Could the subprime crisis have been foreseen?

COLLOQUIUM BY JORDI MOLINS

Systemic crises tear apart the fabric of society: suicide rates increase, unemployment skyrocket, families lose their homes. Systemic crises are always and everywhere related to credit crises.

In this presentation, we find that credit crises can be understood as instances of phase transitions. Our model (*), the Ising/Jungle model, is well known in condensed matter physics. Its application in the credit arena results in understanding credit crises as phase transitions in a natural way. Even more, by using empirical credit data, the fit of the model allows us to robustly estimate future risks in the economy. In particular, we find that regulators could have expected, in 2008, the 2009 U.S. subprime crisis as a statistically reasonable event.

(* Model Risk on Credit Risk. Jordi Molins and Eduard Vives. Risk and Decision Analysis, vol. 6,