The German Pfandbrief system facing the financial crisis

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Contents

Covered Mortgage Bonds: General Characteristics

- issued against collateral pool of eligible low risk assets (mostly mortgages and sovereign)
  - ongoing obligation of the issuer to maintain sufficient assets to satisfy the claims of covered bondholders at all times
  - long term funding source for mortgage loans
- investors (= bondholders) have priority claim on collateral
- bond is liability of issuer (=originator of the cover loans) → dual guarantee
  - typically specialized mortgage bank
    - heavily regulated and intensely supervised by public or other independent bodies (esp. matching)
    - cannot issue deposits; monopoly on mortgage bond issuance
    - provides residential and commercial real estate loans
  - universal banks may also issue → long term funding; funding diversification
  - credit enhancement from issuer's balance sheet
  - bonds may be over-collateralized

Minimum standards for European Covered Bonds

- Art. 22 par. 4 UCITS Directive (Directive 2001/108/EC amending Directive 85/611/EEC on Undertakings for Collective Investments in Transferable Securities)
  1. Credit institution as issuer
  2. Specific legislation (legal basis)
  3. Cover principle (assets matching liabilities)
  4. Specific supervision
  5. Preferential claim for bondholders in the case of bankruptcy of the issuing institution
- European Covered Bond legislations are not relying on a fully harmonised regime
  - UCITS Directive is only setting a framework for 20 different types of Covered Bonds in Europe
- De facto convergence of European Covered Bonds
  - capital market and rating agency requirements are driving European Covered Bond legislations to converge

What does „covered“ mean?

purpose = transformation of cover assets into covered bonds

cover assets ≥ covered bonds

↓ (cover assets)

- quality of assets
- management of
  - interest rate risks
  - liquidity risks
  - operational risks

↓ (covered bonds)

designation of cover assets to holders of covered bonds

⇩

- segregation of cover assets from originator’s other assets in case of insolvency of originator
- bankruptcy remoteness of cover assets and covered bonds

⇩

timeliness of payment realistic?

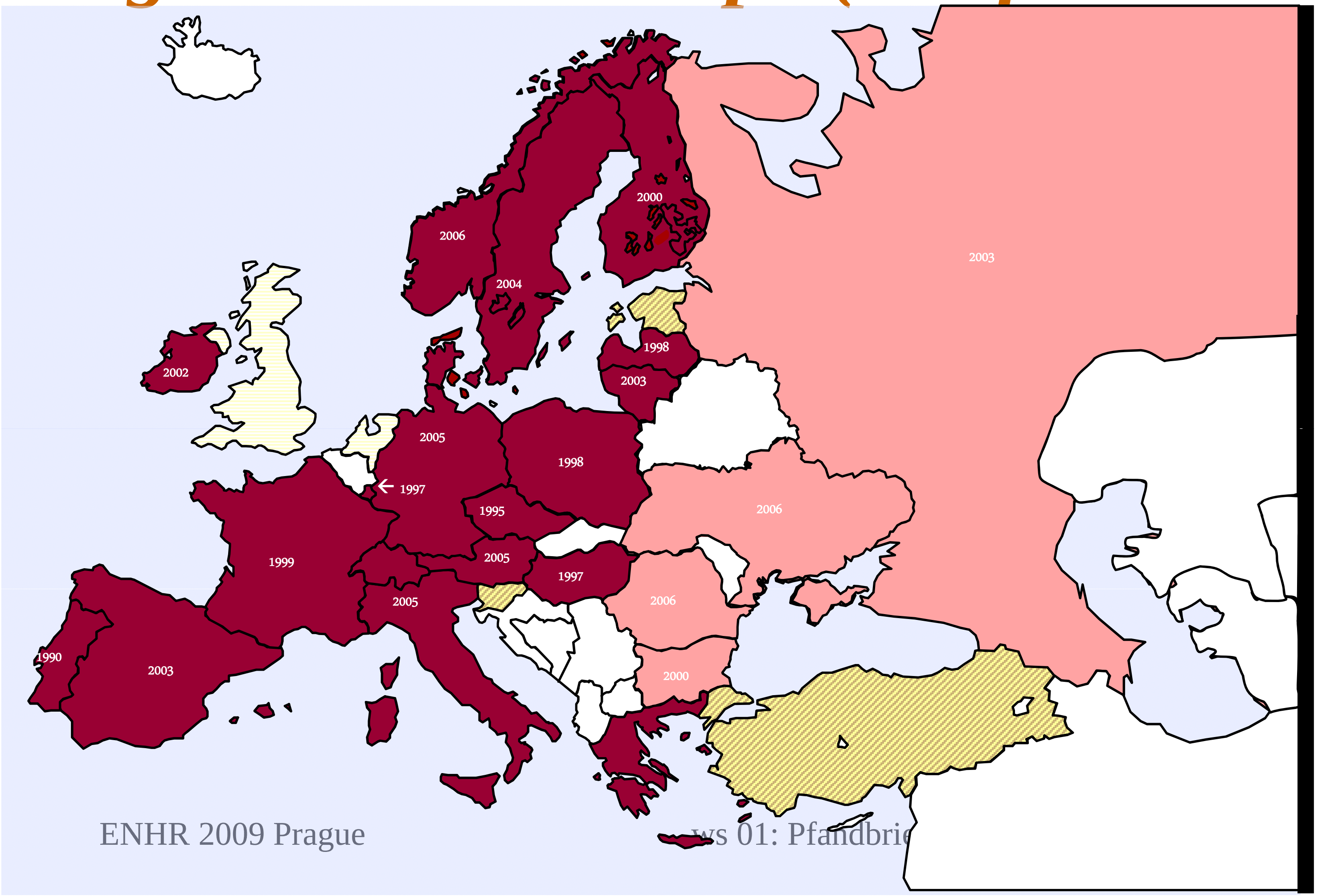
The less covered bond issuers are legally specialised, the more and detailed regulations their covered bonds need in order to achieve clear segregation and bankruptcy remoteness and to convince capital markets of it.

I. A brief outline of the German Pfandbrief system

Covered Mortgage Bonds: Pfandbrief Model

- Restricted eligible loans: 60% LTV, first-rank, conservative valuation
- „coverage principle“: registration of the cover values into the „cover register“ → Regular examination by cover pool monitor
- Issuing bank has one permanent collateral pool for each category of cover assets (mortgages, public loans, ship and aircraft loans)
- new loans are funded by new bond issues
  - The loan becomes part of the collateral pool
  - Loans repaid or defaulted will be replaced (dynamic cover pool)
- Matching: duration of bonds almost matches that of loans
  - loans usually have fixed-rate period of 1-10 years
  - matching bond is interest-only for same period → shorter maturity
  - limited prepayment risks: borrowers can prepay at end of fixed-rate period or in between with a sensible prepayment penalty
  - Risk exposure from remaining mismatchings
    - balanced out by substitute cover and derivatives
    - NPVs calculated of loans and bonds
- major funding source in Germany; introduced throughout Europe and CEE Markets
  - Growth of liquid, large “Jumbo” Euro-bonds
  - rigid structure: issuance limited to licensed (universal) banks
  - variants to model in Spain (universal bank issuers) and France (virtual issuers)
  - introduced in a number of CEE Markets
    - main success in Czech Republic; interest on bonds tax exempt

Geographical Overview - Covered Bond Legislation in Europe (as of March 2006)



Legislation in countries of the EU/EEA/CH

19

Legislation in future EU member and further countries in transition

23

4

Concrete legislation in preparation

3

Legislation under consideration

2

28

balance

A	P
Mortgaged loans	**Mortgage Pfandbriefe**
Other cover values (< 20%)	
Public loans	**Public Pfandbriefe**
Other cover values (< 20%)	
other assets	**Other refinancing means**
	Equity capital

Originator = issuer (unlike MBS)

Pfandbrief emission:
dual claim

vs.

MBS transaction:
only specific credit bundle (repayment stream) serves as collateral for the outstanding bonds

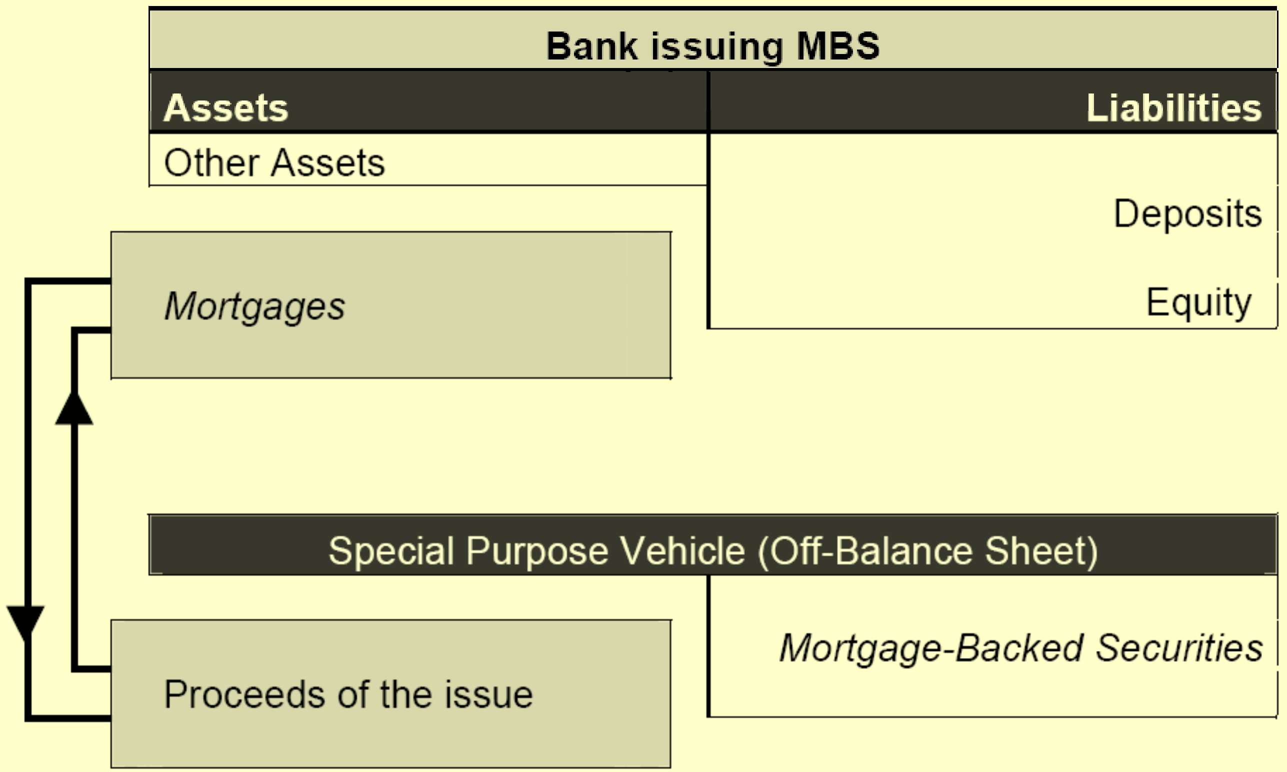
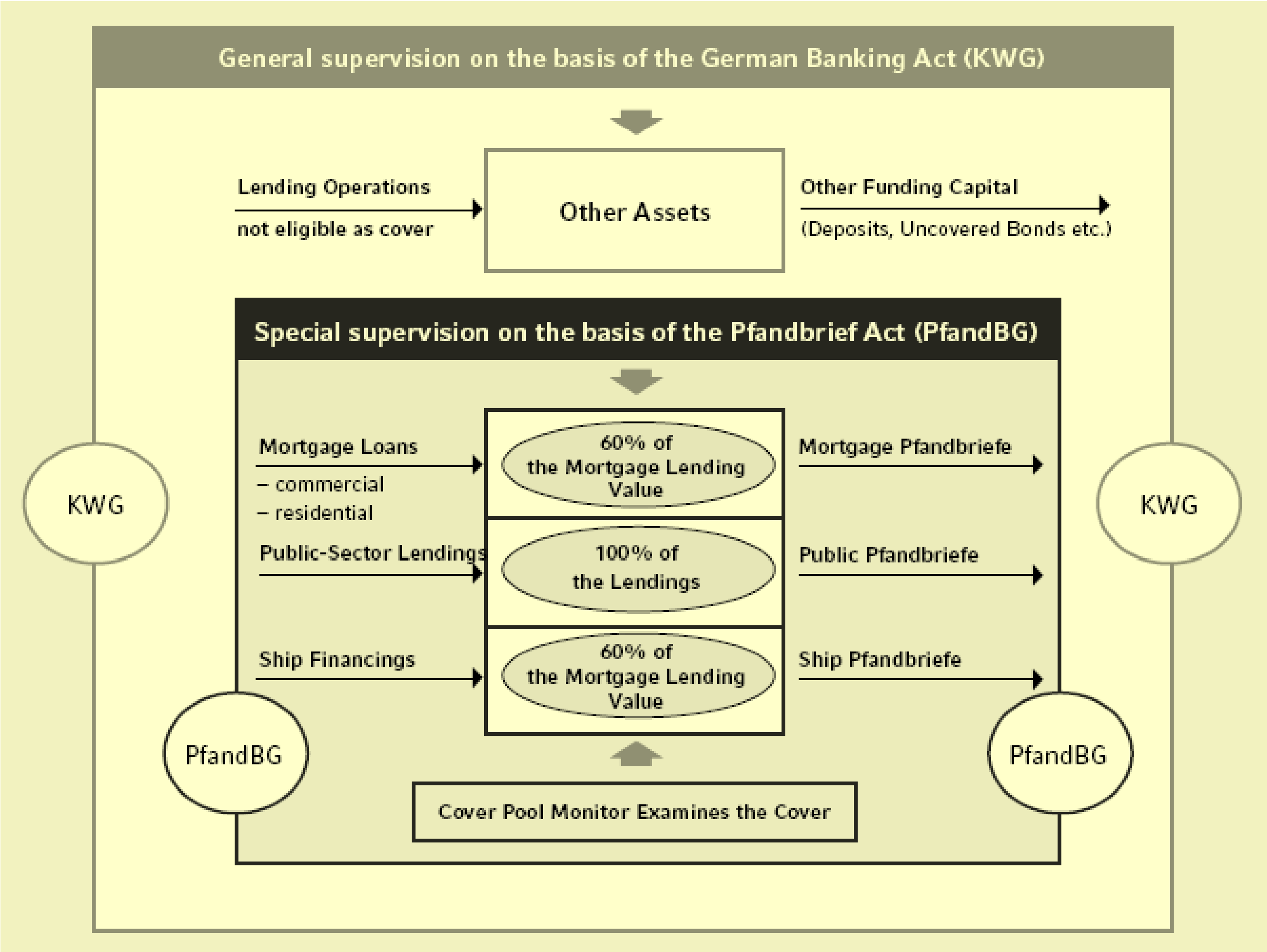


Figure 7: Balance sheet of a bank issuing Mortgage-Backed securities.

Source: Robin / Saunders 2009, p. 29

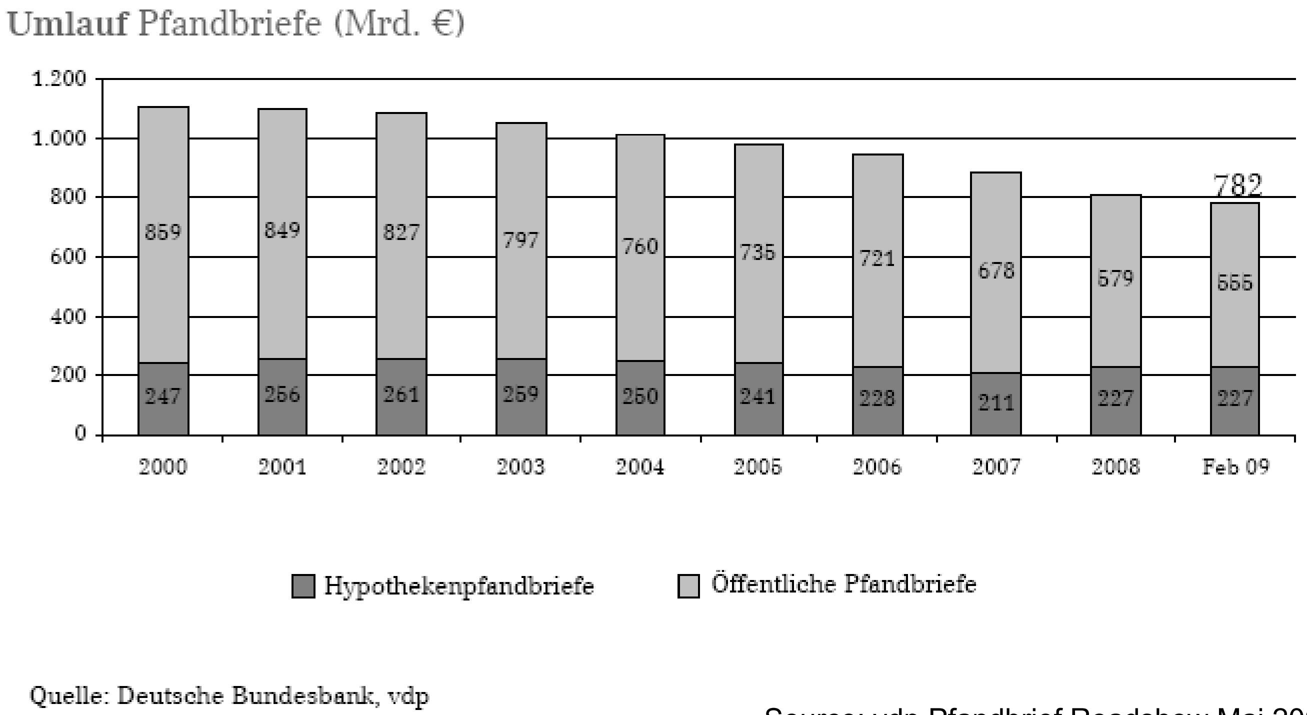
Structure of a Pfandbrief Bank



Per cent	1970	1980	1990	2000	2003	2008
High street banks	0,42	4,26	6,84	12,84	11,56	12,20
Regional banks and foreign branches	4,10	5,28	6,73	8,31	8,93	12,20
Private banks	0,14	0,14	0,20			
Landesbanken	8,33	8,56	6,67	7,40	7,25	5,00
Sparkassen	23,16	20,96	23,16	25,04	25,57	27,9
Bausparkassen	16,66	19,67	12,94	9,17	9,43	9,80
Co-operative banks	4,88	9,54	11,09	14,11	14,71	17,90
Real-estate cre-dit institutions	33,02	23,78	21,88	13,94	13,01	9,40
Banks with spe-cific functions	0,99	0,54	2,22	3,09	3,21	5,60
insurances	8,30	7,27	8,27	6,10	6,31	
total	100,00	100,00	100,00	100,00	100,00	100,00
Including vdp member banks						28,00

Table: market shares of financial institutions in housing finance
Sources: Immobilien & Finanzierung, 55. Jg. (2004), S. 284 f. und vdp 2009, p. 25

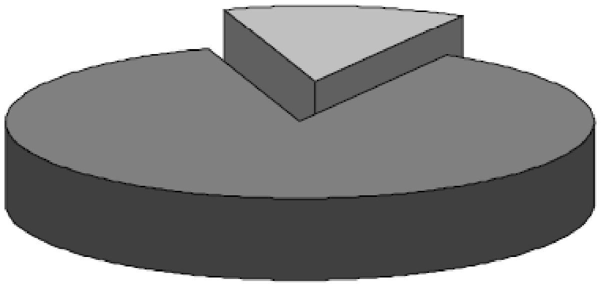
Pfandbrief circulation



Source: vdp Pfandbrief Roadshow Mai 2009

- Anstieg bei Hypothekenpfandbriefen kann Konsolidierung bei Öffentlichen Pfandbriefen nicht kompensieren
- Fehlende Ablösung großer Jumbo-Fälligkeiten

Mortgages as cover assets



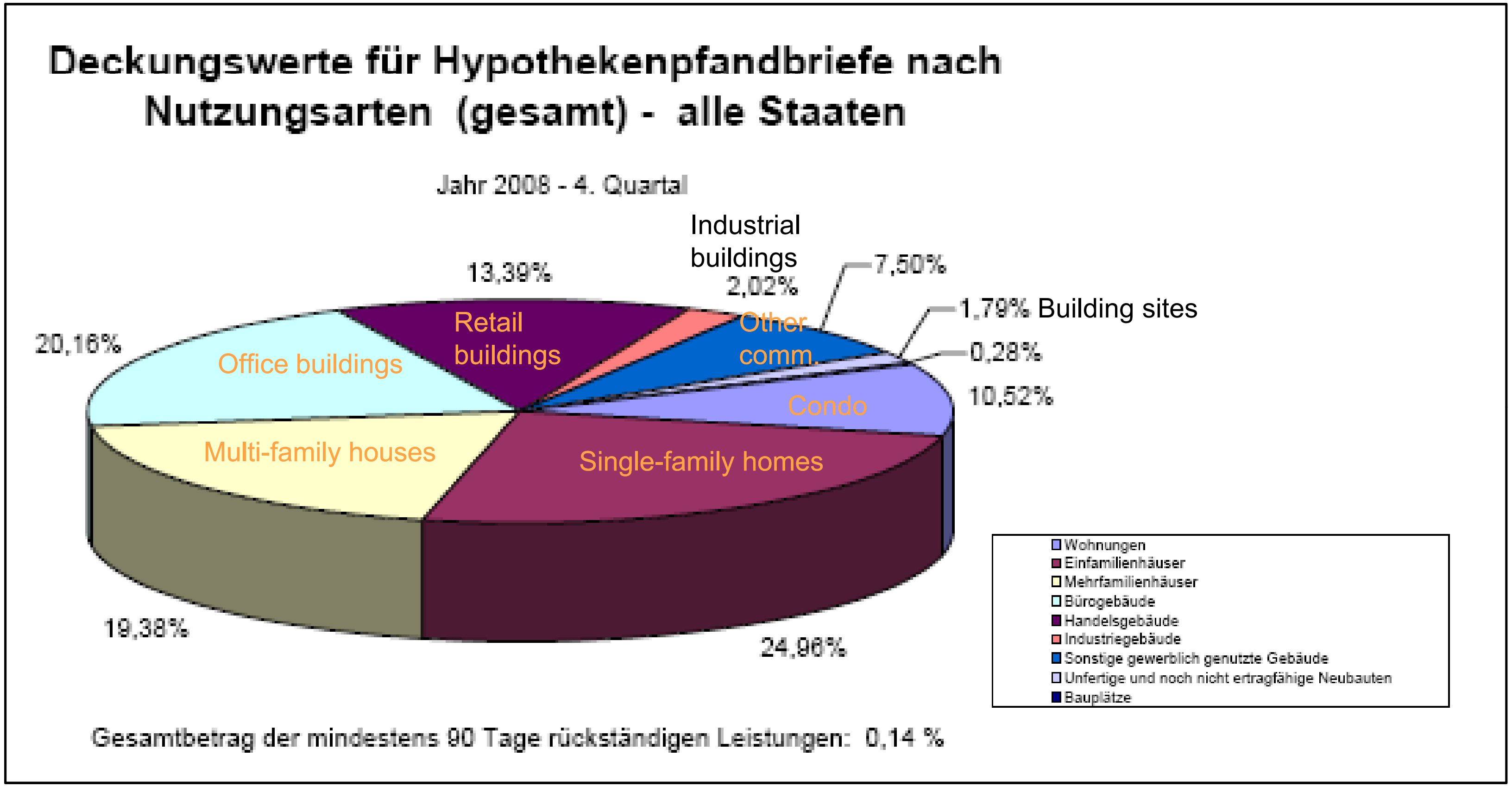
Hypotheken-deckungswerte 232 Mrd. €
davon Ausland 37 Mrd. €

Stand 31. Dez. 2008

Quelle: Institutsangaben gemäß § 28 PfandBG

- Dominanz inländischer Deckungswerte
- Pfandbriefqualität unabhängig von der Entwicklung einzelner ausländischer Immobilienmärkte

Cover assets of Mortgage Pfandbriefe: breakdown by type of use



II. Measures safeguarding the Pfandbrief creditor

Special safety features of the Mortgage Pfandbrief

- No pre-payment risk due to preclusion of early repayment or full indemnification of funding losses in case of early repayment
- Prudent appraisal of the Mortgage Lending Value by independent surveyor
- Specific regulation for property valuation in cross-border lending business
- 60% mortgage lending limit
- Tight rein on development finance

Bankruptcy remoteness of Pfandbriefe

"Voluntary" overcollateralization

"Mandatory" overcollateralization = 2 %

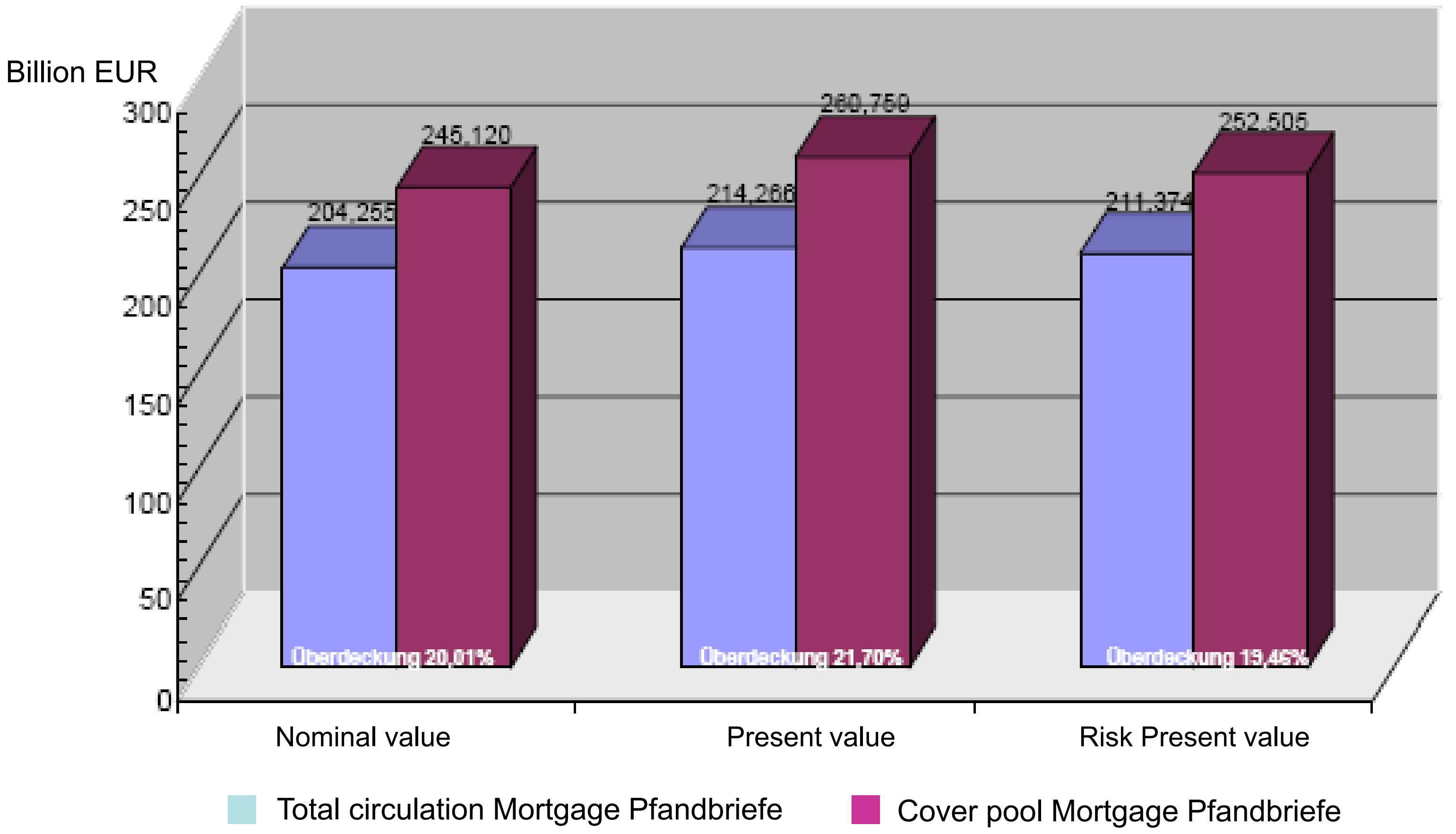
"De facto" overcollateralization through observation of stress scenarios according to net present value calculation of cover

Ordinary cover
+
Substitute cover

Every type of cover is bankruptcy-remote!

Mortgage Pfandbriefe

Year 2008 – fourth quarter (billion Euros)



Pfandbrief act and Mortgage Banking Act

PBA

- Specific Pfandbrief licence under strict requirements
- Sanction measures of BaFin
- Sustainable Pfandbrief issuance
- Professional risk management
- Enhanced transparency rules
- Claims against public-sector credit institutions without state support not eligible for cover pools

Quality safeguarding measures

- High quality requirements for cover assets
- Conservative evaluation
- LTV
- Mandatory overcollateralization of 2% (including stress scenarios)
- Special banking supervision (BaFin)
- Independent cover pool monitor
- Clear emergency plan, i. e. (detailed regulations about insolvency procedure; cover pool administrator
- Matching principle
- Cover principle

Principles from MBA

Quality assurance – regulatory requirements

- Need for a specific license for banks to issue Pfandbriefe
- Uniform special supervision of all Pfandbrief issuers by BaFin
- Regular auditing of cover pools by the supervisory authority
- BaFin to have extensive catalogue of measures in the event that requirements are violated
- Stronger demands to be made on cover monitor’s qualifications.
- Strong capital basis for issuing institutions

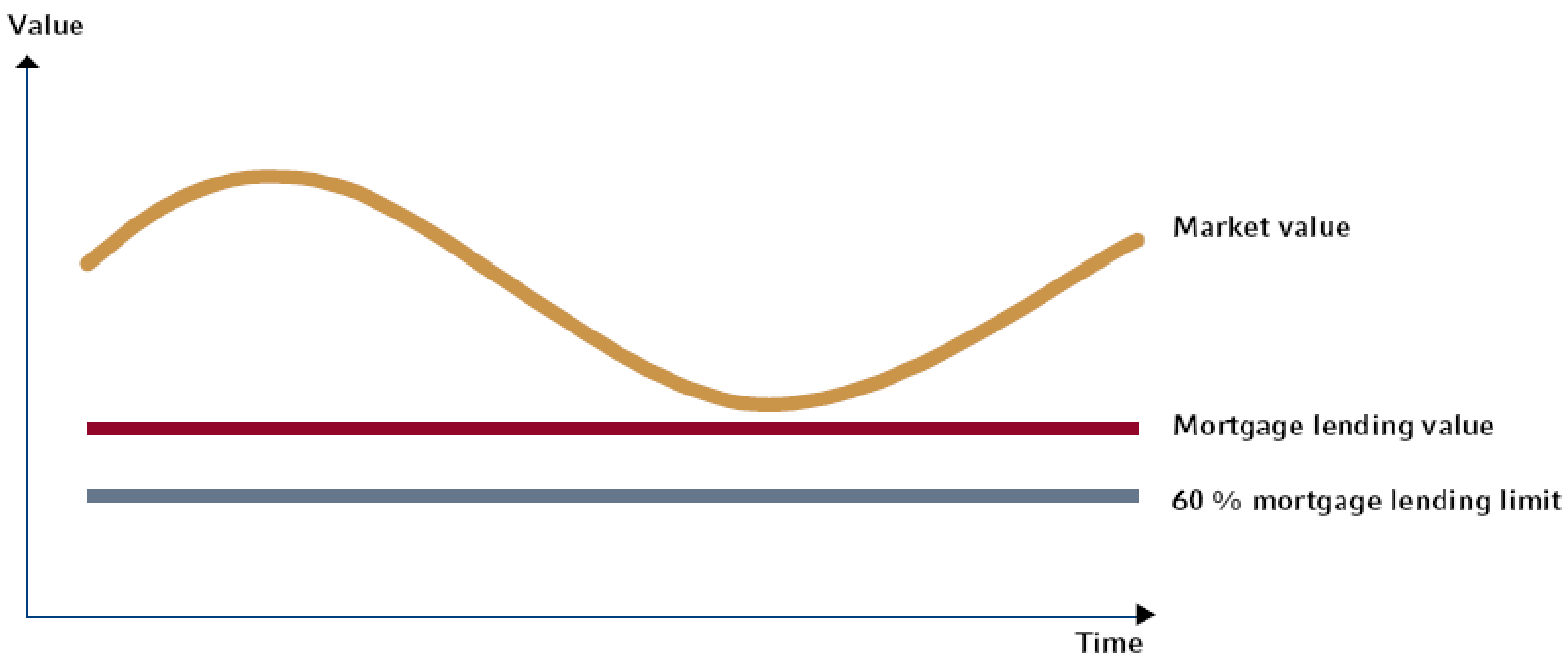
Quality assurance – operational requirements

- Principle of professional risk management specifically for cover pools.
- Enhanced transparency rules, in particular quarterly disclosure of the cover pools in terms of credit quality, diversification and market risk.
- Proven expertise for Pfandbrief issuing operations and lending business refinanced through Pfandbriefe.
- Sustainability of issuance

Quality assurance – asset quality requirements

- Public Pfandbrief: Claims against public-sector credit institutions not backed by state support and guarantee mechanisms (“Anstaltslast” and “Gewährträgerhaftung”) are generally not eligible as cover.
- Mortgage Pfandbrief: Valuation of real estate in accordance with the concept of Mortgage Lending Value and with mortgage banks’ practised (international) valuation standards.

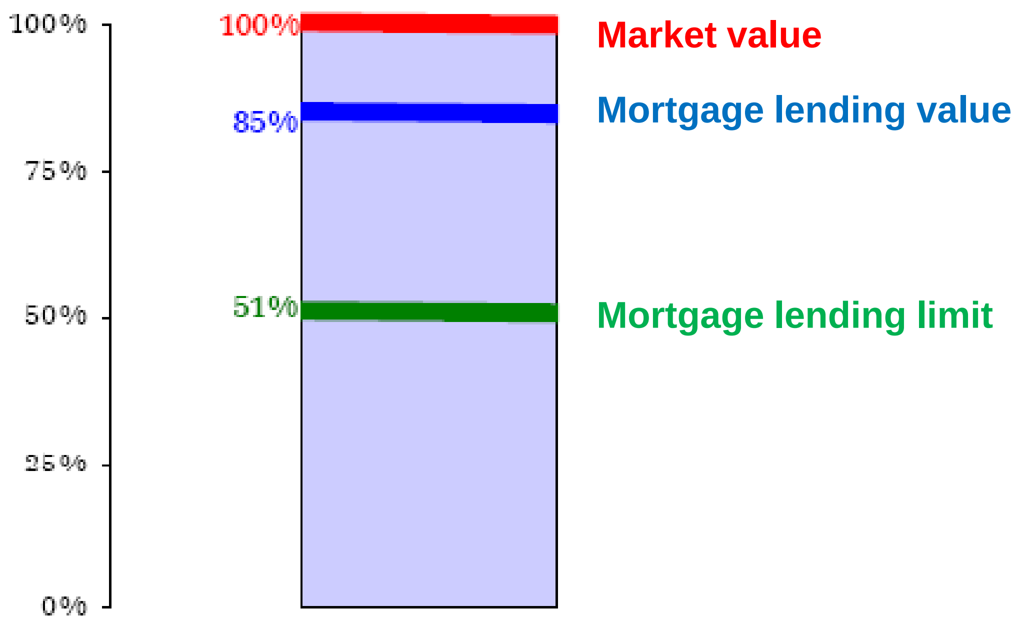
MORTGAGE LENDING VALUE VS. MARKET VALUE



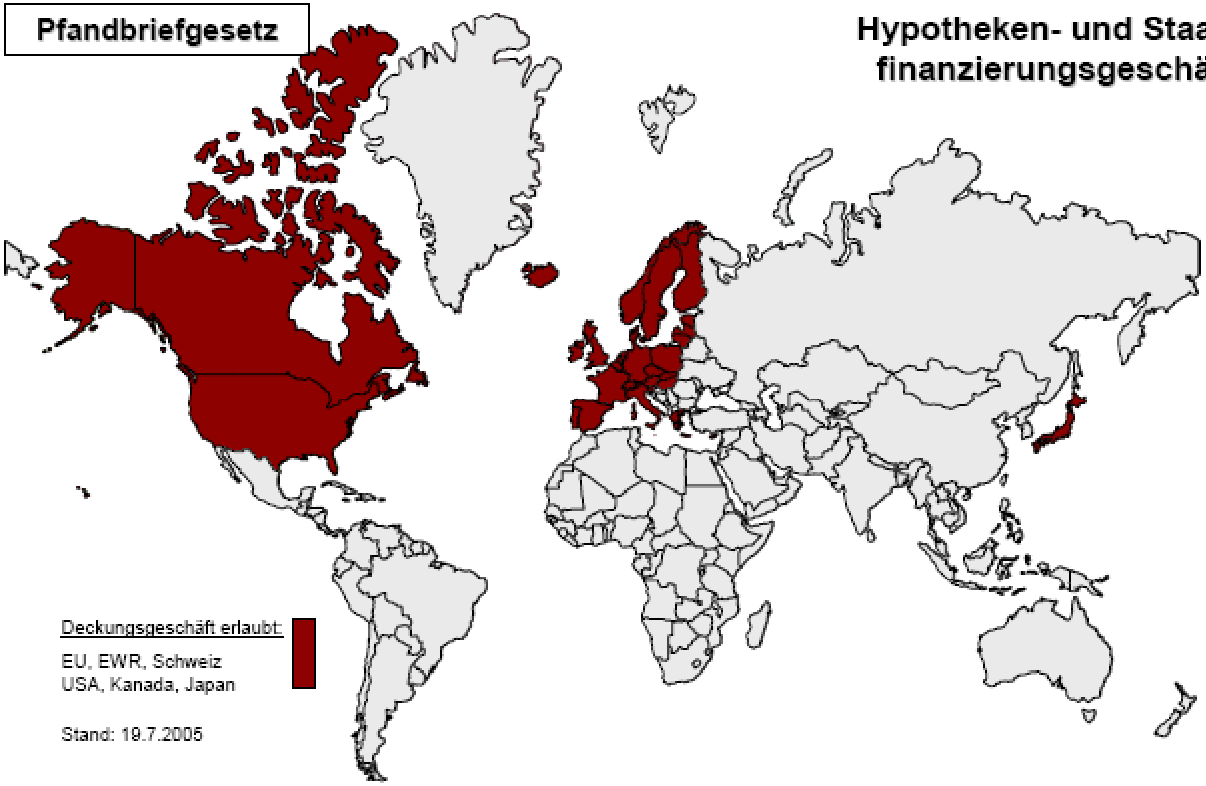
Conservative valuation of real estate

- The mortgage lending value (MLV) is determined according to detailed statutory provisions
- Based on permanent features of the property
- Market value is the upper limit for the MLV
- Occasion-related review of the MLV
- Claims up to 60% of the MLV are eligible as cover

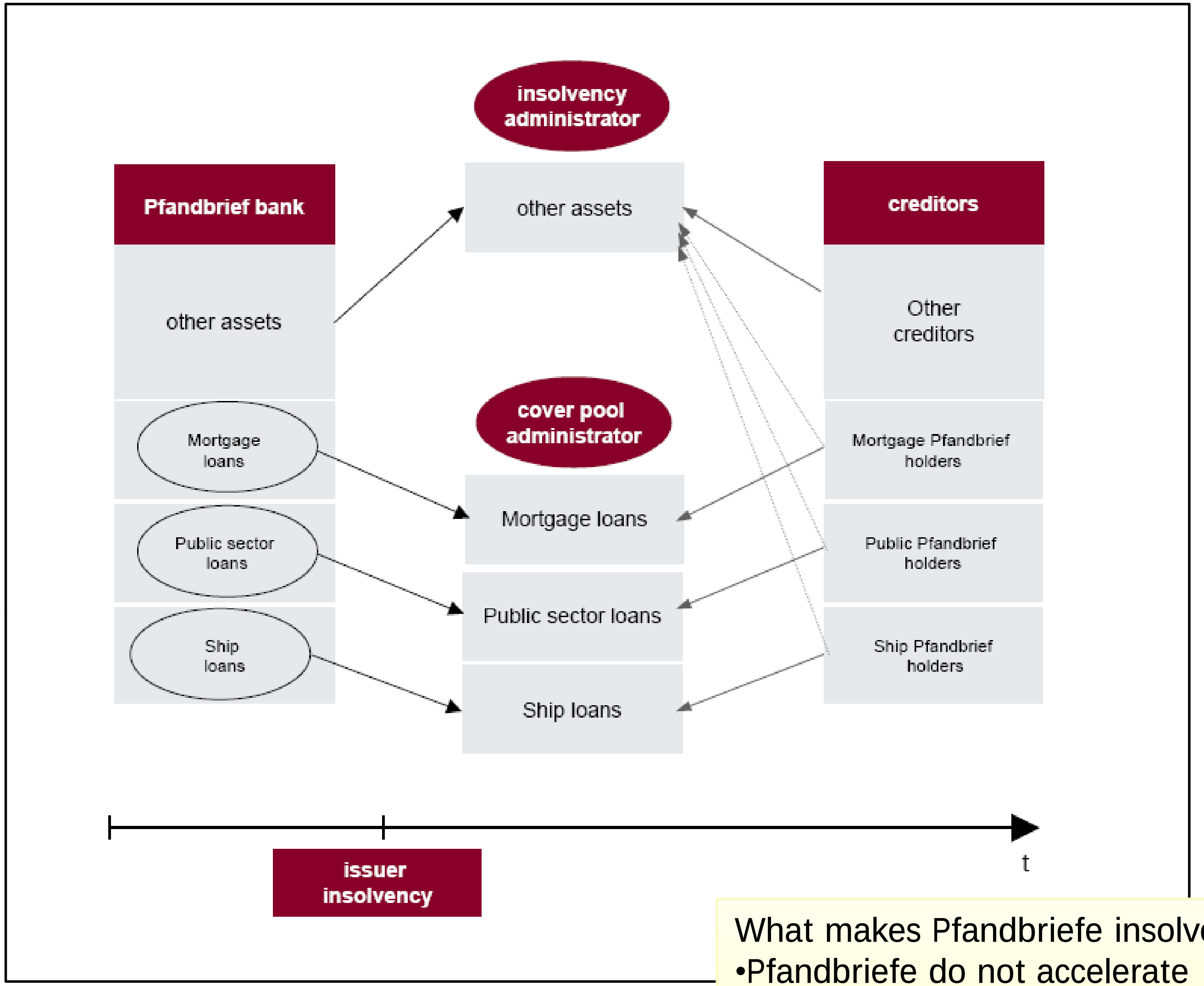
Security by means of conservative valuation



Business restrictions



Regulation in the event of issuer insolvency



What makes Pfandbriefe insolvency remote?
•Pfandbriefe do not accelerate
•Segregation of cover pools
•Insolvency privilege of Pfandbrief creditors

UCITS requirement N° 5

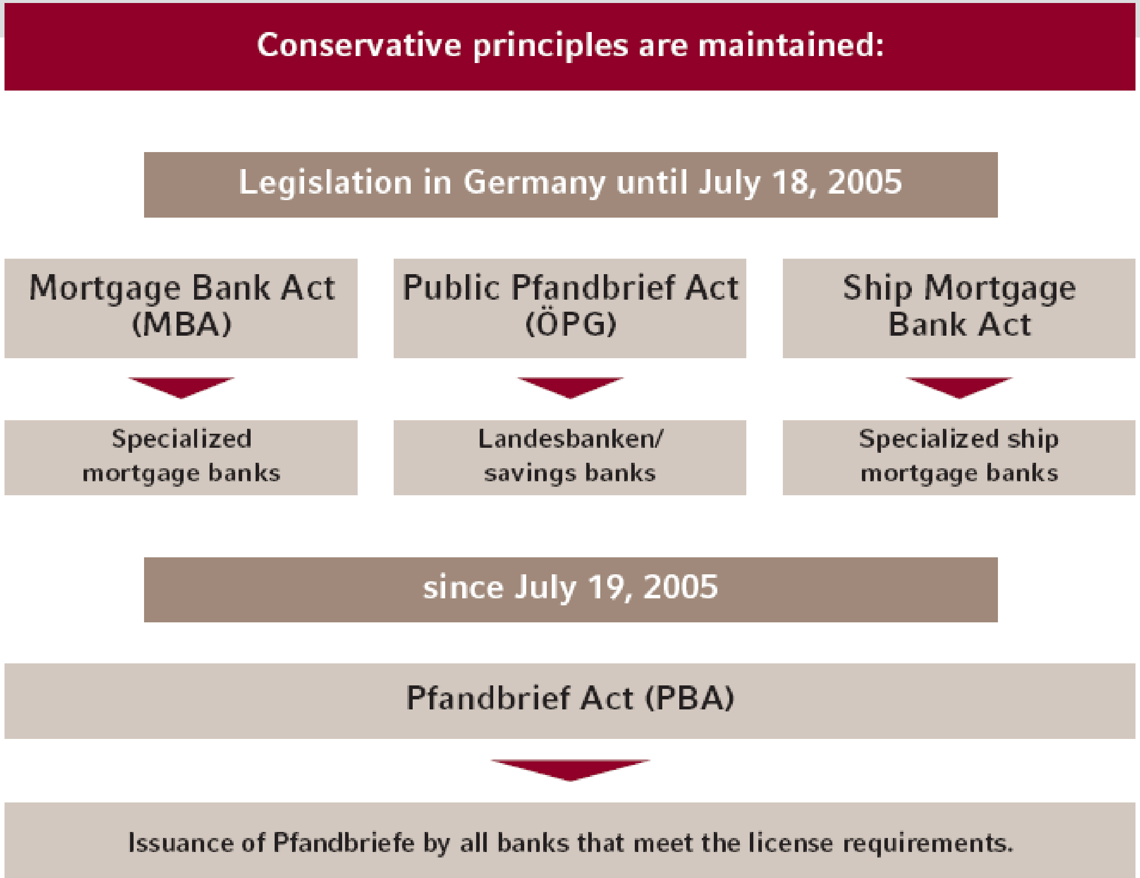
Level of asset segregation and bankruptcy remoteness are driven by:

1. **Identification process of cover assets**
2. **The way how cover assets are segregated from the insolvency's estate (automatically by law or are additional steps necessary ?)**
3. **The extension or non-extension of the insolvency process to covered bonds**
4. **Access to liquidity in order to maintain cover business in case of insolvency of the issuer**

Core: Supervision by Regulatory Body

- Mortgage banks are subject to supervision by the Federal Banking Supervisory Authority
  - With regard to the regulations of the German Banking Act
  - In addition: with regard to specific regulations of the Mortgage Bank Act
- Key element of supervision: Monitoring of loans used as cover
  - Regular reporting of the current position of the cover register in regular intervals
  - Regular cover checks gives insight into the credit policy of the individual bank
    - Information on cover asset; examination if necessary
    - Fulfilment of formal requirement rules
  - Irregular cover checks on a case-by-case basis
  - Independent monitor certifies cover
- Regular interest rate risk measurement and reporting

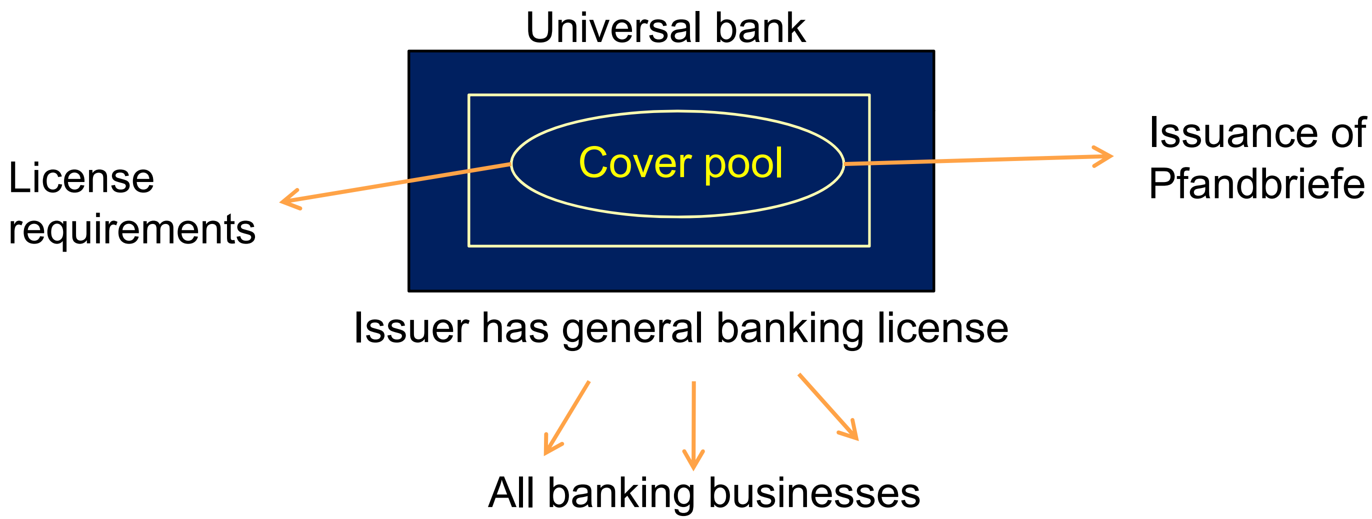
The new Pfandbrief Act



- omission of the emission monopoly of the special banks in 2005
- Pfandbrief business to be opened up to every credit institution which fulfills **minimum requirements** and possesses a Bafin license
- instruments taken over from the existing mortgage bank legislation include lending limit, trustee principle and regular cover audits

Universal bank principle instead of specialist bank principle

- Ending of the specialist bank principle (emission monopoly) as a consequence of the omission of public guarantees for the issuers under public law (entry into force of Pfandbrief act 19. July 2005) and introduction of a license requirement for operating the Pfandbrief business



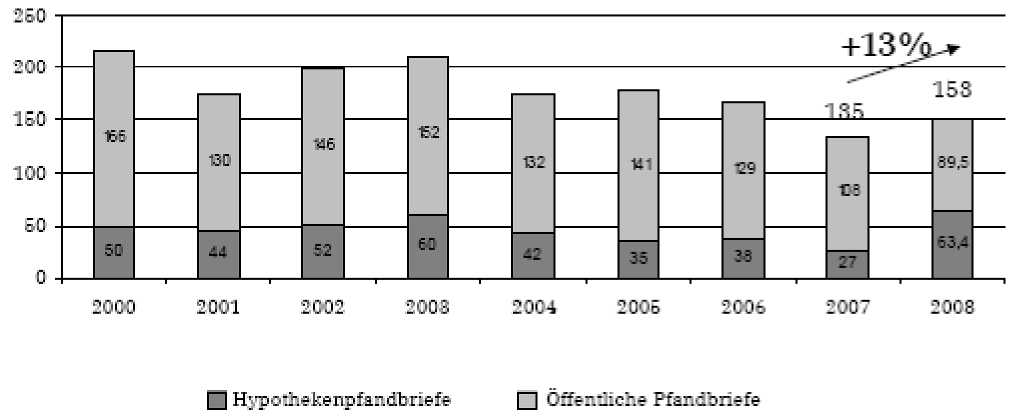
License requirements

- Permission to operate the lending business according to § 11 Abs. 1 Satz 2 Nr. 2 KWG
- Minimum core capital 25 million Euros
- suitable risk management system for the Pfandbrief business
- suitable rules and instruments for the control, monitoring and check of the risks associated with the cover pools and the issue of the securities
- operating the Pfandbrief business regularly and lastingly
- appropriate organizational structure, qualified staff and resources

III. Market disturbances b.L. / a.L

Pfandbrief issuance 2007 / 2008 / 2009

Erstabsatz Pfandbriefe (Mrd. €)



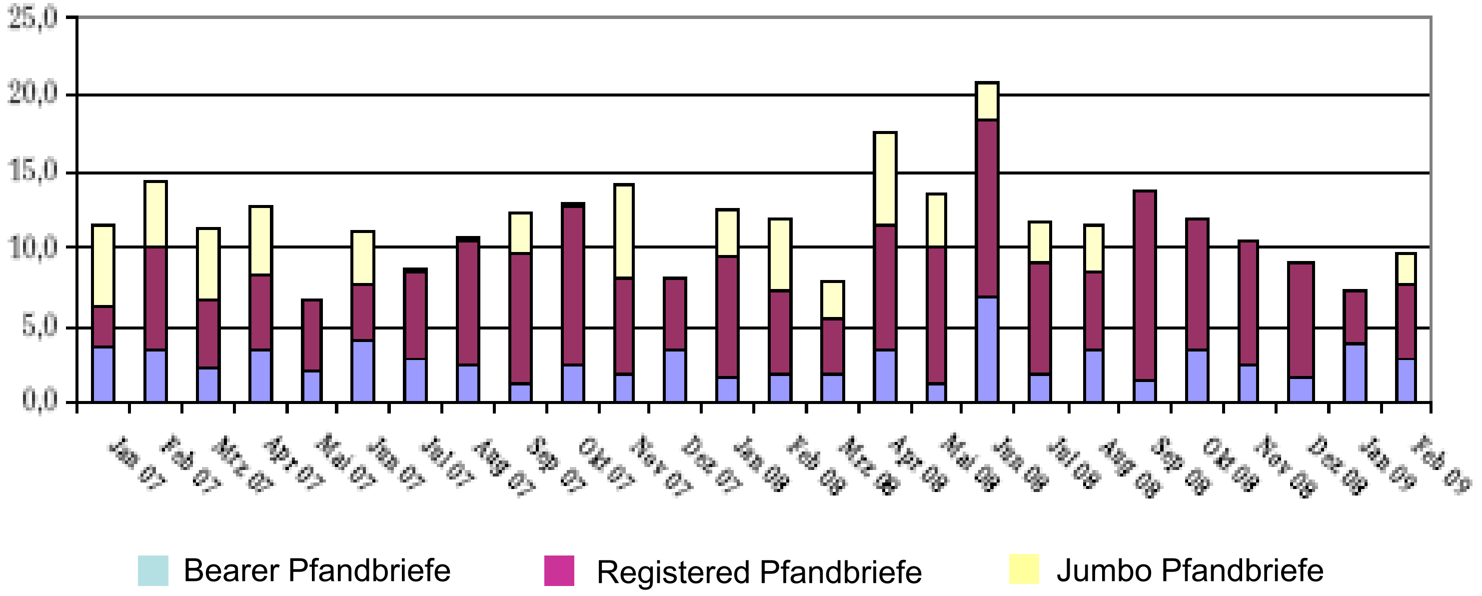
Quelle: Deutsche Bundesbank, vdp

- Neuemissionsvolumen zieht im Verlauf des ersten Quartals an:
  - Q1 gesamt: ca. 27 Milliarden Euro
  - davon Hypothekenpfandbriefe: ca. 14 Milliarden Euro
  - davon Öffentliche Pfandbriefe: ca. 13 Milliarden Euro

▪ Neuemissionsvolumen gesamt	2007: 135 Mrd. €	
	2008: 153 Mrd. €	(+13%)
▪ Hypothekenpfandbriefe & Schiffspfandbriefe	2007: 27,5 Mrd. €	
	2008: 63,4 Mrd. €	(+131%)
▪ Öffentliche Pfandbriefe	2007: 107,9 Mrd. €	
	2008: 89,5 Mrd. €	(-17%)

Source: vdp Pfandbrief Roadshow Mai 2009

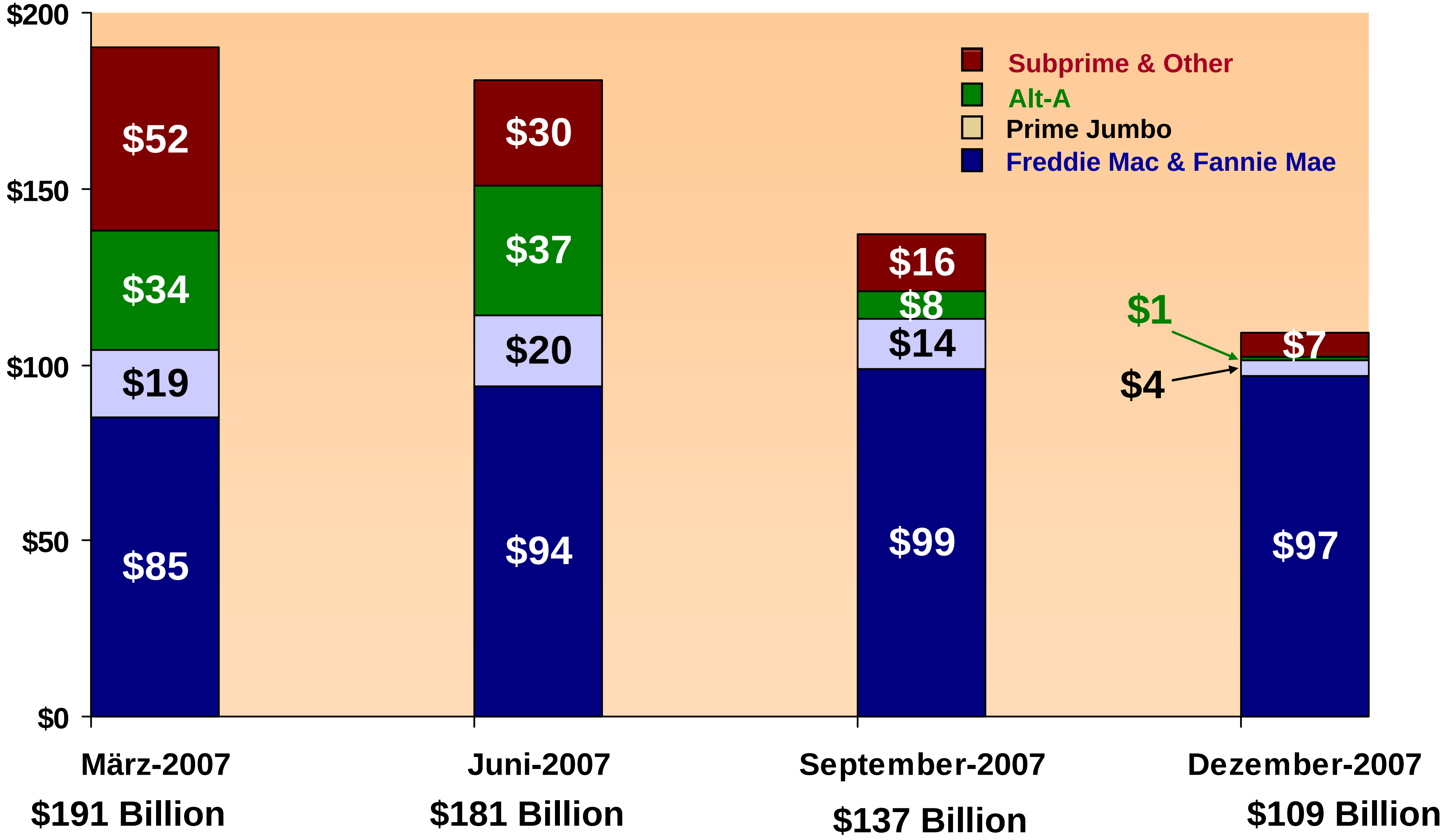
Volume of new Pfandbrief issues (billion € / month)



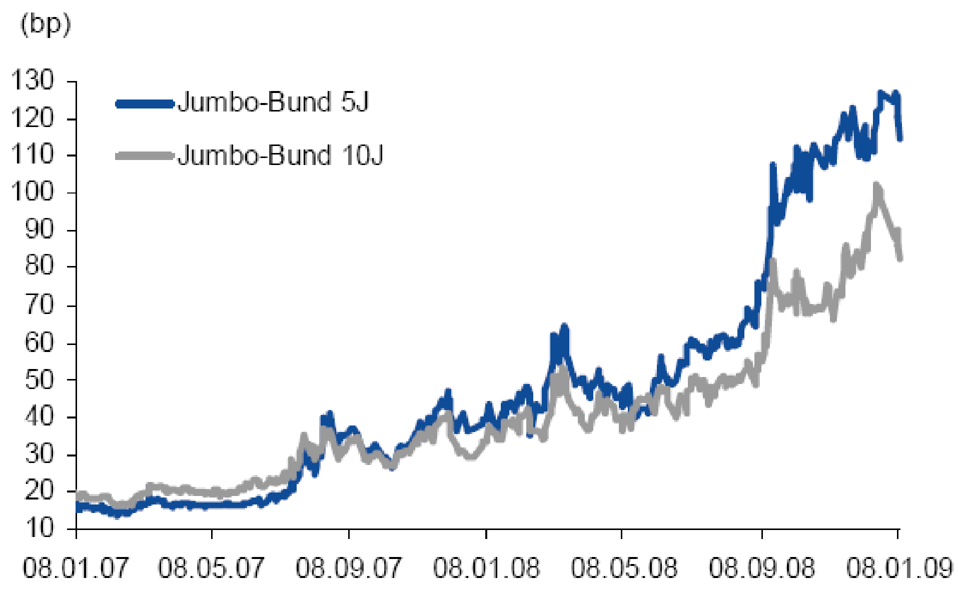
Source: vdp Pfandbrief Roadshow Mai 2009

MBS-Emissionen in Mrd. Dollar

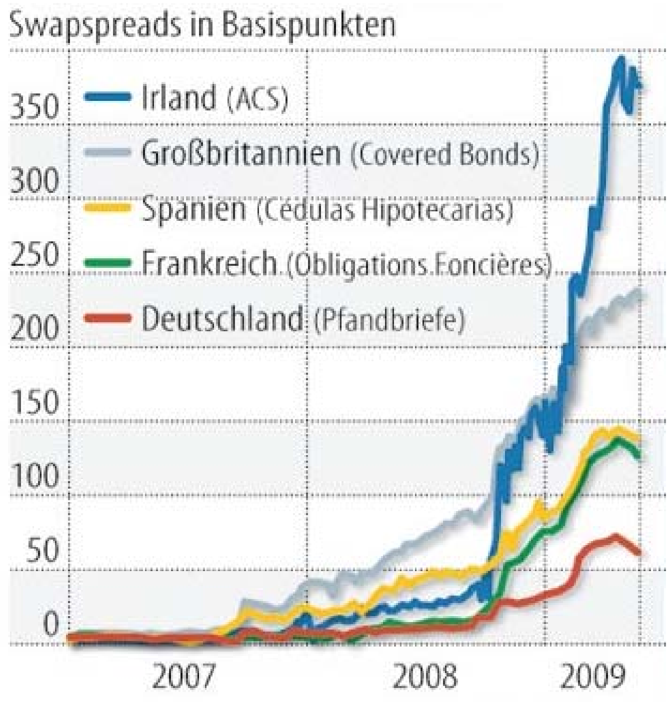
Source: Inside Mortgage Finance



Development of the swap spreads during the crisis



source: WestLB



Partial illiquidity of the secondary market in 2008

- Tradability temporarily restricted for larger volumes – even b.L.
- commitments of the market makers relaxed or suspended repeatedly during the crisis (F.A.Z., 20.09.2008, Nr. 221, p. 19) – even b.L.
- However: private investors were almost always able to buy or sell (F.A.Z., 05.06.2008, p. 25)
- Secondary market dried out almost completely by the end of Sept. 2009
- “liquidity-driven” price formation (F.A.Z., 29.09.2008).
- <u>October</u>: Private investors were throwing all kinds of bonds on the market they regarded as risk-bearing. And they did not make a distinction between covered and uncovered bonds any longer. The whole Pfandbrief market suffered independent from the ratings of the issuers. Only Pfandbriefe with maturities below two years were less affected. Current yields temporarily rose to 15 per cent in some cases (F.A.Z., 10.10.2008, Nr. 237 / p. 25).

The case of the Hypo Real Estate bank

- The bank faltered because her Irish subsidiary Depfa bank was no longer able to re-finance herself at the interbank-market.
- public loan business of the Depfa was regarded as a means of risk diversification
- “low risk, low margin” business
- refinancing of the 230 billion Euro credit portfolio relied in part on shorter term credits from other banks (about 50 billion Euros)
- Depfa’s assets were illiquid in the financial crisis
- Hypo Real Estate bank was one of the largest Pfandbrief issuers
- bail-out evolved into a never-ending story (as usual)

Possible explanations for the market disturbances in 2008 / 2009

- Phenomena of partial illiquidity and rising risk premiums demand explanation
- Presumably doubts about the quality of the cover values have only played a minor role
- Investors did not trust the stability of the issuers any more
  - contagion risks from the non-cover business
  - Liquidation of a Pfandbrief bank never tested
- Competition from government bonds, guaranteed bank obligations and deposit guarantees

The turning point

- bail out of the Hypo Real Estate bank in early October: implicit state guarantee for all Pfandbrief issuers
- EU finance ministers rescue package which included the commitment to bail out any systemic bank (F.A.Z., 08.10.2008, Nr. 235, p. 11)
- German government's declaration from 13. October 2008.

Institutional letter of comfort from the German government

- “The special statutory provisions in Germany mean that Pfandbriefe are already safe - throughout the more than 200-year long history of the product there has never been a default of a German Pfandbrief. The German government will ensure that this continues to be the case in the future as well. As far as the functionality of the Pfandbrief Market requires it the Federal Government will take further legal measures to ensure the safety of the Pfandbrief in the short term.”

Revival of the Jumbo-Market after more than five months

Issuer	Type	Date	Volume in billion Euros	Maturity	Interest
LBBW	Public	4.2.2009	1,0	2014	+75 bpvs. swaps
Postbank	Mortgage	5.2.2009	1,0	2014	+85 bpvs. swaps
Eurohypo	Mortgage	17.3.2009	1,25	2014	+100 bpvs. swaps
WL Bank	Public	13.5.2009	1,25	2014	+48 bpvs. swaps
Eurohypo	Mortgage	18.5.2009	1,75	2016	+80 bpvs. swaps

Table 2: Jumbo Pfandbrief issuance until May 18, 2009, source: vdp 2009b

Plus diverse step-ups

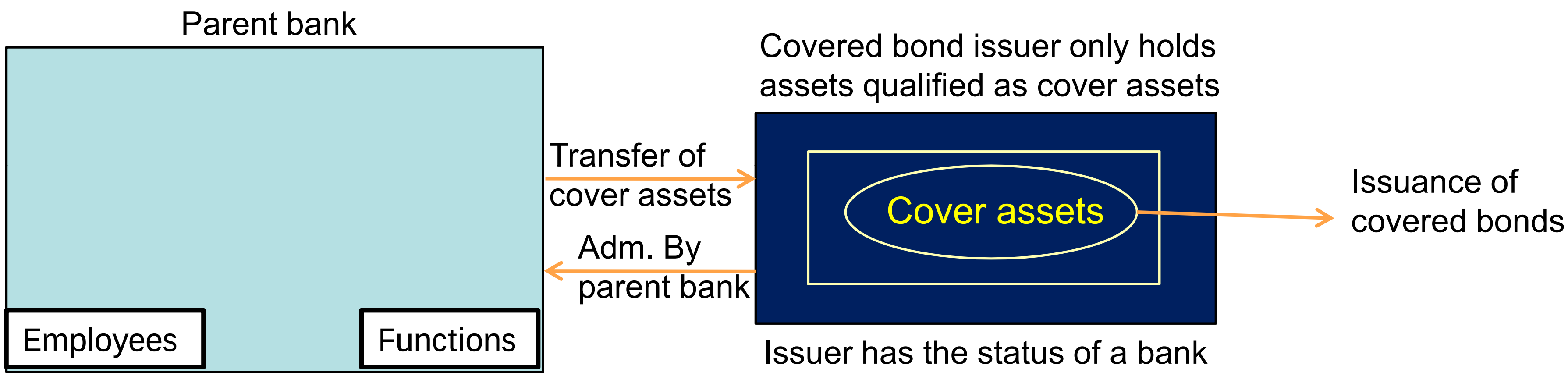
Pfandbrief market 2009

- Competition from public bonds and guaranteed bank bonds
- Revival of the Jumbo-segment
- Stimulation by ECB‘s covered bond purchase
- Continuation of the positive development of Mortgage Pfandbriefe issuance expected
- Downward trend in Public Pfandbriefe issuance expected to continue
  - Large maturities
  - low margins due to the current capital market environment

IV. Specialist or universal banks as issuers of covered bonds?

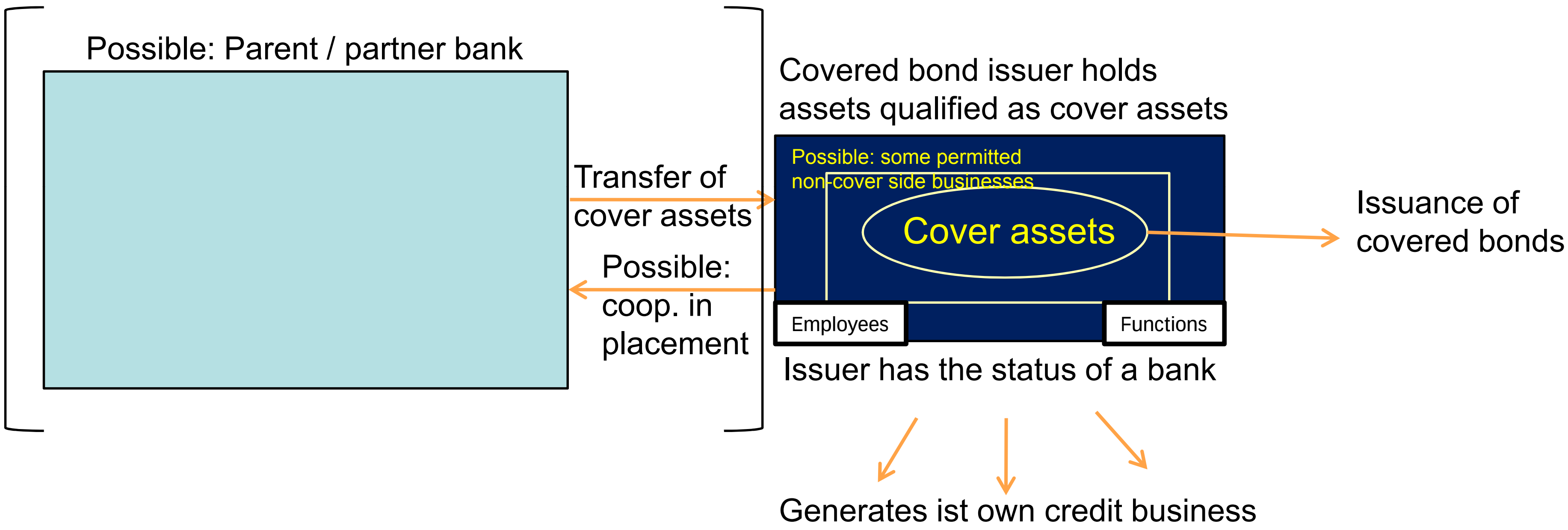
1. Covered bond issuer as an issuing vehicle

France, Finland, Ireland, Norway, partially Sweden



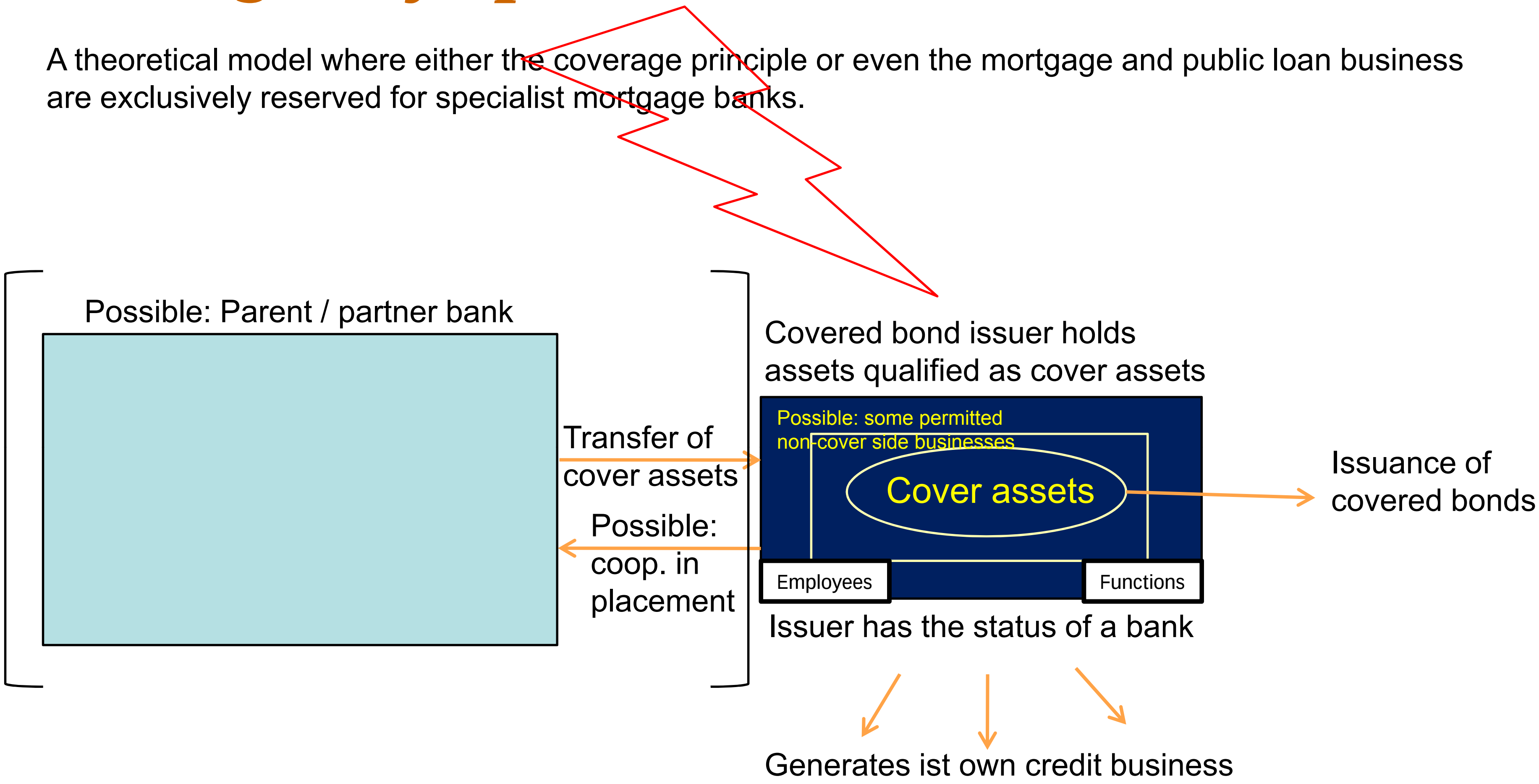
2. Facultative specialist bank model

Denmark, Germany (until 2005), Hungary, Luxembourg, Poland, partially Sweden



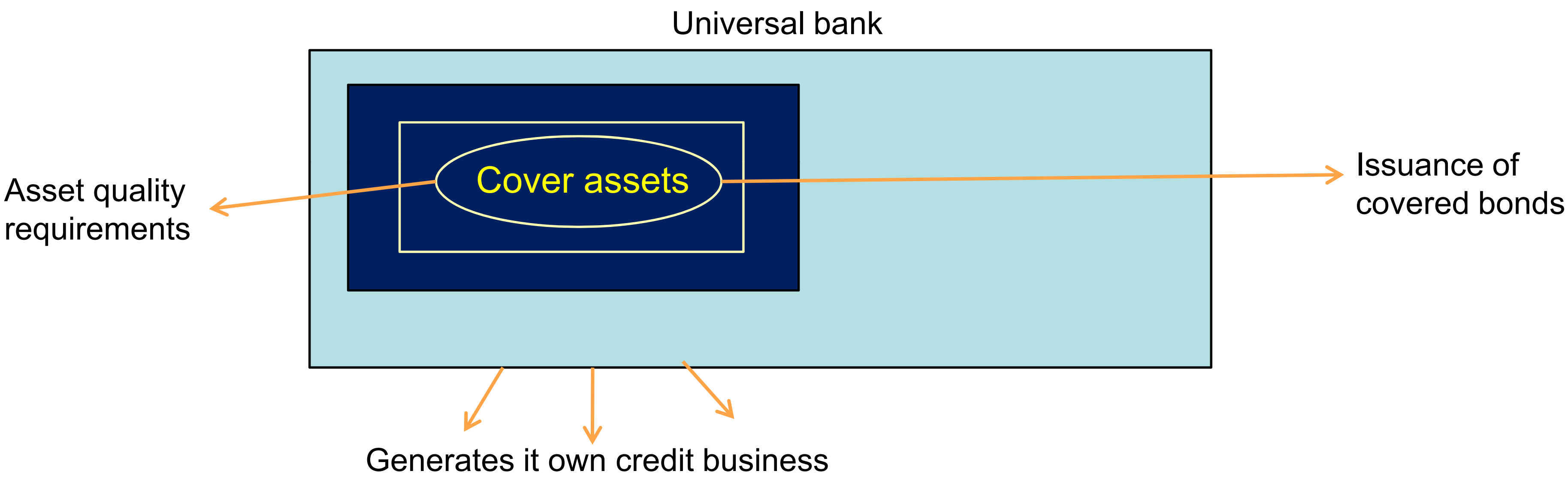
3. Obligatory specialist bank model

A theoretical model where either the coverage principle or even the mortgage and public loan business are exclusively reserved for specialist mortgage banks.



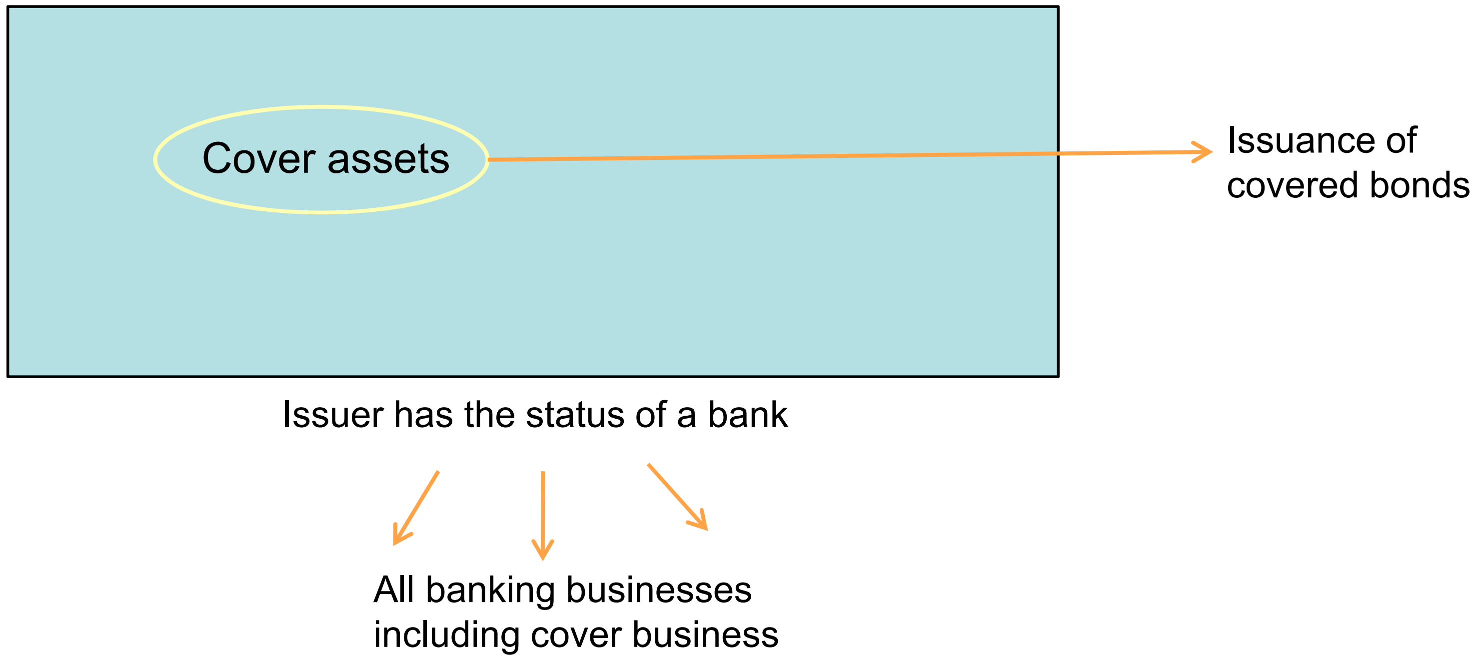
4. Universal bank with covered bond license

Germany (since 2005), Latvia, Russia, Slowenia



5. Universal bank without license requirement

Bulgaria. Czech Republic, Lithuania, Spain, Slowakia



V. The Pfandbrief as a blueprint?

- Pfandbrief market hit late, but heavily
- Pfandbrief system only saved by the bail-out of the Hypo Real Estate bank, the government’s letter of comfort and the general measures taken to stabilize the banking system
- Pfandbrief market as a part of the financial system is not invulnerable in a crisis of confidence
- Prudence and trust, both in the cover and in the non-cover business
- sustainable risk policy not enforced by regulation

Pfandbrief as a blueprint?

- Tighter regulation
- Tighter supervision
- Simple structures
- Responsible business conduct
- Increased transparency
- Strict quality standards and supervision