (in the Absence of Express Undertakings or Agreements) (e.g. Transfer Agents)**
 - **Primary** (e.g. Fund Managers, Collateral Agents).

- **Secondary** (e.g. Agents on Bank Loans, Issuer Registrars, Private Equity Fund GMs).
- **Contractual Provisions** including appropriate liability limitations, prescribed standards of care, covenants to generate exchange information, reporting responsibilities, and rights to access information from third parties, etc., subject to legal screening.
- **Record-keeping Practices** (e.g., notations in custodial records indicating assets that are held “out-of-network” with cross-references to contractually agreed standards and supervisory/recording-keeping practices).

Third Party Time Deposits

Topic / Function	Current Practice	Best Practice Considerations	Best Practice Challenges
<p>Time Deposits have a number of attributes which create risks to Custodians who service clients investing in this asset class. Clients utilize the asset class in many cases as an overnight investment vehicle. They value their direct relationship with time deposit counter-parties and often seek the best rate via aggregated balance investment across multiple custodians.</p> <p>Key Attributes</p> <ul style="list-style-type: none"> • Lack of simultaneous exchange of value • Lack of custodian involvement in the account set-up • Lack of standardized and mandated asset identifiers <p>Key Risks</p> <p>As a result of the above, Custodians may be hindered in their ability to perform traditional custodial oversight duties, including: awareness and confirmation of asset acquisitions/disposal, position reconciliation, reporting, identification and collection of maturity proceeds.</p> <p>Key Opportunities</p> <ul style="list-style-type: none"> • Clarify role of Custodian • Standardize instruction format • Enhance controls related to tracking/receiving income • Drive education of regulators as to market practice, thereby supporting/promoting adoption of commercially viable rules/regulations. 			
<p>Asset Registration / Ownership</p>	<p>Registered in the name of the client or the client's investment advisor</p>	<p>Assess commercial and operational viability of adding custodian to registration process</p>	<p>The custodian is not a party to the relationship set-up and has no oversight on SSIs for the return of maturity proceeds.</p>
<p>Settlement Practices</p>	<p>Although no CSD, a mature practice does exist for investing in time deposits.</p> <p>Settlement cycles and length of investment tend to be standardized.</p> <p>There is no exchange in value as the asset is a cash investment. The custodian's role is to deliver cash based upon an authorized client instruction.</p> <p>No provision of settlement confirmations by the time deposit agent</p>	<p>Assess the booking of a 'record-keeping' placeholder on the books of the custodian to track funds delivered/entitlement due</p>	<p>Clients agreement that record-keeping asset should be reflected on custodian's books versus Fund Accounting books only. (A control mitigant is the receivable booked by the client's fund accounting agent)</p>
<p>Method of Transaction Instruction</p>	<p>Standardized industry format does exist for SWIFT users (MT321)</p> <p>Other formats include FAX, proprietary files or other</p> <p>There are no recognized market identifiers</p>	<p>Assess the development of:</p> <ul style="list-style-type: none"> • Standardized industry format for non-SWIFT instruction mediums containing both trade/payment /maturity instructions in one form • Standardized security set-up 	<p>Client and custodian adoption of standardized instruction format and security set-up</p>

Third Party Time Deposits

Topic / Function	Current Practice	Best Practice Considerations	Best Practice Challenges
Record Keeping Methodology / Requirements	Assets if reflected, may be reflected as held “out” of a custodian’s network benefitting from record-keeping services only	Assess legal/regulatory implications of record-keeping services only (disclaimer, contractual language)	Clients agreement that record-keeping asset should be reflected on custodian’s books versus Fund Accounting books only. Potential challenges regarding regulatory/oversight requirements based on jurisdiction/asset class
Reconciliation of Ownership	Receipt of statements and reconciliations with banks are not market practice Reconciliations typically do not occur as a result of one or more of the following: <ul style="list-style-type: none"> ▪ Placement often matures in one day (although can be longer), impacting ability to reconcile ▪ Placements are often made in aggregate across custodians ▪ Lack of standardized asset identifiers 	Assess commercial and operational impact of performing reconciliations with Third Party Time Deposit Agents ISITC’s recommendations on standardization of message content for verification/reconciliation process ¹ , including, in particular, with respect to maturity and block trading ²	Multiple agents involved in process Custodian not recognized as a party to the transaction and therefore may not be a recipient of data Placement of aggregate balance investments across custodians Reconciliations of overnight time deposits may not be commercially viable Reconciliations likely to be manually intensive
Corporate Actions and Income Collection	Market events are not applicable based on asset structure Interest is agreed upon and returned when the cash investment matures	Not applicable	Not applicable
Documentation Standards / Requirements	Account documentation maintained between the client and the Time Deposit agent	Assess the impact of including the custodian as an interested party	Clients may not be amenable to adding the custodian to the documentation flow/interested party

¹ Market Practice Custody Holdings Reconciliation, version 6.6.9, dated August 1, 2011.

² MT321 US Market Practice Guide, version 2.0, dated November 8, 2007.

Third Party Time Deposits

Topic / Function	Current Practice	Best Practice Considerations	Best Practice Challenges
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<p>Legal Status</p>	<ul style="list-style-type: none"> • The legal status of time deposits will generally depend on whether the deposit is represented by an account or by a certificate: <ul style="list-style-type: none"> ○ A certificate of deposit is a negotiable instrument that can be sold to a third party rather than being limited to redemption/repayment by the bank of deposit. <ul style="list-style-type: none"> ▪ A certificate of deposit that is a negotiable instrument will generally be treated as a “financial instrument”, an “investment security” or similar characterization that will make it capable of custody on effectively the same legal footing as any other investment security. ▪ A certificate of deposit that is not negotiable is simply evidence of a time deposit account. ○ A time deposit account can be characterized as a debt subject to special rules related to banking or a financial contract as opposed to a financial instrument. <ul style="list-style-type: none"> ▪ The entry on the accounts record of the deposit institution will determine the beneficiary of the deposit obligation. ▪ As with loan participations, such an entry can be made in favor of a financial intermediary in a particular capacity (e.g. Bank ABC as custodian/trustee for Client XYZ) although this does not appear to be consistent with prevailing practice. ▪ Again as with loan participations, where an intermediary is listed as the accountholder in a particular capacity, this creates ambiguity as to whether the intermediary is creating an entitlement on its books in favor of the client or merely recording the interest that it holds for its client. • The deposit account is evidenced by confirmation of transmission and receipt of monies, but most banking law would consider the account books of the deposit institution to be the primary indication of the debt. • Where the time deposit is represented by a certificate, ownership will be determined by the registration of the certificate and any endorsements allowable under applicable law as a means of negotiation of the instrument. <p>See § I(A), II(A)(1) and III(A)(1) and (B) of the AGC Out-of-Network Assets Report for further analysis of Third Party Time Deposits under U.S., U.K. and French laws as to (i) their legal nature and what determines their ownership, (ii) which parties possess or control those assets and/or relevant information concerning those assets, and (iii) what happens to those assets when they are provided as collateral.</p>		
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Bank Loans

Topic / Function	Current Practice	Best Practice Considerations	Best Practice Challenges
<p>Banks Loans have a number of attributes which create risks to Custodians who service clients investing in this asset class.</p> <p>Key Attributes</p> <ul style="list-style-type: none"> Lack of central clearing and/or use of ICSD (international central securities depository) to track/record ownership of asset and allow for simultaneous exchange of value upon settlement of asset acquisition/disposition Lack of standardized and mandated asset identifiers Lack of standard settlement cycle Significant amount of investment specific documentation completed by an Investment manager on behalf of underlying client without reference to the Custodian <p>Key Risks</p> <p>As a result of the above, Custodian's are hindered in their ability to perform their required custodial oversight duties, including: awareness and confirmation of asset acquisitions/disposal, position reconciliation, identification, collection and reporting on corporate events.</p> <p>Key Opportunities</p> <ul style="list-style-type: none"> Clarify role of Custodian Create and standardize automation for trade and documentation flows. Enhance controls related to income accruals/receipts, changes in ownership of asset, and downstream reporting. Develop standard asset identifiers for this asset class. Drive education of regulators as to market practice, therefore supporting/promoting adoption of commercially viable rules/regulations. 			
<p>Asset Registration / Ownership</p>	<p>Bank Loans are generally registered in the name of the Investment Manager directly or on behalf of their underlying owner/client directly, without reference to the Custodian.</p> <p>The loan documentation among the parties evidences the interest of the lender and borrower in the loan agreement. This documentation may be in the form of a promissory note and/or a loan agreement. An assignee's ownership interest will be reflected by an assignment and assumption agreement and a participant's interest will be evidenced by a participation agreement.</p>	<p>Assess implications of model whereby registration allows for identification/disclosure of Custodian/trustee and requirements</p>	<ul style="list-style-type: none"> Loan documentation is relatively standardized and does not currently easily accommodate the concept of the custodian. Further, inserting a reference to the custodian may introduce additional operational flows/handoffs which will exacerbate an already manually intensive process. Insertion of Custodian or trustee as signatory could raise other risk considerations including principal risk issues as well as delays in the settlement process.
<p>Method of Transaction Instruction</p>	<p>Trades are sent to custody providers via various means, very manual with bifurcated process with various forms of documentation required to evidence ownership.</p>	<p>Assess development a standardized trade flow for clients investing in bank loans inclusive of:</p> <ul style="list-style-type: none"> Instruction method Instruction format Instruction content and timing. 	<p>Trade flow and documentation process largely manual; can custodial operations areas support standard model and bear costs associated with automating process?</p>

Bank Loans

Topic / Function	Current Practice	Best Practice Considerations	Best Practice Challenges
<p>Settlement Practices</p>	<p>Bank Loan transactions settle upon delivery of monies to an agent bank or selling party, There is no exchange of values at settlement time and settlement is largely manual and requires the issuance of a “Funding Memo”, which the purchaser must instruct their bank to act upon.</p>	<p>Asses the utilization of existing or development of new utilities to facilitate versus payment settlement.</p>	<ul style="list-style-type: none"> • As there is no simultaneous exchange of value, Custodian is unable to confirm that change of ownership (acquisition or disposition) has occurred and thus that it’s custodial oversight duties have begun or ceased. • Fractured market especially Europe vs US. Large pain points felt amongst downstream service providers as opposed to primary market participants.
<p>Record Keeping Methodology / Account Structure Requirements</p>	<p>Practices related to recording of asset and transactional information varies including whether disclosures as to custodial control are included.</p>	<p>Assess development of standard protocol for recording applicable information to custodial records.</p> <p>Assess impact of relevant law in designating the account as a record-keeping account versus an account signifying greater rights (e.g. a securities account signifying “entitlement rights” per UCC § 8-501. See AGC Out-of-Network Assets Report § IV(B)(2))</p>	<ul style="list-style-type: none"> • Lack of consistent approach amongst Global Custodians limits Custodians’ ability to influence client behavior as they look to adopt single standard process across all custodians, • Trade and settlement processes currently manual and non-standard across issuers and buyers and therefore difficult to influence change
<p>Reporting Considerations</p>	<p>Reporting of loan position subject to custodian’s recordkeeping methodology/requirements.</p>	<p>Assess standard protocol minimum data requirements for providing ongoing reporting (inclusive of transactional, holdings and Corporate Events) to client.</p>	<p>Timely, accurate and comprehensive reporting is the by-product of nearly all other Topics/Functions captured here. As such , while high level reporting protocol can be defined, implementation/adoption of such may be subject to development/implementation of other related best practices.</p>
<p>Documentation Standards / Requirements</p>	<p>Acquisition of asset involves various documents which typically include trade ticket, funding memo, assignment/participation agreement and trade confirmation.</p>	<p>Assessment of development of consistent methodology with respect to:</p> <ul style="list-style-type: none"> • Loan documentation that clients are required to provide. • The manner in which documentation if is communicated to the service provider. • Practices related to review, assessment and retention of applicable documentation. 	<p>Complexity and lack of standards for governing documentation and process related to settlement of transactions and asset servicing.</p>

Bank Loans

Topic / Function	Current Practice	Best Practice Considerations	Best Practice Challenges
Asset Identifiers	No standard Bank Loan asset identifier utilized across the industry.	Assess the ability to implement single standard protocol for asset identification in conjunction with interested market participants.	Currently, lack of coordinated efforts around this issue amongst interested parties.
Reconciliation of Ownership	Practices vary with respect to reconciling client ownership versus issuing agent records in terms of frequency and method; current automated methods provide only limited coverage of outstanding issues.	Assess the development and implementation of reconciliation standards amongst custodians and Agent Bank, using existing industry infrastructure or otherwise (including ISITC recommendations on standardization of message content for verification/reconciliation process). ¹	<ul style="list-style-type: none"> • Immature industry utilities hinder the ability to facilitate automated reconciliations. • Agent Banks do not recognize/support the role of the custodian.
Income Collection and Corporate Actions	Providers use different vendors to track distributions but there is no industry utility (IDC-equivalent) to track and report applicable information across the asset class and issues.	Assess ability to and implications of : <ul style="list-style-type: none"> • Track corporate action and income events • Report and collect entitlements • Track and report past due entitlements • Interface with Loan Issuers/Agents to actively collect past due entitlements 	<ul style="list-style-type: none"> • Primary/typical corporate action vendors , inclusive of sub-custodians do not currently provide such data • Processes would be manual and costly without industry utility.
Role of other Relevant Related 3rd Parties / Servicing Entities	<p>Agent Bank – Serves a registrar/transfer agent like role and maintains official records of loan participants. Facilitate the distribution of notifications (e.g., rate resets) cash entitlements, etc...to loan participants.</p> <p>Loan Servicing Agents - Service providers providing middle office services for investors in bank loans. Services in clued loan document review and execution, and reconciliation.</p>	Assess the ability to clarify roles and responsibilities of Agent Banks, Loan Servicing Agent Banks, Fund Administrators and Custodians and manner in which each organization interacts/communicates with one another.	<ul style="list-style-type: none"> • Agent Banks do not necessarily recognize service providers such as custodians as their clients as such, driving behavioral changes amongst the agent bank community can be challenging. • Loan servicing agents may perform certain roles equivalent to those of a custodian, thus creating the potential for a perceived duplication of effort.

¹ Market Practice Custody Holdings Reconciliation, version 6.6.9, dated August 1, 2011.

Bank Loans

Topic / Function	Current Practice	Best Practice Considerations	Best Practice Challenges
<p>Infrastructure</p>	<p>There are number of infrastructure initiatives in place, largely driven by a small number of key players.</p> <p>Documentation – Standardization of the key transactional documents is being driven by LSTA (Loan Syndication and Trading Association – US focused trade association) and LMA (Loan Market Associations – European focused trade association) are driving standardized loan documentation (Confirmation, Assignment & Assumption, Funding Memo) ,</p> <p>Execution Facilities - ClearPar is driving a centralized utility for executing loan documentation,</p> <p>Settlement Facilities - DTCC has developed a “Cash on Transfer” product to facilitate versus payment settlement of Bank Loan transactions. Euroclear has developed LoanReach to facilitate a versus payment settlement process.</p> <p>Corporate Event and Cash disbursement - DTCC is developing APAS (Agent Payment Aggregation System) to facilitate the distribution of Loan related payments (Principle & Interest).</p> <p>Reconciliation - DTCC has developed LoanServ to facilitate automated reconciliations with agent banks (330,000 loan positions reported to LoanServ), Euroclear has developed LoanReach to facilitate automated reconciliations with agent banks.</p> <p>.</p> <p>Asset Identifiers - Markit has developed the MEI (Market Entity Identifier) to standardize the identification of entities in the loan market.</p> <p>Other – Wall Street Office - Acts primarily as accounting provider – calculating interest accruals for interested parties (Inv Mgr, Fund Accountant, etc...). Has become defacto source of Corporate Event and holding information.</p>		
<p>Industry Groups / Initiatives / Guidance</p>	<p>Industry groups: SIFMA/AMF – Bank Loan Working Group IFIA Working Group</p> <p>Guidance: ISITC Bank Loan Trading Market Practice Guide; ISITC Market Practice Custody Holdings Reconciliation, version 6.6.9, dated August 1, 2011</p>		

Bank Loans

Topic / Function	Current Practice	Best Practice Considerations	Best Practice Challenges
Legal Status	<ul style="list-style-type: none"> • A bank loan is a contractual obligation running between the debtor and the bank/lender to repay monies transferred to the debtor by the bank. • The benefit of this contractual obligation may be assigned for value, while, in the case of a “participation”, the bank/lender remains a party to the original loan transaction, or, in the case of an “assignment”, the bank/lender assigns all of its interest to the assignee and does not remain a party to the original loan transaction. • Assignment is both accomplished by: (1) the delivery of consideration for the assignment; and (2) documentary evidence of the assignment agreement between the assignor, the assignee and, if required, an acknowledgment or consent by the debtor. • Documentation Evidencing an Assignment or Participation: <ul style="list-style-type: none"> ○ A confirmation that includes a record of the consideration paid for the loan assignment or participation and that identifies the underlying loan asset, interest in which interest is being transferred is legally complete evidence of the basic transfer. The confirmation, however, is superseded by a formal assignment and assumption agreement or participation agreement, as the case may be, subsequently entered into by the parties. ○ None of the confirmation, the above-described formal transfer documentation or the underlying loan agreement is a negotiable instrument transferable or otherwise. ○ Registers maintained by lead bank or lead bank agent are administrative records of the participation or assignment and not per se the participation or assignment itself unless the respective agreements indicate otherwise (e.g. a provision that indicates that “in the event of inconsistency between confirmations or other evidence of the assignment/participation and the register reflecting the assignment/participation, the register will prevail”). • A loan participation is not a financial security. It is therefore not generally an asset capable of custody under AIFMD/UCITSV. • Because a loan participation is owned and transferred via contractual transfer of interests in the original loan contract, a loan participation is not a securities entitlement, transferred by book entry through a chain of intermediate entitlements unless the intermediaries specifically agree otherwise. • While theoretically under general legal principles a loan participation could be further transferred without reference to the original lender or its agent, loan participation documentation may prevent or otherwise affect this and this is not common practice. • Legally, a loan participation may be transferred to a financial intermediary acting on behalf of its clients (e.g. ABC Bank custodian or trustee for XYZ Client). If the loan participation is held by the intermediary in such capacity, this raises the issue of distinguishing any associated account entry of the holding bank to an entitlement account rather than a general account of such bank. However, if a loan participation is not transferred to a bank in an intermediary capacity, this eliminates ambiguity that the interest is held as an entitlement. • Basic elements available for validation are: <ul style="list-style-type: none"> ○ Confirmations ○ Registers of participations ○ Loan assignment and/or participation documentation as evidence of the terms of the transfer. • The direct assignment of a part of a loan is legally distinguished from arrangements where an intermediate vehicle or account bundles loan participations and where the interest of a client is represented by a separate interest in the bundled interests (e.g. an LLP or other intermediate association by contract that is holding participations and where the client interest is the interest in the association). <p>See §§ I(C), II(A)(3) and III(A)(3) and (B) of the AGC Out-of-Network Assets Report for further analysis of Bank Loans under U.S., U.K. and French law as to (i) their legal nature and what determines their ownership, (ii) which parties possess or control those assets and/or relevant information concerning those assets, and (iii) what happens to those assets when they are provided as collateral.</p>		