

Germany
Credit Analysis

Bayerische Landesbank— Public Sector Pfandbriefe

Ratings

Securities	Rating
Public Sector Pfandbriefe	AAA

Pool Key Data	29 Sep 07
Cover assets (EURbn)	60.37
Covered bonds (EURbn)	56.43
Nominal overcollateralisation (OC, %)	7.00
Weighted-average asset maturity (years)	6.00
Weighted-average liability maturity (years)	4.06
Floating-rate assets	24.33
Floating-rate covered bonds (% of cover assets)	6.59
D-Factor (%)	7.1

Analysts

Dr. Holger Horn
+49 69 768076-190
holger.horn@fitchratings.com

Vessela Todorova
+49 69 768076-114
vessela.todorova@fitchratings.com

Financial Institutions
Thomas von Lüpke
+49 69 768076-150
thomas.vonluepke@fitchratings.com

Sabine Bauer
+49 69 768076-245
sabine.bauer@fitchratings.com

Related Research

- ["Fitch Launches New Covered Bonds Rating Methodology", dated 19 February 2007](#)
- ["Covered Bonds Rating Criteria – Stop or Continue?", dated 13 July 2006](#)
- ["Credit Analysis on Bayerische Landesbank", dated 19 september 2007](#)
- ["2007 Comparative Study of Covered Bonds", dated 12 October 2007](#)

Rating Rationale

- The public sector Pfandbriefe of Bayerische Landesbank (BayernLB) are rated 'AAA'. This rating is based on BayernLB's Long-Term Issuer Default Rating (IDR) of 'A+' (Stable Outlook), on a Discontinuity Factor (D-Factor) of 7.1%, and on the conclusions drawn from Fitch Ratings' assets and cash flow analysis.
- The rating also takes into account the overcollateralisation (OC) between the cover assets and the covered bonds. The agency found the lowest nominal OC over the last 12 months to be sufficient to withstand a 'AAA' scenario applied to the credit risk of the assets and to the assets and liabilities mismatches.
- All else being equal, BayernLB's covered bonds rating could be maintained at 'AAA' (based on the probability of default of the covered bonds and on recoveries from the cover pool in case of a default of the covered bonds) if the issuer is rated at least 'BBB'.

Credit Committee Highlights

- BayernLB's public sector cover pool has a high credit quality due to its substantial exposure to German state-guaranteed public sector banks and Landesbanks as well as to German sovereign and federal states.
- In its analysis of the cover pool, the agency gave no credit to unguaranteed exposures against entities belonging to the BayernLB group.
- Since the abolition of regional and local government guarantees for German public sector banks and saving banks in 2005, this type of debt is no longer available in the primary market. Therefore the pool volume of BayernLB is likely to decrease as approximately the half of the pool is made up of such assets. However, due to the large amount of available eligible assets on BayernLB's balance sheet this has not yet been observed and since September 2006 the cover pool has grown by 9.28%.

Issuer Background

- BayernLB (rated 'A+'/'F1+'/Stable Outlook) is Germany's eight-largest bank by equity and its second-largest Landesbank. The bank is 100%-owned by BayernLB Holding AG, which in turn is owned by the state of Bavaria (50%) and the association of Bavarian savings banks (50%).
- BayernLB is the central bank for the 75 Bavarian savings banks and banker to the Bavarian government. It owns 75.1% of Landesbank Saar, 89.6% of MKB Bank Nyrt, 100% of Deutsche Kreditbank and 54.7% of the Austrian Hypo Group Alpe Adria.
- At end-September 2007, BayernLB's outstanding public sector Pfandbriefe totalled EUR56.43bn, representing approximately 14.7% of the bank's total balance sheet at end-June 2007.

D-Factor components

- Asset Segregation (50%)
- Liquidity Gaps (30%)
- Alternative Management (15%)
- Covered Bond Oversight (5%)

Continuity Analysis

Under Fitch's rating methodology, the covered bonds rated by the agency are assigned a D-Factor of between 0% (best) and 100% (worst). This reflects the likelihood that they will default in the immediate aftermath of a default by the issuer. The D-Factor has four weighted elements.

Asset Segregation (50%)

In the agency's view, German Pfandbrief law ensures that the assets recorded on the dedicated register will be available for covered bond investors in the event of their issuer's insolvency, although residual uncertainty remains with respect to the interpretation of the OC that is deemed to be obviously not necessary.

Liquidity Gaps (30%)

Fitch analyses liquidity gaps, defined as the difference between the revenue from the cover assets and the payments due to covered bond investors, shortly after an assumed issuer's default. The unstressed expected cash flows from BayernLB's assets and the issued Pfandbriefe display some liquidity gaps after the first year. However, the agency believes the liquid assets in the cover pool are sufficient to offset these and the situation is further mitigated by BayernLB's public commitment to manage liquidity daily in such a way that the maximum liquidity gap for the next 180 days is covered by additional liquid assets.

Alternative Management (15%)

The fact that the German banking authorities must appoint a substitute manager (Sachwalter) for the cover pool, at latest upon the insolvency of the issuer, provides comfort that the cover pool could be managed without interruption. Despite BayernLB having a large public sector pool, the majority of which is comprised of loans and Schuldscheindarlehen, the structure of the pool is not complex and the substitute manager should not be presented with particular difficulties. Moreover, Fitch believes any transition to a substitute manager for BayernLB's public sector pool would be facilitated by the IT systems used for the cover pool's management. The quality of data delivery is average.

Covered Bond Oversight (5%)

In terms of a dedicated covered bond oversight, Fitch considers the extent of monitoring exercised by the German banking authorities on Pfandbrief issuers to be exemplary.

Fitch assigned BayernLB's public sector covered bonds a D-Factor of 7.1%. Taking into account its IDR of 'A+', the public sector Pfandbriefe can achieve a rating of 'AAA' on a probability-of-default (PD) basis (see *Appendix 5*). The agency carried out a cash flow analysis to determine whether the minimum nominal OC over the past 12 months was sufficient to withstand the credit risk of the cover pool, and the maturity, interest rate and currency mismatches between the cover pool and the covered bonds in a 'AAA' stress scenario.

Credit Quality of the Cover Pool

On 29 September 2007, BayernLB's outstanding public sector Pfandbriefe amounted to EUR56.43bn and were backed by a pool of assets with a total value of EUR60.37bn, resulting in nominal OC of 7%.

As is common for most German public sector pools, German exposure is very high. At end-September 2007, it accounted for 92.88% of the pool, followed by Swiss (4.06%) and UK (1.2%) borrowers (see *Appendix 3*).

At 26.85%, guaranteed German public sector banks and Landesbanks represent the largest borrower group in the cover pool. German saving banks account for 24.82% of the pool assets, while exposure to the German sovereign and federal states

amounts to 23.34% (see Appendix 4). Since the guaranteed assets of German savings banks and Landesbanks are no longer available in the primary market, the pool volume should diminish over the coming years.

The regional breakdown within Germany shows that 39.80% of BayernLB's pool is concentrated in Bavaria, the region on which the bank has its main focus, and 10.91% in the state of North-Rhine Westphalia, the demographically strongest German state. The cover pool is also characterised by a very low exposure to eastern Germany of around 10%.

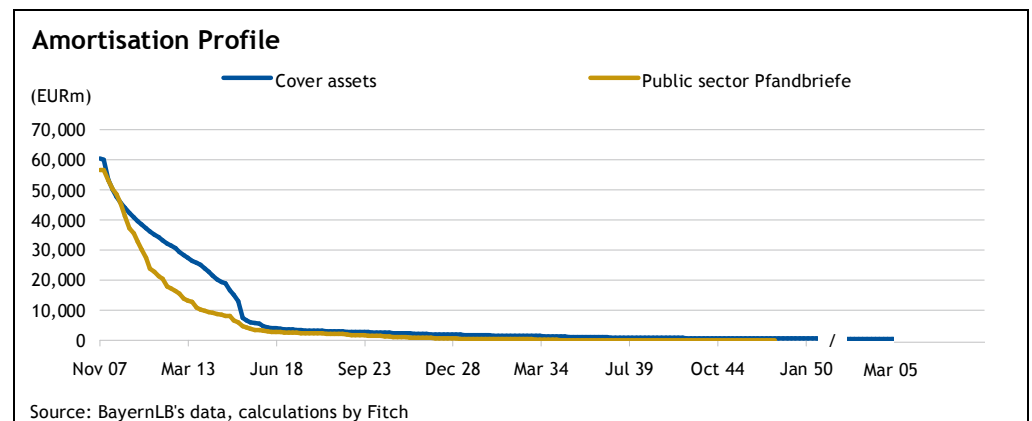
The cover pool shows an average concentration on a single-borrower basis, in that the 20 largest borrowers account for around 47.29% of total exposure.

Fitch assumes a cumulative probability of default of 4.61% and a recovery rate of 78.23% for the cover pool in an 'AAA' scenario.

Cash Flow Analysis

The agency compared the revenues from the cover pool with the cash flows due on the liability side in a wind-down scenario, where a third party would act as substitute manager, and subject to 'AAA' stress assumptions for the credit risk, as well as the maturity, interest rate and currency risks.

The residual weighted-average maturities of the assets and liabilities are 6.0 and 4.06 years respectively, indicating maturity mismatches slightly higher than those of other German peers. The chart below compares the scheduled nominal amount of the cover pool with the residual amount of public sector Pfandbriefe over time. Around 15% of BayernLB's pool is made up of liquid assets that could be sold to meet timely payments in case of need.



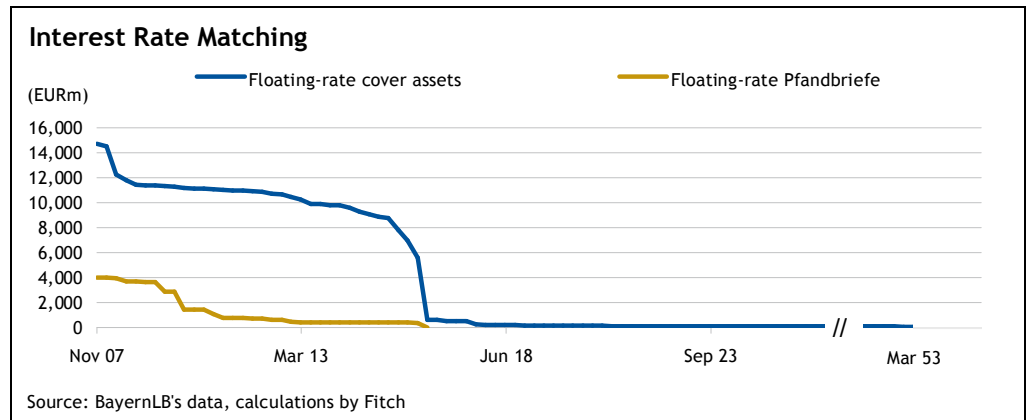
Fitch tested the cash flows by simulating both increasing and decreasing interest rate environments. The floating-rate cover assets exceeded the floating-rate Pfandbriefe by 17.73% as at 29 September 2007, which means that cash flows would be adversely affected by declining interest rates in a wind-down scenario.

Table 1: Cover Assets by German Federal States*

State	(%)
Bavaria	39.80
North-Rhine Westphalia	10.91
Hesse	7.03
Schleswig-Holstein	6.75
Saarland	6.49
Lower-Saxony	6.17
Rhineland-Palatinate	5.43
Baden-Württemberg	4.46
Berlin	3.61
Thuringia	2.23
Saxony	2.13
Bremen	2.05
Hamburg	1.33
Brandenburg	0.74
Mecklenburg-Vorpommern	0.53
Saxony-Anhalt	0.34
Total	100.00

*excluding German sovereign risk

Source: BayernLB's data, calculations by Fitch



Most of the assets (92.93%) and liabilities (94.53%) are EUR-denominated. For the remaining currencies, the bank is applying natural hedging to minimise currency risk. As a result, only some currency risk exists due to the fact that open positions in CHF amount to 2.18% of the total cover pool.

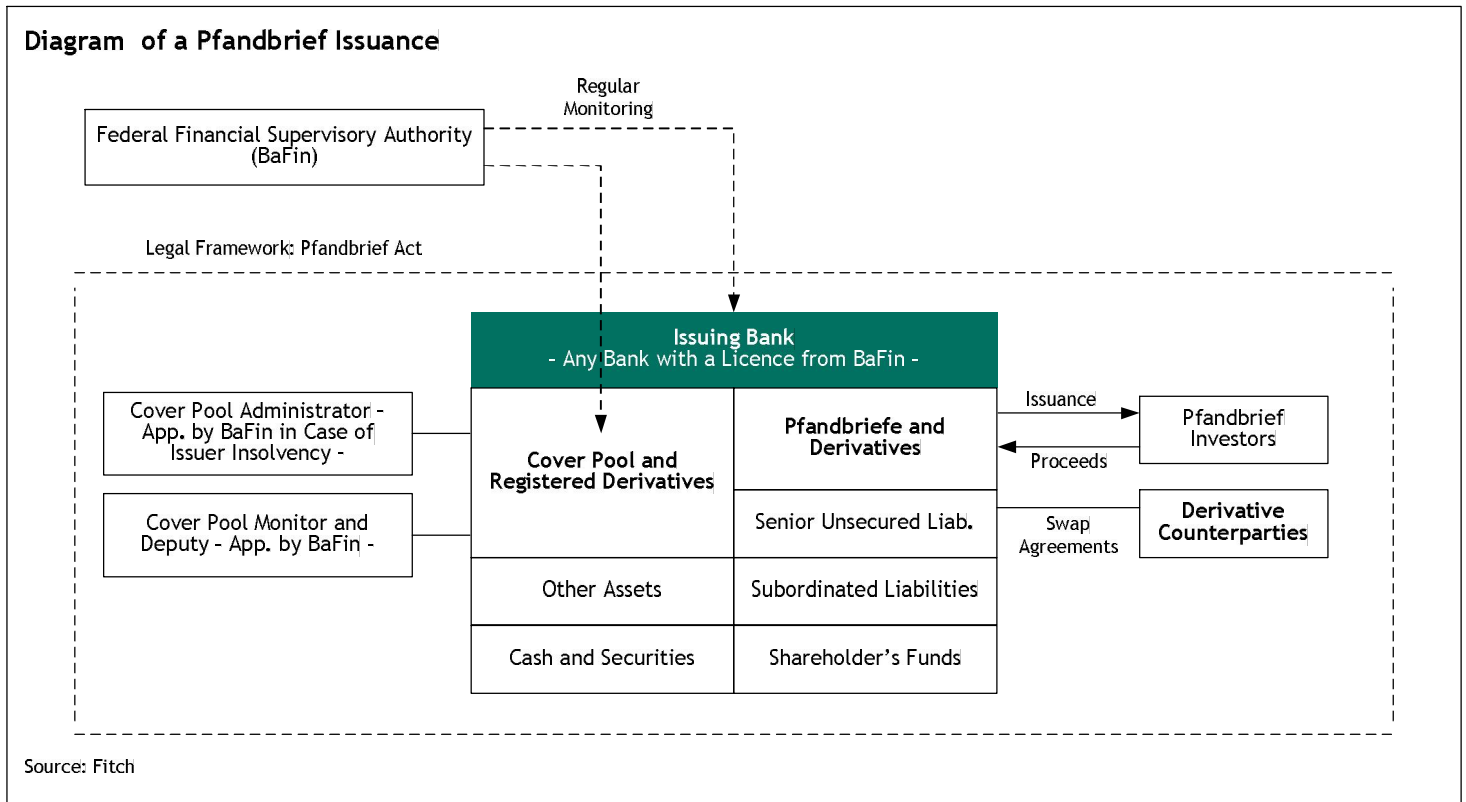
The cash flows were tested with the minimum nominal OC for the last 12 months, which was the current OC of 7%. Fitch's cash flow analysis shows that this OC is sufficient to withstand the 'AAA' level of stresses applied to the credit risk of the cover assets, and to the maturity, interest and currency mismatches between the public sector cover pool and the related Pfandbriefe.

Conclusion

Under Fitch's covered bond methodology, BayernLB's public sector Pfandbriefe achieve a 'AAA' rating on a probability of default basis. This result is based on BayernLB's IDR of 'A+', on a D-Factor of 7.1% and on the conclusions drawn from Fitch's assets and cash flow analysis. The agency will continue to monitor BayernLB's public sector cover pool and the related Pfandbriefe, whose profile may change over time.

Appendix 1

Diagram of a Pfandbrief Issuance



Appendix 2

Main characteristics of German Pfandbriefe

Covered bonds type	Legislation-based
Legal background	The German Pfandbrief Act (PfandBG) as of 19 July 2005
Issuer	Banks which hold a licence to issue Pfandbriefe
Cover register	Yes
Eligible collateral	<ul style="list-style-type: none"> Mortgage loans to EEA countries, Switzerland, the US, Canada and Japan. Residential and commercial mortgage loans are subject to a 60% maximum loan-to-mortgage-lending-value limit. Public sector assets to central governments and sub-sovereigns with a maximum 20% risk weighting in EEA countries, Switzerland, the US, Canada and Japan. Loans secured by a ship or shipbuilding. Mortgage/public sector loans from non-EU countries, in which the preferential claim of the Pfandbrief holder is not recognised, are only allowed to account for 10% of the sum of total EU mortgage/public sector loans in countries with a preferential claim.
Minimum overcollateralisation (OC)	<ul style="list-style-type: none"> The nominal value of the cover assets must permanently be higher than the total value of the Pfandbriefe and the interest income and interest expenses must be at least the same. 2% legally protected OC on a net NPV basis, after the effects of regulatory interest rate and currency stresses. According to §30 (4) PfandBG, the insolvency administrator may at any time demand that recorded assets, which will obviously not be necessary as cover for the respective Pfandbrief category and for the “securing OC” (ie, the mandatory OC), shall be surrendered to the insolvency estate by the cover pool administrator.
Substitute assets	The share of substitute collateral is restricted to a maximum of 20% of the total volume of outstanding mortgage and shipping Pfandbriefe among which 10% can consist of liquid assets. For public sector Pfandbriefe, this ratio may also not exceed 10%.
Cover pool monitor	Independent trustee appointed by the German regulator, BaFin.
Substitute manager	A dedicated cover pool administrator (Sachwalter), other than the insolvency administrator, will take over the management of the cover assets and outstanding liabilities. He will be appointed at the request of BaFin at the latest upon insolvency.

Source: Fitch

Appendix 3: Cover Assets by Country

Country	(%)
Germany	92.88
Switzerland	4.06
United Kingdom	1.20
Spain	0.76
Hungary	0.53
Canada	0.24
Supranational	0.17
Turkey	0.03
USA	0.02
Rumania	0.02
Poland	0.02
Czech Republic	0.01
Iceland	0.01
Austria	0.01
Greece	0.01
Italy	0.01
Belgium	0.01
Sweden	0.01
Cyprus	<0.01
Total	100.00

Source: BayernLB's data as of 29 Sept 2007, calculations by Fitch

Appendix 4: Cover Assets by Borrower Group

Borrower group	(%)
Guaranteed German public sector banks and Landesbanks	26.85
German savings banks	24.82
German sovereign and federal states	23.34
German municipalities	11.66
Foreign Subnationals	4.16
German public sector companies	3.11
Other German financial institutions	3.10
Foreign guaranteed public sector banks	1.99
Foreign sovereigns	0.79
Supranational	0.17
Protestant and Catholic churches	<0.01
Total	100.00

Source: BayernLB's data as of 29 Sept 2007, calculations by Fitch

Appendix 5: Discontinuity Factor Matrix

Maximum Achievable Rating of Covered Bonds on a Probability of Default Basis

Issuer Default Rating	5 Yrs PD (%)	D-Factor 90%	80%	70%	60%	50%	40%	30%	20%	10%	7.1%	5%	0%
AAA	0.03	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
AA+	0.094	AA+	AA+	AA+	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
AA	0.203	AA	AA	AA+	AA+	AA+	AA+	AAA	AAA	AAA	AAA	AAA	AAA
AA-	0.255	AA-	AA	AA	AA	AA+	AA+	AA+	AAA	AAA	AAA	AAA	AAA
A+	0.501	A+	A+	AA-	AA-	AA-	AA	AA	AA+	AAA	AAA	AAA	AAA
A	0.561	A+	A+	A+	AA-	AA-	AA	AA	AA+	AAA	AAA	AAA	AAA
A-	0.787	A-	A	A	A+	A+	AA-	AA-	AA	AA+	AAA	AAA	AAA
BBB+	1.016	BBB+	A-	A-	A	A+	A+	AA-	AA	AA+	AA+	AAA	AAA
BBB	1.582	BBB	BBB+	BBB+	BBB+	A-	A	A+	AA-	AA	AA+	AA+	AAA
BBB-	3.361	BBB-	BBB-	BBB	BBB	BBB	BBB	BBB+	A	AA-	AA-	AA	AAA
BB+	5.355	BB+	BBB-	BBB-	BBB-	BBB-	BBB	BBB	BBB+	A	A+	AA-	AAA
BB	7.477	BB	BB+	BB+	BB+	BBB-	BBB-	BBB	BBB	A-	A	AA-	AAA
BB-	11.007	BB-	BB	BB	BB	BB+	BB+	BBB-	BBB	BBB+	A-	A	AAA
B+	15.37	B+	BB-	BB-	BB	BB	BB+	BB+	BBB-	BBB	BBB+	A-	AAA
B	19.616	B	B+	B+	BB-	BB-	BB	BB+	BBB-	BBB	BBB	BBB+	AAA
B-	25.538	B-	B	B	B+	BB-	BB-	BB	BB+	BBB-	BBB	BBB+	AAA
CCC+/CCC	32.475	CCC	B-	B-	B	B+	BB-	BB-	BB	BBB-	BBB	BBB	AAA

PD=Probability of Default
Source: Fitch

Copyright © 2007 by Fitch, Inc., Fitch Ratings Ltd. and its subsidiaries. One State Street Plaza, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved. All of the information contained herein is based on information obtained from issuers, other obligors, underwriters, and other sources which Fitch believes to be reliable. Fitch does not audit or verify the truth or accuracy of any such information. As a result, the information in this report is provided "as is" without any representation or warranty of any kind. A Fitch rating is an opinion as to the creditworthiness of a security. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed, suspended, or withdrawn at anytime for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$10,000 to US\$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of Great Britain, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.