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Global Asset-Backed Commercial Paper Criteria

September 29, 2005

(Editor's Note: This article is no longer current. It has been fully superseded by "Global Asset-Backed Commercial Paper Methodology And Assumptions," March 22, 2024.)

- An asset-backed commercial paper (ABCP) conduit is a limited-purpose entity that issues CP to finance the purchase of assets or to make loans. Some asset types include receivables generated from trade, credit card, auto loan, auto, and equipment leasing obligors, as well as collateralized loan obligations (CLOs) and collateralized bond obligations (CBOs). ABCP conduits are often established and administered by major commercial banks to provide flexible and competitive low-cost financing to their customers. The CP issued can take a variety of forms, including traditional discount notes, interest bearing fixed and floating notes, to extendible notes, callable notes, and puttable notes.
- Unlike stand-alone term securitizations, ABCP conduits are ongoing concerns and do not wind down after a few years. In a typical ABCP conduit, maturing CP is paid down with the proceeds of newly issued CP. Simultaneously, the proceeds of collections from matured receivables are reinvested in newly generated receivables. In evaluating these programs, S&P Global Ratings analyzes the risks associated with credit, liquidity, interest rates, foreign currencies, legal issues, structural features, cash flows, and, where appropriate, the financial viability of the asset originator.
- The main focus of this criteria article is on partially enhanced ABCP conduits. In contrast, fully enhanced conduits, including those structured with repurchase or total rate of return swaps, typically use credit enhancement facilities from financial institutions to cover 100% of the credit, liquidity, and occasionally legal risks. The 100% enhancement also covers other risks that may be present, such as interest rate, servicer, and program administrator risks. In these conduits, the risk to CP investors is that the credit enhancer will become insolvent, not that the assets will default. Investors in partially enhanced ABCP are exposed to the losses on the underlying receivables if these losses exceed the pool-specific enhancement and the fungible partial enhancement provided at the program level.
- 4. Another way of classifying ABCP conduits is by whether the program involves a single seller or multiple sellers. Single-seller programs are established to benefit an individual asset originator by providing a way to finance its receivables pool. Multiseller programs, on the other hand, acquire receivables from numerous asset originators.

Single-Seller Conduit

A single-seller ABCP conduit is a limited-purpose, bankruptcy-remote entity that issues CP as a way to finance the assets of a single originator. Such conduits are most suitable for asset

ANALYTICAL CONTACTS

Dev C Vithani

New York

(1) 212-438-1714

dev.vithani @spglobal.com

Radhika Kalra

New York (1) 212-438-2143 radhika.kalra

radnika.kaira @spglobal.com

CRITERIA CONTACTS

Volker Laeger

Frankfurt

+ 49 693 399 9302

volker.laeger @spglobal.com

Mauricio Tello

New York

+ 1 (212) 438 1206

mauricio.tello @spglobal.com

Herve-Pierre P Flammier

Paris

+ 44 20 7176 7338

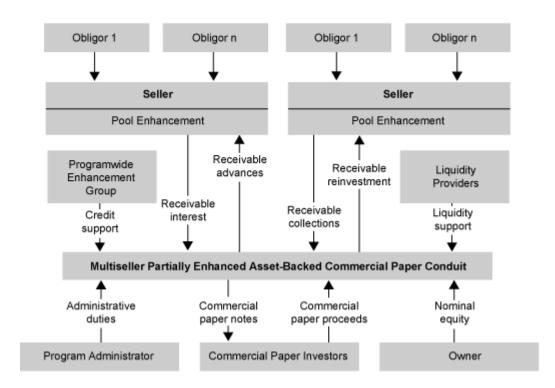
herve-pierre.flammier @spglobal.com

originators with large pools. While the asset originator has the advantage of significant control over the associated costs of administering the pool, it also has the burden of shouldering these costs alone. Single-seller conduits provide credit enhancement consistent with the CP rating and 100% liquidity support from providers rated at least as high as the conduit issuances, with two notable exceptions, discussed in the liquidity section.

Multiseller Conduit

- 6. Multiseller CP conduits serve the financing needs of several unaffiliated originators by combining their assets into one diverse, nonfungible portfolio supporting CP issuance (see chart 1). The multiseller conduit is a bankruptcy-remote, special-purpose entity. The asset portfolio is managed for the ABCP conduit by a program administrator (typically the sponsor bank but not necessarily) according to the conduit's credit and investment guidelines.
- 7. Multiseller conduits rely heavily on program administrators to ensure that a program is operating properly. Thus, the evaluation of the program administrator, which is in many cases also a provider of credit enhancement and/or liquidity lines, is key to the analysis of these programs. The program administrator's role is to negotiate with third-party credit enhancement providers and liquidity banks, and to closely monitor the performance of each transaction in the conduit. Because the multiseller conduit finances assets from a variety of sellers, the administrator also manages the conduit's portfolio risk and cash flows. The administrator may also originate assets and refer new asset originators to the conduit.
- 8. For most partially enhanced conduits, all new transaction pools entering the conduit are subject to review by S&P Global Ratings. The new seller reviews as well as the management review (to be discussed later) are based on the following factors:
 - The conduit's portfolio diversification;
 - The amount of fungible programwide enhancement;
 - The liquidity funding formulas;
 - The strength of conduit management and operating procedures;
 - The target customer base;
 - The credit and investment policies;
 - The experience of the underwriting and surveillance staff with that particular asset;
 - The conduit's track record regarding portfolio performance and adherence to underwriting guidelines;
 - The maximum CP maturity; and
 - The transaction's amortization events and conditions for issuing CP.





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Management Review And Surveillance

15. The initial structural review of ABCP conduits is supplemented with ongoing management reviews and surveillance. Surveillance and management reviews are the maintenance functions of the rating process. They help monitor the quality and performance of the receivable pools financed or purchased by the conduits. The surveillance and management review process maintains the continuing integrity of individual ratings.

Management review

16. Expansion of the types of assets in the ABCP market means that an increasing amount of time and effort is needed not only to understand complex structures and risks, but also for the management review process. It means that some participants may be performing functions for which they have very little track record. With so many new entrants seeking financing, greater

emphasis is placed on the program administrator's role as a manager and servicer of the conduit's business. It is imperative to understand how the conduit's management team originates its business, how its credit approval process works, and how it handles problem credits.

- 17. S&P Global Ratings conducts a periodic management review of the program administrator. The management review includes a discussion of any changes in the credit and investment policy, credit underwriting process, management of problem transactions, review of personnel, demonstration of conduit transactions, and receivables-monitoring systems. For new programs, the program administrator's motivation in establishing the program and senior management's commitment to the securitization business are evaluated in this process. The program administrator should be able to demonstrate its general securitization expertise and ABCP expertise in particular. Appreciation of the competition, the targeted market, and the conduit's strengths is essential for a successful program. The program administrator should be able to link aspects of the legal documents with its day-to-day operations.
- 18. In addition, the management team should have extensive credit training and a strong credit culture. The underwriting criteria of the conduit are set in a credit and investment policy. The program administrator is guided by this policy and may reject potential sellers that do not meet the policy minimums. In reviewing a conduit's underwriting criteria, assurances will be sought that the conduit's credit and investment policy is at least as conservative as that of the program administrator where the administrator is a financial institution.
- 19. When assessing the underwriting risk, it is important to know the level of review that is conducted by the program administrator on each asset originator. Questions that should be answered include, but are not limited to, the following:
 - What does the credit and investment policy require the program administrator to do?
 - Who performs the audits and when?
 - Is there a procedures manual, and does every person on the administration team have a backup?
 - Is the priority of payments clearly identified for the program administrator?
 - Are there specific pool performance requirements?
 - Are there separate credit, surveillance, and auditing departments that serve as quality control functions and have reporting lines separate from new business development?
 - What are the events that compel the program administrator to stop purchasing assets and cease issuing CP?
- ^{20.} Sound transaction underwriting would involve a thorough analysis of seller risks, including evaluation of overall creditworthiness, risk of fraud, product and performance risk, and the capacity of the seller to meet its representation and warranties.
- The management review includes a demonstration of the information system in place to monitor the actual workings of the program daily. This system should track the following:
 - Seller-specific and programwide enhancement;
 - Flow of funds or payment priorities;
 - Programwide termination events in the context of the legal documents;
 - How CP proceeds and collections are allocated during revolving and liquidation periods;
 - How much CP can be issued against available liquidity;

- Available liquidity by seller;
- CP maturities; and
- Termination events and reinvestment of collections.

Surveillance

- ^{22.} ABCP conduits submit periodic surveillance reports that show key statistics to monitor the health of transactions. Failure to submit timely surveillance reports can result in a withdrawal of the CP rating. Some key statistics on surveillance reports include:
 - CP outstanding;
 - Financing commitments;
 - Required and actual programwide credit enhancement;
 - Required and actual seller-specific credit enhancement;
 - Portfolio composition and portfolio activity statistics;
 - Seller concentration;
 - Asset type concentration;
 - Liquidity provider information; and
 - Portfolio performance and pool amortization triggers.
- ^{23.} Any substantial decline in performance of assets beyond initial (stressed) expectations may result in a draw on programwide support. Erosion of the programwide support beyond the minimum required amount consequently will result in a program wind-down or rating action.
- 24. S&P Global Ratings also monitors the ratings of providers of liquidity support and credit enhancement to verify that the provider's rating continues to reflect the rating on the ABCP. The same applies to new providers and is based on corresponding information S&P Global Ratings receives. The downgrade of a credit enhancement provider may cause an immediate downgrade of the conduit's CP if the conduit does not have a remedy for maintaining its rating. The downgrade of a liquidity provider may not cause an immediate downgrade of the CP if the conduit can find replacement liquidity within a short time frame, usually 30 days if the facility meets certain criteria.

Evaluating Credit Risk For ABCP Transactions

- ^{25.} Generally, there are two levels of credit enhancement in ABCP conduits: pool-specific and programwide.
- 26. Pool-specific enhancement should include protection against losses, dilution (if dilution is not covered by liquidity banks), foreign exchange, and, in the case of non-interest-bearing assets, carrying costs. Pool-specific enhancement is generally provided in the form of overcollateralization, third-party credit enhancement, excess cash flow, swaps, or recourse to the asset originator. Pool-specific enhancement only covers defaults on a specific originator's receivables and cannot be used to fund losses on any other pool.
- ^{27.} Programwide enhancement is made available to pay for losses in excess of pool-specific enhancement. Programwide enhancement is fungible across all pools in the conduit. It is generally

in the form of a bank LOC, bond insurance policy, cash collateral, or some combination. The CP program will be rated no higher than the programwide credit enhancement provider. Any expected-loss interest holder that may be drawn upon before the programwide enhancement may or may not be a rating dependency.

28. S&P Global Ratings will examine the underwriting standards of each transaction's originator and servicer. One method of examining these standards is to conduct a business review of the transaction's originator and servicer. In lieu of a review by S&P Global Ratings, a conduit may instead choose to rely on its own due diligence and have programwide credit enhancement in place that is equal to at least 5% of the transaction's outstanding balance. S&P Global Ratings meets selectively with the originators to discuss their business and understand their credit system and servicing capabilities, even when the conduit is willing to hold programwide credit enhancement. The credit enhancement may also be present to offset other risks in the transactions or structure.

Credit risk assessment

- ^{29.} Credit risks arise in a conduit when the credit quality of a transaction deteriorates and, in some cases, when the financial condition of the asset originator erodes. An analysis of a pool of assets for an originator relies on the transaction summary provided by the program administrator. The transaction summary includes the asset originator's overall risk profile, underwriting standards, collection procedures, pool selection process, historical receivables performance statistics, and the receivables' characteristics.
- 30. The asset originator's risk profile includes its historical and expected financial performance, competitive strengths and weaknesses, and competitive position and strategy in the business line from which assets are being sold. Underwriting and collection policies include historical and current lending criteria, as well as audit procedures and accounting systems.
- 31. The review of standard asset types, such as credit card receivables and auto loans, will usually rely on the program administrator's review of the asset originator. In some cases, particularly for new asset types, asset originators in new markets, or conduits that do not have program enhancement, S&P Global Ratings may meet with the asset originator's management to review business and financing strategies, credit and collection policies, and computerized receivables management systems.
- 32. Default risk is analyzed in all asset types, starting with a review of pool data provided by the program administrator. The pool data include customer concentrations, historical and prospective value of tangible assets securing the receivables, historical pool origination and payment characteristics, and delinquency and loss characteristics of the receivables pool.
- Provided underwriting standards and target markets have not changed, for most asset types, historical delinquencies and write-off performance are considered to be the best indicators of current pool credit quality. In sizing a transaction's enhancement, an expected case is first established. Expected loss performance is then increased by an appropriate stress factor to determine the levels of credit enhancement needed to arrive at the desired rating (see "Determining pool-specific enhancement"). The stress factor is a function of the asset type, volatility of historical loss rates, and rating level. Typically, the higher the volatility of historical loss rates, the higher the stress multiple used for sizing enhancement.
- 34. Obligor concentration is another factor that is incorporated into the sizing of enhancement. Some receivables pools contain substantial obligor concentrations, which add credit risk to the transaction. For example, if a pool has one obligor that represents 20% of the total pool, and that obligor were to become insolvent, the transaction could risk losing the entire receivables amount

of that large obligor. Therefore, it is important to establish concentration limits that prevent obligors from becoming too large a percentage of a transaction. In some cases, limitations on industry concentration may also be required.

Determining pool-specific enhancement

- When analyzing pool-specific enhancement, S&P Global Ratings uses essentially the same approach as that for single-seller and multiseller ABCP conduits. The total amount of pool-specific enhancement is based on a multiple of historical loss experience of the pool, expected pool performance, obligor concentrations, the type of receivables, and the rating requested.
- 36. Pool-specific enhancement, pool wind-down triggers, programwide enhancement, and CP issuance triggers are evaluated because they should all work to mitigate the credit risks associated with receivables financed by ABCP conduits. S&P Global Ratings focuses on the following factors when analyzing pool-specific enhancement:
 - Asset type and characteristics of the receivables;
 - Eligible receivables criteria (see "Eligible receivables");
 - Pool-specific enhancement and what it covers;
 - Type of enhancement, whether fixed level or dynamic; and
 - Whether the enhancement is sized to cover losses over the life of the asset (long-tail risk) or the tenor of the liability (short-tail risk; see "Short-tail versus long-tail risk" and chart 2).
- 37. Each pool financed by the conduit is expected to be structured to a credit quality level consistent with the conduit's rating. Some conduits structure their pools at a rating level below the conduit's CP rating. The credit gap between the pool assessment and the CP rating is typically mitigated by structural features at the pool level and the conduit level, the portfolio diversification of the conduit, and programwide enhancement.
- 38. Generally, detailed loss data of at least three years help to refine the analysis. While the process of determining required enhancement levels varies by asset type, the general approach is to cover a multiple of historical losses over the loss horizon. The multiple is based primarily on the conduit's CP rating. The loss horizon is the period when the conduit is exposed to credit risk on the underlying assets.

Eligible receivables

- ^{39.} For any transaction with a revolving period, including warehouse transactions, analyzing credit support also involves assessing receivables eligibility criteria. In a revolving transaction, there is no fixed set of receivables because collections from old receivables are constantly being reinvested in new ones during a period typically referred to as the revolving period. Therefore, in a revolving transaction, there are several risks that are not found in an amortizing transaction.
- ^{40.} First, the collateral mix may change as the originator enters a new market or business. Second, the originator's underwriting criteria may change in a way that negatively impacts the credit quality of the purchased assets. For this reason, all revolving transactions have eligibility criteria to limit subsequent purchases of receivables to a well-defined set of receivables.
- The eligibility criteria define the pool and limit investor exposure to high-risk receivables. There is typically a long list of eligibility requirements peculiar to each individual transaction. Among the

more common are:

- Delinquent and defaulted accounts. Borrowing base calculations exclude defaulted receivables and receivables that are past due beyond a specified delinquency category;
- Excess concentration. To limit investor exposure to a default by a large obligor, most structures set size limitations for individual obligors. Such concentration limitations are generally set on the basis of the credit rating of the obligor and the credit enhancement floor;
- Unperformed contracts. Receivables billed before completion of service or delivery of a product are generally limited for two reasons. First, obligors are less likely to pay for a service or product that has not been received. Second, the receivables may be considered an executory contract that could be rejected by the originator during its insolvency;
- Bill and hold receivables. In these instances, the supplier sells the goods to the customer, but holds the inventory until the customer needs it. In the event of an insolvency of the supplier, the customer may attempt to stop payment on products that have not been shipped. In addition, collecting payment on other shipments to the customer may be difficult if there is bill and hold inventory that has been paid for but is not in the possession of the customer;
- Tenor. The tenor of the receivables is limited to lower credit risk. For example, for an auto lease transaction, eligible leases might be limited to leases with an original tenor of 24 months. Generally, 60-month leases have more credit risk than 24-month leases because the originator is exposed to the default risk of the obligor for a longer period of time; and
- Obligor characteristics. Eligibility criteria also define obligor characteristics. For example, a pool may exclude receivables from affiliates of the originator or receivables from obligors who are past due on other receivables. A pool may also exclude receivables from obligors in a jurisdiction where it may be difficult to perfect the conduit's lien interest in such receivables.
- 42. In a revolving structure, the pool is screened periodically and receivables that have become high risk are continually removed from the eligible pool. The conduit is typically entitled to receive a share of all collections. If the pool of eligible receivables falls below the conduit's net investment (amount paid by the conduit to the seller) plus the required reserves and is not topped up within a specified cure period, the transaction will enter early amortization. As with early pool amortization events, a strong set of eligibility criteria will help to lower credit enhancement levels.

Short-tail versus long-tail risk

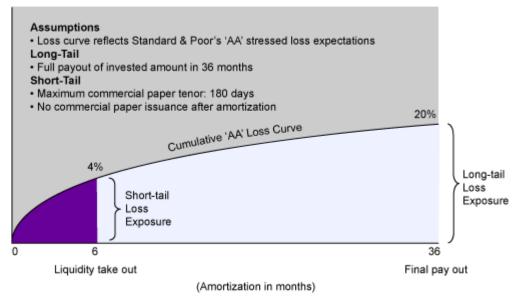
- 43. When reviewing pool reserves, any structural features that might reduce the credit support requirement for that pool are evaluated. For example, some transactions require liquidity providers to fund and repay CP as it matures as soon as any problem comes up in the transaction that causes an amortization. This is achieved by stopping the issuance of CP in an amount equal to the amount advanced for that pool and the purchase of new receivables after certain amortization events. In other cases, assets may be immediately put to the liquidity provider. Either way, what is referred to as short-tail exposure is created.
- 44. Chart 2 illustrates a short-tail exposure. The loss curve as shown represents expected losses to be incurred in an 'AA' stress scenario. Total 'AA' losses are expected to reach 20%. However, these losses are incurred over time as the pool liquidates in a 36-month period. Therefore, CP will not be exposed to all losses if it is repaid early in the amortization. The loss exposure to CP holders would be a one-month "look-see" period (which relates to reporting frequency; typically one month), when portfolio performance was eroding but no monthly conduit report was available to show the deterioration, plus maximum CP tenor. In this example the short tail is six months (the one-month

look-see period plus a maximum CP tenor of 150 days). S&P Global Ratings assumes that CP could be issued for its maximum allowable term the day before a monthly conduit report showing that a short-tail trigger had been hit, preventing further issuance of CP. Thus, CP holders would be exposed to losses during the one-month look-see period plus the maximum CP tenor.

- 45. Since there is, on average, only 4% of defaults before CP is repaid in the stressed scenario, an 'A-1+' CP rating can be assigned to a transaction that has credit support sized at 4%. If CP issuance is stopped upon a triggering pool amortization event such as a borrowing base deficiency, enhancement may be sized over the tenor of the liability plus the look-see period, resulting in a number greater than 4% but less than 20%.
- 46. However, liquidity banks are exposed to losses occurring during the full amortization period of the underlying receivables. They may want additional protection to ensure the full repayment of the liquidity principal and accrued interest on the liquidity loans they have provided to repay CP. As long as the liquidity banks are willing to accept less than 20% in this example, then there is an incentive to use a short-tail structure by the conduit administrator. The short-tail analysis is applicable when S&P Global Ratings is comfortable that the conduit is not exposed to any additional legal risks (see S&P Global Ratings' Structured Finance Legal Criteria).
- 47. If the conduit does not have any mandatory stop triggers for CP issuance due to a borrowing base deficit, or for other reasons tied to asset performance, the conduit can continue to issue and pay down CP as the eligible receivables pay down after a pool termination date. If CP can be issued during pool amortization, then credit enhancement is expected to be sized to cover losses and carrying costs expected to be incurred over the life of the asset.

Chart 2 Long-Tail Versus Short-Tail Analysis





Grossing up enhancement

48. When pool-specific enhancement takes the form of receivables overcollateralization, losses will

also occur on the overcollateralization amount. Therefore, the enhancement percentage is multiplied by the receivables balance, as opposed to being multiplied by the amount the conduit ultimately advances to the asset originator. If the enhancement is a percentage of the amount the conduit advances to the asset originator, the enhancement is grossed up to account for the expected losses on the overcollateralization amount.

- ^{49.} The following is an example of a gross-up reserve:
 - Eligible receivables balance = \$110;
 - Required loss reserve percentage = 10% of receivables balance, or \$11;
 - Amount of CP that can be issued = \$110 \$11 = \$99;
 - To issue \$100 of CP, more than \$110 of receivables would be required, as the balance of \$110 can experience 10% losses, or \$11;
 - To be able to issue \$100 of CP, the loss reserve of 10% needs to be grossed up as follows: required loss reserve as a percent of net investment = 10% / (1 10%), receivables balance = \$100 + \$11 = \$111; and
 - CP that can be issued = receivables balance 10% of receivables balance such that $$111 (10\% \times $111) = 100 .

Dynamic versus fixed enhancement

50. Enhancement can be a fixed percentage of the entire asset pool or it can be dynamic, changing as receivables performance changes. If fixed, certain pool performance triggers force an early amortization and may cause the conduit to stop issuing CP. If enhancement percentages are dynamic, they will rise when receivables performance deteriorates and fall (subject to a floor) when performance improves.

"Look-see" risk

51. An ABCP conduit administrator may not know each day how a transaction is performing because the servicer may not report receivables performance daily. If the conduit receives pool performance reports monthly, there is a risk it could continue to invest in receivables for an entire month while the transaction is underenhanced. The risk of being underenhanced caused by the reporting lag is referred to as "look-see" risk. ABCP transactions requiring servicers to report compliance reports daily can have lower enhancement levels than transactions that receive compliance reports less frequently.

Pool wind-down triggers

52. Wind-down triggers for revolving pools are early warning signals that are designed to minimize the conduit's exposure to losses by discontinuing the financing of new receivables. Revolving pools also typically have a mandatory pool wind-down trigger related to the decline of pool-specific enhancement below required levels. If the asset originator does not cure any deficiency in the enhancement within a fixed number of days, the pool is wound down automatically. Other triggers tied to breach of representations, warranties and covenants, and pool performance are not mandatory. However, the program administrator can exercise its right to terminate the pool upon any trigger.

53.

S&P Global Ratings does not require a standard set of pool wind-down triggers, but some common examples include:

- Insolvency or bankruptcy of the asset originator or servicer;
- Material breach of representations, warranties, or covenants;
- Servicer default:
- Deterioration of pool performance beyond specified levels (for example, delinquency, default, or dilution triggers):
- Decline of credit enhancement below required levels or deficiency in the level of eligible receivables that is not cured within a specified period of time; and
- Seller-specific triggers tied to its financial performance, merger, etc.

Structural Considerations For ABCP Transactions

In its review, S&P Global Ratings considers various structural characteristics of an ABCP program. Some of these include programwide enhancement, liquidity support or extension mechanisms, and various types of risk.

Programwide enhancement

- 55. Programwide enhancement is typically a fungible layer of credit enhancement provided by a third party directly to a conduit. Primarily, it is used to cover losses in excess of pool-specific enhancement. The presence of at least 5% programwide credit enhancement of unrated pools of assets provides comfort that the programwide credit enhancement provider is incentivized to keep the underwriting standards high. Although S&P Global Ratings reserves the right to conduct a business review of any originator selling to a conduit, in most instances the presence of programwide credit enhancement allows S&P Global Ratings to rely on the information provided by the administrator rather then conducting such a review. It also can be used to mitigate various basis, reset, and reinvestment risks if such risks are not fully covered by hedge agreements.
- Frogramwide enhancement is frequently provided by a rated affiliate of the program administrator that is rated as high as the CP. Programwide enhancement is either inherently liquid or fronted by a liquidity facility, and it covers losses on all pools, up to a set commitment amount. Examples of liquid programwide enhancement include cash in an eligible account that is invested in permitted investments, an irrevocable loan facility from a source rated as high as the CP program, and an LOC from a bank rated as high as the CP. A surety bond or a guarantee of payment from an entity with an appropriate long-term rating may be used, but would require that a liquidity provider be contracted to cover any payment timing mismatches due to the short-term nature of the CP.
- 57. Although not all programs have programwide enhancement, most of them do establish it for practical, as well as marketing, reasons. Programwide credit enhancement distinguishes ABCP multiseller conduits from single-seller CP and term transactions. This programwide credit enhancement also allows a program administrator significant flexibility to tailor transactions to meet the needs of specific clients. Absent programwide enhancement, transactions may need to be structured more conservatively. Conduits with a diversified portfolio and significant programwide enhancement can absorb high credit losses associated with a pool without exposing investors to a default in the timely payment of principal and interest at CP maturity. The level of programwide enhancement is factored into the rating and surveillance process. One of the most important factors considered when conducting transaction reviews is the size of the programwide

protection. Erosion of this enhancement to lower than its minimum required percentage would trigger a stop-issuance of CP and a wind-down of the program.

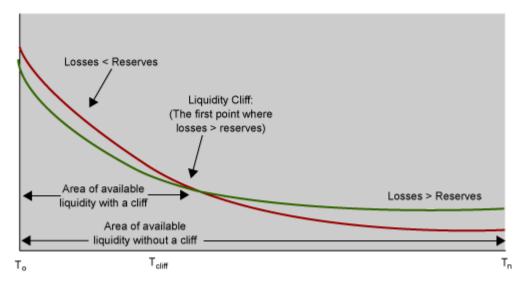
58. The typical ABCP conduit structure requires that pool-specific enhancement be exhausted before any draws are made on the programwide enhancement. Repayment of the programwide enhancement should be subordinate to that of CP and to any liquidity commitment that is not providing credit enhancement. Also, many programs have the ability to amortize the programwide enhancement as the program-authorized amount amortizes. The enhancement amount is typically a percentage of CP outstanding, and changes as that amount fluctuates. However, if a program wind-down occurs, programwide enhancement freezes at the level before wind-down. This helps protect investors against potential losses such as those resulting from adverse selection within an asset pool and from any losses that occur at the end of the transaction.

Analyzing liquidity support and risks

- 59. Liquidity support is an integral part of every nonextendible ABCP conduit. The liquidity funding formula is among the most important aspects of the document review. The funding formula determines for what the liquidity facility is willing to fund. Since most programs have assets and liabilities that are not match funded and lack minimum CP maturity restrictions, liquidity facilities are necessary to assure timely repayment to CP investors. Some, but not all facilities go beyond covering timing mismatches and provide protection to investors by, for example, absorbing the risk that receivables cash flows could be impaired by an automatic stay in the event of an asset originator bankruptcy. In providing this protection, the liquidity provider may be relying on its evaluation of the risk through a legal review of the transfer (a true sale analysis) or a credit review of the asset originator. Depending on the liquidity facility provider's comfort with the asset originator's credit quality, the liquidity facility may also protect investors against receivable dilutions, which are noncash reductions in a receivable's balance due to noncredit-related events such as product returns in a trade receivables transaction.
- 60. The liquidity provider also may be willing to provide an asset purchase agreement that provides added protection to investors. The liquidity facility provider's willingness to agree to such an arrangement will be based on the provider's independent document review and evaluation of the underlying pool of receivables. Though liquidity banks typically fund for nondefaulted receivables, the banks may be more willing to provide more than just protection against timing mismatches when the originator of the receivables has other banking arrangements with the provider and is an investment-grade client.
- 61. Credit enhancement is designed to protect investors against all risks associated with the funding of receivables that are not covered by a liquidity facility. Liquidity facilities vary considerably among conduits and often among specific receivables pools in the same conduit. As a result, a detailed review of liquidity facility documentation is necessary and will affect the evaluation of the adequacy of pool-specific and programwide credit enhancement levels.
- 62. Unlike the credit enhancement facility, the liquidity facility is generally large in size, but is subject to significant restrictions concerning its availability and use. In general, the facility commitment covers the face of CP through maturity. Also, unless there is additional credit protection (see joint and several and 80%/20% discussion below), the liquidity provider has to be rated as high as the program's CP.
- 63. Liquidity support may be in the form of either an asset purchase agreement or a loan agreement. Under the purchase, banks or other liquidity providers purchase nondefaulted receivables when liquidity is needed. Under the loan, liquidity banks lend money to the conduit and are secured by the cash flow from the underlying receivables. Swaps may also be used to provide liquidity.

- 64. The liquidity facility normally covers 100% of the face value of CP issued, but may provide less if another form of liquidity, such as a program LOC, is available to make up the full amount. The inherent liquidity of the assets can be analyzed for a period established for a minimum CP maturity. Extendible CP may or may not have a partial liquidity facility.
- 65. Liquidity for the full face of CP will be paid on maturity and can be achieved in several ways. The liquidity facility may fund, on the date when a liquidity event occurs, for nondefaulted receivables including accrued interest on CP through maturity. The liquidity facility may be set up to fund only for the accrued interest to the date of the draw, but in this case procedures should be such that liquidity is drawn only on CP maturity dates. This ensures that the interest on assets accrued until CP maturity is adequate to pay down the interest component on maturing CP. Otherwise, additional liquidity or enhancement should be in place to cover accrued interest on CP through maturity.
- 66. **Floating-rate CP.** Floating-rate CP introduces reset risk into the calculation. All programs using 100% liquidity facilities have a condition precedent to the issuance of CP that the facility covers the face amount. With floating-rate CP, the risk of interest rates rising upon reset could cause the test to fail after the CP issuance. To mitigate this risk, we would expect to see a buffer built into the issuance test to allow for the potential rising resets; alternatively, this risk may also be mitigated by the terms and conditions of the liquidity facilities. S&P Global Ratings will review buffer proposals case by case.
- 67. Interest rate on liquidity draws. To ensure that investors are not exposed to any interest rate mismatch between the reimbursement rate on the liquidity loan and the underlying asset, the interest amount payable on any advance under the liquidity facility is either capped at the yield on the underlying asset (or interest rate received through an interest rate swap) or covered by a yield reserve or other form of credit enhancement. For non-interest-bearing assets, a yield reserve is typically funded to cover interest paid to the banks. A transaction lacking such reserves or caps will usually subordinate the repayment of liquidity draws in the same way as in a short-tail transaction.
- ⁶⁸. **Liquidity funding base.** In many cases, liquidity banks limit their funding commitment based on an asset-based formula or on a capital-based formula. The asset-based formula typically includes all nondefaulted receivables. Under the capital-based formula, liquidity banks fund for the amount that the conduit advanced to the originator minus defaults in excess of the required enhancement.
- 69. However, there are some liquidity funding formulas that link funding commitment to available enhancement in addition to eligible receivables. In these cases, a liquidity cliff may occur (see chart 3). As long as enhancement exceeds losses, the liquidity provider is committed to fund. If the pool losses exceed enhancement, liquidity coverage is discontinued at that point and the commitment is reduced to zero. Pool-specific credit enhancement is often established at an adequate level to protect CP investors against this risk.





Amortization period

- 70. Another example of a liquidity funding formula is one that discounts eligible receivables by a portion of the pool's fixed enhancement. In this case, there is the risk that a liquidity purchase price shortfall could occur. This shortfall represents a discount in liquidity funding built in to give liquidity banks a level of protection against credit losses.
- 71. For an example of a liquidity funding shortfall, assume a liquidity provider's commitment equals:
 - (Eligible receivables defined defaults) / (1 + 50% x loss reserve percentage).

72. Further assume:

- CP outstanding = \$100;
- Eligible receivables before amortization = \$110;
- Required loss reserve = 10% or \$11; and
- Defaulted eligible receivables = \$6.

73. Calculations:

- Funding formula = $(\$110 \$6) / (1 + 50\% \times 10\%) = \$104 / (1 + 0.05) = \$99.05$.
- 74. In this example, the liquidity banks would only fund for \$99.05 even though there is \$104 in good receivables left. By funding only \$99.05, the liquidity provider has \$4.95 (or 5%) remaining in enhancement. The CP investor suffers a 95-cent funding shortfall.
- ^{75.} Transactions with liquidity purchase price shortfalls can either cover the shortfalls by increasing the size of pool-specific enhancement or by allocating programwide enhancement.

- 76. Consistent methodology is key. The definition of a defaulted receivable for sizing enhancement is generally the same as the definition to determine the available liquidity amount (see "Liquidity support" above). Liquidity providers commonly fund only for nondefaulted receivables, while the credit enhancement covers defaulted receivables—the complement of nondefaulted receivables. If the liquidity provider's definition of a defaulted receivable differs from the definition in the receivables purchase agreement, the transaction could be underenhanced. For example, assume a transaction uses receivables more than 90 days past due to calculate credit enhancement levels, but liquidity providers only fund for receivables up to 60 days past due. The receivable balances over 60 days past due are expected to be larger than the balances over 90 days past due, and the 30-day gap could cause a shortfall to the CP. Therefore, how a liquidity provider defines a loss is what defines the loss proxy for sizing credit enhancement levels.
- 77. Conditions precedent to liquidity funding. This paragraph has been superseded by "Global Methodology For Analyzing Liquidity Funding Outs And Limitations In ABCP Transactions," published Oct. 27, 2014.
- 78. Limited recourse and nonpetition. To reduce any incentive that the liquidity provider might have to file a claim against the conduit and cause the conduit to enter bankruptcy, limited recourse and, under short-tail transactions or anywhere liquidity takes more than timing risk, nonpetition language should be included in the facility agreement. The recourse that the liquidity provider has to the conduit should be limited to assets financed in the case of an asset purchase agreement or cash flow from the related receivables in the case of a loan agreement. Under a nonpetition clause, the liquidity provider covenants not to file a bankruptcy petition against the conduit for a limited period of time, generally a minimum of one year and one day after the full payment of the last maturing CP note.
- 79. "Joint and several" liquidity. In "joint and several" liquidity structure transactions, two institutions that are rated lower than the conduit's CP may provide all of a conduit's liquidity. For example, the combination of two 'A-1' rated financial institutions, each providing 100% liquidity coverage of rated obligations, would result in an 'A-1+' joint and several rating for the conduit's ABCP. This 'A-1+' rating could be used for an ABCP program rated 'A-1+'. Similarly, two 'A-2' financial institutions would result in a combined 'A-1' rating on a joint and several basis.
- 80%/20% liquidity for 'A-1+' rated ABCP programs. Up to 20% of an 'A-1+' rated conduit's liquidity may be provided by 'A-1' rated banks under certain conditions. First, only 'A-1' rated banks are eligible. Second, the long-term ratings of the 'A-1' rated banks are at least 'A+'. Third, the 'A-1' liquidity agreements should require an immediate draw to cash upon a downgrade of the provider to 'A' or 'A-2'. Last, this support applies only to a conduit's liquidity requirements and does not permit 'A-1' rated banks to provide credit support for 'A-1+' rated ABCP.

Evaluating other risks

- 81. S&P Global Ratings' review also includes an evaluation of interest- and non-interest-bearing receivables, and interest rate hedging agreements.
- 82. **Non-interest-bearing receivables.** ABCP transactions with non-interest-bearing receivables are typically sold to the conduit at discounts to cover the interest component on CP. This discount, or overcollateralization, usually covers rising interest rates throughout the liquidation phase of a transaction. Unless a transaction specifies differently, it is assumed that the conduit will continue to issue new CP throughout liquidation. CP transactions also need enough overcollateralization to

cover other carrying costs if those costs rank, in the allocation of collections, senior to or pari passu with CP. Liquidity interest on liquidity loan facilities is an example of a carrying cost that may rank in this order.

- 83. S&P Global Ratings considers the following factors when sizing overcollateralization for a yield reserve:
 - The worst-case amortization period;
 - The maximum number of resets that will occur on the CP during the period the receivables remain outstanding; and
 - The historical volatility of CP rates over the maximum number of resets.
- 84. Interest-bearing receivables. Transactions with interest-bearing receivables typically use the interest income to cover the interest component of the CP and carrying costs. These transactions will introduce basis risk when the receivables yield is not indexed on the same basis as the CP rate. We analyze the historical volatility and resets between the asset rate and CP rate to determine if the receivables income will cover the CP interest component.
- Interest rate hedging arrangements. Interest rate swaps and interest rate caps are the most common form of hedging arrangements used by ABCP conduits to manage interest rate risk. Charts 4 and 5 illustrate how interest rate hedges are commonly structured in ABCP transactions. Interest rate swaps can be used to manage basis risk when obligors pay a yield that is indexed differently than the CP rate. To manage this basis risk, an asset originator may enter into an interest rate swap with a bank or other entity as the swap counterparty. Interest rate swaps in ABCP should meet the following criteria:
 - The swap counterparty is rated as high as the CP unless sufficient collateral is posted according to the published criteria on interest rate swaps;
 - The swap notional amount should equal the outstanding face amount of CP; and
 - The swap should conform to S&P Global Ratings' Global Derivative Agreement criteria. Interest rate caps can be used when assets pay fixed rates of interest and the conduit has to pay continually resetting CP rates. The cap eliminates the risk that continually resetting CP rates may rise above the fixed-rate income the conduit receives from the asset originator.

Chart 4
Managing Interest Rate Risk With An Interest Rate Swap

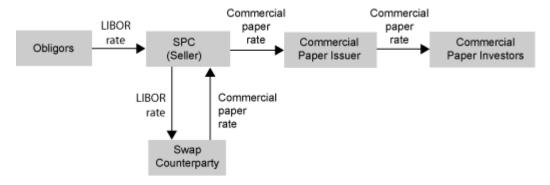
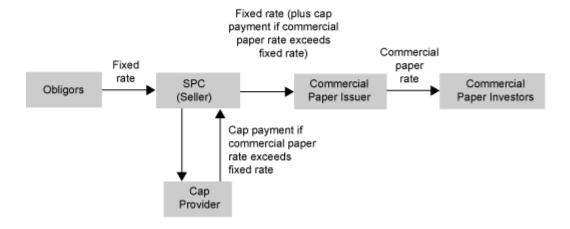


Chart 5 Managing Interest Rate Risk With An Interest Rate Cap

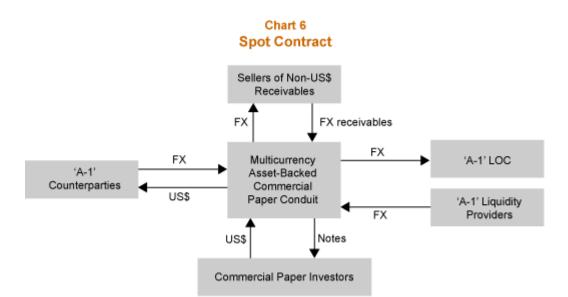


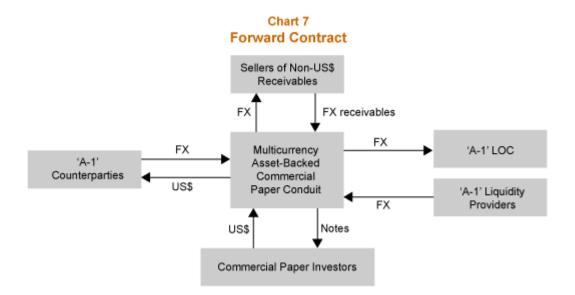
Timely interest rate payment

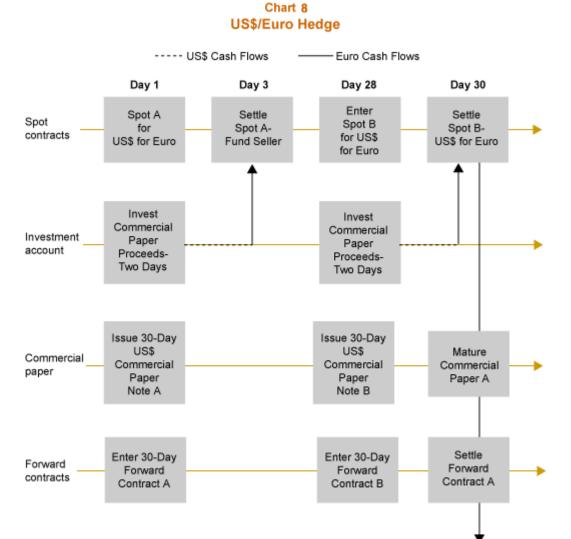
- 86. Yield reserves, interest income cash flows from interest-bearing receivables, and interest rate hedges may not assure the timely payment of the interest component of CP. When the timing of interest income from receivables is uncertain, the conduit may issue more CP to cover the interest component as long as there are sufficient receivables and liquidity to cover this capitalized interest.
- 87. When there is an immediate put to the liquidity provider upon a pool wind-down trigger, such as a decline in pool-specific enhancement below the required level, certain conduits may be exposed to reinvestment risk if the CP matures later than the put date. The funds received from the liquidity providers are invested in eligible investments consistent with "Global Investment Criteria For Temporary Investments In Transaction Accounts," published May 31, 2012, until CP matures. Reinvestment risk could arise if the rate earned on eligible investments is less than the CP rate. To avoid reinvestment risk (CP usually cannot be prepaid), the liquidity facility or some liquid form of enhancement may fund the interest component that would accrue through to the final CP maturity date. Alternatively, an ABCP conduit can cause the liquidity facility to fund and the conduit to pay the interest component only on the dates that CP matures rather than before maturity. Reinvestment risk may also be mitigated by establishing a dedicated reserve account.

Managing foreign exchange risk

88. There has been a growing number of conduits financing multicurrency receivables. This adds an element of currency risk that cannot always be sized because the valuation of some currencies is linked to other unpredictable factors such as economic and political stability of foreign countries. Where it cannot be sized or where the conduit chooses not to size a reserve, the risk can be mitigated through the use of a foreign exchange hedge. Charts 6, 7, and 8 illustrate how foreign exchange hedges are commonly structured in ABCP transactions. This type of hedge aims for zero exposure to currency risk between assets in one currency and CP in another.







- 89. For example, simultaneously with the issuance of U.S. dollar CP, the conduit will enter into euro exchange agreements with a counterparty to buy euros to finance the purchase of euro-denominated receivables. The typical agreement takes the form of a spot contract that settles two days after the CP issuance, and a forward contract that settles on the same day as the maturity of the CP. The U.S. dollar CP proceeds may be reinvested in eligible investments for two days before the spot contract settles. On the day that the spot contract settles, the CP conduit will pay U.S. dollar CP proceeds plus the two-day investment returns to the foreign exchange counterparty and will receive euros with which to pay the asset originator.
- 90. Under the forward contracts, the conduit will owe a specified amount of euros on the forward-contract settlement date, which is also a CP maturity date. This hedges the CP issued in relation to U.S. dollar and euro exchange agreements and fixes the conduit's obligation irrespective of any currency movements before the settlement of the forward contract. However,

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the exchange agreements subject the ABCP conduit to counterparty risk. For this reason, the forward contract counterparties should have ratings as high as the CP or adequate collateralization.

- ^{91.} Furthermore, because receivables are in euros, liquidity and credit facilities are also typically denominated in euros. This feature, as in other conduit structures, is designed to cover the risk between forward-contract maturity and receivable maturity. If new CP cannot be issued, then the next option is to request liquidity funding to settle the forward contract for the necessary amount.
- 92. The conduit will know two days before CP maturity whether it will be able to issue new CP to pay off maturing CP. If it cannot issue new CP in that amount, it will then know the amount of liquidity funding in euros necessary to settle the forward contract so that it can receive the dollar payment from the forward contract necessary for paying maturing CP.
- ^{93.} If CP proceeds and liquidity are still insufficient to repay maturing CP or settle the conduit's obligation to the forward contract, programwide enhancement would be drawn. As with the liquidity facility, credit enhancement should also be denominated in euros.
- ^{94.} Finally, in addition to the structural review, S&P Global Ratings will generally conduct as part of its management review, an onsite review of the operations to determine the conduit's procedural capability of executing foreign exchange hedges.

Servicer risk

- ^{95.} Effectively, an asset originator that typically is the servicer is a portfolio manager for the conduit's investment. The servicer identifies receivables eligible for the ABCP conduit and manages to maximize the return and preserve the investment on behalf of the program administrator.
- ^{96.} Funds commingled with the general funds of the servicer are at risk in the event of a servicer bankruptcy. There is a variety of ways to mitigate this risk. For example, at closing, separate lockboxes can be established in the name of a bankruptcy-remote, special-purpose entity.
- ^{97.} Having the liquidity facility assume the commingling risk and establishing a reserve account are other ways of mitigating this risk.
- 98. Depending on the complexity of the asset and the proprietary nature of the systems, a backup servicer may be under contract so that the servicer can be replaced quickly. However, if the asset type is generic, a backup servicer may not be needed because there would be any number of servicers readily available at competitive prices. Because the conduit administrator often provides credit enhancement to the conduit, the administrator is incentivized to act quickly to deal with servicing issues and have contingency plans in place.

Dilution risk

99. Dilution is used to describe any noncash adjustment to a receivable and is a normal recourse item back to the originator. It can occur due to payment discounts offered as an incentive to pay early adjustments for partial returned goods and errors in the amount billed. Since the conduit will have funded against the full amount of the receivable, its reduction by something other than a collection or repurchase will leave the conduit short of funds. Because one of the aims of securitization is to insulate pool credit quality from originator credit quality, dilution risk should be covered in any transaction. The methods used to address it are similar to those used to cover commingling risk: Either a reserve is established or an appropriately rated party assumes the risk. Generally, liquidity providers fund for diluted receivables.

Depositary and issuing and paying agents

- 100. Depositaries most often are also the issuing agent and paying agent for CP transactions. As an administrative key transaction party, the depositary plays a critical role, but it is not necessarily a rating dependency. Depositaries can make voluntary advances to pay maturing CP, but they are not required to do so. Because the advances are voluntary, there is no rating requirement for the depositary; however, where the depositary holds funds for the benefit of noteholders in accounts that are not trust accounts, a rating dependency can be created.
- ^{101.} S&P Global Ratings analyzes the depositary agreement for the payment and notice mechanisms and for clear communication responsibilities between the depositary and the other parties.

Revisions And Updates

This article was originally published on Sept. 29, 2005. This article superseded "Global Synthetic Securities Criteria: Structural Considerations." This criteria article has been amended and partly superseded by "Global Methodology And Assumptions For Calculating Programwide Credit Enhancement In Multiseller ABCP Conduits." It has also been partly superseded by "Global Methodology For Analyzing Liquidity Funding Outs And Limitations In ABCP Transactions" and "Asset-Backed Commercial Paper Issued By Multiseller Conduits: Classification And Timing Of Reviews For New-Seller Transactions."

Changes introduced after original publication:

- Following our periodic review completed on April 20, 2016, we updated certain research and criteria references and clarified certain paragraphs.
- Following our periodic review completed on April 11, 2017, we updated certain research and criteria references and clarified certain paragraphs.
- Following our periodic review completed on April 6, 2018, we updated the contact details.
- On Jan. 28, 2020, we republished this criteria article to make nonmaterial changes. In particular, we deleted the "Rating Process" section, which contained noncriteria text describing operational aspects of the rating process, and we updated the contact list.
- On May 12, 2021, we republished this criteria article to make nonmaterial changes. These
 changes were related to the global transition from LIBOR and related indices. Specifically, we
 replaced an explicit reference to LIBOR in paragraph 84, which had served as an example of an
 index.
- On Dec. 3, 2021, we republished this criteria article to make nonmaterial changes to clarify paragraphs 24, 37, 47, 52, 80, and 85, updating text of an operational nature when applicable. We also updated a criteria reference and contact information.
- On May 5, 2023, we republished this criteria article to make nonmaterial changes to update related research references and contact information.

Related Criteria and Research

Related Criteria

- Global Methodology For Analyzing Liquidity Funding Outs And Limitations In ABCP Transactions, Oct. 27, 2014
- Global Framework For Assessing Operational Risk In Structured Finance Transactions, Oct. 9, 2014
- Global Derivative Agreement Criteria, June 24, 2013
- Global Methodology And Assumptions For Calculating Programwide Credit Enhancement In Multiseller ABCP Conduits, Feb. 14, 2013
- Global Investment Criteria for Temporary Investments In Transaction Accounts, May 31, 2012.
- Asset-Backed Commercial Paper Issued By Multiseller Conduits: Classification And Timing Of Reviews For New-Seller Transactions, April, 18, 2011
- Principles Of Credit Ratings, Feb. 16, 2011
- S&P Global Ratings Analysis' Of ABCP Ratings Following Changes To Ratings On Support Providers, Dec. 18, 2008

Related Research

- Standard & Poor's Requests Transaction Performance Metrics From Sponsors Or Administrators Of Global ABCP Conduits, Jan. 12, 2012
- Standard & Poor's Global Approach To ABCP Conduit Administration, July 7, 2008

This article is a Criteria article. Criteria are the published analytic framework for determining Credit Ratings. Criteria include fundamental factors, analytical principles, methodologies, and /or key assumptions that we use in the ratings process to produce our Credit Ratings. Criteria, like our Credit Ratings, are forward-looking in nature. Criteria are intended to help users of our Credit Ratings understand how S&P Global Ratings analysts generally approach the analysis of Issuers or Issues in a given sector. Criteria include those material methodological elements identified by S&P Global Ratings as being relevant to credit analysis. However, S&P Global Ratings recognizes that there are many unique factors / facts and circumstances that may potentially apply to the analysis of a given Issuer or Issue. Accordingly, S&P Global Ratings Criteria is not designed to provide an exhaustive list of all factors applied in our rating analyses. Analysts exercise analytic judgement in the application of Criteria through the Rating Committee process to arrive at rating determinations.



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