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DOI:

[10.1016/j.pprev.2017.08.008](https://doi.org/10.1016/j.pprev.2017.08.008)

Document Version

Peer reviewed version

[Link to publication record in King's Research Portal](#)

Citation for published version (APA):

Kapetanios, G., & Muzzupappa, E. (2017). Regulatory capture and financial crisis: Comment on "Modelling human behavior in economics and social science" by Marina Dolfín, Leone Leonida, and Nisrina Outada. *Physics Of Life Reviews*. <https://doi.org/10.1016/j.pprev.2017.08.008>

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Accepted Manuscript

Regulatory capture and financial crisis

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PII: S1571-0645(17)30134-3
DOI: <http://dx.doi.org/10.1016/j.plrev.2017.08.008>
Reference: PLREV 918

To appear in: *Physics of Life Reviews*

Received date: 25 August 2017

Accepted date: 25 August 2017

Please cite this article in press as: Kapetanios G, Muzzupappa E. Regulatory capture and financial crisis. *Phys Life Rev* (2017), <http://dx.doi.org/10.1016/j.plrev.2017.08.008>

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Regulatory Capture and Financial Crisis.

Comment on “Modelling Human Behavior in Economics and Social Science”

by Marina Dolfin, Leone Leonida, and Nisrina Outada

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The paper by Dolfin, Leonida and Outada makes an important contribution to the topical and much debated question among scholars from different disciplines about whether and to what extent an interdisciplinary approach may help in understanding economic and social dynamics. In a sense, we read the paper as an attempt by (part of) the scientific community of mathematicians to inform economists and social scientists about the opportunities the kinetic approach can offer as far as these dynamics are concerned.

The above consideration calls for an approach able to represent and grasp the interactive nature of the phenomenon under consideration. The paper proposes a new approach that allows the researcher to go beyond the traditional dichotomy between hard and soft sciences, and exploit instead the interaction between the two approaches. The quest for the interdisciplinary approach to the social dynamics has already been highlighted by economists and sociologists. In particular, [2] has given an important contribution to this issue in the context of the so-called social systems theory [5]. According to the social systems theory the behaviour of the entities of a system is necessarily influenced by the entities which belong to other systems [3, 4].

In order to capture these interactions, it is necessary to look at the overall picture, rather than at the system as a closed entity. Although each system has its own language, their agents are closely linked and interact with each other by continuously communicating. Of course, the higher the degree of communication among systems, the better the understanding of the inner dynamics of the social system. This paper goes one step further with respect to the social systems theory by figuring out the key aspects of this communication.

The approach proposed is extremely useful when analysis of the behaviour of some social agents to changes in macro determinants such as changes in regulation, is of interest for policy implications. This relates to our argument, which essentially refers to the regulatory capture, as the behavioural reaction of the banking system due to the changes in the regulatory landscape. This topic is of interest because, in the aftermath of the Great Regression, the regulatory system of the banking sector has received increasing attention by scholars and policy makers. In fact, it is believed that deficient

regulation of the financial system, together with a failure of market discipline have contributed to the crisis which spread globally. Therefore, the main quest is to provide the economic system with a regulatory landscape able to avoid the onset of a new crisis and to deal with situations of financial distress. From the point of view of the policy recommendations, the main challenge is to be able to produce regulation that is flexible and can convey the right incentives to all economic agents: banks, governments, and individuals.

The point is that, if the regulation can be taken as exogenous with respect to the regulated entities then, given a new rule, the outcome is likely to be what the regulator wants. In this case, we may think that a partial equilibrium analysis, where only the regulated entities are modelled, and possibly a comparative static approach may be enough to describe this phenomenon. The approach will be to analyse the economic environment without the new rule first, and the same environment once the new rule has been instead implemented after. There is no need of considering dynamics and interactions in between these two points, especially if the system is assumed to be stable. The partial equilibrium model, and the comparative static approach will depict the impact of the new rule from an equilibrium point to the new equilibrium point.

However, the above is unlikely to hold. Usually, the outcome of a new rule is not what the regulator wants [7]. It is not always clear why this is the case. However, the behaviour of the economic actors may well play a role in the adjustment dynamics towards the new equilibrium point, given the implementation of a new rule. Further, some banks or financial institutions can, at some point, find convenient to cooperate/collude so as to endogenously influence the regulator. If this is the case, the new rule should not be taken as exogenously given, but as influenced by the economic actors which have to be regulated.

The large number of post-crisis regulations and policies on the banking sector are likely to reduce the market power in the banking sector. Because of their impact on the market structure, there is an incentive for large banks to influencing these dynamics by participating to the rule-making process, *via* regulatory capture practices [1]. This provides advantages for them, at the expense of small banks. The regulatory capture issue in the banking sector is an important topic in terms of unethical behaviour in banking and distortions in economic dynamics leading to instabilities of the financial system [6]. This is why it is important to be considered for the purpose of policy recommendations when working on the implementation of new financial regulations. The main challenge is whether and to which extent the kinetic approach is suitable for modelling and forecasting these incentives and dynamics.

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