

Whither Risk Management? Lessons from the Subprime Crisis

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Based on: De la Torre, Augusto and Alain Ize (2009). "Regulatory Reform: Integrating Paradigms,"
Forthcoming in *International Finance*.

1. The pre-crisis, Basel-inspired approach

✚ Risk management centered on individual institutions

- ✦ The system's resilience depends on the soundness of its parts → Focus on idiosyncratic risk and shore up the weakest
- ✦ Rely on institutions' own (IRB) risk models
- ✦ Risk managers are cool headed and face no conflicts of interest

✚ Rely on the system to support the parts

- ✦ Wholesale markets will remain liquid and can be relied upon
- ✦ Diversification helps (not all things will get bad at once)
- ✦ Interconnectedness does not matter

✚ Price history is all you need

- ✦ Markets are efficient
- ✦ Distributions are normal
- ✦ Observed correlations are what matters

✚ Credit risk can be managed through an arms-length approach

- ✦ *Assessing risk*: scoring techniques, standardization, ratings agencies, public information
- ✦ *Selling risk*: credit risk slicing, dicing, trading (securitization and originate-to-distribute)

2. The Subprime crisis wakeup call

- ✚ Efficient financial markets hypothesis was thrown into question
 - ✦ Market discipline failed the most in the land of the sophisticated and well-informed
- ✚ Failures in risk measurement and management
 - ✦ The great fallacy of composition – the sum of individual institution protections is not equal to systemic protection
 - ✦ Assumption of normal distribution proved wrong – fat tails, black swans
 - ✦ All things went bad simultaneously
 - Correlations went into lock-in phase
 - Risk aversion and illiquidity reinforced each other and the downward cycle was magnified by leverage and interconnections
 - ✦ Risk managers – wrong, dismissed, or sold out
 - ✦ Rating agencies performance – a disgrace
 - ✦ Originate-to-distribute model boosted opacity ...
 - ✦ ... and dispersed individual risks while increasing interconnectedness risks
 - ✦ Powers and tools to resolve TBTF/TITF institutions were missing

3. A deeper look

Three fundamental drivers of systemic crisis buildup

✚ Principal-agent frictions

- ✦ Source of trouble: taking advantage of the less informed or farther removed by levering one-sided bets (insufficient “skin in the game”)
- ✦ Moral hazard-driven behavior (including regulatory arbitrage), once in motion, can accumulate risk and make a crisis inevitable, as agents have little of nothing to lose

✚ Externalities (individual-group frictions)

- ✦ Source of trouble: wedge between private and social risks/returns
- ✦ Regulatory arbitrage driven by un-internalized externalities
- ✦ Free riding on liquid markets and LOLR
- ✦ Leverage with short-term wholesale funding exacerbated systemic vulnerability

✚ Mood swings (group-reality cognitive frictions)

- ✦ Source of trouble: getting carried away in the midst of evolutionary uncertainty
 - Limited capacity to understand systemic implications of creativity and innovation
 - Emotional decisions or rational decisions based on deficient information
- ✦ Exuberance on the way up – “this time it is different, things are under control”
- ✦ Panic on the way down – fear of the unknown; acute risk aversion and recoiling

4. The current regulatory architecture is unbalanced...

- ✚ **Principal-agent** issues dominate design of ex-ante prudential oversight...
 - ✦ Capital requirements seen as “skin in the game” to align principal-agent incentives
 - ✦ Resistance to regulate non-deposit taking intermediaries that borrow from the “sophisticated and well-informed” (wholesale funding markets)
- ✚ ... yet “second generation agency problems” are ill attended
- ✚ **Externalities** are taken into account in ex-post safety net (LOLR, DI)...
 - ✦ To mitigate contagious runs, domino effects, asset fire sales...
 - ✦ ...**but** failure resolution mechanisms proved to be inadequate
- ✚ ...yet there is no well-articulated connection between ex-ante and ex-post
 - ✦ Lack of ex-ante regulation designed to induce internalization of externalities
 - Regulation not explicitly linked to intermediaries’ contribution to systemic risk
 - No explicit regulatory pricing of LOLR-enhanced option value lend-short-and-exit
- ✚ **Mood swings** are completely ignored under current architecture
 - ✦ Mainstream finance has been dominated by “efficient markets” hypothesis

... and rebalancing will be a major challenge

Inconsistent regulatory prescriptions across paradigms

	Agency	Externalities	Mood swings
Should fair value accounting be reviewed?	<i>Absolutely not: it is fundamental to keeping incentives aligned (cf. Savings & Loans crisis)</i>	<i>Yes, it exacerbates the transmission and impact of externalities</i>	<i>Yes, it exacerbates the transmission and impact of mood swings</i>
Should CROs' fees be paid by borrowers or investors?	<i>Investors, having borrowers paying creates obvious agency conflicts</i>	<i>Borrowers, having investors paying creates obvious free rider problems</i>	<i>Not sure, they can all go cuckoo..</i>
Should the perimeter of regulation be reviewed?	<i>No, it will only constrain innovation and competition, and make supervision more costly</i>	<i>Absolutely yes, without it, it is impossible to effectively internalize externalities and prevent regulatory arbitrage</i>	<i>Not sure, might help reign in innovation but could do the same by authorizing new instruments</i>
Should systemic liquidity norms be introduced?	<i>No, lending short and running is fundamental to market discipline</i>	<i>Absolutely yes, this is key to enhancing systemic ex-ante resilience</i>	<i>Yes, unless supervisor is Moses, it will help him control mood swings</i>
Are counter-cyclical norms needed?	<i>No, systemic events start from individual malfeasance and this is where the ball should stay</i>	<i>Yes, they are needed to ensure coordination and can be rules-based</i>	<i>Yes, they are needed to avoid major disequilibria and should be mostly judgment based</i>

... and rebalancing will be a major challenge

Inconsistent views on the role oversight & safety nets

	Agency	Externalities	Mood Swings
Should the role of the supervisor be extended?	<i>No, going beyond policing and market discipline enhancing invites moral hazard</i>	<i>Yes, crowd control is as much part of the job as firefighting</i>	<i>Yes, scouting and guiding need to be included in the supervisor's TOR</i>
Should prudential and monetary authorities coordinate?	<i>Not really, supervisors control the micro side, central bankers the macro (the Greenspan doctrine)</i>	<i>Tightly, externalities naturally connect the micro and macro worlds</i>	<i>Joined at the hip, mood swings arise from the constant interaction between micro and macro</i>
Can players learn?	<i>Yes, got me once, won't get me twice...</i>	<i>No, there is nothing much to learn and even if there was, I am not interested!</i>	<i>No, can't learn what is truly novel (even learning to expect the unexpected seems to go contrary to human nature)</i>
Is a LOLR facility needed?	<i>No, it is counterproductive</i>	<i>Yes, to provide liquidity in systemic events</i>	<i>Yes, to absorb risk in systemic events</i>
Is a deposit insurance needed?	<i>No (setting aside consumer protection)</i>	<i>Yes, to limit risk of "wrong" runs</i>	<i>Yes, to calm the frayed nerves</i>

5. Towards a More Balanced Architecture

- a. Reducing dynamic regulatory arbitrage
- b. Internalizing systemic risk implications of short-term wholesale funding
- c. Dampening mood swings
- d. Improving failure resolution tools

a. Reducing dynamic regulatory arbitrage

- ✚ In addition to moral hazard-driven arbitrage, the focus should also be on arbitrage driven by individual-group frictions
 - ✦ Un-internalized externalities
 - ✦ Free riding
 - ✦ Coordination failures

- ✚ → Minimize unevenness in regulation across *all* intermediaries
 - ✦ This is inconsistent with the popular proposal of using “systemic importance” as the criterion to decide what intermediaries should be brought under prudential regulation
 - ✦ Isolating the “systemic core” from the rest looks like a perilous return to past thinking (isolate the systemically important commercial banking system...)
 - ✦ There is no need to fuel regulatory arbitrage in order to:
 - Deal with TBTF/TITF issues – instead, put in place suitable ex-post resolution tools
 - Induce internalization of systemic risk – instead, introduce a suitable Pigovian tax (see below)

- ✚ The tradeoff – new regulatory perimeter can hinder competition and innovation
 - ✦ See proposal to mitigate this effect in De la Torre and Ize (2009)

b. Internalizing systemic risk implications of ST funding

- ✚ Popular proposal to focus on maturity mismatches also looks like a remnant of past idiosyncratic thinking that does not take externalities into account
 - ✦ Matching short assets to short liabilities protects an individual intermediary at the expense of exacerbating systemic vulnerability
 - ✦ Under systemic events, short loans become as illiquid as long loans
- ✚ Focus should be on maturity of uninsured liabilities, esp. ST wholesale funding
 - ✦ The shorter the maturity the higher the tax
 - ✦ This would induce investors to retain more of the liquidity risk onto themselves...
 - ✦ ...without allowing intermediaries to offset this tax and pass it on to someone else downstream via short lending
- ✚ The tradeoffs
 - ✦ Pigovian tax would increase the *private* costs of maturity transformation...
 - ✦ ... and would limit the ability of principals to use the “short leash” to discipline agents

c. Dampening mood swings

- ✚ Need for *judgment-based* countercyclical prudential norms?
 - ✳ Focus: unexpected elements of aggregate cycle dynamics
 - Discretion (depending on circumstances) is needed for real time calibration
 - ✳ Objective: dampen the cycle and enhance systemic resilience to tail events
 - ✳ Function: to overcome coordination failures
 - ✳ Authority: Central bank

- ✚ Need for “scouting capacity” as part of systemic oversight?
 - ✳ Systemic analysis: connect the dots and monitor the evolution of the system
 - ✳ Functions: inform, educate, lead (including “souring the party”)

- ✚ A new breed of supervisors? Is this feasible?
 - ✳ Supervisors clearly bear much responsibility for what happened
 - ✳ Can they not only do what they were doing better, but also expand their role?

d. Improving failure resolution tools

- ✚ Strong legal powers to achieve a reasonable balance between
 - ✦ Minimizing asset value destruction
 - ✦ Minimizing contagion risk
 - ✦ Limiting moral hazard

- ✚ Minimize asset value destruction
 - ✦ Focus: professional asset management and incentives of stakeholders

- ✚ Minimize contagion risk
 - ✦ Balance sheet interconnection; interconnection via markets
 - ✦ Resolution powers that cover all intermediaries, with special options for TBTF/TITF
 - ✦ Cross-border protocols for international financial institutions
 - ✦ Coordination with CB regarding emergency liquidity

- ✚ Contain moral hazard
 - ✦ Clear priority of claims ladder for uninsured liabilities
 - ✦ Haircuts for uninsured liabilities
 - ✦ Partial carve-outs and transfers of assets and liabilities (good bank-bad bank)

6. The regional perspective

- ✦ Current risks or future vulnerabilities? We think both...
- ✦ Perimeter issues increasingly matter in the region
 - ✦ The issue of where to draw the line had already started to pop up (Mexican Sofoles)
 - ✦ Even where the perimeter extends farther, less regulated or unregulated financial activities develop at the edge (department stores, brokerage firms, coops)
 - ✦ Regulatory arbitrage across licenses is on the rise, with potentially important systemic consequences (banks vs. mutual funds, insurance vs. banks, etc.)
 - ✦ The silo-based regulatory model is showing increasingly severe strains
- ✦ The need for macro-prudential tools is perhaps even stronger
 - ✦ Monetary policy carries an even bigger burden (competitiveness & fiscal tensions)
 - ✦ The scope for asset bubbles and credit cycles could be magnified by globalization and greater macroeconomic stability
- ✦ The need to reappraise the role of official supervision is clear, but not obvious
 - ✦ How to connect better the top-down (macro) and the bottom-up (micro)?
 - ✦ How far can one increase room for discretion in our region?
- ✦ Where does the region currently stand? → Joint ASBA-WB survey

END

