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Can the Social Mechanisms Framework be Applied in Modelling Natural Shocks?

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Abstract

Theorizing in the social sciences has generally been characterised by a dichotomy between concrete (practical) and abstract models. While concrete models attempt to explain social phenomena based on observable outcomes, abstract modelling has often departed from logical thinking, being characterised by critical assumptions, culminating in logically attractive but often practically unrealistic models. Many sociologists however agree that the social mechanisms framework is useful model for rigorizing the identification, understanding and analysis of real world social phenomena. In summary, the social mechanism framework departs from the assumption that the relationship between inputs and outputs of social phenomena must necessarily be explained by the underlying mechanisms, and not based on simple relations displaced for instance by regression or correlation coefficients. This article extends this conventional wisdom in the social science to the analysis of natural shocks, whose rapid upsurge has been observed in recent years. It suggests that this concept in itself provides a middle ground theory that sufficiently combines abstract logic and empirical validity in understanding and explaining natural shocks. It is argued that an adequate theoretical and methodical approach of examining formal and informal responses based on the social mechanisms framework is prerequisite for understanding and explaining the black box often existing when such shocks occur in developing countries. This is very crucial as formal (state and market) mechanisms often fail or function only partially in such countries. An adapted theoretical model is proposed that enables natural shocks to be conceptualised as social phenomena. Such an approach can help explain aspects of vulnerability, adaptability and resilience observed or not when extreme events occur. Apart from providing a theoretical model with respect to shocks, empirical examples are provided to strengthen the argument that the social mechanisms framework provides an adaptable model that can significantly improve quantitative analysis of shocks, as long as they are perceived as social phenomena.

Keywords: Modelling, natural shocks, social mechanisms, social phenomena