Introduction to ABS / MBS for Investors

January 2001
Bea von Gneisenau
Credit Products - Head of European ABS Trading & Investments (MEF 2)
Introduction to ABS/MBS for investors

- Definitions
- ABS-classes
- Market development in Europe
- Valuation (structure, pool, pricing)
- special terms
- advantages for investors

- attractive investment
What are asset backed securities (ABS)?

Securities entirely based on the performance of a pool of assets

- Backed by pool, not by issuer risk
- Usually independent from the credit risk of the assets' owner (originator or seller)
- New approach to assessing credit risk
- Using statistical methods instead to analyse and predict portfolio performance
How works Securitization?

Sponsor/Originator → Special Purpose Vehicle (SPV)

Risk transfer of asset pool
Through True Sale, Guarantee or Credit Derivatives

Issue of different tranches or CP’s
AAA A BBB Not rated or

ABCP’s

Investors
- revolving issues
- established for a longer period
- usually originators unknown to investors
- pool basics available
- CP maturity between 7 and 270 days
- no tranching
- short term rating, highest ratings achieved A-1+/P1 or A-1/P1
- private placements

- one time issue
- Pool exactly specified and all historic statistics available
- maturity > 1 year, up to 30 years
- publicly placed transactions
- rated by 1 or more rating agencies
ABS classes

ABS (term deals)

MBS (Mortgage Backed Securities)
- Residential MBS
- Commercial MBS/CRE

CDO (Collateralized Debt Obligations)
- CLO (Collateralized Loan Obligations)
- CBO (Collateralized Bond Obligations)
  - Cashflow CBO's
  - market value CBO's

ABS (specific asset classes)
- CARDS (credit card receivables)
- consumer loans (HEL, auto loans...)
- Lease receivables
- Future Flow Receivables
- Others (infrastructure, project finance, taxes non-performing loans, royalties...)
Market development in Europe in 2000

source: Fitch IBCA

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European market breakdown 2000

Source: Fitch IBCA, issues 01/00 - 12/00

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Valuation

Understanding the transaction appeal and motivation

- **Structure Analysis**
  - form of transfer
  - form of credit enhancement
  - form of cashflow allocation (waterfall...)
  - form of transformation of cashflows (interest rate or currency swaps...)
  - who else is involved

- **Pool Analysis (of the underlying assets)**

- **Bank regulations and capital treatment**

- **Relative Value Analysis (Pricing)**
Structure

What to look for:

- How the credit risk of the assets is separated from the credit risk of their seller (bankruptcy remoteness)
- How the asset cash flows are matched with the bond cash flows
- Why the transaction makes economic sense (capital relief, funding, risk transfer)
Structure

Major Participants

Sponsor/Originator
- Sponsor/Originator
- Risk transfer of the asset pool
- By true sale, guarantee or credit-derivatives

Special Purpose Vehicle (SPV)
- Bond-issue of different tranches

Credit Enhancement
- AAA
- A
- BBB
- Not rated

Servicer

Trustee

Rating Agency

Investors
Structure analysis - key parties

**Originator / Sponsor**
- Entity (Corporate, bank, public issuers)
- have funding needs
- own assets, which can be used as collateral for ABS/MBS funding

**Issuer of ABS/MBS**
„Special Purpose Vehicle“ (SPV), specifically created for the purpose of the securitisation, very often located in Channel Islands or Ireland

**Outside Credit Enhancer**
Entity providing credit enhancement through guarantee, insurance, reserve fund etc.

**Servicer**
- Entity, which collects and distributes the cash flows from the assets, looks after delinquent loans, reminds borrowers of the missing payments ...
- in Europe very often = originator
Structure analysis - key parties

Liquidity Provider
   Entity which balances the timing mismatching between the collected cashflows from the pool and the cashflows to be distributed under the structured bonds

Rating Agencies
   - determine the credit strenght of an ABS
   - size the credit enhancement to achieve desired rating

Trustee
   controls and checks cashflows

Structurer
   structures the issue in close cooperation with the originator

Underwriter
   takes the issue and places it in the market
Structure

Depends on the type of collateral

- Risk Transfer (page 15)
  - True Sale
  - Credit Derivatives
  - Guarantees

- Pass through/Pay through, Sequential Pay

- Form of SPV (corporate, charity, trust)

- Credit Enhancement - protection against losses
  - „inside structure“ / often through originator
    Senior-subordinated structure (page 16)
    Reserve account (Cash account)
    Overcollateralization
    Excess spread
    corporate guarantee
  - „outside structure“ / through external counterpart
    Insurance („Wrap“ through „monoline insurer“), guarantee, liquidity-reserve
Struktur - Risk transfer

**true sale**

- Originator
- Pool of Assets
- ABS Issuer (SPV)
- Bond Issue

Assets → proceeds funded → Proceeds of issue

**synthetic risk transfer:**
(credit derivatives / guarantee)

- Originator
- Pool of Assets
- ABS Issuer (SPV)
- Collateral

Portfoliorisk → Protection unfunded → Proceeds of issue are invested in High Quality Collateral
Structure Analysis

Hypothetic Payments „Waterfall“ in Subordination Structures

Cash Flows of the Collateral ➔ Fees ➔ AAA Coupon ➔ AAA Principal ➔ A Coupon ➔ A Principal ➔ BBB Coupon ➔ BBB Principal ➔ Equity

⇒ Losses hit lowest tranche first
Structure analysis

Targets and advantages of the originator

- Regulatory capital release
- Diversification of funding sources, alternative to classic loan and entry to the international capital market
- Securitization will free capital for new business
- „Marketpricing“ of loan portfolio
- Portfolio management
- Possibility of true credit risk transfer of illiquid assets
- Release of credit lines
- No correlation between performance of the originators and risk of the assets
- Improving own ratings by separating delinquent assets
- Improving of balance sheet figures („active balance sheet management“), more efficient use of capital, increase of Return on Equity
- Better pricing (through higher rating)
Important terms

**Cash-Flow Structures**
- hard bullet
- soft bullet
- amortizing, with prepayments
- sequentials

**Faktor**
- shows the actual outstanding principal of a tranche and how much has been prepaid until now
- e.g. factor 0,963456 means 96,34% principal outstanding and 3,65 being prepaid.

**Maturity**
- WAL (weighted average life)
- Expected Maturity
- Final Maturity

**Terms/Figgures**
- LTV
- DSCR („Debt Service Coverage ratio“)
- seasoning
- WART

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- WART

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Pool analysis

Type of Receivables

- Every type of receivable can theoretically be put in an ABS
- **Interest bearing receivables**
  - Consumer Loans
  - Home Equity Loans (HEL)
  - Credit Cards (CARDS)
  - Autoloans / -leasing (CARS)
  - Balance Sheet Structures
  - Collateralized Loan Obligations (CLO)
  - Mortgage Loans
  - Mortgaged Backed Securities (RMBS, CMBS)
  - Project Loans

- **Receivables bearing no interest**
  - Non performing loans
  - Mortgaged Backed Securities, Consumer Loans, Social Security Payments
  - Trade receivables
  - Future Flow Receivables
  - licence and patent funding

- **Actively managed portfolios**

  (CDO)
Pool Analysis

**Pooltype**
- revolving / static
- amortizing / bullet
- homogen / heterogen
- fixed / floating
- performing / non-performing

**Statistical Features**
- Level of Diversification
  - according to region
  - according to industry
  - according to number of loans
- Collateral specific benchmarks (e.g. LTV, DSCR)
- Historical portfolio performance (defaults and losses)

**General economic influences on the assets**
Rating

Three important rating agencies:
  S & P’s
  Moody’s
  Fitch

The rating process
  Originator and Pool (stress tests)
  Due Diligence
  Legal Structure
    - “bankruptcy remoteness“ of SPV
    - True Sale to SPV?
  size the credit enhancement to achieve desired rating
Relative Value

**USA**
- Market exists since the 80ties
- Standardized structures from established vehicles
- High liquidity (market size comparable to treasury market)
- Positions are either - very short term or - buy and hold
- The most important collateral types are mortgages and consumer credits (credit card and HEL)

**Europa**
- Substantial increase in issuance volume since 1996
- Differences in structure from deal to deal (a new “twist” in every transaction)
- By and large a „buy-and-hold“ market
- So far main driving force has been the securitization of bank portfolios (CLOs), influenced by ROE pressures as well as Residential Mortgage Backed Securities (RMBS)

HVB co-ordinates its trading activities from Munich and New York
Relative Value

- Economic stability of the Sponsor/Servicer
- Rating „AAA isn’t AAA“
- Credit Enhancement More is not necessarily better
- Volatility of the underlying collateral

ABS Preis

Investor Goals
- Timing of the Cash Flows
  - Amortizing / Bullet ?
  - Maturity ?
- Yield on comparable Bonds
- Market Condition

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## Relative Value

<table>
<thead>
<tr>
<th>Jumbopfandbriefe 5y</th>
<th>Rating</th>
<th>Euribor Mid-Spreads</th>
<th>R.W.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AAA</td>
<td>-3/+3</td>
<td>10%</td>
</tr>
<tr>
<td>Pfandbriefe 5y</td>
<td>AAA</td>
<td>+2/+7</td>
<td>10%</td>
</tr>
<tr>
<td>Corporates</td>
<td>AAA</td>
<td>flat/+10*</td>
<td>100%</td>
</tr>
<tr>
<td>Corporates</td>
<td>AA</td>
<td>+25/+35*</td>
<td>100%</td>
</tr>
<tr>
<td>Corporates</td>
<td>A</td>
<td>+45/+55*</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Exceptions even wider or tighter**

| EU MBS (4-6y)       | AAA    | +25/+28             | 100% |
| EU MBS (4-6y)       | A      | +65/+75             | 100% |
| EU CLOs (5y)        | AAA    | +28/+32             | 100% |
| EU CLOs (3y)        | A      | +50/+70             | 100% |
| EU Consumer Loans (3y) | AAA | +26/+36 | 100% |
| EU Consumer Loans (3y) | A   | +65/+85 | 100% |

### Recent issues

| Fennica 5 (RMBS)    | AAA(5y), A(7y) | +25/+65 | 100% |
| Aire Valley Fin.No.2 (RMBS) | AAA(5.1y), Aa3(8y) | +32/+55 | 100% |
| ELOC 4 (CMBS)       | AAA(5y), A(5y) | +40/+100 | 100% |
| Celtic 6 (RMBS)     | AAA(4.4y), A(7y) | +25.5/+75 | 100% |
| DMPL 1 BV (RMBS)    | AAA(5.6y), A(10y) | +26/+75 | 50%  |
| Car loan invest-1   | AAA(3.8y), A2(3.8y) | +26/+65 | 100% |
| WürttHyp 2000-1 (RMBS) | AAA(5y), A(5y) | +26/+75 | 100% |
Relative Value

Euribor-Spread (3-5 years)

Asset class

CLO (A)
MBS (A)
ABS (A)
Corporates (A)
CLO (AAA)
MBS (AAA)
ABS (AAA)
Corporates (AA)
Corporates (AAA)
Pfandbriefe
Jumbos
The Risks

- Credit risk
- Liquidity risk
- Servicer Risk
- Swapcounterparty risk
- Garantor risk
- legal risk
- Sovereign risk
- Default risk of underlying assets

**Risks, not measured by Rating Agencies:**
- Interest Rate and Currency risk
- Prepayment risk
Why invest in ABS/MBS:

- New Market
- New Asset class
- (still) not as much market participants as in established markets
- therefore less liquidity
- little volume in sekundary market
  „buy-and-hold“ positions
- more credit analysis / timeconsuming

⇒ Higher Coupon / Spread as for comparable rated Corporate Bonds
Information for Investors

- **Prospectus**
  before launch „Red Herring“ / „Offering Circular“
  after launch „Black“

- **Lead Manager**
  Presentation, Road Show

- **Rating Reports**
  Presale reports before Launch
  Final rating report

- **Internet** (some issues)

- **Bloomberg**
Information for Investors

Bloomberg-Functions

- get Description of tranche via Mortgage Function
e.g. Geldilux 1999-2 B
GELDI <Mtge> Go, 3 Go, 2 Go or GELDI 1999-2 B <Mtge>

- DES - description

- YT - yield table (Spread Calculator)

- CFT - Cashflow Table (expectations)

- CPD - Class pay down (Prepayments)
Individual analysis criteria of Investors

- **Structure- and Poolanalysis**
- **Pre Sale Ratings**
  - historical Portfolio Performance, stress tests
  - influence of economy developments („event risk“)
  - Servicer
- **Market**
  - Sekundary market liquidity
  - Marketmaking Commitment (Lead manager, Reuters-Pages)
  - Performance Reports after Launch (Internet, Bloomberg, Email?)
- **Advantages**
  - Diversification in portfolio, regional, Type and strukture
  - higher yield (as for comparable corp. issues with equal rating)
  - spread tightening
  - possibility of investment in loans and other activa which wasn’t possible before
  - Rating stability (1986-1998 no defaults)
  - no credit line problems because of legally separated SPV
Transactions

Geldilux 1999-2 Ltd.
MAED 1999-C1 Ltd.
Bavaria Finance Ltd. Jersey
Prometheus Investment Funding No. 1
WuertHyp 2000-1
Promise-A-2000-1
**GELDILUX 99-2 Ltd.**  
(Febr. 99 Geldilux 99-1, Sept. 99 Geldilux 99-2)

<table>
<thead>
<tr>
<th>Tranche</th>
<th>Rating</th>
<th>Volume</th>
<th>% Total</th>
<th>Coupon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A</td>
<td>Aaa/AAA</td>
<td>EUR 200.250.000</td>
<td>26,70 %</td>
<td>3m Euribor + 24</td>
</tr>
<tr>
<td>Class B</td>
<td>Aa2/AA-</td>
<td>EUR 507.000.000</td>
<td>67,60 %</td>
<td>3m Euribor + 36</td>
</tr>
<tr>
<td>Class C</td>
<td>A1/A</td>
<td>EUR 9.375.000</td>
<td>1,25 %</td>
<td>3m Euribor + 45</td>
</tr>
<tr>
<td>Class D</td>
<td>Baa2/BBB</td>
<td>EUR 11.250.000</td>
<td>1,50 %</td>
<td>3m Euribor + 92</td>
</tr>
<tr>
<td>Class E</td>
<td>Ba3/BB</td>
<td>EUR 13.125.000</td>
<td>1,75 %</td>
<td>3m Euribor + 250</td>
</tr>
<tr>
<td>Class F</td>
<td>NR</td>
<td>EUR 9.000.000</td>
<td>1,20 %</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EUR 750.000.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Coupon**
Floating, based on 3 months EURIBOR

**Maturity**
Sept 16, 2003 (hard bullet), callable 3 and 6 months prior to maturity

**Ratings**
Moody’s, S&P, Fitch IBCA and Duff & Phelps
GELDILUX 99-2 Structure

Reference Euroloans

HVB Luxembourg

HVB Public Pfandbrief

HVB Medium Term Note (MTN)

Price

Euribor

Guarantees

Cash Deposit

Program Fee

Note Purchase Price

Euribor + Spread

Senior Notes

Subordinated Notes

Put Option Pfandbrief

Put Option MTN

GELDILUX 99-2, Ltd.

Investors

HVB RMP NY

HVB
### MAED 99-C1 Ltd. (May 99)
(Multi Asset Euro Denominated 99-C1 Ltd.)

<table>
<thead>
<tr>
<th>Tranche</th>
<th>Rating</th>
<th>Volume (mln)</th>
<th>% of Issue</th>
<th>Coupon (BP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A-1</td>
<td>Aaa/AAA</td>
<td>EUR 100</td>
<td>34%</td>
<td>3m Euribor + 29</td>
</tr>
<tr>
<td>Class A-2</td>
<td>Aaa/AAA</td>
<td>EUR 197</td>
<td>66%</td>
<td>4.645%</td>
</tr>
</tbody>
</table>

- **Maturity**: May 25 2009, bullet
- **Ratings**: Moody’s and Fitch IBCA
MAED 99-C1

- 11 separate transactions
- Each bond is rated AAA/Aaa
- Fixed collateral pool containing
- Over 2,700 loans
- No commercial property class exceeds 25% of the underlying loans
- Only 1 state has more than 20% of the loans (California) and this is typical of CMBS transactions
MAED 99-C1: CMBS Product Features

- A key feature of CMBS securities is the option of the borrower to pay back his debt at his discretion.
- This option leads to complications in the cash flow management (duration, convexity, prepayment rate).
- The cash flows and the maturity of a CMBS security are hence a product of prepayment evaluation models and can vary in terms of timing and size (prepayment or extension).
- The difficulties in finding the OAS (Option Adjusted Spread) and the complexity of the risk management are usually reflected in a relative „cheapness“ of the CMBS market in comparison to other similar securities.
MAED Structure

MAED

CMBS Security

AAA Tranche
AA Tranche
BBB Tranche

CMBS Security

AAA Tranche
AA Tranche
BBB Tranche

Loan Loan Loan

Loan Loan Loan
The MAED Portfolio

Loan-to-Value Distribution

Debt Service Coverage Ratio Distribution

Distribution by State

Distribution by Property Type

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## Indication for a MAED 1999-C1 based Schuldschein Issue

<table>
<thead>
<tr>
<th><strong>Issuer</strong></th>
<th>LEONARDO Ltd., Isle of Man</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dealer</strong></td>
<td>HypoVereinsbank, Munich</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td>Schuldscheindarlehen</td>
</tr>
<tr>
<td><strong>Underlying</strong></td>
<td>MAED 1999-C1</td>
</tr>
<tr>
<td></td>
<td>Class A-1 (25.5.2009)</td>
</tr>
<tr>
<td></td>
<td>Ratings: Aaa (Moodys)/AAA (Fitch)</td>
</tr>
<tr>
<td></td>
<td>WKN: 308 472</td>
</tr>
<tr>
<td><strong>Volume</strong></td>
<td>EUR 25.000.000</td>
</tr>
<tr>
<td><strong>Coupon Pays</strong></td>
<td>3M Euribor + 0,29% (act/360)</td>
</tr>
<tr>
<td></td>
<td>February, May, August, November 25, modified following, (MAED pay days)</td>
</tr>
<tr>
<td><strong>Redemption</strong></td>
<td>Equivalent to the MAED 1999-C1 Issue</td>
</tr>
<tr>
<td><strong>Maturity</strong></td>
<td>May 25, 2009, equivalent to MAED 1999-C1, legal final maturity November 25, 2014</td>
</tr>
<tr>
<td><strong>Documentation</strong></td>
<td>Schuldschein-documentation</td>
</tr>
<tr>
<td><strong>Settlement</strong></td>
<td>Schuldschein settlement</td>
</tr>
</tbody>
</table>
Leonardo Structure

HypoVereinsbank

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Trust

Enforcer

Schuldschein Trust
Isle of Man Trust

100% Holding

HypoVereinsbank

Note Price

Leonardo Ltd
Isle of Man SPV

Investor

Note Price

Schuldschein Note with “limited recourse” to the Note
Bavaria Jersey Financing

Ownership Structure

Bavaria Finance Holdings (Delaware) → Equity Notes

Bavaria Delaware Finance (Delaware)

reciprocal

credit support

Bavaria Jersey Finance (Jersey)

Commercial Paper

Medium Term Notes

HVB NY

Investors

100% equity

100% equity

49%

51%

Bavaria Jersey Financing (Nov. 99)
## Term Sheet (Indicative Terms)

<table>
<thead>
<tr>
<th></th>
<th><strong>Commercial Paper (CP)</strong></th>
<th><strong>Medium Term Notes (MTN)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issuer</strong></td>
<td>Bavaria Delaware Finance</td>
<td>Bavaria Jersey Finance</td>
</tr>
<tr>
<td><strong>Rating</strong></td>
<td>A1 / P1 /F1</td>
<td>AAA/Aaa (100 Mio)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AA- / Aa3 (32 Mio)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BBB- / Baa2 (80 Mio)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NR / Ba2 (33 Mio)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NR (37 Mio)</td>
</tr>
<tr>
<td><strong>Maturity</strong></td>
<td>up to 270 days</td>
<td>expected 7 years, legal 10 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>callable quarterly from year 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(equal percentages per tranche)</td>
</tr>
<tr>
<td><strong>Volume</strong></td>
<td>up to USD 4,000 Mio</td>
<td>USD 282 mn</td>
</tr>
<tr>
<td><strong>Coupon</strong></td>
<td>n.a.</td>
<td>AAA 3m USD Libor + [50] BP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AA- 3m USD Libor + [75] BP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BBB- 3m USD Libor + [195] BP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BB 3m USD Libor + [400] BP</td>
</tr>
</tbody>
</table>
Bavaria Finance Corporation: Assets

Short term

■ Commercial Paper or short-term deposits (< 90 days)
  ■ issued by A1+/P-1 entities

■ Reverse Repos (<183 days)
  ■ Non-government and overcollateralized
  ■ matched funded with commercial paper
  ■ with investment grade counterparts

■ Total Return Swaps (<365 days)
  ■ with investment grade counterparts
  ■ matched funded with commercial paper

Long Term

■ Securities:
  ■ Fixed-rate (swapped to floating) and floating-rate notes
  ■ Asset-Backed debt (min rating AA-/Aa3)

■ Credit Default Swaps
  ■ only investment grade reference assets

Eligibility criteria

■ no exposure to a country rated below Aa2/AA-
■ no exposure longer than the scheduled maturity of the MTNs
■ no exposure below investment grade at the time the exposure is entered into
■ 8% industry / 3% obligor credit exposure concentration limits apply
Prometheus Investment Funding No. 1 Ltd. (Juni 2000)

- CDO backed by a revolving portfolio of high yield loans and bonds. The program’s assets will be purchased in the primary and secondary market
- Cashflow from Prometheus’ portfolio of loans and bonds is the direct and sole source of interest and principal of the Prometheus Notes
- Senior Notes will have the benefit of credit support in the form of subordination
- Subordinated Notes will have the benefit of credit support in the form of excess yield generated by the Prometheus asset portfolio

<table>
<thead>
<tr>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tranches</td>
</tr>
<tr>
<td>Senior Secured Loans</td>
<td>Class A</td>
</tr>
<tr>
<td>High Yield Bonds</td>
<td>Class B</td>
</tr>
<tr>
<td></td>
<td>Class C</td>
</tr>
<tr>
<td></td>
<td>Class D</td>
</tr>
<tr>
<td></td>
<td>Mezzanine</td>
</tr>
<tr>
<td><strong>Total:</strong> $ 500</td>
<td><strong>Total:</strong> $ 500</td>
</tr>
</tbody>
</table>
# Prometheus Investment Funding No. 1 Ltd.

<table>
<thead>
<tr>
<th><strong>Issuer</strong></th>
<th>Prometheus Jersey, Jersey, Channel Islands</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sponsor</strong></td>
<td>CPF Asset Advisory L.P.</td>
</tr>
<tr>
<td><strong>Expected Rating</strong></td>
<td>Class A: AAA/Aaa</td>
</tr>
<tr>
<td></td>
<td>Class B: AA- / Aa3</td>
</tr>
<tr>
<td></td>
<td>Class C: Baa2</td>
</tr>
<tr>
<td></td>
<td>Class D: Ba2</td>
</tr>
<tr>
<td></td>
<td>Mezzanine: n.r.</td>
</tr>
<tr>
<td><strong>Maturity</strong></td>
<td>Expected Final: 10 years</td>
</tr>
<tr>
<td></td>
<td>Legal Final: 12 years</td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>USD 500 Mio</td>
</tr>
<tr>
<td><strong>Coupon Index</strong></td>
<td>3M USD Libor</td>
</tr>
<tr>
<td><strong>Eligible Assets</strong></td>
<td>85% Non-Investment grade loans</td>
</tr>
<tr>
<td></td>
<td>15% Non-Investment grade bonds (Senior)</td>
</tr>
<tr>
<td><strong>Model Portfolio</strong></td>
<td>Average Rating: S&amp;P: B+ (Corporate Credit Rating)</td>
</tr>
<tr>
<td></td>
<td>Moody’s: B1 / Score 2200 (Senior Implied Rating)</td>
</tr>
<tr>
<td></td>
<td>Obligor Concentration: 3%</td>
</tr>
<tr>
<td></td>
<td>Industry Concentration (Moodys / S&amp;P): 10% with max. two industries 15%</td>
</tr>
<tr>
<td></td>
<td>Asset Maturity: 1 mo to 10yrs (legal final)</td>
</tr>
</tbody>
</table>
Prometheus Investment Funding No. 1 Ltd.

- **Opportunity!**
  - Investment in Leveraged Loans characterized with superior Risk/Return Characteristics.
  - High Quality High Yield Asset Pool with Max. Average Rating Score of 2200*.
  - Expected Maturity 9 years (Legal Maturity 12 years) callable after three years.
  - HypoVereinsbank AG Co-Investor, holding minimum 15% of Mezzanine Notes.

- **Mezzanine:**
  - Mezzanine Investors will have representation on Investment Advisory Committee determining investment strategy and portfolio composition.
  - Mezzanine Notes can also be issued as Schuldscheindarlehen.
  - Expected Cash Return 22% per annum

* Moody’s Senior Implied Rating
# WürttHyp 2000-1

(Aug. 2000)

<table>
<thead>
<tr>
<th>Class</th>
<th>Expected Rating</th>
<th>Volume</th>
<th>%</th>
<th>Coupon and spreadtalk</th>
<th>WAL*</th>
<th>Expected maturity with Call execution after 5 years</th>
<th>Expected maturity without Call execution, with Clean up call**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A+</td>
<td>S&amp;P / Fitch</td>
<td>EUR 100.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Super Senior</td>
<td></td>
<td>EUR 455.000.000</td>
<td>90,0 %</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class A</td>
<td>AAA/AAA</td>
<td>EUR 18.700.000</td>
<td>3,60 %</td>
<td>3m EUR +[26-27]</td>
<td>5y</td>
<td>5y</td>
<td>14.3y</td>
</tr>
<tr>
<td>Class B</td>
<td>AA/AA</td>
<td>EUR 14.800.000</td>
<td>2,93 %</td>
<td>3m EUR +[50-53]</td>
<td>5y</td>
<td>5y</td>
<td>14.3y</td>
</tr>
<tr>
<td>Class C</td>
<td>A/A</td>
<td>EUR 6.600.000</td>
<td>1,30 %</td>
<td>3m EUR +[70-75]</td>
<td>5y</td>
<td>5y</td>
<td>14.3y</td>
</tr>
<tr>
<td>Class D</td>
<td>BBB/BBB</td>
<td>EUR 5.000.000</td>
<td>1,00 %</td>
<td>3m EUR +[130-145]</td>
<td>5y</td>
<td>5y</td>
<td>14.3y</td>
</tr>
<tr>
<td>Class E</td>
<td>privately rated</td>
<td>EUR 6.000.000</td>
<td>1,17 %</td>
<td>3m EUR +[•]</td>
<td>5y</td>
<td>5y</td>
<td>14.3y</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EUR 506.200.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* legal final maturity march 2041  
** with 12.5% CPR

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WürttHyp - The Structure

<table>
<thead>
<tr>
<th>A+</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Super Senior Swap</strong></td>
</tr>
<tr>
<td><strong>A (AAA / AAA)</strong></td>
</tr>
<tr>
<td><strong>B (AA / AA)</strong></td>
</tr>
<tr>
<td><strong>C (A / A)</strong></td>
</tr>
<tr>
<td><strong>D (BBB / BBB)</strong></td>
</tr>
<tr>
<td><strong>E (privately rated)</strong></td>
</tr>
</tbody>
</table>

Credit Default Swap

Premium

Protection

Senior Notes

Proceeds

Subordinated Notes

Proceeds

Equity Tranche with interest participation

OECD Bank

Investors

January 2001 - page 48
WürttHyp - Relative Value

- Underlying:
  - mortgages from Wuertembergische Hypothekenbank
  - Portfolio highly diversified
  - on region (Bundesländer)
  - on property type

- only 1st lien mortgages (100%)

- “Soft Bullet” structure = no prepayments

- Call will be executed, because issuance is getting more expensive already shortly after launch due to sequential prepayment
## Promise-A-2000-1: Deal Info

<table>
<thead>
<tr>
<th><strong>Issuer</strong></th>
<th>Promise-A-2000-1 plc, Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Originators</strong></td>
<td>HypoVereinsbank &amp; Vereins- und Westbank</td>
</tr>
<tr>
<td><strong>Servicer</strong></td>
<td>HypoVereinsbank</td>
</tr>
<tr>
<td><strong>Issue Type</strong></td>
<td>Synthetic CLO: 85.3% Super Senior Tranche plus funded AAA-Notes</td>
</tr>
<tr>
<td><strong>Coupon</strong></td>
<td>3-Months Euribor + Spread, first coupon May 2001, act/360, payable February, May, August, November, rolldates 28</td>
</tr>
<tr>
<td><strong>Expected Maturity</strong></td>
<td>28(^{th}) February 2009, soft bullet</td>
</tr>
<tr>
<td><strong>Final Legal Maturity</strong></td>
<td>28(^{th}) February 2011</td>
</tr>
<tr>
<td><strong>Options</strong></td>
<td>The issue can be redeemed on any Interest Payment Date on or after year 5</td>
</tr>
<tr>
<td><strong>Listing</strong></td>
<td>Luxembourg</td>
</tr>
<tr>
<td><strong>Denomination</strong></td>
<td>100,000 EUR</td>
</tr>
<tr>
<td><strong>Lead Manager</strong></td>
<td>HypoVereinsbank</td>
</tr>
</tbody>
</table>
**Promise-A-2000-1: Tranching**

<table>
<thead>
<tr>
<th>Class</th>
<th>Expected Rating Moody’s / Fitch</th>
<th>Volume</th>
<th>%</th>
<th>Coupon and spreads</th>
<th>WAL* (expected maturity 02/2009)</th>
<th>Credit Enhancement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Super Senior</td>
<td></td>
<td>EUR 853.000.000</td>
<td>85,3 %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class A Aaa/AAA</td>
<td></td>
<td>EUR 40.000.000</td>
<td>4,0 %</td>
<td>3m EUR + 32</td>
<td>8.2y</td>
<td>10,7%</td>
</tr>
<tr>
<td>Class B Aa2/AA</td>
<td></td>
<td>EUR 24.000.000</td>
<td>2,4 %</td>
<td>3m EUR + 50</td>
<td>8.2y</td>
<td>8,3%</td>
</tr>
<tr>
<td>Class C A2/A</td>
<td></td>
<td>EUR 16.000.000</td>
<td>1,6 %</td>
<td>3m EUR + 70</td>
<td>8.2y</td>
<td>6,7%</td>
</tr>
<tr>
<td>Class D Baa2/BBB</td>
<td></td>
<td>EUR 15.000.000</td>
<td>1,5 %</td>
<td>3m EUR + 145</td>
<td>8.2y</td>
<td>5,2%</td>
</tr>
<tr>
<td>Class E Ba2/BB</td>
<td></td>
<td>EUR 11.000.000</td>
<td>1,1 %</td>
<td>3m EUR + 370</td>
<td>8.2y</td>
<td>4,1%</td>
</tr>
<tr>
<td>Class F n.r./B-</td>
<td></td>
<td>EUR 15.000.000</td>
<td>1,5 %</td>
<td>Retained by HVB</td>
<td>8.2y</td>
<td>2.6%</td>
</tr>
<tr>
<td>Class G n.r.</td>
<td></td>
<td>EUR 26.000.000</td>
<td>2,6 %</td>
<td>Retained by HVB</td>
<td>8.2y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>EUR 1.000.000.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*legal final maturity February 2011*
Promise-A-2000-1: Structure

HVB

KFW

Super Senior Credit Default Swap

OECD Bank

Promise-A-2000-1 plc (Ireland)

KFW-MTNs Aaa/AAA (Collateral)

Mittelstand loans HVB and VUW

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Promise-A-2000-1: Initial Reference Pool

- Size: 1,000,000,000 EUR with 1103 loans in EUR or DEM (WAL of loans 3.5y)
- Origination and Servicing according to HVB’s Loan Origination, Administration and Collection Procedures
- German Law
- Revolving Portfolio:
  - New Loans added quarterly
  - Early amortization triggers, cease revolving and begin amortization of portfolio
  - regional diversified (Bavaria 44%, NRW 11%, rest 7% or lower)
- Average Loan Size: 906,618 EUR, Moody’s Diversity Score: 98
- Internal weighted average rating: 3.68 (Rating score 1-10, only class 1-6 included)
- HVB & VuW originated loans under KfW, DtA and LfA programs
  initial portfolio:
  - 47.4% KfW
  - 28.3% DtA
  - 15.8% LfA