Challenges and experiences in AMA implementation:

Views from Aspiring Banks

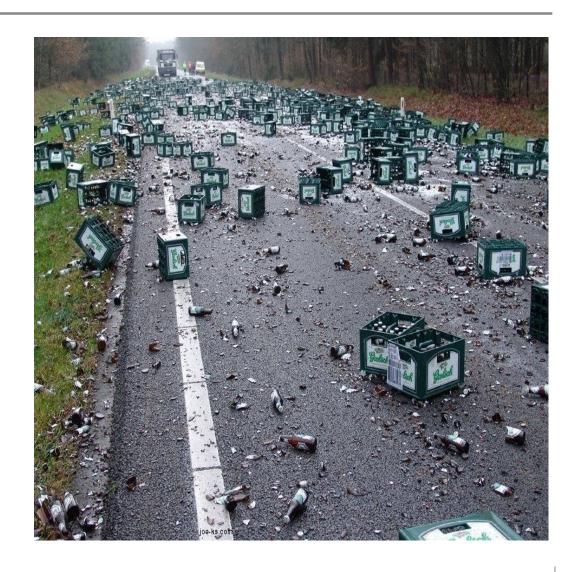
Boston, May 14, 2008

NOTE

All information presented here, as well as all comments discussed here, represent the view of the speaker and do not necessarily represent the policy or practices of ABN AMRO Bank

Topics for the aspiring banks

- 1. Is AMA achievable?
- 2. Is AMA desirable?
- 3. What is an acceptable AMA timeframe?



AMA requirements

A. Governance framework

- ✓ Set up of roles and responsibilities
- ✓ Set up of reporting / decision structure

B. Measurement framework

- ✓ Quantitative aspects (Internal and External Loss data)
- ✓ Qualitative measures (Scenarios, Internal Control Environment)
- ✓ Modelling

C. Validation framework

✓ Independence

D. Use test

Views of AMA and Operational Risk Management



A set of tools with a specific and well defined purpose



Ingredients no longer recognisable post process



A mathematical exact way to compute capital

Sample banks

The group of 10 sample banks is not intended to be representative. All banks have a retail division and some trading activities, asset management or brokerage. Geographically, they are based in:

Asia: Indonesia (2 banks), Taiwan, Kazachstan

Middle East: Qatar, Saudi Arabia, Egypt, UAE

South America: Bolivia, Brazil

Timeframe for AMA

The group of 10 sample banks have different AMA ambitions. The graph below shows the year by which the banks want to be in a position to apply for AMA.

Five banks have indicated they intend to apply for AMA.

NOTE: The five banks that will not apply for AMA, will all develop AMA-like standards for internal use.

2008 2009 2010 2011 2012 2013 2014

ME: 1 ME: 3

Asia: 3 Asia: 1

SA: 2

A. Governance Framework Timeline (1/2)

> Set up of Roles and Responsibilities

2008	2009	2010	2011	2012	2013	2014
2000	2009	2010	2011	2012	2013	2014

ME: 2 ME: 2

Asia: 3 Asia: 1

SA: 2

Issues (A = Acknowledged; H = Hidden):

✓ A: Setting up the appropriate board committee

✓ H: Keeping the risk staff fully occupied

A. Governance Framework Timeline (2/2)

> Set up of reporting / decision structure

2000	2000	2040	2044	2042	2042	2044
2008	2009	2010	2011	2012	2013	2014
				_		

ME: 1 ME: 3

Asia: 2 Asia: 2

SA: 1 SA: 1

- ✓ A: Risk committees deal only with Credit Risk and ALM, ORM not an item on the agenda
- ✓ H: Delays in implementation roll out (scheduled for Q2 2007, not yet operational in Q2 2008)

B. Measurement Framework Timeline (1/3)

Quantitative Aspects (Internal and External Loss data)

2008	2009	2010	2011	2012	2013	2014	
		ME: 1	ME: 1	ME: 2			
		Asia: 1	Asia: 1	Asia: 1	Asia: 1		
			SA: 1		SA: 1		

- ✓ A; Few internal losses (as low as 28 losses in 1 year)
- ✓ A: No severe losses (< 0.1‰ of profit) reported</p>
- ✓ A: No established regional loss database (pooled or commercially available)

B. Measurement Framework Timeline (2/3)

Qualitative Aspects (Scenarios and BCE)

2008	2009	2010	2011	2012	2013	2014	
	ME: 2	ME: 1	ME: 2				
	Asia: 2	Asia:	2				
	SA: 1	SA: 1					

- ✓ A: How to benchmark Scenarios
- ✓ H: BCE not measured consistently
- ✓ H: No authority / capability to develop scenarios

B. Measurement Framework Timeline (3/3)

Modelling

2008	2009	2010	2011	2012	2013	2014

ME: 3 ME: 1

Asia: 3 Asia: 1

SA: 1 SA: 1

- ✓ H: Modelling tracks without data
- ✓ A: Using externally developed models, requiring unavailable information and thwarting ORM efforts

C. Validation Framework Timeline (1/1)

2008	2009	2010	2011	2012	2013	2014
			MI	E: 1 ME	: 2	ME: 1
			As	sia: 1		Asia: 3
			SA	\: 1		SA: 1

- ✓ H: Validation is not on the agenda of all banks
- ✓ A: No independent function

D. Use test Timeline (1/1)



ME: 1 ME: 1 ME: 2

Asia: 1 Asia: 2 Asia: 1

SA: 1 SA: 1

- ✓ A: Less clarity on internal use for banks that will not apply
- ✓ H: ORM is suffering from renewed attention for credit risk, liquidity Risk

Pillar 3 example (sample banks)

The sample banks all report on Risk in an increasingly transparent way in their annual reports. Data related to the relative number of pages on Risk in the Annual report

	2000	2006	
Avg %	<1%	4%	
Minimum %	1%	2%	
Maximum %	3%	8%	

Topics for the aspiring banks

- 1. Is AMA achievable?Internally yes
- 2. Is AMA desirable?Very much so
- 3. What is an acceptable AMA timeframe? Two to Three years



Final Remarks on AMA for aspiring banks

- AMA is not an off-theshelf product
- Loss Data is never sufficient for small banks
- AMA does provide guidance and purpose for ORM, and is indispensable as a roadmap

