

Repackaged Loans calibration for Standard Formula spread risk module

Our reference:	ECO-SLV-12-183	Date:	6 April 2012
Referring to:			
Related documents:			
Contact person:	Ecofin Department,	E-mail:	ecofin@insuranceeurope.eu
Pages:	8	Transparency Register ID no.:	33213703459-54

Introduction

The current calibration of the spread risk module for investments in repackaged loans is calibrated based on worldwide spread data. However, it was noted by several parties that this calibration does not do justice to European Repackaged Loans, as these are overly penalized in relation to both the actual risks and other asset classes. **This has severe consequences for the European Repackaged Loans market.** Insurers would be incentivized not to invest in Repackaged Loans anymore, which damages diversification possibilities in asset portfolios. This in turn has consequences for the issuance of Repackaged Loans, which may hurt many European businesses (ranging from mortgage loan providers to carmakers and lease companies) that lean on Repackaged Loans as an important source of funding within their total funding pallet. Taking away such an important funding source may create funding problems across Europe, but may also introduce systemic risks due to creating an over-reliance on other funding sources such as Covered Bonds¹.

The quality of European Repackaged Loans has proven to have performed much better than some of its Repackaged Loans counterparts in non-EEA such as the US. This relates not only to defaults, as has been pointed out by AFME², but also on market spreads as we will show below. Furthermore, we believe a calibration on European Repackaged Loans specifically, is justified as these are the Repackaged Loans that European insurers mostly invest in and European regulators can exert influence on the European markets via rules and regulation. The latter is already visible in various initiatives such as Solvency II regulations (repackaged loan investments, use of ECAI, Counterparty Default Risk module on collateral such as residential

¹ Although Covered Bonds are a very important and suitable funding source for a number of collateral types, it is only possible to use as a funding source for a limited volume to keep the balance sheet of the issuing organization healthy. Also, it is only a funding option for financial organizations such as banks and not car producers or lease companies which also need funding.

² See letter from AFME to Karel van Hulle and Carlos Montalvo date 31 March 2011

mortgages) and an initiative on introducing more transparency on Repackaged Loans collateral (e.g. for ECB repo eligibility).

This paper proposes a recalibration of the capital requirements for European tradable securities or other financial instruments based on repackaged loans, as follows:

Credit quality step	0	1	2	3	4	5	6
Risk factor FUP'_i	3.5%	10%	17%	22%	82 %	100%	100%
Maximum modified duration (in years)	4	5	4	3.5	1	1	1

This would replace the current proposal for the treatment of all repackaged loans, which should only apply to non-European tradable securities or other financial instruments based on repackaged loans:

Credit quality step	0	1	2	3	4	5	6
Risk factor FUP'_i	7%	16%	19%	20%	82 %	100%	100%
Maximum modified duration (in years)	6	5	4	2	1	1	1

Re-calibration

Repackaged Loans exist in various forms with different structures and collateral and historical performance differs heavily between the various forms of Repackaged Loans and country of origin. Furthermore, as a relative new asset class it has had some issues with misunderstanding and transparency in the first couple of years, which are being dealt with at the moment. This will ensure a more mature and less volatile market.

Since the Standard Formula within Solvency II cannot differentiate between all the different forms of Repackaged Loans and needs to provide a simple, but solid spread risk sub-module we have not re-calibrated to such extent that all characteristics of Repackaged Loans are covered. Instead we have followed EIOPA's initial calibration, done on Repackaged Loans spreads from the Barclays index based on a worldwide portfolio, but provide a calibration based solely on European data. Even though this will still be punishing for some Repackaged Loans types, it should prevent that Repackaged Loans as a total asset class will become prohibitive to invest in for insurers within Europe due to an overly prudent strain on capital requirements.

Some calibration choices we have made:

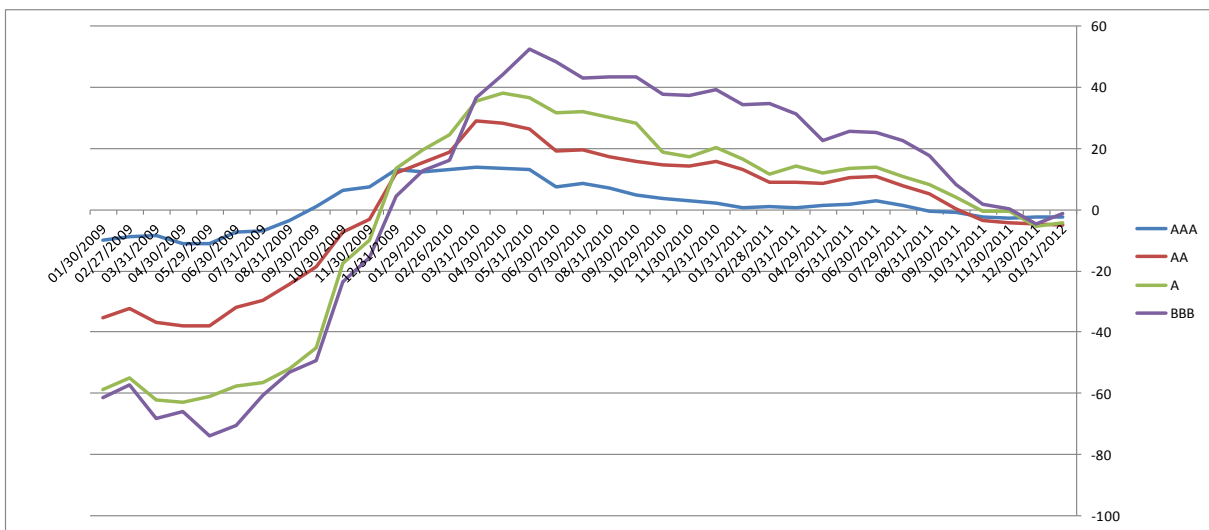
- Using a transparent and publicly available index (Barclays)
- Focus on 12 month rolling total return index (which incorporates downgrade information), not on defaults
- Focus on European ABS, ignoring country differences
- Focus on the available duration information based on projection till call date (when used to turn price developments into spreads this will give a prudent view of spread movements)

We understand that calibration on spreads seems straightforward, but care needs to be taken that some spread data may be polluted in time series due to various reasons: a.o. influence of downgrades, differences in maturity, calls/non-calls and coupon payments. Therefore various data sets may give very different outputs.

The final choice of calibration should not be based on the most positive index, but should also not be overly prudent.

Comparing various sources of data, we have chosen to base our suggestion for re-calibration on the **Barclays European ABS index** information. The Barclays ABS benchmark consists of about 1000 ABS bonds across different ABS sectors, countries and rating categories. As such, the Barclays European Index is a good representation of the European ABS market.

Please, find below a graph showing the 12 month rolling total return index development of European Repackaged Loans per rating bucket:



This graph shows that the price index of European AAA ABS has not dropped more than about 12%. With an average duration of 3.5³, this implies a shock factor of around 3.5%. This is significantly different from the current factor of 7% and makes an important difference on whether it is worthwhile to invest in such securities.

Also for other rating buckets we can see less volatility than in the worldwide index, consistent with the AAA bucket. This is not surprising considering the fact that defaults for many Repackaged Loans also are consistently lower.

Based on the information from this index we are proposing to use the following risk factors and duration caps to use within the Spread Risk Sub-module of the Standard Formula:

Credit quality step	0	1	2	3	4	5	6
Risk factor FUP'_i	3.5%	10%	17%	22%	82 %	100%	100%
Maximum modified duration (in years)	4	5	4	3.5	1	1	1

³ See appendix 1

Please note that the spread duration numbers that have been used are conservative as these were based on the call date and not the maturity date. With the given 12 month return movements divided by this duration this gives a conservative shock factor. A duration based on the possibility bonds are not called would give lower shock factors to be applied. We have chosen to take the prudent number for the maximum modified (spread) duration, but that also implies that even though the maximum modified (spread) duration numbers in years look small, the outcome of multiplying these with the shock factor gives total capital requirements that align with the largest losses we have seen on Repackaged Loans per rating class.

Senior bonds

An important distinction that has to be made with Repackaged Loans is senior claims versus non-senior claims. If a bond is issued as a AAA bond it will have a senior claim on the collateral even in the case the bonds get a downgrade. Since ratings of regular bonds are linked to the rating of the sovereign bonds, some Repackaged Loans may be overly punished if the capital requirement is solely based on the current rating of a bond, ignoring that it may have a senior claim.

Therefore, in addition to the analysis above, we have also looked at the 12 month return of senior bonds that have been downgraded. The maximum negative rolling 12 month return of these senior bonds (original AAA's) has been about 30%, irrespective of the current rating.⁴

Our suggestion based on this analysis, is to cap the maximum capital charge to 30% for senior bonds that have been downgraded to up to BBB. The senior bonds that may qualify for such preferential treatment have the following characteristics:

- 1) Senior (first claim on collateral) tranche,
- 2) Collateral from an EEA country,
- 3) Collateral with senior claims (no second liens or subordinated exposures),
- 4) Denominated in an EEA currency (mitigating currency risk)

The above needs to be tested in the internal credit assessment, which is required for Repackaged Loans in article 141 subs (4) and (5) of the draft Implementing Measures.

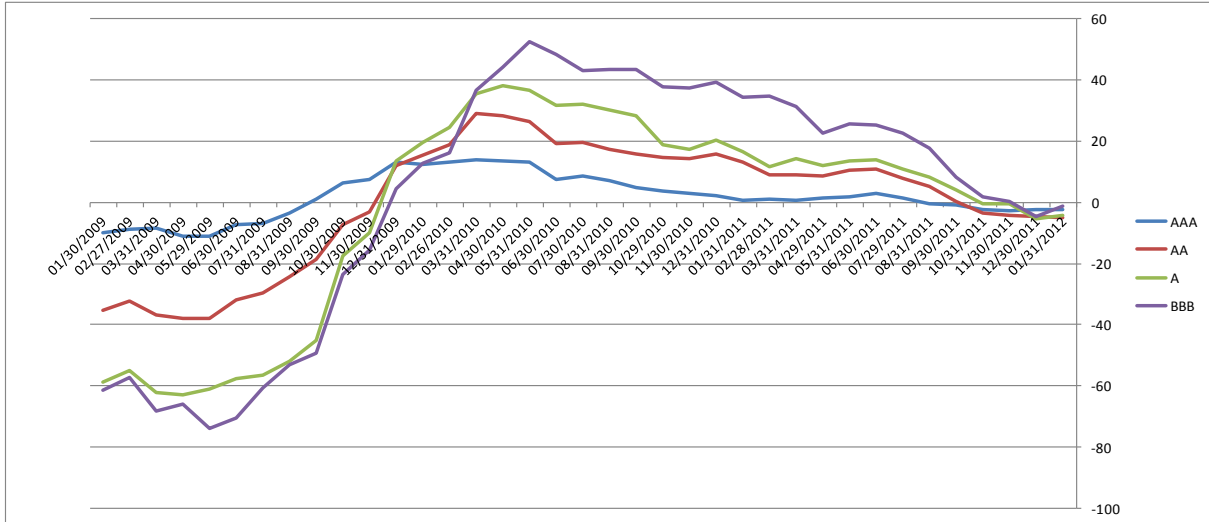
Adding the distinction of senior claim bonds will ensure that the capital charge of Repackaged Loans that are bought with a senior claim, does not get overly punished in case of a downgrade. This seems especially fair in case the downgrade is a result of the downgrade of the sovereign bond in the country of issuance. Also, this aligns with the treatment of covered bonds that also receive a lower capital charge due to a senior claim on collateral.

The mezzanine tranches do not get any benefit from this and it may make such bonds even harder to sell in the market at issuance which will cause these to be retained. Although ideally such tranches should also be possible to sell, retaining these aligns with the 5% risk retention rule as currently laid out in the draft Solvency II Implementing Measures.

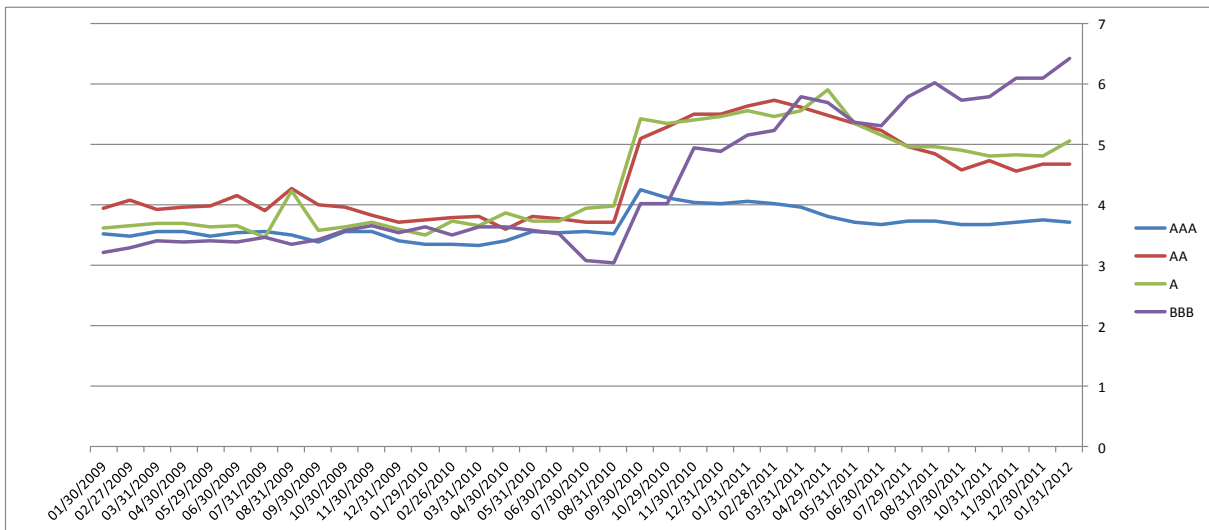
⁴ See appendix 2 for more details

Appendix 1

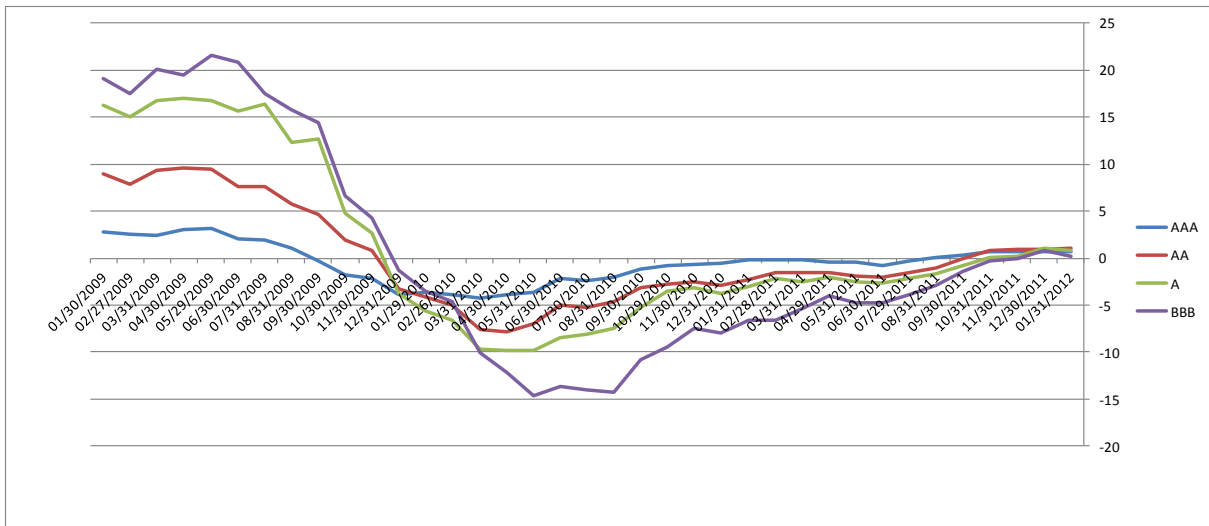
12M rolling total return Index (%):



Spread duration (yrs):

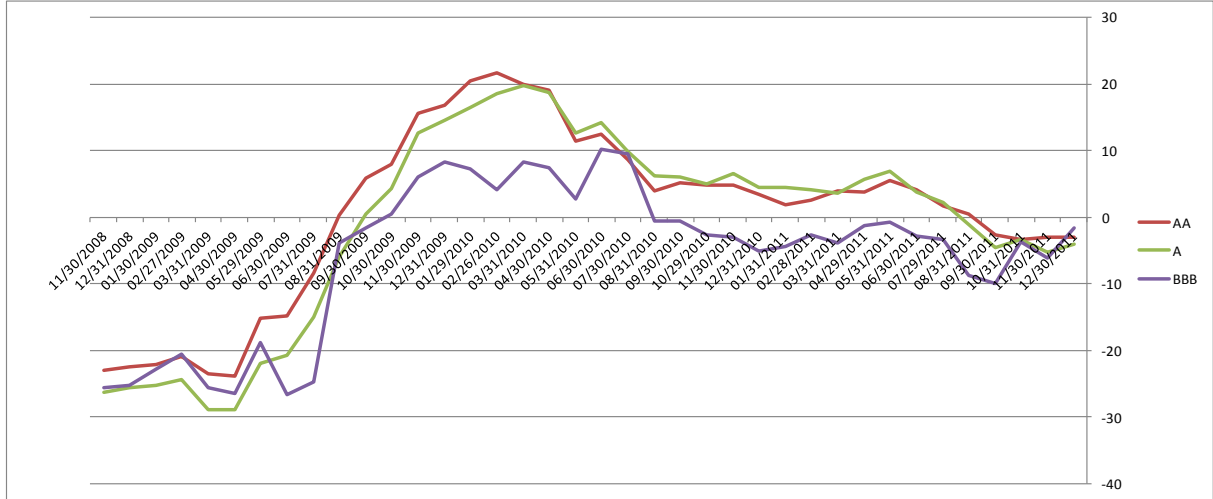


12M rolling total return / Spread duration (%/yrs):



Appendix 2

12M rolling total return of SENIOR bonds, with a current rating of AA, A or BBB:



Article 159 SR3

(Art. 105(4) (d) of Directive 2009/138/EC)

Tradable securities or other financial instruments based on repackaged loans

1. The capital requirement for spread risk on tradable securities or other financial instruments based on repackaged loans shall be equal to the following:

$$SCR_{rpl} = SCR_{rpl, EU} + SCR_{rpl, non-EU}$$

where

- $SCR_{rpl, EU}$ denotes the capital requirement for spread risk on European tradable securities or other financial instruments based on repackaged loans for which the collateral is localised within the Economic European Area;
- $SCR_{rpl, non-EU}$ denotes the capital requirement for spread risk on non-European tradable securities or other financial instruments based on repackaged loans.

2. The capital requirement for spread risk on tradable securities or other financial instruments based on repackaged loans shall be equal to the loss in the basic own funds that would result from an instantaneous decrease in the value of each tradable security or other financial instrument based on repackaged loans by the following amount:

$$FUP'_i \cdot dur_i \cdot MV_i$$

where:

- (a) FUP'_i denotes a risk factor specified in paragraphs 2 3 to 4 5.
 - (b) dur_i denotes the modified duration of the tradable security or other financial instrument based on repackaged loans i denominated in years; it shall not be lower than 1 or higher than the maximum modified durations specified in paragraph 2 3 to 4 5.
 - (c) MV_i denotes the value of the tradable security or other financial instrument based on repackaged loans i .
3. Tradable securities or other financial instruments based on repackaged loans, other than resecuritisation exposures, and for which a credit assessment by a nominated ECAI is available shall be assigned a risk factor FUP'_i and a maximum modified duration according to the following tables. The assignment shall be in accordance with Subsection RECAI and UECAI.

For European tradable securities or other financial instruments based on repackaged loans, the following risk factors and maximum modified durations shall apply:

<u>Credit quality step</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
<u>Risk factor FUP'_i</u>	<u>3.5%</u>	<u>10%</u>	<u>17%</u>	<u>22%</u>	<u>82 %</u>	<u>100%</u>	<u>100%</u>
<u>Maximum modified duration (in years)</u>	<u>4</u>	<u>5</u>	<u>4</u>	<u>3.5</u>	<u>1</u>	<u>1</u>	<u>1</u>

For senior European tradable securities or other financial instruments based on repackaged loans that have been downgraded to up to BBB, the product of the risk factor and modified duration shall not exceed 30%. Such senior bond must satisfy the following characteristics, in accordance with Article 141 (4) and (5) on the internal credit assessment:

- 1) Senior (first claim on collateral) tranche;
- 2) Collateral from an EEA country;
- 3) Collateral with senior claims (no second liens or subordinated exposures);
- 4) Denominated in an EEA currency (mitigating currency risk).

For non-European tradable securities or other financial instruments based on repackaged loans, the following risk factors and maximum modified durations shall apply:

Credit quality step	0	1	2	3	4	5	6
Risk factor FUP'_i	7%	16%	19%	20%	82 %	100%	100%
Maximum modified duration (in years)	6	5	4	2	1	1	1

4. Notwithstanding paragraph 3, tradable securities or other financial instruments based on repackaged loans which are resecuritisation exposures and for which a credit assessment by a nominated ECAI is available shall be assigned a risk factor FUP'_i and a maximum modified duration according to the following table. This assignment shall be in accordance with Subsection RECAI and UECAI.

Credit quality step	0	1	2	3	4	5	6
Risk factor FUP'_i	33%	40%	51%	91%	100%	100%	100%
Maximum modified duration (in years)	3	3	2	1	1	1	1

5. Tradable securities or other financial instruments based on repackaged loans for which such a credit assessment is not available shall be assigned a risk factor FUP'_i of 100 % and a maximum modified duration of 1 year.

Insurance Europe is the European insurance and reinsurance federation. Through its 34 member bodies — the national insurance associations — Insurance Europe represents all types of insurance and reinsurance undertakings, eg pan-European companies, monoliners, mutuals and SMEs. Insurance Europe, which is based in Brussels, represents undertakings that account for around 95% of total European premium income. Insurance makes a major contribution to Europe's economic growth and development. European insurers generate premium income of over €1 100bn, employ nearly one million people and invest almost €7 500bn in the economy.