

The Rocky Road to Implementation of Basel II in the US

Richard J. Herring

The Wharton School, University of Pennsylvania
Co-Director, Wharton Financial Institutions Center

Hellenic Bank Association

Athens, Greece

March 19, 2007

Overview

- ✓ The Fed's strategy
 - The bi-furcated approach
- ✓ 1st problem: perceived competitive inequities within the US
- ✓ 2nd problem: QIS4
- ✓ The regulatory response: Basle IA & delayed transition with higher floors
- ✓ 3rd problem: Letter from the “Gang of 4” requesting the SA
- ✓ 4th problem: the GAO report
- ✓ Is there a better way forward?

The US has 2 Capital Regimes

1. Basel I (1988)
2. FDICIA (1991)
 - Capital-Based Prompt Corrective Action
 - Defined “Well-Capitalized Banks”
 - 5% tier 1 leverage ratio
 - 10% total risk-based capital ratio
 - 6% tier 1 risk-based capital ratio

The US banking system has strengthened since 1991

- ✓ Has weathered without difficulty
 - The Mexican debt crisis in 1994-95 & the tequilla hangover
 - The Asian debt crisis
 - The collapse of the Thai bhat and “bhatulism”
 - Russian default
 - LTCM
 - A stock market bubble and collapse
 - A recession
 - The largest country default in history
 - The largest corporate defaults in history

US regulatory authorities have played a leading role in the development of Basel II

- ✓ Initiative began when William McDonough, President of the NY Fed, chaired the Basel Committee
- ✓ Researchers in the Federal Reserve System have made significant technical contributions to the development and calibration of models
- ✓ Ironically, the US will be the last member of the Basel Committee to implement the new regime
 - Some believe it may not happen

What went wrong?

Roots of the problem may be found in the structure of Basel II

Basel II Attempts to Reconcile a Number of Irreconcilable Objectives

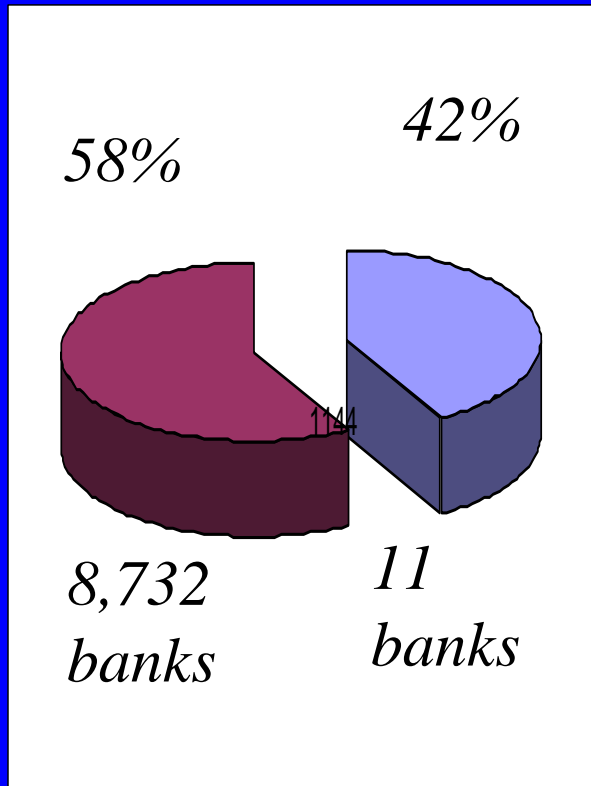
1. Increase risk-sensitivity of capital requirements *without* exacerbating pro-cyclicality of lending
2. Provide incentives for adoption of more sophisticated techniques *while maintaining* a level playing field
3. Increase the safety of the banking system *without* changing overall level of capital in banking system
4. Recognize the responsibilities of host country supervisors *without* multiplying compliance costs

The Fed's strategy: the bifurcated approach

3/2003 Vice Chair Ferguson announced would apply only to US banks with

- ✓ >\$250 billion in assets or
- ✓ >\$10 billion in (on b/s) foreign exposure
- ✓ 11 banks required to adopt
- ✓ In technical compliance with the Accord --
includes all internationally active banks

Likely Basel II “Core Banks”



1. Bank of America
2. JP Morgan Chase
3. Citibank
4. Wachovia
5. Wells Fargo
6. Washington Mutual
7. HSBC*
8. State Street*
9. Bank of New York*
10. Northern Trust*
11. Deutsche Bank*

Because of 10% foreign asset trigger

US banks required to adopt advanced approaches for credit and operational risk

- ✓ Mitigated concerns about cherry-picking
- ✓ EU in contrast, chose trifurcated approach in order to be able to apply to all banks
 - Banks have up to 168 implementation options

Assumed largest banks would not object

- ✓ Largest banks already used risk management systems that were close to Advanced Approaches
- ✓ Prospect of relaxation of leverage ratio and lower capital requirements
 - Greenspan said leverage ratio could be phased out
 - Bies (3/14/05) "The leverage ratio down the road has got to disappear."

Assumed other banks would not object because...

- ✓ Could continue to apply Basel I
- ✓ Not subject to new requirement for operational risk
- ✓ Could seek approval to apply Basel II

Expected smooth sailing through Congress

at the cost of some
resentment in Europe

The first problem:

Smaller banks feared that incentives to reward banks for adopting more advanced approaches with lower capital charges might distort domestic competition

Some smaller banks feared Basel II banks could acquire them or underprice them in key markets

- ✓ Fed argued economic not regulatory capital was important for bank decisions
- ✓ Banks would choose to hold more than the regulatory minimums

Fed commissioned 4 papers analyzing competitive impact

1. Mergers & acquisitions
2. Small business lending
3. Credit cards
4. Mortgage lending
 - First version showed substantial differences
 - Second version did not

The second problem:

Concerns that the implementation of the AIRB might reduce capital in the systemically important banks and jeopardize safety & soundness

Regulators addressed with QIS4

- ✓ 26 US banks
- ✓ Capital requirements fell by more than 26% in more than half of the institutions
- ✓ Banks thought to have similar risk profiles produced drastically different capital requirements

Why were QIS4 capital charges lower & more diverse than expected?

- ✓ Data sampled from an especially favorable point in the business cycle
 - Does this mean Basel II will be even more pro-cyclical than feared?
- ✓ Dispersion across banks reflected
 - Differences in models and parameters
 - Some banks lacked LGD estimates for stress periods
 - Some used “unsophisticated” estimates of parameters
 - Some differences in underlying portfolios

But Also Differences Due to Different Methodologies

- ✓ Compared risk weights assigned by 7 different banks to the same residential mortgage portfolio – same average FICO score, LTV and underwriting characteristics
 - Risk weights ranged from 74% to less than 1%
 - Differences mainly due to different methodologies for estimating PDs and LGDs and downturn LGDs
- ✓ Is this kind of methodology reliable?

Concerns about..

- ✓ Unexpectedly large drop in average level of capital
- ✓ Regulatory induced competitive inequities not only among 26, but especially vis-a-vis smaller banks
- ✓ Dispersion of capital charges among institutions and portfolio types

Agencies agreed to delay NPR
until QIS4 results "better
understood"

QIS5 results broadly similar

- ✓ International supervisors seem confident that can offset with Pillar 2 add-ons
- ✓ US observers find this a very slender reed for the support of prudential policy
- ✓ Supervisors have a difficult time disciplining profitable banks that appear to be in good condition
 - Track record is dismal
 - Most bad loans are made in good times

After an analysis of QIS4, the Regulatory Responses

1. Delayed Implementation, with Raised Floors

- ✓ Announced 3-year transition period with safeguards
 - 2008: Parallel run
 - 2009: 95% floor
 - 2010: 90% floor
 - 2011: 85% floor
 - 2012: Basel II
- ✓ Decision re: termination of floors in 2011 will be made by primary supervisor on an institution by institution basis.

2. Proposed Basel IA for Smaller Banks (NPR 12/26/06)

- ✓ Modifies Basel I
- ✓ Increase the number of risk weight categories from 5 to 9
 - Basel I: 0, 20, 50, 100 & 200%
 - 200% category added 2001 for MBS with less than investment grade rating
 - Basel IA: add 35, 75, 150 & 350%

Permits use of external ratings

- ✓ AAA/AA: 20%
- ✓ A: 35%
- ✓ BBB+: 50%
- ✓ BBB: 75%
- ✓ BBB-: 100%
- ✓ BB+,BB & BB-: 200%
- ✓ B & lower: 350%
- ✓ Comparison--Basel II Standardized approach for corps: AAA to AA-: 20%; A+-A-: 50%; BBB+-BB-: 100%; below BB-: 150%; unrated: 100%.

Expands types of guarantees and collateral recognized

- ✓ May include s.t. or l.t. securities rated investment grade or above by NRSRO-rated entity
- ✓ Recognize guarantees made institution with investment grade rating

Modifies risk weights for residential mortgages

- ✓ Expand Basel I 50%
 - LTV ratio 96-100%: 150%
 - LTV ratio 91-95%: 100%
 - LTV ratio 86-90%: 75%
 - LTV ratio 81-85%: 50%
 - LTV ratio 61-80%: 35%
 - LTV ratio 60% or less: 20%

Does not address operational risk
or interest rate risk

Will not change existing leverage
capital requirements

Smaller banks may choose to
remain on Basel I

Posed question: Should large
banks be permitted to choose IA
rather than II?

3. Renewed support for leverage ratio

- ✓ FDIC, OCC & OTS support
- ✓ Bies (6/14/05) "Even if supervisors don't call for a minimum leverage ratio, I firmly believe that bankers, investors, and the rating agencies would demand it."
- ✓ Roger Cole, new head of supervision at Fed: maintaining capital levels is more important than increasing risk sensitivity of capital requirements or international competitive equity.
- ✓ Limits the ability to rationalize large reductions in capital requirements through clever modeling.

The 3rd Problem:

Citigroup, JPMorgan Chase,
Wachovia & WAMU request
option to run Basel II
Standardized Approach (SA)

Deployed arguments strikingly similar to those used by small banks in preserving leverage ratio and gaining option of Basel IA

- ✓ Raised specter of takeover by foreign financial institutions who could deploy regulatory capital more efficiently

Feared competitive disadvantage vs. foreign banks and domestic investment banks not be subject to leverage ratio or transition floors

- ✓ Currently Bear Stearns, Goldman Sachs, Morgan Stanley, Lehman Brothers & Merrill Lynch required to comply with Basel II
 - But not leverage ratio
 - Not transition floors
- ✓ 9/26/06 "(L)everage ratio will require banks to hold more capital than is justified by a risk analysis, creating incentives for banks to acquire riskier asset in order to earn an acceptable return on excess capital."

Banks believe current systems for identifying, managing & pricing risks are superior to Basel II AIRB

- ✓ Implementation of regulatory models will thus impose deadweight costs
- ✓ Models are a management tool that should be adjusted as needed, without waiting for regulatory approvals

The Standardized Approach
would be more transparent and
much easier to understand for all
users of information including
boards of directors, senior
management, customers,
investors, analysts, regulators and
financial journalists

NPR for Basel II published 9/5/06

- ✓ Emphasized downturn LGDs in response to QIS4 to limit reductions in capital charges
- ✓ Sought comment on whether Standardized Approach should be available to US banks

Revealed tensions among 4 key banking regulators

- ✓ Bies 11/30/06 observed that all foreign, large complex institutions are expected to adopt AIRB and AMA
- ✓ Bair 11/3/06 observed that the SA is "simpler and less costly to implement than the Advanced Approaches...[and] does not pose the same potential for dramatic reductions in capital requirements...."
- ✓ Fed & OCC oppose, FDIC and OTS seem favorably disposed

10/06 Bair proposed that Basel Committee adopt a "supplemental capital measure" like US leverage ratio to ensure a minimum capital cushion for safety and soundness

- ✓ Unique perspective – only regulator on the committee that would have to pay in the event of a crisis
- ✓ Summarily dismissed by most members of Basel Committee although no official action taken
- ✓ Endorsed by European Shadow Committee 11/2006

Even if current rules
implemented...

Potentially troublesome differences...

✓ US

- Wholesale default
 - If bank incurs a loss of 5% or more on sale of any exposure
- SME lending
 - No special treatment
- LGD
 - May use own estimate with supervisory approval
 - If not must use very conservative supervisory formula

✓ International

- Wholesale default
 - No loss threshold. An element in overall assessment
- SME lending
 - Adjustment to reduce capital charge for SMEs
- LGD
 - May use own estimate with supervisory approval
 - If not, cannot qualify for AIRB

The 4th Problem:

GAO issues report (2/16/07) that
may cause additional delays

GAO notes

- ✓ Despite 250 pages of administrative guidance (uses “must” 455 times), vague on critical details
 - Treatment of bank portfolios that do not meet data requirements
 - How calculations of reductions in agreement minimum regulatory capital will be made
 - Distinction between average level & cyclical variation
 - How SA would be implemented in the US
- ✓ Judged proposal too incomplete to assess costs for banks to implement & agencies to enforce, as mandated by Congress

GAO concludes

- ✓ Need a new NPR with a new comment period if
 - Material differences from current NPR in final rule
 - Or, if SA will be part of final rule
- ✓ At end of transition period reevaluate whether Basel II is an appropriate long-term framework for capital regulation

Already US transition lags

| <u>International</u> | | <u>US</u> |
|-----------------------------------|------|--|
| EU Capital Directive | 2006 | |
| Parallel run | 2007 | |
| 1 st trans floor (90%) | 2008 | Parallel run |
| 2 nd trans floor | 2009 | 1 st trans floor (90%) |
| Full implementation | 2010 | 2 nd trans floor |
| | 2011 | 3 rd trans floor (85%) |
| | 2012 | Full implementation if have permission of primary supervisor |

An evolving compliance nightmare

- ✓ For internationally active banks that must cope with
 - Differing definitions & validation requirements
 - Differing rules
 - Differing transition periods
 - Differing transitional floors
- ✓ An enormous burden for supervisors as well

As supervisors who negotiated the agreement depart from the scene,

- ✓ New leaders are less burdened by sunk costs of 10-year negotiation
- ✓ A greater willingness to ask whether the game is worth the candle
- ✓ Some have begun to ask a radical question

Could gain the same improvements in risk management be achieved, with less uncertainty about the impact on financial stability?

- ✓ Would it be preferable to
 - Set Pillar 1 charges with the Standardized Approach, and
 - Supervise the implementation of AIRB and Advanced Approaches type models under Pillar 2?

This would

- ✓ Reduce compliance costs dramatically for both banks & regulators
- ✓ Limit the extent to which Basel II might reduce the average level of capital in the system
- ✓ Minimize risk of exacerbating business cycles
- ✓ Increase the transparency of capital charges
- ✓ Lead to fewer regulatory-induced competitive distortions
- ✓ Continue pressures for advances in risk management without
 - Compromising their use as a management tool or
 - Crystallizing a particular state of the art prematurely

In the US it may still be possible to implement this version of Basel II

Is it too late for Europe to consider such a course?