



A Regulatory System for the Financial Sector from Complex Systems Science

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I am a systems scientist, more specifically I engage in a quantitative version of system science called complex systems science, and as such I take a systems approach.

I appreciate the importance of the development of an architecture of regulatory organizations as has been described in the documents presented to us about the creation of a new financial regulatory structure [1-3]. Still, I would like to bring your attention to a fundamental gap---a missing aspect of these documents. I affirm, that these documents are primarily focused on the type of effects we want to achieve in the financial system, but they do not recognize that the current task is that of creating a regulatory system that itself will be successful. The assumption of these documents is that if we identify the goals and assign people to those tasks, we will be successful. This is not the case.

I emphasize that as a scientist I have studied the financial system and have recommendations to make relevant to the stability and effective functioning of that system. However, today we are asked to comment on the regulatory system, and it is not effective to focus on saying we want this to be true so we need a regulator for this, and we want that to be true so we need a regulator for that.

Instead, I want to state what I think are the primary features of an effective regulatory system.

First, the regulatory system must have motivation and mechanism that promotes the objectives of regulation: these translate into (1) Accountability and (2) A Culture of Learning (education, research, and information), and (3) Authority (power). Only with these three features, will the system be successful.

Second, it should be a tenet of the regulatory system that those who are being regulated must have an abiding interest in the success of their regulators---otherwise the system will be undermined.

Achieving this seeming contradiction is possible if:

Regulation is (a) Based upon a high reputation of the regulatory agency, (b) Visible and (c) Through its visible presence and certifications, promotes the reputation of those that are regulated and their success in the short term. This means that the regulatory agency is integral to

the confidence that the customer has in that organization, process, institution, market, or other system.

This statement is apparent in the question of whether investors have confidence in the market, citizens in their banks, and whether the international community considers this to be the place where they will go for security.

Third, the characteristics of such a regulatory system are that those who constitute its essential personnel are devoted to that task through both long term residence (careers) and the aforementioned Culture of Learning. Only through a reward structure that emphasizes the long term consequences, and the ongoing engagement in understanding those long term consequences, can accountability be achieved.

Successful examples of regulatory systems are the Federal Reserve, and in a different domain the Centers for Disease Control and Prevention (CDC). Each of these organizations has a high reputation in its context, and is devoted to a Culture of Learning that transcends the moment, its personnel engage in career long advancement through contribution to knowledge, i.e. research into the complex problems faced by the system under regulation. Further examples may be found in the Culture of Learning found in the military, medical and academic communities, each with its limitations and lessons.

Given that the exemplar regulatory organization in this context is the Federal Reserve, it is not accidental that the various recommendations about regulatory reform are anchored by expanding its authority. However, this is not the same as expanding its culture. Today the Federal Reserve does not have either the long history or Culture of Learning in the many domains of possible regulatory activity. Neither does its involvement automatically transfer its culture to other organizations. Therefore, establishing as a first priority a framework in which the essential features of success will pervade the new regulatory system is central to its success.

Thank you.

References:

1. Former Treasury Secretary Hank Paulson's March 2008 regulatory blueprint – <http://www.treas.gov/press/releases/reports/Blueprint.pdf>
2. Group of 30 report, including recommendations by former Federal Reserve Chairman Paul Volcker — <http://www.group30.org/pubs/recommendations.pdf>
3. Recommendations of the TARP Congressional Oversight Panel — <http://cop.senate.gov/documents/cop-012909-report-regulatoryreform.pdf>