



VIA EMAIL: rule-comments@sec.gov

July 30, 2010

**Ms. Katherine W. Hsu
Senior Special Counsel
Division of Corporation Finance
United States Securities and Exchange Commission**

**Ms. Rolaine Soril Bancroft
Attorney
Division of Corporation Finance
United States Securities and Exchange Commission**

RE: Release Nos. 33-9117; 34-61858; File Number S7-08-10

The Bank of New York Mellon Corporation is pleased to have the opportunity to comment in response to Release Nos. 33-9117; 34-61858 (the "Proposed Rule") in which the Commission proposes to revise Regulation AB and other rules regarding asset-backed securities.

Our comments are limited to those parts of the Proposed Rule that deal with additional disclosure in the form of asset-level information in XML and waterfall models in Python (the "Analytic Disclosure").

BNYM is in favor of the proposed Analytic Disclosure, which would:

- enhance market transparency,
- shift the focus of risk disclosure from the few scenarios selected by an issuer to the many sought by investors,
- protect investors' privacy by allowing them to analyze each transaction themselves, without disclosing the nature of that analysis to issuers, underwriters or other investors,
- empower investors to analyze transactions throughout each transaction's life cycle, allowing lessons learned from existing transactions to be applied to new transactions,
- promote a dialogue between issuers, underwriters and investors that is open, complete and fair,
- broaden the general understanding of asset-backed securities,
- enable alternative critical points of view, in addition to the existing credit-rating agencies,
- support any effort to evaluate and monitor market risk, and
- reduce operational errors.

We conclude that the Analytic Disclosure requirements are practical, informative and easily achieved with existing software technology and network infrastructure, imposing minimal additional expense on the industry.

To illustrate this conclusion, we have made available to the public, free of charge, an example of a fully-functional system that provides Analytic Disclosure for a recent public securitization transaction (see <http://portfinsys.com>). This demonstration includes asset-level data in XML, a waterfall model in Python, a cashflow engine capable of running scenarios, and a desktop user interface.

We offer the following comments to assist the Commission to finalize the Proposed Rule:

Summary

The Commission should consider refining the Proposed Rule to accomplish the following goals:

1. Clarify Technical Architecture. The technical elements of the Proposed Rules should be more rigorously defined, to provide clear direction to issuers.
2. Establish Rights and Responsibilities for Intellectual Property. The Proposed Rule should go beyond general references to "open-source" software, explicitly to:
 - (a) require that all operative programs be available to the public, free of charge, on an open-source basis, including any cashflow engine required to operate the Python waterfall model,
 - (b) prevent any party from asserting copyright over data or models (these should be subject to a "copyleft" license to assure ongoing access, as described herein),
 - (c) guarantee equal access to data, models, cashflow projections and related analytics to any person, for that person's private, non-exclusive use,
 - (d) limit each party's liability to an appropriate, tolerable level, to encourage all parties to participate, and
 - (e) establish guidelines for an entity to act as master licensor, hosting service and repository for related intellectual property, either independently, under the auspices of the Commission, or in concert with an existing self-regulatory organization.
3. Promote Interoperability, Usability and Open Access. The value of the Analytic Disclosure would be enhanced if issuers are required to provide data and models that are:
 - (a) interoperable, allowing investors to examine economic scenarios across many transactions,
 - (b) accompanied by a desktop user interface that supports interactive analysis of subject transactions,
 - (c) available through an open application-programming interface (API), to support integration with other systems, and
 - (d) maintained, corrected and updated for the life of the transaction.

Likewise, the value would be diminished if issuers are allowed to provide:

- (a) uniquely configured data and models, each meeting the letter of the Proposed Rule but rendering the entire body of work difficult to use,
- (b) arcane forms of output that either require substantial work to be understood by investors or vary from transaction to transaction, imposing an undue burden to integrate into existing systems,
- (c) proprietary components that inhibit direct access to computational resources, or
- (d) disclosure that is subject to a suspension of duty after a limited time, prior to the termination of the subject transaction.

1. Clarify Technical Architecture

1.1 Defined Terms

"Transaction" means an asset-backed securities transaction subject to the final form of the Proposed Rule.

"Collateral Assets" means the assets securitized in a Transaction.

"Certificates" means the securities issued through a Transaction.

"Source Code" means, with respect to a software program, the entirety of the program in the preferred form for modification (generally plain text to be interpreted or compiled), sufficiently complete to generate, install and use the program.

"Executable" means, with respect to a software program, the entirety of the program in a form usable on a specified computer system (including any software resources required for the program to operate).

"Open-Source" means any software program for which Source Code is made available for inspection, modification or extension.

"Copyleft License" means a software license that provides private, non-exclusive use of Open-Source and Executable versions of a software program and permits modification or extension of that program, but (a) prohibits any party from charging money for the program, related modifications to or extensions of the program, or works derived from use of the program and (b) requires any party that modifies or extends the program to contribute any such modification or extension to the licensor for inclusion as part of the program, in order that all licensees have equal access to the modification or extension (for a general overview of copyleft licensing, see <http://www.gnu.org/copyleft/>).

"Copyleft Component" means any component of a software program that is required to be contributed to the licensor pursuant to a Copyleft License.

"Proprietary Component" means any component of a software program that is not required to be contributed to the licensor pursuant to a Copyleft License.

"Asset Data" means asset-level information for Collateral Assets adequate to project future asset-level cash flows, updated with the same frequency as the asset's typical payment cycle.

"Collateral Model" means a software program that generates projected future behaviors for Collateral Assets (including projected defaults, prepayments or loan modifications), in order to generate Scenarios; examples of Collateral Models include conditional prepayment rate ("CPR") or conditional default rate ("CDR").

"Interest Rate Process" means a software program that generates projected values of possible future interest rates, in order to generate Scenarios.

"Scenario" means a projected future set of cash flows for (a) Collateral Assets, generated by specifying a set of assumptions for any combination of Collateral Models or Interest Rate Processes, then applying those assumptions, models or processes to Asset Data and (b) Certificates, generated by applying those projected future collateral cash flows to the related Waterfall Model.

"Cashflow Engine" means a software program that generates Scenarios, including, at a minimum, (a) the capacity to accept external Collateral Models, Interest Rate Processes, Asset Data (including periodic updates) and Waterfall Models, (b) facilities to allow users to specify assumptions adequate to define a Scenario, and (c) a calculator that generates projected future cash flows for Collateral Assets and Certificates for that Scenario, based upon those assumptions.

"Waterfall Model" means, for a given Transaction, computer code written in the Python programming language that

- (a) describes in all material respects that Transaction's
 - (i) Certificates, including face amounts and coupon structures,
 - (ii) interest-rate derivatives or other hedging contracts,
 - (iii) order of payment priorities, including any conditional payments, tests, triggers, or exceptions,
 - (iv) reserve accounts, fees payable, financial guaranty contracts, or other material elements that may alter future cash flows, and
 - (v) any other material financial terms or conditions governing the amounts payable to Certificates under any Scenario, and
- (b) is compatible with at least one publicly-available Cashflow Engine.

1.2 Basic Architecture

An ABS analytics platform is based upon a Cashflow Engine, which provides functions that are common to multiple Transactions and a framework to introduce Transaction-specific elements such as Waterfall Models.

To begin, a Cashflow Engine accepts Asset Data, Collateral Models and Interest Rate Processes, then employs specified assumptions to produce a Scenario's projected future asset-level cash flows. These projections are independent of the terms of a Transaction, since asset cash flows do not depend upon securitization payment rules.

If possible, a Cashflow Engine should generate projected asset cash flows on an asset-by-asset basis, allowing Collateral Models to enforce behaviors based upon each individual asset's discrete characteristics. For certain sectors such as credit cards, the large number of individual assets may warrant some consolidation to reduce data requirements; however: for residential or commercial mortgage transactions, asset-level cash flows are essential, since any consolidation of assets defeats the purpose of asset-level disclosure by making it impossible to distinguish asset characteristics that define future default or prepayment behavior.

The Cashflow Engine then calls upon a Waterfall Model to establish the existence of Certificates (e.g., class names, coupon rates or face amounts) and to generate projected future Certificate payments. A Waterfall Model is the unique piece of computer code that, when spliced into the Cashflow Engine, allows the Cashflow Engine to translate projected future asset-level cash flows into projected future cash flows for related Certificates. A Cashflow Engine is designed to accept one Waterfall Model per Transaction.

In terms of disclosure, the Waterfall Model is analogous to other offering materials that describe the payment characteristics of a Transaction, such as a structural term-sheet, offering memorandum or pooling and servicing agreement.

By specifying multiple Scenarios, an investor can use a Cashflow Engine to examine a broad spectrum of possible future payment outcomes for any or all Certificates in order to assess risk.

As a practical matter, a Waterfall Model is useless in the absence of a compatible Cashflow Engine, since the details of the implementation of the Cashflow Engine dictate the usable form for Waterfall Models; this limitation suggests that a single shared Cashflow Engine may best serve a broad audience, requiring that audience to adapt to only one new set of software tools.

As an alternative, it may be possible to adopt an abstract specification for Cashflow Engines and Waterfall Models, which would allow any compliant Waterfall Model to function within any compliant Cashflow Engine, at the expense of limiting the scope of available functions within the reference Cashflow Engine to a bare minimum and a concomitant increase in the complexity of each Waterfall Model.

1.3 Network Deployment

As a practical matter, an ABS analytics platform must be deployed over a network (presumably the internet) to provide anonymous distributed access to a library of Waterfall Models and related Asset Data.

In addition, the computational overhead of a Cashflow Engine can be substantial; a usable platform must provide adequate processing power to complete projections in a reasonable amount of time.

Last, the audience's privacy should be maintained when the system is used to generate Scenarios, since each Scenario is rightly the private property of each user and, if revealed, could compromise an investor's investment strategy.

These requirements suggest a distributed computing architecture, where each user installs a complete, private Executable copy of a Cashflow Engine on a computer system, then downloads a Waterfall Model and related Asset Data on demand, specifies assumptions, and thereby generates Scenarios, using either:

- (a) a desktop application with a reasonable user interface, or
- (b) an API, through which the Cashflow Engine has been integrated into an external system.

1.4 Limitations

Downloading a Python Model may serve as useful disclosure if read alongside other offering materials, but a Python Model alone is not sufficient to generate Scenarios, since it is limited to a Transaction's payment rules and cannot generate the required projected future asset cash flows.

1.5 Recommended Programming Languages

Our initial experience with Python suggests that Python is an excellent choice for expressing Waterfall Models, owing to two characteristics:

1. for a broad audience, Python code is highly readable (we have written hundreds of models in Java and other languages, and as readers, we prefer Python);
2. from a technical standpoint, Python code is interoperable with existing languages such as Java, C or C++. We had no trouble adapting our existing software systems to accommodate Waterfall Models written in Python.

We recommend broadening the acceptable programming languages for Cashflow Engines to include Java, C or C++, because:

1. Cashflow Engines require several years' effort to develop; existing Cashflow Engines are written in these languages and should be eligible for use to reduce cost and avoid delay, and
2. Cashflow Engines are large-scale software projects; these languages are more formal than Python, and are better suited to large-scale projects, where robustness is valued over readability. Many substantial open-source software projects are written in these languages.

2. Establish Rights and Responsibilities for Intellectual Property.

2.1 Limitations

The Proposed Rule should recognize that:

- the provider of a Cashflow Engine is probably not the issuer, since the issuer is probably not equipped to provide the software engineering services required to develop and maintain a Cashflow Engine,
- existing Cashflow Engines are adequate to produce the output required in the Proposed Rule; however: any Cashflow Engine must be Open Source to allow market participants to:
 - (a) inspect the internal calculations for errors, inconsistencies or implicit assumptions,
 - (b) adapt that engine to future requirements,
 - (c) file disclosure that is complete and unambiguous (a proprietary Cashflow Engine introduces a "black-box" element to a critical piece of the related disclosure), and
 - (d) prevent any participant from possibly taking advantage of superior knowledge of the inner workings of a proprietary system,
- duplicative efforts to create and file multiple Cashflow Engines may be counter-productive, since investors could be faced with a bewildering array of software programs to install and maintain in order to evaluate their holdings, and
- for convenience, it may be sufficient for an issuer to file a Cashflow Engine by reference, that is, by indicating which version of a publicly-available Cashflow Engine was used in preparation of an issuer's offering materials (rather than filing the entirety of the Cashflow Engine's source code).

2.2 Qualified Licensor

To address these limitations, the Proposed Rule should encourage or require that one or more Cashflow Engines be made available to the public, free of charge, on an Open Source basis pursuant to a Copyleft License offered by a qualified licensor.

A qualified licensor of a Cashflow Engine should be a neutral party for which all market participants have equal standing and evident good faith:

- Ideally, the licensor might be an independent entity created for the sole purpose of sharing intellectual property, an entity established under the auspices of the Commission, or an existing self-regulatory organization such as FINRA.
- the Proposed Rule might outline minimum requirements for a qualified licensor, allowing one or more such licensors to emerge.

The chain of rights to extend, modify or use the Cashflow Engine would proceed as follows:

1. The qualified licensor would acquire rights to a Cashflow Engine (and, if available, any companion user interface or other related software components) by entering into a long-term or perpetual license with the owner of that software; that license would allow the qualified licensor to offer Copyleft Licenses to the general public for the purpose of evaluating Transactions issued pursuant to the final form of the Proposed Rule.
2. The Copyleft License would provide that the qualified licensor license the Cashflow Engine to any person, free of charge, for that person's private

non-exclusive use, to model or analyze those Transactions; the license would require that any extensions or modifications to the software be contributed back to the qualified licensor (and thereby made available to all licensees), however: Collateral Models, Interest Rate Processes or other components used solely to define the outcomes of Scenarios would be treated as Proprietary Components and excluded from this requirement.

3. Any person that models a Transaction would be obligated under the Copyleft License to contribute that model to the qualified licensor; any person that corrects, modifies or extends the software (apart from permitted Proprietary Components) would be obligated to contribute that work to the qualified licensor; the qualified licensor would manage, govern and announce changes in the mutual interest of all licensees.
4. The Copyleft License would prohibit licensees from charging money for the software or for works derived in whole or in part from the use of the software.
5. The owner of the Cashflow Engine (and, if applicable, any companion components) would retain all related rights that do not infringe on the rights of the qualified licensor or its licensees.
6. No party would provide any warranty for the Cashflow Engine or related components, relying instead on an open-source policy to allow licensees to protect their individual and collective interests by examining, commenting on or modifying the source code.

2.3 Hosting; Deployment; Cost Estimate

The qualified licensor would be responsible to deploy, host and maintain the Cashflow Engine and library of Waterfall Models and Asset Data, either directly or by contract with third parties. The qualified licensor would solicit, review, and incorporate additions or corrections to the entire body of work (Waterfall Models, Asset Data, Cashflow Engine or otherwise) submitted by any party, and would coordinate changes with all parties in an orderly public process, with the goals to make all work as complete and correct as possible.

The qualified licensor would manage numbered releases of the Cashflow Engine and provide ongoing open access to archival copies of Source Code and Executable versions of each numbered release, allowing any party to retrieve a prior release; issuers would note which release was used to prepare an offering; any party could then examine any offering in the state in which it was first issued (to avoid confusion as to the effect of subsequent changes to a Cashflow Engine upon analytic results).

We estimate that oversight, deployment, hosting and maintenance for a worldwide audience would cost between \$2.5 million and \$4.0 million annually, based on our recent experience developing and deploying one such system.

2.4 Issuer's Responsibilities

Issuers would be required to file Waterfall Models and Asset Data that are compatible with an available Cashflow Engine, and to submit to the terms of that Cashflow Engine's Copyleft License. The license would provide that any such models and data become part of the body of work that includes the Cashflow Engine and thereby become equally available to the public through either the required filing or from the qualified licensor.

The issuer's representations and warranties should be limited in scope to refer only to the Waterfall Model and Asset Data, which are unique to the related Transaction. The Proposed Rule should explicitly forbid the issuer from asserting copyright over the Waterfall Model or Asset Data, to prevent future claims of infringement, but should also explicitly relieve the issuer from responsibility for the Cashflow Engine, over which the issuer has no control.

In addition, to the extent that the issuer includes computational materials as part of its offering materials and these computational materials are based upon cash flow projections, the issuer should be required to use its Waterfall Model to generate those projections. This requirement will eliminate any inconsistency between those elements of the disclosure. Rather than filing the Source Code for the entire Cashflow Engine, the issuer could be required to identify the qualified licensor and version number for the related Cashflow Engine; investors could retrieve that version from the qualified licensor.

In the interest of fairness to issuers, the Copyleft License would guarantee that no party can exploit the Waterfall Models or Asset Data by charging money for those items or for any work derived from those items, except: the license would provide an exclusion for Collateral Models and Interest Rate Processes, which would be permitted to be Proprietary Components. This exclusion would protect (a) each investor's right to privacy and (b) the legitimate interests of existing businesses that offer these components on a commercial basis separate from any particular offering of securities (such activities are unrelated to the issuer and are not part of required disclosure).

2.5 Shared Responsibilities

The burden of extending, maintain and correcting the Cashflow Engine would effectively fall upon the industry as a whole, since every participant would have equal access to the source code and a common interest in correctness.

The qualified licensor would intervene to govern only the process, not the outcome.

An Open Source Cashflow Engine would protect both investors and issuers: any incentive to seek an advantage through privileged access to the details of computational methods would diminish, as would claims that disclosure is incomplete, inaccurate or uneven.

Equal access would level the playing field for all issuers, underwriters and investors. On balance, all parties would be better informed and more reliant on themselves to pursue their aims.

3. Promote Interoperability, Usability and Open Access

In addition to the open access provided by the suggested licensing standard, the Proposed Rules should encourage or require a standard of usability adequate to support two activities:

1. any person should be able to examine the results of Scenarios from a typical desktop computer connected to the internet, and
2. a software engineer should be able to access Scenario results programmatically through an application programming interface (API), to allow integration between a Cashflow Engine and other systems.

3.1 Desktop Access

Ideally, a Cashflow Engine should include a desktop application that loads and displays Asset Data and Waterfall Models, allows users to specify Scenarios, invokes the Cashflow Engine to generate projected future cash flows, then displays these results in a consistent, intelligible form.

Common forms of display include price/yield tables, decrement tables, or asset stratification tables.

Alternatively, the Proposed Rule could define the technical form of acceptable projected future cash flows, allowing third parties to develop desktop applications suitable to view and analyze Scenarios.

3.2 API Access

Many participants will seek direct access to Asset Data and Waterfall Models to support portfolio risk management, routine operations, surveillance, market research or other activities.

A Cashflow Engine should offer an open API, providing direct access to Asset Data, Waterfall Models and the results of Scenarios.

The qualified licensor should be aware that participants will rely on this API, suggesting that changes should be orderly and well-documented.

The Bank of New York Mellon Corporation appreciates this opportunity to comment on the Proposed Rule. If we may be of any assistance, please do not hesitate to contact us.

Sincerely,

(signed)

Douglas Magnolia
Managing Director
douglas.magnolia@bnymellon.com

Michael Megliola
Managing Director
michael.megliola@bnymellon.com