

Chapter 43

Sustainable Development and the Sustainability of Socioeconomic Systems: Some Reflections on Crises and Corporate Systemogenesis

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ABSTRACT

In the current global scenario, it is essential to ensure the stability and sustainable development of the socioeconomic system. The literature shows that there is so far no clear understanding of the nature of the sustainability and development of socioeconomic system. Systems thinking may be the right approach for the transition to sustainable development, supplying a way to understand the universality of the laws of development. This theoretical paper shows how the management of firms can be based on the universal laws of evolution and development

INTRODUCTION

This theoretical paper shows how the management of firms can be based on the universal laws of evolution and development. It aims to discuss and create a framework for better understanding the theory of development, sustainability, and the sustainable development of socioeconomic system, with a particular reference to business systems.

To this end, the paper will:

1. Study the main theories of development.
2. Discuss the essence of evolution and the development of the socioeconomic system.

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3. Describe the main structural transformations over the last 100 years, considering the evolutionary change of socioeconomic systems on the global scale (highly complex nonlinear systems), structural transformations, and their implications in the global context.
4. Construct a holistic model of evolutionary dynamics of socioeconomic systems, allowing a better understanding of the systems as a whole, in interaction and interdependence with their elements over time. This model will be based on the coherent interaction and coevolution of the system's elements and subsystems.
5. Show how holism (systems thinking) in management and in corporate government can be an effective approach to sustainable development.

This study refers to several theoretical approaches from which we alter the terminology and some relevant methodological aspects: *General Theory of System* (Bertalanffy, 1968); *Synergetics* (Buckminster Fuller, 1975), Schumpeter's entrepreneurship theory (1949); the theory of social dynamics (Sorokin, 1937); the theory of social action (Parsons, 1949); Durkheim's theories of sociology and labor (1983 and 1900); Spengler's theory; the theories of economic cycles by Kuznets, Mensch and Elliott (1971–1973); theories of development of nonlinear system by Haken (2000) and Prigogine (1989–1994); and chaos theory as popularized by Gleick (1987). Furthermore, this study is based on a postulate concerning the transition of socioeconomic systems from unorganized to self-organizing systems.

We can find a similar direction and approach to management in the works of Beck & Cowan (2006) and of Warnecke (1993).

The paper provides an analytical overview of the financial and economic crises from 1900 to 2013. The data was analyzed using the system-synergetic approach of Kindleberger and Aliber (2005).

The contribution and implications of this research are to expand the existing theories of development in order to create the scientific basis for future studies. The study demonstrates the laws and tendencies of development and attempts to define the stage of development, shedding light on a new way to manage systems more effectively, helping to foresee future scenarios, and to prevent the negative circumstances the result from crises. Moreover, the proposed approach may facilitate focusing on the future and on innovation, instead of on vain attempts to preserve an imaginary stability. To this end, we consider the financial, economic, social, and technical elements of the enterprise as a connected holistic system.

ON THE UNDERSTANDING OF THE UNIVERSAL LAWS OF EVOLUTION

First, we consider the dialectical theories of the classical German philosophers (Hegel, 1807; Marx, 1894; Fichte, 1792–1810; Kant, 1770–1780s). Friedrich Engels systematized the three laws of dialectics: the transformation of quantity into quality; the negation of the negation (thesis, antithesis, synthesis); and the unity of opposites. According to the first law, within any period of development of society, changes gradually accumulate until further change cannot be accepted, triggering the leap of revolutionary transformation. According to the second law, within any stage of development, mutually antagonistic forces interact as a system. The third law states that any stage of development is the result of the negation and synthesis of the previous stage; development thus has the character of a spiral, and could be characterized as a three-step process.

Auguste Comte's "social physics" divides society into two components: social statics and social dynamics. The social system requires a more "intimate harmony of the component elements and more

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