## Reforming Financial Regulation and Supervision Session 1: Why Did Regulation Fail?

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#### Three possible discussions

Comment on paper by De la Torre and Ize

"Regulatory Reform: Integrating Paradigms"

- Comment on issues in session program
  - What are market failures addressed by current regulation?
  - Is there a need for a radical rethinking of regulation?
  - If so, what should be the future regulatory architecture?
- Comment on other related issues

## Part I Comments on De la Torre and Ize

#### **Overview**

- Summary of paper: Three possible explanations
- Summary of paper: Five policy recommendations
- Comment 1: Approach of paper
- Comment 2: Radical change in regulatory architecture?
- Comment 3: On policy recommendations

## **Summary of paper**

#### Three possible explanations

- Agency (risk-shifting) paradigm
- Externalities (social cost) paradigm
- Mood swings (behavioral) paradigm

## **Summary of paper**

#### Five policy recommendations

- Distinguish between regulated & unregulated intermediaries
  - → Unregulated not subject to capital requirements
  - → Unregulated restricted to borrow from regulated
- Penalize short-term borrowing
- Improve safety next (deposit insurance, LOLR)
- Introduce authorization regime for <u>all</u> financial innovations
- Increase discretionary powers of supervisors

#### Two alternative approaches

- General overview of literature
  - → Implications that are vaguely related to models
- Specific models
  - → Implications that are tightly derived from models

- Paper follows first approach
  - Recommendations may (or may not) follow from models
  - Different models may lead to different recommendations
  - There is no "discipline"
- I would go for second approach
  - Not easy: There are many models and many puzzles
  - But it is the only way to design sound policies

#### A radical change in regulatory architecture?

- Proposal ignores
  - Self-correcting market mechanisms
  - Risk of creating new forms of moral hazard
  - Risk of creating new forms of regulatory arbitrage
  - Risk of supervisory failure

- I would favor a "minimal approach"
  - Keep basic regulatory structure (including Basel II)
  - Increase level of capital requirements
  - Introduce countercyclical adjustments in capital regulation
    - → Repullo, Saurina and Trucharte (2009)
- I would also favor increasing research on financial regulation
  - By academics → launch research program funded by IFIs
  - By policy-makers → increase research capabilities

#### On policy recommendations

- Introduce an analytical examination of <u>all</u> recommendations
  - → Panel of independent experts look at each proposal
  - → Policy-makers then decide on basis of this advice
- Radical changes should require significant expert support
  - → They may have negative "side-effects" (like drugs!)
- My initial reaction
  - → Against proposal on unregulated intermediaries
  - → Against proposal on financial innovations

# Part II Comments on issues in session program

#### **Overview**

- Market failures addressed by regulation
- What went wrong: market failures
- What also went wrong: regulatory failures
- What did not go wrong

## Market failures addressed by regulation

- Common externality: Social cost of bank failure
  - → Contagion to other banks
  - → Destruction of lending relationships
  - → Disruption to payment system
  - → Distortions in monetary transmission

## Market failures addressed by regulation

- Specific channels
  - Risk-shifting incentives of debt financing
    - → Minimum capital requirements
  - Inefficient bank runs by small investors
    - → Deposit insurance
  - Inefficient bank runs by large investors
    - → Lender of last resort

## What went wrong: market failures

- Underestimation of systemic risk
  - → Partly due to the good experience of past decade
- Downside of financial innovation Rajan (2005)
  - → Greater scope for risk-shifting
- Increased competition → lower charter values
  - → Higher risk-shifting
- Weak corporate governance → compensation-related distortions
  - → Higher risk-shifting

## What also went wrong: regulatory failures

- Underestimation of systemic risk
  - → Focus on micro-prudential approach to financial regulation
- Regulatory capture
  - → Low capital requirements (given higher risks)
  - → Weak enforcement of regulation
  - → Disregard for liquidity risk

## What also went wrong: regulatory failures

- Poorly designed supervisory institutions
  - → Little incentives to collect prudential information
  - → Relevant information in the wrong place
- Poorly designed deposit insurance schemes
  - → Widespread criticism by academics and practitioners
  - → Illusion of monitoring by small depositors

## What did not go wrong

- Hedge funds
  - → Despite "obsession" with hedge funds prior to crisis
  - → Too little
- Basel II
  - → Despite widespread criticism by many commentators
  - → Too late

## Part III Comments on other related issues

#### **Overview**

- Role of macroeconomic factors
- Search for yield?
- A simple model
- Another simple model
- Summing up

#### Role of macroeconomic factors

- Global imbalances → Blame the Chinese (and possibly others)
- Low interest rates → Blame Greenspan (and possibly others)
- Connection with risk-taking
  - → "Search for yield"

## Search for yield?

#### An uncontroversial statement

- In a market economy investors <u>always</u> search for yield
- This should be independent of the level of interest rates

#### Two puzzles

- Why the "search for yield" story has become so prominent?
- Why so little serious work has been done on this?

## A simple model

- At date 0
  - Bank raises 1 unit of deposits at fixed rate c (no capital)
  - Bank invests in risky asset + chooses risk parameter p
- At date 1
  - Return from investment

$$R = \begin{cases} 1 + r + s(p) & \text{with probability } 1 - p \\ 0 & \text{with probability } p \end{cases}$$

- $\rightarrow$  r is policy rate set by central bank
- $\rightarrow$  s(p) is risk-shifting function, increasing and concave

## A simple model

• Bank's optimal choice of risk

$$\max_{p} (1-p) [r+s(p)-c]$$

• First-order condition

$$(1-p)s'(p) = r + s(p) - c$$

• Effect of changes in  $r \rightarrow$  differentiating FOC

$$\frac{dp}{dr} = \frac{-1}{2s'(p) - (1-p)s''(p)} < 0$$

 $\rightarrow$  Result: Lower asset returns (r) implies higher risk (p)

## A simple model

- Key assumption
  - $\rightarrow$  Cost of liabilities c does not move in line with policy rate r
- How could we justify this assumption?
  - $\rightarrow$  Commercial banks: c may be zero (checking accounts)
  - $\rightarrow$  Pension funds: c may have been set when rates were high
- Alternatively c may capture fixed operational costs (wages, etc.)

## Another simple model

- At date 0
  - Bank raises 1 unit of deposits at variable rate r
  - Bank invests in risky asset + chooses risk parameter p
- At date 1
  - Return from investment

$$R = \begin{cases} 1 + c + s(p) & \text{with probability } 1 - p \\ 0 & \text{with probability } p \end{cases}$$

- $\rightarrow c$  is fixed (e.g. mortgage) rate set when rates were low
- $\rightarrow$  s(p) is risk-shifting function, increasing and concave

## Another simple model

• Bank's optimal choice of risk

$$\max_{p} (1-p) [c+s(p)-r]$$

• First-order condition

$$(1-p)s'(p) = c + s(p) - r$$

• Effect of changes in  $r \rightarrow$  differentiating FOC

$$\frac{dp}{dr} = \frac{1}{2s'(p) - (1-p)s''(p)} > 0$$

 $\rightarrow$  Result: Higher funding cost (r) implies higher risk (p)

## Search for yield?

- Can any of these models contribute to explaining crisis?
  - → Need much more theoretical work
  - → Need much more empirical work
  - → Need general equilibrium perspective
  - → Until such work is done

    maybe we should not blame the Chinese (or Greenspan)

## **Summing up**

- Be very careful with radical changes in regulation
  - → They may do more harm than good
- Have proper analysis of regulatory trade-offs
  - → Resist the urge of politicians to do something quickly
- Do not underestimate self-correcting market mechanisms
- Do not overestimate regulatory and supervisory capabilities
- Significantly increase research budgets
  - → Policy mistakes are <u>very</u> expensive
  - → It makes a lot of sense to invest in crisis prevention