



## Primary yield and multitranche structure in securitization issues: Explicative factors. A review



Miguel Á. Peña-Cerezo<sup>a,\*</sup>, Arturo Rodríguez-Castellanos<sup>b</sup>, Francisco J. Ibáñez-Hernández<sup>c</sup>

<sup>a</sup> Dpto. Economía Financiera II, University of the Basque Country, Escuela Universitaria de Estudios Empresariales de Vitoria-Gasteiz, Comandante Izarduy, 23, 01006 Vitoria-Gasteiz, Spain

<sup>b</sup> Dpto. Economía Financiera II, University of the Basque Country, Facultad de Ciencias, Económicas y Empresariales, Lehendakari Agirre Etorbidea, 83, 48015 Bilbao, Spain

<sup>c</sup> Dpto. Economía Financiera II, University of the Basque Country, Facultad de Ciencias, Económicas y Empresariales, Comandante Izarduy, 23, 01006 Vitoria-Gasteiz, Spain

### ARTICLE INFO

#### Article history:

Received 10 May 2015

Accepted 10 August 2015

Available online 9 October 2015

#### JEL classification:

G12

G21

#### Keywords:

Securitization

Primary yield

Tranche

### ABSTRACT

The reasons for the strong rise in the securitization phenomenon up until the start of the “subprime crisis” need to be analysed. According to many authors, they mainly stem from its offering the possibility of generating fixed yield securities with the highest rating and a low risk premium, thanks to the issues being structured in differentiated bond series, so that certain series absorb most of the risk, thus facilitating the safer or “senior” tranches having a higher rating. Accordingly, this paper reviews the literature on the factors underlying the generation of differentiated tranches in this type of issues and regarding the determining factors of the yield offered by securitization issues. It concludes that the search for more complete markets, along with the reducing of problems associated to the moral hazard, are the main reasons for the multi-tranche structuring. And given the strong influence of the number of tranches on the yield offered by the issues, the paper likewise concludes that the multitranche structures has been an efficient tool to place securitization issues with more competitive yields.

© 2015 AEDEM. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## 1. Introduction

Over two decades up until the onset of the subprime crisis, international financial markets witnessed a spectacular development of asset-backed securitization, both in terms of volume and methods, to the point that it became the most powerful and dynamic means of financial innovation. The relevance of securitization can be seen both from a quantitative and qualitative perspective. The immense majority of the securitization bonds thus received maximum ratings (AAA), not only during, but also after the period prior to the crisis. In the years in the run up to the crisis, securitization issues worldwide represented over two thirds of AAA issues overall (BCBS, 2011). It is precisely the opportunity offered by securitization to generate fixed-yield securities with the maximum rating (and, consequently, with a very low risk premium) which explains, to a great extent, its intensive use, and, to a lesser extent, why many agents, particularly credit institutions, continue to do.

There is, therefore, clearly no doubt about the social and economic relevance of securitization. Beyond the discussion regarding this mechanism's contribution to the triggering of the subprime crisis, from the point of view of the academic and scientific interest generated by its use, there is not a great deal of research that focuses on analysing the yield provided by the securities resulting from securitization, even though there are numerous studies that point to its characteristic as a means to obtain financing on good terms as the fundamental reason for its development. Moreover, to the best of our knowledge, none of those studies performed an exhaustive review of the related literature.

Given these gaps in the literature, we believe it to be appropriate to delve further into the aspects most closely related to the use of securitization: borrowing on advantageous terms and the factors that made it possible. In this regard, the generation of issues where the majority of the securitization bonds had maximum ratings was based on flexibility associated to this financial technique. This enabled the issues to be structured on various differentiated series of subordinated securities (tranches), meaning that certain subordinated tranches (or equity) absorb the majority of the risk and freeing their privileged tranches (or senior tranches), thus facilitating their higher rating. Precisely for that reason, the central purpose of this paper is to identify the factors

\* Corresponding author.

E-mail address: [miguelangel.pena@ehu.es](mailto:miguelangel.pena@ehu.es) (M.Á. Peña-Cerezo).

underlying the generation of differentiated tranches in securitization issues (tranching) and the impact of these multi-tranche structures, and other relevant factors, on the primary yield offered by the securitization bonds. This will be carried out by a review of both the theoretical and empirical literature existing in that regard.

Consequently, this paper is structured in the following three sections. The next section reviews the factors that influence the generation of multi-tranche structures, considering both the financial theory approaches and the results of the empirical studies conducted in that regard. The factors are then analysed that, along with those structures, impact the primary yield of the securitization issues. The paper ends by setting out the main conclusions obtained.

## 2. Generating multi-tranche structures: determinants

The literature puts forward many reasons for using securitization. However, obtaining financing on attractive terms appears the most recurrent, if not the most relevant, of such reasons. This conclusion is not only reached based on quantitative studies (Agostino & Mazzuca, 2009; Bannier & Hänsel, 2008; Cardone-Riportella, Samaniego-Medina, & Trujillo-Ponce, 2010; Gorton & Metrick, 2012), but also on more qualitative approaches (BCBS, 2011). However, there are few papers that focus on analysing the yield offered by the securitization bonds; moreover, none of them perform an integral review of the different types of variables that may affect that yield, by linking them to the different financial theories.

Therefore, we aim to delve further into the factors that justify the development of securitization as a mechanism to obtain low-cost financing, with a special emphasis on the internal structure of the securitization funds, an essential factor that distinguishes this type of issues from other financing mechanisms.

The fact that a single asset pool acts as collateral or guarantee to a structure or set of a series of bonds (tranches), with a predetermined order of precedence and, therefore, with different risk profiles, allows the needs of investors with different profiles to be met, which results in a lower overall return requirement by investors. Consequently, the design of the number and size of the tranches seeks to minimise the weighted sum of the yields offered by the series of bonds into which each securitization issue or demand is divided (Childs, Ott, & Riddiough, 1996; Franke & Weber, 2009).

Firla-Cuchra (2005) and Firla-Cuchra and Jenkinson (2006) highlight three main reasons to explain the multi-tranche structuring (tranching) and its impact on the yield of the issues: (i) the sophistication of the investors, (ii) the segmentation of the markets and (iii) the existence of asymmetric information. However, the influence of those three factors cannot be perfectly defined and each one of them will be considered separately below.

### 2.1. Sophistication of the markets and of investors

One of the circumstances associated to the greater complexity of the structuring of the securitization operations is the degree of sophistication of the markets and of the investors involved. Both the improved risk analysis techniques and the advances in information technology are two of the main factors that have explained the growth of securitization (European Commission, 2004) and the greater sophistication of the investors were placed among the six most important factors.

Plantin (2004) indicates that the growing sophistication of the investors should be associated to the generation of issues structured on a greater number of tranches and with greater differentiation of the roles performed by the participating agents. In

this regard, the model proposed by this author propounds that the issuers should be interested in generating at least two different types of bonds: on the one hand, the relatively high yield generators, whose associated cash flows are information sensitive; they would be aimed at sophisticated agents and “scrutineers”, with a greater yield compensating those analysis and supervision endeavours; and, on the other hand, high quality bonds, close to safe-haven assets, whose cash flows are not information sensitive, that is, which do not depend (or only to a minimum degree) on the management by the issuers themselves; those securities would be aimed at risk adverse and not very sophisticated investors.

Cumming, Schwienbacher, and McCahery (2011), in a worldwide study of securitization issues underwritten by syndicated loans, consider the generation of tranches as a core element for the efficient legal configuration of this type of issues. They propose (and verify) that the investor protection and legal differences, by countries, are decisive in the multi-tranche structuring. On the contrary, Haselmann, Pistor, and Vig (2010) believe that the regulation of financial systems is irrelevant in this regard, as the high sophistication of the investors – or at least part of them – enable agreements to be designed that cover the legal differences existing between countries by means of contractual clauses. This would support the hypothesis that multi-tranche structuring is independent from the existing legal framework for high sophisticated investors, but not to no-sophisticated ones.

Some studies show the aforementioned relation between the sophistication of the markets and the complexity of the securitization structures. For the Spanish case, Peña-Cerezo (2014) observes a clearly positive relation between the degree of sophistication of the investors and of the securitization markets (measured by the number, volume and types of funds set up) and the number of tranches per issue. The European Commission (2004) came to similar conclusions using a more qualitative approach (*focus group*).

### 2.2. Segmentation and search for complete markets

The fact that financial markets are incomplete, that is, that they do not offer an exhaustive range of securities able to meet all the needs of the investors, is a reason for the multi-tranche structuring of the securitization issues (Franke & Weber, 2009). If the markets are incomplete, the generation of new securities that cover the needs not covered by the existing ones will be beneficial (Firla-Cuchra, 2005), as it helps to “complete” the markets, that is, to extend the range of investment opportunities.

Therefore, according to this approach, the main virtue associated to tranching lies in the order of precedence of the different tranches. Thus, the simultaneous generation of particularly protected tranches (*senior*) and subordinated tranches (known as *junior*, *mezzanine* or – if they refer to those assuming the first losses – *equity*) is effective to complete the market and, consequently, to minimise the mean yield linked to the issue overall (Franke & Weber, 2009). In fact, if there are incomplete markets and diverse investors as regards yield-risk preferences, availability of private information or capacity to assess investments, the creation of multiple tranches with distinct characteristics (different degrees of sensitivity to information, risk and yield) may have the goal of adjusting the *performance* of the securitization issues to the different investor profiles, thus completing the market (Boot & Thakor, 1993; Gaur, Seshadri, & Subrahmanyam, 2004; Iacobucci & Winter, 2005; Plantin, 2004; Riddiough, 1997). Thus, the most risk adverse investors, or those that find it difficult to understand all the characteristics of this type of investments, may prefer protected or senior tranche bonds. On the other hand, the specialist investors may be more inclined to obtain an additional yield by acquiring more specific and information-sensitive financial assets, but also with greater risks. This reasoning is consolidated in

# دانلود مقاله



<http://daneshyari.com/article/1009094>



- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات