TwentyFour
ASSET MANAGEMENT

Solvency II and Asset Backed Securities

A Quick Reference Guide for Insurers

A boutique of Vontobel Asset Management

October 2017

Contents

1. Background

2. Due Diligence & Risk Retention

3. Types of Securitisations

4. Capital Requirements

5. Looking Forward –
Amendments for 2019 and Beyond

6. Appendix

1. Solvency II – Background

- Introduced on January 1, 2016
- Sweeping changes to how EU insurance industry investors conduct their business
  - Contains specific guidelines on how to deal with investments in Asset Backed Securities
- Introduction of specific investor due diligence and risk retention requirements
- Introduction of a regulatory capital regime
  - Quantitative risk framework conceptually similar to the banking industry
  - Capital requirements based on statistical analysis[1]
  - Standard Model contains parameters and rules for calculation per asset group
    - e.g. Equities, Real Estate, Government Bonds, Corporate Bonds, Asset Backed Securities

1. The maximum market value loss that an asset is not statistically expected to incur more frequently than 1 out of 200 times over a one year period (i.e. a 99.5% one year VaR)

2. Due Diligence and Risk Retention

- Solvency II includes specific investor requirements for securitisations, consistent with CRD and AIFMD
  - Extensive and explicit due diligence requirements are prescribed with detailed standards demanding:
    - Analysis and stress testing of securitisation structures and underlying collateral
    - Evaluation of originators' underwriting standards
    - Look-through analysis and modelling
    - Ongoing monitoring, updates to initial analysis to reflect collateral evolution and originator compliance checking
- Risk Retention Requirements:
  - Investors must ensure that investments comply with European risk retention standards
    - *The 'originator', 'sponsor' or 'original lender' must retain, on an ongoing basis, a 'material net economic interest' of at least 5% in securitisations issued after January 2011*[1]
- Insurers are able to rely on outsourced asset managers to comply with these requirements on their behalf

1. Also includes securitisations issued prior to January 2011 where collateral substitutions are to occur after December 2014

3. Solvency II – Types of Securitisations

- A securitisation is defined as
  - A transaction whereby the credit risk associated with an exposure or pool of exposures is tranched and has both of the following characteristics

    a) Payments 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

- Under Solvency II there are currently three types of securitisation

Type	Requirements
Type 1	• Most senior tranche • Investment grade rating[1] • Listed on a regulated exchange in an EEA or OECD country • True sale transaction (i.e. not synthetic) • Underlying collateral consists primarily of prime, performing residential mortgages, SME loans, prime auto and consumer loans[2 3]
Type 2	• Any tranches or asset classes (e.g. CLOs or CMBS) that do not qualify as Type 1
Re-securitisations	• A securitisation whose underlying collateral includes other securitisations (e.g. CDOs of ABS)

1. Equivalent from Moody's, S&P, Fitch or DBRS
2. Does not include transferable securities such as corporate bonds or derivatives other than for hedging interest rates or currencies
3. Subject to specific collateral quality requirements for eligible loan types

4. Solvency II – Capital Requirements

- The capital requirement weightings for securitisations are defined in a spread-risk matrix
  - The matrix references the type of securitisation vs a credit rating category scale ('credit quality step')
  - The matrix defines the capital charge for each type and step for each year of spread duration

Rating Category[1] Credit Quality Step	AAA 0	AA 1	A 2	BBB 3	BB 4	B and below 5 & 6
Type 1	2.1%	3%	3%	3%	N/A	N/A
Type 2	12.5%	13.4%	16.6%	19.7%	82%	100%
Re-securitisations	33%	40%	51%	91%	100%	100%

- The capital charge is calculated by multiplying the relevant risk factor from the matrix by the modified spread duration[2]
  - E.g. a 2.6 year AAA Type 1 bond would attract a capital charge of 2.1% x 2.6 = 5.46%
  - However, a 3.5 year AA Type 2 bond would attract a 58.1% capital charge
- Regulatory reporting for Solvency II including capital type and charge can be performed for investors by asset managers

1. Equivalent from Moody's, S&P, Fitch or DBRS – other agencies may differ
2. The modified spread duration has a floor of 1 and the capital charge has a cap of 100%

Investments may also be subject to other risks such as interest rate risk and currency risk that must be considered along with the spread risk
These additional risk factors have been ignored for this purpose

Capital Requirements (continued)

- The capital charges are currently far higher than those in comparable markets
  - Senior RMBS is about 3x the equivalent charge for Covered Bonds

Rating Category Credit Quality Step	AAA 0	AA 1	A 2	BBB 3	BB 4	B and below 5 & 6
Type 1 Securitisation	2.1%	3%	3%	3%	N/A	N/A
Covered Bonds	0.7%	0.9%	N/A	N/A	N/A	N/A

- For junior tranches and other Type 2 securitisations such as CLOs and CMBS the difference is enormous
  - In the single-A and BBB sweet-spot for insurance investments the charges are up to 12x higher than for corporates
  - A typical AAA-rated senior CLO 6-year bond would attract a 75% capital charge

Type 2 Securitisation	12.5%	13.4%	16.6%	19.7%	82%	100%
Corporate Bonds	0.9%	1.1%	1.4%	2.5%	4.5%	7.5%

- Investments in Type 2 assets are generally not currently practical for insurers without an approved internal model

The modified spread duration has a floor of 1 and the capital charge has a cap of 100%
Investments may also be subject to other risks such as interest rate risk and currency risk that must be considered along with the spread risk
These additional risk factors have been ignored for this purpose

5. Solvency II – Looking Forward – Amendments for 2019 and Beyond

- Three-year post-implementation review of Solvency II by the European Commission due in 2019

- The new regulatory framework covering all EU securitisation also comes into force in January 2019
  - This includes overarching due diligence and risk retention requirements replacing those in CRD, AIMFD and Solvency II
  - Newly developed 'STS'[1] standard to be introduced for qualifying securitisations
    - ***STS will allow for beneficial revision of Solvency II capital charge and eligibility framework for insurers***
    - ***Junior tranches of qualifying STS transactions will likely become Type 1[2]***
      - ***Expectation that new capital charges will become more closely aligned with Covered and Corporate Bonds***
    - ***Type 2 unlikely to change in the near term***

- Likely to be a positive step in attracting insurers as investors in securitisations

1. STS – Simple, Standardised and Transparent securitisation
2. Likely that a senior/non-senior capital differential will still apply

Appendix: Asset backed securities team

Ben Hayward, Founding Partner
18 years RMBS experience across portfolio management, modelling and analytics.

Rob Ford, Founding Partner
30 years RMBS experience across trading, securitisation, portfolio management.

Aza Teeuwen, Partner & Portfolio Manager
10 years RMBS experience across portfolio management and analytics for mezzanine structured finance.

John Lawler, Portfolio Manager
30 years' ABS experience, and was previously a Managing Director at three Global Investment Banks.

Doug Charleston, Portfolio Manager
9 years experience structuring, managing and rating mortgage-backed securitisations.

Silvia Piva, Portfolio Manager
9 years experience structuring and managing asset-backed securitisations.

Shilpa Pathak
Develops system architecture, models mortgage securities.

Luca Beldi
Models mortgage securities, builds stress tests.

Elena Rinaldi
Models mortgage securities, builds stress tests.

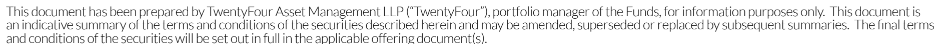
TwentyFour industry recognition

twentyfouram.com

8th Floor
The Monument Building
11 Monument Street
London
EC3R 8AF

T +44 (0)20 7015 8900
F +44 (0)20 7015 8901
E sales@twentyfouram.com

E Alistair.Wilson@twentyfouram.com
E Nicola.Pearson@twentyfouram.com



This document has been prepared by TwentyFour Asset Management LLP ("TwentyFour"), portfolio manager of the Funds, for information purposes only. This document is an indicative summary of the terms and conditions of the securities described herein and may be amended, superseded or replaced by subsequent summaries. The final terms and conditions of the securities will be set out in full in the applicable offering document(s).

This document shall not constitute an offer to sell or the solicitation of an offer to buy any securities described herein. TwentyFour is not acting as advisor or fiduciary. Accordingly you must independently determine, with your own advisors, the appropriateness for you of the securities before investing. TwentyFour accepts no liability whatsoever for any consequential losses arising from the use of this document or reliance on the information contained herein.

No offers, sales, resales or delivery of the securities described herein or distribution of any offering material relating to such securities may be made in or from any jurisdiction except in circumstances which will result in compliance with any applicable laws and regulations and which will not impose any obligation on TwentyFour or any of its affiliates.

TwentyFour does not guarantee the accuracy or completeness of information which is contained in this document and which is stated to have been obtained from or is based upon trade and statistical services or other third party sources. Any data on past performance, modelling or back-testing contained herein is no indication as to future performance and there can be no assurance that targeted or projected returns will be achieved, that the Company will achieve comparable results or that the Company will be able to implement its investment strategy or achieve its investment objectives. No representation is made as to the reasonableness of the assumptions made within or the accuracy or completeness of any modelling or back-testing. All opinions and estimates are given as of the date hereof and are subject to change. The value of any investment may fluctuate as a result of market changes. The information in this document is not intended to predict actual results and no assurances are given with respect thereto. TwentyFour, its affiliates and the individuals associated therewith may (in various capacities) have positions or deal in securities (or related derivatives) identical or similar to those described herein.

This document is being made available in the UK to persons who are investment professionals as defined in Article 19 of the FSMA 2000 (Financial Promotion Order) 2005. Outside of the UK, it is directed at persons who have professional experience in matters relating to investments. Any investments to which this document relates will be entered into only with such persons. This document is not for distribution to retail customers.

No action has been made or will be taken that would permit a public offering of the securities described herein in any jurisdiction in which action for that purpose is required.

This document does not disclose all the risks and other significant issues related to an investment in the securities. Prior to transacting, potential investors should ensure that they fully understand the terms of the securities and any applicable risks. This document is not a prospectus for any securities described herein. Investors should only subscribe for any securities described herein on the basis of information in the relevant prospectus (which has been or will be published and may be obtained from TwentyFour by visiting it's website www.Twentyfouram.Com), and not on the basis of any information provided herein.

TwentyFour Asset Management LLP is registered in England No. OC335015, and is authorised and regulated in the UK by the Financial Conduct Authority, FRN No. 481888. Registered Office: 8th Floor, The Monument Building, 11 Monument Street, London, EC3R 8AF. Copyright TwentyFour Asset Management LLP, 2017 (all rights reserved). This document is confidential, and no part of it may be reproduced, distributed or transmitted without the prior written permission of TwentyFour.

24124 09/10/17