Covered Bonds
from a Rating Agency Point of View

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Agenda

Introduction

How does Fitch rate Covered Bonds?

ALM Choices

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Fitch Covered Bonds Coverage

- Fitch currently maintains ratings for covered bonds issued under 77 different programmes
  - issued by 62 institutions located in 13 different countries
  - 53 backed by mortgage assets, 24 secured on public sector debt
  - 16 issued pursuant to contractual agreements rather than within a legal and regulatory framework
- A pioneer in covered bonds surveillance
  - Covered Bonds SMART launched in March 2008
  - Enables to follow the composition of cover pools as well as maturity, interest rate and currency mismatches
- Named Best Rating Agency for Covered Bonds
  - In a poll undertaken in 2007 by EuroWeek's 'The Cover'

FAQ #1: Impact of Covered Bonds Funding on Banks Rating

> Generally, access to covered bond markets is a positive rating factor, as it provides cheap (mostly AAA-rated) funding;

> Downside (such as the need to maintain overcollateralisation level) is limited if adequately managed;

> The Issuer Default Rating of ‘monoline’ mortgage lenders already reflect their narrow business model.

Overall neutral to positive impact on the Issuer Default Rating

> But excessive issuance can have negative rating implications for the financial institution’s unsecured or subordinated debt, mainly due to assets cherry-picking and the subordination effect of other creditors.

Testing of liquidation scenario suggests unsecured debt rating could suffer if covered bonds funding exceeds 60%

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Fitch Covered Bonds Ratings

= Rating corresponding to covered bonds probability of default (PD), determined as a function of:

> Issuer Default Rating;

> Discontinuity Factor; and

> Result of covered bonds stressed cash flows model.

+ / - Adjustment for recoveries given default

> in accordance with Fitch guidelines on Recovery Ratings

Three Steps

1. Combine the covered bonds Discontinuity Factor and the issuer default probability in the covered bonds PD matrix

=> Max achievable rating of the covered bonds on a PD basis

2. Test this max achievable rating in the covered bonds cash flows model

=> Rating of the covered bonds on a PD basis

3. Give credit for recoveries on the covered bonds given their default

=> Final rating of the covered bonds

Discontinuity Factor Composition

	Weighting
Asset Segregation	50%
Liquidity Gap	30%
Alternative Management	15%
Covered Bonds Oversight	5%

D – Factor
(Ranges from 0% to 100%)

Step 1 – Covered Bonds Probability of Default Matrix

Issuer Default Rating (IDR): ‘A’

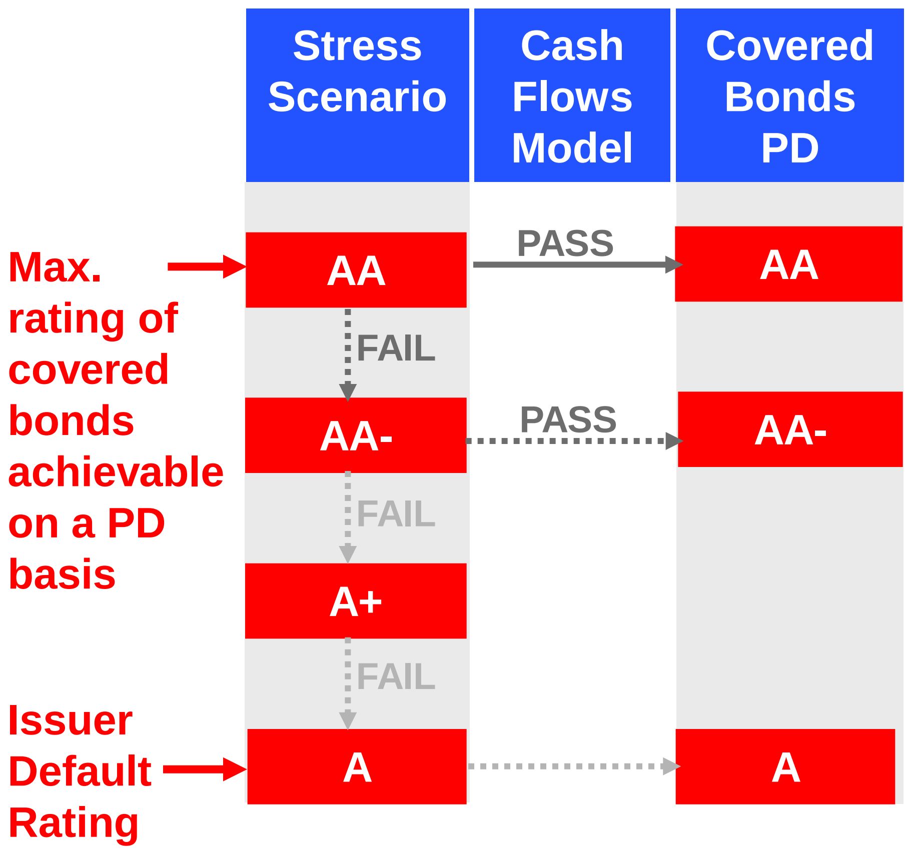
Discontinuity Factor: 35%

Lowest Achievable Covered Bonds PD: 0.561% x 35% = 0.1963% equivalent to a ‘AA’ rating

Issuer Default Rating	5 years cumulative PD	D-Factors							
		100%	50%	35%	20%	15%	10%	5%	0%
AAA	0.030%	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
AA+	0.094%	AA+	AAA	AAA	AAA	AAA	AAA	AAA	AAA
AA	0.203%	AA	AA+	AA+	AAA	AAA	AAA	AAA	AAA
AA-	0.255%	AA-	AA+	AA+	AAA	AAA	AAA	AAA	AAA
A+	0.501%	A+	AA-	AA	AA+	AA+	AAA	AAA	AAA
A	0.561%	A	AA-	AA	AA+	AA+	AAA	AAA	AAA
A-	0.787%	A-	A+	AA-	AA	AA+	AA+	AAA	AAA
BBB+	1.016%	BBB+	A+	AA-	AA	AA	AA+	AAA	AAA
BBB	1.582%	BBB	A-	A	AA-	AA-	AA	AA+	AAA
BBB-	3.361%	BBB-	BBB	BBB+	A	A+	AA-	AA	AAA
BB+	5.355%	BB+	BBB-	BBB	BBB+	A-	A	AA-	AAA
BB	7.477%	BB	BBB-	BBB-	BBB	BBB+	A-	AA-	AAA
BB-	11.007%	BB-	BB+	BBB-	BBB	BBB	BBB+	A	AAA
B+	15.370%	B+	BB	BB+	BBB-	BBB	BBB	A-	AAA
B	19.616%	B	BB-	BB	BBB-	BBB-	BBB	BBB+	AAA
B-	25.538%	B-	BB-	BB	BB+	BBB-	BBB-	BBB+	AAA
CCC	32.475%	CCC	B+	BB-	BB	BB+	BBB-	BBB	AAA

The outcome of this matrix does not automatically correspond to the covered bonds PD rating!

Step 2 – Covered Bonds Cash Flows Model



The covered bonds PD is set at the highest level of stresses which the cover pool, including overcollateralisation, is able to withstand while still providing full payment of interest and principal on the covered bonds.

Input in the Cash Flows Model – Credit Risk of the Pool

	Residential mortgage loans	Commercial mortgage loans	Public sector exposure
Stressed probability of default	> Original loan-to-value and debt to income ratio > Historical data	> Debt service cover ratio > Internal ratings	> External or internal ratings > Maturities
Stressed loss severity	> Market value decline	> Rental value decline	> Low or nil for local authorities > Long restructuring process

Step 3 - Giving Credit for Recoveries

			Maximum Notching	
Recovery Ratings	Recovery Prospects	Recovery Range (%)	Investment Grade	Non Investment Grade
RR1	Outstanding	91 -100	+2	+3
RR2	Superior	71 - 90	+1	+2
RR3	Good	51 - 70	+1	+1
RR4	Average	31 - 50	-	-
RR5	Below Average	11 - 30	-1	-1
RR6	Poor	0 - 10	-1/-2	-2/-3

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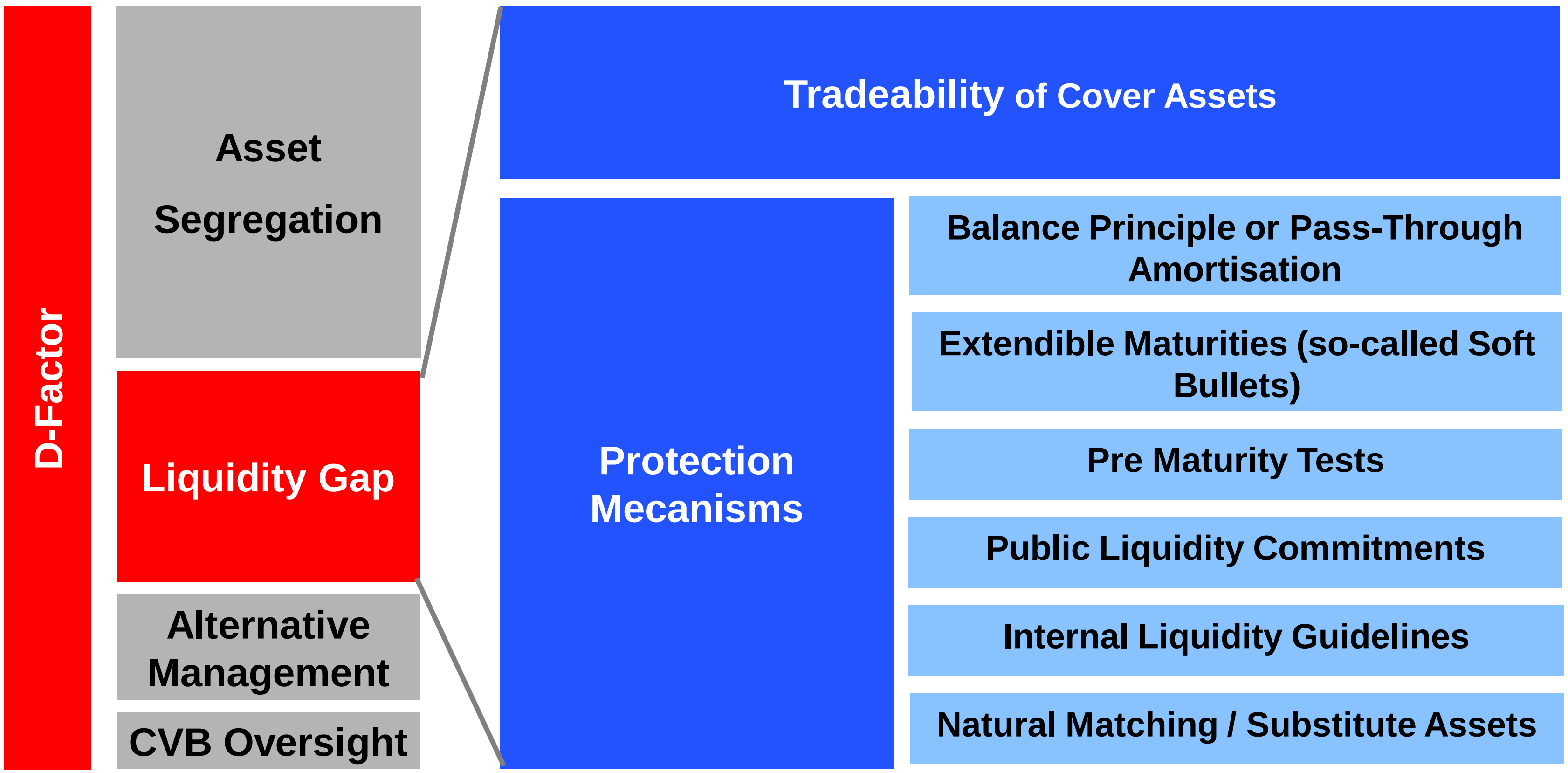
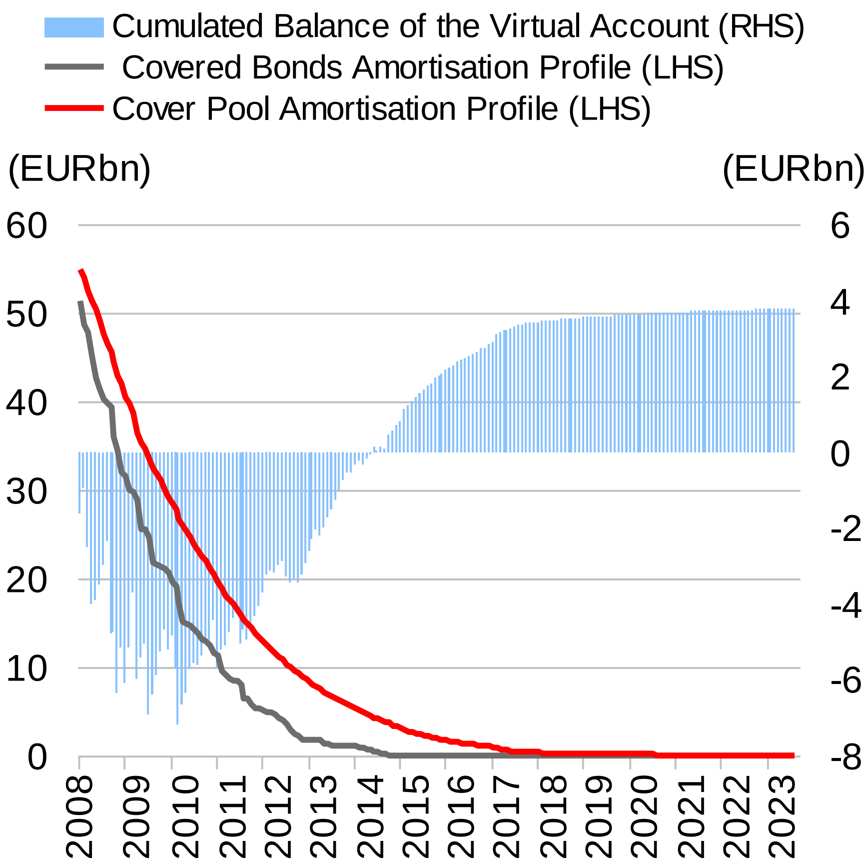
Liquidity Management



Maturity Mismatches



Source: Fitch

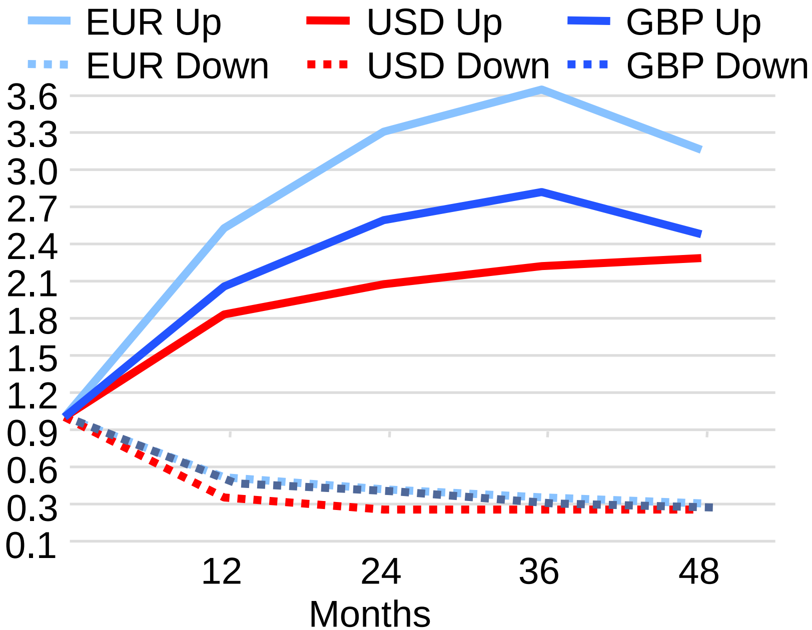
Event	Options	Fitch Assumptions
Shortfall	Sell, Pledge Assets or Borrow	> Volume/timing > Buyer's Cost of Funds > Haircuts > Firesale Discounts
Surplus	Re-invest Excess Funds	Sub-Euribor yield

Interest Rate and Currency Mismatches

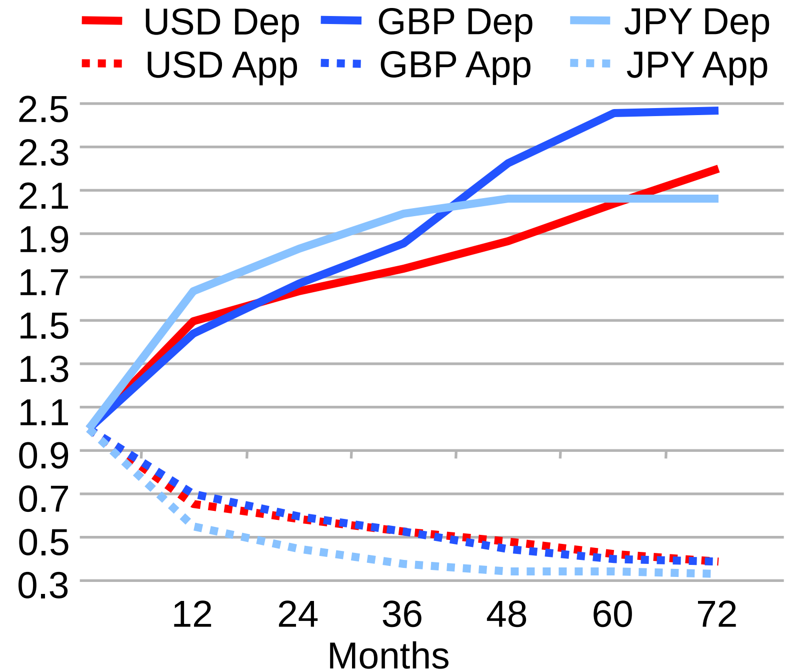
> Privileged swaps are taken into account in Fitch covered bonds cash flows model

> Open positions are stressed with Fitch standard assumptions

Fitch Interest Rate Stresses (AAA Scenario)



Fitch FX Stresses (AAA Scenario)



Summary

Issuer Default Rating

Acts as a floor for the rating of the covered bonds on a PD basis

D-Factor

Indicates how far the covered bonds PD can differ from the PD of the main debtor

Overcollateralisation

Protects against credit risk in the cover pool and mismatches between the cover pool and the covered bonds

Drives the level of recoveries on defaulted covered bonds

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Examples of Discontinuity Factors

Issuer	Country	Framework	Cover Pool	D-Factor
CIF Euromortgage	France	Legislative	Mortgages	6.2%
Aareal Bank	Germany	Legislative	Public Sector	7.3%
Eurohypo Lux	Luxembourg	Legislative	Public Sector	7.8%
Banco Comercial Portugues	Portgual	Legislative	Mortgages	7.8%
Danske Bank	Denmark	Legislative	Mortgages	8.3%
Northern Rock	UK	Contractual	Mortgages	8.8%
SpareBank 1 Boligkreditt	Norway	Legislative	Mortgages	10.3%
ING Bank	Netherlands	Contractual	Mortgages	12.8%
BNP Paribas Covered Bonds	France	Contractual	Mortgages	12.9%
Bank of Montreal	Canada	Contractual	Mortgages	13.6%
Deutsche Postbank	Germany	Legislative	Mortgages	13.8%
Aareal Bank	Germany	Legislative	Mortgages	15.1%
Caixa d'Estalvis de Catalunya	Spain	Legislative	Mortgages	31.6%

Source: Fitch, 3rd April 2008

Fitch Ratings
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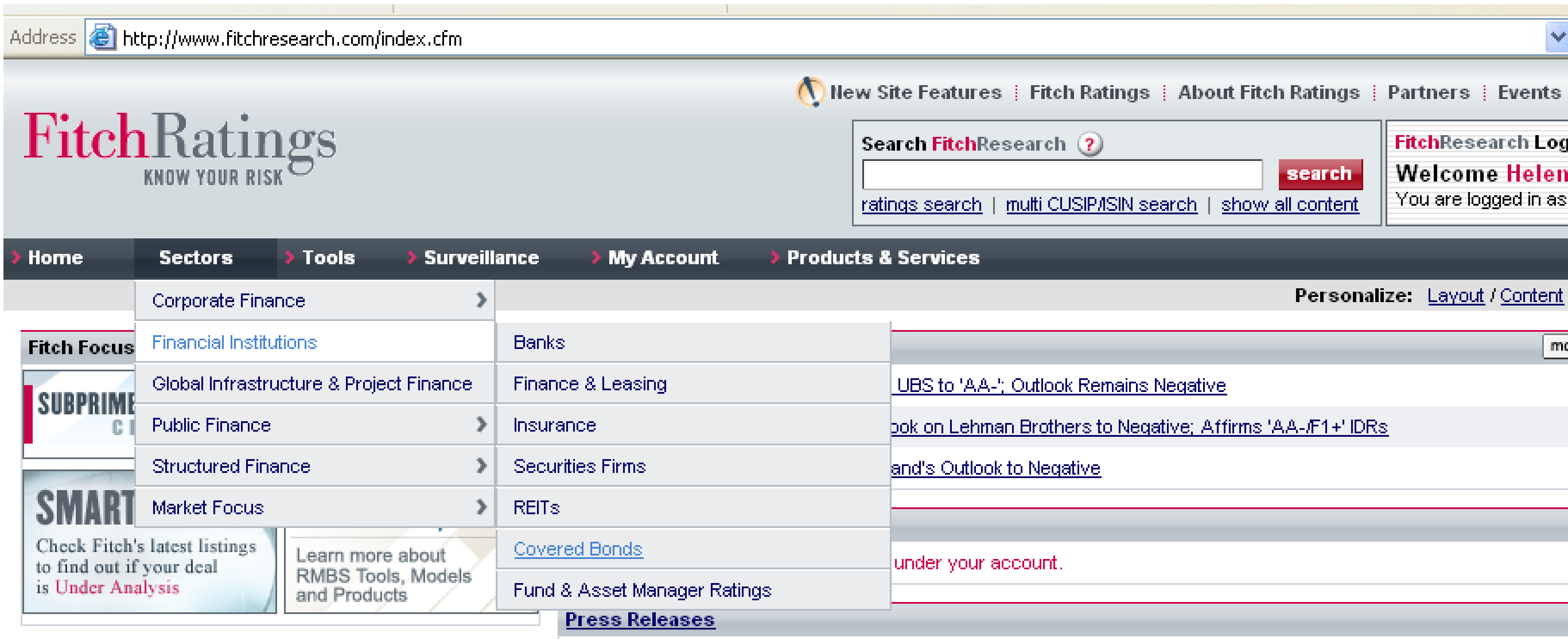
A few Covered Bonds Ratings – Step by Step

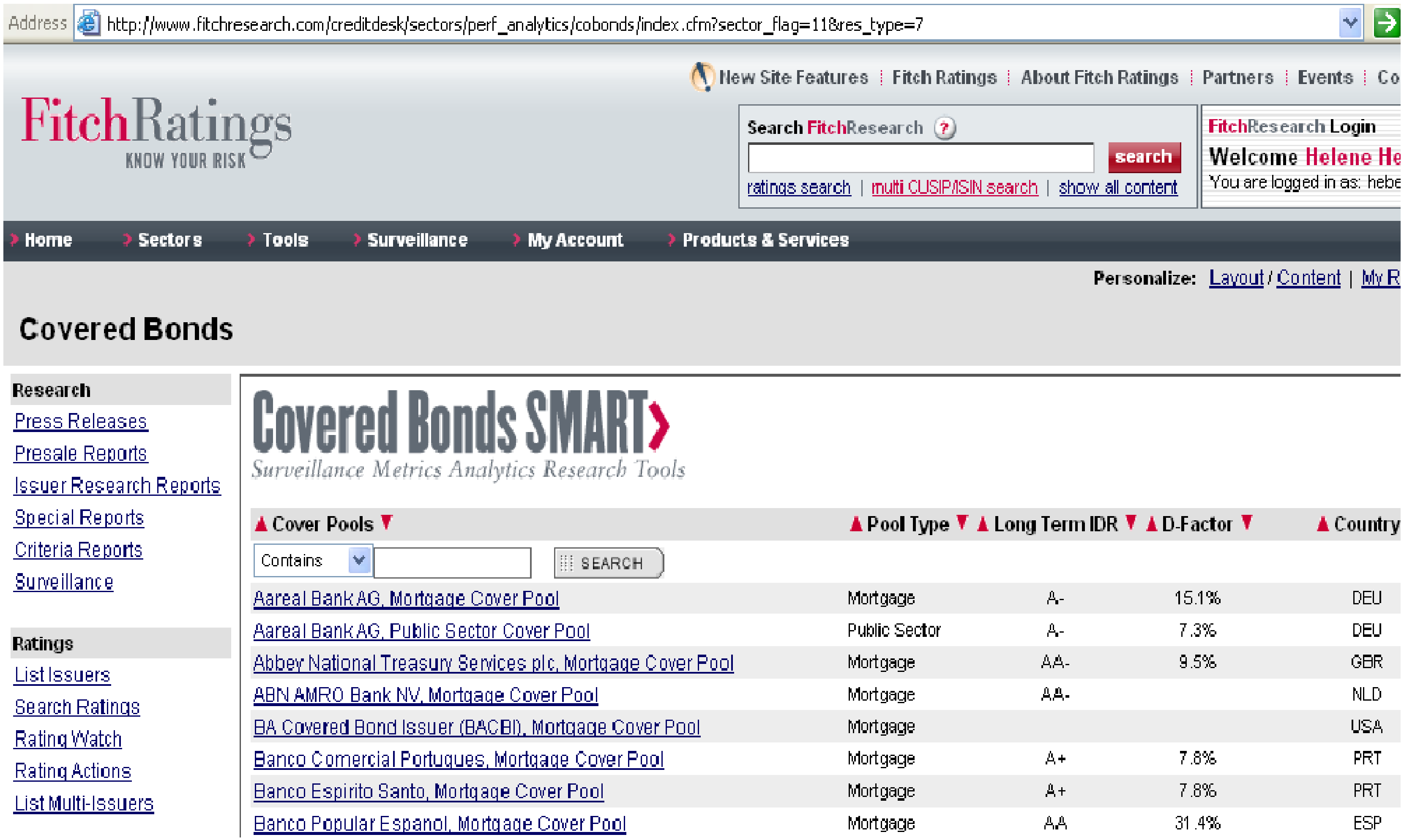
Issuer	Bankinter	Corealcredit Bank		Northern Rock	Wuestenrot Bank Pfandbriefbank
Country of the issuer	Spain	Germany		UK	Germany
Framework	Legislative	Legislative		Contractual	Legislative
Cover Pool Type	Mortgage	Public Sector	Mortgage	Mortgage	Mortgage
Issuer Default Rating	A+	BBB-	BBB-	A- (RWP)*	A-
D-Factor	30.5%	6.4%	11.7%	8.8%	14.9%
Maximum Rating on a PD basis	AA	AA	A+	AA+	AA+
Overcollateralisation	>1,000%	6%	13%	11.60%	4.40%
Rating on a PD basis	AA	AA	A+	AA+	AA
Covered Bonds Rating	AAA(EXP)*	AAA	AA	AAA	AAA

*RWP: Rating Watch Positive, EXP: Expected
Source: Fitch, 3rd April 2008

Fitch Dedicated Covered Bonds Webpage



Fitch Covered Bonds Surveillance Service



Fitch Covered Bonds Special Reports

- Analysis of the Italian Covered Bonds Framework, 23rd January 2008
- 2007 Comparative Study of Covered Bonds, 12th October 2007
- Proposals for a UK Covered Bonds Legislative Framework – a New Status Quo?, 12th October 2007
- Covered Bonds and Capital Requirements Directive, 8th December 2006

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