August 3rd, 2010

Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-1090
Attention: Elizabeth M. Murphy, Secretary

Dear Ms. Murphy,

I am a structured credit trading professional with over 15 years of experience across several structured credit markets, including the asset-backed securities markets, with a keen interest in the technology issues underpinning these products and markets.

I have been in a participant in the Securitization Risk Roundtable of the RMA (“RMA-SRR”) and have contributed to its response to your proposal separately. The opinions stated in this letter are entirely my own and do not necessarily reflect the views of the RMA-SRR.

Back in or around March of 2009 I engaged in a conversation with your office about making it a requirement that a “machine processable” description of the waterfall structure be submitted as part of the filing requirement for any new asset-backed security issue. Subsequently, in or around July of 2009, I submitted a fuller proposal that included a sample document showing how this could be done in a manner that would most closely follow the English narrative of the waterfall description in current 424B filings using XML as the base language representation.

While I commend your office for your particular proposal, which I believe would represent a significant step forward in terms of transparency and ultimately market efficiency, having noticed several comment submissions calling for a similar XML representation of the waterfall, independent of the actual computer language that it is implemented in, I’ve decided to make this sample XML description of one randomly chosen asset-backed structure (in this case the ACE Securities Corp Series 2007-HE4) publicly available, for the benefit of other interested parties and the market as a whole.

Unfortunately, while upon first appearance it may not be entirely clear what the benefits of this type of representation are, in fact these benefits should become apparent once one becomes familiar with the many tools available to view (and edit) these types of structures. In particular, some of these tools give the user the ability to present the XML structure in a graphical manner, which together with some other enhancements, would aid significantly in its understanding.

Notwithstanding the ability to guide and aid in the understanding of the waterfall structure with the use of readily available low-cost tools, one of the advantages of an XML representation of the waterfall structure is that, given a suitable specification of the general form that the waterfalls can take using a set of XML-schemas (possibly one for each product type or asset class), waterfall submissions could be checked for completeness and consistency (together with the aid of some new tools possibly), thus effectively mitigating the concerns expressed in some of the comments to your proposal. Thus, for instance, this approach could ensure that all the certificates are properly declared and defined, or that the subordination rules are fully and consistently stated, amongst others issues. Other advantages of this approach include the possibility that the XML description be mapped on a one-to-one basis to the English narrative in the text, thus aiding and assisting both producers and consumers of this information.
Other comments to your proposal expressed a concern that because of changing market conditions, including unanticipated changes in servicing practices or regulations, possibly impacting some of the subtle mechanics of the cashflow waterfalls, it would be nearly impossible to ensure that the WCP, if implemented in a programming language such as Python, reflected accurately at all times the actual mechanics of the payments. Thus, separating the waterfall description from its detailed implementation could provide an answer to this issue, leaving different analytic providers with the decision of how to best implement the actual detailed mechanics, ensuring that they reflect changes in market practice or circumstances by making changes to their implementation as these occur. This would allow them to preserve their role, and to compete in the form of best of class implementation and analytic offering.

I do not expect that the particular XML representation of the waterfall structure here shown be the one adopted by your office or the market (a similar result could be obtained through the design of a custom DSL, though this may require a greater investment in graphical and other tools). I am only merely suggesting that before setting the technology solution in stone for implementing the WCP portion of your proposal, that alternative solutions be given due consideration, with ideally the ultimate solution determined through an unbiased, market-led process, open to all.

Truly yours,

Ariel Blumencwejg
ab@principiacapm.com
Proposal for the filing of a machine readable cash-flow model for asset-backed securitizations as part of their registration process, submitted to the SEC on July 23rd, 2009.

Abstract

The proposal would entail the filing of a machine readable cash-flow model as part of the new issue asset-backed security registration process, covering initially all major asset-backed security classes, such as RMBS, CMBS, auto and credit card securitizations, and eventually other securitizations such as CLOs for instance. By making an unambiguous cash-flow model publicly available, modeling transparency, or the current lack of it, would be significantly improved. This proposal, together with other initiatives such as project RESTART, would result in greater overall product transparency and hence lower informational asymmetries between investors and issuers. Ultimately this should result in renewed investor confidence and hence the renewed acceptance of this asset class as a non-biased, legitimate investment choice.

Rationale

The current crisis has exposed a number of deficiencies in the constitution of our financial markets. These have been particularly acute in the case of the asset securitization markets, as evidenced by their current condition. In particular for these markets, many of its deficiencies are rooted in an over-reliance in the outsourcing of the investment due diligence process, encouraged by the lack of product transparency, in part attributable to an imperfect and antiquated informational support infrastructure.

Informationally, the asset-backed product is characterized by two main traits: (i) the large informational requirements necessary to properly assess the quality and likely behaviour of the collateral pool, a challenge which is currently being met by project RESTART, and (ii) its complex structural nature, both legal as well as analytic (or legal and model complexity). In particular, model complexity, as we now know, is not adequately captured through a simple labelling approach, such as the one originally designed by the rating agencies, as some of these securities exhibit properties more akin to highly complex financial derivatives (which they are) than corporate debt instruments.

Given the lack of modeling support in the current informational infrastructure, the current modeling approach, when attempted, is manually intensive, time consuming and error prone and thus quite expensive and inefficient. It is based on the reverse engineering of an unstructured (by current standards), inherently ambiguous document designed more to satisfy legal and regulatory requirements than to efficiently assist the analysis of the complex nature of these instruments. Given the expense and challenge to carry out proper investment due diligence, the lack of modeling transparency (together with the lack of data transparency) has either promoted an over-reliance by investors on an imperfect and possibly flawed rating opinion to guide their investment and risk management decisions, as was the case before the crisis, or simply deterred investors from participating in it, as is most painfully currently the case. This proposal should address at least in part the model transparency deficiency in the current information infra-structure.

Implementation

In its essence, the cash-flow model would provide a formal description of the asset-backed securitization such that a computer program would be able to interpret this description and together with a snapshot of the then current asset and liability structure (i.e. updated loan and certificate data) produce prices for each of the certificate classes based on the discounting of their projected cash-flows.
under different economic scenarios (i.e. collateral cash-flows). This computer program would either be put together by the investor or obtained from a third party software or service provider and would not be a part of the model.

Ideally, the cash-flow model for a given securitization would be specified in a high-level computer language designed to make the model easily comprehensible to a non-technical, yet highly trained user, such as asset-backed structurers at banks and rating agencies, asset-backed industry legal professionals, regulatory staff, and technical staff members on the investor side such as quant analysts and traders. Consequently, the modeling language itself should be designed to provide language support for those concepts common across all asset securitizations, such as certificate class, subordination and loss allocation, and interest and principal distributions, yet it should be flexible enough to fit the peculiar features of individual securitization.

In a way, this proposal could be thought of as the development of a standard language to describe asset-securitization structures, so that the information contained in them can be further efficiently processed by other computer programs further up the value chain, akin to the way the XBRL standard was developed to provide a machine readable standard for communicating balance sheet and income statement information contained in periodic financial reports.

Cost/Benefits

Given the fact that an asset-backed securitization is typically (if not always) extensively modeled as part of the structuring and rating effort, it should technically be relatively easy to make this model available as part of the disclosure package at the time of registration, thus resulting in little new additional costs to the issuer or sponsor. The only significant cost, would consist of the initial expense associated with the development of the appropriate modeling language and bare tools (such as some simple GUI driven production tools, with most likely third-party software developers stepping into the fray to provide more advanced tools at fairly reasonable cost). This cost, when viewed in the larger context of the asset securitization industry should be relatively insignificant.

In terms of its most tangible benefits, this proposal will help lower the cost of the analytic processing of asset-backed securities as well as increase the accuracy and certainty of the modeling effort (or at the very least make it some of the inherent assumptions more transparent). More importantly, by opening the black-box model that characterizes this product and asset class, it will signal a fundamentally different approach to the investing and risk management process of these securities, based upon greater informational symmetry and transparency, and hence contribute to the rebuilding of the asset class on a more solid foundation. Over time, this should foster a much more nuanced and sophisticated investment and risk management approach by the asset management industry as it would provide it with it with all the necessary infrastructure support elements to do its own due diligence, without having to necessarily rely on third party, possibly biased or flawed, opinions.

Summary and Conclusion

This proposal addresses the lack (or perceived lack) of modeling transparency of the asset-backed security product. Together with other transparency initiatives (such as data, trade reporting and other transparency initiatives) it should help in significantly upgrading the investing infrastructure around the asset-class, bringing it closer to the standards being developed in other areas of finance as well as the standards for openness and transparency that the public and society now demand of the industry.

Relative to some of the other initiatives, this proposal would be relatively simple to implement, at
essentially no additional cost to issuers, but with potentially very significant benefits to asset managers, investors, the larger public and society.
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      - `<Certificates class="M-3" method="Principal Balance" period="t" />`
      - `<Certificates class="M-4" method="Principal Balance" period="t" />`
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- <product-of>
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    period="0" />
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</minus>
</lesser-of>
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</Glossary-Term-Definition>
- <Glossary-Term-Definition name="Class M-8 Principal Distribution Amount"
  period="t">
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    - <sum-of>
      <Certificate-Group group="Class A Certificates" method="Principal Balance"
        period="t" />
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      <Certificates class="M-3" method="Principal Balance" period="t" />
      <Certificates class="M-4" method="Principal Balance" period="t" />
      <Certificates class="M-5" method="Principal Balance" period="t" />
      <Certificates class="M-6" method="Principal Balance" period="t" />
      <Certificates class="M-7" method="Principal Balance" period="t" />
      <Certificates class="M-8" method="Principal Balance" period="t-1" />
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</Glossary-Term-Definition>
- <Glossary-Term-Definition name="Class M-9 Principal Distribution Amount"
  period="t">
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    - <sum-of>
      <Certificate-Group group="Class A Certificates" method="Principal Balance"
        period="t" />
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      <Certificates class="M-2" method="Principal Balance" period="t" />
      <Certificates class="M-3" method="Principal Balance" period="t" />
      <Certificates class="M-4" method="Principal Balance" period="t" />
      <Certificates class="M-5" method="Principal Balance" period="t" />
    </sum-of>
<Certificates class="M-6" method="Principal Balance" period="t" />
<Certificates class="M-7" method="Principal Balance" period="t" />
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<Certificates class="M-9" method="Principal Balance" period="t-1" />
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- <lesser-of>
  - <product-of>
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  - <minus>
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    - <product-of>
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      <Mortgage-Loan-Pool method="Principal Balance" period="0" />
    </product-of>
  </minus>
</lesser-of>
</excess-of>
</Glossary-Term-Definition>
- <Glossary-Term-Definition name="Credit Enhancement Percentage" period="t">
  - <fraction>
    <Certificate-Group group="Subordinate Certificates" method="Principal Balance" period="t-1" />
    <Mortgage-Loan-Pool method="Principal Balance" period="t" />
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- <Glossary-Term-Definition name="Group I Allocation Percentage" period="t">
  - <fraction>
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      <Mortgage-Loan-Group group="Group I" method="Principal Balance" period="t" />
      <Mortgage-Loan-Group group="Group II" method="Principal Balance" period="t" />
    </sum-of>
  </fraction>
</Glossary-Term-Definition>
- <Glossary-Term-Definition name="Group I Interest Remittance Amount" period="t">
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    - <sum-of>
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      <Mortgage-Loan-Group group="Group I" method="Interest Advanced" period="t" />
    </sum-of>
    - <sum-of>
      <Mortgage-Loan-Group group="Group I" method="Prepayment Charges" period="t" />
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</Glossary-Term-Definition>
<Mortgage-Loan-Group group="Group I" method="Reimbursable Amounts" period="t" />
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</Glossary-Term-Definition>
- <Glossary-Term-Definition name="Group I Principal Distribution Amount" period="t">
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    <Mortgage-Loan-Group group="Group I" method="Scheduled Principal Payments" period="t" />
    <Mortgage-Loan-Group group="Group I" method="Principal Repurchase Proceeds" period="t" />
    <Mortgage-Loan-Group group="Group I" method="Unscheduled Collections" period="t" />
    <Mortgage-Loan-Group group="Group I" method="Remaining PreFunded Amount" period="t" />
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  - <minus>
    - <product-of>
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      <Glossary-Term name="Overcollateralization Increase Amount" period="t" />
    </product-of>
    - <product-of>
      <Glossary-Term name="Class A-1 Allocation Percentage" period="t" />
      <Glossary-Term name="Overcollateralization Reduction Amount" period="t" />
    </product-of>
  </minus>
  <Mortgage-Loan-Group group="Group I" method="Reimbursable Amounts" period="t" />
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</Glossary-Term-Definition>
- <Glossary-Term-Definition name="Group I Principal Remittance Amount" period="t">
  - <sum-of>
    <Mortgage-Loan-Group group="Group I" method="Scheduled Principal Payments" period="t" />
    <Mortgage-Loan-Group group="Group I" method="Principal Repurchase Proceeds" period="t" />
    <Mortgage-Loan-Group group="Group I" method="Unscheduled Collections" period="t" />
  </sum-of>
  <Mortgage-Loan-Group group="Group I" method="Reimbursable Amounts" period="t" />
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- <Glossary-Term-Definition name="Group II Allocation Percentage" period="t">
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<Mortgage-Loan-Group group="Group II" method="Principal Balance" period="t" />
- <sum-of>
  <Mortgage-Loan-Group group="Group I" method="Principal Balance" period="t" />
  <Mortgage-Loan-Group group="Group II" method="Principal Balance" period="t" />
</sum-of>
</fraction>
</Glossary-Term-Definition>
- <Glossary-Term-Definition name="Group II Interest Remittance Amount" period="t">
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    - <sum-of>
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      <Mortgage-Loan-Group group="Group II" method="Interest Advanced" period="t" />
    </sum-of>
    - <sum-of>
      <Mortgage-Loan-Group group="Group II" method="Prepayment Charges" period="t" />
      <Mortgage-Loan-Group group="Group II" method="Reimbursable Amounts" period="t" />
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</Glossary-Term-Definition>
- <Glossary-Term-Definition name="Group II Principal Distribution Amount" period="t">
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    <Mortgage-Loan-Group group="Group II" method="Scheduled Principal Payments" period="t" />
    <Mortgage-Loan-Group group="Group II" method="Principal Repurchase Proceeds" period="t" />
    <Mortgage-Loan-Group group="Group II" method="Unscheduled Collections" period="t" />
    <Mortgage-Loan-Group group="Group II" method="Remaining PreFunded Amount" period="t" />
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  - <minus>
    - <minus>
      - <product-of>
        <Glossary-Term name="Class A-2 Allocation Percentage" period="t" />
        <Glossary-Term name="Overcollateralization Increase Amount" period="t" />
      </product-of>
      - <product-of>
        <Glossary-Term name="Class A-2 Allocation Percentage" period="t" />
        <Glossary-Term name="Overcollateralization Reduction Amount" period="t" />
      </product-of>
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</Glossary-Term-Definition>
<Mortgage-Loan-Group group="Group II" method="Reimbursable Amounts" period="t" />
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</Glossary-Term-Definition>
- <Glossary-Term-Definition name="Group II Principal Remittance Amount" period="t">
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      <Mortgage-Loan-Group group="Group II" method="Unscheduled Collections" period="t" />
    </sum-of>
    <Mortgage-Loan-Group group="Group II" method="Reimbursable Amounts" period="t" />
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</Glossary-Term-Definition>
- <Glossary-Term-Definition name="Interest Remittance Amount" period="t">
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    <Glossary-Term name="Group II Interest Remittance Amount" period="t" />
  </sum-of>
</Glossary-Term-Definition>
- <Glossary-Term-Definition name="Net Monthly Excess Cashflow" period="t">
  - <sum-of>
    <Glossary-Term name="Overcollateralization Reduction Amount" period="t" />
    <Glossary-Term name="Available Distribution Amount" period="t" />
    <Glossary-Term name="Senior Interest Distribution Amount" period="t" />
  </sum-of>
  - <Certificates class="M-1" method="Interest Distribution Amount Due" period="t" />
  - <Certificates class="M-2" method="Interest Distribution Amount Due" period="t" />
  - <Certificates class="M-3" method="Interest Distribution Amount Due" period="t" />
  - <Certificates class="M-4" method="Interest Distribution Amount Due" period="t" />
  - <Certificates class="M-5" method="Interest Distribution Amount Due" period="t" />
  - <Certificates class="M-6" method="Interest Distribution Amount Due" period="t" />
  - <Certificates class="M-7" method="Interest Distribution Amount Due" period="t" />
<Certificates class="M-8" method="Interest Distribution Amount Due" period="t" />
<Certificates class="M-9" method="Interest Distribution Amount Due" period="t" />
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<Glossary-Term name="Principal Remittance Amount" period="t" />
- <sum-of>
  <Glossary-Term name="Net Swap Payment" period="t" />
  <Glossary-Term name="Swap Termination Payment" period="t" />
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</Glossary-Term-Definition>
- <Glossary-Term-Definition name="Overcollateralization Amount" period="t">
  <Glossary-Term name="Required Overcollateralization Amount" period="t" />
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</Glossary-Term-Definition>
- <Glossary-Term-Definition name="Overcollateralization Increase Amount" period="t">
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    <Glossary-Term name="Net Monthly Excess Cashflow" period="t" />
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</Glossary-Term-Definition>
- <Glossary-Term-Definition name="Overcollateralization Reduction Amount" period="t">
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    <excess-of>
      <Glossary-Term name="Overcollateralization Amount" period="t" />
      <Glossary-Term name="Required Overcollateralization Amount" period="t" />
    </excess-of>
    <Glossary-Term name="Principal Remittance Amount" period="t" />
  </lesser-of>
</Glossary-Term-Definition>
- <Glossary-Term-Definition name="Principal Distribution Amount" period="t" >
- `<sum-of>
  <Glossary-Term name="Group I Principal Distribution Amount"
    period="t" />
  <Glossary-Term name="Group II Principal Distribution Amount"
    period="t" />
</sum-of>
</Glossary-Term-Definition>
- `<Glossary-Term-Definition name="Principal Remittance Amount" period="t">
  - `<sum-of>
    <Glossary-Term name="Group I Principal Remittance Amount"
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    <Glossary-Term name="Group II Principal Remittance Amount"
      period="t" />
  </sum-of>
</Glossary-Term-Definition>
- `<Glossary-Term-Definition name="Required Overcollateralization Amount" period="t">
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  </product-of>
</Glossary-Term-Definition>
- `<Glossary-Term-Definition name="Scheduled Principal Balance" period="t"
  applies-to="Mortgage Loans">
  <Mortgage-Loan-Pool method="Principal Balance" period="0" />
  <Mortgage-Loan-Pool method="Aggregate Scheduled Principal Repayments" period="t" />
  <Mortgage-Loan-Pool method="Aggregate Unscheduled Principal Repayments" period="t" />
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- `<Glossary-Term-Definition name="Senior Interest Distribution Amount" period="t">
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    <Certificate-Group group="Class A-2 Certificates" method="Interest Distribution Amount Due" period="t" />
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</Glossary-Term-Definition>
- `<Glossary-Term-Definition name="Stepdown Date" period="t" first-stepdown-period="6" credit-enhancement-percentage=".5820" credit-enhancement-function="Credit Enhancement Percentage" />
- `<Glossary-Term-Definition name="Trigger Event" period="t">
  <Delinquency-Ratio-Trigger-Condition level=".2750" credit-enhancement-function="Credit Enhancement Percentage" />
</Glossary-Term-Definition>
- `<Realized-Loss-Trigger-Condition>
  <trigger-point period="1" level="1" />
  <trigger-point period="2" level="1" />
  <trigger-point period="3" level="1" />
  <trigger-point period="4" level="1" />
  <trigger-point period="5" level="1" />
  <trigger-point period="6" level="0.0215" />
  <trigger-point period="7" level="0.0235416666666667" />
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- <Interest-Distributions>
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<Distribution source="Group II Interest Remittance Amount" type="certificate-group" group="Class A-2 Certificates" method="Make Interest Distribution Payment" period="t" priority="pro-rata" />

<Distribution source="Group I Interest Remittance Amount" type="certificate-group" group="Class A-2 Certificates" method="Make Interest Distribution Payment" period="t" priority="pro-rata" />

<Distribution source="Group I Interest Remittance Amount" type="certificate-group" group="Class A-1 Certificates" method="Make Interest Distribution Payment" period="t" priority="pro-rata" />

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<Distribution source="Group I Interest Remittance Amount;Group II Interest Remittance Amount" type="certificate-class" class="M-2" method="Make Interest Distribution Payment" period="t" />

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<Distribution source="Group I Interest Remittance Amount;Group II Interest Remittance Amount" type="certificate-class" class="M-4" method="Make Interest Distribution Payment" period="t" />

<Distribution source="Group I Interest Remittance Amount;Group II Interest Remittance Amount" type="certificate-class" class="M-5" method="Make Interest Distribution Payment" period="t" />

<Distribution source="Group I Interest Remittance Amount;Group II Interest Remittance Amount" type="certificate-class" class="M-6" method="Make Interest Distribution Payment" period="t" />

<Distribution source="Group I Interest Remittance Amount;Group II Interest Remittance Amount" type="certificate-class" class="M-7" method="Make Interest Distribution Payment" period="t" />

<Distribution source="Group I Interest Remittance Amount;Group II Interest Remittance Amount" type="certificate-class" class="M-8" method="Make Interest Distribution Payment" period="t" />

<Distribution source="Group I Interest Remittance Amount;Group II Interest Remittance Amount" type="certificate-class" class="M-9" method="Make Interest Distribution Payment" period="t" />

<Distribution source="Group I Interest Remittance Amount;Group II Interest Remittance Amount" type="certificate-class" class="CE-1" method="Make Interest Distribution Payment" period="t" />

</Interest-Distributions>

- <Principal-Distributions>

- <NotStepDownOrTriggerEventBlock>

  <Distribution source="Group I Principal Distribution Amount" type="certificate-group" group="Class A-1 Certificates" method="Make Principal Distribution Payment" period="t" priority="sequential" />

  <Distribution source="Group II Principal Distribution Amount" type="certificate-group" group="Class A-2 Certificates" method="Make Principal Distribution Payment" period="t" priority="sequential" />

  <Distribution source="Group I Principal Distribution Amount" type="certificate-group" group="Class A-2 Certificates" method="Make Principal Distribution Payment" period="t" priority="sequential" />

  <Distribution source="Group I Principal Distribution Amount" type="certificate-group" group="Class A-2 Certificates" method="Make Principal Distribution Payment" period="t" priority="sequential" />

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<Distribution source="Group I Principal Distribution Amount;Group II Principal Distribution Amount" type="certificate-class" class="M-2" method="Make Principal Distribution Payment" period="t" />
<Distribution source="Group I Principal Distribution Amount;Group II Principal Distribution Amount" type="certificate-class" class="M-3" method="Make Principal Distribution Payment" period="t" />
<Distribution source="Group I Principal Distribution Amount;Group II Principal Distribution Amount" type="certificate-class" class="M-4" method="Make Principal Distribution Payment" period="t" />
<Distribution source="Group I Principal Distribution Amount;Group II Principal Distribution Amount" type="certificate-class" class="M-5" method="Make Principal Distribution Payment" period="t" />
<Distribution source="Group I Principal Distribution Amount;Group II Principal Distribution Amount" type="certificate-class" class="M-6" method="Make Principal Distribution Payment" period="t" />
<Distribution source="Group I Principal Distribution Amount;Group II Principal Distribution Amount" type="certificate-class" class="M-7" method="Make Principal Distribution Payment" period="t" />
<Distribution source="Group I Principal Distribution Amount;Group II Principal Distribution Amount" type="certificate-class" class="M-8" method="Make Principal Distribution Payment" period="t" />
<Distribution source="Group I Principal Distribution Amount;Group II Principal Distribution Amount" type="certificate-class" class="M-9" method="Make Principal Distribution Payment" period="t" />
<Distribution source="Group I Principal Distribution Amount;Group II Principal Distribution Amount" type="certificate-class" class="CE-1" method="Make Principal Distribution Payment" period="t" />
</NotStepDownOrTriggerEventBlock>
-<IsStepDownAndNoTriggerEventBlock>
  <Distribution source="Group I Principal Distribution Amount"
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  <Distribution source="Group II Principal Distribution Amount"
    type="certificate-group" group="Class A-2 Certificates" method="Make Principal Distribution Payment" max-amount="Class A-2 Principal Distribution Amount" period="t" priority="sequential" />
  <Distribution source="Group I Principal Distribution Amount"
    type="certificate-group" group="Class A-2 Certificates" method="Make Principal Distribution Payment" max-amount="Class A-2 Principal Distribution Amount" period="t" priority="sequential" />
  <Distribution source="Group I Principal Distribution Amount"
    type="certificate-group" group="Class A-2 Certificates" method="Make Principal Distribution Payment" max-amount="Class A-2 Principal Distribution Amount" period="t" priority="sequential" />
  <Distribution source="Group I Principal Distribution Amount;Group II Principal Distribution Amount" type="certificate-class" class="M-1" method="Make Principal Distribution Payment" max-amount="Class M-1..."
Principal Distribution Amount" period="t" />
  <Distribution source="Group I Principal Distribution Amount;Group II
  Principal Distribution Amount" type="certificate-class" class="M-2"
  method="Make Principal Distribution Payment" max-amount="Class M-2
  Principal Distribution Amount" period="t" />
  <Distribution source="Group I Principal Distribution Amount;Group II
  Principal Distribution Amount" type="certificate-class" class="M-3"
  method="Make Principal Distribution Payment" max-amount="Class M-3
  Principal Distribution Amount" period="t" />
  <Distribution source="Group I Principal Distribution Amount;Group II
  Principal Distribution Amount" type="certificate-class" class="M-4"
  method="Make Principal Distribution Payment" max-amount="Class M-4
  Principal Distribution Amount" period="t" />
  <Distribution source="Group I Principal Distribution Amount;Group II
  Principal Distribution Amount" type="certificate-class" class="M-5"
  method="Make Principal Distribution Payment" max-amount="Class M-5
  Principal Distribution Amount" period="t" />
  <Distribution source="Group I Principal Distribution Amount;Group II
  Principal Distribution Amount" type="certificate-class" class="M-6"
  method="Make Principal Distribution Payment" max-amount="Class M-6
  Principal Distribution Amount" period="t" />
  <Distribution source="Group I Principal Distribution Amount;Group II
  Principal Distribution Amount" type="certificate-class" class="M-7"
  method="Make Principal Distribution Payment" max-amount="Class M-7
  Principal Distribution Amount" period="t" />
  <Distribution source="Group I Principal Distribution Amount;Group II
  Principal Distribution Amount" type="certificate-class" class="M-8"
  method="Make Principal Distribution Payment" max-amount="Class M-8
  Principal Distribution Amount" period="t" />
  <Distribution source="Group I Principal Distribution Amount;Group II
  Principal Distribution Amount" type="certificate-class" class="M-9"
  method="Make Principal Distribution Payment" max-amount="Class M-9
  Principal Distribution Amount" period="t" />
  <Distribution source="Group I Principal Distribution Amount;Group II
  Principal Distribution Amount" type="certificate-class" class="CE-1"
  method="Make Principal Distribution Payment" period="t" />
</IsStepDownAndNoTriggerEventBlock>
</Principal-Distributions>
- <Loss-Allocation excess-cashflow-function="Net Monthly Excess Cashflow">
  <Certificates class="CE-1" />
  <Certificates class="M-9" />
  <Certificates class="M-8" />
  <Certificates class="M-7" />
  <Certificates class="M-6" />
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  <Certificates class="M-3" />
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  <Certificates class="M-1" />
</Loss-Allocation>
</structure>