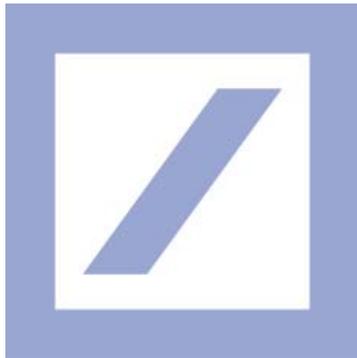
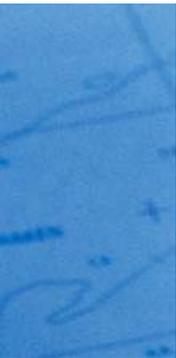


# The US sub-prime crisis and its implications

Dr. Josef Ackermann



12. Handelsblatt Jahrestagung  
Frankfurt, 4<sup>th</sup> September 2007





# Agenda

**1** What has happened ?

**2** What caused it ?

**3** What can we learn ?

**4** What are the implications for the market ?

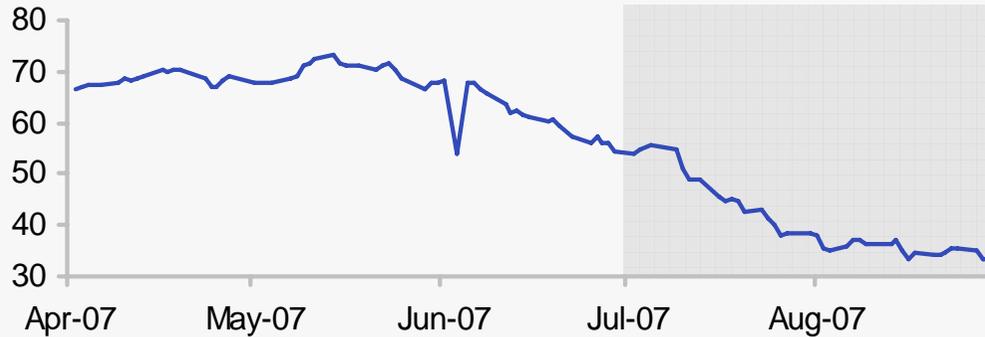
**5** What is the impact on Deutsche Bank ?



# US sub-prime crisis causes market turbulences

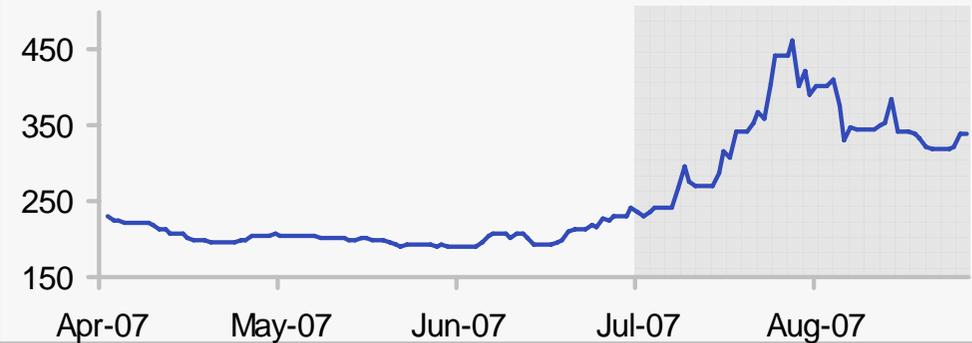
## US sub-prime crisis

US sub-prime securitisation price index<sup>(1)</sup>



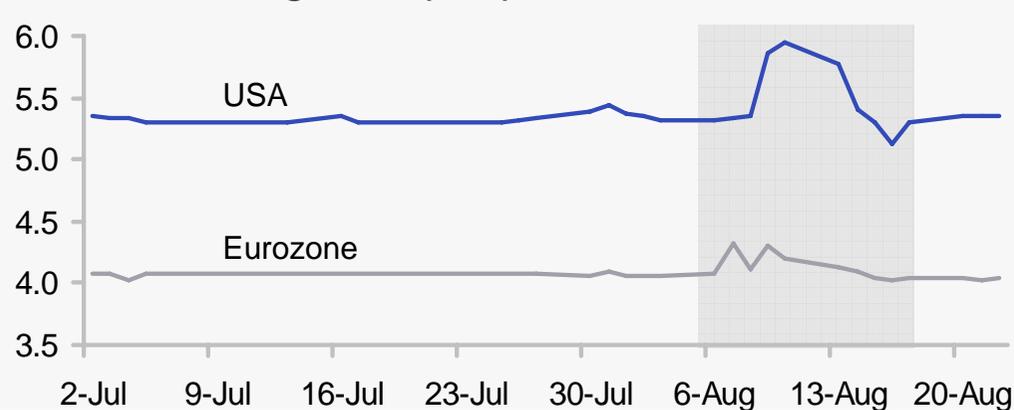
## Contagion into global credit, ...

Credit risk index<sup>(2)</sup>



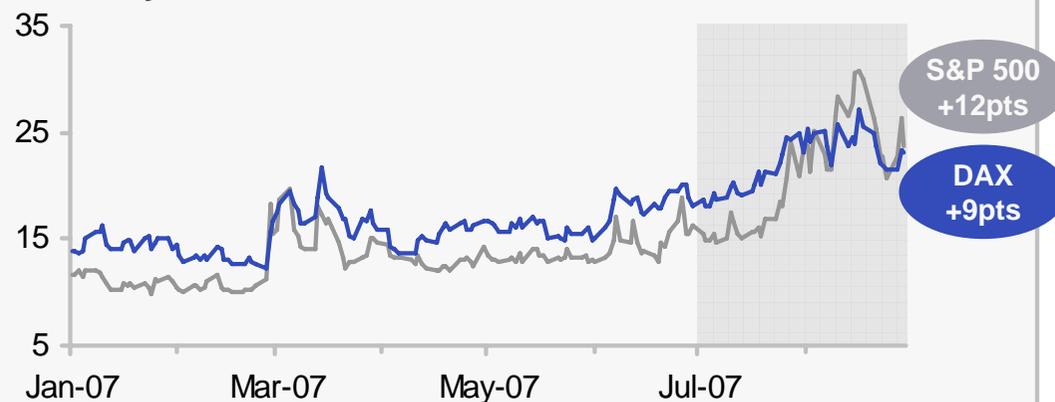
## ... money market ...

Interbank overnight rate (in %)<sup>(4)</sup>



## ... and equity markets

Volatility index<sup>(3)</sup>



(1) ABX Index (for sub-prime MBS with BBB rating); data as of 29.08.2007

(2) Itraxx Crossover: Index of 45 sub-investment grade rated CDS; data as of 29.08.2007

(3) CBOE Index Options Volatility: VIX – S&P 500 ; VDAX – DAX; data as of 29.08.2007 (4) LIBOR

Source: Datastream, Global Insight, Thomson Financial, British Bankers Association, Deutsche Bank





## The origins of the recent market turbulences

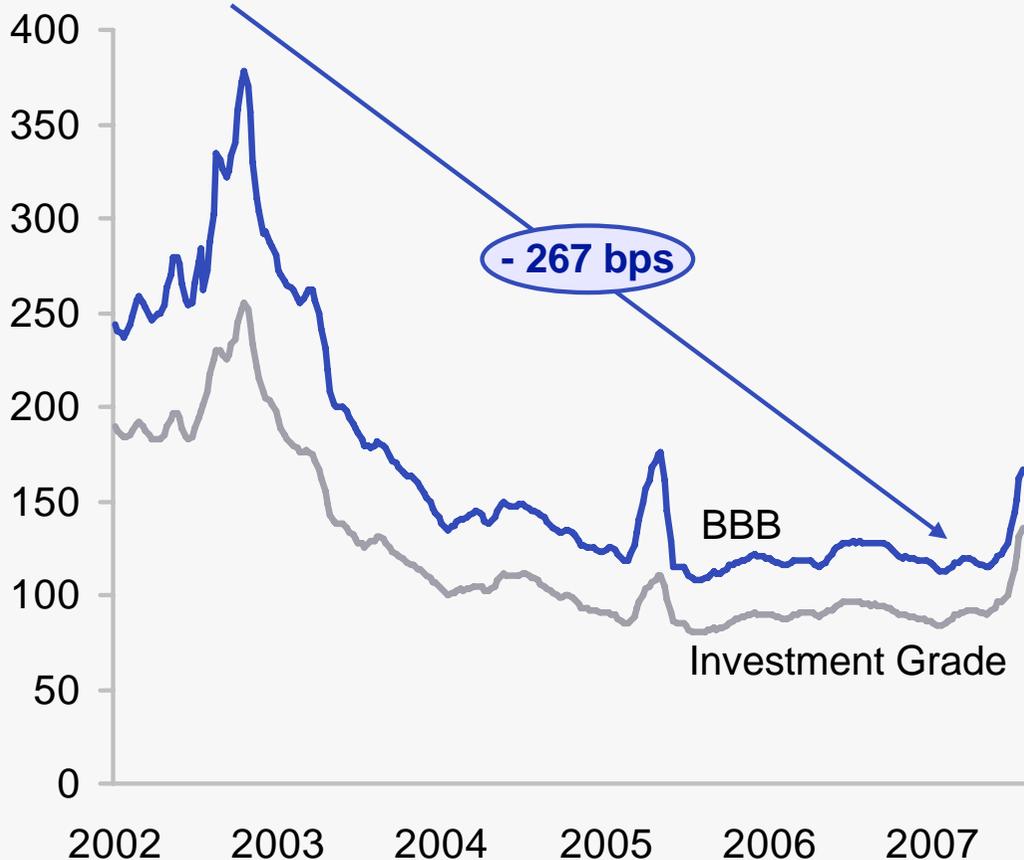
- Mis-pricing of credit risk
- Limited understanding of risk dispersal / amount of leverage
- Loss of trust and increasing nervousness
- Liquidity squeeze in money markets; flight to quality / less complex assets
- Technical sales triggered by redemptions

# Mis-pricing of credit risk



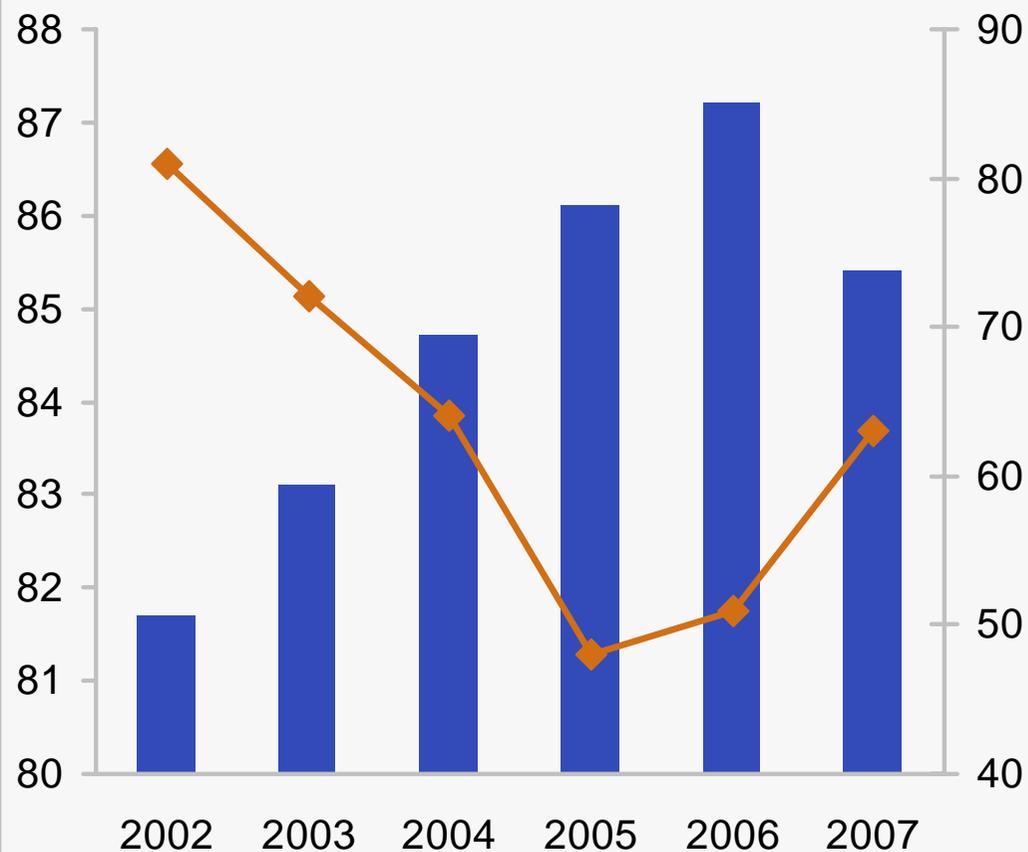
## Tightening spreads in the credit markets ...

US credit spreads<sup>(1)</sup> (in bps)



## ... and increasing loan-to-value ratios and declining lending standards in US sub-prime market<sup>(2)</sup>

■ Loan-to-value (lhs)      ◆ Lending standards (rhs)



(1) Risk premia over US Treasuries; data as of 24.08.2007 (2) "Originator underwriting matrix" used as lending standards proxy; score represents a composite of loan underwriting standards employed by loan originator; as of year-end and as of first quarter 2007

Source: Bloomberg, DB Global Markets Research, Datastream, Inside Mortgage

## Loss of trust and increasing nervousness

“... franchise was largely destroyed ..., by **undermining the confidence of ... business partners.**”  
*(broker report, 27.03.07)*

“Recent developments in the US sub-prime and other credit markets may trigger additional heavy losses in 2H 2007. **We remain cautious.**”  
*(broker report, 23.08.07)*

“... **shocked the market** with the news that three of its **asset-backed securities funds** ... were temporarily frozen”  
*(press report, 10.08.07)*

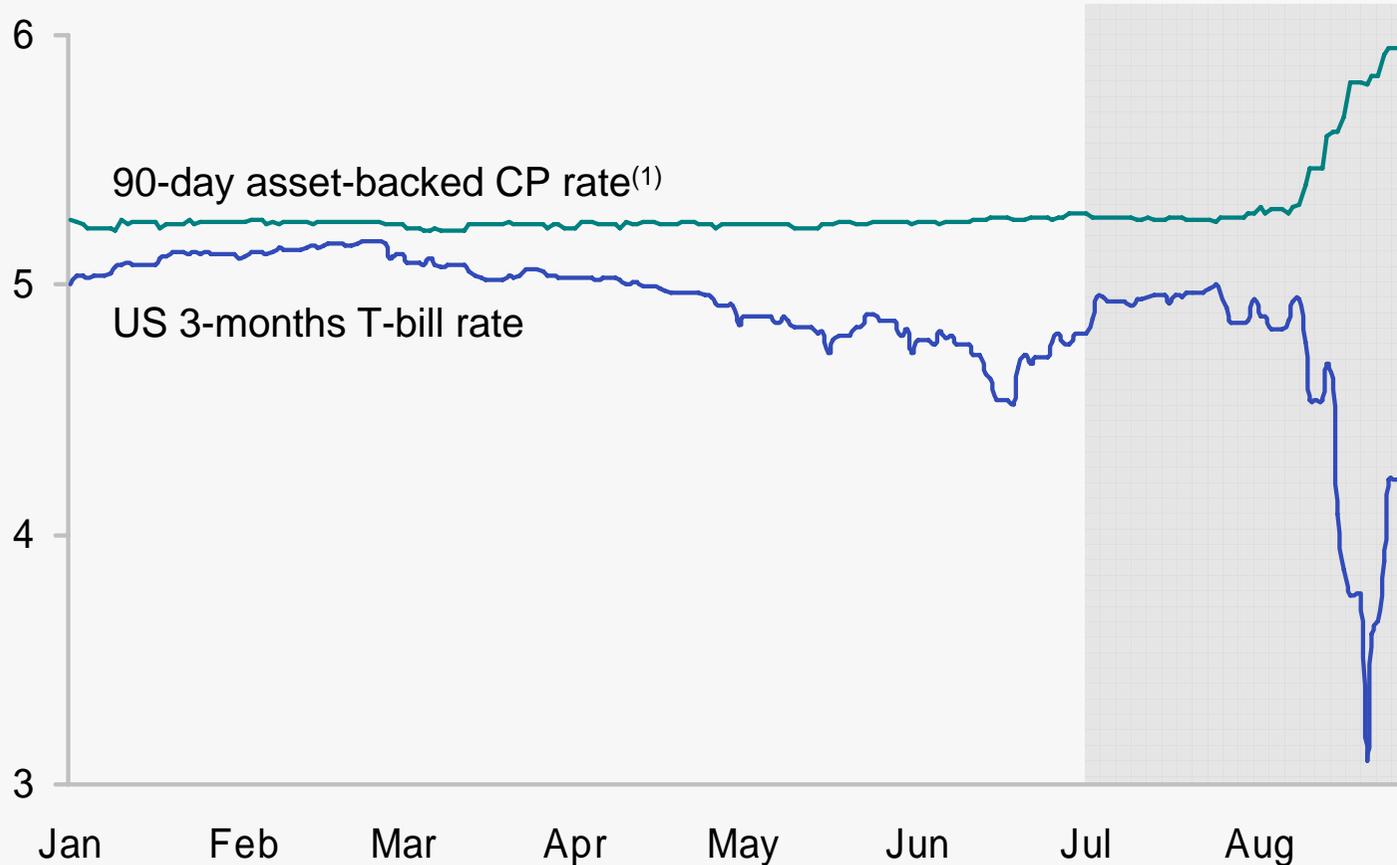
“This is just the **tip of the iceberg**”  
*(market observer, 21.08.07)*



# Liquidity squeeze in money markets as a consequence of technical sales and flight to quality / less complex assets

## Money market rate movements

Money market interest rate 2007, in %



Technical sales by institutional investors (primarily hedge funds); exits from structured assets

Flight to quality / less complex assets; banks hoard liquidity

(1) US ABCP (A1/P1), data as of 28.08.2007

Source: Datastream

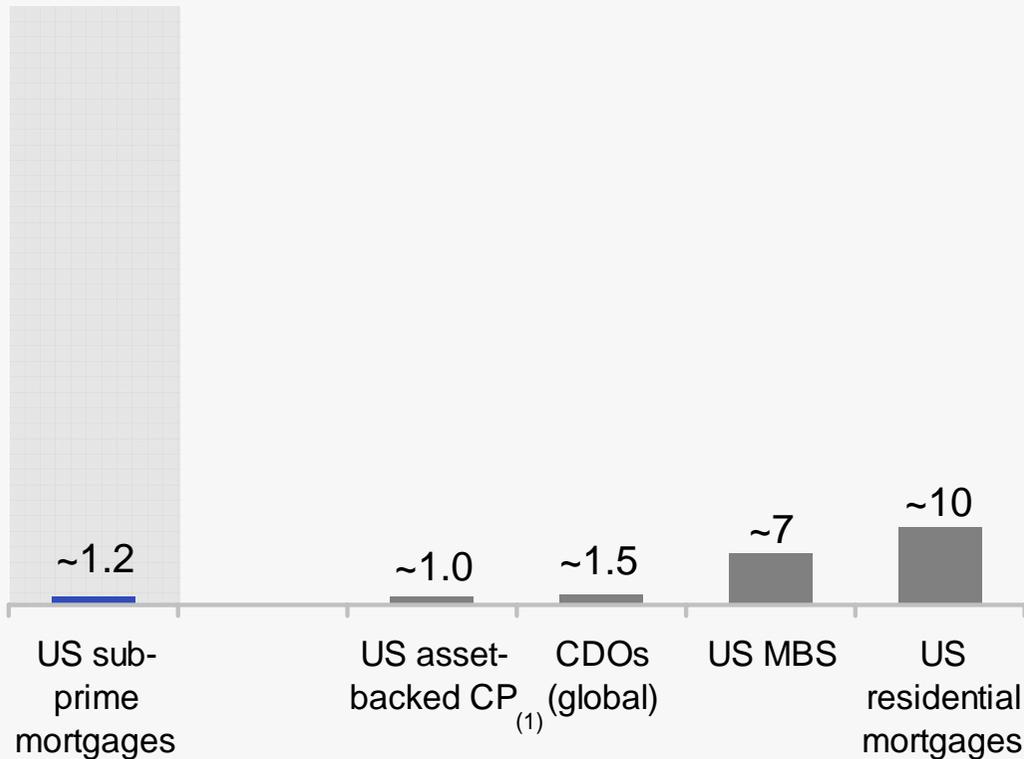
## Lessons learned

- Improving transparency around risk dispersal
- Greater focus on risk management
- Strengthening of liquidity management
- Coordinated action by central banks
- Greater vigilance by regulators
- Communication by market participants

# Sub-prime risks are manageable

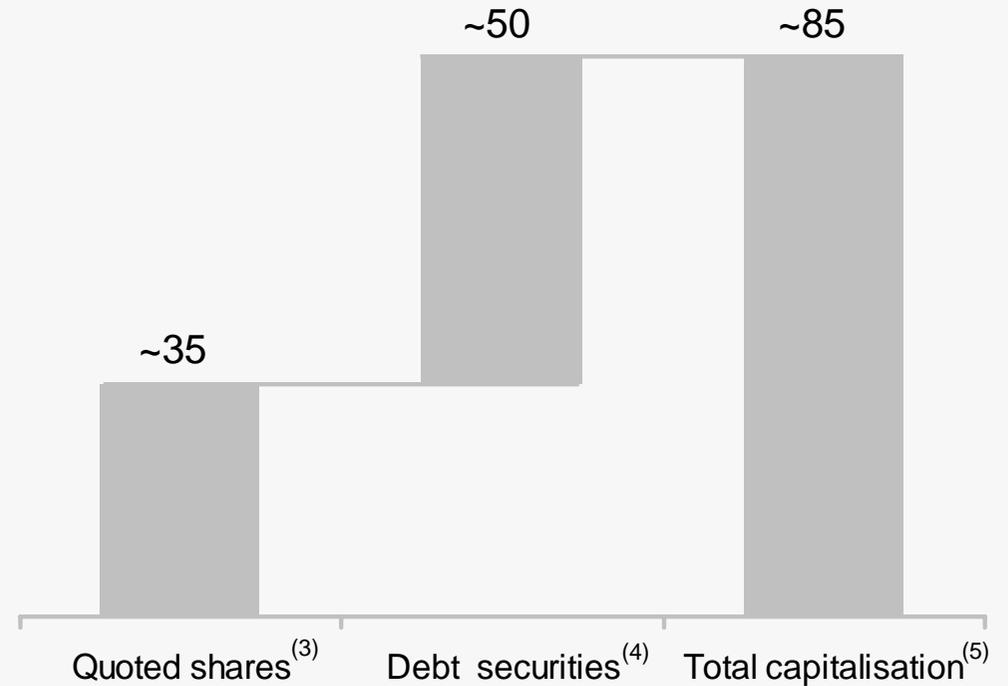
## Sub-prime crisis is manageable ...

Outstanding volume (in USD tn)



## ... in context of the major capital markets

Capitalisation (in USD tn)<sup>(2)</sup>



(1) As of 22.08.2007 (2) EU 25, Japan, USA; data as of 31.12.2006; all values translated at year-end FX rates (3) Total outstanding amount of quoted shares at market value  
 (4) In nominal value; Outstanding volume as of 31.12.2005 (5) Excluding derivatives

Source: ECB, Federal Reserve, Deutsche Bank

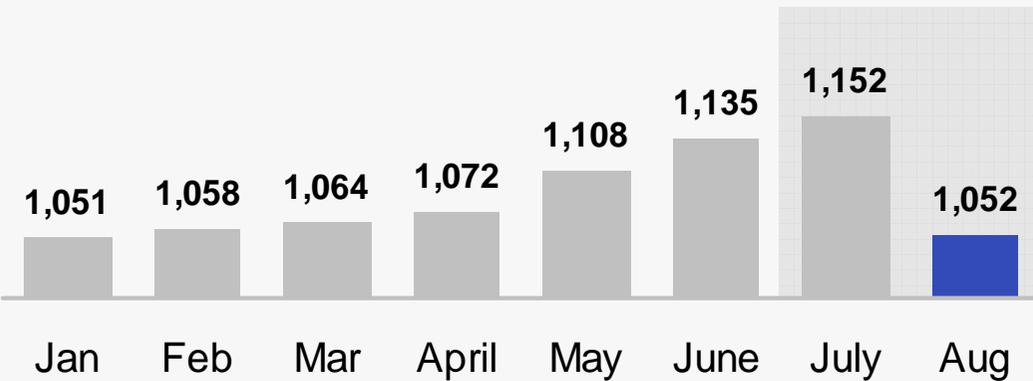
## Outlook

- Work-out of the sub-prime crisis in the USA
- Gradual stabilisation of the money and credit markets
- Declining consumer confidence in the USA
- Slight decline in global growth rates
- German economy on growth course

# Environment for structured products and leveraged lending remains challenging

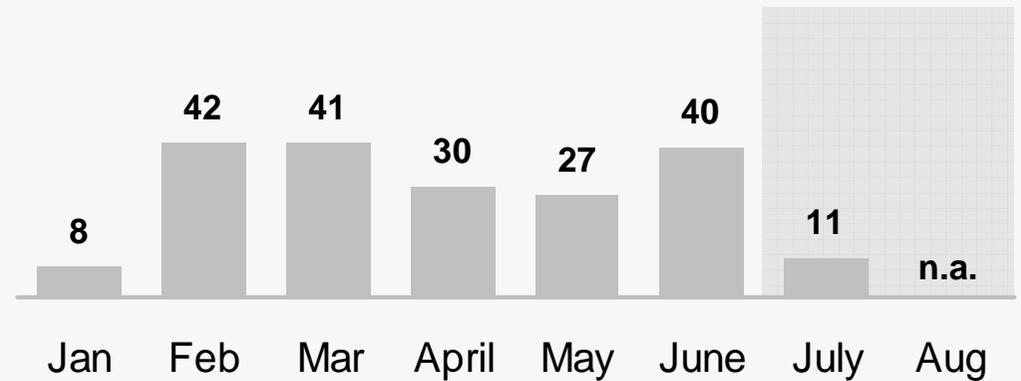
US asset-backed CP market

Outstanding volume 2007 (in USD bn)



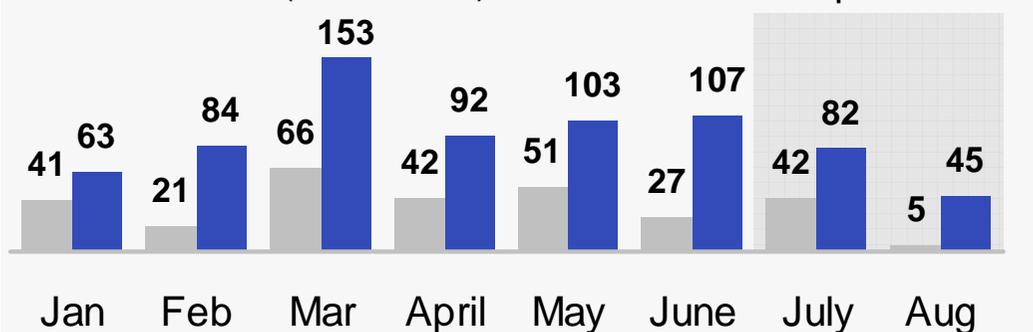
US market for CDO issuance

Monthly issuance 2007 (in USD bn)



Leveraged loan underwriting

Volumes 2007 (in USD bn)





## Deutsche Bank exposures

### US sub-prime

- DB is not exposed to further deterioration in US sub-prime mortgages across its books
- Exposure to US mortgage originators tightly managed and largely hedged

### ABCP Conduits

- Total assets in DB-sponsored conduits of EUR 32 bn
- Substantially all of which consolidated on balance sheet
- The purpose of DB-sponsored conduits is to provide clients and the bank with cheaper funding
- DB-sponsored conduits include assets sourced by DB such as credit card receivables, auto loans/student loans, mortgages, and mortgage backed securities
- CP investors in DB-sponsored conduits have no exposure to US sub-prime

### Hedge Funds

- High priority client segment
- DB does not lend unsecured to hedge funds
- Exposures are fully collateralized, margin calls are being met
- Types of acceptable collateral governed by strict policies
- Net exposure is marked to market and collateral is called on a daily basis

### Leveraged Finance

- Pipeline of sponsor loans: EUR 29 bn
- In addition: equity bridges of EUR 750 m
- High credit quality of pipeline





## Cautionary statements

This presentation also contains forward-looking statements. Forward-looking statements are statements that are not historical facts; they include statements about our beliefs and expectations and the assumptions underlying them. These statements are based on plans, estimates and projections as they are currently available to the management of Deutsche Bank. Forward-looking statements therefore speak only as of the date they are made, and we undertake no obligation to update publicly any of them in light of new information or future events.

By their very nature, forward-looking statements involve risks and uncertainties. A number of important factors could therefore cause actual results to differ materially from those contained in any forward-looking statement. Such factors include the conditions in the financial markets in Germany, in Europe, in the United States and elsewhere from which we derive a substantial portion of our trading revenues, potential defaults of borrowers or trading counterparties, the implementation of our management agenda, the reliability of our risk management policies, procedures and methods, and other risks referenced in our filings with the U.S. Securities and Exchange Commission. Such factors are described in detail in our SEC Form 20-F of 27 March 2007 on pages 9 through 15 under the heading "Risk Factors." Copies of this document are readily available upon request or can be downloaded from [www.deutsche-bank.com/ir](http://www.deutsche-bank.com/ir).