# Chapter 14 Standardization of Information and Financial Innovation: Lessons from Mortgage Securitization

# **Antonios Kaniadakis**

Queen Mary University of London, UK

# **ABSTRACT**

Mortgage securitization markets emerged as an extension of the primary mortgage lending markets. This created the need for standardization of information across these two contexts that would enable a collective and universal understanding of credit risk and its management. The securitization industry, however, instead of developing standardization management strategies that would support this vision, it rather chose to implement an organizing vision that was centered around operational efficiency and profit-making supported by a focus on functional specialization. The outcome was the fragmentation of the securitization supply chain via vertical disintegration, which undermined the unity of the risk analysis process. This chapter argues that the effects of technological standardization on innovation in the mortgage industry should be explored beyond a narrow focus on efficiency and profit in relation to an individual organization's business strategy; but rather within an extended scope that includes broader social and policy contexts that guide innovation.

# INTRODUCTION

Not that long ago the securitization industry and its practices were practically unknown to the broader public. In fact, in 1998, Business Week was reporting on "A \$2.5 trillion market you hardly know" (Business week, 1998), referring to securitization. This very profitable industry had to a large extend remained the domain of a few players who had managed to assemble the technical knowledge and capabilities to practice it. As the 2007-8 financial crisis started spreading allover the world, however, this rather unknown industry was suddenly at the center of everyone's attention. How was it created? What were the innovations necessary for its emergence and evolution? In this chapter I shall show that stan-

DOI: 10.4018/978-1-4666-9737-9.ch014

dardization of information across contexts was a driving force for innovations that led to the emergence of securitization. I shall talk more specifically about the mortgage industry as a special case which was heavily implicated in the 2007-8 global credit crunch.

A typical definition of securitization is "The process through which an issuer creates a financial instrument by combining other financial assets and then marketing different tiers of the repackaged instruments to investors. The process can encompass any type of financial asset and promotes liquidity in the marketplace." (Investopedia, accessed 15.05.2015)

Although this seems like a rather technical definition, simply it means that issuers (mortgage lenders, investment banks, building societies etc) pool together financial assets (mortgage loans, credit card loans, auto loans) which then divide in slices (tranches) depending on how much risk they carry, and then they sell these slices to third party investors in the capital markets. Capital markets constitute secondary markets as opposed to the primary ones, in which the underlying assets were bought and sold. Although securitization is a centuries-old financial innovation, as a practice of selling loans in secondary markets (Riddiough, 2011), in its current form and scale, especially in the context of the mortgage markets that were implicated in the US housing bubble that initiated the credit crunch, its origins are placed in the 1970s.

One of the main characteristics of securitization is that it is based on creating linkages between multiple layers of context by which credit risk can travel from primary to secondary markets. During this process, risk is transformed from something to be dealt with as part of a risk analysis process aimed at improving decision-making (i.e. lending decisions) in the mortgage lending market, into *raw material* used to create a different type of financial product aimed at the capital markets. By making this risk transfer possible, securitization as a financial innovation creates linkages between an individual homebuyer with the vast resources of the global capital markets (Business Week, 1998). The creation of these linkages gives securitization a ubiquity, as if a person has a mortgage, or a credit card loan, or an auto loan, the chances are they are part of it whether they know it or not.

The complexity of securitization and the way it makes possible the "enmeshing" of multiple layers of context of social and economic life into a single financial product, makes it quite a controversial topic. In fact, the way risk can be interpreted outside the specific context of the credit arrangement that created it (e.g. a borrower paying their mortgage in monthly installments) and acquire a broader, generic meaning, has raised debates as to how beneficial securitization is as a financial innovation. On the one hand, it has been seen as "one of the most important and abiding innovations to emerge in the financial markets since the 1930's." (Leon T. Kendall quoted in Business Week, 1998), while on the other, it has been termed as "financial weapons of mass destruction" (Buffett, 2002). This ambiguity surrounding securitization raises questions in regards to the role of financial innovation in economic and social life, and also suggests that this type of financial innovation may be pointed towards alternative possible directions. These alternative paths for financial innovation are created through a collective effort by industrial actors, in their attempts to enter the industry and "plug into" its value chain. As I will show here, part of these efforts was the collective attempt of the industry to standardize credit information across primary and secondary mortgage markets. Although the need for standardization of information was initially aiming at finding a collective and standardized way to understand and interpret credit risk, as the industry spread to private sectors, standardization of information formed the basis for operational efficiency based on functional specialization. This had the opposite effect on the understanding of risk as it resulted to its compartmentalization.

21 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/standardization-of-information-and-financial-innovation/141774

# **Related Content**

# An Exploratory Analysis of the Relationship Between Organizational and Institutional Factors Shaping the Assimilation of Vertical Standards

Rubén A. Mendozaand T. Ravichandran (2011). *International Journal of IT Standards and Standardization Research (pp. 24-51).* 

www.irma-international.org/article/exploratory-analysis-relationship-between-organizational/50573

### Standardization and Business Models for Platform Competition: The Case of Mobile Television

Pieter Ballonand Richard Hawkins (2009). *International Journal of IT Standards and Standardization Research (pp. 1-12).* 

 $\underline{www.irma-international.org/article/standardization-business-models-platform-competition/2595}$ 

## A Framework for Measuring the Deployment of Internet Protocols

Tapio Levä, Antti Riikonen, Juuso Töyliand Heikki Hämmäinen (2015). Standards and Standardization: Concepts, Methodologies, Tools, and Applications (pp. 809-835).

www.irma-international.org/chapter/a-framework-for-measuring-the-deployment-of-internet-protocols/125322

# Reversible Information Hiding and Its Application to Image Authentication

Masaaki Fujiyoshiand Hitoshi Kiya (2013). *IT Policy and Ethics: Concepts, Methodologies, Tools, and Applications (pp. 349-367).* 

www.irma-international.org/chapter/reversible-information-hiding-its-application/75037

# Energy-Efficient MAC Protocols in Distributed Sensor Networks

Yupeng Huand Rui Li (2013). IT Policy and Ethics: Concepts, Methodologies, Tools, and Applications (pp. 1776-1797).

www.irma-international.org/chapter/energy-efficient-mac-protocols-distributed/75099