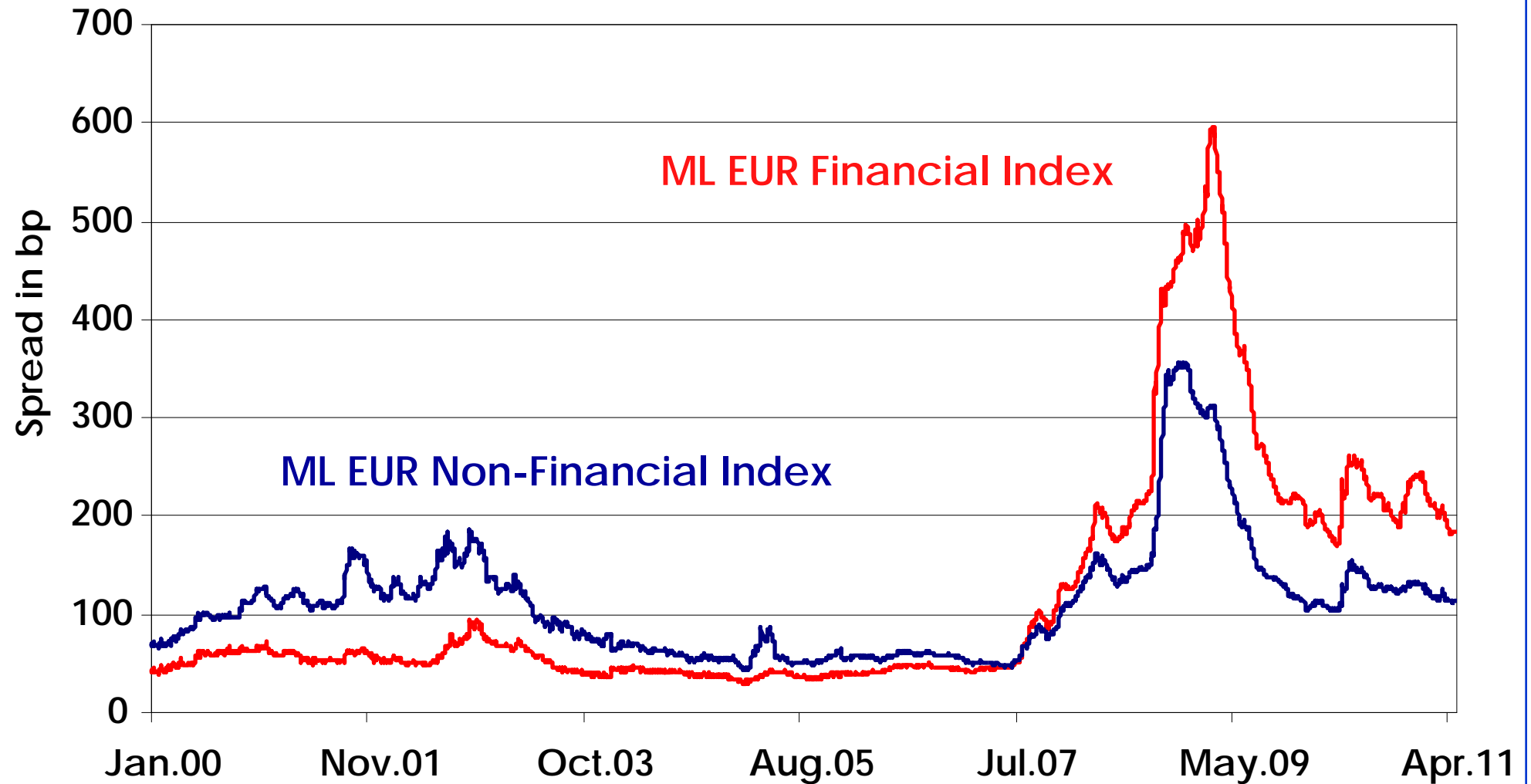


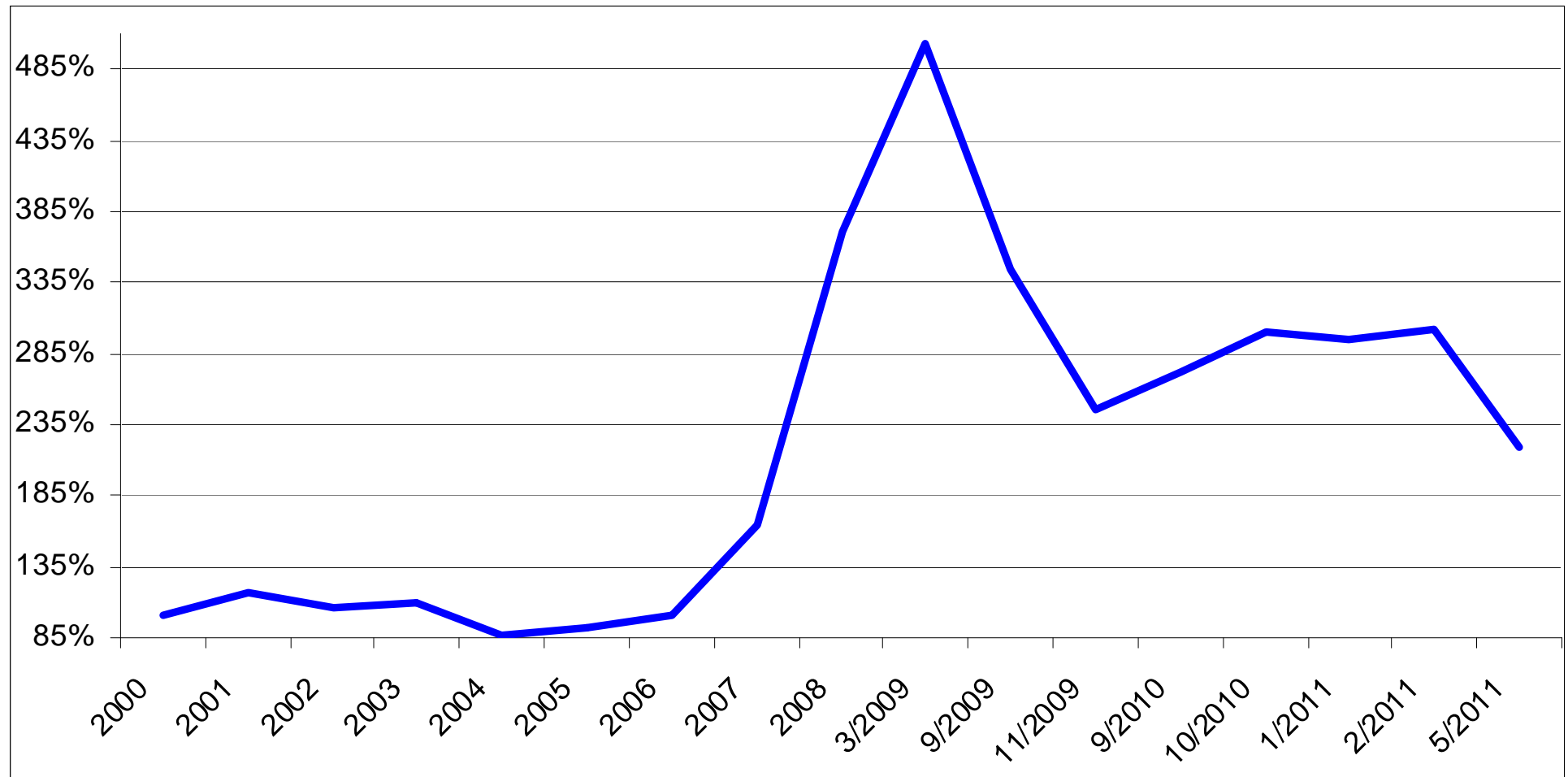
„Basel III“ and its consequences

Bondspreads 5/2011



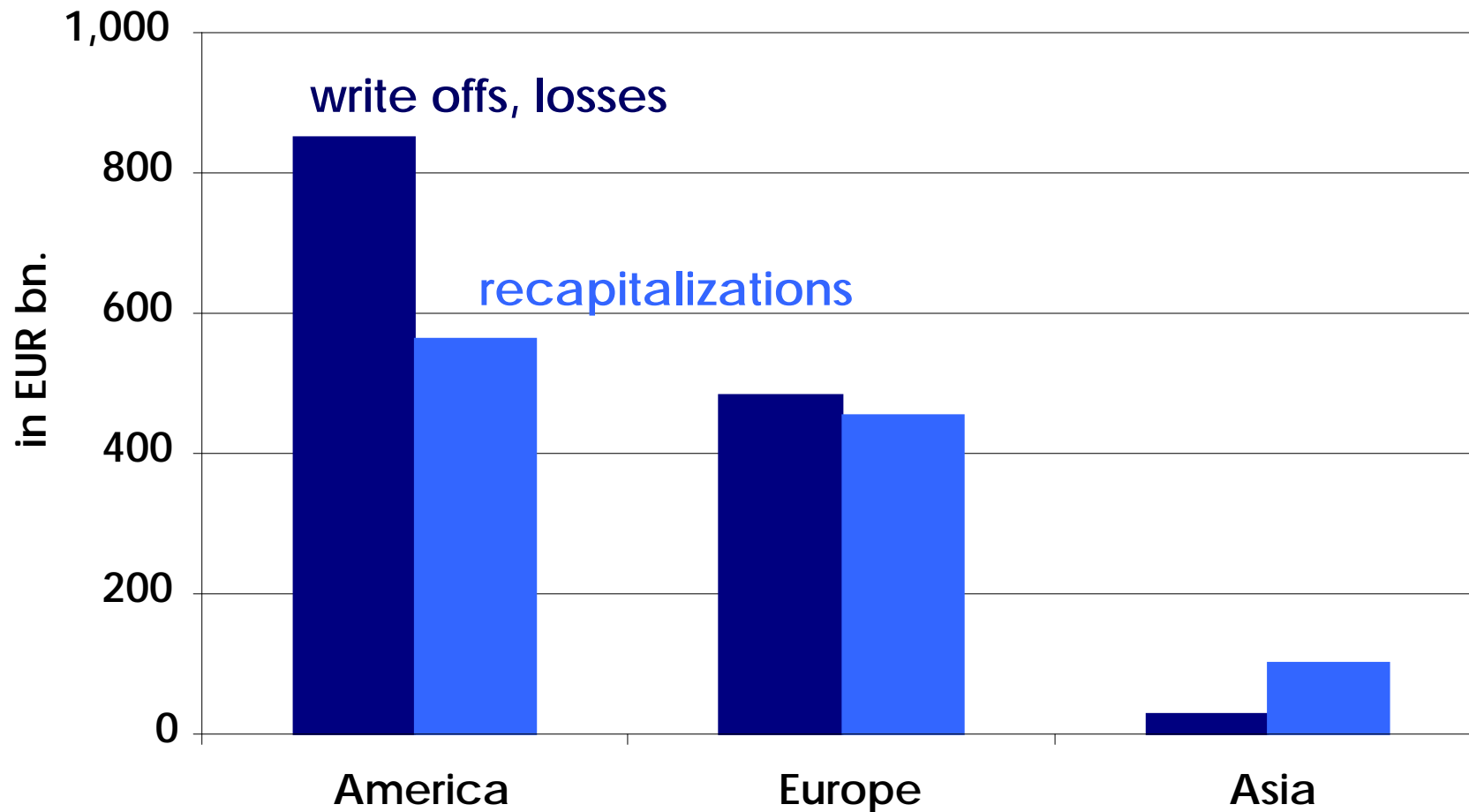
Source: Bloomberg, Raiffeisen RESEARCH

Cost curve for good credit-worthiness 3 Y



- Many countries are heavily indebted
- Many banks are still weakened
- The crisis is not over
- The necessary deleveraging of banks, private households and countries make a strong and self-sustaining recovery difficult (Japan Syndrome)
- The probability of a credit crunch is still high
- Banks were able to raise a lot of new capital but still need more

Losses and recapitalizations (5/11)

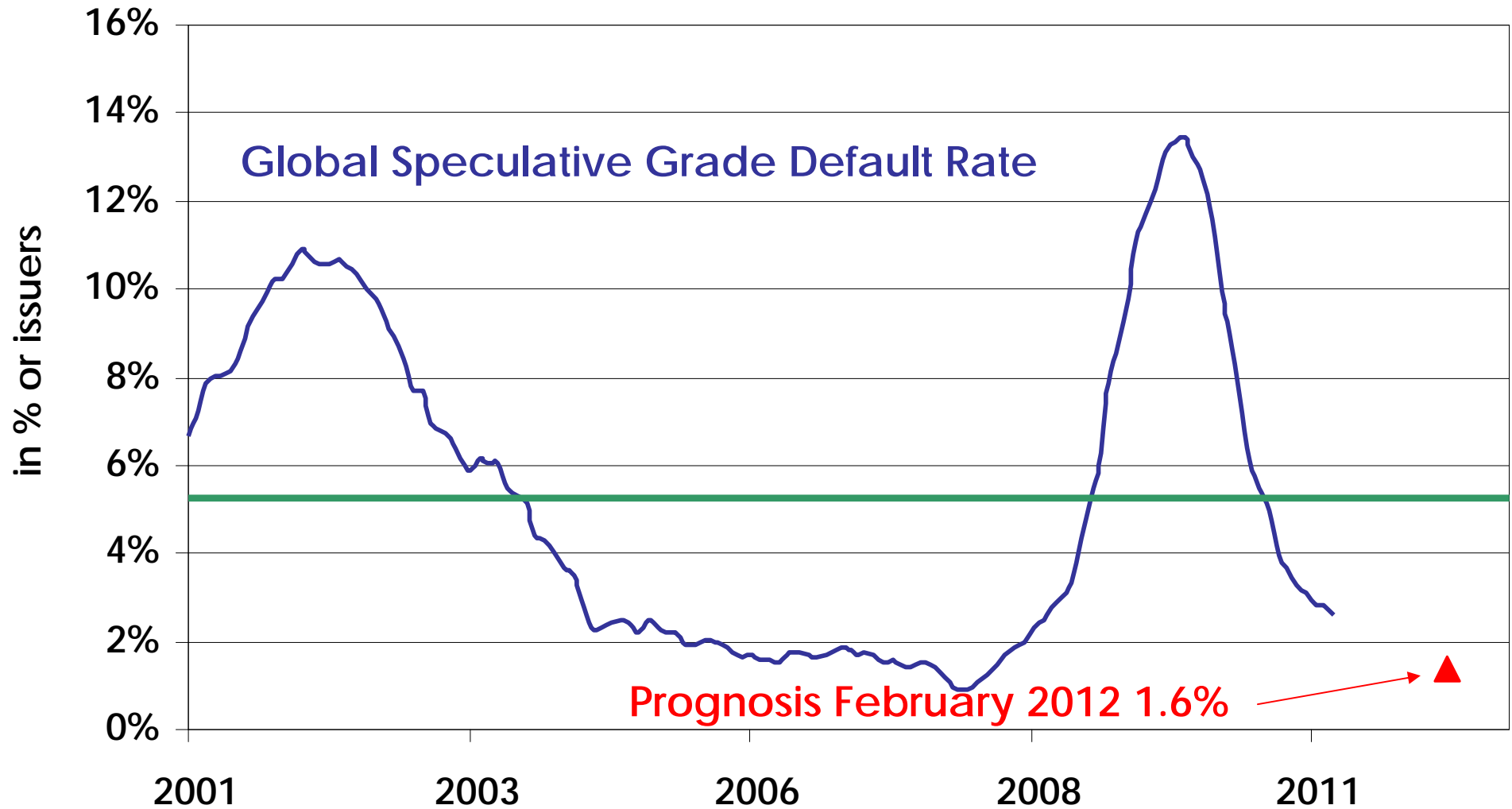


* Worldwide since start of the crisis EUR 1.400 bn. (write offs, losses) vs. EUR 1.100 bn. (recapitalizations)

Source: Bloomberg, Raiffeisen RESEARCH – IMF expects further EUR 340 bn. For losses only

- Many countries are heavily indebted
- Many banks are still weakened
- The crisis is not over
- The necessary deleveraging of banks, private households and countries make a strong and self-sustaining recovery (Japan Syndrome)
- The probability of a credit crunch is still high
- Banks were able to raise a lot of new capital but still need more
- The peak in credit losses is behind us

Corporate Bonds Moody's Default Rates



Source: Bloomberg, Raiffeisen RESEARCH

- The crisis is perceived as a transfer of losses from banks (and their stakeholders) to the taxpayer - with high moral hazards for the future
- The costs of the crisis up to now are estimated at €11.000 bn. (World GDP 2009: €45.000 bn.)
- The lack of confidence towards and between banks is still there
- The supervisory agencies want to show competence.....

...by creating tons of new rules – fraught with compromises, not always well thought through

“Basel III” – what happened

- Some good, some highly theoretical concepts
- USA and Europe are not working together well
- „level playing field“ killer phrase
- „Basel III“ is a mix of local legislature, IFRS, US GAAP and Basel II
- A lot of reasonable (and unreasonable) rules have been or are being renegotiated (retention in syndications, liquidity requirements, approach to bonuses, provisioning, capital requirements for trading book, leverage ratio, minority interest....)

“Basel III”: The approach

- Improvement of risk management
- More real responsibility for the rating agencies
- Stricter rules for liquidity management
- More obstacles for creative accounting
- First steps toward a bonus regime which incentivizes medium term thinking
- Reduction of the procyclicality of Basel II
- More (USA) or rather less (EUROPE) market value
- Approaches concerning „too big to fail“

- What's new?:
 - Improvement of risk management
 - „More“ capital
 - „better“ capital
 - Stress tests

- Improvement of risk management
 - Banks have to understand the structured products, they buy
 - No full sale of originated risk
 - retention 5%, in Germany 10% (starting 2012)
 - stricter rules for liquidity management (see later)
 - Higher risk weights in the trading book (see later)
 - More conservative loan loss provisioning (see later)

- „More“ capital
 - More to begin with
 - Plus a capital conservation buffer
 - Plus a countercyclical buffer
 - Result: 7% - 9,5%!! -> this is no real change in itself
 - Stricter rules for systemic relevant banks
 - Bail in bonds become important
 - Bail in bonds are bonds, which will be written down or converted to equity under predefined conditions (e.g. core capital ratio reaches a certain threshold). First issuer was Lloyds Bank 11/2009, in the meantime others like Rabobank, Intesa, Unicredit and CS followed -> this is a reaction to the total failure of tier 2 capital!!
 - No rules (yet?) for senior bonds and savings accounts

- „better“ capital -> core tier 1
 - Limited consideration of minority interest (see later)
 - More deductions for participations
 - No consideration of hybrid capital
 - No consideration of silent partners' interest in Corporations
 - No consideration of participation capital
- Long transition periods.....

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 - Limited consideration of minority interest (see later)
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- Long transition periods.....
-but will the markets accept them??

- Stress tests
 - Are conducted in EUROPE, USA and GB
 - Assumptions have been heavily criticized
 - On the positive side banks are and have been stress tested on the basis of transparent assumptions. This allows analysts to “stress test” the stress tests.
 - BUT: The results of the last stress tests in EUROPE were quite positive....

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 - BUT: The results of the last stress tests in EUROPE were quite positive....
 -including the results for the Irish banks!!!
 - Stress tests are here to stay but their quality has to be significantly improved

Spain as an example

-such a rescue would be led by a state run restructuring fund, known as the Frob, which was set up in 2009 and has so far disbursed almost €12 billion to help ailing cajas. The Frob currently has an additional €7.5 billion at its disposal to inject in cajas, of which €3 billion are in the form of credit lines.
- Over the past year and under pressure from the government to cut costs and help bolster the weakest institutions, the cajas have taken part in a consolidation round that has cut their number toll from 45 to 17 and is still going on.
- 17 - Number of cajas remaining
- 45 - Number of cajas in January 2010
- €78bn - Size of the average caja in January 2011
- €28bn - Size of the average caja in early 2010

- “Reverse” stress tests
 - introduced last year by FSA (FSA was the first to introduce stress tests in 2008, followed by the US in 2009)
 - they require banks to identify potentially fatal events and then to work backward to find ways to revamp their businesses so they would be better prepared to withstand such shocks
 - Heavily opposed by British banks

Rating Agencies:

- „Rating agencies and wall street firms collaborated behind closed doors in rating these products“, said Attorney General Jerry Brown. (HB 18.9.2009)
- He stated that the rating agencies got paid 200% of what they got for rating other products
- For the first time a US court allowed an action to be filed against Standard&Poor's, Moody's and Morgan Stanley.
- Joseph Mason, Professor of Finance at the Drexel University, has analyzed collateralized debt obligations with a Moody's rating of "Baa". His findings: the PD of these obligations was 10 times higher than the PD of comparable corporate bonds (WSS 15.2.2009)

Rating Agencies: a conflict of interest

- Possible solutions
 - „objective“ rating agencies (e.g. national banks)
 - The ratings could be paid for by the investors and not by the issuers of debt

- Possible solutions
 - „objective“ rating agencies (e.g. national banks)
 - The ratings could be paid for by the investors and not by the issuers of debt (this was done in the 70ies now China Rating)
 - Rating agencies might become liable for damages resulting from wrong ratings (USA)
 - Why not take the banks' ratings?
- Investors start to realize that they cannot fully rely on external ratings

- Liquidity
 - Creation of international standards for managing liquidity
 - Explicit rules how to handle liquidity gaps
 - LCR: should ensure short-term liquidity in a stress scenario – time to wall 30 days
 - NSFR: has the goal to ensure a reliable source of funding during a stress scenario of one year
 - Banks have to improve their liquidity management
 - The requirements for liquidity reporting increase significantly
 - Liquidity gapping (and the profits thereof) will decrease

- Stricter supervision of accounting for „dependent“ SPVs
- The creation of capital via SPVs has led to new rules concerning the recognition of minority interests

- Principles:
 - More medium term oriented
 - claw backs are possible
 - Bail-in bonds as bonus?

- approaches:
 - US want to increase transparency
 - EUROPE: banks pay out only part of the bonus immediately. The rest is to be paid over 3 – 5 years, to motivate managers to think medium term.

- The inherent procyclicality of Basel II led to exaggerated credit growth in good times and to an extreme deleveraging during the crisis:
 - “During the most severe part of the crisis, the banking sector was forced by the market to reduce its leverage in a manner that amplified downward pressure on asset prices, further exacerbating losses, declines in bank capital, and contraction in credit availability.”
 - Handelsblatt 31.01.2011:
 - 2009 UBS sold its Brazilian investment bank Pactual 2009 for USD 2,5 bn. Now Pactual is valued around USD 10 bn.
 - Citibank sold its German business, UBS sold its US branches, Dexia had to sell its participation in Banque Cr dit du Nord and in its Slovenian subsidiary.
 - Commerzbank reduced its balance sheet volume by 22 percent, Lloyds and RBS have to shrink their balance sheet volume by up to 40%.

The problem of procyclicality

- What will be done:
 - countercyclical capital buffer
 - Leverage ratio
 - countercyclical provisioning
 - PDs “through the cycle”

The problem of procyclicality

- countercyclical capital buffer
 - Each Basel Committee member jurisdiction will ... make decisions on the size of the countercyclical capital buffer ... in periods of excess credit growth.
- BUT:
 - How to define excess credit growth
 - How will investors react when buffers are reduced?
 - Is a countercyclical capital buffer necessary in addition to countercyclical provisioning?
 - How often would a countercyclical capital buffer become relevant?

■ Leverage Ratio

- Is meant to constrain the build-up of leverage in the banking sector, helping avoid destabilizing deleveraging processes which can damage the broader financial system and the economy
- Is meant to reinforce the risk based requirements with a simple, non-risk based “backstop” measure.
- Capital measure: core tier 1 (CET1)
- Exposure includes off-balance sheet items such as liquidity facilities
- Long phase in period
- Starts with 3%

The problem of procyclicality

- Loan loss provisioning
 - Will become more forward looking - provisioning for expected losses will become mandatory

The problem of procyclicality

- During good times, banks have to set aside provisions for the expected losses that are embedded in expanding credit portfolios.
- The provisions made during those years are used to build up the so called statistical fund that might be depleted in bad times when the excesses of the last upturn appear in the form of impaired assets.
-

(Excerpt based on staff papers prepared for the IASB and FASB)

The problem of procyclicality

- Volatile PD
 - By taking into account more years PDs should become more stable

- Europe/IFRS :
 - Less market value, more amortized costs

- USA/FASB
 - More market value, less amortized costs
 - Goal: Even where a valuation at amortized costs is allowed market value has to be shown as well

Too big to fail, too big to be rescued

- Still an open topic
- Iceland und Ireland as examples
- CH, GB and USA seem to be most willing to address this problem

Too big to fail, too big to be rescued



- Approaches:
 - Living will
 - Intervention rights for authorities
 - Bank tax to spare taxpayers
 - Higher capital requirements for proprietary business
 - Separation of proprietary business from customer business
 - Additional capital buffers for systemic banks

- The existence of living wills will make it possible for supervisory authorities to quickly restructure – break up – take ownership of institutes which are in an crisis (example: HRE)

- Germany (HB 30.6.2010):
 - If necessary BaFin can initiate a financial restructuring of systemic banks. If necessary BaFin can suspend property rights
 - The supervisory authorities have the right to:
 - Decide on the form of restructuring
 - Break up an bank and create a good and a bad bank
 - decide on the form of recapitalization
 - The objective of the bank tax is to accrue sufficient funds for future restructurings **in advance**

- USA: Regulators have the right to liquidate a bank in the case of a crisis
 - the Fed has the mandate to impose stricter rules concerning capital, liquidity leverage, risk management and concentration risks as well as conducting stress tests and demanding living wills
 - the Fed may demand from systemic banks to segregate their proprietary business from the rest of their activities
 - the regulators may veto an acquisition or a merger or
 - impose limits on a business
- In the US the intention is to let banks pay for restructurings **after they have taken place**

Higher cap. requirements for prop. business



**Raiffeisen Bank
International**

- Reduce risk and profit

- GB: One option under consideration would separate, or ring fence, the deposit taking areas of the banks from the investment banking side. They will not be required to separate into independent companies, as happened in the United States in the Depression of the 1930s, but to operate as distinct subsidiaries with their own balance sheets belonging to a broader holding company.
- US: The Volcker-Rule limits proprietary business **for large banks:**
 - Investments in real estate funds, private equity funds and hedge funds must not exceed 3% of core capital after a phase in period of 7 years and more (for illiquid assets)
 - For example Goldman Sachs has to reduce these investments from \$15.4 bn. to \$2.1 bn (WSJE 28.6.2010)

Top 1000 World Banks 31.12.2009



....according to core capital

Ranking 2010	Bank	Country	Core Capital	Ranking 2009	Ranking 2008	Ranking 2007	Balance sheet	Ranking 2010
1	Bank of America Corp	USA	160.388	2	5	1	2.223.299	6
2	JP Morgan Chase & Co	USA	132.971	1	4	5	2.031.989	8
3	Citigroup	USA	127.034	3	2	2	1.856.646	10
4	Royal Bank of Scotland	UK	123.859	4	3	8	2.749.572	2
5	HSBC Holdings	UK	122.157	5	1	3	2.364.452	4
6	Wells Fargo & Co	USA	93.795	6	23	18	1.243.646	22
7	ICBC	CHN	91.111	8	8	7	1.725.938	11
8	BNP Paribas	FRA	90.648	14	11	11	2.964.983	1
9	Banco Santander	ESP	81.578	10	9	10	1.600.186	14
10	Barclays	UK	80.449	15	12	12	2.234.893	5
11	Mitsubishi UFJ Financial Group	JPN	77.218	7	6	6	2.025.830	9
12	Lloyds Banking Group	UK	77.034	48	na	na	1.664.919	13
13	Crédit Agricole Group	FRA	75.504	9	7	4	2.440.634	3
14	Bank of China	CHN	73.667	11	10	9	1.281.183	21
15	China Construction Bank	CHN	71.974	12	13	14	1.409.355	18
16	Goldman Sachs	USA	64.642	13	na	na	848.942	29
17	UniCredit	ITA	56.245	18	16	17	1.338.270	19

- USA:
 - “Goldman Sachs closing proprietary trading unit” (Bloomberg News 3.9.2010)
 - Bank of America might sell their proprietary business or reorganize it
 - Morgan Stanley will spin off its proprietary trading unit as an independent firm by the end of 2012 (Reuters 10.1.2011)
 - J.P. Morgan has decided to exit from all proprietary trading....(WSJ 1.9.2010)
 - Banks search for ways to circumvent the Volcker Rule (Standard 11.8.2010)

- The road to shadow banking: (Handelsblatt 27.01.2011):
 - „move your team to a different entity: Greg Lippmann, top trader of Deutsche Bank in New York moved to the Hedge-Funds "Libre Max", Citigroup's proprietary team under Andrew Hall will move to Occidental and continue its business there.
 - Spin off: Morgan Stanley considers to set up a new hedge fund in 2012 for its star trader Peter Muller and his team of 60 people. Presumably the bank will hold a minority interest only
- Result: the proprietary business goes on in a different set up.
- **In the US the liabilities of the shadow banks amount to UD\$ 15.300 bn. whereas the liabilities of the banks amount to US\$ 12.900 bn.**

Additional capital buffer for systemic banks



- What is a “systemic bank”???
- How much more capital?
- CH: 10% CT1 + 3% in T1 + 6% bail in bonds!!
- SWE: 10% CT1 + 3% in T1 + 2-3% in T2
- The label “systemic bank” -> a free ticket to carelessness?

- IIF paper 6/2010:
 - cumulative loss of growth for US, Euroland and Japan of 3,1% for 2011 – 2015
 - for US, Euroland and Japan 10 Mio. employees less
 - cumulative loss of growth for Euroland 4,3%
 - for Euroland 4,7 Mio. employees less
 - Assumption: Banks will be able to raise the capital needed
 - but it will increase costs
- This forecast has not been changed significantly until now because of the assumption that the market will not accept the long phase in time.

- The Basel Committee expected in summer 2010 for the next 4,5 years:
 - A cumulative loss of growth of 0,5 percent
 - A reduction of the volume of loans of 2 - 5 percent
 - in the next 4 years
 - **BUT:** the negative effects of higher capital requirements and stricter rules for liquidity management will be overcompensated by the positive effects on economic growth thanks to a more stable banking system

- The additional capital needs worldwide are estimated at € 1200 bn.
- Federal Association of German Banks: the first estimate of the additional capital needs of the 10 biggest German banks was €100 bn., quickly followed by an estimate of €50 bn. The €50 bn. can be translated into a loan volume of roughly €600 bn.
 - German Soffin mentioned needs of €200 bn.
 - German Bundesbank estimated €50 bn. (11/2010)
- For Austria the estimates run between €15 and €33 bn.

Basel III – a run on capital?

- Deutsche Bank raised €10 bn. In fall 2010, Commerzbank raises €11 bn. 2011
- Ubi Banca announced an offering of €1 bn. Intesa Sanpaolo wants €5 bn., Banco Monte dei Paschi di Siena plans to raise €2 bn. Unicredit is expected to follow suit.
- Denmark's largest bank, the Danske Bank, raised €2,6 bn.
- British banks like Barclays (> €9 bn.), HSBC (€14 bn.) raised capital already in 2008/2009
- Bail in capital raised by British, Dutch, Italian and Swiss banks
- General goal seems to be a minimum (core?) tier 1 ratio of 10% in the very near future

Basel III – the consequences

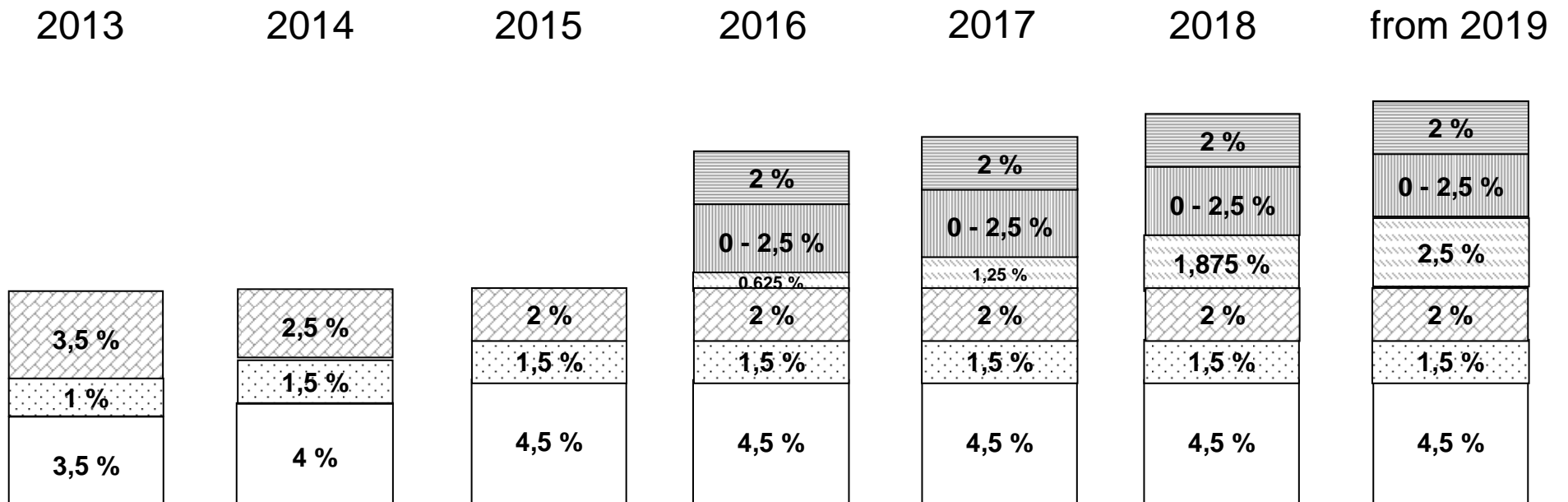
- Too many stakeholders (banks vs. regulatory authorities, USA vs. Europe, investment banks vs. commercial banks) got in the way of better rules
- The new rules do not differentiate between aggressive and conservative banks
- Basel III will increase the trust between banks in the medium term??
- Stress tests – if transparent - will remain important
- Liquidity will be managed more professionally in the future
- Procyclicality will be reduced
- The split banking system will not return?????

Basel III – the consequences

- liquidity costs, capital costs and risk costs will increase - but not significantly
- Profits from risk positions (proprietary trading, liquidity gapping, interest gapping) will decrease
- In the short run Basel III will make lending more difficult
- To acquire enough capital remains a challenge
- European banks will have to focus more on credit brokering
- The shakeout in the banking sector will continue
- Shadow banks (hedge funds, equity funds, property funds and other SPV) will increase in importance and might become the trigger for the next crisis.
 - **In the US the liabilities of the shadow banks amount to UD\$ 15.300 bn. whereas the liabilities of the banks amount to US\$ 12.900 bn.**

APPENDIX

Capital requirements (Basel Committee 12.09.2010)



CT1 + T1 + T2 + CCB	8 %	8 %	8 %	8,625 %	9,25 %	9,875 %	10,5 %
Own capital	8 %	8 %	8 %	13,125 %	13,75 %	14,375 %	15 %
Deductions	0 %	20 %	40 %	60 %	80 %	100 %	100 %

- Core Tier 1 (CT 1)
- Capital Conservation Buffer (CCB)
- Tier 1 (T 1)
- Countercyclical Buffer
- Tier 2 (T 2)
- Systemically important banks - surcharge