

7th International Economics & Business Management Conference, 5th & 6th October 2015

Could the 2007 Crisis Have Occurred without Credit Derivatives? Citibank Group: Case Study

Walaa Ismael Alnassar^{a,c}, Othman Bin Chin^{b,*}

^a*Graduate Business School, College of Graduate Studies, Universiti Tenaga Nasional, 43000 Kajang, Selangor, Malaysia*

^b*College of Business & Accounting, Universiti, Tenaga Nasional, 26700 Muadzam Shah, Pahang Darul Makmur.*

^c*College of Administration and Economics, University of Baghdad, IRAQ*

Abstract

Financial derivatives have been acclaimed as the greatest innovation of the 20th century. This popularity is not unconnected to their use as a risk management tool. It is thus disconcerting that such instruments meant to manage risk can be blamed for having exacerbated it, to the extent of causing a global crisis. In the light of the aforementioned, this paper examines the nature and use of credit derivatives (CDs) in a market participant, in particular, a large financial institution eminently involved in the recent financial crisis, “Citibank Group”. We assess the role it has played in the global financial crisis, investigate whether the presence of derivatives in the financial market was a sufficient condition to cause the crisis, and examine the impact of two critical periods (during and post crisis) on the credit risk (CR) in this international bank. Findings reveal that derivatives were a key contributor to Citibank’s bankruptcy. Furthermore, the post crisis period had a serious debilitating effect on Citibank compared with the period during the crisis. Separating investment and commercial banking, and insisting that derivatives be traded only in recognized exchanges, were recommended to forestall recurrence of this type of crisis.

© 2016 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-reviewed under responsibility of Universiti Tenaga Nasional

Keywords: CDs, CR, Size, Costs of Financial Distress, Business Opportunities, Exposure to CR.

* Corresponding author. Tel.: +60-9-455-2025; Fax: +60-9-455-2006
E-mail address: OthmanChin@uniten.edu.my

1. Introduction

Banks and other financial institutions have progressively comprehended the inevitability to manage and measure the Credit Risk (CR) of their loans. Therefore, Credit Derivatives (CDs) have increased in the reaction to the up surging need of the financial institutions to design the vehicle tools for transferring and hedging the CR. CDs are the latest among a group of financial engineering innovations that have had a serious impact on credit markets. They have been widely criticized for destabilizing the entire economic system, hence, causing the latest subprime credit crisis. Have the CDs been properly, or rather, effectively, applied? For the first time in modern economic history, a financial crisis has led to an economic one. The scheme of subprime loans has allowed for major distribution in the financial system. This resulted in many unintended impacts, and a large volume of research has been carried out on this subject. However, many areas still need to be explored. In this study context, it will be interesting to examine some of the areas that remain unexplored. From this perspective, this study aims to assess the role of CDs in the Global Financial Crisis (GFC) by analysing the impact of the usage of CDs on CR, particularly by a large financial institution that was eminently involved in the crisis. Towards this end, such influencing factors as financial institution size, capital ratio, mortgage ratio, leverage ratio, liquidity ratio, return on average equity, net interest margin, non-interest income ratio, loans sale ratio, provisions for loans losses, non-performing loans, and total loans growth are also investigated. Readily available data is collected as quarterly data from the Citibank Group for the time period of 2000 to 2014. Seemingly, an Unrelated Regression (SUR) structural model has been applied to analyse the data and the effect of independent variables on dependent variables based on a total of 25 hypotheses. Through the time period of 2000 to 2014, comparison between the CDs' position pre (Jan 2000-Dec 2007), during (Dec 2007-Sep 2010), and post financial crisis (Sep 2010-Mar 2014), in selected institutions, was conducted to further support the hypotheses verification.

2. Problem Statement

There is an ongoing debate about the role of CDs in the US subprime mortgage market (European Central Bank, 2009; Norden, Silva, & Wagner, 2014; Norden, Buston and Wagner, 2014). The head of the Federal Reserve System, Alan Greenspan, has confirmed that "CDs and other complex financial instruments have contributed to the development of a far more flexible, efficient, and hence, resilient financial system that existed just a quarter-century ago" (Greenspan 2004). In a contrasting speech, the legendary investor Warren Buffet drew attention in 2003 with a blistering attack on derivatives. He concluded that although features of CDs are "weapons of mass destruction, carrying dangers that, while now latent, are potentially lethal". This evidence had existed before the crisis when he gave his annual address before the General Assembly for his company, "Berkshire Hathaway" (Buffett 2003). These words were written five years before the credit crisis broke out.

CDs represent an important credit market innovation theoretically, which initially was considered a tool to enable banks to shift CR to a third party, principally the risk of non-performance, due to default or bankruptcy. Undoubtedly, CDs were seen as the most important financial innovation of the last few decades; however, there are many studies which suggest that the risks generated by them are more extensive than the benefits generated (Crotty, 2009; Stulz, 2010; Li and Yu, 2010; Mayordomo, Moreno and Pena, 2014). This is the main point of the debate on the importance of their role to achieve stability in US financial markets.

This paper's contribution to the literature is three-fold. First of all, we study the impact of CDs and bank institutional internal factors on CR with close reference to Kim's study for modelling the financial crisis period, where it is mentioned that the crisis period was estimated to be from December 5, 2007 to September 15, 2010, based on the experience gained by the US. Therefore, the pre-crisis period took place on December 5, 2007, the crisis period took place on December 5, 2007 to September 14, 2010, and the post-crisis period took place after September 15, 2010 (Kim, 2013). Secondly, our target is a unique bank that represents the main player in the CDs market that has been adversely affected by the use of CDs; this effect has lasted to date as a consequence of the bailout committed by the US government. Finally, further contribution is achieved through an investigation on the effect of the economic situation of during and post-crisis period on financial institutions' CR.

3. Data

To approve the role of CDs and bank internal factors in increased CR, an analysis of the overall US financial

Download English Version:

<https://daneshyari.com/en/article/979855>

Download Persian Version:

<https://daneshyari.com/article/979855>

[Daneshyari.com](https://daneshyari.com)