

Functional Training & Basel II Reporting and Methodology Review: Commercial Bank Wholesale Assets

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1 Wholesale Exposure Definitions

1.1 Introduction

For the purposes of training, wholesale exposures are discussed separately from retail, investment, repostyle, derivatives, and other asset exposures. Thus, wholesale exposures in this context are most easily described by what they are not, rather than what they are. Wholesale exposures are *not*:

- a) Exposures with retail counterparties, i.e., individuals or small businesses, that are pooled together for credit analysis
- b) Equity and debt instruments
- c) Credit issued to support securitization activities, e.g., ABCP lines
- d) Repo-style transactions, which are collateralized exposures re-margined daily
- e) Over-the-counter derivatives
- f) Immaterial/other assets

This definition of wholesale is designed to capture all of the "leftovers" of credit risk outside of the other categories. It helps to bear in mind that all of these categories, other than retail and immaterial/other assets, can be considered varieties of wholesale exposure, based solely on type of counterparty.

Wholesale exposures should have a customer representing either a) a company, b) a sovereign/government entity, or, in rare circumstances c) an individual. These counterparties are generally large in size in terms of their income statement revenue/balance sheet assets and total sales volumes, and are managed individually by banking institutions for credit monitoring.

1.2 Common Definition

Wholesale exposures are described in terms used across the banking industry to identify the various forms of exposures, differentiated by attributes such as balance sheet position, availability of collateral, and capital purpose. With these definitions, it should be possible to communicate clearly to anyone in the banking community the definition of wholesale exposures.

1.2.1 Loans

Loans are any funded credit position explicitly requested by the counterparty (not incidental to deposit withdrawals), without a real estate-related capital purpose.

1.2.1.1 Unsecured Loans

Unsecured loans are those drawn **without** the specification of collateral, posted by the counterparty or implicit in the asset purchased, as part of the loan agreement. Since these positions are not mitigated by collateral, the applicable credit risk parameter (LGD, EAD) is expected to represent greater credit risk than an equivalent secured position.

1.2.1.2 Secured Loans

Secured loans are those drawn **with** the specification of collateral, posted by the counterparty or implicit in the asset purchased, as part of the loan agreement. The collateral can be either explicit or implicit.

1.2.1.2.1 Explicit Collateral

Explicit collateral is something of tangible value and easily marketed, e.g., cash or securities. Explicit collateral is posted and held by either an intermediary or the creditor. It is fully available to the creditor at time of default, or based on an event as specified in the loan agreement.

1.2.1.2.2 Implicit Collateral

Implicit collateral is collateral available to a creditor as a result of the use of funds by the counterparty. Examples include car loans and mortgage loans, whereby the creditor has recourse to the car and house, respectively, at time of default, or as specified in the loan agreement. Implicit collateral is not held by the creditor or an intermediary, and there are recovery costs associated with collection of the collateral by the creditor.

1.2.2 Overdrafts

Overdrafts are loans made incidental to the cash flows associated with a deposit account. As part of a deposit account agreement, an overdraft provision allows a counterparty to overdraw a deposit balance, withdrawing more funds than are available in the account at the end of a business day. This overdraft results in a short term loan to the counterparty, one that normally is reversed within a short period of time, e.g., days. Some deposit agreements require the clearing of overdraft balances within a specified period, else the account be closed and sent for collection. In addition, some deposit accounts allow for netting of overdrafts across the customer relationship, e.g., multiple branches.

1.2.3 Leases

Leases convey the use, not ownership, of real assets, such as planes or real estate, with an agreement to compensate the owner of the assets (the bank) through a series of lease payments. The lessee may be given an option to purchase the asset from the lessor after the lease term, based on a pre-agreed residual

value. The credit risk associated to a lease is driven by two primary factors: 1) The value of the lease payments due; and 2) The asset's residual value. If the lease has a residual value purchase agreement, the second factor actually has a price risk component that contributes to credit risk, through the difference between market and projected residual value at the end of the lease. If the underlying asset is worth less than projected, credit risk increases, as a market liquidation of the asset won't cover the bank's outstanding residual receivable. If the underlying asset is worth more than projected, credit risk decreases, as a market liquidation of the asset is likely to cover the bank's outstanding residual receivable.

1.2.4 Commercial Real Estate

Commercial real estate is a type of "purpose" loan, whereby the loan of funds is intended for the purchase of commercial real estate. Purchase of commercial real estate can be for purposes such as: a) occupancy by the counterparty or b) leases to lessees, the cash flow from which facilitates repayment on the real estate loan. Under scenario b), note that commercial real estate differs from leases, in that the bank does not own the real estate purchased and generating lease revenue. The bank must own the asset in question for the exposure to qualify as a lease. Commercial real estate has implicit collateral, in that the creditor has recourse to the real property should the counterparty default, or otherwise not perform based on the terms of the loan agreement.

1.2.5 Letters of Credit

Letters of credit are guarantees issued by a creditor to the benefit of some counterparty. It is an agreement by a bank to honor the obligations of its customer. It is often required by suppliers/counterparties to the customer as a prerequisite of doing business with them, whereby the credit of the guarantor bank substitutes for the customer if the customer fails to perform. Letters of credit are off balance sheet uses of credit. They do not create a balance sheet position, as no funds are extended to the customer by the bank, but they do use credit under a credit facility, as the bank has obligated itself to perform for the customer should the customer not have the financial means to do so.

1.2.6 Trade Finance

Trade finance includes many types of exposures related to the import and export of goods. Some positions are off balance sheet, related to guarantees granted to an exporter. Other positions are on balance sheet, created once the beneficiary calls on the guarantee as payment for goods transferred. The various types of products offered within the Trade Finance realm include:

- a) Import Letter of Credit
- b) Export Letter of Credit
- c) Deferred Payment Credit
- d) Acceptance
- e) Banker's Acceptance
- f) Steamship Guarantee

These exposure types are described in detail in the Management Reporting Categorization section.

1.2.7 Unused Credit

Unused credit is the portion of a customer facility that has yet to be drawn down. Unused credit is not a balance sheet asset exposure, but rather a contingent customer liability that resides in off balance sheet accounts. A credit risk arises from the unused credit based on the probability of the unused credit becoming used, funded credit that ultimately results in a customer default. The probability that the unused credit becomes funded credit is often referred to as a "loan equivalent" exposure, and is usually modeled in the EAD portion of the capital formula as a haircut against the total unused balance.

1.2.8 Participations

Participations are slices of a bank's exposure to counterparties that are "bought" by another financial institution, with the originating bank retaining the customer relationship and servicing agreement (if applicable). Banks often participate into the exposures held at another financial institution for risk management purposes, e.g., to diversify into other industries or customer segments that they do not have access to in the open market. Participations can take the form of both funded and unfunded positions, e.g., loans and unused credit under a facility.

In discussing participations, it is useful to distinguish its definition from that of two other concepts:

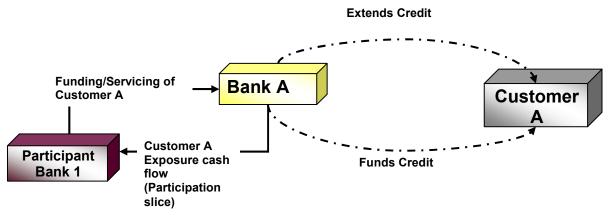
- 1) Syndications
- 2) Assignments

Participations differ from syndications in that syndications are credit positions that never reside on a bank's books, and the customer has no recourse to other banks in the syndicate if a specific bank doesn't perform. The syndication specifies the percentage of customer exposure divided up among many banks at initiation of the credit extension. Each slice of customer business is managed independently of the other slices held at other banks. Participations, conversely, are positions initiated with a customer by a bank, and subsequently sold to one or many banks, with the customer relationship retained by the originating bank.

Participations differ from assignments in that assignments are a legal transfer of a customer position from one bank to another, whereby the assignment bank then owns the customer relationship and servicing agreement (if applicable) for the assets in question. The customer has no recourse to an originating bank if an assignment bank doesn't perform under its credit agreement.

Underlying customers are blind to participations, in that their relationship remains with the originating bank, and calls upon it for credit draws and servicing. When such a request is made, the originating bank then calls upon the participant bank to perform its portion of the customer agreement, and is obligated to do so itself if the participating bank is unable. Syndications and assignments, as described, do not have this residual exposure, as the customer has a direct relationship with each bank in the syndication/assignment. A participation is represented graphically as follows:

Participation Example



1.3 Management Reporting Categorization

Management reporting of wholesale exposures normally focuses on categories that closely mirror the common definition of these exposures, with slightly more granular specification. For instance, letters of credit are broken down by their guarantee purpose, and every type of trade finance exposure is clearly identified. Of particular note is the presence of a 3rd party guarantee deemed exposure category, which tracks the exposure to guarantors, rather than underlying customers. **This category is not reportable for regulatory capital purposes** if using the PD substitution approach, but is useful for concentration risk monitoring by credit officers.

Definitions of common management reporting categories for wholesale exposures are as follows:

1.3.1 Loans

See section <u>Loans</u>. Note that management reporting categories don't distinguish the presence of collateral. However, the credit product associated to each exposure does indicate the presence of collateral mitigating an exposure and whether or not that collateral is margined.

1.3.2 Fed Funds Sold

Fed Funds Sold are loans, the majority of which are on an overnight basis, made to other banks in order to meet their deposit reserve requirements for that day. These deposits, held with their regional Federal Reserve Bank, earn no interest. The rate charged by a counterparty bank on these funds is targeted by the Federal Reserve Board; in theory the effective interest rate on Fed Funds is set by the market, with a lower bound of 0 and an upper bound of the Discount Rate, which is the interest rate charged by the Federal Reserve for loans made directly to member banks. In practice, the Fed Funds rate can increase above the Discount Rate if it is impractical to seek a loan from the Fed before a market close.¹

The credit risk associated to a fed funds loan is based on the credit quality of the borrowing bank; the Federal Reserve does not guarantee performance of member banks on these loans.

1.3.3 Overdrafts

See section <u>Overdrafts</u>. The management reporting categorization reflects the common definition of these exposures, with additional specification on Overdraft types as follows:

1.3.3.1 Gross Overdrafts

Gross overdrafts are those loans resulting from deposit overdrafts that are not governed by a counterparty netting agreement. Each overdraft exposure is modeled distinctly based on the associated deposit account. A given counterparty could have multiple gross overdraft exposures, limited by its number of deposit accounts.

¹ It is of interest that, during the period from September 19 - 26, 2008, the effective fed funds rate varied significantly from the target rate of 2%, as the Federal Reserve injected substantial capital in the overnight loan market in hopes of increasing short-term liquidity and restoring confidence in inter-bank lending among member banks. During this period, the effective rate ended as low as 1.08% as a direct result of the Fed's capital injection. However, longer term commercial paper rates among banks skyrocketed, as member banks were unwilling to assume longer-term unsecured credit risk with their banking counterparties. For instance, the 2 month financial commercial paper rate increased from 2.66% on Sept. 17 to 3.40% on Sept. 26, an increase of 28%.

1.3.3.2 Net Overdrafts

Net overdrafts are those loans resulting from deposit overdrafts that are governed by a counterparty netting agreement. All overdraft exposures and deposit liabilities subject to the netting agreement are modeled as a single exposure, with the deposit accounts in that customer relationship in liability balance offsetting the asset overdraft exposures. A given counterparty could have multiple net overdraft exposures, depending on the terms of the netting agreement. An example of a netting rule: *net all deposit balances by branch within a given currency*.

1.3.4 Leases

See section <u>Leases</u>. The management reporting categorization reflects the common definition of these exposures.

1.3.5 Letter of Credit

See section <u>Letter of Credit</u>. The management reporting categorization reflects the common definition of these exposures, with additional specification on Letter of Credit types as follows:

1.3.5.1 Performance Standby Letter of Credit

Performance Standby Letter of Credit is an irrevocable commitment on the part of a bank to guarantee performance in an underlying contract between a Buyer and Seller or a service provider.

This type of Standby can be used to insure many types of transactions from international trade to buying or selling a house or other major purchase.

The Standby stands as a guarantee that the parties to an underlying contract will perform as agreed. Used in this matter, the Standby serves as a performance bond.

As such, it is an off balance sheet instrument because, until there is a default that causes the Standby to be executed (called upon), there really is nothing to ledger other than the fee charged by the bank for agreeing to the Standby and creating it. Neither the bank nor the bank's customer ever expect the credit to be needed, but it's there to cover unforeseen circumstances.

1.3.5.2 Financial Standby Letter of Credit

The "Financial" Standby Letter of Credit, a type of credit enhancement, serves a different purpose than the Performance Standby, albeit they do have a few things in common inasmuch as each is used as a form of quasi-insurance, or guarantee.

The difference is that whereas the Performance Standby Letter of Credit backs an obligation to perform an action, the Financial Standby Letter of Credit backs an obligation to pay money or repay a loan. For instance, if the Buyer fails to make an obligated payment for a delivery of product or service, the Financial Standby Letter of Credit kicks in and the Seller or service provider is paid.

Again, neither the bank nor the applicant ever expects the Standby to be called upon.

If the Financial Standby is being used to safeguard a portfolio while the portfolio owner seeks alternate credit lines, then the portfolio or other liquid assets (depending on bank negotiations) must be used as the collateral for the Standby, and a minimum value of the collateral must be maintained. If the value of the

collateral falls below the minimum, the bank can liquidate the owner's assets or call upon the owner to make up the difference.

1.3.5.3 Import & Export Letter of Credit

Import and export letters of credit are guarantees against the performance of an importer in an exchange of goods. The key parties in import and export letters of credit are usually a **beneficiary** who is to receive the money (seller/exporter), the **applicant** who wishes to receive imported goods (buyer/importer), the **issuing bank** of whom the applicant is usually a client, and the **advising bank** of whom the beneficiary is usually a client.

Another important concept in letters of credit such as Import and Export LOCs is documents, which serve numerous purposes, including validation of the performance of a counterparty. Documents in trade finance LOCs normally take the form of a **bill of lading**. A bill of lading is a document issued by a carrier to a shipper/exporter that serves a threefold purpose:

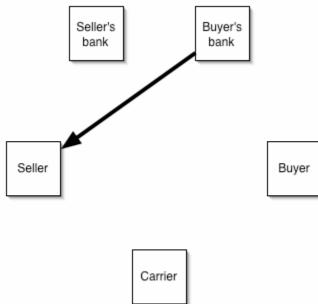
- A receipt for the goods delivered to the carrier for shipment
- A definition of the contract of carriage of the goods from the port of shipment to the port of destination listed in the bill of lading
- Evidence of title to the relative goods

An import letter of credit is issued by the issuing (importer's) bank in favor of the exporter, guaranteeing payment to the exporter by the importer once an appropriate bill of lading is presented. The issuing bank then collects funds from the applicant in exchange for the bill of lading.

Like an import letter of credit, and export letter of credit guarantees payment to the exporter by the importer once an appropriate bill of lading is presented. However, an export letter of credit is issued in addition to an import letter of credit; it is normally requested and paid for by the exporter as additional insurance on payment of a time draft, especially if the exporter is not satisfied with the credit quality of the issuing bank. Any bank can issue an export letter of credit in favor of the exporter.

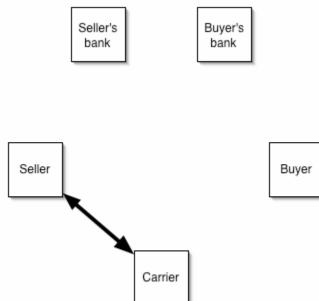
The sequence of events associated to the **execution and cash payment** [upon presentation of appropriate shipping documentation, an exporter receives payment in one of two forms: cash or a time draft, which is a promissory note for payment at a later date] against export and import letters of credit are as follows:





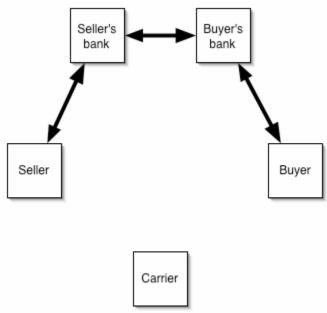
After a contract is concluded between buyer and seller, buyer's bank supplies a letter of credit to seller.





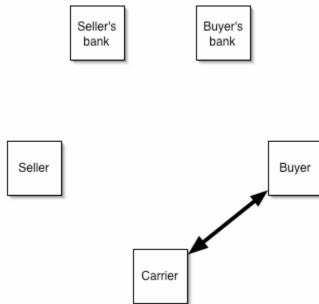
Seller consigns the goods to a carrier in exchange for a bill of lading.

I/E LOC Diagram 3:



Seller provides bill of lading to advising bank in exchange for payment. Seller's bank exchanges bill of lading for payment from buyer's bank. Buyer's bank exchanges bill of lading for payment from buyer.

I/E LOC Diagram 4:



Buyer provides bill of lading to carrier and takes delivery of goods.

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1.3.5.4 Deferred Payment Credit

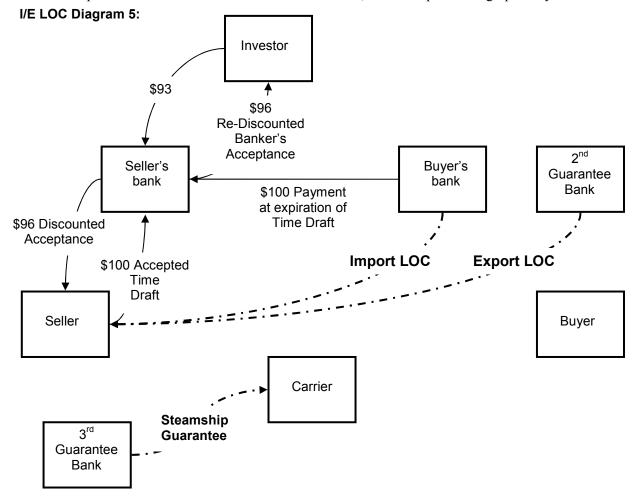
Deferred Payment Credit is a type of documentary Letter of Credit providing for payment to the beneficiary at a fixed period of time after presentation of conforming documents, although no time draft, a document specifying the amount and future date of payment, is required.

1.3.5.5 Steamship Guarantee

A steamship guarantee is an indemnity letter issued by a bank to a steamship line requesting release of merchandise in the absence of original bills of lading (See LOC Diagrams 4 & 5). The bank indemnifies the steamship line from the liabilities arising from releasing a shipment without the necessary shipping documents. Banks issue this guarantee to their creditworthy customers, normally the importer in a trade finance transaction, who either have not received the documents or have lost them.

1.3.5.6 Acceptance and Banker's Acceptance

Upon presentation of appropriate shipping documentation, an exporter receives payment in one of two forms: cash or a time draft, which is a promissory note for payment at a later date. Both Acceptances and Banker's Acceptances result from the issuance of a time draft, and are represented graphically as follows:



1.3.5.6.1 Acceptance

An acceptance usually results from a Letter of Credit that provides for payment by means of a time draft. Payment of the time draft is "accepted" (guaranteed) by the bank issuing the credit only if the documents presented conform to the stipulations of the LOC. By accepting the draft, the issuing bank indicates its commitment to pay the stated amount of the time draft on a specified future date. Normally the advising bank "accepts" the time draft on behalf of the issuing bank in exchange for a fee. No funds are extended to the beneficiary upon acceptance, but acceptances are advantageous because the beneficiary (the seller) can receive immediate payment by having the draft discounted (purchased) by the advising bank (or some other bank), while the applicant's (buyer's) obligation to pay is deferred until the maturity of the draft.

Once discounted, the acceptance becomes a funded exposure on the advising (or discounting) bank's books.

1.3.5.6.2 Banker's Acceptance

A banker's acceptance results from the re-discounting, or selling at a discount to face value, of an acceptance, creating a money market instrument that is marketable and exchangeable. A three step process is necessary to create a banker's acceptance:

- 1) Acceptance of a time draft upon receipt and approval of appropriate shipping/warehousing documentation (usually performed by an advising bank)
- 2) Discounting (payment) of an acceptance to the beneficiary by a bank (normally the advising bank)
- 3) Re-discounting of an accepted time draft to the greater market (any investor) by the discounting bank

The re-discounted time draft that is sold to an investor earns a money market rate of return based on the credit risk of the issuing bank. The banker's acceptance matures once the issuing bank pays the time draft, funds that are ultimately dispersed to the discounting bank and investor.

The banker's acceptance (or acceptance or time draft) becomes a funded exposure on the issuing bank's books once it pays the time draft at maturity. The exposure is eliminated once the issuing bank is paid by the applicant (importer).

1.3.6 Undrawn Credit

See section <u>Unused Credit</u>. The management reporting categorization reflects the common definition of these exposures, with additional specification on Undrawn Credit types as follows:

1.3.6.1 Advised Undrawn

An advised undrawn exposure is simply the available credit balance, net of syndications, assignments and participations, under an advised facility. An advised facility is one in which the customer is advised of the availability of credit, including the facility's total and available credit line, although the bank is under no legal obligation to extend funds under the facility when drawn by the customer.

1.3.6.2 Committed Undrawn

A committed undrawn exposure is simply the available credit balance, net of syndications, assignments and participations, under a committed facility. A committed facility is one in which the customer is

advised of the availability of credit, including the facility's total and available credit line, and the issuing bank is under legal obligation to extend funds under the facility when drawn by the customer.

1.3.7 Participations

See section <u>Participations</u>. The management reporting categorization reflects the common definition of these exposures, with additional specification on Participation types as follows:

1.3.7.1 Funded Participation Guarantee

A funded participation guarantee is a funded asset, such as a loan, on a bank's books that has been participated to another non-affiliated bank, either in whole or in part. The portion of this funded asset that was participated externally is modeled for credit risk only if the funded asset falls under a revolving facility. As the loan balance amortizes, the amount of the amortized principal returns to the originating bank's credit facility in the form of unused credit. As such, and as a conservative risk modeling approach, the entire funded participation balance, governed by a revolving facility, is modeled for credit capital.

1.3.7.2 Unfunded Participation Guarantee

An unfunded participation guarantee is any used or unused credit extension that has not yet funded, but is participated by another non-affiliated bank. Examples of unfunded participations include undrawn credit and letters of credit. Although these positions are participated, the originating bank is still responsible for funding if these positions are ever funded. A credit risk arises for the originating bank if the participant bank fails to fund its share of the participation when drawn, in which case the originating bank must fund and assume the credit risk of the underlying customer. In effect, an unfunded participation guarantee results in credit risk only if two defaults occur: the participant bank fails to fund, and, once funded, the underlying customer defaults on repayment. Unfunded participation guarantees are modeled for credit risk in all cases.

1.3.8 3rd Party Guarantee Deemed Exposure

A deemed exposure models the counterparty credit risk to a guarantor, instead of to the customer being guaranteed. Logically, an exposure that is guaranteed retains the customer identifier representing the original obligor. A second exposure, representing the same position, is created to model the credit risk associated to the guarantor counterparty, which facilitates customer concentration risk and industry/sector analysis by internal managers, among other benefits. Both the original exposure and the deemed exposure receive a double-default equivalent capital treatment, although through different means: the original exposure via an LGD adjustment, and the deemed exposure through an EAD adjustment. *It is important to note that a deemed exposure is not modeled for regulatory capital, as it would double count the capital allocated to the original exposure.*

1.4 Basel II Pillar I Reporting Categorization

The Basel II Accord requires specific disclosure of exposures within the FFEIC 101 report. The taxonomy of disclosure includes four primary drivers: *counterparty, product, calculation method, and exposure status*. One of these four drivers should categorize every exposure for reporting under Pillar I requirements. The method for assigning an exposure category will depend on prioritization rules, with exposure status dominating calculation method, calculation method dominating product, and product dominating counterparty. The wholesale exposure categories as listed below are expected to be driven by counterparty and product only.

It is important to note that, for training purposes, repo-style, derivatives, and the investment book are excluded from this discussion of wholesale exposures, but for Basel II Pillar I disclosure, repo-style, derivatives, and a portion of the investment book are considered part of the Wholesale asset category. Please refer to the applicable training manual for Basel II Pillar I exposure categorization of repo-style, derivatives, and investments.

As described in the introduction, an exposure to a) a company, b) a sovereign/government entity, or c) an individual have the potential to be considered wholesale. The term "company" is broadly defined to mean a corporation, partnership, limited liability company, depository institution, business trust, SPE, association, or similar organization. An individual can be considered wholesale if it is not managed by the bank as part of a segment of exposures with homogeneous risk characteristics. Securitizations, equity, and retail exposures are never considered wholesale.

A clear distinction is drawn in the final rule between an exposure categorized as retail vs. one categorized as wholesale. This distinction is critical to understanding the wholesale definition in Pillar I reporting classification. There exist a number of "product" exceptions within the traditionally retail book of business that would classify an exposure as wholesale:

- (i) An exposure of > \$1 million, either in original or current outstanding amount, on residential property (other than 1-4 family), secured by either a first or subsequent lien.
- (ii) Exposures to individuals or companies *for business purposes* (other than residential mortgage exposures and Qualified Revolving Exposures (QRE)), > \$1 million per borrower, and managed as part of a segment of similar exposures. The bank must aggregate all business exposures to a particular legal entity and its affiliates that are consolidated under GAAP. If that borrower is a natural person, any consumer loans (for example, personal credit card loans or mortgage loans) to that borrower would not be part of the aggregate.
- (iii) Any residential mortgage managed on an individual basis, rather than as part of a segment.

The categorization of securitizations and equity should be driven by their product identifiers, and thus excluded from analysis at the counterparty level as wholesale exposures.

1.4.1 Corporate

Wholesale Exposures – Corporate includes all wholesale exposures as defined in the final rule, except those which are to be specifically included in the Wholesale Exposures – Bank, Wholesale Exposures – Sovereign, Wholesale Exposures – Income Producing Real Estate, Wholesale Exposures – High Volatility

Commercial Real Estate, or Wholesale Exposures – Eligible Margin Loans, Repo-Style Transactions, or OTC Derivatives schedules. Included in this category are government-related entities whose exposures do not have the full faith and credit support of a sovereign, such as the Federal Home Loan Bank or the Federal Agricultural Mortgage Corporation. Also include in this category exposures to regional and local government entities, such as state governments or municipalities.

1.4.2 Bank

The Bank category includes the following entities: (1) banks and depository institutions as defined in the Glossary of the Reports of Condition and Income under the following headings: Banks, U.S. and Foreign; and Depository Institutions in the U.S.; (2) securities firms; and (3) multi-lateral development banks (including the World Bank, African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, and the Inter-American Development Bank Group) that do not have full faith and credit backing of sovereign entities.

1.4.3 Sovereign

A sovereign entity means a central government (including the U.S. government) or an agency, department, ministry, or central bank of a central government. State or local government bodies would not qualify as sovereign, and should slot into one of the other wholesale categories.

A sovereign exposure means:

- (i) A direct exposure to a sovereign entity; or
- (ii) An exposure directly and unconditionally backed by the full faith and credit of a sovereign entity.

An interesting situation has emerged with recent market events, whereby the corporate entities AIG, Freddie Mac, and Fannie Mae received significant financial support from the U.S. government. AIG received a capital injection of up to \$85 billion in exchange for close to 80% of its equity, including veto power over strategic decisions. Freddie and Fannie were put in conservatorship by the U.S. Treasury, thus controlling its operations and finances.

Interpretation of the sovereign exposure clause (ii), as described above, plays an important role in determining the appropriate classification of exposures to these three counterparties, and others like them. The conservatorship of Freddie and Fannie likely meets the criteria of clause (ii), whereas the equity stake in AIG requires further clarification as to the U.S. government's "unconditional" backing of its financial obligations.

1.4.4 High Volatility Commercial Real Estate (HVCRE)

Parameters for inclusion in this asset category are very specific, as outlined in the Basel II Federal Register Final Rule:

A credit facility that finances or has financed the acquisition, development, or construction (ADC) of real property, unless the facility finances:

- (1) One-to four-family residential properties; or
- (2) Commercial real estate projects in which:
 - (i) The loan-to-value ratio is less than or equal to the applicable maximum supervisory loan-to-value ratio in the [AGENCY]'s real estate lending standards;

- (ii) The borrower has contributed capital to the project in the form of cash or unencumbered readily marketable assets (or has paid development expenses out-of-pocket) of at least 15 percent of the real estate's appraised "as completed" value; and
- (iii) The borrower contributed the amount of capital required by paragraph (2)(ii) of this definition before the [bank] advances funds under the credit facility, and the capital contributed by the borrower, or internally generated by the project, is contractually required to remain in the project throughout the life of the project. The life of a project concludes only when the credit facility is converted to permanent financing or is sold or paid in full. Permanent financing may be provided by the [bank] that provided the ADC facility as long as the permanent financing is subject to the [bank] 's underwriting criteria for long-term mortgage loans.

1.4.5 Income Producing Real Estate (IPRE)

IPRE includes exposures that finance the acquisition, development, or construction (ADC) of one-to-four family residential properties, or commercial real estate projects that are not defined as HVCRE, as well as permanent financing of commercial real estate and apartment buildings.

Thus, the IPRE exposure category includes all commercial real estate not covered under HVCRE, including both project-based and permanent financing. It's worth noting that, according to these definitions, permanent financing of One-to four-family residential properties is the only type of real property exposure that is omitted from the HVCRE and IPRE categories, financing that is rarely expected from a wholesale customer.

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