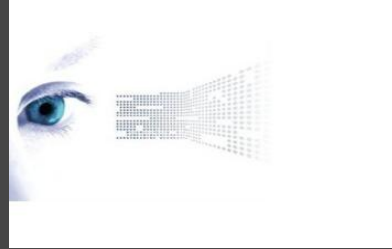


II. Bilgi Teknolojileri Yönetişim ve Denetim Konferansı



BTYD'2011

ANKARA



BASEL III & OPERASYONEL RİSKLER

Doç. Dr. C.Coşkun KÜÇÜKÖZMEN
İzmir Ekonomi Üniversitesi

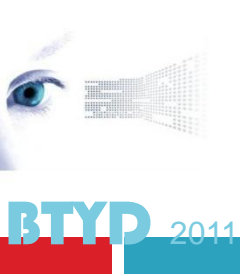
&

PRMIA Regional Director



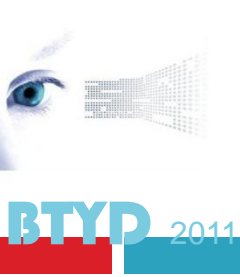
OpRisk Nedir?

- **BANKALARIN SERMAYE YETERLİLİĞİNİN ÖLÇÜLMESİNE VE DEĞERLENDİRİLMESİNE İLİŞKİN YÖNETMELİK TASLAĞI**
- **jj) Operasyonel risk:** Yetersiz veya başarısız iç süreçler, insanlar ve sistemlerden ya da harici olaylardan kaynaklanan ve yasal riski de kapsayan zarar etme olasılığını,
- **kk) Operasyonel riske esas tutar:** Sermaye yeterliliği standart oranının hesabında operasyonel risk nedeniyle maruz kalınabilecek zararlara karşı bulundurulması gereken **özkaynak** miktarının tespitinde dikkate alınacak tutarı,
- ... ifade eder.



OpRisk Hesabı...

- **Operasyonel riske esas tutar nasıl hesaplanır?**
- **MADDE 23- (1)** Operasyonel riske esas tutar, **temel gösterge yöntemi** veya **standart yöntem** ile hesaplanır. Standart yöntemin kullanılabilmesi için Kurumdan izin alınması zorunludur.
- **Temel gösterge yöntemi**
- **MADDE 24- (1)** Bankanın son üç yıl itibarıyla gerçekleşen yılsonu brüt gelir tutarlarının yüzde onbeşinin ortalamasının onikibuçuk ile çarpılması suretiyle bulunacak değer, operasyonel riske esas tutar olarak dikkate alınır.



OpRisk Hesabı...

- **Standart yöntem ve uygulama kriterleri**
- **MADDE 25- (1)** Standart yöntemde operasyonel riske esas tutar, yıllar itibariyle faaliyet kolları bazında bulunacak sermaye yükümlülüğü tutarları toplamının son üç yıllık ortalamasının oniki buçuk ile çarpılması suretiyle bulunur.



Basel & OpRisk

BTYP 2011

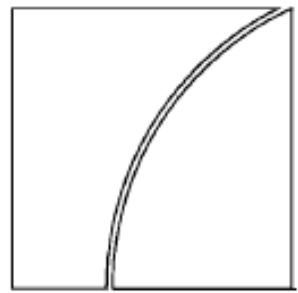
Basel Committee
on Banking Supervision

Consultative Document

Sound Practices for the Management and Supervision of Operational Risk

Issued for comment by 25 February 2011

December 2010





Basel & OpRisk

- Although operational risk management is still a relatively young risk discipline, a variety of practices have developed in several areas of internal governance, particularly in the governance structure used to manage operational risk.
- A bank's risk governance structure should be appropriate for its size and business complexity.
- The governance structure adopted by many banks relies on **three lines of defence** – **business line management**, **independent corporate operational risk function**, and **independent verification and validation**.
- The implementation of these three lines of defence varies depending on a bank's risk management approach and the flexibility provided by national supervisors. .



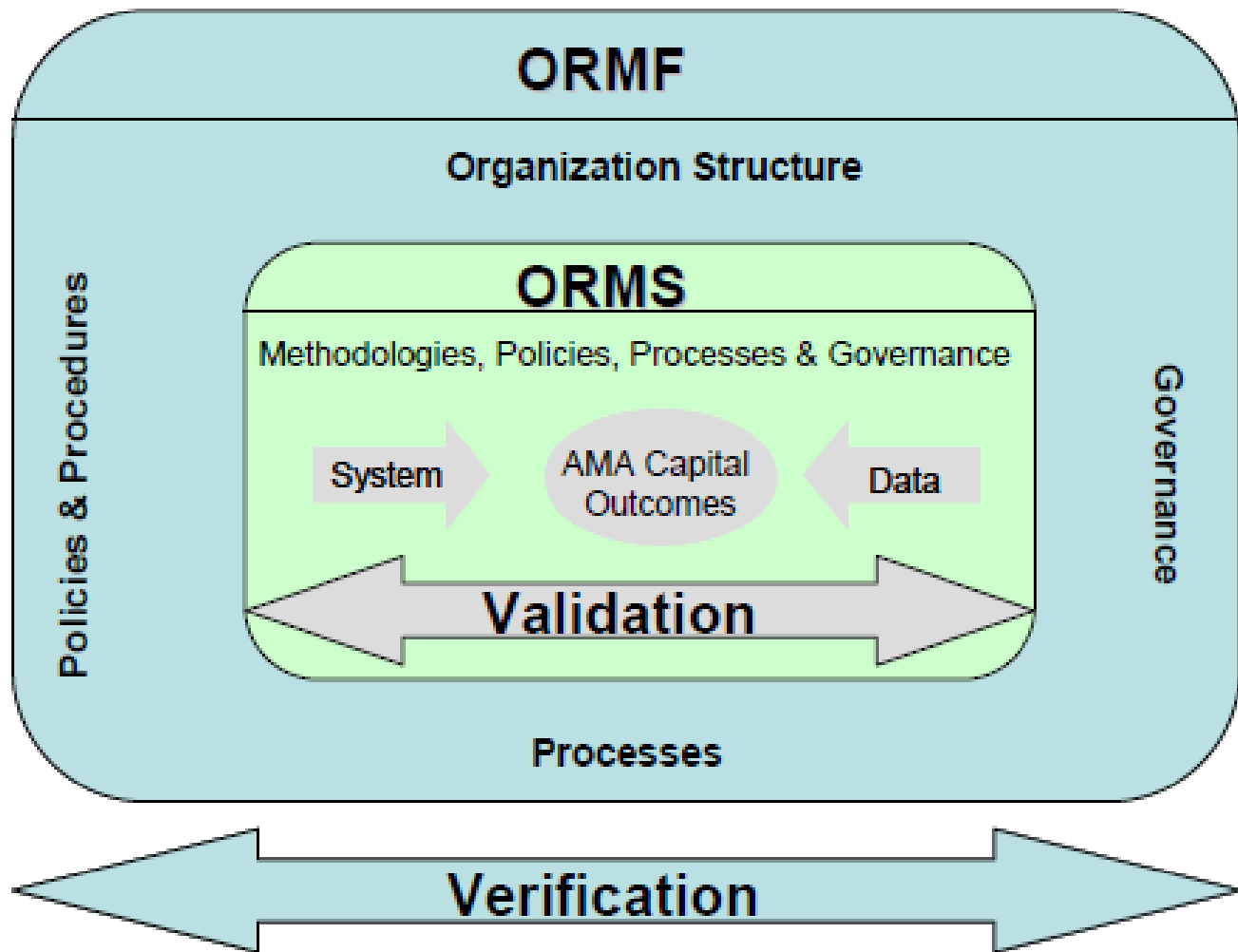
Basel & OpRisk

- **Independent validation and verification** are components of the third line of defence in the governance structure used to manage operational risk, and serve as a challenge function to the other two lines of defence.
- Yani modelin uygunluğu ve onaylanması (doğruluğunun teyidi?) !
- Burada bir sorun (risk) var!
- Model riski!



Basel & OpRisk

- The effectiveness of both the Corporate Operational Risk Management Function (**CORF**) and operational risk measurement system (**ORMS**) should be reviewed by **appropriately qualified independent internal or external auditors, qualified external and/or other independent parties.**
- Yani bu işi nitelikli/yetkin denetçiler, müfettişler, kontrolörler (ismi/unvanı çok önemli değil) yapacak!
- The purpose of these activities is to ensure that a bank's operational risk management framework (**ORMF**) is functioning as intended and that it remains appropriate for the bank's risk profile.
- OR çerçevesi bankanın risk profiline uygun bir işlevde olacak!



THE GREAT AMERICAN BUBBLE MACHINE

From tech stocks to high gas prices, Goldman Sachs has engineered every major market manipulation since the Great Depression – and they're about to do it again

——
By MATT TAIBBI

**GOLDMAN
SACHS &
OpRisk (?)**



SCENARIOS & STRESS TESTS FOR OpRisk

- ▣ Are what if scenarios suitable for OPRISK?
- ▣ Stress testing?

<http://www.usfa.dhs.gov/downloads/pdf/publications/tr-022.pdf>

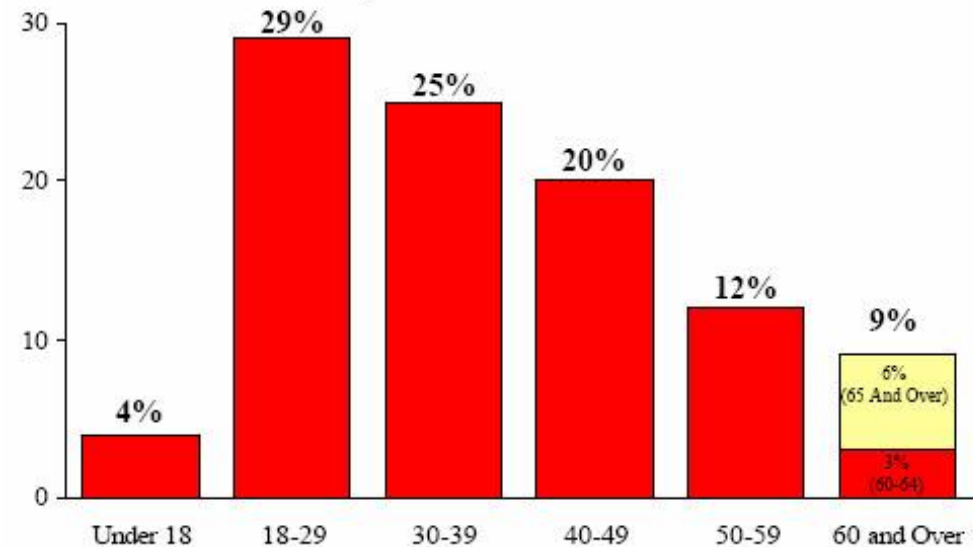
**Interstate Bank Building Fire
(Los Angeles, CA – May 1988)**



SCENARIOS & STRESS TESTS FOR OpRisk



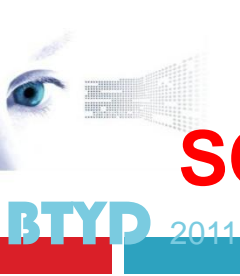
Identity Theft Complaints by Victim Age¹
January 1 – December 31, 2004



¹Percentages are based on the total number of identity theft complaints where victims reported their age (234,263). 95% of the victims who contacted the Federal Trade Commission directly reported their age.

Increasing
risk awareness or avoidance ?





SCENARIOS & STRESS TESTS FOR OpRisk

Citi Says Credit Card Customers' Data Was Hacked – 09/06/11

By [CHRIS V. NICHOLSON](#) and [ERIC DASH](#)

Robert

Galbraith/Reuters 12:49 p.m. | Updated
Citigroup acknowledged on Thursday that unidentified hackers had breached its security and gained access to the data of hundreds of thousands of its credit card customers in North America.





SCENARIOS & STRESS TESTS FOR OpRisk

NY TIMES

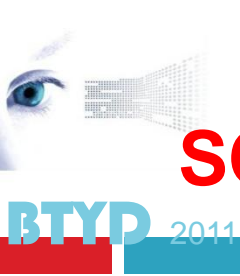
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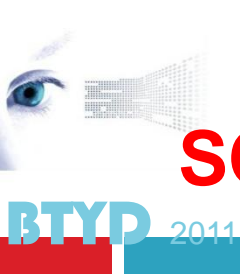


SCENARIOS & STRESS TESTS FOR OpRisk

“**For-profit attacks are always foreign,**” one of the people said. “**I’ve never heard of an American group doing that.** You can deface a Web site, but once you start stealing money ... we understand the FBI. They can kick your door down for downloading torrents.”

(BİZİ TAMAMEN İYİ NİYETLE GÖZETLEYEN UYDULARI UZAYA HUTU & TUTSİ KABİLELERİ YERLEŞTİRMİŞTİ ZATEN)

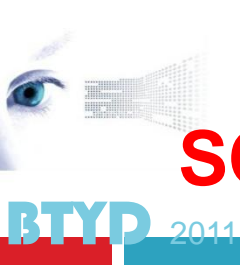
Citigroup was reported to have been breached by hackers tied to a Russian group in 2009, and before that in 1995.



SCENARIOS & STRESS TESTS FOR OpRisk

One of the members of Anonymous questioned Citigroup's security as the bank described it on [its Citi Card site](#), saying the **128-bit encryption** the bank boasts of is "really not that big a deal."

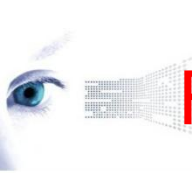
"**Two-hundred-and-fifty-six bit** would take someone a lifetime to decrypt," the person said. "The security is so weak right now, if you know a couple attacks, you can just go around and see what works."



SCENARIOS & STRESS TESTS FOR OpRisk



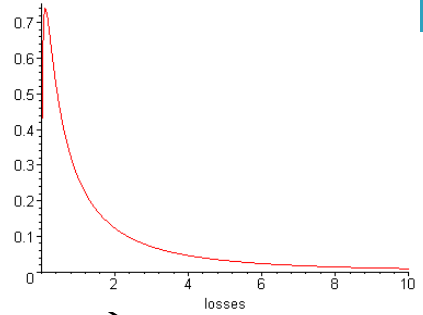
You cannot foresee a nuclear disaster
BUT
You can take preventive measures



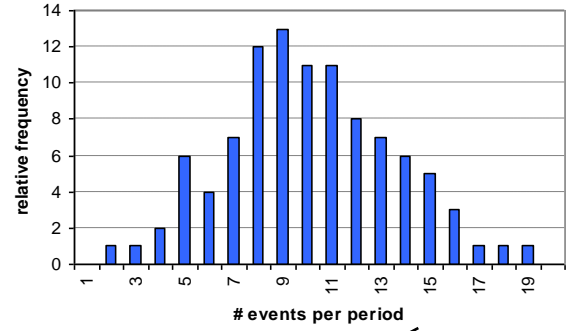
Fundamental elements of OpRisk: the LDA

BTYD 2011

Severity distribution

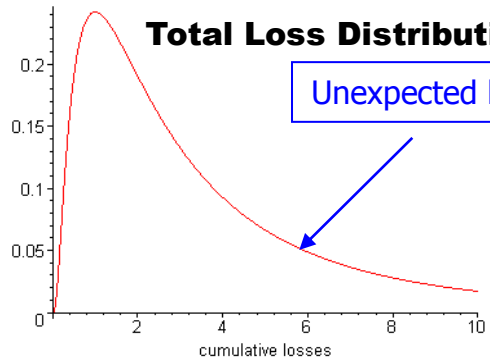


Frequency distribution



Aggregated via Monte Carlo or analytical tools

Total Loss Distribution



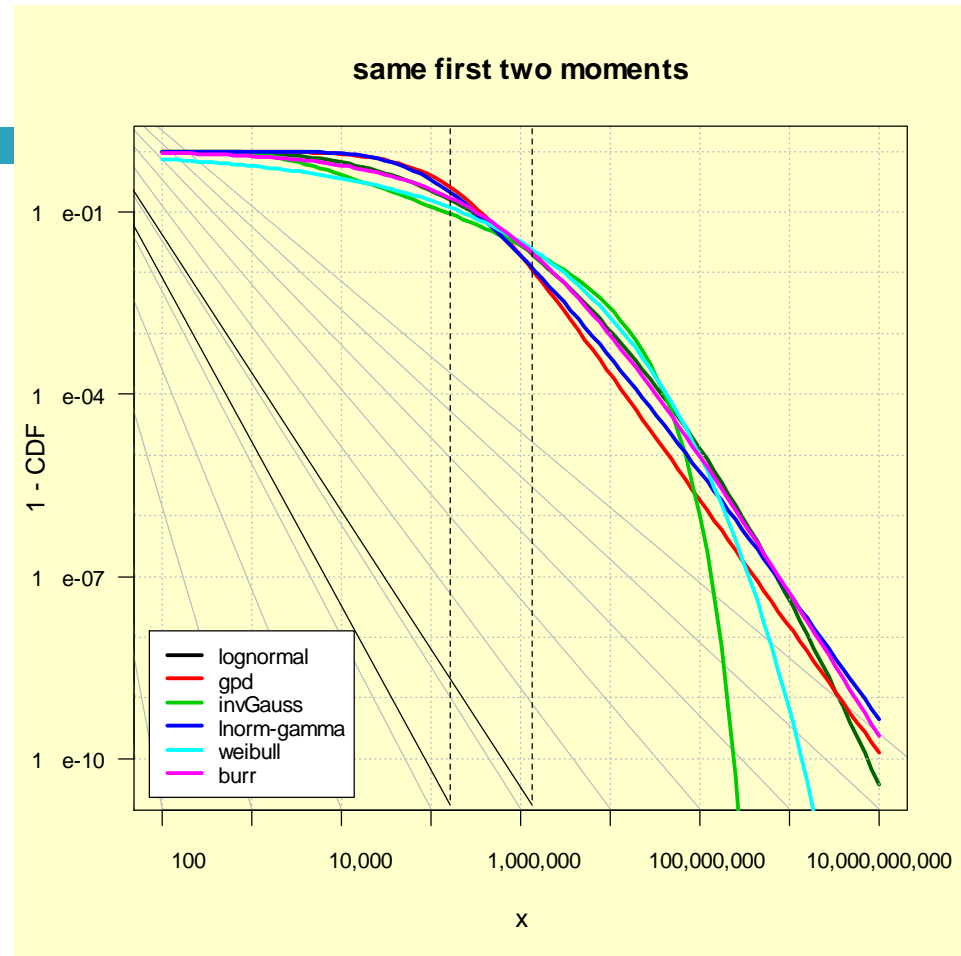
Op. VaR 99.9 percentile

Essential Tools

Severity distributions

- Lognormal
- lognormal-gamma mixture
- Generalised Pareto density
- Inverse Gaussian
- Weibull
- Burr density

Source: Mignola & Sanpaolo, 2007





VERİ TABANI OLUŞTURULMASI

- **Trade-off**
- **Holding Capital based on Probability Distributions vs OpRisk Mitigating through several factors**
- **Legal responsibility of Risk Supervision (by Supervisors, external auditors etc.)**

Global Operational Loss Database



GEÇMİŞİ UNUTMAMAK

- **Refresh our memories:**
- Bankhaus Herstatt (1974)
- BCCI (1991)
- Barings (1995)
- LTCM (1998)
- AIB (2002)
- Société Générale –Kerviel (2008)
- Northern Rock, Bear Stearns, Lehman Brothers, Wa-Mu , AIG (global financial crisis, 2007-.....)



BTYD 2011

Lingua OpRisk

SOME LATIN MIGHT HELP US TO BETTER UNDERSTAND BASEL 2/3

- *Ignotum per ignotius*
- The unknown by the more unknown
- *Ignoramus et ignorabimus*
- We don't know and will not know
- *Ignotum per æque ignotum*
- The unknown by the equally unknown

See: A New Approach for Managing OpRisk and
<http://www.ior-institute.org/>

Basel-III will fully be implemented in 2019....



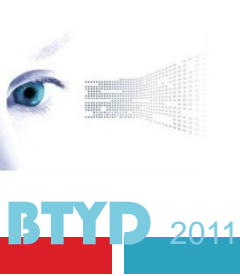
BTYD 2011

Annex 2: Phase-in arrangements (shading indicates transition periods)

(all dates are as of 1 January)

	2011	2012	2013	2014	2015	2016	2017	2018	As of 1 January 2019
Leverage Ratio	Supervisory monitoring		Parallel run 1 Jan 2013 – 1 Jan 2017 Disclosure starts 1 Jan 2015					Migration to Pillar 1	
Minimum Common Equity Capital Ratio			3.5%	4.0%	4.5%	4.5%	4.5%	4.5%	4.5%
Capital Conservation Buffer						0.625%	1.25%	1.875%	2.50%
Minimum common equity plus capital conservation buffer			3.5%	4.0%	4.5%	5.125%	5.75%	6.375%	7.0%
Phase-in of deductions from CET1 (including amounts exceeding the limit for DTAs, MSRs and financials)				20%	40%	60%	80%	100%	100%
Minimum Tier 1 Capital			4.5%	5.5%	6.0%	6.0%	6.0%	6.0%	6.0%
Minimum Total Capital			8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Minimum Total Capital plus conservation buffer			8.0%	8.0%	8.0%	8.625%	9.125%	9.875%	10.5%
Capital instruments that no longer qualify as non-core Tier 1 capital or Tier 2 capital			Phased out over 10 year horizon beginning 2013						
Liquidity coverage ratio	Observation period begins				Introduce minimum standard				
Net stable funding ratio		Observation period begins						Introduce minimum standard	

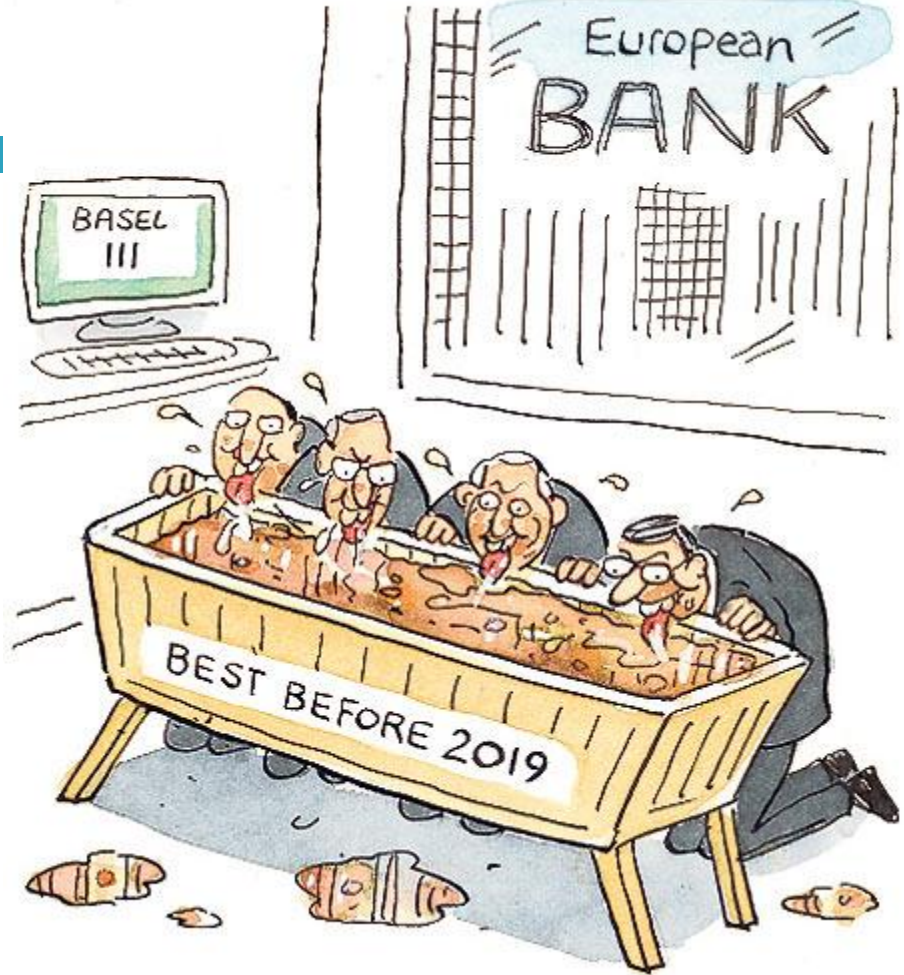
Ya Basel
Ya ben
Ya da bankalar



KipperWilliams

Is 2019 realistic?
Oh Yeah 😊

Is capitalism necessarily bad?
NOT, if you're on the winning side!



As eloquently put by investment firm Coxe Advisors: “In terms of balance-sheet caution and coverage, **Basel II was to Basel I what a bikini was to a burkha**”.

Wall Street Journal Europe, 28/12/2009,
Time for Banks to End Their Addiction



If above statement is true; what can we say about Basel III to Basel II?

- a) G-string
- b) B-string*
- c) Warren-Buffet style (swimming naked)
- d) Impossible

*B does not stand for Basel



OpRisk ve Basel-III karşısında durumumuz nedir ?



A



B



C