

Regulatory Reform: Integrating Paradigms

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What drove the crisis? Where did regulation fail?

The answers depend on your lenses

- ✚ Intermediaries understood the risks but took the bet because they captured the upside but not the downside (**agency paradigm**)
 - ⇒ “They saw it coming yet continued to take advantage of the uninformed...”
- ✚ Intermediaries understood the risks but went ahead because they did not internalize social costs (**externalities paradigm**)
 - ⇒ “They realized tail risks could materialize but kept on matching risk taking to their own risk appetite...”
- ✚ Intermediaries did not fully grasp the risks they were running into and reacted emotionally to a constantly evolving, uncertain world (**mood swings paradigm**)
 - ⇒ “They were overly enthusiastic innovating and did not see it coming; when it came, they were gripped by the fear of the unknown...”

What does this paper do?

- ✦ Explains recent events and regulatory failures following the internal logic of each of the paradigms
- ✦ Concludes that we live in a multi-paradigm world where the three great pitfalls of finance (agency problems, externalities, mood swings) drive the process and constantly feed on each other
- ✦ Stresses that a successful regulatory reform will need to integrate more harmoniously the three paradigms, which won't be easy
 - ✦ Conflicting perceptions of the world leading to conflicting regulatory implications
 - ✦ Addressing a problem identified under one paradigm can exacerbate the problems identified under another paradigm
- ✦ Proposes a minimum set of general features that cross paradigm-consistent reforms should have

Outline

1. A paradigm-based view of financial intermediation and regulation
2. The Subprime crisis viewed under alternative paradigms
3. The conflicting regulatory implications of the three paradigms
4. Towards a cross-paradigm consistent (prudential) regulatory framework

1. A paradigm-based view of financial intermediation and regulation

Why financial intermediaries?

	Agency paradigm	Externalities paradigm	Mood swings paradigm
What is investors' main concern?	<i>Funding the wrong guy or being unable to control his use of your funds</i>	<i>Getting stuck (lack of easy exit)</i>	<i>Being hit by unpredictable events that can undermine the value of investments</i>
What is the gap to be filled?	<i>Information and control</i>	<i>Liquidity and maturity</i>	<i>Volatility and Knightian uncertainty</i>
How do markets fill the gaps?	<i>Arms-length lending, hard information and governance standards</i>	<i>Deep, liquid secondary markets</i>	<i>Derivatives markets</i>
How do intermediaries fill the gaps?	<i>Relationship lending, soft information, and capital (skin in game)</i>	<i>Demandable debt, pooling, and capital/liquidity (buffers)</i>	<i>Debt redeemable at par and capital (buffer)</i>

Why regulation?

	Agency paradigm	Externalities paradigm	Mood swings paradigm
What is the market failure intermediaries are exposed to?	<i>Residual principal-agent problems:</i> <ul style="list-style-type: none"> - informed/uninformed - managers/shareholders 	<i>Like everybody else, intermediaries fail to internalize externalities</i>	<i>Like everybody else, intermediaries are gripped by mood swings</i>
What is the role of regulation?	<i>Align incentives in principal-agent relationship through information and skin in the game</i>	<i>Align incentives in individual-society relationship by internalizing externalities</i>	<i>Temper moods and domesticate creativity</i>

2. The Subprime crisis viewed under alternative paradigms

The agency paradigm

The current regulatory architecture reflects a (mostly) agency view of the world

- ✚ *The source of trouble*: “heads I win, tails you lose”
 - ⇒ This justifies prudential regulation in world of small, uninformed investors
- ✚ However, it is not desirable to *prudentially* regulate everybody
 - ✚ Innovation and competition thrive in the unregulated world
 - ✚ Good supervision is costly; poor supervision is counterproductive
 - ✚ Anyway, the grown-ups will see through your tricks!
- ✚ The solution: a “line in the sand”
 - ✚ Restrict prudential regulation (and supervision) to the systemically important commercial banks that also benefit from the safety net
 - ✚ Let market discipline and transparency take care of agency problems in the unregulated world of informed investors

What led to the crisis?

- ✚ Innovations (securitization, shadow banking) got the ball rolling
 - ✚ New opportunities (involving regulatory arbitrage) *boosted the upside potential*
 - ✚ They also *reduced the downside risk* (good excuse for the bad times)
 - ⇒ A variety of operators (new or old, shadowy or main stream) went for the touch down!
- ✚ The ball went too fast for the monitors
 - ✚ The supervisor was slow in catching up with regulatory arbitrage
 - ✚ Investors were slow to see through the maze of aggravated principal-agent frictions at various nodes of the originate-and-distribute chain
 - ⇒ Intermediaries preyed on the less informed, levering up one-sided bets
- ✚ Once in motion, a crisis became ultimately unavoidable (nothing more to lose by taking more risk)
- ✚ Widespread ex-post public intervention (under the gun of systemic contagion) ultimately validated the paradigm

Where does the paradigm fall short?

- ✚ Why did markets (informed investors) continuously fail to do their job (screen, monitor, and control)?
 - ✚ Were the abused so unable to control the abusing?
 - Yes, there was a huge problems with governance
 - Yet, if shareholders and investors understood what was going on, *why did they not exercise greater control and/or vote with their feet?*
 - Why did principals not alter managers' compensation or fire them?
 - Why did rating agencies not represent the principals well?
 - ✚ Or was it a gigantic problem of asymmetric information?
 - Yes, there was a serious problem of systemic opacity
 - Yet, *how could this asymmetry last so long?*

2. The Subprime crisis viewed under alternative paradigms

The externalities paradigm

Externalities made the system more *fragile* and the downturn more *violent*

- ✚ *The source of trouble*: wedge between private and social costs/benefits
 - ⇒ Market discipline and “market-friendly” regulation, by definition, do not work
- ✚ Liquidity is a well-recognized source of externalities
 - ✳ Ex-ante: rely on others to provide it (creates fragility)
 - ✳ Ex-post: beat the others to retrieve it (makes downturns violent)
- ✚ But many other un-internalized externalities fed the bubble and aggravated the collapse
 - ✳ Coordination failures (among market players or among regulators)
 - ✳ Under-provisioning of information and monitoring (free ride on others)
 - ✳ Over-extension of credit (sour the market for others)
 - ✳ Credit default swaps (pass the ball to others)

Externalities put the focus on the system rather than on individual institutions

- ✚ Externalities explain the gigantic fallacy of composition...
 - ✚ Every one counted on every one else for support, but no one internalized adequately the systemic risk of such cross support
 - ✚ But the risk of the whole is not simply the sum of the risks of the parts
- ✚ ...that regulation failed to address
 - ✚ The current CAR of commercial banks—higher than that in unregulated intermediaries—reflects systemic concerns for the sector as a whole
 - ✚ Yet, a bank's *individual contribution to systemic risk* has little influence on its regulatory capital
 - ✚ Moreover, Basel-style focus on improving risk management at individual institutions level promoted and aggravated the systemic bias

Externalities also made the system *unstable*

- ✚ Discrepancy between the unregulated and the regulated (where some systemic risk was internalized, at least on an aggregate basis) created a wedge in returns
- ✚ The unregulated thus grew to become systemic behemoths!
- ✚ Thus, Glass-Steagall boosted systemic risk outside commercial banking; its repeal boosted risk inside commercial banking!

Where does the paradigm fall short?

- ✚ Externalities increase the system's vulnerability to “acts of god”, and make a crisis more violent once triggered, *but do not trigger by themselves the crisis*
- ✚ *Probability* of crisis (materialization of tail risk) is exogenous, independent of degree of systemic vulnerability
- ✚ Rational players continue to “manage” their risk
 - Had they fully understood how close they were to the abyss and how deep it was, would they really have taken so much risk?
 - Even with coordination failures, self-preservation should eventually kick in (the prisoner's dilemma should vanish as the abyss nears...)

2. The Subprime crisis viewed under alternative paradigms

The mood swings paradigm

Not all that glitters...

- ✚ *The source of trouble*: getting carried away in the midst of evolutionary uncertainty
- ✚ Creativity was real but went wild
 - ✚ Shadow banking resulted from a normal (healthy) process of financial innovation and market completion (promoted by public policy)
 - ✚ Yet, innovation and market development went faster than the capacity to fully understand and absorb the risks and systemic implications
- ✚ *Endogenous* mood swings provided the dynamics
 - ✚ Seemingly predictable behavior inducing exuberance on the way up (“*this time things are really under control...*”)
 - ✚ Then, unexpected icebergs spotted in the fog (CBX credit swap index)...
 - ✚ ...leading to acute uncertainty aversion and extreme unpredictability on the way down (compounded by disappearance of a price vector)

Where does the paradigm fall short?

- ✚ The mood swings paradigm is dynamically self standing
 - ⇒ No need for sustained information asymmetries or “acts of god”
- ✚ However, the collective failure to look ahead, connect the dots, and keep cool is troubling
 - ✚ Markets do not reward (fully rational) systemic risk gazers?
 - ✚ What determines moods? (is it Alice in Wonderland?...)
 - Biased perceptions and/or volatile risk appetites?
 - Playing field uncertainty or playing uncertainty?
 - Individual “wiring” problems or complex group dynamics?
- ✚ Without externalities, would the swings be so violent?

3. The Conflicting Regulatory Implications of the Three Paradigms

The oversight role of markets and supervisors varies radically across paradigms...

	Agency	Externalities	Mood Swings
Can risk be priced and systemic crises avoided?	Yes	<i>Not fully (“one hundred year floods”)</i>	<i>Not really (unless supervisor is Moses...)</i>
How effective is market discipline?	<i>Potentially very effective</i>	<i>Ineffective (inability to internalize or withstand systemic risk)</i>	<i>Ineffective (inability to comprehend or withstand systemic risk)</i>
What is the role of the supervisor?	<i>Market discipline enhancer (crime police residually)</i>	<i>Crowd control - fireman</i>	<i>Scout-moderator-fireman</i>

... with very different implications for regulation...

	Agency	Externalities	Mood Swings
Does fair value accounting help?	<i>Yes, it is fundamental to keep principal-agent incentives aligned</i>	<i>No, it exacerbates externalities</i>	<i>No, it exacerbates mood swings</i>
Should the line in the sand be redefined?	<i>No</i>	<i>Yes</i>	<i>Not necessarily</i>
Are dynamic macro-prudential norms needed?	<i>No</i>	<i>Yes, rules-based</i>	<i>Yes, partly judgment based</i>
Should prudential and monetary authorities coordinate?	<i>Yes, but not tightly</i>	<i>Tightly</i>	<i>Joined at the hip</i>

... and contrasting views on the need for, and purpose of, the safety net

	Agency	Externalities	Mood Swings
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: it is an oxymoron! (optimism might lead me to think so, which is part of the problem...)</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>

4. Towards a Cross-Paradigm Consistent (Prudential) Regulatory Framework

Key challenges for a successful reform

- ✚ Find the right balance between the three paradigms
 - ⇒ Avoid one-paradigm solutions!
- ✚ Find the right balance between financial stability and financial development
 - ✚ Crisis-proof systems may not intermediate or be prone to regulatory arbitrage
 - ✚ Unbridled systems may thrive ... and collapse
- ✚ Reach international agreement on essence of reform *and* implementation modalities across countries

Some (new) general directions of reform

✚ Dealing with externalities

- ✚ Align incentives: internalize systemic consequences of debt funding
 - In the CAR?
 - In the safety net? (deposit insurance and/or LOLR-specific insurance)
- ✚ Ensure regulatory neutrality: interpose a regulated layer between market funding and the unregulated

✚ Dealing with mood swings

- ✚ Boost the supervisor's role: connect dots, scout ahead, temper moods
 - Calibrate counter-cyclical norm in light of changing circumstances
 - Keep a better control on innovations and instruments (standards)
 - Move towards “holistic” supervision
- ✚ Rethink LOLR (role & modalities) as a *risk absorber of last resort*

The new “line in the sand”

✚ Design

- ✚ All intermediaries that lever on deposits and/or market funding are subject to licencing and prudential regulation
 - Prudentially *regulated* non-bank intermediaries have a lower entry capital requirement than banks but the same CAR
 - All direct and indirect credit risk exposures (on- and off-balance sheet) of regulated intermediaries to be backed by consistent capital
- ✚ Prudentially *unregulated* intermediaries need a license, have low entry requirements, no CAR, but *can only borrow from regulated intermediaries*
- ✚ All prudentially regulated intermediaries have access to the LOLR

✚ Advantages

- ✚ There is no arbitrary, bound-to-fail, definition of who is a “systemic” player
- ✚ Systemic risk is (partially) internalized throughout the entire universe of financial intermediation (avoids regulatory arbitrage)
- ✚ This arrangement implies a two-tiered “nursery” system promotes entry—hence competition and innovation
- ✚ It also simplifies monitoring (“delegated supervision”)

Towards holistic supervision

- ✚ A new and much tougher role for the supervisor...
 - ✚ Watch the forest
 - ✚ Connect the dots
 - ✚ Provide information on systemic risk to markets
 - ✚ Act in time
 - ✚ Go against the tide

- ✚ ...with substantial risks attached
 - ✚ Fail: moral hazard
 - ✚ Succeed: complacency and exuberance

- ✚ The biggest question: rules or discretion?
 - ✚ What is the right mix?
 - ✚ What is the right institutional setting?

END

