# Rethinking Capital Regulation

by Anil K Kashyap, Raghuram G. Rajan, Jeremy C. Stein

A discussion By Dario Focarelli

- The usual disclaimers apply
- Warning
  - I would simplify the line of argument for the sake of clarity,
    even at cost of being naïve
- Overall, discussing this paper is a risky business:
  - "although the present system has hardly been perfect, it is not necessarily broken. True, it has encouraged risk-taking and short-term borrowing, and banks have allocated their resources neither efficiently nor wisely. Yet, for all the pain, no large bank has yet failed —thanks in large part to the capital they had been forced to hold."

#### Plan of Discussion

- The Credit-Market Crisis: Causes
- The Role of Capital Regulation
- Principles for Reform
  - ➤ Capital Insurance

#### Preview of the comments

- The KRS explanation of the crisis: breakdown of incentives and risk control systems within banks
- Yes, .. but they do not give sufficient emphasis to:
  - "escaping from regulation"
  - Failure of Regulation (hot issues include "Fair value" ad "group regulation")
- KRS see several possible limitations to the strategy of simply raising the level of capital (for regulated entities)
  - it would chill intermediation activity generally by increasing banks' cost of funding
  - it would also increase the incentives for regulatory arbitrage
- Yes. I completely agree
- KRS propone Capital Insurance, which aims to reduce the adverse consequences of a crisis, while making sure the private sector picks up the bill
- Yes, ... but I do see a number of problems!!
- This is a great paper!

#### The Credit-Market Crisis: Causes

#### ESCAPING FROM REGULATION: THE "SHADOW BANKING" SYSTEM

- KRS: The "originate and distribute" model of securitization that many banks ostensibly followed was supposed to transfer risk to those institutions best able to bear it, such as unleveraged pension funds.
- We now understand that largely risk wasn't transferred (this is also true for some derivative markets)
  - The "reputation problem" or "Side letters granting terms different from those disclosed"?!
- The "shadow banking" system (SIV, hedge funds, derivative and OTC markets) was unregulated, with no/low capital requirement and largely not supervised. As a result, the overall capitalization of the financial system declined even if the capital ratio for banks increased
  - Shadow banking allowed banks to have high and persistent profits (ROE > 20%) and to pay huge salaries to directors
  - Most directors thought that they were making money because they were successfully escaping from the cost of regulation and not because they were taking too much risk
- Thus, increasing the capital requirement on banks doesn't make much sense. The problem is how to reduce the cost differential between "chartered" and "shadow" banks
  - Costs arise from different sources, including capital requirements, taxes and disclosures

#### The Credit-Market Crisis: Causes

#### **THE FAILURE OF REGULATIONS**

KRS do not discuss this issue. To my mind this is a weakness in their analysis. Admittedly, this critique is much easier to make after Lehman

- Regulators overemphasized the liquidity problem
- Design of (Group) Supervision
  - If we want to repeal Glass-Steagall, we should think about how to supervise commercial and investment banks.
  - If we want to foster financial integration in Europe, we should be thinking about how to supervise European groups
  - Who supervises international groups at the world level?
- Is "fair value" optimal for financial institutions?
  - Do "fair value" accounting rules always reflect the substance of transactions, or instead do they increase the scope for boosting profits in good times (also interacting with stock options plans to cause a failure of internal controls)?
- Unregulated markets and self-fulfilling prophecies
  - If we let unregulated OTC markets expand, we must think aabout how to manage counterparty risk
  - Is short selling a problem?
- Unregulated Institutions
  - No idea from supervisors on how to segment regulated and unregulated "banks"

# The Role of Capital Regulation

This Section is definitely the most convincing

- KRS: Any command-and-control regime of regulation creates incentives to circumvent the rules, i.e. regulatory arbitrage.
  - Compared with the first Basel accord, Basel II seeks to be more sophisticated by making capital requirements contingent on fine measures of risk; this is an effort to cut down on such regulatory arbitrage.
  - But as recent experience suggests, this is a difficult task, no matter how elaborate a risk-measurement system one builds into the regulatory structure.
- The point is how to improve controls and how to level the playing field with "shadow banking" or more realistically how to reduce the huge cost gap
  - The analogy is tax evasion. It is very hard to imagine that you can reduce tax evasion by raising the taxes of those who already pay
  - The solution, as in a standard Becker approach to crime, is both to reduce the potential gain from illegal activity and to increase the cost of punishment, weighted by the probability of getting caught

### Capital Insurance (the proposal)

- KRS: The basic idea is to have banks buy capital insurance policies that would pay off in states of the world when the overall banking sector is in bad enough shape
- Capital insurance would be implemented on an opt-in basis
  - A bank with \$500 billion in risk-weighted assets could be given the following choice by regulators: either accept an upfront capital requirement that is, say, 2% higher, meaning that the bank would have to raise \$10 billion in new equity; or take out an insurance policy that pays off \$10 billion upon the occurrence of a systemic "event"—defined perhaps as a situation in which the aggregate write-offs of major financial institutions in a given period exceed some trigger level.
- To make the policy default-proof, the insurer (a pension fund, or a sovereign wealth fund) would at inception put \$10 billion in Treasuries into a "lock box"

# Demand for Corporate Insurance (MacMinn&Garven)

- Risk aversion
  - Not the case for publicly held companies
- Costly Bankruptcy (agency problem)
  - Under-investment (the manager has an incentive to limit insurance because the return is for the bondholder)
  - Risk shifting
  - Tax asymmetries
- Overall, the proposal is consistent with the theoretical framework, but ...

# Capital Insurance (comment)

- The definition of a systemic trigger is highly problematic, and doesn't solve problem of financial distress at an individual bank
- The opt-in method generates adverse selection and pricing problems
- CAT bonds (the product most resembling capital insurance) are hard to price in capital markets
  - No pension funds buy CAT bonds (they are basically a hedge fund asset)
  - The price of CAT bonds is higher than reinsurance coverage: capital market imperfections and the market power of traditional reinsurers (Froot 2001), although the spread is narrowing
  - The point is that Black-Scholes pricing is not well suited to rare events with huge severity
- Are KRS sure that the Government would not bail out the pension fund or sovereign wealth fund?
  - Think about how the US decided to bail out Fannie & Freddie

# Capital Insurance (comment)

• Why not an old-fashioned "reserve requirement" instead of a "recapitalization requirement" with the FED able to use money in the case of systemic risk?

# Capital ratios after Basel I



