

## FACTS & INSIGHT: Solvency II & Securitizations

Closing the Gap on AIFMD and CRD:  
Restrictions on ABS & CLO Investments Extended to  
European Insurance Companies



## Solvency II & Securitizations:

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#### Introduction

On January 1, 2016, a new regulatory regime for European Insurance, Reinsurance Companies and certain Pension Funds (subsequently referred to as “EU Insurers”), also known as Solvency II, will come into effect and bring about sweeping changes as to how industry participants conduct their business.

Similar to provisions applicable to European Banks<sup>1</sup> and Alternative Investment Fund Managers,<sup>2,3</sup> Solvency II sets forth specific guidelines on how to deal with investments in securitizations such as Collateralized Loan Obligations (“CLO”) and Asset Backed Securities (“ABS”).

In this article, we will introduce and outline the new requirements for EU Insurers investing in securitizations, specifically:

- The definition of different types of securitizations;
- Calculation of the spread capital charge under the Standard Model and
- Operational and risk retention compliance constraints.

#### Regulatory Capital Regime

One of the key innovations of Solvency II is the introduction of a *regulatory capital regime* (i.e. capital requirements) based on a quantitative risk framework conceptually similar to the one in the banking industry.

Under this framework, each investment asset held by an EU Insurer for the purpose of meeting future liabilities must be financed by the insurer’s own capital in order to account for the risk of said asset’s potential loss of value. Solvency II defines this risk as the *maximum market value loss* that statistically an asset is not expected to incur more frequently than 1 out of 200 times over a one year period (i.e. a 99.5% one year VaR).

In its Standard Model, Solvency II has distinct asset groups (Equity, Real Estate, spread products such as Corporate Bonds or Securitizations, etc.) and sets parameters and rules for the calculation of a given asset’s loss potential, and thus, its capital charge.

<sup>1</sup> As per the *Capital Requirement Directive* (“CRD”)

<sup>2</sup> As per the *Alternative Investment Fund Manager Directive* (“AIFMD”)

<sup>3</sup> Compare our briefing on AIFMD ABS Rules from June 2013. <http://behringkhan.com/research.html>

**Securitizations:**

**The Good, The Bad, and The Ugly**

The objective of EU policy makers is to provide consistent rules that govern investments in securitizations by regulated financial entities. Similar to AIFMD, Solvency II does not define the term ‘securitization’ but rather draws from CRD’s definition. CRD, in turn, defines ‘securitization’ as a transaction or scheme, whereby the credit risk associated with an exposure or pool of exposures is tranching and

has both of the following characteristics:

- a) payment(s) in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures; and
- b) the subordination of tranches determines the distribution of losses during the ongoing life of the transaction or scheme.

Solvency II differentiates between three types of securitizations (see table below):

Type	Requirements
<p><b>Type 1 (‘Good’)</b></p>	<p>Following criteria must be met:<sup>4</sup></p> <ul style="list-style-type: none"> <li>• most senior tranche;</li> <li>• rating of credit quality step 3 (i.e. investment grade equivalent under Moody’s, S&amp;P, Fitch or DBRS);</li> <li>• listed on a regulated exchange in an EEA or OECD country;<sup>5</sup></li> <li>• underlying collateral has been transferred in a true sale transaction and not synthetically;</li> <li>• underlying collateral consists primarily of prime, performing residential mortgages, SME loans, prime auto and consumer loans; does not include transferable securities such as corporate bonds, other securitizations or derivatives other than for hedging interest rates or currencies; specific collateral quality requirements for eligible loan types have been provided</li> </ul>
<p><b>Type 2 (‘Bad’)</b></p>	<p>Any tranches that do not qualify as Type 1 and are not considered re-securitizations (i.e. CLOs or CMBS)</p>
<p><b>Re-securitizations (‘Ugly’)</b></p>	<p>A securitization whose underlying collateral includes other securitizations</p>

<sup>4</sup> The criteria to qualify as Type 1 securitization are extensive; only the most relevant are listed herein.

<sup>5</sup> <https://www.gov.uk/eu-eea> and <http://www.oecd.org/about/membersandpartners/list-oecd-member-countries.htm>

### Capital Requirements for Securitizations

Investments in securitizations are part of the 'Spread Risk Module' under Solvency II's Standard Model. Spread risk is defined as the risk of losses to a fixed income instrument's market value due to an increase in the component of the instrument's interest rate compensating for credit risk and illiquidity. This component is commonly referred to as 'credit spread' and is considered the difference between the fixed income instrument's total yield and the risk free interest rate for an equivalent tenor. Different levels of spread risk are defined along a credit

quality scale that ranges from 0 to 6 (each a 'credit quality step'). Each credit quality step matches the rating scale of major ratings agencies<sup>6</sup> such as Moody's, S&P, DBRS or Fitch with 0 being the AAA equivalent, 1 being the AA equivalent and so forth. The below table shows the risk factor for securitizations (normalized per modified (spread) duration of 1 year) subject to their credit quality step. The capital charge for a given investment is calculated as the product of its above risk factors and its modified spread duration.<sup>7</sup>

#### Credit Quality Steps and Spread Risk

	0	1	2	3	4	5	6	Unrated
Type 1	2.1%	3%	3%	3%	N/A	N/A	N/A	N/A
Type 2	12.5%	13.4%	16.6%	19.7%	82%	100%	100%	100%
Re-securitization	33%	40%	51%	91%	100%	100%	100%	100%

The following table shows the capital charges associated with the spread risk component for a typical Euro CLO 2.0 capital structure.<sup>8</sup>

#### Typical Euro CLO 2.0 Capital Charges

Tranche	WAL	Spread	Credit Quality Step	Type	Modified Duration	Risk Factor	Spread Capital Charge
AAA	6	130	0	2	5.76	12.5%	72%
AA	8	210	1	2	7.34	13.4%	98.35%
A	8	310	2	2	7.06	16.6%	100%
BBB	8	400	3	2	6.81	19.7%	100%
BB	9	610	4	2	6.88	82%	100%
Equity	N/A	Excess	Unrated	2	N/A	100%	100%

<sup>6</sup> EIOPA is considering the possibility of providing an official table as part of their Technical Specifications mapping each credit quality step directly to a rating category for each EU recognized rating agency which may deviate from the intuitive 1 to 6 mapping outlined herein (i.e. a AAA of one rating agency might qualify as a Credit Quality Step of 0, whereas a AAA of another rating agency might only qualify as a Credit Quality Step of 1).

<sup>7</sup> The modified duration has a floor of 1 and the capital charge has a cap of 100%.

<sup>8</sup> A Spread Product may also be subject to other risks such as interest rate risk and currency risk that have to be taken into consideration along with the spread risk through a correlation matrix provided by the Directive. For the purposes of this analysis, we have ignored these additional risk factors.

A typical new issuance EUR CLO AAA leads to a capital requirement of 72%: for every 100 EUR invested into this type of security, an EU Insurer needs to assume that the potential loss over a one year time horizon may be up to 72 EUR and only 28 EUR will be available to cover any future payment obligations

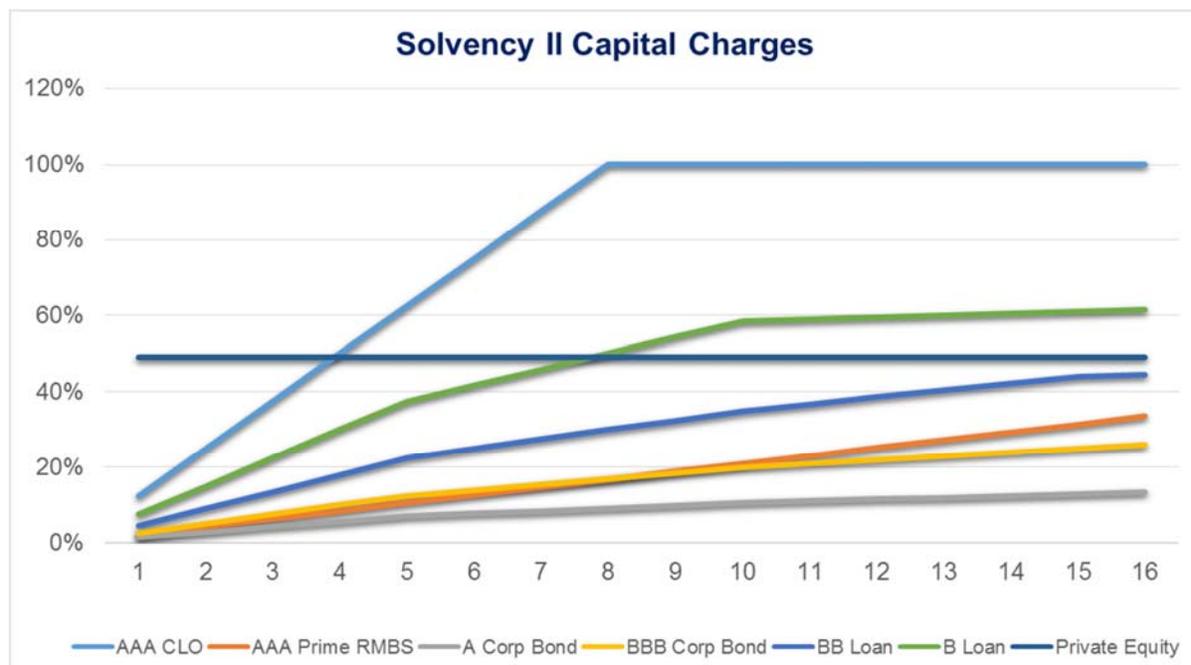
stemming from its liabilities.

The below table compares the capital charge of this EUR CLO to Type 1 Securitizations and to a direct investment into corporate loans (assuming the same modified duration):

### Capital Charge Comparison

Asset Type	Credit Quality Step	Modified Duration	Capital Charge
EUR ABS Type 1 AAA	0	5.76	12.10%
EUR ABS Type 1 AA – BBB	1-3	5.76	17.28%
EUR Corporate Loan BBB	3	5.76	13.64%
EUR Corporate Loan unrated	N/R	5.76	16.29%
EUR Corporate Loan BB	4	5.76	24.40%
EUR Corporate Loan B	5	5.76	40.69%
Private Equity	N/A	N/A	49.00%
Euro CLO AAA	0	5.76	72.00%

Based on the above table, it is clear that the capital charge of a Type 1 securitization and a direct investment into the underlying asset of a CLO (i.e. loans) is significantly lower than that of a EUR CLO AAA. The following graph also illustrates this using different durations ranging from 1 year to 16 years.



### Risk Retention Requirement

Consistent with CRD and AIFMD, eligible securitization investments under Solvency II must meet a risk retention requirement. This risk retention rule mandates that the 'originator', 'sponsor' or 'original lender' retains, on an ongoing basis, a 'material net economic interest' of at least 5% in those securitizations that have been issued after January 2011 or those which were issued prior to this date but where collateral substitutions are to occur after December 2014.

These rules will apply to new investments made starting January 1, 2016. For existing investments, there is a lack of explicit grandfathering language. The regulator, EIOPA, is expected to provide practical guidance in their final draft Technical Specifications by June 30, 2015.<sup>9</sup>

### Due Diligence, Underwriting & Monitoring

Based upon the AIFMD language, Solvency II explicitly prescribes extensive obligations for an EU Insurer.

Detailed standards describe how to analyze and stress test a securitization's structure and underlying collateral, and how to evaluate the loan originators' underwriting procedures and credit granting standards. EU Insurers will have to perform a full 'look-through' analysis of a securitization structure. In addition to the due diligence of the legal

documentation and involved parties, the 'look-through' analysis requires the transparent modeling and re-engineering of a transaction before an investment decision is taken. Furthermore, in order to satisfy the ongoing monitoring requirements, the initial analysis will have to be updated on a regular basis to reflect changes in the underlying collateral data and to ensure that originators or sponsors continue to be in compliance with the risk retention requirements and have not relaxed their credit granting standards.

### Non-Compliance Penalty

Securitizations under Solvency II mirror AIFMD in many aspects. Solvency II, however, employs a more drastic approach in cases of non-compliance of the risk retention rule. AIFMD requires the fund manager to *consider* taking some corrective actions, such as hedging, selling or reducing the exposure or approaching the party in breach of the retention requirements with a view to reinstating compliance. Such corrective action should always be in the interest of the fund investors and should avoid a 'fire sale'.

Solvency II, on the other hand, requires an EU insurer to immediately notify his local regulator. If there has been negligence or omission from the EU Insurer regarding its investment or monitoring process, the regulator shall increase the capital requirements of a non-compliant position by no less than 250% of the existing capital

<sup>9</sup> EIOPA's Technical Specification for the Preparatory Phase as of April 30, 2014 Part I states in a footnote 24 (Page 162) that securitizations, irrespective of their credit quality step, which do not meet the risk retention requirements will be assigned a capital charge of 100%.

requirement (e.g. a AAA CLO with a capital requirement of 72% would see an increase to at least 252%). Such an increase would be a strong motivation for a sale of the non-compliant position.

### Conclusion

The definition of securitizations and their risk retention rules will be widely similar for Insurers, Banks and Alternative Investment Fund Managers in Europe. Insurers under Solvency II, however, face two distinguishing aspects:

- 1) The capital charges, especially for Type 2 securitizations, are very high.
- 2) There are potentially severe consequences if the governance of

securitization investments is found to be sub-standard.

Going forward, Insurers will therefore have to decide if investments into securitizations should be made “in-house”, which imposes high governance standards, or via external investment advisors, reducing their burden with respect to due diligence and on-going monitoring. Alternatively, a direct exposure to the underlying assets of a securitization may be the more capital efficient route. Considering that Solvency II is creating incentives for Insurers to invest in AIFMD compliant closed-end funds, such funds allocating to loans may become an attractive alternative for those looking for managed exposure to this asset class.

## About

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**GLOSSARY**

AIFMD	Alternative Investment Fund Manager Directive
AIF CEF	Alternative Investment Fund Closed-End Fund
CEF	Closed-End Fund
CRD	Capital Requirement Directive
EEA	European Economic Area
EIOPA	European Insurance and Occupational Pensions Authority
OECD	Organization of Economic Co-operation and Development
Solvency II	The Solvency II Directive (2009/138/EC) is an EU Directive that codifies and harmonises the EU insurance regulation. Primarily, this concerns the amount of capital that EU insurance companies must hold to reduce the risk of insolvency.
VaR	Value at Risk

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