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ABSTRACT

The ‘information cycle’ is an evolutionary model of the selection and maintenance information in the face of Second Law depreciation of its carriers. It is a general model of information, originally conceived by Howard T. Odum, that applies to information of any kind. The model has been applied now to DNA information and to many forms of cultural information, including conversation, social media, television, ritual, classroom lecture, and others. This paper aims to conceptualize money and the financial system in forms that permit application of the information cycle model. A principle insight has been to conceive of money in the financial industry not as flow but as storage or concentration. Products of the financial industry are concentrations of money, which are then available to move in countercurrent to real wealth in productive economic processes. The concentrations produced are of many sizes, which can be organized as a hierarchy. In the financial industry, as money concentrations increase in size they are also produced less frequently, requiring longer cycle time, they require larger inputs of energy and materials, and they apply to larger spatial areas within the economy, as predicted by Odum’s Fifth Law Hierarchy Principle. Money concentrations are produced and maintained in information cycles. Their form and application are tested in the market, and if successful they are copied into conceivably many new forms. This cycling maintains successful designs against Second Law depreciation. In conclusion, the major components of the financial industry are identified and recognized for their contributions to the information cycles of the financial industry. A general model of the industry is produced with components located within scales of the hierarchy of natural and human systems. This includes the nested hierarchy of forms of cultural information. It is within this model that financial information interacts with the other scales of cultural information, which results in the contestation and negotiation of ideas that characterize human cultural information as it self-organizes and as it feeds-back control to systems of nature and industry.

Citation
