

Contents lists available at ScienceDirect

Finance Research Letters

journal homepage: www.elsevier.com/locate/frl



Volatility spillovers in the European bank CDS market



Aida Alemany ^a, Laura Ballester ^b, Ana González-Urteaga ^{c,*}

ARTICLE INFO

Article history: Received 13 January 2015 Accepted 26 February 2015 Available online 6 March 2015

IEL classification:

G01

G15

C58 C32

Keywords: CDS spreads Credit risk Volatility spillovers Financial crisis

ABSTRACT

From the 2007 subprime crisis to the recent Eurozone debt crisis, the banking industry has experienced terrible financial instability with increasing volatility levels of bank default probability. Using European CDS spreads data from January 2006 to March 2013, this paper sheds light on the impact of three recent significant events of credit risk volatility transmission between, firstly, Eurozone and non-Eurozone banks, and then between distressed peripheral and core countries inside the Eurozone. We employ an asymmetric multivariate BEKK model to measure cross-market volatility spillovers. We find that both recent crises are distinct episodes. The global financial crisis that originated outside Europe is characterized by unidirectional volatility spillovers in credit risk from inside to outside the Eurozone. By contrast, the Eurozone debt crisis is revealed to be local in nature with the euro as the key element, suggesting a financial market fragmentation within the Eurozone between distressed peripheral and non-distressed core Eurozone countries, whereas retaining the local currency has acted as a firewall.

© 2015 Elsevier Inc. All rights reserved.

^a Nfoque Advisory Services, C/ Claudio Coello, 78, 28001 Madrid, Spain

^b University of Valencia, Avda. Los Naranjos s/n, 46022 Valencia, Spain

^c Public University of Navarre, Arrosadia Campus, 31006 Pamplona, Spain

^{*} Corresponding author. Tel.: +34 948 16 6083.

E-mail address: ana.gonzalezu@unavarra.es (A. González-Urteaga).

1. Introduction

The serious tensions that emerged in the international financial markets in 2007 and 2008 broke the stability that had characterized the first ten years of the Eurozone, affecting the real estate sector and causing a rapid deterioration in the major European economies, and to a greater extent in the distressed peripheral economies inside the Eurozone. It led to the Eurozone sovereign debt crisis, which for the first time severely tested the robustness of the Eurozone since its inception in 1999 and resulted in the divergence of financial conditions for debt issuers across countries within the Eurozone. This area has become the heart of the world's financial stress with the break-up of the euro continuing to be a possibility. As a consequence, the European banking industry has witnessed a terrible credit and liquidity crisis from 2007 to the present. The vulnerability of the banking sector has become evident, to a great extent due to globalization, increasing the perception of its credit risk to unprecedented levels, playing a key role in the global financial crisis and causing damage, especially to the banking sector and, consequently, to financial stability.

Extraordinary measures have been taken by central banks and governments to prevent a collapse of the sector that threatened the entire economy. This situation has caused bank supervisors and regulators to rethink banking regulations. Evidence suggests that stability in the banking system, given the role of banks as financial intermediaries as providers of liquidity transformation and monitoring services, is crucial for economic growth and the global financial sector. In this line, the Basel III agreements have improved the capital requirements of credit institutions and the regulatory requirements in Solvency II did the same in the field of insurance companies. The goal was to eliminate credit risk as far as possible, which was, until the onset of the global financial crisis, hardly considered a threat to the developed financial economics.

Volatility in credit spreads has significantly increased in Europe, and even more so within the Eurozone, since 2007. The market perception of default risk has increased and, as a consequence, we are in a new scenario in which a bank credit event is considered a real possibility. Given this background, it becomes crucial to understand the linkages over time between the volatility of European bank credit spreads inside and outside the Eurozone. More concretely, this article fills this gap using the information content in the banking Credit Default Swaps (CDS) spreads, which we employ, following the most recent literature, as an indicator of bank credit risk. In this sense, despite the importance of bank credit risk in financial markets, relatively little is known about the impact of credit risk volatility transmission in European banking credit markets before and during this turbulent period. This paper aims to shed some light on how volatility spillovers work, as this is crucial for understanding how financial crises spread.

More concretely, the main objective of this study is to analyse whether volatility transmission patterns in European banking markets have changed after three significant events during the period January 2006 to March 2013: the subprime crisis which became manifest in Europe on August 9, 2007 (hereafter SC), the bankruptcy of Lehman Brothers on September 15, 2008 (hereafter LB), and the first bailout of Greece on May 8, 2010 (hereafter GB).² These three events are characterized by all having caused a volatility increase in European bank CDS data, with a different impact depending on the location of the bank in the Eurozone.

We make the following contributions. To the best of our knowledge, this is the first study of volatility credit risk transmission using CDS exclusively for the European banking sector. Moreover, we try to assess whether the volatility spillovers have changed after the three significant events selected, in order to learn the impact of the different recent crises on credit risk transmission among banks of different European zones. Finally, we contrast if CDSs have asymmetric responses regarding volatility.

2. Literature review

The extensive literature on volatility transmission has mainly focused on international shock transmission between stock market indices, stocks, exchange rates, interest rates and spot and futures

¹ CDS spreads are considered a good proxy for bank riskiness and default probability (see Longstaff et al., 2011; Kalbaska and Gatkowski, 2012). They reflect market perceptions about the financial health of banks, signalling regarding financial stability.

² We establish the event's dates following Drudi et al. (2012), which analyzes the crises effects in the case of the Eurozone.

Download English Version:

https://daneshyari.com/en/article/5069579

Download Persian Version:

https://daneshyari.com/article/5069579

<u>Daneshyari.com</u>