

SUPPLEMENT TO M_S ASI - HF LLC FALL 2010 NEWSLETTER

Introducing The Hoyt Wiki Site

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The extent of the financial crisis of the 2000s which caught most economists and regulators by surprise is evidence of how complex the US and global financial markets have become. It is also evident that the models being used to make financial decisions were not adequate or at least not exposed to enough stress testing to capture events that could cause a collapse of the subprime mortgage market triggering the financial crisis.

The Homer Hoyt Institute embarked on a program of research and conferences (Subprime Crisis Research Program) as the financial crisis was occurring to try to better understand what went wrong and what kinds of research and models might be helpful to avoid future financial crises. One obvious conclusion from this program was that there was a need for new ways of modeling real estate markets as they relate to the broader financial markets and how the actions of all the various agents in the market (homebuyers, lenders, mortgage backed securities issuers, etc.) interact.

In 2009, the Homer Hoyt Institute explored the feasibility of Project New Initiative as an extension of the Subprime Crisis Research Program dealing with an interdisciplinary approach to the foreclosure crisis and its various ripple effects. The objective of this exploration was to find and bring together researchers from diverse disciplines in order to discuss how their respective areas of expertise could assist policymakers in ending the crisis and prevent a relapse of the housing market crisis.

As a result of this exploration, the Homer Hoyt Institute has initiated a “Complex Real Estate Systems Research Program.” A key component of this research program is to recognize the inter-disciplinarily nature of real estate and that concepts and models from other sciences can help explain real estate markets as a system.

This research program has five threads at this time. These are presented in the home page of **Complex Real Estate Systems**. They are as follows:

- 1.) The **Discipline Development** thread is series of articles written by Maury Seldin that discusses concepts from other disciplines that are applicable to understanding real estate markets. Many of these concepts are found in the Complexity Economics literature as well as biology and other disciplines and he suggests how “consilience” can lead to these concepts being applied to the analysis of real estate markets including the subprime mortgage market.

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- 2) **Agent-Based Modeling**, a tool used to analyze complex adaptive systems, is presented. The Homer Hoyt Institute is developing several agent-based models to demonstrate how these models can complement other models traditionally used by researchers to capture the interactions of the various agents in the real estate market. Jeff Fisher is currently leading this effort.
- 3) The original Subprime Crisis Research Program presentation is available from the main home page of the Hoyt Group, <http://www.hoyt.org>, under the label **Subprime Crisis**. A major supplement to the Subprime Crisis Research Program is in the form of Maury Seldin on Strategy Matters (http://www.hoyt.org/decision_making.phtml). It contains substantial background material for utilizing strategy in complex adaptive systems.
- 4) The **Capital Flows** thread highlights ways in which the Institute has been exploring how previous research that it funded can be used to better measure capital flows and their imbalances. These imbalances may indicate that the system is moving out of equilibrium as happened with the financial crisis due in part to too much capital flowing to subprime mortgages and securities backed by these mortgages. Ron Donohue and Stephanie Rauterkus have been leading this effort. The Capital Flows section focuses on developing this monitoring system as a means to harness complexity in real estate and capital markets. In doing so, the section draws heavily on the original Capital Flows project is linked as a major supplement. It is on the main home page of the Hoyt Group, <http://www.hoyt.org>, under the label Capital Flows. It serves as background to the discussion on utilizing capital flows as a major indicator for policy decisions in harnessing complexity in real estate and capital markets.
- 5) Finally, the **Development Process** thread features Dan Kohlhepp's "development matrix" and related material. Here, Kohlhepp attempts to capture the interrelationship between all the various agents to the development process with the understanding that responsible development practices should use what we learn about complex real estate systems. To encourage discussion and collaboration among Hoyt constituents and others, the Hoyt Wiki has been created to facilitate this interaction and to further our understanding of Complex Real Estate Systems as well as other topics. The site can be viewed by anyone; and the objective is for the site to be utilized as a forum for the exchange of ideas regarding complex real estate systems as well as other real estate topics. This can be accomplished by researchers either adding content or commenting on existing content. In order to facilitate this exchange, we have engaged Stephanie Rauterkus as a 'content editor' who is charged with the task of organizing the content of the site, requesting author permission to post working papers and other documents to the site as well as addressing technical issues regarding discussion forums and links to external content. If you have questions or comments regarding the Wiki site including (but not limited to) questions about uploading content to the site, contact Stephanie at srauter@uab.edu.