

Abstract

The issue: What regulatory arrangements for systemic financial stability?

The dilemma: Controlling the evolution of individual strategies with high potential for systemic risk without unduly impeding positive market dynamics?

This is an exploratory essay on financial regulation and stability that draws upon the basic issues studied within Public choice and Collaborative decision-making approaches.

In the tradition of mechanism design approach à la Myerson, this article comes within the scope of the *New Economics of Regulation* (Laffont, 1994) and seeks to implement the principal-agent methodology in the analysis of the relationship between (public/private) regulators and regulatees in order to identify the conditions for an optimal regulation.

Keywords: Collective action, cooperative games, financial regulation, mechanism design, public good

JEL Classification Codes: C70, D82, G18, H44

Introduction

Compared with the literature developed on this issue, the article offers an alternative perspective to financial stability. It assumes that (systemic) financial stability is a public good to be provided by appropriate mechanisms and cannot only rest on market self-regulation **because of the specific characteristics of monetary and financial operations and dynamics** that lead to a crucial distinction between the “normal” (market) activities (producing/consuming tomatoes, software or holidays) and financial activities. Financial regulation is of systemic importance since the smooth functioning of markets requires a continuous and sustainable provision of financial activities, and thus financial stability at the macro level. From self-regulation to state regulation, different regulatory models could be outlined. However, in light of the 2007-2008 financial turmoil, composite micro-macro-based regulatory models may have a political and ideological attraction for policy-makers and private institutions. I borrow from the analysis of Ostrom (1998) on the commons and collective action through **polycentric governance** and consider the conditions under which an optimal regulation might be designed and implemented in a smooth and flexible way to meet **the dilemma**.

Two constraints must be considered in order to assess the relevance and the feasibility of the preferred regulation model. First, the model must be compatible with a minimum level of decentralized individual action. Although regulation can be organized and implemented by and/or under public control, it should seek at supporting market activities. Second, regulation must be designed according to an ultimate macro objective, financial system’s stability.

1. Regulation

I.1. Industry-interest related regulation

“as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit” (Stigler, 1975: 115)

I.2. Regulation as a market-permitter

Regulation supplies to society “a structure of beliefs that make prosperity and liberty possible (...). Regulation (...) in some sense creates the very possibility of marketplaces” (Carpenter, 2009: 164).

I.3. Regulation as a system of constraints for the common good

As a set of restrictions/constraints imposed over individual/market activities through a binding set of rules, usually implemented by the public power to influence business or social behavior, regulation aims at preventing actions that might harm society and/or seeks to facilitate/encourage/incite actions to enhance society’s welfare (Baldwin et al. 2012).

I.4. Regulation as mechanism design

→R. Myerson (1988): A mechanism is defined as “a specification of how economic decisions are determined as a function of the information that is known by the individuals in the economy. In this sense, almost any kind of market institution or economic organization can be viewed, in principle, as a mechanism. Thus, such a perspective can offer “a unifying conceptual structure in which a wide range of institutions can be compared, and optimal institutions can be identified”. J.J. Laffont (1994: 508): Different economic institutions can then be seen as different mechanisms for communication that should allow separate individuals to enter into contact with each other without provoking systemic clashes and catastrophes. The usual framework is a principal-agent set up within which “the principal is the State or the regulatory institution and the agent is the regulated firm. A specific conceptual tool to be used in such an analysis is the concept of incentive efficiency (Myerson, 2008) that leads to the evaluation of the rules (and institutions) by which resources are allocated. Following Laffont (1994: 507), I assume that regulation is “the public economics face of industrial organization. It explores the various ways in which governments interfere with industrial activities for the good or for the bad **The study of financial regulation as a mechanism design issue may then be conducted through public choice and the like literature if financial stability is regarded as a public good**. Therefore, the question is not to know whether or not financial regulation must be organized through market mechanisms (the so-called self-regulation) or through tight public supervision (constrained regulation). It is rather related to the relevant type of regulatory framework to be set up between an extra-market independent public regulator and private market players, the regulatees (banks, financial institutions, etc.), in order to ensure social coherence.

2. Regulatory design: Cheap talk or mediation

The design and implementation of particular supervision and intervention procedures are related to the choice of a peculiar organizational mode for which “the game equilibria corresponding are as good as possible when one takes into account the constraints imposed by the diversity of information and the interests amongst the members of the organization” (Radner, 1987: 5).

Two mechanisms (among other possible communication games) are presented here: **cheap talk and direct revelation mechanism with a mediator**. The advantage of cheap talk is that it allows large freedom of decision and action to market actors. Aumann and Hart (2003 : 1619) state that « With cheap talk, more can be achieved by long conversation than by a single message –even when one side is strictly better informed than the other.”

The second is more centralized and binding: a direct revelation mechanism with a mediator (Myerson, 1988). The central mediator is a trustworthy person who asks market actors to report all their relevant private information. The mediator then reveals to each individual, separately, only her/his own recommendation about the expected action of each individual. However, such incentive-compatible direct-revelation mechanisms rest on highly centralized mediation of the economic system.

Condition to reinforce the bilateral communication mechanism in a sender-receiver game: strategic information transmission (Crawford and Sobel, 1982): **communication of relevant information is dependent on the similarity of parties’ interests**. In a public regulator (seeking social coherence = systemic financial stability)-private regulatee (seeking individual profit maximization) relationship how much and how this similarity could/might be reinforced? (In other words, how to convince the regulatee that the regulator seeks the interest of the regulatee through systemic stability and not her/his own interest?)

3. Regulation as a social dilemma: polycentric governance

Usual dichotomy between market-relying and state-relying governance frameworks. Another perspective: “polycentric governance” (V. Ostrom et al. 1961) to avoid the *Tragedy of the Commons*. Some specific circumstances (such as repeated interactions that would allow reciprocity, reputation and punishment, and kin selection) might provide general solutions to the problem of the evolution of cooperation through mixed equilibria in public-good games with a certain level of cooperation (Archetti and Scheuring, 2012). However, in such a decentralized regulatory system, the constituent organizations have to be governed by an overarching set of rules aiming at aligning the information and incentives of individual actors with broader social goals such as financial stability. General conditions under which polycentric governance could be expected to be efficient:

- The publicness of goods may vary from low to high under specific conditions and then require a more or less polycentric organization than a monocentric public hand-guided governance.
- Multiple-scale provision seems easier when the scale of production and the size of the organization required are small.
- Therefore, a horizontal hierarchy is possible in a regular and open meeting-and-consultation environment within which all players can be involved. Such a “direct democracy” may allow simple, flexible and permanent communication among the members of the community through “cheap talk” mechanisms.
- Characteristics of the actors involved, their respective position (power, obligations, interests, etc.), set of actions actors can take, and the map of functions within the collective game as well as the consequences of such actions on the provision process should be posited.

4. Criticalness of money and finance

Market-based capitalist economy is a monetary economy (credit-debt financing process of economic life). Financial markets are at the core of economic operations. Without monetary operations and related financial systems no economic activity can be undertaken and no wealth can be created. Therefore, financial stability and continuous monetary (debt-financing) operations are essential conditions for a smooth economic development. Financial stability is not a “normal” product (good or service) that could be excludable and rival. It is a “public good” and its inherent quality requires public production (Musgrave, 1945:44). Its impacts are indivisibly spread around the entire society. The question then arises: How to provide it (what is the relevant mechanism)?

5. Publicness financial stability

A crucial aspect comes then into the picture: the financial system displays the features of a basic infrastructure common to the whole society whose stability proves to be a public good and a societal concern. A few distinctive criteria (size-scope and systemic/societal criticalness) of the activities to regulate allow to set the conditions for a relevant regulatory framework: **If an issue has a global character, it would fit well with top-down-like “power-over” governance (for instance, systemically important financial institutions), whereas more locally providable commons could be governed by bottom-up, polycentric, “power-with” mechanisms (local, cooperative banks, for instance)**. If financial stability proves to be rather a global concern than a local issue, the rationale for macro-prudential regulation against systemic failures should lead to a global governance of collective action. Some relevant directions for systemically consistent (global) measures might be given through works developed in the aftermath of the 2007-2008 global financial crisis. These directions are usually directed toward macroprudential organization of the regulatory framework. For instance, Acharya et al. (2009) suggest that the regulator in charge of systemic risk would act like the *headquarters* of the economy, and each individual firm would be considered as a component of the system. Such a framework might help meet the minimum goals: - Making institutions more accountable for the negative systemic effects of their individual strategies (micro-prudential regulation assessed at the macro level) and - Preventing micro-level rational individual strategies from turning into macro-level catastrophic outcomes (macro-prudential regulation based on the principle of “no one-way bridge between market behavior-mechanisms and the social optimum).

Conclusions

This article regarded financial regulation as a problem of mechanism design seeking a relevant collective action to solve an existential social dilemma: financial stability at a systemic level in large private institutions-dominated economy. Assuming that financial stability is a public good, two mechanism designs are recalled within the framework of a non-cooperative communication game between a public regulator and market actors (the regulatees): a cheap talk model and a mediation-based revelation model. The results that can be drawn from polycentric approaches à la Ostrom & Ostrom and the specific characteristics of monetary and financial operations in a market-based capitalist economy can provide relevant insights about the development of mechanism design models in the area of financial regulation. The ultimate goal being the sustainable and society-wide welfare generating functioning of an economic system that is crucially relying on the stability of the way monetary/financial markets are operating and developing innovative solutions.

References

- Aumann, R.J. and Hart, S. (2003), “Long Cheap Talk”, *Econometrica*, 71(6), November: 1619-1660.
- Borio, C. (2011), “Implementing a Macroprudential Framework: Blending Boldness and Realism”, *Capitalism and Society*, 6(1), Article 1. DOI: 10.2202/1932-0213.1083.
- Carpenter, D. (2009), “Confidence Games: How Does Regulation Constitute Markets?” In Balleisen E.J. and Moss, D. (Eds.) 2009. *Government and Markets: Toward a New Theory of Regulation*. New York, NY: Cambridge University Press: 163-190.
- Clark, E. and Jokung, O. (2015), “The role of regulatory credibility in effective bank regulation”, *Journal of Banking & Finance*, 50: 506-513.
- Laffont, J.-J. and Tirole, J. (1993), *A Theory of Incentives in Procurement and Regulation*, The MIT Press, Cambridge, Mass.
- Morrison, A.D. and White, L. (2010), “Reputational Contagion and Optimal Regulatory Forebearance”, *European Central Bank Working Paper Series* No 1196, May.
- Myerson, R.B. (2008), “Perspectives on Mechanism Design in Economic Theory”, *AER*, 98(3): 586-603.
- Ostrom, E. (2010), “Beyond Markets and States: Polycentric Governance of Complex Economic Systems”, *AER* 100: 641-672
- Silk, J.B., Kaldor, E. and Boyd, R. (2000), “Cheap talk when interests conflict”, *Animal Behaviour*, 59: 423-432.
- Stigler, G (1975). *The Citizen and the State. Essays on Regulation*. The University of Chicago Press, Chicago.
- Ülgen, F. (2021), “Public Good, Collective Action and Financial Regulation”, *Annals of Public and Cooperative Economics*, 92(1): 147-167
- Ülgen, F. and Klapkiv, L. (2022), “Financial crises and financial regulation: What relationship?”, forthcoming in S. Hsu (Ed.) *Encyclopedia of Financial Crises*, Edward Elgar.