

**RATING-BASED REGULATION AND INVESTORS' OVER-
RELIANCE: *QUO VADIS?***

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Declaration of originality

I declare that the work submitted in this thesis is my own.

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ABSTRACT

The purpose of this thesis is to investigate into the phenomenon of over-reliance on external credit ratings by investors and market participants. This phenomenon is traced back to the hardwiring of the credit ratings into legislation. In this context, the investigation has a broad scope in that it is not only concerned with the phenomenon per se, but also with the current status of implementation of the rules which have been set out to tackle this problem. The approaches against over-reliance have been elaborated at the international level by the Financial Stability Board (FSB). These were incorporated into specific rules at the EU and US levels. This thesis will therefore analyse and critically assess the progress which these two legal systems have made for translating into practice the international standards against over-reliance on external credit ratings.

This subject is of relevant interest from several perspectives. Firstly, the phenomenon was brought to attention in the aftermath of the recent financial turmoil. This is a new context, which is to be regarded as a segment of the post-crisis reforms on the structure and operation of the rating industry. This part of the reforms stimulates to provide an understanding of the nature of over-reliance on the credit ratings and why investors and market participants are vulnerable to it.

Secondly, the phenomenon made regulators cast numerous doubts in respect of the opportunity of relying on the credit ratings in legislation. This aspect stimulates research with regard to the use of the credit ratings by the private and public sector and to investigate the degree to which the tie between the regulators and the credit ratings have changed because of the threat of over-reliance.

Thirdly, normative approaches have been set out and the implementation process is still ongoing at the time of writing. A critical evaluation of them permits an assessment of the current status of progress in the translation of the approaches, to identify their positive and negative aspects, and discuss possible improvements.

Fourthly, the analysis of the progress and its outcomes may stimulate further reflections on the premise the debate on over-reliance was based upon. This permits us to wonder which (if any) things might have been missed at the beginning, whether the debate is to be considered closed or whether there are new, possible, directions to be taken in the future.

Overall, this research will provide a thorough investigation into the problem of over-reliance from the post-crisis regulatory debate on the CRAs until the issue and implementation of specific rules aiming at mitigating this risk. In particular, by explaining the phenomenon of over-reliance on external credit ratings, critically reviewing the advantages and shortcomings of the approaches against it, and suggesting possible improvements, this research may be the platform for further studies on a subject which has so far received marginal attention by the literature on the CRAs.

TABLE OF CONTENTS

Table of abbreviations

I INTRODUCTION	14
I.1 Setting the context.....	14
I.2 Literature review	19
I.2.1 Overview	19
I.2.2 Law studies.....	21
I.2.3 Economic studies.....	24
I.2.4 Studies on over-reliance on external credit ratings	26
I.3 Filling a research gap	30
I.4 Research questions, structure and development	34
I.5 Building the research path: sources and materials	41
II OVER-RELIANCE ON EXTERNAL CREDIT RATINGS: IN SEARCH OF A MEANING	45
II.1 Introduction.....	45
II.2 The ‘good’ aspects of the credit ratings: a basis for relying.....	47
II.2.1 The rating industry: origins and development	47
II.2.2 Credit ratings: categories and formation process	50
II.2.3 Credit ratings as opinions on creditworthiness	55
II.3 The importance of credit ratings in the financial markets: the private sector’s reliance	57
II.3.1 The CRAs informational services	57
II.3.2 The CRAs monitoring services: outlook and watch-list procedures.....	60
II.3.3 CRAs’ services users	62
II.4 The public sector reliance on credit ratings	63
II.4.1 The CRA’s as certification providers.....	63
II.4.2 Clarifying the CRAs’ certification function.....	67
II.4.3 Understanding the regulatory reliance on credit ratings	68
II.4.4 Mapping the regulatory use of credit ratings.....	73
II.5 From ‘good’ to ‘bad’: a roadmap towards the risk of over-reliance	78
II.5.1 Rating-based regulation versus the hardwiring of credit ratings in legislations.....	78
II.5.2 Downgrades, rating triggers and liquidity problems	81

II.5.3 Cliff-edge effects and herd behaviours.....	86
II.5.4 Systemic Risk and Spill-over effects across markets	88
II.5.5 The rating-based regulation and its implications: a critical review.....	90
II.6 Understanding over-reliance on credit ratings	93
II.6.1 Introducing the phenomenon	93
II.6.2 Detecting the phenomenon: over-reliance in the US pre-crisis regulatory debate on the CRAs.....	96
II.6.3 Over-reliance in the EU pre-crisis regulatory debate on the CRAs	100
II.6.4 The sources of over-reliance: rating-based regulation versus the structured finance sector	103
II.6.5 Closing the gap: defining over-reliance on external credit ratings	108
II.7 Regulatory strategies at the national, international and regional levels to address over-reliance on credit ratings.....	110
II.7.1 Delimiting the scope of the analysis.....	111
II.7.2 US level: Section 939A of the Dodd-Frank Act: reliance versus over-reliance	112
II.7.3 The FSB principles for reducing reliance on credit ratings: searching for over-reliance	117
II.7.4 The European CRA Regulation III: confirming over-reliance.....	123
II.8 Conclusion.....	127

III REGULATORY APPROACHES AGAINST OVER-RELIANCE: IN SEARCH OF EFFECTIVENESS **131**

III.1 Introduction.....	131
III.2 The over-reliance rules and their implementation	133
III.2.1 Normative approaches in focus.....	133
III.2.2 Implementation process in focus	138
III.3 The status of the US reforms under Section 939A of the Dodd Frank Act	144
III.3.1 The early debate on Section 939A	144
III.3.2 The US Federal agencies reform process.....	150
III.3.3 The US reforms: a critical review in relation to the risk of over-reliance	163
III.4 The status of the EU reforms under the CRA III Regulation.....	169
III.4.1 The work of the ESAs.....	169
III.4.2 The EU approach in future perspective	181
III.4.3 The EU approach: a critical review	191
III.5 More independent credit risk analysis: from theory to practice.....	192
III.5.1 The status of implementation.....	192

III.5.2 The second level of the approach: a critical review.....	194
III.6 Conclusion	198

IV REVIEWING THE DEBATE ON OVER-RELIANCE AND ITS APPROACHES: IN SEARCH OF DIRECTIONS 202

IV.I Introduction	202
IV.2 Credit rating references and the ‘official seal of approval’: what has been missed?.....	205
IV.2.1 CRAs’ market failures and regulatory interventions	205
IV.2.2 Evidence of over-reliance in the structured finance sector.....	211
IV.2.3 Evidence of over-reliance on credit rating legislative references.....	225
IV.3 Anticipating the post-crisis debate on over-reliance.....	234
IV.3.1 The CRAs’ message to the regulators	234
IV.3.2 The CRAs’ message to the users of credit ratings	242
IV.4 Taking stock of the situation.....	245
IV.4.1 Still much to be seen.....	245
IV.4.2 Developing an assertion into certainty: providing evidence of over-reliance	246
IV.4.3 Encouraging more dialogue and coordination at all levels.....	248
IV.4.4 Ensuring more of a level-playing field among credit risk assessment tools	250
IV.5 Conclusion	253

V FINAL CONCLUSIONS 256

V.1 Introduction	256
V.2 What has been learned	257
V.3 Theoretical implications.....	270
V.4 Policy implications.....	274
V.5 Prospects for future research.....	277
V.6 Concluding remarks	280

Bibliography

List of Abbreviations

ABA	American Bankers Association
ABSs	Asset Backed Securities
ADB	Asian Development Bank
ADBI	Asian Development Banking Institute
AER	American Economic Review
AIFM	Alternative Investments Fund Managers
ANPR	Advanced Notice on Proposed Rule Making
ASF	American Securitization Forum
BCBS	Basel Committee on Banking Supervision
BIDCO	Business and Industrial Development Company
BIS	Bank for International Settlements
BoE	Bank of England
CBLR	Columbia Business Law Review
CCP	Central Clearing Counterparties
CDOs	Collateralised Debt Obligations
CDS	Credit Default Swap
CEJL	Columbia European Journal of Law
CESR	Committee of European Securities Regulators
CFTC	Commodity Futures Trading Commission
CILJ	Connecticut Insurance Law Journal
CIS	Collective Investment Scheme
CLR	California Law Review
CMLJ	Capital Market Law Journal

CPO	Commodity Pool Operator
CQSs	Credit Quality Steps
CRA	Credit Rating Agency
CRD	Capital Requirement Directive
CSEF	Centre for Studies in Economics and Finance
DCO	Derivatives Clearing Organisation
DNB	De Nederlandsche Bank
DOL	Department of Labour
EBA	European Banking Authority
EBLR	European Business Law Review
EBOLR	European Business Organization Law Review
ECAI	European Credit Assessment Institution
ECB	European Central Bank
EFSF	European Financial Stability Framework
EIOPA	European Insurance and Occupational Pensions Authority
ERISA	Employee Retirement Income Security Act
ESAs	European Supervisory Authorities
ESMA	European Supervisory Market Authority
ESME	European Securities Markets Experts
EuSEF	European Social Entrepreneurship Fund
EU	European Union
EuVECA	European Venture Capital Fund
EXRBA	External Rating Based Approach
FCM	Future Commission Merchant

FCU	Federal Credit Union
FDIC	Federal Deposit Insurance Corporation
FHFA	Federal Housing Finance Agency
FICU	Federally Insured Credit Union
FJCFL	Fordham Journal of Corporate and Financial Law
FRB	Federal Reserve Board
FRBNY	Federal Reserve Bank of New York
FSA	Financial Service Authority
FSB	Financial Stability Board
FSF	Financial Stability Forum
G-20	Group of Twenty
HBLR	Harvard Business Law Review
IMF	International Monetary Fund
IORP	Institutions for Occupational Retirement Provision
IOSCO	International Organization of Securities Committee
IRBA	Internal Rating Based Approach
IRB	Internal Rating Based
ITS	Implementing Technical Standards
JBFA	Journal of Business Finance and Accounting
JBF	Journal of Banking and Finance
JBR	Journal of Banking Regulation
JC	Journal of Commerce
JCGEP	Journal of Comparative Government and European Policy
JEP	Journal of Economic Perspective
JF	Journal of Finance

JFE	Journal of Financial Economics
JPP	Journal of Public Policy
MAD	Market Abuse Directive
MBS	Mortgage backed Securities
MiFID	Market in Financial Instruments Directive
MMF	Money Market Fund
NBER	National Bureau of Economic Research
NCUA	National Credit Union Administration
NPE	New Political Economy
NRSO	Nationally Recognised Statistical Rating Organisation
OCC	Office of Comptroller of the Currency
OECD	Organisation for the Economic Cooperation and Development
OJEU	Official Journal of the European Union
OTS	Office of Thrift Supervision
PTE	Prohibited Transaction Exemption
QJE	Quarterly Journal of Economics
QMMF	Qualifying Money Market Fund
RCAP	Regulatory Consistent Assessment Programme
RFS	Review of Financial Studies
RMBS	Residential Mortgage Backed Securities
SEC	Securities and Exchange Commission

S&P	Standard and Poor's
SIFMA	Securities Industry and Financial Markets Association
SMMF	Short Term Money Market Fund
UCITS	Undertaking for Collective Investments in Transferable Securities
UMLR	University of Miami Law Review
US	United States
WLR	Wisconsin Law Review
WP	Working Paper
WULQ	Washington University Law Quarterly

CHAPTER I

INTRODUCTION

I.1 SETTING THE CONTEXT

The context of the present research can be set and understood by preliminarily contrasting two words in their respective meanings and implications, namely: reliance and over-reliance. In relation to the topic of this thesis, both of them are to be discussed as human behaviours. To begin with the first one, its meaning can be analysed in relation to the act of putting trust in something or somebody.¹ Such a meaning can also be applied to over-reliance. However, in the context of over-reliance this meaning has a different connotation due to such adverbs as ‘heavily’, ‘excessively’, ‘blindly’ or ‘unduly’ which characterise the trust placed in something or somebody.² These adverbs demark a line between the two words and help understand that the word reliance, basically, has a good connotation, while over-reliance a negative one.

In more detail, the interpretation of the meaning of the word reliance vis-à-vis the meaning of over-reliance through its adverbs leads us to consider the different degrees of trust that reliant and over-reliant people can place on something or somebody. Accordingly, a reliant person will not generate a total or entire trust. Specifically, those who rely and, thus, grant their trust, will do this with some reservations. In other words, they are neither likely to accept situations with the benefit of the doubt, nor are they likely to take anything at face value. In essence, their reliance is accompanied by some degree of judgemental autonomy which is supposed to guarantee their independence from what or whom they rely on. Significantly, their behaviour is not totally influenced by external factors, situations or other people. Through their reliance they are supposed to process the information they receive and make use of it in a way which is complementary to their

¹ See <www.oxforddictionaries.com>.

² Ibid.

own judgement. Should their trust be measured, it could be said that 50 per cent is on external factors while the remaining percentage is traced back to their own judgemental autonomy. However, even if the difference is 98 per cent of trust in something or somebody and the remaining 2 per cent is their own judgement, this would be equally sufficient to exclude an entire external influence. Consequently, reliance also implies the freedom of giving whatever measure of trust, provided that what or who is relied upon does not receive 'excessive', 'heavy', 'blind' or 'undue' reliance. This would, in fact, mark the shift from reliance to over-reliance. Clearly, any placed trust would assume a negative connotation within this new context. Over-reliance is therefore the other side of the coin.

Importantly, an over-reliant conduct implies an over-estimation of the information received. In practice, this information would assume the characteristic of something not fallacious and, for this reason, would receive a 100 per cent of trust. It may be argued that even 100 per cent trust could be regarded as the consequence of reliance where such a choice is the result of an independent analysis which has considered several perspectives. Nonetheless, where this 100 per cent is construed in combination with adverbs such as 'heavily', 'unduly', and so on, the trust is overdue, in one word, blind. This means that the person or information which are given blind trust are taken at their face value. When trust is blind, room for undertaking own judgement, aimed at understanding the limits of what or who is given 100 per cent trust, is dramatically reduced, if not absent. Many factors can play a role with regard to over-reliance: negligence, ignorance, imprudence or, sometimes, the impossibility of undertaking one's own judgement.

Over-reliance in its negative connotation and implications is emphasised in numerous contexts. For instance, in sports which are based on teamwork, over-reliance may be identified in the excessive trust on the capacity of a top-player, which finally leads to believe that he will make the difference in any match even when the overall team's performance is not good.³ In the scientific

³ Sid Lowe, 'Argentina See Danger in their Over-reliance on Lionel Messi' *The Guardian* (London 24 June 2014).

and technological world, over-reliance is generally identified as the excessive consideration given to one factor at the exclusion of others which can serve the same investigative purpose.⁴ This view has also been applied in case law. For example, in *Re Greater Niagara General Hospital and Ontario Nurses' Association* it was ruled that relying solely on job interviews to fill vacancy to the exclusion of other relevant factors may violate collective agreements.⁵

Looking at the issue of over-reliance from a legal perspective, in contract law scholars discuss the risk of over-reliance within the relationship between a promisor and a promisee. In more detail, in the event of a breach of a bargain contract, reference is usually made to the expectation measure of damages. Through the expectation measure of damages the injured party is put in the position they would have been in the event that the contract had been performed.⁶ In this context, law and economics scholars developed a theory according to which the expectation measure guarantees the promisee's reliance and may therefore induce him to over-rely, in other words, 'to invest more heavily in reliance than efficiency requires'.⁷ To provide a better understanding of the situation, a promisor is a contracting party who is or may be in breach; a promisee is the contracting party who is affected by the promisor's breach; and over-reliance is defined as the promisee's reliance which inefficiently treats the promisor's performance as insured.⁸

On the whole, all the above-mentioned contexts bring to attention how over-reliance has the potential to undermine one's judgemental independence since it polarises the trust on one factor which receives exclusiveness. This, in turn, jeopardises the possibility of considering other factors when a wide spectrum of alternatives could be available; or not to consider accurately the shortcomings of one factor when only this factor is available to be relied upon.

⁴ Graeme Paton, 'Over-reliance on Technology is Undermining Spelling Skills' *The Telegraph* (London 22 May 2012).

⁵ Andrew Tremayne, 'Over-reliance on Job Interview to Fill Vacancy May Violate Collective Agreement' (1999) <<http://www.ehlaw.ca/publications/jan99/jobinter.pdf>> accessed 20 December 2011.

⁶ Jim Leitzel, 'Reliance and Contract Breach' (1989) 52 *Law and Contemporary Problems* 1, 87.

⁷ Melvin A Eisenberg & Brett H McDonnell, 'Expectation Damages and the Theory of Over-reliance' (2002) 54 *Hasting Law Journal* 1335.

⁸ *Ibid.*

All things considered, the line of demarcation between reliance and over-reliance, the understanding of them in their respective positive and negative connotations, as well as the risk that reliance escalates into over-reliance, are the general paradigms to be applied to the topic of the present research. Significantly, the considerations made above are the basis to discuss the attention that the problem of over-reliance received in the aftermath of the 2007-2009 financial crisis. In particular, the word over-reliance was specifically referred to the investors' and market participants' excessive trust given to the credit ratings assigned by the major credit ratings agencies (CRAs) to complex financial products. Within this debate, the risk of over-reliance deriving from the hardwiring of credit ratings into legislation and regulatory frameworks was also brought forward.⁹ In essence, the wide use of the credit ratings by the public sector as essential components of regulatory programmes had, or would have had, the effect of inducing over-reliance on external credit ratings by investors and market participants. In other words, legal requirements to invest in securities rated investment grade by the CRAs carry the danger of regarding the credit ratings as official stamps of approval of creditworthiness imprinted by the regulators.

By way of applying the concept of over-reliance introduced above, it can clearly be understood that credit ratings are taken at their face value as the exclusive credit risk assessment tools. In practice, over-reliance would result in the investors' and market participants' discouragement from undertaking their own due diligence and credit risk analysis. The credit rating references in legislation would therefore provide an incentive to over-rely with the consequence of giving the credit ratings exclusiveness for credit risk analysis and, at the same time, discouraging any independent analysis which should be at the gist of any investment decision. Significantly, the credit ratings are not used as complementary sources for determining an investment decision but as substitutes for own, independent, credit risk analysis. Over-reliance deriving from embedding credit ratings into legislation has also systemic implications. In short, where legislation requires investing in highly rated debt instruments, in the event of downgrades applied by the CRAs a massive sale of

⁹ Chapter 2, section II.6.

these instruments can occur. This results in a downward price spiral which can pose serious threats to the financial stability.¹⁰

The post-crisis regulatory debate on the CRAs has, *inter alia*, identified the issue of over-reliance and proposed specific regulatory intervention aimed at reducing the risk that investors and market participants may blindly rely on the credit ratings. In particular, if credit rating references provide incentives to consider the credit risk analysis provided by the CRAs as ‘official seal of approvals’ of credit quality, and consequently to neglect independent credit risk analysis, the strategy to address this problem is based on revisiting the role of the credit ratings in legislation and on encouraging more independent credit risk analysis.

These issues are the fundamentals of this research work. The purpose of this thesis is to investigate into the phenomenon of over-reliance which is traced back to the hardwiring of the credit ratings into legislation. In this context, the investigation has a broad scope in that it is not only concerned with the phenomenon *per se*, but also with the current status of implementation and feasibility of the strategies which have been set out to tackle this problem. Such strategies have been elaborated at the international level by the Financial Stability Board (FSB) and then translated into normative approaches at the US and EU levels. This thesis will analyse and critically assess the progress which these two legal systems have made for translating into practice the suggested strategy. As will be discussed, though some significant differences exist in addressing over-reliance deriving from the credit rating references in legislation, the US and EU must be regarded as the most pro-active legal systems in the implementation of an approach based on redesigning the tie between the regulations and the credit ratings. Both the systems have set out normative approaches which led to considerable amendments to their existing rating-based regulations. Before introducing in more detail how this research will be designed and developed, it is desirable to point out that the subject is of relevant interest from several perspectives.

¹⁰ *Ibid.*

Firstly, the phenomenon was brought to attention in the aftermath of the recent financial turmoil. This is a new context, which is to be regarded as a segment of the post-crisis reforms on the structure and operation of the rating industry. Hence, this part of the reforms stimulates to provide an understanding of the nature of over-reliance on the credit ratings and why investors and market participants are vulnerable to it. Secondly, the phenomenon made regulators cast more doubt in respect of the opportunity of relying on the credit ratings in legislation. This aspect stimulates research with regard to the use of the credit ratings by the private and public sector and to investigate the degree to which the tie between the regulators and the credit ratings have changed because of the threat of over-reliance. Thirdly, normative approaches have been set out and the implementation process is still ongoing at the time of writing. A critical evaluation of them permits an assessment of the current status of progress in the translation of the approaches, to identify their positive and negative aspects, and discuss possible improvements. Fourthly, the analysis of the progress and its outcomes may stimulate further reflections on the premise the debate on over-reliance was based upon. This permits us to wonder which (if any) things might have been missed at the beginning, whether the debate is to be considered closed or whether there are new, possible, directions to be taken in the future. Each of these aspects explains the reasons why it is worth researching this topic. An in-depth consideration of these aspects, will provide a better insight into the opportunity to write on this subject, and into the structure and development of the research work. Accordingly, in the following paragraphs the rationale behind this research will be detailed by providing a literature review, by highlighting the main research questions, and by illustrating how the analysis will be designed and developed.

I.2 LITERATURE REVIEW

I.2.1 Overview

The literature on the rating industry and on the role of the credit ratings in the international financial markets is quite vast so that it can be divided into numerous strands. To begin with, the world of CRAs has been discussed from a sociological and political standpoint. Within this strand, a significant amount of governmental research and legislation has been produced. Secondly, other works are more focussed on the organisation, structure and operation of the rating industry in the financial markets. Such works often draw on the results of surveys conducted among the users of the credit ratings, namely the investors and the issuers. Furthermore, research analysis and data provided by the CRAs are of relevance to these studies. Within this general context, it can be observed that the largest group of contributions is made by law and economics scholars. Their studies are essential to the development of the present research.

Narrowly speaking, there are two streams of literature which are relevant to the topic addressed by this thesis. One strand is comprised of the studies conducted by law scholars who analyse the rating industry from its origins and take stock of the increasing use of the credit ratings within the private and public sector. Importantly, their contributions were the groundings for further studies relating to the legislative reforms which took place consequently to the role that the agencies played in some corporate scandals and in the recent financial crisis. These works provide a critical interpretation of the CRAs legislative frameworks which have been developed at the national, regional and international levels. In particular, the analysis focuses on the suitability of the CRAs' reforms in tackling the problems that the operation of the agencies has brought to attention.

A second strand relates to the studies conducted by economics scholars who assess the impact of the credit ratings on the financial markets, investigate their implications for the financial stability and provide empirical results based on elaborated models and calculations. Such studies are mainly based on surveys about the interaction between the market participants and the credit ratings, in particular, they assess the market participants' reactions to rating downgrades and the extent to which these aspects can have repercussions on the financial stability during downturn periods.

1.2.2 Law studies

To start with the first stream of literature, reference is to be made to those works which have studied the rating industry from a historical perspective and, thus, have provided a valuable understanding of the origins, growth, development and worldwide expansion of the rating industry. In this respect, Sylla (2001)¹¹ offers a comprehensive analysis detailing the structure, business model, conduct and performance of the CRAs from the very origins until the early 1970s, during which the agencies changed their initial business model, the consumers-pay model, into the issuers-pay-model. As part of his study, the author notes the widespread use of credit ratings in legislation for regulatory compliance purposes, and highlights the decisive role that the agencies have been playing in those markets that have become more interconnected in recent decades. He concludes by warning against the increasing reliance on credit ratings in financial regulations and how this can contribute in giving an enormous influence to opinion providers (like the CRAs) among the market participants. Similar studies were also undertaken by White (2001)¹² with a main focus on the oligopolistic structure of the rating market dominated by the most ancient agencies, namely Moody's Investors Services, Standard & Poor's and Fitch Ratings. By referring to the history and consolidated power of these three agencies in the rating market, and to the US Nationally Recognised Statistical Rating Organization (NRSRO) status that the agencies have to acquire to operate in the US rating market, the author expresses the view that this dominance is the result of regulations which have facilitated the demand of credit ratings and restricted the supply in favour of few agencies.

Both these works address the origin of the industry and the role that the regulation may have played in bolstering the importance and power of the CRAs in the financial markets. It is worth

¹¹ Richard Sylla, 'An Historical Primer on the Business of Credit Ratings', in Richard Levich, Carmen Reinhart & Giovanni Majnoni (eds), *Ratings, Rating Agencies and the Global Financial System* (Boston: Kluwer 2002).

¹² Lawrence J White, 'The Credit Rating Industry: An Industrial Organizational Analysis (2001) <<https://www.bis.org/bcbs/ca/lwhit.pdf>> accessed 10 January 2012.

noting that they are based on the seminal work provided by Partnoy (1999).¹³ Through an investigation into the history of the rating industry Partnoy has sketched his theory on the CRAs' 'paradox' in the financial markets. The author argues that such a paradox is the result of an increasing prosperity of the CRAs in the face of a decline in the credit ratings' informational value. Also, he argues that the CRAs' anomaly finds its rationale in the practice of linking financial regulation to the external credit ratings. According to the author, the use of credit ratings for regulatory compliance purposes would have contributed to give the CRAs an elevated status so that the agencies sell 'regulatory licenses', rather than valuable credit information. Accordingly, he suggests eliminating rating-dependent regulations and substituting the credit ratings with credit spreads.

Overall, these works share the common factor of being published around the same time. They all address the relationship between the public sector and the credit ratings and, among other things, they were issued at the time in which the CRAs used to be unregulated entities. Thus, they are the milestones of all the literature which flourished when the operation of the CRAs came under regulatory scrutiny consequent to their role in some major corporate scandals, as well as in the recent financial turmoil and ensuing global recession. These facts will have due consideration within the development of this thesis.

Now, from a literature perspective it must be observed how these events, in particular the 2007-2009 financial crisis, paved the way for numerous studies on the post-crisis regulatory debate and proposed reforms. In this respect, it is interesting to observe that the role of the CRAs in such scandals contributed to increase the disagreement among academics as to the optimal regulatory reforms to apply. In this context, there are some scholars who emphasise the role of the CRAs as gatekeepers holding reputational capital which they use to build up the investors' confidence in the credit ratings. For them, regulatory intervention should not be massive since the performance of the

¹³ Frank Partnoy, 'The Siskel and Ebert of Financial Markets: Two Thumbs Down for the Credit Rating Agencies' (1999) 77 WULQ 3, 619.

CRA's is relatively good. This is, for example, the view expressed by Schwarcz (2002)¹⁴, who argues that the CRA's are motivated to provide accurate and efficient services because their image and profitability is linked to their reputation. Accordingly, there is no need to overhaul the rating industry. More regulation, in the author's view, would subject the agencies to political manipulation. In turn, this would undermine the reliability of the ratings. Similar views are expressed by Hill (2004)¹⁵ who, in contrast to Partnoy, stresses the informational value produced by the agencies through their services. In more detail, the author underlines a 'stellar job' done by the agencies in the ratings of corporate bonds. Therefore, possible regulation should not aim at repealing the credit ratings from regulations; rather, attention should be devoted to the potential for conflict of interest deriving from the issuers-pay-model, to the set up of a civil liability framework, and to address the oligopolistic structure of the market by reducing any barrier to entry.

These works were issued in the wake of the role played by the CRA's in the Enron's default. Afterwards, the role that the agencies played in the 2007-2009 financial crisis contributed to give prominence to the view of those scholars who favour strong regulation of the industry and, by taking position from Partnoy's regulatory license theory, call for a downsize of the rating industry's power in the financial markets. According to them, the market should not heavily rely on the services of the CRA's, as much as the credit ratings should not be included in legislation, but perhaps replaced by alternative mechanisms for measuring the credit risk (Kisgen and Strahan 2009¹⁶; Flandreau et al 2009;¹⁷ Cornaggia & Cornaggia 2011;¹⁸ Iannotta and Pennacchi 2012.¹⁹

¹⁴ Stephen L Schwarcz, 'Private Ordering of Public Markets: The Rating Agency Paradox' (2002) 1 UCLR 2002, 3.

¹⁵ Claire Hill, 'Regulating the Rating Agencies' (2004) 82 WULR 1, 43.

¹⁶ Darren J Kisgen & Philip E Strahan, 'Do Regulations Based on Credit Ratings Affect a Firm's Cost of Capital?' (2009) NBER WP Series 14890, 5.

¹⁷ Marc Flandreau, Norbert Gaillard & Frank Packer, 'Rating Performance, Regulation and the Great Depression: Lessons from Foreign Government Securities' (2009) CEPR Discussion Paper 7328.

¹⁸ Jess Cornaggia & Kimberly J Cornaggia, 'Does the Bond Market Want Informative Credit Ratings?' (2011)

<<http://sites.harvard.edu/fs/docs/icb.topic1060772.files/Cornaggia%20and%20Cornaggia%202011-05-02.pdf>> accessed 5 March 2012.

¹⁹ Giuliano Iannotta & George Pennacchi, 'Bank Regulation, Credit Ratings, and Systemic Risk' (2012) WP University of Illinois.

This is, hence, the first strand of legal studies which will be relevant for the start and development of this research. Importantly, the pre-crisis and post-crisis literature on the functions and operations of the CRAs will help this research build the concept of reliance on the credit ratings by the private and public sector; and understand the extent to which this reliance, in particular from the side of the regulators, may have changed in the wake of the post-crisis reforms of the rating industry.

1.2.3 Economic studies

US Senator Joe Lieberman (2002) stated that the CRAs ‘wield immense, quasi-government power to determine which companies within the corporate world are creditworthy and which are not’.²⁰ This statement can be the basis to refer to the second strand of literature which is important for shaping the present research: the empirical studies which focus on the degree to which the investors are influenced by the credit ratings, in particular, by the rating downgrades. Numerous studies have been conducted in this respect, in particular, much of this academic literature empirically assesses whether rating announcements contain pricing-relevant information. These studies brought significant evidence to the fact that rating announcements, namely rating downgrades, give new information which plays a role in the formation of prices.

To begin with, early studies date back to the first half of the 1970s and they brought mixed results. On the one hand, Katz (1974)²¹ finds that investors do not anticipate rating changes, rather they tend to react with a delay to the announcement of rating downgrades. On the other hand, Weinstein (1977)²² does not find any evidence of investors’ reactions to rating changes. Further studies are more conclusive. Hand et al (1992)²³, for example, show that the announcement of a downgrade by the CRAs determines a statistically significant adjustment of corporate bond and

²⁰ See ‘Rating the Raters: Enron and the Credit Rating Agencies’ (2002) Committee on Governmental Affairs, Testimony of Chairman John Lieberman <http://hsgac-amend.senate.gov/old_site/032002lieberman.htm> accessed 18 February 2012.

²¹ Steven Katz, ‘The Price Adjustment Process of Bonds to Rating Reclassifications: A Test of Bond Market Efficiency’ (1974) 29 JF 2, 551.

²² Maxine A Weinstein, ‘The Effect of a Rating Change Announcement on Bond Price’ (1977) 5 JFE 3, 329.

²³ John R M Hand, Robert Holthausen & Richard Leftwich, ‘The Effect of Bond Rating Agency Announcements on Bond and Stock Prices’ (1992) 57 JF 2, 733.

equity prices. Such conclusions stimulated new studies which corroborated the argument of the credit ratings' influence on the investors and market participants. Goh and Ederington (1993)²⁴ were the first to verify whether the reaction of equity prices is in relation to the announcement of downgrades. They find that equity prices drop consequently to downgrades relating to a deterioration in the issuer's financial conditions. Similarly, Kliger and Sarigh (2000)²⁵ find that corporate bond and equity prices reacted to Moody's re-definition of its rating category in 1982, when the agency introduced numeric modifiers. Moreover, by analysing a sample of international bonds, Steiner and Heinke (2001)²⁶ find that both downgrades and reviews for downgrades exercise a significant impact on prices.

In the wake of these studies, further empirical literature flourished in relation to other market segments such as credit default swaps (CDS) and asset backed securities (ABS). For instance, Hull et al (2004),²⁷ as well as Norden and Weber (2004)²⁸ conclude that the reaction of CDS prices is considerably pronounced in the event of reviews for downgrades. Finally, Ammer and Clinton (2004)²⁹ discuss the impact of the credit ratings on the pricing of ABS and give evidence of a significant negative reaction to the CRAs' downgrades.

The 2007-2009 financial crisis events, with massive rating downgrades applied to sophisticated structured finance products, gave impetus to new studies analysing the investors' reaction to the rating changes. In particular, the recent sovereign debt crisis in the Euro zone gave the opportunity to analyse the systemic implications of rating downgrades. Arezki et al (2011)³⁰

²⁴ Jeremy C Goh & Louis H Ederington, 'Is a Bond Rating Downgrade Bad News, Good News, or No News for Stockholders?' (1993) 48 JF 5, 2001.

²⁵ Doron Kliger & Oded Sarigh, 'The Information Value of Bond Ratings' (2000) 55 JF 6, 2879.

²⁶ Manfred Steiner & Volker G Heinke, 'Event Study Concerning International Bond Price Effects of Credit Rating Actions' (2001) 6 IJFE 2, 139.

²⁷ John Hull, Mirela Predescu & Alan White, 'The Relationship Between Credit Default Swap Spreads, Bond Yields, and Credit Rating Announcements' 28 (2004) 11 JBF, 2789.

²⁸ Lars Norden & Wolf Wagner, 'Credit Derivatives and Loan Pricing' (2008) 32 JBF 12, 2813.

²⁹ John Ammer & Nathanael Clinton, 'Good News is No News? The Impact of Credit Rating Changes on the Pricing of Asset-Backed Securities' (2004) Board of Governors of the Federal Reserve System International Finance Discussion Paper 809.

³⁰ Rabah Arzeki, Bertrand Candelon & Amadou N.R. Sy, 'Sovereign Rating News and Financial Markets Spill-overs: Evidence from the European Debt Crisis' (2011) IMF WP/11/68.

report that downgrades from investment to speculative grade for sovereigns can have contagious effects across countries and financial markets. Similarly, Afonso et al (2012)³¹ show that rating downgrades of lower-rated countries can have spill-over effects onto higher-rated sovereigns. Other relevant studies followed. Alsakka and ap Gwilym (2013)³² tested the impact of sovereign credit ratings on foreign exchange markets. The authors reveal that currency markets of higher-rated countries were significantly responsive to rating downgrades during the crisis period as opposed to lower-rated countries' exchange rates, which were more affected in the pre-crisis periods by sovereign ratings. Based on these studies, more recently Baum et al (2013)³³ studied the impact of the CRAs' downgrades on the value of the Euro and the yields of French, Italian, German and Spanish long term sovereign bonds in the Euro area between 2011 and 2012. They conclude that the rating changes influenced crisis-time capital allocation in the Euro zone and forced investors to rebalance their portfolios across member countries.

This second strand of economic studies is important because it focuses on the investors and market participants' reaction to rating changes. As over-reliance is a behavioural phenomenon, these works provide the basis for understanding in respect of: 1) the influence that the ratings may exercise; 2) how such an influence can escalate into over-reliance; and 3) the extent to which the rating-based regulation may provide incentives to this.

1.2.4 Studies on over-reliance on external credit ratings

On the whole, both the illustrated law and economics studies on the CRAs are relevant to the present research in that they constitute the premises upon which the debate on over-reliance is built upon. In fact, as will be explained, the concept of over-reliance on credit ratings presumes that the

³¹ Antonio Afonso, Davide Furceri & Pedro Gomes, 'Sovereign Credit Ratings and Financial Markets Linkages. Application to European Data' (2012) ECB WP Series 1347, 6.

³² Rasha Alsakka, Owain ap Gwilym & Tuyet N Vu, 'Bank and Sovereign Credit Rating During the European Debt Crisis (2013) Bangor Business School.

³³ Christopher F Baum et al, 'Credit Rating Announcements and the Eurozone Sovereign Debt Crises' (2013) DIW Berlin Discussion Papers 1933.

investors and market participants are negatively influenced by the credit ratings and, thus, they neglect to undertake their own credit risk assessment and due diligence. In this context, the credit rating references in regulations are regarded as an incentive to this over-reliant conduct. Clearly, there is an inter-connectedness between the use of the credit ratings as regulatory tools and the degree of influence that these can exert on the investors and market participants. As this work will detail in the following chapters, the concept of over-reliance stemming from the hardwiring of credit ratings into legislation and regulatory frameworks is traced back to the public sector's use of the credit ratings and how this is perceived by the users of the credit ratings. Consequently, the literature which has been illustrated above is essential to understand the reliance of the public and private sector on the credit ratings and how this can escalate into over-reliance by investors and market participants. The two strands are the preliminary literature which help this study develop towards the shift from reliance to over-reliance and to the consequent regulatory approaches which have been set out to eliminate the phenomenon or mitigate the potential risk. With this as the premise, it is to be wondered which other studies can be relevant to this research work. Importantly, this foundation literature must be completed by referring to specific studies into the phenomenon that this thesis will address holistically: from its introduction within the regulatory debate on the CRAs until the recent regulatory strategies which have been set out at all levels to tackle it. These studies should be defined as the third strand of literature made of contributions on over-reliance on the external credit ratings. In one word, the third strand should embrace those research works which give insights into the subject of over-reliance, and which critically assess the consequent normative approaches. These, in turn, are based on the elimination of the credit rating references in legislation, substitution of them with valid alternative standards of creditworthiness, and contextual enhancement of the investors' capabilities to conduct more autonomous credit risk analysis. In this respect, it must be considered which studies have addressed these issues.

To start with, the phenomenon of over-reliance has been recently taken into consideration by Masciandaro (2013)³⁴ in the context of the recent sovereign crisis in the Euro zone. The author applies a definition of market over-reliance (MOR) as ‘the risk that ratings can affect bond yields quite independently from the supply of new information’. According to him, MOR depends on the rating-based regulation and the communication policy of the rating agencies, namely how CRAs channel information into the markets. Masciandaro concludes that to reduce MOR, it is necessary to remove the rating-based regulation and set out a principle of liability in the CRAs’ communication policy.

As to the regulatory strategies to reduce over-reliance, comments have been provided by Whelan (2011).³⁵ While illustrating the European package of reforms on the CRAs, the author is sceptical as to the possibility of encouraging more independent credit risk analysis from the CRAs since not all the financial institutions can afford to deploy adequate resources to this end. Specifically, the author welcomes the reform, in particular, the aim of reducing the amount of credit rating references into legislation. Nonetheless, he argues that the gains from the improvement of independent risk management are likely to be small.

In relation to the reduction of credit rating references in legislation, in particular with regard to the search of alternatives to credit ratings, proposals have been brought forward by economics scholars. Horsch (2014)³⁶, for instance, proposes four alternative methods for credit risk assessment: 1) credit risk assessment through market prices of debt; 2) credit risk assessment through market prices of derivatives; 3) credit risk assessment through market prices of equity; and 4) credit risk assessment through multi-factor models. According to the author, such alternatives

³⁴ Donato Masciandaro, ‘Sovereign Debt: Financial Market Over-reliance on Credit Rating Agencies’ (2012) BIS Papers No 72.

³⁵ Karl Whelan, ‘Ratings Agency Reform: Shooting the Messengers?’ (2011) European Parliament Directorate General for Internal Policies IP/A/ECON/NT/2011-03.

³⁶ Andreas Horsch, ‘Regulation of Credit Rating Companies: An Economic Point View’ (2014) 25 EBLR 2, 227.

often anticipate the credit ratings and would allow for superior evaluation of the debtors' credit quality.

These works have been the most recent since the debate on over-reliance started. Nonetheless, they do not deal with the theme of over-reliance from a holistic perspective as this research aims to do. For example, the analysis of Masciandaro is circumscribed to the sovereign debt crisis and it is based on research questions concerning the relationship between ratings news and volatility.³⁷ Hence, his work is more related to the second strand of the abovementioned literature which aims at providing a better understanding of the relationship between the rating announcements and the markets. Moreover, his conclusion to eliminate rating-based regulation is simply in line with the early literature on the disadvantages of relying on credit ratings for regulatory purposes. As said, the recent crisis and the debate on over-reliance revamped the views of those scholars who have always called for the elimination of the rating-based regulation (Partnoy 1999;³⁸ Altman 2010).³⁹ Consequently, he simply suggests what has always been suggested.

Similarly, Horsch reflects over the possibility of credit rating alternatives from an economic perspective. His work is mainly focussed on one aspect of the strategy, that is, the search of a unique, valid and universally accepted alternative to the credit ratings.⁴⁰ As will be shown in chapter III, most of the final rules issued at the time of writing have addressed and solved the issue of the alternatives to credit ratings. Now, the amendments applied to these rules need to be critically assessed.

Finally, Whelan expresses his scepticism within a broader illustrative context of the whole EU reforms of CRAs. His scepticism was expressed at an early stage of the reforms and should now be tested in light of the current status of implementation of the final rules.⁴¹

³⁷ Masciandaro (n 34).

³⁸ Partnoy (n 13).

³⁹ Edward J Altman et al, 'Regulation of Rating Agencies' in Viral V Acharya et al (eds), *Regulating Wall Street, the Dodd Frank Act and the New Financial Architecture* (Wiley, New Jersey 2010), 443.

⁴⁰ Horsch (n 36).

⁴¹ Whelan (n 35).

In addition to these three studies, other works on the phenomenon of over-reliance on external credit ratings seem to be lacking. In other words, while the first two strands of literature mentioned above may be the basis to discuss the post-crisis debate on over-reliance, the third, more specific strand still lacks enhancement. Unquestionably, most of the literature on the post-crisis reforms on the CRAs is mainly focussed on issues such as conflict of interest, civil liability and competition, to mention but a few. Even before the recent crisis these issues were debated and studied. Instead, over-reliance on external credit ratings still needs more penetrating attention to create a wider academic debate providing insights into the phenomenon, and able to stimulate criticism on the approaches and their progress. The few mentioned works are still too little for the development of a discussion on this segment of the CRAs' reforms. Currently, the implementation progress of the elaborated rules on over-reliance seems to be only monitored by standards setters and policymakers (FSB 2014)⁴², who ultimately try to push the enactment of the strategies through a list of recommendations. However, there is still much to be investigated and analysed as to over-reliance on credit ratings.

I.3 FILLING THE RESEARCH GAP

As explained, the literature on over-reliance on external credit ratings is still at an early stage. Besides, the contributions mentioned above do not undertake any thorough investigation into the phenomenon. Specifically, some of these contributions either side with some features of the strategies such as, for instance, removing the credit rating references from legislation, or underline some difficulties in the implementation of the approaches. However, all of these analyses do not take stock of the progress made so far at the national, international and regional levels to translate into practice the elaborated plans to mitigate the risk of over-reliance on the credit ratings. What is still needed is a holistic study. Such a work would help understand the phenomenon of over-reliance

⁴² Financial Stability Board (FSB), 'Thematic Review on FSB Principles for Reducing Reliance on CRA Ratings' (2014) Peer Review Report.

on credit ratings. Indeed, it would allow for a discussion on the regulatory debate, analyse the subsequent normative approaches and their degree of implementation; and in light of these results, would pose a reflection over the future of the strategies and, thus, question whether there is something which still remains to be seen or remedied.

The importance of this research path lies in the fact that over-reliance on the credit ratings must be regarded as something new within the broader debate on the CRAs. As will be highlighted through the part of the thesis explaining the phenomenon of over-reliance, the regulatory debate, which followed the 2007-2009 financial crisis, brought to attention the problem for the first time within the discussions aiming at reforming the credit rating industry. In essence, while issues such as reducing the possibility of conflict of interest deriving from the CRAs' business model, enhancing competition in the rating market, improving the CRAs' methodologies and setting up an appropriate civil liability regime, had been under the regulatory spotlight even before the recent crisis, over-reliance came out as a new problem to be addressed *inter alia*. The problem in question is not strictly related to the operation of the CRAs; it mainly refers to the relationship between the private and the public sector with the credit ratings. Nonetheless, the reforms which address over-reliance are incorporated into the legislation concerning the operation and structure of the CRAs. Therefore, over-reliance is a new issue which is finally part of the post-crisis reforms relating to the rating industry.

Accordingly, it is of relevance to produce views on the problem of over-reliance and increase the amount of the literature which, at present, appears to be stagnant and needs to be updated from the moment the debate started and progressed towards the implementation of the rules against over-reliance. Based on this, there are numerous issues which can be discussed by undertaking a thorough investigation into the phenomenon, its introduction, the proposed normative approaches, and their implementation process. To start with, it will be observed that there is a sort of confusion relating to the use of the word over-reliance. For example, the Financial Stability Forum (now Financial Stability Board) used the word over-reliance in relation to the investors' and

market participants' behaviour, while at the EU level the European Parliament talks about over-reliance from the part of the regulators. Besides, there is also an interchangeable use of the words reliance and over-reliance as if they were synonyms. These situations give a nebulous connotation to the phenomenon in itself and raise doubts on what over-reliance is and who over-relies. This research will be based on the concept of over-reliance as a behavioural phenomenon concerning investors and market participants as it was introduced by the FSB. This will be developed by considering the dichotomy between reliance and over-reliance in their respective positive and negative connotations.

Moreover, another gap which this research will identify is concerned with a lack of proper definition of the phenomenon. It will be shown that over-reliance was only introduced at the international level and applied to the contexts of the rating-based regulation and the structured finance sector. However, there was a failure to provide a clearer understanding of it through a definition which could demark the line between the two sectors. This definitional gap is not only from the part of the regulators but also from the part of the scholars which illustrated the elaborated normative approaches thereafter. Therefore, this research will set out two definitions of over-reliance according to whether the phenomenon is referred to the hardwiring of ratings into legislation or to the structured finance sector. Both definitions will be based on the interpretation of the discussions which animated the debate and culminated in the current regulatory approaches against over-reliance on credit ratings. In fact, different regulatory approaches reveal two types of over-reliance which need proper definition because of the different implications they have. Significantly, drawing a line between the two sectors in which over-reliance may arise and providing two respective definitions is an important detail that the debate missed. This research will deal with this gap while addressing the question of what over-reliance on the credit ratings is, who over-relies and why, and which sectors can be identified as over-reliance risky. Among other things, the lack of a proper definition and the need to close this gap is corroborated by the fact that only in 2014 (after five years from the start of the debate), at the EU level the European Supervisory

Authority (ESAs) recognised that they had to deal with a lack of specific definition of ‘mechanistic and parallel reliance’ on credit ratings.

After providing a definition of over-reliance, the research is circumscribed to the over-reliance stemming from the embedded credit ratings into legislation and regulatory frameworks. To this end, an interesting, thought-provoking aspect that this research will identify and discuss is concerned with the presumed abandonment of the over-reliance issue within the regulatory debate at the US and FSB level. This seems to be the result of major attention given by the regulators and policymakers to reliance. This is regarded as something to be (if not eliminated) heavily reduced with opportune regulatory intervention. Therefore, an interpretative work will be framed with the view to finding reference to over-reliance within the approaches dealing with reliance on the credit ratings. The supposed shift from over-reliance to reliance is an aspect that this research has noticed and discussed as an evolution of the debate initially started with over-reliance. Accordingly, it will be shown how over-reliance is being tackled through an approach which preliminarily requires addressing the reliance on the credit ratings.

After fixing the way to reduce over-reliance, there will be room for evaluating the normative approaches which were finalised consequently. To this end, the focus will be on their contents and their current status of implementation. Through this analysis this study will give a twofold contribution to the literature on over-reliance. Firstly, there will be a critical assessment of the progress which has been made to translate the approaches so far. This will entail analysing the initial expectations of the debate vis-à-vis the final rules, and verify the degree of consistency of the final rules with the aims of the regulatory debate on over-reliance. In turn, this will permit us to discuss the extent to which the final rules are effective in reducing or eliminating the problem. Secondly, the outcomes will stimulate further reflections on the future of the strategies and on possible issues that the debate could take into consideration. All things considered, undertaking an investigation into over-reliance on the external credit ratings from the beginning of the debate until now, with a main focus on the risk deriving from the rating-based regulation, is a study which is

still missing. Accordingly, this work aims at stimulating new literature and to enhance the discussion on a new lively issue. The contribution it will give from a theoretical, policy and future studies perspective will be underlined in the final conclusions. In these introductory remarks, it is to be emphasised that the present research will give a more complete understanding of the phenomenon of investors' over-reliance stemming from the hardwiring of credit ratings into legislation and regulatory frameworks. Also, by way of critically assessing the implementation of the normative approaches which have been elaborated to eliminate this risk, it will permit identifying and discussing possible improvements to make the approaches more effective in their purposes.

I.4 RESEARCH QUESTIONS, STRUCTURE AND DEVELOPMENT

In light of these aims, this research seeks answers to the following main question:

- After five years since the elaboration of rules at the national, international and regional levels for reducing the risk of investors' over-reliance deriving from the inclusion of credit ratings in financial regulations, to what extent are these rules effective to this end?

To answer this question, it is necessary to give the work a specific direction. In this respect, the title of this thesis incorporates a Latin, general question representing the reasoning which will be necessary to answer the main question and, in turn, the further reflection which may arise after answering this.

'Quo vadis?' is to be regarded as a catch-all phrase which will be of relevance to every chapter this thesis is comprised of. Narrowly speaking, this word refers to the future of the plans set out at all levels to address the phenomenon of over-reliance deriving from the credit rating references incorporated into the legislation and regulatory frameworks. Such a question can be answered in light of the results which can be drawn through the investigation into the phenomenon

of over-reliance, the elaborated regulatory approaches, and the status of implementation of them at the national, international and regional levels.

In the first place, this question can have a twofold meaning. If the results of the investigation are positive, this may bring into question what further improvements are necessary in relation to an approach which has progressed well since its definition and incorporation into the legislative frameworks. In this case, the answer to the question '*quo vadis?*' could be a reflection following a positive outcome of the status of the implementation of a strategy dated back to 2010. This would be underpinned by the conclusion that the chosen approaches work in their aim to reduce the risk of over-reliance. Therefore, a further development of the analysis could either be in the sense that the approach needs only few improvements to be consolidated, or improvements are not necessary at this stage given the good progress; but they may be needed in the future. Consequently, numerous options could be discussed in the event that the overall analysis gives evidence of a workable strategy.

Conversely, the scenario is different in case the outcome of the analysis is negative or reveals an approach which has more shadows than lights. In this case, saying '*quo vadis?*' entails discussing whether the approach is doomed to fail and, thus, the debate should discuss new strategies, or whether the shortcomings that the approach has brought to attention may be tackled without changing the gist of the strategy. Research based on this question is opportune because five years have passed since the start of the debate and the finalisation of the normative approaches elaborated by the FSB and the US regulators. As to the EU, it will be shown that the pace of implementation was different, but some results can be verified as well since the rules represent the full endorsement of the guidelines provided by the FSB. Consequently, there is sufficient room to investigate the phenomenon of over-reliance since its introduction in the post-crisis regulatory debate and from the perspective of the progress made to reduce its risk through the rules which have been set out so far.

Broadly speaking, *'quo vadis?'* is the basis to answer all the sub-questions which will lead to the main question. For instance, the lack of proper definition of the phenomenon will make it necessary to provide a better understanding of it through the elaboration of a definition according to whether it stems from the rating based regulation or the structured finance sector. This will be the first direction this research will have to take. After having identified, understood and properly defined the phenomenon, the question *'quo vadis?'* arises again and refers to a new direction to be taken, namely the analysis of the approaches elaborated to reduce the risk deriving from rating-based regulation and their effectiveness. Finally, this question arises in relation to the results of the analysis of these approaches and will be concerned with questioning whether the approaches can be improved and how they may be improved.

Putting things into a more specific perspective, this research is divided into the following core chapters. The second chapter, as its title suggests, *'in search of a meaning'*, deals with the phenomenon of over-reliance with the view to providing a clear understanding of it within the post-crisis debate on the structure and operations of the CRAs. In this respect, the analytical approach which will be followed is based on the line of demarcation between reliance and over-reliance in accordance with their positive and negative connotations. As will be often remarked in the progress of the work, the former is the *'good'* and the latter the *'bad'* of the credit ratings. To this end, to understand over-reliance on the credit ratings it is necessary to start with the credit ratings and discuss the role and importance of the CRAs in the global financial markets. In the context of the reliance on the credit ratings, namely the *'good'* aspect, the necessary information will be provided by questioning why there is widespread use of the credit ratings in both the private and the public sector. This sketches the contours of the reliance on the credit ratings. It will permit us to focus, in particular, on the tie between the credit ratings and the investors and market participants, as well as between the ratings and the regulators. Specifically, being the subject of this thesis the problem of over-reliance deriving from the credit rating references in legislation, this introductory analysis will coherently move from those who rely on the credit ratings and are at risk of over-relying from those

who, by relying on the credit ratings in their regulatory programmes, may provide an incentive to over-rely. Through this understanding, the analysis can be devoted to the other side of the coin, that is, the ‘bad’ of the credit ratings. In this context, answers are sought in relation to which unintended consequences can derive from the use of the credit ratings. Basically, the discussion will concentrate on some specific facts as examples of the negative impact that the rating downgrades can have on the financial stability. This will permit us to circumscribe the focus on the rating-based regulation and its potentiality to facilitate phenomena such as cliff-edge effects and herd behaviours which can have systemic implications for financial stability. This will be the grounding for shifting completely from reliance to over-reliance on the external credit ratings since it is argued that these systemic relevant phenomena are exacerbated by the investors’ and market participants’ over-reliance on the external credit ratings. This will mark the beginning of the investigation into the phenomenon of over-reliance. To this end, the main question to be answered is concerned with what over-reliance is. As already mentioned, it will be discussed how the word was introduced at the international level without providing a clear definition of it. In this part of the thesis such a gap will be closed by providing a definition which comes at the end of an investigation aimed at verifying which sectors can facilitate over-reliance and why. It will be shown that there are two sectors in which over-reliance may arise. Both sectors imply a different definition of over-reliance and tackle their own risk of over-reliance through different regulatory approaches. Having clarified these aspects, the scope of the research can be circumscribed to its central topic, namely over-reliance stemming from the hardwiring of the credit ratings into legislation and regulatory frameworks. Knowing accurately why there is the risk of over-reliance in this area and its implications, we will have a sufficient basis to illustrate the normative approaches which have been set out to address the problem. Specifically, attention will be given to the FSB set of principles to reduce reliance on the credit ratings, Section 939A of the Dodd Frank Wall Street Reform and Consumer Protection Act, (Dodd Frank Act)⁴³ and to the rules developed at the EU level within the reforms of the CRAs.

⁴³ Section 939(a) of the Dodd Frank Act: *Review of Reliance on Ratings*,

These are to be regarded as the three macro areas which have provided a strategy finally translated into soft or hard rules. However, the discussion will not result in a mere illustration of the approaches. On the contrary, by taking stock of the evolution of the debate on over-reliance, this research will note a development of it towards reliance on the credit ratings. Both the FSB principles and Section 939A of the Dodd Frank Act are denominated in this regard. Over-reliance seems to have disappeared and hence it will be questioned whether the rules and principles deriving from the debate on over-reliance still refer to it despite their primary reference to reliance. This investigation will try to give substance to the assertion that the US rules and the FSB guidelines implicitly refer to over-reliance by way of addressing, primarily, its potential source, that is, regulatory reliance on the credit ratings; and then by enhancing the market participants' capabilities to conduct their own due diligence and credit quality assessment. This will be confirmed through the analysis of the US debate on the implementation of Section 939A of the Dodd Frank Act, the contents of the FSB two-pronged approach and by linking the FSB strategy to the EU rules which explicitly refer to over-reliance as a full endorsement of the FSB principles. All things considered, this chapter of the thesis sets the context, defines over-reliance and reflects over the development of the debate towards the consequent normative approaches.

The third chapter of the thesis will accordingly deal with an examination of the current status of implementation of the strategies developed at the national, international and regional levels. Firstly, a comparison between the US and EU rules will be made with the view to highlighting similarities and differences and answer the question of whether their implementation process is to be regarded as a coordinated effort under the auspices of the FSB or whether the two legal systems pursue different plans. Successively, by taking the FSB approach as the general paradigm upon which the implementation at the US and EU level can be assessed, answers will be provided as to the question of which final rules have been written in accordance with the FSB basic strategy. In this context, the progress made by the US and EU legal systems will be critically

reviewed and finally a reflection on the outcomes of the final rules will be provided. This will be based on the question concerning the consistency of the final rules with the general strategy, and their suitability to reduce the risk of over-reliance. In more detail, this part of the third chapter is concerned with the first level of the general strategy which requires the reduction of reliance through the removal and replacement of the credit rating references with valid alternatives. On the other hand, the second level is concerned with the enhancement of the investors' and market participants' capabilities of conducting independent credit risk analysis so as not to solely rely on the credit ratings. This second level will then be discussed by questioning whether the development of independent credit risk assessment and due diligence is feasible for all the investors and market participants. Preliminary conclusions will be drawn in light of the results achieved in the overall third chapter. In particular, to anticipate some of the results, the implementation of the approach currently will slow down due to some intrinsic limits. Besides, it will be discussed that the risk of over-reliance is still latent due to the impossibility of completely eliminating the credit ratings.

This may raise the question of whether the strategy has failed or will be failing in the long term. Such a question would be obvious because of the negative outcome of the translation progress.

Nonetheless, prior to this, the results stimulate a more in-depth reflection on the post-crisis debate on over-reliance on credit ratings. In more detail, the questions are concerned with what the debate has missed while elaborating the approach on over-reliance deriving from the credit rating references in legislation and whether anything could have been done in the past to anticipate the problem of over-reliance. This is the fourth chapter of the thesis in which a reflection is provided as to the extent to which over-reliance deriving from the rating-based regulation has been adequately proven to support the current approaches. This question will be answered by preliminarily discussing the etiological nexus between the rating reforms and the CRAs' failures. This will introduce the question of whether the elaborated approaches are supported and justified in light of strong evidence of the existence of over-reliance. In accordance with this aim, it will be argued that

the current approaches seem not to have been thoroughly evaluated because over-reliance concerning the rating-based regulation has not been sufficiently proven. This result will be highlighted by way of comparing the lack of evidence of this type of over-reliance with the strong evidence of the over-reliance provided in the structure finance sector. Therefore, not only the approach slows down in its progress because of intrinsic limits, but also because it tries to solve a problem which has not been adequately demonstrated in its existence. Furthermore, it will be discussed and given evidence of the fact that over-reliance is not exclusively a matter of best practice by investors and market participants as the debate has always claimed. Regulators might have anticipated the phenomenon long before the recent financial crisis. This is not only referred to the widespread use of credit ratings by the public sector, but mainly to the fact that even during the last century the regulators were constantly warned by the CRAs against the over-emphasis they were giving to the credit ratings. The unintended consequences which could have been derived from this regulatory over-emphasis, especially in relation to the market participants' use of the credit ratings, were also highlighted and explained by the agencies. However, warnings remained on paper. *Quo vadis* then?

This fourth chapter tries to go beyond the present and past shortcomings of the debate on over-reliance. The focus will be on analysing whether the ongoing implementation process can be out of the quicksand which seems to make it stagnant. It will be argued that the strategy is a no turning-back point and, for this reason, it does not make sense to claim that it should be cancelled. Furthermore, as will be shown, some positive aspects can be highlighted. Consequently, the discussion will try to give some suggestions to enhance the implementation progress so that new results can be monitored and discussed.

Based on the investigation conducted in these core chapters, the overall results of this research will be spelt out in the final conclusions.

I.5 BUILDING THE RESEARCH PATH: SOURCES AND MATERIALS

This thesis pursues an exploratory aim in relation to the phenomenon of over-reliance on the external credit ratings. The research also involves a critical assessment of the current status of implementation of the approaches elaborated to curb the risk of over-reliance deriving from the credit rating references in financial legislation and regulatory frameworks. As mentioned above, the investigation will start by drawing a line between reliance and over-reliance on credit ratings. In doing so, the former will be construed as the ‘good’ of the credit ratings while the latter as the ‘bad’, since it represents the negative escalation of reliance into over-reliance. As this analysis is primarily based on the question of why the private and public sector rely on the credit ratings, the answer will be sought by briefly tracking the history of the CRAs, as well as the nature, characteristics and importance of the credit ratings in the financial markets. To this end, the analysis is based on secondary sources, in particular, on the strand of literature which provides the historical grounding to understand the rating industry, its operation in the financial markets, and the credit ratings. This provides a useful insight into the ‘good’ side of the credit ratings. The ‘good’ side of the credit ratings is traced back to the advantages deriving from the use of the ratings, such as the reduction of the information asymmetries and transaction costs. These secondary sources are also combined with references to what the major CRAs say about themselves, when they explain the nature of the credit rating, the value of their services, and how they interact with the investors and the market participants. This literature is also the basis to expand the analysis on the reliance from the private to the public sector. Within this part, it is essential to explain the so-called widespread use of credit ratings into legislation. In this case, the questions of where the regulatory use of the credit ratings started, which legislative sectors make wide use of them more than others, and which legal systems make significant use of them in the legislation, are answered through the study of the historical papers and the recent reports which were issued in the wake of the recent crisis. These, in fact, permit us to identify a change in the language of the regulators and scholars to define the tie

between the regulators and the credit ratings. In practice, the hardwiring of the credit ratings vis-à-vis the rating-based regulation will be contrasted in their different meanings. While the former is interpreted within the 'bad' side of the credit ratings and is now a zeitgeist in the context of over-reliance, the latter is construed within the 'good' side of the credit ratings. Such results are generated through the understanding of the literature providing an overview of the history of the regulatory use of the credit ratings and the role and responsibility of the CRAs in the aftermath of the 2007-2009 financial crisis.

The post-crisis literature is also the main source for shifting from the good to the bad of the credit ratings and thus introducing the phenomenon of over-reliance. In essence, the main objective is to illustrate how the negative aspects associated to the rating downgrades are exacerbated by the over-reliance on them. At this stage, the phenomenon is discussed and the main sources to this end are the reports produced during the post-crisis regulatory dialogue on the CRAs at the national, international and regional levels. As mentioned, this thesis will address a lack of definition of the phenomenon according to whether it stems from the hardwiring or from the structured finance sector. A lack of literature on the phenomenon urges this work to attempt to provide a definition of two types of over-reliance which will be identified through the interpretation of the debate's reports.

Then, focussing on the central topic of this thesis, namely over-reliance deriving from the regulatory use of the credit ratings, the question to be addressed is whether the phenomenon was introduced for the first time after the crisis. In essence, it will be investigated whether, before the crisis, the rating-based regulation had ever been regarded as carrying the risk of over-reliance by the market participants. This question is answered by comparing the two legal systems, namely the US and the EU, which have a normative framework on the CRAs. In more detail, the regulatory documents such as the US SEC releases and the EU consultations documents will be analysed with the view to searching for clues about the phenomenon before the crisis. These sources will help the investigation conclude that over-reliance deriving from the embedding of the credit ratings into

legislation came under the regulatory spotlight only in the post-crisis debate and it is a segment of the broad post-crisis regulatory reforms on the CRAs.

Having contextualised and defined over-reliance, the scope of the research can be widened and can deal with the regulatory approaches to address the problem. The approaches set out by the FSB, the US and EU regulators will be illustrated. Methodologically, the FSB set of guidelines will be regarded throughout the thesis as the general paradigm upon which the implementation of the US and the EU rules can be tested. Nonetheless, as mentioned, both the FSB and the US approaches deal with reliance instead of over-reliance and this raises the question of the relevance of over-reliance within these approaches. A positive answer to this question is reached by searching and analysing the data provided by the regulators debating the finalisation of their approaches. This permits the claim that over-reliance is implicitly referred to in Section 939A of the Dodd Frank Act and in the second level of the FSB two-pronged approach. This assertion is then concretely tested by referring to the EU rules on the CRAs which came into force in June 2013 which explicitly refer to over-reliance. This interpretative path, based on legislative documents, soft-law guidelines and political reports, leads this research to fix the approach against over-reliance: the phenomenon is tackled by addressing its source, namely the credit rating references, and subsequently through the enhancement of the investors' ability to conduct their own due diligence and credit risk assessment.

This is the platform to analyse the current status of implementation of the approach. The US and the EU are an obligatory reference in that they are the only two systems with rules against over-reliance and an ongoing implementation process. Such an analysis is consequential to the FSB warning that the implementation process of the approach is slow at the global level, while only the US and the EU have made significant progress. Therefore, discussing the progress of the two systems by way of illustrating their final rules will not be a mere descriptive process. On the contrary, it will permit us to take stock of the results since the debate started and evaluate what has been produced. This critical assessment takes into consideration the data resulting from the consultation periods which were launched in the US and the EU when the rules against over-

reliance were under discussion. In particular, the written opinions provided by the main users of the credit ratings are regarded as fundamental to chart how the final rules were set out and to discuss which role the credit ratings may still maintain within legislation.

Moreover, the opinions of the users of the credit ratings are crucial to build up the discussion concerning the evidence of over-reliance which takes place in the fourth chapter of the thesis. As to this, the evidence of over-reliance deriving from the regulatory and the structured finance sectors is contrasted and some significant results are drawn by critically considering some pre-crisis and post-crisis surveys. Finally, the opinions expressed during consultation periods are essential documents with regard to what the regulators have missed in the past in relation to the emphasis given to the credit ratings in regulations. The assertion that the debate on over-reliance could be anticipated is based on the warnings given by the major CRAs back in 1994. These were found among the responses given to the consultations launched by the SEC in relation to the NRSROs status.

All things considered, this work has an exploratory, holistic approach into the phenomenon of over-reliance. Its results are generated through the study of historical materials, the interpretation of legislative documents, the comparison and critical assessment of the final rules, as well as through the analysis of the views expressed by the users of the credit ratings and the CRAs.

CHAPTER II

OVER-RELIANCE ON EXTERNAL CREDIT RATINGS: IN SEARCH OF A MEANING

II.1 INTRODUCTION

Among all the matters of concern relating to the structure and operations of the rating industry, the regulatory debate that the recent financial turmoil triggered at the national, international and regional levels also focussed on the degree of influence that external credit ratings may have on investors and market participants. In particular, at the outbreak of the 2007-2009 financial crisis, the massive downgrades applied to structured products and the ensuing, dramatic, sell-off of them prompted the regulators to reflect over the investors' dependence on external credit ratings.⁴⁴ In essence, it was argued that investment grade ratings assigned to debt instruments by CRAs may have the effect of discouraging investors from undertaking their own due diligence and credit risk assessment. Such an analysis, should always be performed while making investment decisions and, thus, credit ratings should be among the sources of information to complement the investors' analysis.⁴⁵ Significantly, where a triple A assigned by CRAs is interpreted as a guarantee of creditworthiness and no independent, additional, credit risk analysis is performed credit ratings become primary credit risk assessment tools.

Within the regulatory debate, this situation has been synthesised as follows: over-reliance on external credit ratings by investors and market participants. In the first place, it can be understood that this is a phenomenon which is not concerned with the CRAs themselves but with the conduct of

⁴⁴ Partnoy, 'Overdependence on Credit Ratings was a Primary Cause of the Crisis' (2009) Proceedings of the 2008 International Banking Conference: "The First Credit Market Turmoil of the 21st Century", San Diego Legal Studies Paper No 09-015.

⁴⁵ De Larosière Group, 'Report of The High-Level Group on Financial Supervision in the EU, chaired by Jacques de Larosière' (Brussels 2009) para 56, 16.

investors and market participants. In other words, while CRA-related issues such as conflict of interest, reducing entry barriers and increasing competition in the rating industry, accuracy of rating methodologies and timeliness, as well as CRAs' accountability are commonly discussed within the operation of the CRAs, over-reliance pertains mainly to the behaviour of investors and market participants. Put more simply, over-reliance is a behavioural phenomenon which is directly related to the way investors and market participants approach the credit ratings. Hence, to understand over-reliance is necessary to consider the relationship between the credit ratings and investors. This context raises numerous questions, such as what over-reliance is, why investors and market participants over-rely, and which factors are determinant for the escalation of the reliance on credit ratings into over-reliance. The clarification of these aspects permits us to introduce and take chart of the regulatory debate and consequent legislative approaches which have been elaborated to address the phenomenon in question.

This part of the thesis aims to introduce and explain the phenomenon of over-reliance on external credit ratings by investors and market participants. In doing so, the following approach will be applied. In keeping with the paradigm set out in the introduction to the present work, over-reliance will be conceived as the negative escalation of reliance. Consequently, given the negative connotation that the word has in connection with the use of credit ratings, the analysis will start by discussing the reliance on credit ratings. Reliance on credit ratings will be interpreted as the 'good' part of credit ratings. Indeed, reliance has a positive connotation in that it is concerned with the unquestionable benefits which derive from the use of external credit ratings in the financial markets, notably, the reduction of information asymmetries and transaction costs. In this respect, the focus will be on what credit ratings are, why they occupy a centre stage position in the financial markets, who uses the credit ratings and why. In particular, with regard to the users of the credit ratings, the analysis will contrast the use of the credit ratings in the private and public sector and identify the reasons for reliance. Understanding the 'good' aspects of credit ratings also stimulates consideration of the potential negative implications deriving from the use of the credit ratings. This permits us to

move the analysis from the ‘good’ to the ‘bad’ aspects of the credit ratings. Crucially, this will be the context in which the escalation from reliance to over-reliance can be detected. Thus, the discussion can concentrate on the phenomenon of over-reliance on external credit ratings. In this respect, the concerned paragraphs will undertake a broad investigation into over-reliance. Firstly, it will be argued that the debate has never given a specific definition of over-reliance. Consequently, this gap will be closed by providing a definition built upon a distinction between two different contexts which will be earmarked as over-reliance risky: 1) the hardwiring of credit ratings into legislation and regulatory frameworks; and 2) the structured finance sector. Over-reliance stemming from the regulatory use of credit ratings will be the central topic of the thesis. Accordingly, this chapter will conclude by introducing and discussing the regulatory approaches which have been elaborated at the national, international and regional levels to tackle the phenomenon.

II.2 THE ‘GOOD’ ASPECTS OF THE CREDIT RATINGS: A BASIS FOR RELYING

II.2.1 The rating industry: origins and development

CRA's are key players in the financial markets. Their business is concerned with the assessment of the credit risk of borrowers such as corporations, municipalities and sovereign governments.⁴⁶ Credit rating services can be traced back to the early nineteenth century when the predecessors of the modern CRA's, the US credit reporting agencies, began providing information services on railroad bonds. At that time, the US industrial centres and the major cities had rapid growth through the high volume of business which the creation and expansion of railroads generated.⁴⁷ Railroads gave a significant surge to the US economic and technological progress. In that context, railroad corporations flourished and set up in those territories in which funding could be easily obtained

⁴⁶ Fabian Amtembrink & Jacob De Haan, ‘Regulating Credit Rating Agencies in the European Union: A Critical First Assessment of Regulation 1060/2009 on Credit Rating Agencies’ (2009) 46 CMLR 6, 1915.

⁴⁷ Richard Sylla (n 11), 19.

because of the presence of banks and investors.⁴⁸ The set up of the US railroad corporations and their capital needs, in turn, paved the way for the creation of a railroad bond market which grew domestically and soon spread internationally.⁴⁹

Importantly, the US railroad bond market changed the way of doing business. Before the expansion of the railroad market, transactions were mainly at a domestic level and among people who knew each other. This meant that those providing funds did not need much information on their debtors' repayment capacity.⁵⁰ However, once the railroad market grew larger, the geographical scope of the transactions increased as well. Consequently, lenders needed more information on their counterparties' trustworthiness. To this end, letters of recommendation provided by bankers, lawyers or intermediary friends were the only source of information available in the early nineteenth century. Nonetheless, these could easily be faked or forged.⁵¹ Meanwhile, markets and trades kept growing. Such a constant, rapid evolution made it clear that new channels to gather and disseminate credit information in a more systematic, reliable and efficient way were necessary. In that period, Lewis Tappan, a silk businessman, understood these needs and specialised in the supply of commercial information. In essence, over the course of his business he collected and kept record of all his current and potential customers' credit information.⁵² In 1841, in the aftermath of the collapse of the silk business, his data proved to be crucial to other merchants involved in the same sector, who wanted to have information on the trustworthiness of their current

⁴⁸ Christian Wolmar, *The Great Railroad Revolution: the History of Trains in America* (PublicAffair 2012); Richard White, *Railroaded: the Transcontinentals and the Making of Modern America* (W W Norton & Company 2011); see also Milton C Hallberg, 'Railroads in North America, Their Evolution and Family Structure' (2009) <<http://www.personal.psu.edu/faculty/m/c/mch/railroad/>> accessed 7 January 2012 .

⁴⁹ White, 'Credit Rating Agencies: An Overview' (2013) Stern School of Business, New York University <http://web-docs.stern.nyu.edu/old_web/economics/docs/workingpapers/2013/White_CRAsARFE_Jun2013.pdf> accessed 10 January 2012.

⁵⁰ Lance E Davis & Robert J Cull, *International Capital Markets and American Economic Growth, 1820-1914* (CUP 2002).

⁵¹ Ibid.

⁵² Nicola Jentzsch, *Financial Privacy: An International Comparison of Credit Reporting Systems* (Springer 2006), 63.

and potential clients. Hence, he set up his Mercantile Agency with the view of selling information on the creditworthiness and business standing of US commercial enterprises.⁵³

Other mercantile credit raters followed this example and entered a business which turned out to be very profitable for Tappan. In particular, in 1890 the predecessor of the rating agency Standard and Poor's (S&P), Poor's Publishing Company, published the Poor's Manual which provided a compilation and analysis of business information, mainly on railroad bonds.⁵⁴ These were the roots of the credit rating industry and market which would have started in the early 1900s. John Moody, a Wall Street financial analyst, took a close look into the business of the mercantile agencies and noticed some significant drawbacks. In essence, the information and data embodied in the reports sold by the mercantile agencies were too intricate to be clearly understood by investors. Accordingly, he reviewed and simplified the information set out in the mercantile agencies' reports and in 1909 published his *Analysis of Railroad Investments*.⁵⁵ His idea was quite revolutionary: providing synthetic credit quality information expressed through easy-to-understand alphabetical symbols.⁵⁶ In practice, bonds were assigned alphabetical symbols expressing different grades of creditworthiness. For instance, an 'A' letter meant high probability of repayment; by contrast, a letter 'D' indicated a high probability that the issuer of the debt instrument would default in the repayment of his debt.⁵⁷ This method, applied to stocks and bonds, was quite successful. John Moody's book was sold all over the US and paved the way for the creation of the credit rating industry. In fact, Moody's Investors Service (Moody's) was set up in 1914 and created its first rating department in 1922.⁵⁸ Following the John Moody's method, new agencies entered the rating business. These included Poor's Publishing Company in 1916, Standard Statistic Company Inc in

⁵³ Ibid; see also Peter T Leach, 'The 1800's: Brothers in Arms' (2005) JC, 3

<http://www.joc.com/sites/default/files/joc_inc/history/p3.html> accessed 10 January 2012.

⁵⁴ Timothy J Sinclair, 'Bond Rating Agencies' (2003) 8 NPE 1, 147.

⁵⁵ Moody's Investors Service (Moody's), 'Moody's History: A century of Market Leadership',

<<https://www.moody.com/Pages/atc001.aspx>> accessed 4 February 2012.

⁵⁶ Emory R Johnson, 'Moody's Analyses of Railroad Investments by John Moody' (July 1909) 34 *Annals of the American Academy of Political and Social Science* 1, 210.

⁵⁷ Kenneth Pinkes, 'The Function of Ratings in Capital Markets' (1997) *Global Credit Research*, Moody's Investors Service, 2.

⁵⁸ Charles R Geisst, 'Credit Rating Agencies' (2009) *Encyclopedia of American Business History*, 111.

1922 and Fitch Publishing Company in 1924.⁵⁹ These were the first rating agencies which are now commonly regarded as the most powerful within the rating market.⁶⁰

Currently, the rating market is characterised by numerous agencies. Also, recent legislation which has been issued in the US and the EU in the aftermath of the 2007-2009 financial crisis has tried to strengthen competition by setting out specific registration requirements to be met to access the rating market. This has undoubtedly increased the number of CRAs. For example, in the EU, under the registration and certification system laid down under Regulation 1060/2009 (hereinafter: CRA Regulation I),⁶¹ there are more than thirty European registered CRAs.⁶² In the US, there are more than ten CRAs which can operate under the status of Nationally Recognized Statistical Rating Organizations (NRSROs).⁶³ Nonetheless, there is still a high concentration in the rating industry which has maintained its oligopolistic structure, characterised by the power and dominance of the most ancient, namely Moody's, S&P and Fitch. These three agencies operate internationally and are able to provide a wide range of credit rating services: from corporate and sovereign to structured finance credit ratings.⁶⁴ Other agencies and recent entrants do not have the same size and volume of business as the three big. They do not provide a full package of rating services and concentrate their business on specific sectors at a domestic level.⁶⁵

II.2.2 Credit Ratings: categories and formation process

⁵⁹ Gilbert Harold, *Bond Ratings as an Investment Guide: An Appraisal of their Effectiveness* (New York: Ronald Press 1938), 6.

⁶⁰ Standard & Poor's (S&P) is a division of the publishing giant McGraw Hill, while Fitch Ratings (Fitch) is owned by the French holding company Fimalac, see Sylla (n 11).

⁶¹ 'Regulation (EC) No 1060/2009 of the European Parliament and of the Council of 16 September 2009 on credit rating agencies' (CRA Regulation I).

⁶² A list of registered and certified EU CRAs is available at: <<http://www.esma.europa.eu/page/List-registered-and-certified-CRAs>>.

⁶³ White (n 49).

⁶⁴ Ulrich G Schroeter, 'Credit Ratings and Credit Rating Agencies', in Gerard Caprio, Douglas W Arner (eds.), *Handbook of Key Global Financial Markets, Institutions and Infrastructure* (Academic Press 2012) Ch 35, 386.

⁶⁵ This is the case, for example, of the Chinese rating agency Dagong Global Ltd founded in 1994. The agency is registered in the US as NRSRO and in the EU as European registered CRA. Dagong does not provide structured finance credit rating and concentrates mainly on corporate and sovereign credit ratings, see <<http://en.dagongcredit.com/about/rating.html>> accessed 6 March 2012.

As mentioned above, CRAs provide an assessment of the creditworthiness of public and private borrowers and of a wide range of debt instruments. These include corporate bonds, sovereign bonds and complex structured finance products which result from a securitisation process. Hence, from a financial product perspective, credit ratings can be grouped into three categories: corporate ratings; structured finance ratings; and sovereign ratings. Narrowly speaking, the agencies provide two different types of credit ratings: issue-specific credit ratings and issuer credit ratings. Issue-specific credit ratings are concerned with the assessment of the credit quality of an issuer in relation to his financial obligation, class of financial obligations, or a specific financial program. This type of credit rating, among other things, also forecasts the recovery prospect associated with the specific debt being analysed. Conversely, issuer-credit ratings aim to assess the obligor's overall capacity to service its financial obligation. Both of these types of credit ratings can be notched up or down by the agencies. Specifically, the term 'notching' refers to the practice of differentiating issues in accordance with the issuer's overall credit quality.⁶⁶

The rating assigned by the CRAs is only concerned with the credit risk of borrowers and debt instruments. Other risks such as market and liquidity risks are not included.⁶⁷ In general, to assess the credit risk, CRAs apply quantitative (systematic assessment of financial data, the calculation of ratios, running of models and so forth) and qualitative methods (business risk, the impact of regulatory change, the quality of management, the implied future industry outlook and so on).⁶⁸ Each agency applies its own rating methodologies. Differences in the rating process depend on the type of product being rated and the information that the rating analysts have to review. For

⁶⁶ Issues are notched up or down from their corporate rating level in accordance with specific guidelines. For example, an issuer rated investment grade can receive different ratings on single debt issues notched up or down. Basically, an unsecured bond can be notched down, while a highly secured bond can receive a higher rating, see S&P, 'Corporate Rating Criteria' (2006), 46.

⁶⁷ This is clearly specified in the CRAs' rating disclaimers: 'Fitch Ratings' credit ratings do not directly address any risk other than credit risk, ratings do not deal with the risk of a market value loss on a rated security due to changes in interest rates, liquidity and other market considerations', Fitch, 'Definition of Ratings and Other Forms of Opinions' (2014) <https://www.fitchratings.com/web_content/ratings/fitch_ratings_definitions_and_scales.pdf> accessed 10 February 2014.

⁶⁸ International Organisation of Securities Commissioners (IOSCO), 'Good Practices on Reducing Reliance on CRAs in Asset Management' (June 2014) Consultation Report CR04/14, 9.

instance, for the determination of sovereign ratings, the CRAs refer to criteria such as macroeconomic and fiscal indicators of a country,⁶⁹ while for corporate bonds they may refer to a company's financial statements, franchise value, management quality and competitive position.⁷⁰ On the other hand, for structured finance credit ratings the analysis aims to assess the credit quality of the securitised assets, the payment structure and cash flow mechanics, operational and administrative risks of key participants, as well as historical performance data of the underlying assets.⁷¹

Basically, the credit quality analysis provided by the CRAs is the result of a process conducted by a rating committee in which decisions are taken by majority vote. Such a process is initiated through a contract entered into between an agency and those who ask for the credit ratings.⁷² Credit rating seekers can be issuers of debt instruments or investors who subscribe for having the credit rating reports. This highlights an important feature of the rating industry, that is to say, CRAs are paid by the entities which solicit a credit rating. Therefore, the CRAs' business model is identified as the issuers-pay-model. Such a business model, however, was only adopted by the CRAs during the seventies. From the beginning of their existence, CRAs used to operate under the subscribers-pay model according to which they received their revenues from the investors.⁷³ The shift from the subscribers-pay-model to the issuers-pay-model was due to a number of reasons. In 1970 the US' largest railroad company, Penn Central Transportation, went bankrupt. This resulted in an increase in the demand of ratings by investors and market participants who regarded the information services provided by the CRAs as valuable for their investment decisions. At the same

⁶⁹ Christopher M Bruner & Ravi Abdelal, 'To Judge Leviathan: Sovereign Credit Ratings, National Law and the World Economy' (2005) 25 JPP 2, 191.

⁷⁰ Moody's, 'Understanding Moody's Corporate Bond Ratings and Rating Process' (2002) <<https://www.moody.com/sites/products/ProductAttachments/eeSpecialComment.pdf>> accessed 20 February 2012.

⁷¹ S&P, 'General Description of the Credit Rating Process' (2014), <http://www.standardandpoors.com/spf/upload/Ratings_US/GXJP_EX2-2.May2014_05-19-14.pdf> accessed 20 March 2014.

⁷² IOSCO, 'Report on the Activities of Credit Rating Agencies' (2003), 1.

⁷³ John X Jiang, Mary H Stanford, Yuan Xie, 'Does it Matter who Pays for Bond Ratings? Historical Evidence' (2012) 105 JFE 3, 607.

time, advances in technology, notably, photocopy and fax machines, facilitated the diffusion of the information sold by the CRAs.⁷⁴ This exacerbated a free-rider problem in which some investors could take advantage of the information others had obtained and paid for. Put more simply, through fax and photocopies, investors could obtain, free of charge, the credit risk information the agencies had sold to their subscribers.⁷⁵ This caused a decline in the business of the CRAs and explains why the agencies decided to change their business model. Despite heavy criticism because of the potential for conflict of interest between the agencies and the entities they rate, the issuers-pay-model has remained unchanged.⁷⁶ Since its introduction, this business model has been applied by almost all the CRAs.⁷⁷

Nevertheless, credit ratings are not exclusively solicited and paid by the issuers. The CRAs also issue unsolicited credit ratings. These can be distinguished from solicited ratings in two features. Whereas solicited ratings are requested and paid by the issuers, unsolicited ratings are neither requested nor paid.⁷⁸ Secondly, solicited ratings are based on the information and data provided by the issuers, while unsolicited ratings are exclusively based on public information.⁷⁹ This context brings to attention the essentiality of the information supplied and used by the CRAs for the determination of their ratings. As opposed to unsolicited ratings, the rating process relating to solicited credit ratings is indeed characterised by a synergy between the rating analysts and the issuers. In this case, the rating committee will give consideration to the data supplied by the issuers as well as to publicly available information. However, the unsolicited ratings lack this synergy and

⁷⁴ Ibid.

⁷⁵ Ibid.

⁷⁶ Stephen Foley, 'Issuer Payment: Model Resistant to Reform', *The Financial Times* (London 2013) <<http://www.ft.com/intl/cms/s/0/5a9d7522-5e3d-11e2-a771-00144feab49a.html#axzz380j3Z9te>> accessed 20 April 2012.

⁷⁷ The US CRA Egan Jones is the only rating agency which still operates under the consumer-pays-model, see Egan Jones Rating Co, 'How to Improve the Credit Rating Agency Sector' (June 2008) American Enterprise Institute Presentation, <http://www.aei.org/files/2008/06/24/20080624_EganPresentation.pdf> accessed 24 April 2012.

⁷⁸ Fabian Dittrich, 'The Credit Rating Industry: Competition and Regulation' (2007) University of Cologne Department of Economics <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=991821> accessed 18 April 2012.

⁷⁹ Ibid.

the rating committee will have to base its rating decision only on publicly available data.⁸⁰ Nonetheless, the rating process leading up to the issue of a credit rating follows the same stages in either case. To this end, the rating process can be summarised into four phases: 1) collection of information; 2) selection of relevant data; 3) credit rating determination; and 4) disclosure of the credit ratings.⁸¹

Putting things into the perspective of a solicited rating, the first phase is characterised by the demand of credit ratings by issuers and consequent supply of information to the hired agency. For example, taking position from corporate credit ratings the data provided may be concerned with the issuer's business environment, policy choices and strategic plans.⁸² In essence, the agency's financial analysts will require financial information regarding the audited annual financial statements of the last five years, as well as narrative descriptions of operations and products. These data will be assessed with the view to selecting the most relevant for a credit risk analysis. Given the interaction between the issuer and the agency during the first stages of the rating process, additional information can be supplied and, if necessary, meetings can be organised between the parties.⁸³ Indeed, these meetings with the corporate management are crucial for the formation of the credit rating in that they permit review of the issuer's financial condition and any other factor which can be of relevance for the issuance of the credit rating. Also, the ups and downs of business cycles will be taken into consideration for determining the rating.⁸⁴ This part of the rating process terminates with a preliminary credit rating determination prepared by the agency's analysts and explained in a report which will be submitted to the committee. The final determination is taken by the committee by majority vote. This leads to the last stage of the credit rating process in which the

⁸⁰ Ibid.

⁸¹ IOSCO (n 72).

⁸² Mara Hildermann, 'Opening the Black Box: The Rating Committee Process at Moody's' (July 1999) Moody's Investors Service.

⁸³ Ibid.

⁸⁴ To this end, the CRAs are said to look through-the-cycle when assigning credit ratings. In more practical terms, the credit ratings are formulated and assigned by evaluating, inter alia, the issuer's ability to survive over a long time horizon, see Stefan Trueck & Svetlozar T Rachev, *'Rating Based Modeling of Credit Risk: Theory and Application of Migration Matrices'* (Academic Press 2009), 17.

credit rating is disclosed and made available to the public. Nonetheless, issuers may decide to maintain the credit rating confidential or prevent the publication of a rating they feel dissatisfied with. In particular, this may happen in the structured finance sector in which the issuer can accept or appeal the rating determination, or ultimately hire another CRA and pay a break-up fee to the previous one.⁸⁵ Finally, the agencies maintain surveillance on an ongoing basis of the issued credit ratings. In particular, in the context of the solicited credit ratings, as part of the surveillance process, periodic meetings may be scheduled with the company's management so as to apprise the analysts of possible changes in the rated entity which can impact on the assigned rating.

II.2.3 Credit ratings as opinions on creditworthiness

The credit rating which is disseminated to the public is expressed through alphabetical symbols (AAA; BBB and so on). Rating scales are ranks of creditworthiness, from investment grade to speculative grade. Historically, the major CRAs have applied separate rating scales for long-term and short-term securities. For instance, long-term credit ratings, which normally refer to obligations with an original maturity of more than one year are classified into several categories: from those expressing the strongest creditworthiness (AAA), to those expressing high probability of default (D). Clearly, the credit ratings in the four highest categories, that is, AAA, AA, A and BBB are classified as investment grade ratings, while those in categories such as BB or below are classified as speculative grade ratings or high yield 'junk', to underline the high likelihood of the issuer's default in the repayment of its obligation. This way of expressing the creditworthiness of borrowers and debt instruments make the credit ratings easy-to-understand tools. Importantly, the credit risk assessment is synthesised into practical symbols which convey information that is useful to investors and market participants. On the other hand, these symbols are not cast-iron guarantees of creditworthiness. CRAs have always stressed that their credit ratings are forward-looking opinions

⁸⁵ IOSCO (n 72).

subject to changes over time. As such, they should not be interpreted as indicators of the suitability of an investment, nor as recommendations to buy or sell a financial product.⁸⁶

The credit ratings' nature as opinions has been acknowledged by regulators as well. For example, at the EU level, this is defined under Article 3(a) of the CRA Regulation I.⁸⁷ By contrast, in the US, this nature is somehow controversial in relation to the prospects of a CRAs' civil liability. In more detail, CRAs have always emphasised that the credit ratings are opinions not dissimilar to those expressed by journalists. For this reason, they have always claimed that their credit ratings come within the freedom of speech immunity under the US First Amendment.⁸⁸ This view has been accepted by the majority of the US Courts and policymakers as well. Based on this, US CRAs have always been quite shielded from civil liability.⁸⁹ The recent financial crisis and the contribution given by the CRAs to it, put the agencies under the regulatory spotlight at the national, international and regional levels. Among other issues, the establishment of a civil liability framework for CRAs under the US Dodd Frank Act⁹⁰ and the EU Regulation No 462/2013 (hereinafter: CRA Regulation III)⁹¹ aims at reducing what some academics have defined as the 'CRAs' accountability gap' due to the abovementioned controversial nature of the credit ratings as

⁸⁶ 'S&P's credit ratings are designed primarily to provide relative rankings among issuers and obligations of overall creditworthiness; the ratings are not measures of absolute default probability. Creditworthiness encompasses likelihood of default and also includes payment priority, recovery, and credit stability', S&P, 'Understanding Ratings', <<http://www.standardandpoors.com/MicrositeHome/en/us/Microsites>> accessed 24 April 2012.

⁸⁷ Art 3(a) of CRA Regulation I: 'credit rating' means an opinion regarding the creditworthiness of an entity, a debt or financial obligation, debt security, preferred share or other financial instrument, or of an issuer of such a debt or financial obligation, debt security, preferred share or other financial instrument, issued using an established and defined ranking system of rating categories'.

⁸⁸ Arthur Pinto, 'Control and Responsibility of Credit Rating Agencies in the United States' (2008) Brooklyn Law School Legal Studies Research Papers 119, 1.

⁸⁹ Partnoy, 'The Paradox of Credit Ratings', in Richard M Levich, Giovanni Majnoni & Carmen Reinhart (eds.), *The Role of Credit Reporting Systems in the International Economy* (Kluwer Academic Publisher 2002), 65.

⁹⁰ Securities and Exchange Commission (SEC), 'Dodd-Frank Wall Street Consumer Protection Act' (2010) Public Law 111-203, Section 933.

⁹¹ Art 35(a) of Regulation (EU) No 462/2013 of the European Parliament and of the Council of 21 May 2013 amending Regulation (EC) No 1060/2009 on credit rating agencies (2013) OJEU L 146/1 (CRA Regulation III).

freedom of speech.⁹² At present, the civil liability frameworks that the recent reforms in the US and EU have set out aim at closing this accountability gap and guaranteeing an adequate right of redress before courts to investors and issuers who claim damages consequently to unbiased credit ratings.⁹³

II.3 THE IMPORTANCE OF CREDIT RATINGS IN THE FINANCIAL MARKETS: THE PRIVATE SECTOR'S RELIANCE

II.3.1 The CRAs' informational services

CRAs occupy a centre stage position in the financial markets. Credit ratings are valuable tools which help investors and market participants gauge the credit quality of various debt instruments. For this reason, some scholars emphasise that the credit ratings are a fact of life, a culture, or 'common language' so that investors have to deal with them even if they do not want.⁹⁴ This raises the question of why credit ratings play such an essential role in financial markets.

As the history of the agencies has shown, the agencies came to existence to provide credit risk information. Essentially, the CRAs are information intermediaries which contribute to mitigate information asymmetries between the investors and the issuers. The concept of information asymmetry is well developed in economic theory. Akerlof explained the information asymmetries through the example of the used-car market, which can be summarised as follows.⁹⁵ Assuming that every car is good or bad ('lemon'),⁹⁶ the buyer of a new car will know whether this is a good one or a 'lemon' only after owning the car for a sufficient length of time. Then, following Akerlof's theory, we may suppose that the owner of a good car wants to sell his car. Only the owner of the used car knows that his car is a good one, while potential buyers do not. To the extent that sellers

⁹² Dieter Kerwer, 'Holding Global Regulators Accountable: The Case of Credit Rating Agencies' (2005), 18 *Governance, an International Journal of Policy, Administration, and Institution* 3, 453.

⁹³ Brigitte Haar, 'Civil Liability of Credit Rating Agencies-Regulatory All-or-Nothing Approaches Between Immunity and Over-Deterrence (2013) 02 University of Oslo Legal Studies Research Paper Series, 2.

⁹⁴ John C Coffee Jr, *Gatekeepers: The Professions and Corporate Governance* (OUP 2006), 283.

⁹⁵ George A Akerlof, 'The Market for "Lemons": Quality Uncertainty and the Market Mechanism' (1970) 84 *QJE* 3, 488.

⁹⁶ *Ibid*, 'bad cars are known in America as lemons'.

have now more knowledge about the quality of a car than buyers, an information asymmetry is created. In particular, before a transaction takes place an adverse selection problem is identified in the buyers' inability to select between good and bad products.⁹⁷ As it is difficult for buyers to distinguish between good and bad cars, used good and bad cars risk being sold at the same price. Buyers will be reluctant to pay the price offered by the seller for a used car and the seller will be unable to get the fair price. In other words, due to their inability to distinguish between high-quality products and low-quality products ('lemons'), buyers will finally offer the same reduced price for both. As a result of this, lemons may drive high-quality products out of the market and the market may even collapse.⁹⁸

The 'lemon' principle can be theoretically applied to credit markets: lenders (used-car buyers) may be unable to distinguish high-risk borrowers (lemons) from low-risk borrowers (good cars). Consequently, lenders would charge all borrowers for the same rate of interest, that is, the one which should cover the risk of lending to a high-risk borrower. Like the seller of a good used car may sell this for the price of a lemon, a low-risk borrower may pay the same interest rate as a high-risk one. Accordingly, the volume of borrowing by low-risk borrowers may be jeopardised and lenders may misallocate productive resources away from them.⁹⁹ As seen, such problems stem from the information asymmetries according to which one party has more or superior information than its counterparty. Within capital markets, in which financing is sought through the issuance of debt instruments, this informational gap pertains to the issuer's capacity to repay the principal and interest to the investors on maturity.¹⁰⁰ In short, only the issuer knows whether he will be able to service his debt. Numerous consequences can derive from this informational disequilibrium. To

⁹⁷ See Jonathan Levin, 'Information and the Market for Lemons' (2001) 32 RAND Journal of Economics 4, 657.

⁹⁸ Andrew Touch, 'Multiple Gatekeepers' (2010) Harvard Law School, Discussion Paper No 33, <http://www.law.harvard.edu/programs/olin_center/fellows_papers/pdf/Tuch_33.pdf> accessed 18 May 2012.

⁹⁹ Mark H Adelson, 'The Role of Credit Ratings in Financial System' (May 2012) Standard & Poor's publications.

¹⁰⁰ Amadou N R Sy, 'The Systemic Regulation of Credit Rating Agencies and Rated Markets' (2009) IMF WP/09/129, 3.

begin with, investors may consider issuers as not reliable enough. Consequently, they may decide not to provide funds and stay out of the market; otherwise, they may provide funds by charging issuers with a high risk premium. Thus, issuers will have to pay higher interest rates.¹⁰¹ These situations increase the cost of transactions and may hamper the functioning of the capital markets, especially where investors decide not to provide funds or issuers are not available to bear higher interest rates.¹⁰²

In this context, CRAs will act as intermediaries in the demand and supply of capital. Through the credit risk analysis embodied into the credit ratings, they will help reduce the information asymmetry between the two parties and mitigate adverse selection problems.¹⁰³ Both issuers and investors benefit from the CRAs' service. On the one hand, investors will have more information on their counterparties' credit quality and avoid the costs that they would face where they had to acquire the information by themselves. Furthermore, the informational service is provided by a neutral third party which is supposed to have qualified people and adequate instruments to conduct a proper credit risk analysis.¹⁰⁴ Finally, investors who do not have the means, time or the capacity to conduct such an analysis may rely on the credit risk analysis provided by experts. On the other hand, issuers, by being rated investment grade can access the capital markets to obtain financing more easily. Also, they will avoid the higher risk premium that the investors may require, as well as an increase in the cost of transactions.¹⁰⁵ These advantages contribute to the primacy of credit ratings in the financial markets and reliance by investors and market participants. In this context, it is discussed by scholars the extent to which, in addition to the illustrated advantages, the CRAs' reputation as good providers of credit risk analysis plays a decisive role with regard to the market participants' reliance. In particular, some empirical studies

¹⁰¹ Cally Jordan, *International Capital Markets, Law and Institutions* (OUP 2014).

¹⁰² Gianluca Mattarocci, *The Independence of Credit Rating Agencies: How Business Models and Regulators Interact* (AP 2014).

¹⁰³ *Ibid.*

¹⁰⁴ *Ibid.*

¹⁰⁵ *Ibid.*

view the reputation factor as the agency's product. In more detail, issuers would buy a share in the agency's good reputation so as to be seen as trustworthy counterparties by potential investors.¹⁰⁶ This is advantageous to little known issuers who seek high ratings to build up their reputation in the capital markets, while established issuers can only consolidate their reputation in the markets by maintaining their high ratings. Investors, in turn, will be willing to provide their funds because they regard the agency which issued the top credit ratings as trustworthy.¹⁰⁷ For this reason, they will accept a lower risk premium they may otherwise impose on unrated issuers. This means that good credit ratings provided by recognised CRAs increase the probability of acceptance of debt instruments. Financial products rated investment grade are likely to be attractive to a wide group of investors. Good credit ratings create trust and are therefore regarded as a pre-requisite to access the capital markets.¹⁰⁸

II.3.2 The CRAs monitoring services: outlook and watch-list procedures

The generation and production of informational services explains why investors and market participants rely on credit ratings and why the agencies occupy a centre stage position in the financial markets. However, the production and dissemination of creditworthiness information is not the only service which makes CRAs important gatekeepers. As explained, the rating process is brought to an end through the disclosure of the credit ratings to the public. However, once the CRA's credit risk information is disseminated, the agencies' task is not over. CRAs also perform *ex post* monitoring services. These services are helpful to mitigate the moral hazard situation which arises after the borrowers obtain their financing.

¹⁰⁶ Thomas J Chemmanur & Paolo Fulghieri, 'Investment Bank Reputation, Information Production and Financial Intermediation' (1994) 49 JF 1, 57.

¹⁰⁷ Tullio Jappelli & Marco Pagano, 'Information Sharing in Credit Markets: A survey' (2000) CSEF WP/36/2000.

¹⁰⁸ Jennifer Payne, 'The Role of Gatekeepers' (2014) University of Oxford Legal Research Paper Series No 22/2014, <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2428121> accessed 30 April 2014, forthcoming in Niamh Moloney, Eilis Ferran and Jennifer Payne (eds), 'Oxford Handbook of Financial Regulation' (OUP 2015) .

Generally speaking, borrowers may behave opportunistically and use the obtained financing for other more risky projects and, above all, different than the one for which the funds were granted. This may jeopardise the possibility of repaying the debt if the project fails.¹⁰⁹ Monitoring the borrowers' behaviour, perhaps by imposing restrictions on the use of funds, and enforcing them in case of violation may be too costly for lenders. In the case of credit ratings, it may be too costly for investors to monitor an issuer's financial performance so as to control whether his level of creditworthiness can be maintained in line with an assigned good rating. The CRAs fulfil this task as well, by issuing updates to the ratings initially assigned. In particular, monitoring services are performed through the outlooks and watch-lists procedures. These work as signals to the issuers that downgrades may be applied in the medium or long term and, thus, corrective actions should be taken to avoid them.¹¹⁰ In essence, monitoring itself pertains to the production of information during the debt instrument's lifetime.

Both issuers and investors benefit from the monitoring services. Issuers through the watch-list and outlook procedures will be under pressure to maintain a level of credit quality sufficient to avoid possible downgrades which could change their credit status from investment to speculative grade. At the same time, investors will save the costs that they would bear to monitor by themselves the business performance of their debtors. Importantly, negative outlooks and credit watch announcements should provide an incentive to the concerned issuers to improve their creditworthiness.¹¹¹ According to some scholars, this would result in an implicit contract between an issuer and the CRAs, in light of which the issuer implicitly promises to take all the necessary actions to avoid the downgrades.¹¹² Furthermore, downgrades as signals of a drop in the issuer's

¹⁰⁹ Frederic S Mishkin, 'Financial Market Reform, Economic Policy Reform: What We Know and What We Need to Know' (1998) Centre for Research on Economic Development and Policy Reform, Stanford University.

¹¹⁰ Amtenbrink & De Haan, 'Credit Rating Agencies' (2011) 278 DNB WP, 4.

¹¹¹ Sy (n 100), 3.

¹¹² Arnoud W A Boot et al, 'Credit Ratings as Coordination Mechanisms' (2006) 19 RFS 1, 81.

credit quality, can help investors to evaluate the possibility of triggering a debt restructuring.¹¹³ Such a possibility would be hard without the constant monitoring of a third party. In fact, the issuer might be able to hide his credit quality deterioration and continue with his business. Should a firm in financial difficulty continue its business without actions being taken, this would reduce the recovery value for the investors. Consequently, rating downgrades applied after the issuer's failure to take opportune actions in the wake of a negative outlook or credit watch announcement can work as a signal to investors to undertake appropriate initiatives such as a debt restructuring.¹¹⁴ All things considered, the CRAs' monitoring activities carry an implicit threat that the failure to improve the creditworthiness will undermine the issuer's possibility of having access to funding in the future.¹¹⁵

II.3.3 CRAs' services users

The utility of the information and monitoring services that the agencies provide to investors and market participants explain why credit ratings are regarded as valuable credit risk assessment tools in the financial markets and there is widespread use of them in the private sector. The US Securities and Exchange Commission (the SEC) have provided a detailed picture of the main users of credit ratings.¹¹⁶ For example, buy-side firms such as mutual funds, pension funds and insurance companies refer to credit ratings as inputs to their own internal credit assessment and due diligence.¹¹⁷ Also, buy-side firms use credit ratings in accordance with internal by-law restrictions or investment policies requiring specific credit rating thresholds or to conform to various regulatory requirements.

Sell-side firms are listed among the users of credit ratings as well. Like buy-side firms, they use credit ratings as inputs to conduct their own credit analysis for risk management and trading

¹¹³ Ibid.

¹¹⁴ Pragnan Deb et al, 'Whiter the Credit Rating Industry?' (2011) 9 Financial Stability Paper, Bank of England, 3.

¹¹⁵ Ibid.

¹¹⁶ SEC, 'Report on the Role and Function of Credit Rating Agencies in the Operation of Financial Markets' as Required by Section 702(b) of the Sarbanes-Oxley Act of 2002' (2003).

¹¹⁷ Ibid.

purposes. Besides, sell-side firms maintain rating advisory groups to assist underwriting clients in the selection of suitable CRAs for their offerings and guide them through the rating process. Furthermore, some sell-side firms are active in markets which give significant value to the information provided by credit ratings. For instance, in the over-the-counter derivatives market (OTC) investment grade ratings are used to select acceptable counterparties and to determine collateral levels for outstanding credit exposure. Finally, sell-side firms seek credit ratings themselves to issue short-term or long-term debt instruments.¹¹⁸

Among other things, the SEC noted that the importance of credit ratings to the marketplace has been enhanced through a wide use of credit ratings in private contracts. In particular, many financial contracts include the so-called rating trigger clauses under which lenders or investors are allowed to terminate credit availability or accelerate credit obligations in case of downgrades.¹¹⁹

II.4 PUBLIC SECTOR'S RELIANCE ON CREDIT RATINGS

II.4.1 The CRAs as certification providers

Relying on external credit ratings is advantageous for investors and market participants since the ratings help reduce information asymmetries and lower transaction costs. As illustrated above, credit ratings are expressed through alphabetical symbols. In particular, through the distinction between investment grade and speculative grade, the CRAs establish different ranks of creditworthiness. So far, investment grade ratings vis-à-vis speculative grade ratings have been introduced in their meanings and discussed in relation to the information and monitoring services provided by the CRAs. The use of the credit ratings by the private sector was the context which served this purpose. In particular, the value of these services provides the basis for understanding the private sector's reliance on credit ratings. Nonetheless, this analysis cannot be considered exhaustive. For the topic this research intends to address, it is essential to expand the use of the

¹¹⁸ Ibid.

¹¹⁹ Ibid.

credit ratings beyond the private sector. To this end, the different credit quality ranks that the agencies establish through their alphabetical symbols can be analysed through the lens of a third service that they would perform in addition to the information and monitoring ones, namely the certification service. Reference to the theoretical literature on the credit ratings will help clarify the role of the agencies as providers of certification services.

Preliminarily, it must be pointed out that this third function is identified and construed by the literature on the CRAs, rather than by the agencies themselves. The CRAs define themselves as information providers and acknowledge that their outlook and watch-list procedures are part of monitoring activities which take place after the dissemination of the credit ratings. However, they do not regard themselves as certification providers because this would imply considering the credit ratings as something more than mere opinions. To understand this and the related implications, it is desirable to analyse how this third function is introduced in the literature.

To start with, Dittrich links the rating agencies' certification function to the use of the credit ratings as regulatory tools for financial market oversight. Specifically, in the author's analysis the word has a twofold meaning. Not only is certification concerned with the assignment of a credit risk evaluation in the form of opinions by the agencies, but also to the value of the investment grade credit ratings as 'licenses' or 'tickets' to access the capital markets.¹²⁰ Clearly, his analysis is influenced by the 'regulatory license' theory which Partnoy elaborated to criticise the lack of informational value of the credit ratings despite large use by the regulators.¹²¹ In any case, both the authors bring to attention a significant aspect, that is, a tie between the regulators and the credit ratings. Dittrich, in particular, uses the word certification to underline the existence of a relationship between the credit ratings and the public sector. Significantly, this is sufficient to understand that not only the private sector relies on credit ratings.

¹²⁰ Dittrich (n 78), 9.

¹²¹ Partnoy (n 13).

Secondly, the International Monetary Fund (IMF) identified the CRAs certification function in the embedment of the credit ratings in regulatory capital requirements and thresholds, as well as in triggers in financial contracts.¹²² Like Dittrich, the IMF makes it clear that the use of the credit ratings is not exclusively circumscribed to the private sector; the public sector also relies on them. Lastly, more specifically than the IMF, Deb et al refer to the embedment of the credit ratings into regulatory frameworks as a ‘variant’ of the certification function which the CRAs would perform in relation to the private sector. Whereas the IMF uses the word certification in a broad sense to indicate that the credit ratings are used in both the private and the public sector, Deb et al, with the word, ‘variant’ introduce the use of the credit ratings by the public sector as something which should be first traced back to the private sector’s use of the credit ratings. Therefore, to understand the certification function it is necessary to start from the private sector. In fact, the authors highlight that the certification function helps reduce moral hazard problems between individual investors and the institutions which manage their portfolios.¹²³ For instance, asset managers may undertake too risky investments while managing their clients’ portfolios. In this case, it may be necessary to cap the amount of the risk that they can undertake. To this end, investors may require managers to invest in highly rated debt instruments. Hence, the credit ratings are useful parameters managers can refer to for their investment management strategies.¹²⁴

Clearly, the rating symbolism and the divisional line between investment and speculative grade ratings appear to have a new connotation, other than the informational one. The credit ratings are used by the private sector as indicators or ‘certifiers’ of credit quality. Unquestionably, this widens the nature of the credit ratings as simple, forward-looking opinions, and runs counter to the CRAs’ definition illustrated in the previous paragraphs. Moreover, as will be shown in the following paragraphs, this connotation will have relevant implications. In other words, the possible

¹²² International Monetary Fund (IMF), ‘Global Financial Stability Report: Sovereign, Funding and Systemic Liquidity’ (2010) Ch 3, 85.

¹²³ Deb et al (n 114).

¹²⁴ Ibid.

shift from investment to speculative grade will play a decisive role in relation to the investors' behaviours with consequent repercussions on the financial stability.¹²⁵

However, following the authors' reasoning, the regulators would have referred to the credit quality certification function given by the private sector to the credit ratings to make it a regulatory instrument. This means that investing in highly rated debt instruments may also be a legislative requirement. Not only does the private sector use the credit ratings because of the above mentioned advantages, but also because the regulators require them to. Accordingly, regulation which contains references to them is also defined as 'rating-based regulation'.¹²⁶ For instance, the EU regulation of CRAs refers to the use of credit ratings for 'regulatory purposes' and clarifies that this means that credit ratings are used for the purpose of complying with Community law.¹²⁷

As stressed, all the above-mentioned works emphasise the certification function of the credit ratings and the relationship between the public sector and the credit ratings. However, among these three studies the last one is to be regarded as more complete. While Dittrich and the IMF simply identify the certification function in the regulatory reliance on the credit ratings, Deb et al provide a more insightful explanation in that the certification role would first stem from the line which the CRAs' draw between securities and issuers with different risk characteristics, notably investment grade versus speculative grade; and the use that the private sector makes of this as thresholds in financial contracts. Secondly, the authors use the word 'variant' of the certification role in relation to the rating-based regulation. This refers to the use of the credit ratings as 'certifiers' of credit quality from the private to the public sector.

This conclusion stems from the interpretation of these three studies which refer to a third CRA's function and expand the reliance on the credit ratings from the market participants to the regulators.

¹²⁵ See below para II.5.

¹²⁶ Partnoy (n 13)

¹²⁷ Art. 3(1)(g).

II.4.2 Clarifying the CRAs' certification function

However, none of these studies have provided a clarification of the meaning of the certification function of the CRAs within the public sector. It is understandable that both the private and the public sectors use the credit ratings and, thus, that they both rely on them. However, having clarified why and how the private sector uses the credit ratings, it must also be discussed why the public sector relies on the credit ratings and how the word 'certification' must be construed within this use.

The relationship between the public sector and the credit ratings is explained by Kruck as a delegation of authority from public regulators to private third parties.¹²⁸ According to the author, CRAs would set a private standard of creditworthiness which is then made binding by a public authority when credit ratings are used in financial regulation. This scheme can be conceptualised under the principal-agent framework. The principal and the agent enter into a contractual arrangement under which the former delegates some functions to the latter so that it can produce the results expected by the principal.¹²⁹ In the case of the regulators and the CRAs, the rationale behind regulatory reliance would not be different to the use of the credit ratings in the private sector. Financial market regulators would not have the capacity and the necessary resources to collect credit risk information on the issuers and borrowers they seek to regulate. Consequently, by referring to the credit ratings in their regulations, regulators and policymakers have transferred this task to the CRAs.¹³⁰ It may be objected that this framework lacks any explicit instruction by the regulators to CRAs to conduct credit risk assessment on their behalf. In this respect, Kruck underlines that such an objection can be overcome by the fact that the principal-agent theory can also be applied in situations in which principals and agents have not entered into any formal contract between them. This would connote the agreement between the public sector and the CRAs

¹²⁸ Andreas Kruck, *Private Ratings Public Regulations: Credit Rating Agencies and Global Financial Governance* (Palgrave Macmillan 2011) Ch 3, 80.

¹²⁹ *Ibid.*

¹³⁰ *Ibid.*

as an implicit delegation of risk assessment tasks.¹³¹ However, this explanation of the tie between the public sector and the credit ratings remains within a too abstract framework. In practice, Kruck uses the principal-agent theory mainly to discuss the assumptions that the rating-based regulation has given the CRAs a quasi-regulatory power that the agencies finally exercise through the provision of the credit ratings under implicit delegation from the regulators and the policymakers.¹³² Basically, Kruck gives a meaning to the relationship between the credit ratings and the regulators. His theory adds something new in comparison to the literature which illustrates the rise and growth of the rating industry, mentions the use of the credit ratings by the public sector, but ultimately does not provide a theory explaining the choice of the regulators to rely on the credit ratings and the purpose of their reliance. However, more concrete details must be provided as to the reasons why the public sector relies on the credit ratings. In fact, as will be shown, such a reliance results in widespread references to credit ratings in legislation and regulatory frameworks.

II 4.3 Understanding the regulatory reliance on credit ratings

In any case, Kruck's theory, as well as the studies which have been mentioned above, use some key words such as 'delegation' (Kruck), 'ticket for accessing capital market' (Dittrich), 'credit quality thresholds' (IMF; Deb et al). These sentences can provide a more concrete understanding of the regulatory reliance on the credit ratings if they are analysed in combination with the common understanding of the role and activities of financial regulators. In more detail, it is necessary to briefly review the basic features of the strategies regulators deploy to achieve the economic and social goals of financial regulation.

As is known, there are numerous and diverse entities which are subject to regulation. Speaking of financial regulation, these encompass depositors, borrowers, lenders, investors, and financial intermediaries, to mention but a few. Each of them is indicative of specific financial

¹³¹ Ibid.

¹³² Ibid.

activities such as securities, banking, insurances, derivatives and investment management.¹³³ This, in turn, implies that there is a wide variety of conducts which are disciplined through financial regulation and for different purposes. For instance, with regard to the sale and provision of financial products and services, the regulation purports to protect consumers and investors through the establishment of standards governing the conduct of financial service providers. In this context, oversight is exercised on the operation of trading markets and financial intermediaries. In this case, regulation seeks to guarantee efficiency in the operation of markets as well as the reduction of financial transaction costs. Specifically, this regulation may deal with market abuse practices, clearance and settlement requirements, margin requirements and trade execution rules.¹³⁴ As to the financial institutions, the regulation attempts to ensure their safety and soundness by exercising adequate oversight over their business operations, financial condition, risk management practices and corporate governance.¹³⁵ In this respect, a distinction is to be made between micro and macro-prudential regulatory approaches. Whereas the first are concerned with the stability of individual financial institutions,¹³⁶ the second addresses systemic risk across the financial system and implies recognising the interconnectedness among institutions and investors across markets, as well as the risk inherent to complex financial instruments and the infrastructure of the financial system.¹³⁷

Furthermore, prudential oversight is exercised to guarantee the stability of the financial system. To this end, monitoring is concerned with the so-called systemically important financial institutions (SIFIs) and the extent to which the financial transactions which connect these institutions to each other may pose the threat of systemic risk events which, in turn may impact the financial stability. Importantly, in respect of all these areas the regulators' task is relating to the set up of appropriate interventions, when needed. Some scholars have hence provided a taxonomy of

¹³³ Mads Andenas, Iris H-Y Chiu, *The Foundation and Future of Financial Regulation: Governance for Responsibility* (Routledge 2013).

¹³⁴ *Ibid.*

¹³⁵ Mishkin, 'Prudential Supervision: Why is it important and What are the Issues?', in Frederic S Mishkin (ed.), *Prudential Supervision: What Works and What Doesn't* (University of Chicago Press 2001), 8.

¹³⁶ Markus Brunnermeier et al, *The Fundamental Principles of Financial Regulation* (2009) Geneva Reports on the World Economy 11, 18.

¹³⁷ Samuel Hanson et al, 'A Macro-prudential Approach to Financial Regulation' (2010) 25 JEP 1, 3.

these regulatory strategies and identified the building blocks of the financial regulation into the following: 1) rulemaking; 2) supervision; 3) certification; and 4) enforcement.¹³⁸ While the first is concerned with the design of rules or standards governing an entity's, supervision is the monitoring by regulators of the entity's compliance with its regulatory obligations. It is argued that rulemaking and supervision are sometimes used interchangeably. Instead, they are conceptually different. In the former, an appropriate conduct is decided by the regulator and a rule is formulated to produce and discipline such a conduct, whereas in the latter, a control is exercised as to the manner in which the regulated entities comply with the rule.¹³⁹ Significantly, this entails that regulators can exercise enforcement powers. Indeed, enforcement is the sanction for failing to comply with the regulation. In practice, it is seen as the regulator's reaction against the regulated entities' violation or circumvention of the rules. In this respect, regulators have a range of civil and criminal penalties in accordance with the type of rules which have been violated.¹⁴⁰

Clearly, in the context of the proposed taxonomy, enforcement appears to be consequential or, more accurately put, an extension of rulemaking and supervision. Finally, certification is referred to the regulator's evaluation and approval of products and services. In this regard, certification is said to encompass a variety of regulatory actions such as licensing, registration and prohibition. Through the certification the regulators try to promote quality by preventing the distribution of undesirable products or products that are too risky. Accordingly, certification is the regulator's decision to support or prohibit the distribution of certain products.¹⁴¹ Having sketched the contours of the building blocks of financial regulation this discussion must be completed with a

¹³⁸ Eric J Pan, 'Understanding Financial Regulation' (2011) Benjamin N Cardozo School of Law WP No 239, 13.

¹³⁹ Rosa M Lastra, '*Legal Foundations of International Monetary Stability*' (OUP 2009) Part 1 Ch 3, the author looks at supervision in relation to the function that it involves for the supervisory authorities for the beginning of the business life of an entity till the end. Accordingly she elaborates a broad notion of supervision, comprising the following stages: 1) licensing, authorization or chartering (the entry into business) ; supervision strictu sensu, that is, oversight of financial firms' behavior, in particular, risk monitoring and risk control; 3) sanctioning or imposition of penalties in the case of non compliance with the law, fraud, bad management, or other types of wrongdoing; and 4) crisis management which comprises lender of last resort, deposit insurance and bank insolvency proceedings.

¹⁴⁰ Ibid.

¹⁴¹ Pan (n 138).

further element. In pursuing these regulatory strategies the regulators can decide either to determine by themselves the contents of the rules, monitor the degree of compliance with the obligations as well as the enforcement of the obligations, or to delegate these responsibilities to private entities. This is defined as the choice between public regulatory strategies and private regulatory strategies.¹⁴² By way of combining this framework with the certification role of the CRAs and Kruch's theory, the reasons why there is regulatory reliance on the credit ratings can be finally fixed. As illustrated, the CRAs provide opinions on the credit risk associated to various issuers and financial products. In relation to the four above-mentioned regulatory strategies, this basic function can be linked to the certification. In more detail, the investment grade thresholds provided by the CRAs is the tool regulators rely on to perform their own certification strategy. As mentioned above, a regulator certifies, licenses or authorises a firm's product or service. According to whether this certification is public or private, it will be the regulator or a private actor which performs this function. In the first place, this sounds as though the regulator determines the merit of the products or services. However, certification should be better understood as a form of control in the sense that the regulator tries to minimise the impact which may derive to the financial system from the distribution and investment in products that are too risky.¹⁴³

The line of demarcation between investment and speculative grade that the CRAs are able to establish serves this certification purpose. Significantly, regulators' certification does not mean that they will determine through the credit ratings the quality of a product, nor that they will make recommendations as to the suitability of an investment. In fact, as stressed in the previous paragraphs the CRAs do not provide such services and their ratings are defined as an opinion. Importantly, the investment grade thresholds are relied on by the regulators to determine which products the market participants, in particular institutional investors, are permitted to invest in or to hold. These are products which have received the highest rating grade. In fact, to anticipate what

¹⁴² Ibid.

¹⁴³ Richard B Stewart, 'Regulation, Innovation, and Administrative Law: A Conceptual Framework' (1981) 69 CLR 1256, 1265.

will be widely discussed in the following paragraphs, prudential regulation allows for less capital or reserves to be held against securities which receive top ratings by the CRAs. Furthermore, central banks refer to the credit ratings for determining which securities can serve as collateral for their money market operations, while asset managers are restricted by investment mandates requiring highly rated instruments within the investors' portfolios.

Like in the private sector, this use of the credit ratings seems to give them a connotation which is different than their nature as forward looking opinions. Through the regulatory use of the credit ratings these become certifiers of what the regulators regard as permissible or not.¹⁴⁴ It may be discussed whether this can be identified, as Kruch argues, as a form of implicit delegation of authority from the part of the regulators to the CRAs, through which the agencies would acquire a quasi-regulatory status. Instead, from a practical point of view, this may be seen mainly as an outsourcing of the credit ratings by the regulators for certifying through the investment grade scales the threshold of risk that the investors should not trespass while making investment decisions. In other words, credit ratings are used by regulators to cap the amount of risk that market participants can take. Beyond the assertion that this outsourcing fills in for the regulator's incapacity to conduct their own credit risk analysis, practical advantages may be seen in terms of saving the costs which the regulators should bear for assigning credit risk thresholds by themselves. In fact, the difference between public and private regulatory strategy mainly lies in the immediate costs that the regulators may face vis-à-vis the allocation of the burden of certification onto private actors.¹⁴⁵ Furthermore, the easiness through which the alphabetical symbols used by the CRAs may be understood and their consolidated use in the private sector are also decisive in respect of the regulators' reliance on them. As will be detailed below, these factors characterise the tie between the public sector and the credit ratings through the so-called rating-based regulation. Also, it will help understand how credit

¹⁴⁴ See below para II.4.4.1.

¹⁴⁵ Pan (n 138), 22.

ratings, willing or not, enter *de facto* the regulatory apparatus and the unintended consequences which may derive therein.

II.4.4 Mapping the regulatory use of credit ratings

II.4.4.1 The widespread use of credit ratings in the US legislation

In 2009 a stock taking on the use of the credit ratings in regulations conducted by the Joint Forum on a sample of 12 countries worldwide ascertained that the US boasts the highest number of credit rating references in legislation, regulations and supervisory policies (LRSPs).¹⁴⁶ This can be easily explained in the fact that the US is the country where the rating business arose and the leading CRAs, in particular, Moody's and S&P gained reputational capital and consolidated their dominance in the ratings market.¹⁴⁷

Remaining in the US legal system, the first credit rating reference traces back to the early 1930s. That was the time of the great depression which affected the US economy and, among other things, caused a dramatic decline in credit quality.¹⁴⁸ In the wake of these events, the US regulators decided to strengthen the protection of investors and required them to avoid risky investments. The distinction between securities with different risk characteristics that the credit ratings guaranteed through the line of demarcation between investment and speculative grade was deemed to serve this purpose.¹⁴⁹ The area which paved the way to the inclusion of the credit rating references in legislation was the banking sector. The Office of the Comptroller of the Currency required banks to hold only investment grade rated bonds in their book value. Lack of investment grade status would have impacted on the adequacy of bank capital. Then, such a requirement became a prohibition

¹⁴⁶ Basel Committee on Banking Supervision (BCBS) The Joint Forum, 'Stocktaking on the Use of Credit Ratings' (2009), 3 <<http://www.bis.org/publ/joint22.pdf>> accessed 15 July 2012.

¹⁴⁷ Partnoy (n 13).

¹⁴⁸ Aline Darbellay, 'Regulating Credit Rating Agencies' (Edward Elgar Publishing 2013), 45.

¹⁴⁹ Schwarcz (n 14).

following the adoption of the US Banking Act of 1936.¹⁵⁰ As a result, all banks were banned from holding speculative grade rated instruments. This marked the first incorporation of the external credit ratings into regulations.¹⁵¹ However, it must be observed that the rationale behind this incorporation did not trigger a widespread use of ratings in other financial legislation. In essence, the banking regulator acknowledged the utility of the investment grade threshold provided by the CRAs and made this a requirement for banks; but, this remained circumscribed to the banking sector. From that period until the 1960s, CRAs were still small firms with modest revenues. Consequently, credit ratings were not yet regarded as an essential component of the US financial legislation.¹⁵²

The situation changed in the 1970s. At that time, the rating industry experienced significant growth because of the expansion of the US private companies in the international capital markets and other factors such as greater capital mobility and financial disintermediation.¹⁵³ The growth of the rating industry and viability of the services provided by the agencies increased the interest of the US regulators. In this context, two events are crucial for the creation of the US rating-based regulation: the introduction of the Nationally Recognized Statistical Rating Organization (NRSRO) status and the amendments applied to rule 15c3-1 of the Securities Exchange Act of 1934, otherwise defined as the Net Capital Rule.¹⁵⁴ In more details, through banking regulation the legislators had

¹⁵⁰ United States Comptroller of the Currency (OCC), ‘Purchase of Investment Securities and Further Defining the Term “Investment Securities” as Used in Section 5136 of the Revised Statutes as Amended by the “Banking Act of 1935” (15 February 1936), Sec II: ‘By virtue of the authority vested in the Comptroller of the Currency by. . . Paragraph Seventh of Section 5136 of the Revised Statutes, the following regulation is promulgated as to further limitations and restrictions on the purchase and sale of investment securities for the bank’s own account, supplemental to the specific limitations and restrictions of the statute. . . . (3) The purchase of ‘investment securities’ in which the investment characteristics are distinctly and predominantly speculative, or ‘investment securities’ of a lower designated standard than those which are distinctly and predominantly speculative is prohibited’.

¹⁵¹ Horsch & Jacob Kleinov, ‘Regulation of Credit Rating Companies: An Economic Point of View-Part II’ (2014) 25 EBLR 2, 249; see also Emily Mc Clintock Ekins & Mark A Calabria, ‘Regulation, Market Structure and the Role of the Credit Rating Agencies’ (2012) 704 Policy Analysis, 6.

¹⁵² Darbellay (n 148).

¹⁵³ Kruch (n 128); see also Isabelle Grass, ‘The Power to Rate: Eine Untersuchung zur Rolle der Ratingagenturen auf den Internationalen Finanzmärkten (2003) Research Group on Equity Market Regulation (REGEM) University of Trier Analysis, 6.

¹⁵⁴ Coffee Jr (n 94).

started requiring institutional investors to obtain investment grade credit ratings so as to draw a line between safe and speculative investments. In 1975, the SEC required these credit ratings to be issued by NRSROs.¹⁵⁵ Then, NRSRO credit ratings were transposed into the amendments applied to the Net Capital Rule. Under the Net Capital Rule, when computing net capital broker-dealers have to subtract from their net worth certain percentages of the market value, the so-called ‘haircut’ of their proprietary securities position. Rule 15c3-1 specifies, inter alia, that broker-dealers have to take reduced haircuts for debt instruments such as commercial paper, non-convertible debt securities and non-convertible preferred stocks. To this end, the requirement is that the instruments be rated investment grade by one of two NRSROs.¹⁵⁶ Through the NRSRO status the SEC conferred a dominant position to the established CRAs. Importantly, those agencies lacking the status of NRSROs could not issue the credit ratings required for regulatory purposes.¹⁵⁷ On the other hand, the requirement of the NRSRO credit rating under the Net Capital Rule was the trigger event as to the widespread use of credit ratings into the US LRSs.¹⁵⁸ From that moment onwards, the use of credit ratings spread within the federal and securities regulations.

Other examples of important rules which were laid down following the introduction of the Net Capital Rule can be mentioned. For instance, under the Investment Company Act, Rule 3a-7 sets out a number of requisites to distinguish between investment companies and structured financings. Among these, the requirement that structured financings be rated investment grade by NRSROs.¹⁵⁹ Furthermore, Section 10(f) of the Investment Company Act defines municipal securities as those debt instruments which can be purchased during an underwriting. To be eligible as a municipal security, the rule requires the instrument to be rated investment grade by

¹⁵⁵ Ibid.

¹⁵⁶ 17 C.F.R. 240.15c3-1; see also SEC, ‘Notice of Revision Proposed Amendments to Rule 15c3-1 under the Securities Exchange Act of 1934’ (1973) Release No 34-10,525, 1973 SEC LEXIS 2309; Michael P Jamroz, ‘The Net Capital Rule’ (1992) *The Business Lawyer* 47, 863.

¹⁵⁷ Coffee Jr (n 94).

¹⁵⁸ IMF (n 122); see also SEC, ‘References to Ratings of Nationally Recognized Statistical Rating Organizations; Security Ratings; Proposed Rules’ (2008) Part IV.

¹⁵⁹ 17 CFR 270.3a-7.

NRSROs.¹⁶⁰ The list could go further, even involving the labour and insurance sector.¹⁶¹ Based on these facts, it can be said that the Banking Act of 1936 marked a first in the use of the credit ratings into legislation, while the Net Capital Rule paved the way to the widespread use of credit ratings which characterised the US financial legislation until the recent amendments applied under the reforms taking place after the 2007-2009 financial crisis. In fact, from the 1970s onwards the expression rating-based regulation was coined to underline the incorporation of the credit ratings into the financial legislation as a consequence of the reliance placed by the US regulators on the credit ratings assigned by the NRSROs.¹⁶²

II.4.4.2 Rating-based regulation at the international and EU levels

In other countries and legal systems the use of credit ratings as regulatory tools is not as widespread as in the US. Nonetheless, the banking sector and its regulation remains the area where the use of credit ratings is more predominant than others. Specifically, the Joint Forum identified five main purposes in relation to the use of credit ratings in LRSPs: 1) determining capital requirements; 2) identifying or classifying assets, mainly in the context of eligible investments or permissible asset concentrations; 3) providing valuable credit risk assessment of assets purchased as part of a securitisation or covered bond offering; 4) disclosure requirements; and 5) prospectus eligibility.¹⁶³ This order of uses of credit ratings is not casual. Not only does it indicate the purpose of including credit ratings into legislation, but it also represents a rank of the sectors.

The banking sector, through the use of credit ratings for the calculation of capital requirements, is the primary one. This is mainly due to the Basel framework which provides for the use of external credit ratings for the calculation of risk-weighted assets under the standardised

¹⁶⁰ 17 CFR 270.10f.

¹⁶¹ John Patrick Hunt, 'Rating Dependent Regulation of Insurance (2011) 17 CILJ 1, 101.

¹⁶² Horsch (n 36).

¹⁶³ Joint Forum (n 146).

approach (SA).¹⁶⁴ Such predominance is not exclusively concerned with the US but also with other countries and legal systems; though references to credit ratings in their LRSPs are not as massive as in the US. For example, in the EU, the Capital Adequacy Directive and the Banking Directives of 2006 were the transposition of the Basel II framework providing for the use of external credit ratings under the SA.¹⁶⁵ However, it has to be observed that the 2006 Capital Adequacy Directive constituted the enlargement of the 1993 Capital Adequacy Directive which first pioneered the regulatory use of credit ratings in the European Banking Regulation. From that moment until the issuance of the 2006 directives, almost all the EU Member States referred to credit ratings in their prudential supervision of banks in order to define eligible debt securities for the calculation of the capital requirements for specific interest rate risk.¹⁶⁶ The pervasive use of credit ratings in banking regulation can also be noted beyond the US and EU. For instance, the Argentinean Central Bank sets out a list of banks eligible to receive time deposits from institutional investors. A bank's rating is among the factors that the central bank takes into consideration for its decision on membership.¹⁶⁷ Likewise, in New Zealand external credit ratings are considered by the competent authorities useful indicators of banks' credit quality for 'prudent but not expert investors' because they are easy-to-understand symbols. In this respect, banks are required to disclose their own credit ratings and make them available in all their branches.¹⁶⁸ Moreover, to complete the picture, it is worth noting that also at the institutional level central banks have included credit ratings into their collateral rules to select

¹⁶⁴ Kern Alexander, 'The Risk of Ratings in Bank Capital Regulation' (2014) 25 EBLR 2, 295; see also Rolf H Weber & Aline Darbellay, 'The Regulatory Use of Credit Ratings in Bank Capital Requirements Regulations' (2008) 10 JBR 1.

¹⁶⁵ Charles Adams et al, 'International Capital Markets: Developments, Prospects and Key Policy Issues' (1999) Washington DC: International Monetary Fund.

¹⁶⁶ Arturo Estrella et al, 'Credit Ratings and Complementary Sources of Credit Quality Information' (2000) BCBS WP No 3.

¹⁶⁷ Ibid; see also Timothy L. Sinclair, *The New Masters of Capital: American Bond Rating Agencies and the Politics of Creditworthiness* (Ithaca, NY: Cornell University Press 2005).

¹⁶⁸ Ibid.

the assets which can be used as a guarantee for central bank loans. This means that central banks only accept securities rated investment grade as a guarantee to lend money to borrowers.¹⁶⁹

Finally, another significant use of credit ratings in LRSPs is for investment limitations. This is mainly in the US legislation for the pension funds and the insurance sector. For instance, pursuant to rule 2a-7 of the Investment Company Act, relating to the investment and operation of US domiciled money market funds, money market funds are banned from investing in asset-backed securities unless the debt instruments have received an investment grade from NRSROs.¹⁷⁰ Conversely, at the EU level the frameworks referring to investment funds do not significantly rely on credit ratings.¹⁷¹

II.5 FROM 'GOOD TO 'BAD': A ROADMAP TOWARDS THE RISK OF OVER-RELIANCE

II.5.1 Rating-based regulation versus the hardwiring of credit ratings in legislation

The history of the rating-based regulation provides an interesting picture of where the regulatory reliance arose and developed, and which sector of the financial legislation makes wider use of external credit ratings. As it can be understood, the regulatory use occurred when the private sector was already making wide reference to the credit ratings as valuable tools for credit risk assessment. The acknowledgement of the viability of ratings from the private sector explains why regulators began including them in financial legislation and regulatory frameworks. Credit ratings were recognised as easy-to-understand, independent and reliable sources of information. These advantages were considered useful by regulators in relation to their objective of setting up adequate legislation to protect investors. In particular, among the objectives of the financial regulation there

¹⁶⁹ European Central Bank (ECB), 'Collateral Eligibility Requirements: A Comparative Study Across Specific Frameworks' (2013), 4 <<http://www.ecb.europa.eu/pub/pdf/other/collateralframeworksen.pdf>> accessed 24 June 2012.

¹⁷⁰ 17 CFR 270.2(a)7.

¹⁷¹ See Chapter III, section III.4.

is the protection of market participants and the prevention of excessive risk taking.¹⁷² When credit ratings were first introduced in the US banking regulation and then in the Net Capital Rule, the aim was to prevent speculative investments that were too risky. Even though the inclusion happened at different times, on both occasions regulators intervened in times of financial and economic crisis; in which investors suffered significant losses consequent to excessively risky investments.¹⁷³ Importantly, regulators noticed that the certification service provided through the investment grade threshold could work as a viable tool to cap the amount of risk that investors and market participants could undertake. As analysed above, this explains why reliance on credit ratings must be broadly referred to the private and public sector. All things considered, regulatory reliance on credit ratings means the trust that the regulators put on credit ratings as instruments which can help fulfil the financial regulation's objective to limit risk and promote efficiency in the financial markets.

Nonetheless, regulatory reliance on credit ratings started being questioned in the aftermath of the 2007-2009 financial crisis. CRAs have been regarded as one of the culprits of the recent financial turmoil. There is a large body of literature analysing the reasons why CRAs were among the causes of the financial turmoil.¹⁷⁴ In a nutshell, CRAs were accused of: 1) inflating the ratings assigned to some structured products such as residential mortgage backed securities (RMBSs) and collateralised debt obligations (CDOs) because of conflict of interest with the issuers; 2) having inadequate rating methodologies and models for assessing the risk inherent to such complex

¹⁷² Andenas & Chiu (n 133).

¹⁷³ Horsch (n 36).

¹⁷⁴ Deryn Darcy, 'Credit Rating Agency and the Credit Crisis: How the "Issuer Pays" Contributed and what Regulators Might Do About it' (2009) 2009 CBLR 2, 605; Kia Dennis, 'The Ratings Game: Explaining Rating Agency Failures in the Build-up to the Financial Crisis' (2009) 69 UMLR 4, 1111; Thomas J Mollers, 'Regulating Credit Rating Agencies: The New US and EU Law. Important Steps or Much ado About Nothing?' (2009) 4 CMLJ 4, 477; Coffee Jr, 'Ratings Reforms: The Good, The Bad and The Ugly' (2011) 1HBLR, 236; Elizabeth Devine, 'The Collapse of an Empire? Rating Agency Reform in the Wake of the 2007 Financial Crisis' (2011) 16 FJCF 1, 177; John M Griffin & Dragon Y Tang, 'Did Credit Rating Agencies Make Unbiased Assumptions on CDO?' (2011) 101 AER 3, 125.

products; and 3) being slow in downgrading them promptly.¹⁷⁵ As a result, the rating sector was subjected to close scrutiny at the national, international and regional levels. The tie between the credit ratings and legislation was under discussion as well. In this context, it can be observed that the events of the crisis radically changed the regulators' approach to the credit ratings. A new language has been adopted to describe the role of the ratings within the financial legislation. The hardwiring of credit ratings into legislation and regulatory frameworks is the new watchword that academics, regulators and policymakers use in the current debate on the role of credit ratings in legislation.¹⁷⁶ Undoubtedly, this word has a negative connotation as opposed to the term 'regulatory use of ratings' which was mainly used before the 2007-2009 financial crisis. Accordingly, two different meanings can be contrasted. Regulatory use of ratings can be interpreted as referring to the credit ratings as essential parts of a regulatory programme. This is consistent with the concept of regulatory reliance illustrated above, namely the trust that regulators and policymakers put on credit ratings for achieving the goals of protecting investors from excessive risk and preserve the financial stability. On the other hand, the hardwiring of ratings into legislation connotes the tie between credit ratings and legislation as dangerous. In other words, through this expression regulators and policymakers cast doubts on the utility of including credit ratings into legislation.¹⁷⁷ This raises the question of why credit ratings, from essential elements of financial legislation, are now regarded as intrusive and dangerous. This question can be answered by turning to the other side of the coin. In the previous paragraphs, attention was devoted to the utility of credit ratings and why they are widely used in the private and public sector ('the good'). The analysis underlined the positive aspects of credit ratings in relation to the reduction of asymmetric information and transaction costs. Also, it has been highlighted how credit ratings convey information in a simple way through alphabetical symbols which are easy to understand. However, these good aspects are simply one

¹⁷⁵ FSB, 'Report of the FSF on Enhancing Market and Institutional Resilience' (2008) <http://www.fsforum.org/publications/r_0804.pdf> accessed 26 July 2012.

¹⁷⁶ Deb et al (n 114); see also Gudula Deipenbrock & Mads Andenas, 'Editorial Introduction: Regulating Credit Rating Agencies in the EU' (2014) 25 EBLR 2, 205.

¹⁷⁷ Masciandaro (n 34).

side of the coin. The other side is concerned with the negative aspects relating to the credit ratings, namely the rating downgrades and their impact on financial stability ('the bad'). This will be the subject of the following analysis.

II.5.2 Downgrades, rating triggers and liquidity problems

Downgrades applied by CRAs to issuers or debt instruments may trigger large collateral calls and massive sales of debt instruments. These can then escalate into liquidity problems which pose serious threats to the financial stability.¹⁷⁸ This scenario can be better understood by re-analysing the use of credit ratings in the private sector through the lens of downgrades. To begin with, in the previous paragraphs the widespread use of rating triggers in bond indentures and loan contracts has been mentioned. As seen, the purpose of the rating triggers is to protect lenders against the borrowers' credit quality deterioration. Such clauses are advantageous to borrowers as well in that, without them, lenders would ask for a higher initial spread on debt contract.¹⁷⁹ The design of rating trigger clauses depends on the agreement between lenders and borrowers. In this context, it is possible to distinguish five types of rating trigger clauses: 1) rating based collateral and bonding provisions; 2) pricing grids or adjustments in interest rates and coupons; 3) acceleration trigger; 4) rating based put provision; and 5) rating based default provision.¹⁸⁰

Rating based collateral and bonding provisions are mainly included in bank loan agreements. These clauses may be activated consequently to the borrower's downgrade below the investment grade threshold. In this case, the borrower may be required to pledge assets to guarantee

¹⁷⁸ Commission Staff Working Document, 'Impact Assessment Accompanying Document to the Proposal for a Regulation of the European Parliament and of the Council Amending Regulation (EC) No 1060/2009 on credit rating agencies' (2010) SEC (2010) 678.

¹⁷⁹ Fernando Gonzalez et al, 'Market Dynamics Associated with Credit Ratings: A literature Review' (2004) ECB Occasional Paper No 16.

¹⁸⁰ Pamela Stumpp, 'The Unintended Consequences of Rating Triggers' (2001) Moody's Investors Service, Special Comment; see also Federico Parmeggiani, 'Rating Triggers, Market Risk and the Need for More Regulation' (2013) 14 EBOLR 3, 425.

its financing over time.¹⁸¹ Pricing grids or adjustments in interest rates and coupons are usually written into bond indentures as well as in bank loan agreements. In general, in the event of a downgrade, such clauses may require the borrower to increase the lender's return. In particular, when included in bond indentures they require a revision of the initial interest rate or coupon where the borrower's investment grade status shifts from investment to speculative grade.¹⁸² Acceleration triggers may result in an acceleration of repayment or early termination of credit in case of a borrower's downgrade. Rating based put clauses requires the downgraded borrowers to buy back the issued debt from the lenders.¹⁸³ Finally, according to rating based default triggers the borrower's downgrade may be regarded as an event of default of the obligation protected by the trigger. In this case, the downgraded borrower is considered to have failed to comply with the obligation set out in the contract.¹⁸⁴

Clearly, the overview of these clauses show the intertwine between the credit rating downgrade and the rating trigger clauses. In practice, to be activated the rating trigger needs the certification of the borrower's credit quality deterioration provided by the rating downgrade. This means that even though these clauses have no direct relation with the CRAs because they belong to the contractual relationship between the borrowers and their counterparties, their activation is directly linked to the downgrade applied by the agencies. This intertwine can escalate the borrower's liquidity problems. In more detail, assuming that a company is performing poorly and, for this reason, is downgraded by a CRA, the downgrade per se has the effect of increasing the cost of capital and to give the company's counterparties the signal of credit quality deterioration. In this case, the risk is that the company's counterparties may decide to move away from the downgraded

¹⁸¹ Markus Wiemann, 'Rating Triggers in Loan Contracts: How Much Influence Have Credit Rating Agencies on Borrowers in Monetary Terms' (2011) Frankfurt School of Finance and Management <<http://www.docstoc.com/docs/159670649/Rating-based-performance-pricing-Campus-for-Finance>> accessed 5 September 2012.

¹⁸² Christian Koziol & Jochen Lawrenz, 'Optimal Design of Rating Triggers Step-up Bonds: Agency Conflict versus Asymmetric Information (2009) EFA 2009 Bergen Meetings Paper.

¹⁸³ Matthew Noll et al, 'Rating Triggers in Financial Guaranty Industry' (2004) Moody's Investors Service, Global Credit Research.

¹⁸⁴ Ibid.

company. To this end, they will activate their rating trigger clauses and, thus, put further pressure on the company's liquidity position.¹⁸⁵ Because of this, the ultimate scenario can be the bankruptcy of the company unable to deal with its liquidity problems, exacerbated by the intertwine between the rating downgrade and the activation of the rating trigger clauses.¹⁸⁶ However, not all the rating trigger clauses can have such harmful effects. Among those listed above, the acceleration trigger clause is the most critical because not only does its activation increase the cost of capital, but it also requires an immediate injection of new capital to avoid even worse consequences. In essence, whereby in the aftermath of its credit rating downgrade a company also faces the activation of an acceleration trigger clause and is unable to get new liquidity, it will finally go bankrupt.

The intertwine between rating downgrades and rating triggers as well as the criticality of the acceleration triggers can be best captured by referring to the 2001 Enron's default. Enron was the biggest US corporate bankruptcy.¹⁸⁷ In substance, it is the story of a multinational company which undertook considerable risk to expand its trading and business activities (in the energy options) and, to this end, engaged in widespread frauds which were ultimately brought to light when the financial press claimed that the company was experiencing serious liquidity problems.¹⁸⁸ However, the intertwine between its rating downgrade and the rating trigger clauses that Enron had entered into with its counterparties were crucial to the company's bankruptcy. Enron had always sought and obtained an investment grade status by the major CRAs, which allowed the company to expand its trading business and, above all, to access the capital markets for liquidity needs.¹⁸⁹ Once the financial press cast doubts on the company's financial situation, the major CRAs took a closer look

¹⁸⁵ Darbellay (n 148), 179.

¹⁸⁶ Ibid.

¹⁸⁷ Tobias Pavel & Mylene Encontro, 'The Enron Scandal' (2012) Chalmers University of Technology; Coffee Jr (n 94).

¹⁸⁸ Paul M Healy & Krishna Palepu, 'The Fall of Enron' (2003) 17 JEP 2, 3.

¹⁸⁹ Committee on Governmental Affairs of the United States Senate, 'Enron's Credit Rating: Enron's Bankers contacts with Moody's and Governmental Officials': '[Enron] investment grade rating was essential to its ability to enter into agreements with counterparties in the context of its trading operation, one of Enron's most profitable divisions; in addition, Enron had "triggers" tied to credit ratings in a number of agreements that, in the event of a downgrade, would have either constituted a default or would have required Enron to post significant amounts of cash collateral'.

at Enron for possible downgrades. A shift from investment to speculative grade might have had disastrous effects because of the numerous trigger provisions embedded in the contracts Enron had entered into with its counterparties. In particular, in that period it was disclosed that a credit quality deterioration would have accelerated repayment of \$690 million loan.¹⁹⁰ In essence, from the CRAs' perspective, the Enron case is the story of a company which was declared investment grade until four days before it filed for bankruptcy. The downgrade was applied by the major CRAs on 28 November 2001. This triggered the activation of the rating trigger provisions requiring accelerated repayment.¹⁹¹ The end of the story is known, but it could be easily imagined following the logic of the illustrated intertwine between downgrade and rating triggers: 1) the downgrade to junk status certified the worsening of the company's financial situation; 2) Enron's downgrade determined its counterparties to relinquish their engagement with the company and, thus, they triggered the acceleration of the repayment under the trigger clauses; 3) the activation of the trigger provisions exacerbated the Enron liquidity position; 4) unable to repay its debts, the company finally filed for bankruptcy. Overall, these stages can be embodied into a catch-all word: credit cliff. This is market jargon used to indicate a cascade of bad consequences triggered by a negative event.¹⁹²

As discussed, the tie between rating downgrade and rating triggers contribute to credit cliff situations and accelerate the pace at which liquidity problems get worse. In parallel, similar effects can be analysed in relation to other rating trigger clauses. As already mentioned, borrowers may be required by their counterparties to post more or less collateral in accordance with the credit rating they receive by the agencies. Also, market participants may require investment grade securities as collateral. Consequently, in case of a downgrade of the debt instruments borrowers will be asked to post more collateral as guarantees.¹⁹³ The rating trigger clauses which are relevant in this context are the rating based collateral provisions. Like the acceleration clauses, their interplay with the

¹⁹⁰ Deniz Coskun, 'Credit Rating Agencies in a Post-Enron World: Congress Revisits the NRSRO Concept' (2008) 9 JBR 4, 264.

¹⁹¹ *Ibid.*

¹⁹² Gonzalez et al (n 179).

¹⁹³ *Ibid.*

rating downgrades may be critical to the aggravation of a company's financial situation. A valuable example can be provided by referring to the insurance sector, namely to the situation of the American International Group Inc (AIG) during the recent financial turmoil.¹⁹⁴ Indeed, it can be observed that in the years leading up to the 2007-2009 financial crisis the market did not require collateral when purchasing credit default swaps (CDSs) from insurance companies rated investment grade by the CRAs. The investment grade ratings assigned to insurance companies selling protection was regarded as a security against counterparty risk.¹⁹⁵ Before the burst of the US subprime mortgage bubble in 2007, AIG was able to sell CDS without collateral because of its high rating. When the mortgage market collapsed, AIG experienced the effects of the combination of rating downgrade and rating triggers; in its case, these were collateral triggers incorporated into the CDS contracts that the company entered into with the purchasers of protection.¹⁹⁶ The CRAs downgraded the AIG's CDS position backed up with subprime mortgage-related securities. The downgrade was sufficient to trigger the investors' request for more collateral. AIG was unable to post more collateral and, for this reason, was about to be downgraded. This would have made investors require even more collateral in the aftermath of a deterioration in the company's creditworthiness signalled by a possible downgrade. This last intertwine would have been lethal for AIG, likewise in the case of Enron.¹⁹⁷ However, the AIG's debacle would have endangered other financial institutions because AIG was regarded as 'too interconnected to fail'.¹⁹⁸ To avoid a domino effect, the US government was stepped in to bail out AIG. AIG avoided the collapse

¹⁹⁴ US Financial Crisis Inquiry Commission (FCIC), 'The Financial Crisis Inquiry Report-Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States' (January 2011), 344.

¹⁹⁵ Darbellay (n 148), 177.

¹⁹⁶ Elizabeth Warren, 'AIG Rescue, Its Impact on Markets, and the Government's Exit Strategy' (June 2010) Congressional Oversight Panel June Oversight Report, 255.

¹⁹⁷ Ibid.

¹⁹⁸ Federal Reserve Bank of New York (FRBNY), 'Systemic Impact of AIG Bankruptcy' (September 2008) attachment to FRBNY internal email from Alejandro La Torre to Timothy Geithner.

because it obtained an US 85 billion dollars revolving credit from the Federal Reserve Bank of New York.¹⁹⁹

II.5.3 Cliff-edge effects and herd behaviours

As illustrated, the downgrade signals a deterioration of an issuer's or borrower's creditworthiness. In the context of an acceleration rating provision it has been mentioned how investors and market participants tend to react in the same way once the downgrade is applied.

This tendency can be better understood in relation to the rating based put provision. This type of clause is usually written into bond indentures and allows investors to sell their debt instrument back to the issuer in the event of a downgrade.²⁰⁰ Indeed, such a provision was also activated in the wake of the Enron downgrade. However, the criticality of its effects were more evident during the recent financial turmoil when many sophisticated structured finance products such as RMBSs and CDOs were abruptly downgraded by the major CRAs to junk status. A massive sale of these instruments took place as a result.²⁰¹ It is to be observed that the meaning of 'massive' is twofold: it refers not only to the large quantity of debt instruments which were sold after the downgrade was announced but also to the significant number of investors who reacted in the same way following the downgrade. This last aspect is quite complex. It does not exclusively pertain to a homogenous behaviour consequent to the rating announcement. First, the rating downgrade triggers an investors' reaction. Then, other investors may behave in the same way; not necessarily influenced by the downgrade but by the behaviour of those investors who sold the debt instruments after the rating change. In essence, they mechanically copy someone else's behaviour.

Having clarified these aspects from a practical side, it is now possible to categorise them through their technical names: cliff-edge effects and herd behaviours. Cliff-edge effects are

¹⁹⁹ Matthew Karnitschnig et al, 'U.S. to Take Over AIG in \$85 Billion Bailout; Central Banks Inject Cash as Credit Dries Up' *The Wall Street Journal* (September 2008).

²⁰⁰ Stumpp (n 180); Parmeggiani (n 180).

²⁰¹ Commission Impact Assessment (n 178), 13.

concerned with the dramatic sell-off of debt instruments in the occurrence of a downgrade.²⁰² Clearly, the downgrade has the potential to influence investors who hold the downgraded debt instruments and thus trigger a cascade sale of them. In turn, cliff-edge effects are amplified by herd behaviours which Persaud defines as follows: ‘by herding behaviour I mean that banks or investors like to buy what others are buying, sell what others are buying, sell what others are selling and own what others own’.²⁰³ Therefore, herd behaviours represent the systematic and erroneous decision-making by a group.²⁰⁴

The 2007-2009 financial crisis brought to attention the phenomenon of the cliff-edge effects and herd behaviour through the massive sell-off of the downgraded structured products. Going into greater detail, these phenomena were particularly evident in the buy-side sector. As already mentioned, asset managers have investment mandates that limit to investment grade rated instruments the securities they can hold in their portfolios. In the event that the credit quality of these debt instruments go below the investment grade threshold, they are no longer compliant with their mandates. Consequently, they are forced to sale their junk debt instruments.²⁰⁵ The situation of the US money market funds at the outbreak of the financial crisis can provide a practical explanation. Many asset managers held in their portfolios debt instruments issued by the US bank Lehman Brothers Holding Inc, which filed for bankruptcy in September 2008. Similarly to Enron, Lehman Brothers maintained an investment grade until a few days before it defaulted.²⁰⁶ The downgrade and subsequent bankruptcy of the bank reversed its effects on the debt instruments as well, which lost their investment grade status. Asset managers could no longer hold the Lehman Brothers’ debt instruments in their portfolio. In fact, this would have been against rule 2a-7 of the Investment Company Act which, as mentioned above, requires them to only hold triple A

²⁰² Ibid.

²⁰³ Avinash Persaud, ‘Sending the Herd Off the Cliff Edge: The Disturbing interaction Between Herding and Market Risk Sensitive Risk Management Practices’(2000) < <http://www.bis.org/publ/bppdf/bispap02l.pdf>> accessed 4 October 2012.

²⁰⁴ Commission Impact Assessment (n 178), 11.

²⁰⁵ Sy (n 100).

²⁰⁶ Lawrence G McDonald & Patrick Robinson, ‘*A Colossal Failure of Common Sense: The Inside Story of the Collapse of Lehman Brothers*’ (Crown Business 2009).

instruments in portfolios. Significantly, one of the largest US money market funds, the Reserve Primary Fund, had 785 million holdings of Lehman Brothers' debt instruments. Once the rating of these instruments was downgraded, the Reserve Primary Fund's share value dropped from 1 dollar to 97 cents. In other words, the fund 'broke the buck'.²⁰⁷ The Reserve Primary fund was forced to sell its debt instruments and began suffering liquidity problems. The cliff-edge effect triggered by the downgrade urged other investors to behave mechanistically in the same way. Finally, the US government had to intervene by providing deposit insurance to investments in money market funds.²⁰⁸ This shows again the dangerous intertwine between rating downgrades and rating triggers and how their combination can escalate liquidity problems. Furthermore, it has been illustrated how rating downgrades have the potential to amplify phenomena such as cliff-edge effects and herd behaviours.

II.5.4 Systemic risk and spill-over effects across markets

From the contexts analysed it can be seen that rating downgrades are per se negative events with the potential to create a series of other negative events. Having underlined how this combination of events exacerbates the liquidity problems of the market participants being downgraded, it is now to be discussed to what extent rating downgrades and their wave of effects hamper the financial stability. To this end, interesting results have been provided by the sovereign rating crisis which has recently affected most countries in the Euro area. Some background facts are in order.

In April 2010 S&P downgraded the Greek sovereign debt to junk status. Bond yields rose dramatically in the wake of the downgrade²⁰⁹ so that Greece was no longer able to access private

²⁰⁷ This expression is used to indicate that the net asset value of a money market fund falls below \$1, see Diya Gullappalli et al, 'Money Fund, Hurt by Debt Tied to Lehman, Breaks the Buck', *The Wall Street Journal* (September 2008).

²⁰⁸ William A Birdthistle, 'Breaking Bucks in Money Market Funds' (2010) 2010 WLR 1155, 1156.

²⁰⁹ Commission, *European Economic Forecasts*, Staff Working Document (2011), 44. In this study it is shown that sovereign downgrades are followed by rising sovereign spread changes.

capital markets as a funding source.²¹⁰ This forced the Commission, the European Central Bank (ECB) and the International Monetary Fund (IMF) (hereinafter: the troika) to discuss a rescue plan in order to prevent Greece from defaulting on its debt and, thus, seriously threatening the stability of the euro zone.²¹¹ However, criticism against CRAs started mounting between the spring and summer of 2011, when S&P declared that it would classify as a default any planned or voluntary restructuring of the Greek debt. This announcement was made while the European leaders were negotiating a second rescue package for Greece.²¹² Other European countries experienced downgrades by the major CRAs as well. For instance, Moody's downgraded Portugal's sovereign debt to junk status soon after the set-up of a bail-out package by the troika.²¹³ As a result, the cascade of rating changes seemed to be unstoppable because of the sovereign downgrades applied by Moody's to Ireland²¹⁴ and by S&P to nine euro area countries between 2011 and 2012.²¹⁵

These events, in particular the downgrades, started being studied from the perspective of their impact on financial stability. Namely, the downward price spiral caused by the downgrade of sovereign ratings was scrutinised and it was noted to have a contagion effect from the individual downgraded country to a global level.²¹⁶ In essence, the downgrade applied to a Member State can have spill-over effects and threaten the financial stability at the global level. This can be traced back to the multiple effects that sovereign ratings have on financial markets. Empirical studies have demonstrated that sovereign ratings are crucial in the determination of a country's borrowing costs

²¹⁰ Gunther Tichy, 'Credit Rating Agencies: Part of the Solution or Part of the Problem?' (2011) 46 *Intereconomics* 5, 232.

²¹¹ *Ibid.*

²¹² Christopher Alessi, Roya Wolverson, Mohammed A Sergies, *The Credit Rating Controversy* (2013) <<http://www.cfr.org/financial-crises/credit-rating-controversy/p22328#p7>> accessed 28 October 2013.

²¹³ Michael Wilson, 'Moody's Downgrades Portugal Sovereign-Debt Rating', *The Wall Street Journal* (London 13 July 2010) <<http://online.wsj.com/article/SB10001424052748704518904575364320526044824.html>> accessed 4 November 2012.

²¹⁴ Daniel Kruger & Finbarr Flynn, 'Ireland Cut to Junk by Moody's as EU Seeks to Contain Crisis' *Bloomberg* (2011) <<http://www.bloomberg.com/news/2011-07-12/ireland-is-third-euro-area-country-cut-to-junk-joining-greece-portugal.html>> accessed 16 November 2012.

²¹⁵ Larry Elliot & Phillip Inman, 'Eurozone in New Crisis as Rating Agency Downgrades Nine Countries', *The Guardian* (2012) <<http://www.guardian.co.uk/business/2012/jan/13/eurozone-crisis-france-credit-rating-aaa>> accessed 21 November 2012.

²¹⁶ Commission Impact Assessment (n 178), 14.

and have significant effects on yields spreads.²¹⁷ Furthermore, not only do sovereign ratings influence the assessment of the counterparty risk but they are also regarded by investors and market participants as benchmarks for all the credit ratings of the entities located in the country being rated. This means that sovereign ratings have influence within the country across markets.²¹⁸ Consequently, sovereign rating downgrades can have spill-over effects to corporate bond markets and equity markets. This jeopardises the ability of a wide range of entities to access external funding.²¹⁹ In other words, the rating of financial institutions located in a country will be impacted by the downgrade of the concerned country. The facts illustrated above have confirmed this: the downgrade of Portugal was immediately followed by the downgrade of four Portuguese financial institutions. Similarly, the downgrade of Italy in 2011 caused the downgrade of some of the main companies.²²⁰

Nevertheless, the impact of the sovereign downgrade is not circumscribed to the downgraded countries and its financial institutions. Recent empirical studies have demonstrated that the sovereign downgrade applied to one country can have contagion effects across countries. In practice, due to the market interconnections and linkages among countries, a downgrade applied to a single country can reverse its effects to other countries.²²¹ It is therefore clear that rating downgrades have systemic relevance and can pose threats to the financial stability from an individual to a global level.

II.5.5 The rating-based regulation and its implications: a critical review

²¹⁷ Antonio Afonso et al, 'Credit Ratings and the Euro Area Sovereign Debt Crisis' (2011) University of Freiburg.

²¹⁸ 'European Economic Forecast' (2011), Staff Working Document, European Commission, Directorate General Economic and Financial Affairs, 44.

²¹⁹ Rabah Arzeki et al 'Sovereign Rating News and Financial Markets Spill-overs: Evidence from the European Debt Crisis' (2011) IMF WP/11/68.

²²⁰ Ibid.

²²¹ Afonso et al, 'Sovereign Ratings and Financial Markets Linkages. Application to European Data' (2011) 1347 ECB paper.

All the discussed effects are consequential to rating downgrades. Rating downgrades seem to be the source of a spiral process which exacerbates liquidity problems and ultimately impacts on the financial stability at the global level. Investors' and market participants' behaviours play a crucial role in this context. Negative rating announcements also have the effect of aligning the investors' and market participants' reactions. Cliff-edge effects and herd behaviours are the phenomena which can be traced back to rating downgrades and contribute to aggravate liquidity problems with possible repercussions to the financial stability at the global level.

The analysed relationship between rating downgrades and liquidity crises and all of the illustrated negative implications are at the heart of the regulators' and policymakers' turnabout in their use of credit ratings in financial regulations. The 2007-2009 financial crisis brought to attention the danger of the rating downgrades and the extent to which the rating-based regulations can give impetus to all the negative implications which have been illustrated. This can be understood by considering the rating downgrades and, in particular, the cliff-edge effects in combination with the rating-based regulations.

As discussed, rating downgrades influence investors and the occurrence of a sell-off of downgraded debt instruments could be interpreted as an autonomous decision of not holding any more securities whose creditworthiness is deteriorated. However, putting things into the perspective of the rating-based regulations, the debt instruments' sell-off in the wake of the downgrades loses its characteristic of autonomous investors' choice and develops into a constrained behaviour. Some practical examples will provide a better understanding. If there are rules which require asset managers to invest only in investment grade rated products, can asset managers be considered compliant with such rules if they invest in products ranked by the CRAs as speculative grade? Obviously, the answer is negative. Similarly, can asset managers be considered compliant with such rules if they hold highly rated debt instruments whose status shifts to speculative grade consequently to a downgrade? Unquestionably, they were only initially compliant but after the downgrade they cannot be regarded as such. Ultimately, they will have to sell the speculative grade

instruments they hold in their portfolio. Others can behave mechanistically in the same way while observing the conduct of the previous investors. Clearly, market participants react to ratings because they are forced to by the rating-based regulation.

Another useful example to have a clearer understanding of the impact of rating-based regulations following downgrades, can be provided by referring to the use of external ratings in banking regulation. As mentioned earlier, capital regulations reduced the capital requirements of banks that purchased or retained securities which received top ratings by the CRAs. Nonetheless, the other side of the coin was that banks' capital requirements would have increased in the event of a downgrade of these securities. As illustrated, when worries in the subprime mortgage market began mounting, a massive downgrade of securities backed by subprime mortgages occurred. In this respect, Friedman and Kraus underlined that CDO bonds rated triple A in 2007 were downgraded to CCC in 2008. This caused a 4,900 per cent increase in the capital required for these financial instruments. This meant that the capital required for \$100 worth of bonds rose from \$2 to \$100 and, thus the banks would have had to raise \$98 in new capital for every \$100 in assets.²²² The downgrades forced to raise the amount of capital which was necessary to the banks to remain sound and, above all, compliant with the regulation which tied up the calculation of the banks' capital requirements to the investment grade credit ratings. This is therefore an example of how the use of ratings, as tools regulators refer to in bank capital market regulations, can exacerbate market trends and have negative implications on the financial system.

Having discussed these aspects, it is clear that rating-based regulation carries the risk of facilitating the negative effects associated to rating downgrades. The more market participants have to comply with legislation and regulatory frameworks providing for the use of credit ratings for the determination of eligible investments, the more they will homogenise their behaviour in the

²²² Jeffrey Friedman & Vladimir Kraus, *Engineering the Financial Crisis: Systemic Risk and the Failure of Regulation* (University of Pennsylvania Press 2011), 103; see also Anna Katherine Barnett-Hart, 'The Story of the CDO Market Meltdown: An Empirical Analysis' (March 2009), Harvard College Cambridge Massachusetts.

occurrence of rating downgrades; and the more the risk of impacting on financial stability will be critical. All of these negative consequences explain the shift in the language of regulators and policymakers: from regulatory use of credit ratings to the current ‘hardwiring’ of ratings into legislation. The former is relating to the valuable aspects of the credit ratings while the latter is concerned with the negative effects of the downgrades that the use of credit ratings in legislation facilitates. As will be discussed below, the hardwiring of ratings into legislation means that credit ratings are no longer regarded as an essential component of regulatory programmes as they were in the past. Currently, such an expression is the paradigm upon which regulatory efforts are devoted to reduce or mitigate the negative implications deriving to the financial system from the tie between regulation and credit ratings.

However, cliff-edge effects, herd behaviours and liquidity crises are not the only drawbacks that regulations referring to credit ratings may facilitate. For instance, some scholars analyse the possibility that the regulatory use of credit ratings may increase the risk of conflict of interest between CRAs and issuers constrained by regulation to obtain high credit ratings to access the capital markets.²²³ Others argue that the use of credit ratings for investment restrictions reinforces the oligopolistic structure of the ratings market, in particular, the dominance of established CRAs.²²⁴ Beyond these issues, central to this research is the analysis of another issue, namely a phenomenon which is traced back to the hardwiring of credit ratings into legislation and regulatory frameworks, and is considered to exacerbate cliff-edge effects and herd behaviours.²²⁵ This phenomenon is defined as over-reliance on external credit ratings.

II.6 UNDERSTANDING OVER-RELIANCE ON EXTERNAL CREDIT RATINGS

II.6.1 Introducing the phenomenon

²²³ Ibid.

²²⁴ Ibid.

²²⁵ Commission Impact Assessment (n 178), 11.

The hardwiring of credit ratings into legislation and regulatory frameworks also generates over-reliance on external credit ratings by investors and market participants. Following the dramatic events of the 2007-2009 financial crisis, regulators and policymakers worldwide tried to identify the opportune regulatory measures to tackle all the shortcomings that the financial system revealed at the outbreak of the turmoil. In its 2008 ‘Report on Enhancing Market and Institutional Resilience’, the FSB, among other things, warned investors and market participants to avoid over-relying on external credit ratings.²²⁶ The FSB underlined that some institutional investors relied excessively on credit ratings in their investment guidelines and choices. This had the effect of giving credit ratings the role of exclusive benchmarks for the assessment of credit risk. In effect, investors used credit ratings as substitutes for their independent credit risk assessment and due diligence.²²⁷ The FSB identified the source of this specific problem in the embedment of credit ratings in numerous regulatory and legislative frameworks at the international and national levels. Specifically, it was highlighted that credit rating references in financial regulations may play a critical role in encouraging investors’ over-reliance on ratings and in discouraging them to undertake any independent credit risk analysis. The FSB addressed the investors’ over-reliance on credit ratings and, as it will be discussed further, gave suggestions to regulators and policymakers on how to reduce the problem. Before analysing the approach that the international body suggested, some considerations are in order.

Preliminarily, it can be argued that the FSB introduced a problem without specifically defining it. In the first place, the FSB indicated who may over-rely, that is, investors and market participants, the context which may facilitate over-reliance and provided some guidelines to mitigate this. A clear definition of over-reliance, however, was not provided. This has still to be developed even after the regulatory approaches which have been set out following the FSB’s guidelines. The lack of a proper definition is the source of confusion in relation to the phenomenon.

²²⁶ FSB (n 175).

²²⁷ Ibid.

For example, the European Parliament in its 2011 resolution on CRAs uses the word over-reliance on credit ratings in relation to regulators.²²⁸ This is a significant difference vis-à-vis the FSB which, as indicated above, refers to over-reliance on credit ratings as an investors' problem. Moreover, the current debate discusses the reduction of market participants' reliance on credit ratings.²²⁹ This adds further confusion since reliance and over-reliance are perceived and used outside the debate as interchangeable words.²³⁰ Consequently, it is no longer clear whether reliance is the 'good' aspect of the credit ratings or is equal to over-reliance ('bad'). Such a situation stems from a lack of a clear definition of the phenomenon in its features, as well as of specific delimitation of the areas in which it may arise. To understand the problem which is central to the present research, it is necessary to close this definitional gap.

This research will attempt to provide a definition of over-reliance to clarify what the regulators addressed and are attempting to solve. Such a definition can only be the result of a broad investigative process into the phenomenon of over-reliance divided into the following strands. First, analysis is to be provided as to the moment in which the phenomenon has been taken into consideration by regulators and policymakers. Precisely, the question to be addressed is concerned with whether the risk of over-reliance was brought to attention for the first time in the context of the 2007-2009 financial crisis or was also discussed in the previous regulatory debates on CRAs and financial markets. After providing an answer to this, the investigation must consider whether the hardwiring of credit ratings into legislation and regulatory frameworks should be regarded as the only context in which the phenomenon can arise. This investigation will provide a clearer understanding of over-reliance. In particular, addressing the existence of other potential sources of over-reliance will delimit the contours of the phenomenon and help to elaborate a definition of over-reliance which, in turn, will complete the FSB's analysis.

²²⁸ European Parliament, 'European Parliament resolution of 8 June 2011 on credit rating agencies: future perspective (2010/2302 8(INI))' Credit rating agencies P7_TA (2011) 0258.

²²⁹ Ibid.

²³⁰ Matt Robinson, 'IOSCO suggests Ways to Reduce Reliance on Credit Ratings' *Bloomberg* (June 2014).

II.6.2 Detecting the phenomenon: over-reliance in the US pre-crisis regulatory debate on the CRAs

The first strand of investigation can be addressed by looking at the two legal systems, namely the US and EU, in which an approach to reduce over-reliance was set out in specific CRAs' regulations. To start with the US, in the previous paragraphs it has been highlighted that this legal system boasts the highest number of credit ratings into LRSPs. The tie between the regulators and the credit ratings has always been particularly strong in the US. Nonetheless, this raises the question of whether before the 2007-2009 financial crisis the rating-based regulation had ever come under the regulatory spotlight for the risk of over-reliance. To answer this question, it is desirable to start researching and analysing the SEC consultation documents concerning the operations of the CRAs in the financial markets. These documents are of relevance because they are usually issued with the view to discussing the optimal regulatory framework to tackle potential or current problems.

Among those releases concerning the operation of the CRAs, it is essential to analyse whether the widespread use of credit ratings in the US regulations is mentioned and why. As discussed above, the event which paved the way for the widespread use of rating-based regulation was the Net Capital Rule in 1973. The inclusion of credit ratings in this rule had a cascade effect since credit ratings were incorporated into other rules relating to other financial sectors.²³¹ However, only twenty years after the amendments applied to the Net Capital Rule the SEC started monitoring the role of credit ratings into legislations. This SEC's investigation went on until 2003. Consequently, only the releases issued between 1994 and 2003 can be useful to verify whether the US regulators considered, among other issues, the risk of over-reliance by investors and market participants deriving from the rating-based regulation.

As to 1994, the SEC Release No 34-34616 is in order. In this release the SEC acknowledged that the use of credit ratings had become widespread into the main pieces of US financial legislation since the adoption of the NRSRO concept in the Net Capital Rule.²³² Nonetheless, this was not

²³¹ Partnoy (n 13).

²³² SEC Release No 33-7085, 34-34616, IC-20508, International Series Release No 706, File No S7-23-94.

worrisome in that the SEC clearly underlined that the inclusion of the credit ratings provided by NRSRO into its legislation was an essential tool for its regulatory strategies.²³³ Among other things, the SEC pointed out that even the US Congress relied on the NRSRO concept since it recognised that the ‘term has acquired currency as a term of art’.²³⁴ This is the key to understand why the SEC in 1994 decided to analyse the use of credit ratings in regulations. Problems, at that time, only stemmed from the use of the NRSRO’s concept in the regulations because the term NRSRO had been undefined since its introduction in 1973. In greater detail, what this meant was that to participate in the credit rating market, rating providers had to obtain the status of NRSRO. This was crucial for the CRAs’ business in that the legislation incorporated the requirement to use only credit ratings provided by certified NRSROs. However, the criteria to be eligible to obtain the NRSRO status, as well as a clear definition of it were quite nebulous. The SEC simply used to release a non-action letter certifying that the rating providers, seeking the NRSRO status, were eligible to consider themselves as such and, thus, could operate in the rating market.²³⁵ Given these shortcomings in the definition of the status and criteria, the aim of the 1994 SEC release was to consider to what extent the NRSRO concept should have been clarified and what possible solutions could have been discussed in relation to the legislation referring to an unclear concept. Importantly, relying on credit ratings in regulations as tools to define eligible investments did not have any connection with the phenomenon of over-reliance. The tie between regulation and credit ratings only needed to consider more accurately the concept of NRSRO. Undoubtedly, at that time there was not consideration for all the issues that are now widely discussed in the regulatory debate on the CRAs at all levels, such as conflict of interest due to the issuers-pay model, the oligopolistic structure of the rating industry, timeliness in the rating announcement and the lack of CRAs’

²³³ Ibid, 6: ‘The utilization of NRSRO ratings is an important component of the Commission’s regulatory program’.

²³⁴ Ibid, 3; see also H R Rep No 994, 98th Cong, 2d Sess 46 (1984) (appending Statement of Charles C COX, Commissioner, Securities and Exchange Commission, to the Subcommittee on Telecommunications, Consumer Protection, and Finance of the House Committee on Energy and Commerce, March 14, 1984).

²³⁵ Coffee Jr (n 94).

accountability. As there was no room to discuss these problems, over-reliance was even unknown as a potential problem to be included in the regulatory agenda. This was still a period in which the ‘good’ aspects of credit ratings were the basis upon which the regulators’ reliance on them in their legislation finds an explanation.

Outcomes are slightly different with regard to the 2003 period. The SEC Release No 34-47972 of 2003 undertook a new analysis of the role of credit ratings into legislation.²³⁶ The 2003 Release reconsidered the issues that the 1994 Release brought forward with regard to the incorporation of the NRSRO concept in the US financial legislation with the view to addressing them more effectively. In fact, the solution of such issues had remained on paper. In more detail, a proposal to define more specifically the term NRSRO and crystallise this into a specific provision was issued in the aftermath of the 1994 Release, but finally the SEC did not act on it.²³⁷ The 2003 Release gave the opportunity to re-start the debate on the definition of the NRSRO status and the criteria to access such a status. However, a significant difference with the 1994 Release is that the 2003 Release was solicited by heavy criticism against the operation of the CRAs. In the years before, important corporate defaults such as Enron and WorldCom started an intense debate as national fraud scandals. As already mentioned, CRAs were criticised for the slowness of their downgrades and, for this reason, they were subjected to regulatory scrutiny. In a nutshell, the regulatory debate took a closer look at the potential for conflict of interest inherent to the CRAs’ business model, the dominance of the major CRAs in the rating market, their lack of accountability and the role of credit ratings in the US legislation.²³⁸ The spectrum of the 2003 Release was wider than the 1994 Release. It cannot be left unnoticed that the passage from the 1994 Release to the 2003 Release marked the beginning of the shift from the ‘good’ to the ‘bad’ aspects of the credit ratings which would have culminated at the outbreak of the recent financial turmoil. In essence, the

²³⁶ SEC, ‘Concept Release: Rating Agencies and the Use of Credit Ratings under the Federal Securities Laws’ (2003) Release Nos. 33-8236; 34-47972; IC-26066; File No S7-12-03, RIN 3235-AH28.

²³⁷ SEC, ‘Report on the Role and Operation of Credit Rating Agencies in the International Capital Markets’ (2003).

²³⁸ Rating the Raters (n 20).

2003 Release was issued within a CRAs' market failure context which would have finally led to the issuance of the first piece of US legislation on CRAs, namely the Credit Rating Agency Reform Act of 2006.²³⁹ From that moment onwards, CRAs would have ceased to operate as unregulated entities in the US. Nonetheless, like the 1994 Release, the 2003 Release did not consider the tie between regulation and credit ratings in relation to the danger of over-reliance. The 2003 Release addressed the possibility of eliminating the NRSRO designation within the financial regulatory frameworks only in relation to the argument that such a designation would work as a barrier to enter the rating market to the advantage of established CRAs.²⁴⁰ To this end, the NRSRO designation could cease to be used, but this could have been feasible only once proper, valid alternatives could have been identified. These alternatives, as it was clearly underlined in the 2003 Release, should have achieved the same objectives served by the NRSRO designation in the US financial rules.²⁴¹

Overall, the second Release addressed a number of issues in line with the possible areas of intervention identified and listed in the Sarbanes-Oxley Act after the abovementioned corporate scandals;²⁴² but the risk of over-reliance was not contemplated among all the CRA-related-problems debated in 2003. Despite the new light that the role played by the leading CRAs in the Enron and WorldCom cases cast on their relationship with the public sector, it can be said that the credit ratings were still regarded as an important component of the US financial regulation. Among other things, in the language used by the SEC in its 2003 Release to refer to the presence of external credit ratings, there is not any negative connotation. 'Rating-based regulation' was still a term used to emphasise the value of credit ratings. Importantly, over-reliance deriving from the hardwiring of credit ratings references in legislation was still an undetected phenomenon; a problem that the US regulators did not know yet and could not think to include in their regulatory agenda on CRAs

²³⁹ SEC, '*Credit Rating Agency Reform Act of 2006*'

<<http://www.sec.gov/divisions/marketreg/ratingagency/cra-reform-act-2006.pdf>> accessed 25 March 2013.

²⁴⁰ SEC Concept Release 34-47972, 3.

²⁴¹ *Ibid.*

²⁴² Sarbanes-Oxley Act of 2002, Pub L No 107-204, § 702(b) 116 Stat 745 (2002).

either. Therefore, with regard to the US legal system, it can be submitted that the phenomenon of over-reliance had never been mentioned or brought forward before the 2007-2009 financial crisis.

II.6.3 Over-reliance in the EU pre-crisis regulatory debate on the CRAs

The same outcomes can be discussed with regard to the European context: over-reliance on external credit ratings was an undetected phenomenon during all the pre-crisis period. This can be argued by analysing the approaches that the European regulators applied to the CRAs before and after the recent financial turmoil. In essence, the 2007-2009 financial crisis aligned the US and EU legal systems towards the need to elaborate a new legislative framework for disciplining the rating industry. However, while in the US the post crisis debate on CRAs had the aim of improving the regulatory regime which was issued in 2006, in the EU the purpose was to create the first European piece of regulation of CRAs.²⁴³ At the EU level, the shift from the self-regulation model to the regulatory model occurred in different times than in the US. This means that the European regulators and policymakers had different perceptions of the problems which could arise from the rating sector. This can be better understood by taking stock of the evolution of the European reforms of CRAs.

In particular, a corporate default similar to Enron happened in Europe in 2002, namely the Parmalat crack. Similarly to Enron, Parmalat S.p.A was rated investment grade until a few days before it declared bankruptcy and was put into liquidation.²⁴⁴ Consequently, the operation of CRAs came under regulatory scrutiny at the EU level as well. Nonetheless, the European Commission (Commission) did not embark on any reform and decided to leave the industry self-regulated on the grounds that some of the FSAP directives referring to CRAs, combined with self-regulation in

²⁴³ Siegfried Utzig, 'The Financial Crisis and the Regulation of Credit Rating Agencies: A European Banking Perspective' (2010) 188 ADBI WPS.

²⁴⁴ Eric Sylvers, 'Credit Ratings of Parmalat Cut Sharply on Fear of Default' *The New York Times* (December 2003).

accordance with the IOSCO Code,²⁴⁵ were a robust enough framework to deal with the rating sector.²⁴⁶ The directives that the Commission referred to were the Market Abuse Directive (MAD),²⁴⁷ the Capital Requirement Directive (CRD)²⁴⁸ and the Market in Financial Instrument Directive (MIFID).²⁴⁹

Specifically, with regard to the first item of legislation which deals with insider dealing and market manipulation, the Commission noted that in the field of conflict of interest, fair presentation of investment recommendations and access to inside information, the provision of the MAD could constitute a comprehensive legal framework for the rating agencies.²⁵⁰ As to the second item, the CRD allows the use of external credit ratings provided by CRAs for the determination of risk weights applied to bank or investment firms' exposures.²⁵¹ To this end, it is necessary that the agencies be formally recognised as European Credit Assessment Institutions (ECAIs) by the

²⁴⁵ The IOSCO Code was a set of best practices which CRAs were supposed to incorporate into their own codes of conduct in order to prevent conflict of interest, guarantee adequate disclosure of rating methodologies, and improve the timeliness and quality of their rating process. In essence, CRAs were expected to comply with the IOSCO Code or explain why certain principles had not been implemented in their own codes, see *Code of Conduct Fundamentals for Credit Rating Agencies* (2004), published by the Technical Committee of IOSCO; No 4.1 of the IOSCO Code states: 'If a CRA's code of conduct deviates from the IOSCO provisions, the CRA should explain where and why these deviations exist, and how any deviations nonetheless achieve the objectives contained in the IOSCO provision.'

²⁴⁶ Commission, 'Communication from the Commission on Credit Rating Agencies' (2006) OJEU C59/2.

²⁴⁷ Directive 2003/6/EC of the European Parliament and of the Council of 28 January 2003 on insider dealing and market manipulation (2003) OJEU L 96/16; and implementing Directives and Regulations: see Directive 2003/124/EC of 22 December 2003 implementing Directive 2003/6/EC of the European Parliament and of the Council as regards the definition and public disclosure of inside information and the definition of market manipulation (2003) OJEU L 339/70; Directive 2003/125/EC of 22 December 2003 implementing Directive 2003/6/EC of the European Parliament and of the Council as regards the fair presentation of investment recommendations and the disclosure of conflict of interest (2003) OJEU L 339/73; Directive 2004/72/EC of 29 April 2004 implementing Directive 2003/6/EC of the European Parliament and of the Council as regards accepted market practices, the definition of inside information in relation to derivatives on commodities, the drawing up of lists of insiders, the notification of managers' transactions and the notification of suspicious transactions (2004) OJEU L 162/70; see also Regulation (EC) No 2273/2003 of 22 December 2003 implementing Directive 2003/6/EC of the European Parliament and of the Council as regards exemptions for buy-back programmes and stabilisation of financial instruments (2003) OJEU L 336/33.

²⁴⁸ CRD comprised Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions (recast), OJ 2006 L177/1, and Directive 2006/49/EC of the European Parliament and of the Council of 14 June 2006 on the capital adequacy of investment firms and credit institutions (recast), OJ 2006 L 177/201.

²⁴⁹ Directive 2004/39/EC of The European Parliament and of the Council of 21/04/04 on markets in financial instruments amending Council Directives 85/611/EEC and 93/6/EEC and Directive 2000/12/EC of the European Parliament and of the Council and repealing Council Directive 93/22/EEC (2004) OJEU L 145/1.

²⁵⁰ Commission (n 246), 3.1.

²⁵¹ Art 80(1) Directive 2006/48/EC.

Member States' competent authorities.²⁵² The Commission acknowledged that the CRD did not constitute a form of regulation on the operation and conduct of CRAs. Consequently, it encouraged European national competent authorities to ensure that CRAs respected the criteria laid down to be recognised as ECAIs and to monitor whether CRAs performed their role as ECAIs in accordance with the CRD provisions.²⁵³ Finally, the main objective of the third piece of legislation is to increase competition and ensure consumers' protection in investment services.²⁵⁴ In relation to CRAs, the Commission stressed the applicability of the MIFID provisions concerning conduct of business and organisational requirements. In particular, the provisions on conflicts of interest would apply to CRAs in case the agencies provided investment services to clients that fell under the MIFID.²⁵⁵ This framework was considered to be sufficient for the rating sector. Hence, there was no need to discuss new legislation.²⁵⁶ When the financial crisis started in 2007 the European stance towards the self-regulation model went into reverse. The Commission became an active player in the ensuing regulatory reforms of CRAs. These culminated in CRA Regulation I, CRA Regulation II²⁵⁷ and CRA Regulation III.

Clearly, both the US and EU systems started scrutinising the operations of the CRAs in the wake of some industry's failures. Initially, they diverged as to the solutions to apply because, at the EU level, the agencies remained unregulated entities until the end of the recent financial crisis. Finally, in the post-crisis regulatory debate all the problems concerning the rating industry, which

²⁵² Art 81(1) Directive 2006/48/EC.

²⁵³ See also Committee of the European Banking Supervisors (CEBS), *Guidelines on the Recognition of External Credit Assessment Institutions* (2006).

²⁵⁴ Commission (n 246), 3.1.

²⁵⁵ *Ibid.*

²⁵⁶ To this end, the European Commissioner Charlie McCreevy stated: 'last year, we told CRAs that they remain "on watch" and will be monitored actively. In this respect, I welcome CESR's report which provides a useful indication for the level of CRAs' compliance with the IOSCO Code. The report confirms that the self-regulation by CRAs functions reasonably well. The Commission will continue to monitor developments in this area, and, in particular, the impact of the new US Act on CRAs which will be operational by next summer', see Commission, '*Internal Market: Commission Welcomes EU's Regulators Report on Credit Rating Agencies*' (2007) IP/07/28; see also Niamh Moloney, '*EC Securities Regulation*' (2nd edn OUP 2008) Ch 8.4, 687.

²⁵⁷ See Regulation (EU) No 513/2011 of the European Parliament and of the Council of 11 May 2011 amending Regulation (EC) No 1060/2009 on credit rating agencies (2011) OJEU L145/30.

were to be tackled through specific legislative interventions were listed. Among these, a new one was put on the regulatory agenda: over-reliance on external credit ratings. Previous corporate scandals in which the CRAs played a role did not give regulators any signal of the existence of over-reliance. The 2007-2009 crisis' related events raised for the first time the awareness of the phenomenon and its negative implications. Consequently, over-reliance on external credit ratings must be identified and discussed only in the context of the recent global financial crisis.

II.6.4 The sources of over-reliance: rating-based regulation versus the structure finance sector

II.6.4.1 Rating-based regulation

Having clarified that the over-reliance on external credit ratings is a phenomenon regulators and policymakers started taking into consideration in the wake of the 2007-2009 financial crisis, it is now to be verified whether the rating based regulation is the only context which can increase the risk of over-reliance, or whether other areas or situations should also be taken into consideration.

Firstly, the FSB brought to attention the risk of over-reliance deriving from the hardwiring of credit ratings into legislation and regulatory frameworks. In this case, credit rating references can discourage investors and market participants from undertaking their own due diligence and credit risk assessment. In practice, legislation that requires the investment grade rating provided by the CRAs, coupled with the fact that no other credit risk assessment tools are referred to as alternatives to credit ratings, may be misleading for investors and market participants. Legislative reference to investment grade ratings may be interpreted by investors and market participants as 'a seal of approval' of credit quality on the part of regulators.²⁵⁸ In other words, the FSB warned against the risk that investors and market participants may believe that the use of credit ratings by regulators can give them an imprimatur as guarantees of creditworthiness. As a result, investors and market participants would rely on credit ratings as the exclusive benchmark to assess credit risk and would

²⁵⁸ FSB (n 175).

not perform their own due diligence and credit risk assessment in addition to the credit quality analysis provided by the CRAs. In this context, over-reliance would find its source in the credit rating references incorporated in legislation and regulatory frameworks; and would materialise through a negligent behaviour by investors and market participants.

II.6.4.2 The structured finance sector

However, over-reliance is not exclusively traced back to the hardwiring of credit ratings into legislation and regulatory frameworks. In the FSB report it is stated that over-reliance on credit ratings was particularly acute in the structured finance sector during the years leading up to the recent financial crisis.²⁵⁹ With regard to the structured finance sector, it is commonly acknowledged that investors misunderstood the specificities and limits of the structured finance ratings. In essence, they wrongly assumed that the ratings assigned to structured products such as RMBSs and CDOs covered market risk and liquidity risk in addition to credit risk.²⁶⁰ To understand these limits and why the structured finance sector is deemed of posing a serious risk of over-reliance, it is necessary to consider how the structured finance process works, the characteristics of the structured finance rating and the investors' approach in analysing the risks inherent to these products during the pre-crisis period.

To begin with, the mechanisms underlining a structured finance operation and the importance of the role played by the CRAs can be understood by dividing the transaction into three fundamental stages: 1) pooling of assets; 2) tranching of liabilities; and 3) transfer of the credit risk of the collateral asset pool from the originator to a stand-alone entity denominated special purpose vehicle (SPV).²⁶¹ Pooling involves the collection and assemblage of credit-sensitive assets in a portfolio. These assets are usually diversified: cash instruments such as residential mortgages, credit

²⁵⁹ Ibid, 36.

²⁶⁰ European Securities and Markets Authority (ESMA), 'The Role of Credit Rating Agencies in Structured Finance-Consultation Paper' (2008).

²⁶¹ See Ingo Fender & Janet Mitchell 'Structured Finance: Complexity, Risk and the Use of Ratings' (2005) BIS Quarterly Review, 67.

card receivables, loans, bonds and synthetic exposures such as credit default swaps (CDS). The portfolio of assets is then sold to the SPV which will finance the purchase by issuing claims backed by the cash flows deriving from the assets.²⁶² The SPV's balance sheet must be separated from the originator's balance sheet because the de-linking of credit risk from the originator to the SPV is only effective through a 'true sale' between two different entities, namely the originator and the SPV. As said, the SPV issues claims for financing the purchase of the portfolio. Where the SPV issues claims that are not prioritised or simply claims to the payoff of the underlying portfolio, the structure would be defined as a pass-through securitisation.²⁶³ On the other hand, if the claims were prioritised according to different classes of risk, then the operation would be regarded as one of structured finance. Therefore, the creation of a range of securities with different cash flow risks, known as tranches, is regarded as the feature which distinguishes a structured finance operation from a pass-through securitisation.²⁶⁴ The tranching process creates seniority ordering among the different tranches of securities divided into senior, mezzanine and equity. Senior tranches are structured in such a way as to be immune from default losses which shall be finally absorbed by the riskier tranches, namely, the mezzanine and equity.²⁶⁵

The process is complex and is characterised by the interplay of different participants other than the originator and the SPV. CRAs play a significant role within a structured finance operation. A structured finance rating does not have any different meaning than the rating applied to traditional debt instruments such as corporate or sovereign bonds: a structured finance rating is an opinion on the probability that the cash flow from the underlying pool of assets can service the claims associated to a particular tranche.²⁶⁶ The CRAs' analysis, like in corporate and sovereign

²⁶² Joshua D Coval et al, 'The Economics of Structured Finance' (2008) Harvard Business School WP 09-060, 2

²⁶³ Janet Mitchell, 'Financial Intermediation Theory and Structured Finance' (2005) National Bank of Belgium.

²⁶⁴ Peter De Marzo, 'The Pooling and Tranching of Securities: A Model of Informed Intermediation' (2004) 18 RFS 1, 35.

²⁶⁵ Jeffrey Meli & Peter Rappoport, 'Tranched Credit Relative Value' (2003) JP Morgan Fixed Income Quantitative Strategy; Arnoud Boot & Anjan Thakor, 'Security Design' (1993) 48 JF 4, 1349.

²⁶⁶ Fitch, 'Inside the Ratings: What Credit Rating Means' (2007).

bonds, is concerned exclusively with the credit risk and does not cover any other risk such as market or liquidity risk. Meaning and objective are the same. However, several studies highlight a peculiarity of structured finance ratings which distinguish them from traditional ratings, that is to say, the ‘ex ante’ nature of structured finance rating.²⁶⁷ Basically, in the structured finance process arrangers usually pre-structure the deals by referring to the CRAs’ models and then interact with CRAs in order to increase the size of the tranches with the highest ratings or reduce the cost/quality of assets used to reach a high rating tranche or lessen the level of credit protection required for a certain tranche.²⁶⁸ This is referred to as the ex ante or targeted nature of the structured finance ratings as opposed to traditional bond ratings where pre-rating feedback to issuers and targeted ratings have a minor role. There is, hence, a conceptual difference between structured and traditional credit ratings.

Furthermore, a difference in performance is highlighted by some empirical studies. On the one hand, structured finance ratings seem to have more stability than corporate bond ratings during economic upturns but, on the other hand, they have a higher risk of severe downgrade than corporate bond ratings during economic downturns.²⁶⁹ Specifically, the pooling and tranching techniques mitigate exposure to idiosyncratic risks of each individual asset. Consequently, it is accepted that the average credit performance of the underlying pool of assets is less volatile and more predictable in times of economic upturns than the individual assets. However, the benefits of diversification are lost when, because of economic pressures that influence the credit quality of

²⁶⁷ FSB (n 175).

²⁶⁸ ESMA (n 260).

²⁶⁹ Pierre O Cousseran et al, ‘Non Credit Risks in Structured Finance’ (2004) Banque de France/Reserve Bank of Australia/European Central Bank/ Bank of Japan; William Perraudin & Astrid Van Landschoot, ‘How Risky are Structured Exposure Compared with Corporate Bonds?’ in W Perraudin (ed), *Structured Credit Products: Pricing, Rating, Risk Management and Basel II* (Risk Books 2004); John Hull et al, ‘The Relationship Between Credit Default Swap Spreads, Bond Yields and Credit Rating Announcements’ (2004) JBF 28, 2789; James L Wansley et al, ‘Institutional Bond Pricing and Information Arrival: The Case of Bond Rating Changes’ (1992) 19 JBFA 5, 733.

many assets, correlated defaults in the asset pools occur with strong cliff effects to the rating of structured products.²⁷⁰

All the actors involved in the structured process, in particular, originators, CRAs and investors need to understand the default risk embodied in the collateral pool as well as the other risks that are unrelated to defaults in the underlying collateral pool but which affect the creditworthiness of the tranches arising from the transaction structure.²⁷¹

II.6.4.2.1 Over-reliance on the structured finance ratings

In the years leading up to the recent financial crisis, the increasing innovation in the structured finance market increased the complexity and sophistication of structured products. As a result, investors were unable to fully gauge the mechanics and risks associated to these products and they ultimately relied on the credit ratings provided by the CRAs. The triple A ratings assigned to these products became their first and unique ‘port of call’ for their investment decisions. However, their approach to the credit ratings was flawed. Not only were they unable to understand the characteristics of the structured finance ratings vis-à-vis the credit ratings assigned to other debt instruments, but they also misinterpreted the limits of the structured finance ratings. As mentioned, they believed that these could cover market and liquidity risk in addition to credit risk. The Committee of European Securities Regulators (now ESMA) summarised their risk analysis approach as follows: ‘it’s [the structured product] AAA rated so it’s safe, valuable and liquid’.²⁷²

This raises the question of how this misleading approach could happen. According to the International Organization of Securities Commissioners (IOSCO), this may find an explanation in

²⁷⁰ Joseph Mason & Josh Rosner, ‘Where Did the Risk Go? How Misapplied Bond Ratings Cause Mortgage Backed Securities and Collateralized Debt Obligation Market Disruptions’ (2007) Drexel University WP; John Ammer & Nathanael Clinton, ‘Good News is No News? The Impact of Credit Rating Changes on the Pricing of Asset-Backed Securities’ (2004) International Finance Discussion Paper No 809 Federal Reserve Board.

²⁷¹ See Sam Jones et al, ‘Moody’s Error Gave Top Ratings to Debt Products’ *Financial Times* (London 20 May 2008).

²⁷² ESMA, ‘Second Report to the European Commission on the Compliance of Credit Rating Agencies with the IOSCO Code and the Role of Credit Rating Agencies in Structured Finance’ (2008) CESR/08-277 paras 90, 206.

the investors' ignorance on the type of products they were buying, on their risk characteristics and the specificities of the rating assigned to them, as well as to laxness in undertaking own risk analysis on the products: 'this happened either because they were lax or ignorant'.²⁷³

II.6.5 Closing the gap: defining over-reliance on external credit ratings

These two adjectives, 'lax or ignorant', are the basis for drawing a comparison between the phenomenon of over-reliance in the context of the rating-based regulation and in the context of the structured finance sector. Taking position from their literal meaning, while the former refers to a lack of care, attention or control, the latter denotes a lack of knowledge, understanding or information about something. Putting these meanings into the context of over-reliance, it can be shown that laxness is more pertaining to over-reliance arising from the rating-based regulation, whereas ignorance characterises the over-reliance in the structured finance sector. In other words, the reasons behind the risk of over-reliance arising from the structured finance sector are different than the ones behind the over-reliance deriving from the rating-based regulation. This would bring to attention two types of over-reliance according to whether we refer to the rating-based regulation or to the structured finance sector.

In the legislative context, over-reliance is ascribed to the investors' negligence in respect of undertaking own due diligence and credit risk assessment. This is due to a misperception of the role assigned by regulators to credit ratings into legislation. Generally speaking, the 'seal of approval' interpretation does not necessarily imply ignorance on the characteristics and limits of the products and, above all, of the credit ratings. Market participants who invest in highly rated products under legislative requirements may be aware of the limits of credit ratings; especially, if they invest in corporate debt instruments whose risk characteristics may be gauged more easily than a complex, highly sophisticated, structured product. In an over-reliance perspective, they would not say, 'it's AAA rated so it's safe, valuable and liquid'. Rather, they might say, 'it's AAA rated and this is

²⁷³ IOSCO, 'The Role of Credit Rating Agencies in Structured Finance Markets-Final Report' (2008).

required by regulators; hence, I am safe and sound and nothing else is needed'. Eventually, this reasoning does not necessarily overestimate the limits of credit ratings; it leads them to neglect their own due diligence and credit risk assessment which should be additional or complementary to the risk analysis provided by the CRAs. In essence, they are not incentivised to undertake their own credit risk assessment, even though they may have the capacity and possibility.

By contrast, in the structured finance sector, if they do not have a clear understanding of the products and of the specificities of their credit ratings, they will not have the capacity or the possibility of conducting their own due diligence and credit risk assessment. A lack of understanding of the products an investor would like to buy, means not knowing its features and risk characteristics; in turn, not knowing the financial product to be purchased implies ignorance. This ignorance may finally lead to a mischaracterisation of the limits of the credit ratings as it happened before the outbreak of the recent financial turmoil. Clearly, in the structured finance sector, these problems stem from the lack of necessary information whether on the characteristics of the structured products or on the specificities of the credit ratings assigned to them. Importantly, increasing the level of the investors' understanding of the characteristics of the structured finance ratings through more disclosure from the part of CRAs is part of the current regulatory strategies to reduce over-reliance in the structured finance sector in the EU²⁷⁴ and the US.²⁷⁵ This goes hand-in-hand with more disclosure on the characteristics of the structured finance products by the issuers. Indeed, the higher the level of sophistication of the structured finance products, the higher the risk that the purchasers will not have a clear understanding of them. This, in turn, will increase their ignorance and the risk that they may perceive a triple A as a guarantee of good investments. In this context, their over-reliance on credit ratings seems to be the natural result of their lack of necessary information. Therefore, a lack of their own due diligence and credit risk assessment is not a matter of negligence, but a matter of impossibility because of a lack of information.

²⁷⁴ Art 8(b) and Art 8(c) of CRA Regulation III.

²⁷⁵ Steven Mc Namara, 'Informational Failures and Structured Finance and Dodd Frank's Improvement to the Regulation of Credit Rating Agencies' (2012) 17 FJCF 3, 667.

In light of this discussion, a line of demarcation can be finally drawn between two types of overreliance: the first stems from the use of credit ratings by the public sector; and the second relates to the structured finance sector. In the first area, over-reliance is the investors' and market participants' misunderstanding of the role of credit ratings in financial regulation which finally leads them to be negligent in conducting their own credit risk assessment. In the second area, over-reliance originates from the lack of necessary information on the products and their ratings. This makes them unable to undertake their own due diligence and credit risk assessment and may lead them to rely exclusively on credit ratings for the assessment of credit risk. Clearly, in this context credit ratings are not the 'seal of approval' of creditworthiness by regulators, but the 'seal of creditworthiness' by CRAs.

Having distinguished two areas which carry the risk of over-reliance, it is possible to summarise the result of the present analysis into a definition of over-reliance and, thus, close the definitional gap in the FSB report. Over-reliance on external credit ratings is a behavioural phenomenon which may originate from two contexts, that is, the rating-based regulation and the structured finance context. Within the hardwiring of credit ratings in financial legislation, over-reliance is the misperception of the roles of credit ratings in legislation and regulatory frameworks. This misperception results in the investors' and market participants' negligence in conducting their own due diligence and credit risk assessment. In the structured finance sector, over-reliance is the mischaracterisation of the nature and limits of the credit ratings. This depends on the impossibility of conducting one's own due diligence and credit risk assessment due to a lack of necessary information on the products and their ratings. Different regulatory approaches to tackle the phenomenon corroborate the existence of the two types of over-reliance.

II.7 REGULATORY APPROACHES AT THE NATIONAL, INTERNATIONAL AND REGIONAL LEVELS TO ADDRESS OVER-RELIANCE ON CREDIT RATINGS

II.7.1 Delimiting the scope of the analysis

As discussed, the 2007-2009 financial crisis and the European sovereign debt crisis highlighted the systemic relevance of credit rating downgrades. In particular, cliff-edge effects and herd behaviours associated to downgrades can threaten the financial stability at the global level. These, in turn, are exacerbated by over-reliance on external credit ratings by investors and market participants. As elaborated, over-reliance is a behavioural phenomenon according to which external credit ratings are referred to by investors and market participants as the exclusive benchmark for assessing creditworthiness. Within the post-crisis debate on the CRAs, the risk of over-reliance came under the regulatory spotlight. The FSB introduced the phenomenon and gave warning about its effects. In particular, because of over-reliance investors and market participants are not incentivised to undertake their own due diligence and credit risk assessment. In the previous paragraphs, the hard-wiring of credit ratings into legislation and regulatory frameworks, as well as the structured finance sector have been earmarked as over-reliance risky areas. Different approaches have been elaborated to reduce the risk of over-reliance according to whether the risk originates from the former or latter sector. This research deals with the risk of over-reliance deriving from the rating-based regulation and the consequent approaches to mitigate the phenomenon. In this context, recommendations were first elaborated at the international level. Not only did the FSB spot the phenomenon, but it also encouraged authorities to check the role they assigned to credit ratings in regulations and supervisory rules. The FSB underlined that credit rating references should not facilitate undue reliance on credit ratings and should be consistent with the aim of having investors perform an autonomous judgement of risks and proper due diligence.²⁷⁶ The authorities' task was hence concerned with reviewing whether investment grade rating requirements in regulations and supervisory policies could be perceived by investors and market participants as an official

²⁷⁶ FSB (n 175).

recognition of creditworthiness; and, for this reason, act as a disincentive to perform additional due diligence and credit risk assessment.²⁷⁷

Significantly, the tie between the public sector and the credit rating was no longer as strong as it was before the recent financial crisis. The risk of over-reliance and the suggestions brought forward by the FSB to reduce it marked the beginning of a new relationship between regulators and credit ratings. Accordingly, it is now to be assessed how the competent authorities at the national, international and regional levels acted on the FSB's advice. In this respect, the analysis will take position from the approaches elaborated by the US regulators, the FSB and the EU Institutions. These are the only three macro areas in which it is possible to take stock of the progress to reduce the risk of over-reliance from the moment the FSB warned against it.

II.7.2 US level: Section 939A of the Dodd Frank Act: Reliance versus over-reliance

To start with the US, in line with the FSB inputs, the SEC launched its consultations. Consistency with the FSB advice can be seen through the examination of the Releases issued between 2008 and 2009. These were concerned with verifying whether in the SEC's rules and forms the requirement to use credit ratings provided by NRSROs could place an official seal of approval on credit ratings that were detrimental to the investors' independent due diligence and credit risk analysis.

Through Release No 34-58070 of 2008 the SEC sought views from the users of credit ratings as to the opportunity to eliminate credit rating references from its rules and replace them with alternative tools for measuring credit risk.²⁷⁸ Some significant aspects can be discussed in relation to this approach. Firstly, and in accordance with the FSB guideline, the SEC proposed a review which was only finalised to identify those credit rating references which could induce

²⁷⁷ Ibid, 38: the FSB underlined the embedment of credit ratings into legislations and regulatory frameworks at the international and national levels and remarked how such official recognition in regulations or supervisory policies may have plaid a role in encouraging investors' over-reliance on ratings.

²⁷⁸ SEC, 'References to Ratings of Nationally Recognized Statistical Rating Organization' (2008) Release No 34-58070, File No S7-17-08.

uncritical reliance on external credit ratings.²⁷⁹ This means that the review had to identify and select specific credit rating references. Secondly, the SEC went beyond the FSB recommendation. The FSB did not suggest any replacement of credit ratings with alternatives. Consequently, as it will be discussed below, the SEC translated the FSB recommendation into an approach aimed at replacing the credit ratings with valid alternatives. As will be shown below, this aspect would have influenced the successive strategies on over-reliance.²⁸⁰ Finally, the SEC asked the users of credit ratings to provide their view on the approach it brought forward. Even though this approach sounds like a downsize of the role of credit ratings into financial legislation, it can be said that the SEC still showed consideration for the utility of credit ratings into its regulations. In fact, at the time in which Release No 34-58070 was issued, CRARA was the only piece of legislation for the regulation of the rating industry. CRARA regulated only selected aspects of the rating industry acknowledging the importance of credit ratings in financial markets.²⁸¹ Accordingly, any consultation launched by the SEC to change its rating regulation also had to refer to the purpose of CRARA to protect investors and improve the operations of the rating industry.²⁸² For these reasons, in relation to over-reliance, the SEC could select between ‘good and bad’ credit rating references in its regulations.²⁸³ As the review and possible removal was only concerned with specific credit rating references, it can be said that credit ratings were still a component of the authority’s regulatory programme. Those references not carrying any risk of over-reliance had to be maintained. Among other things, this was

²⁷⁹ This is acknowledged in Release No 34-58070 in which reference is also made to the recommendations issued by the President’s Working Group on Financial Markets.

²⁸⁰ The removal of the credit rating references would have then been translated into principles and rules by the Financial Stability Board (FSB) and the European Commission in its reforms of CRAs, see below sections II.7.3 and II.7.4.

²⁸¹ Utzig (n 243).

²⁸² Release No 34-58070 was, in fact, the third rulemaking initiative that the SEC launched in furtherance of CRARA. The first was aimed at reducing the potential of conflict of interest in the credit rating process, while the second aimed at improving investors’ understanding of the risk characteristics of structured finance products, see SEC ‘Press Release’ (2008) No 2008-110.

²⁸³ See SEC (n 278), 4: ‘Consistent with these [FSB] recommendations, the Commission is considering whether the inclusion of requirements related to ratings in its rules and forms has, in effect, placed an ‘official seal of approval’ on ratings that could adversely affect the quality of due diligence and investment analysis. The Commission believes that today’s proposals will reduce undue reliance on credit ratings and result in improvements in the analysis that underlies in investment decisions’.

also consistent with the FSB recommendation to be aware of the important role of credit ratings in investment and risk management frameworks. In this sense, the FSB urged careful consideration of the implications of any possible changes to regulations and supervisory rules.²⁸⁴

Nonetheless, it must be emphasised that it remains untested whether the SEC was able to identify the credit rating references which can cause ‘undue reliance’ on external credit ratings by investors and market participants. It is unquestionable that the SEC was initially consistent with the FSB guidelines concerning the problem of over-reliance; but finally there are not results permitting evaluation of which credit rating references the SEC identified and selected as over-reliance risky. This impossibility finds an explanation in another significant change in the relationship between the public sector and the credit ratings. This change has been marked through the introduction of the Dodd Frank Act which President Barack Obama signed in 2010. The Dodd Frank Act deals with almost every part of the US financial system and regulates the rating industry through several provisions as well.²⁸⁵ Among the provisions incorporated into the Dodd Frank Act, Section 939A confirms the view that the outcomes of the initial investigation that the SEC conducted with regard to the danger of over-reliance have remained ineffective. Titled ‘Review of Reliance on Ratings’, Section 939A resulted from a bipartisan agreement between the Republican and Democratic Senators in the US Congress.²⁸⁶ According to Section 939A, all the US Federal agencies are required to review the references to credit ratings in their legislation and then remove these references to substitute them with alternative standards of creditworthiness.²⁸⁷ The contents of this provision are quite revolutionary in the sense that they seem to put an end to the relationship between the US regulators and the credit ratings. In fact, Section 939A states that the current rating references have to be eliminated and this means that the tie between the public sector and the credit

²⁸⁴ FSB (n 175), 39.

²⁸⁵ See also Marc Labonte, ‘The Dodd-Frank Wall Street Reform and Consumer Protection Act: Systemic Risk and The Federal Reserve’ (2010) Congressional Research Service, 26.

²⁸⁶ Christopher McBride, ‘Investing in Securities Without Relying on External Credit Ratings’ (2013) <<http://www.communitybankingconnections.org/articles/2013/Q2/Investing-in-Securities-Without-Relying-on-External-Credit-Ratings.cfm>> accessed 2 July 2013.

²⁸⁷ Section 939(a) of the Dodd Frank Act: *Review of Reliance on Ratings* <<http://www.sec.gov/about/laws/wallstreetreform-cpa.pdf>> accessed 2 July 2013.

ratings must be broken. As will be discussed in greater detail, the overall approach sounds like a prohibition to include credit ratings in future regulations. In light of this, it can be argued that the initial SEC's investigative path which aimed at selecting only those credit rating references which could create over-reliance has been interrupted by Section 939A of the Dodd Frank Act. In the Releases issued consequently to Section 939A, the SEC acknowledged that it had to deal with a new approach. In essence, it was no longer the case to select between 'good and bad' references and eliminate the 'bad' references, now credit rating references have to be eliminated and alternatives have to be elaborated.²⁸⁸

Section 939A of the Dodd Frank Act represents a significant U-turn in comparison to the aims of the previous proposed review of the credit rating references. Also, it appears not to be in line with the FSB recommendations either. These were specifically related to over-reliance, while Section 939A deals with reliance on credit ratings. At this stage, it may be argued that the US regulators initially had the intention to tackle over-reliance and they ultimately ended up dealing with reliance. Indeed, all the releases issued in relation to Section 939A no longer mention the risk of the 'seal of approval'. Rather, they are mainly concerned with implementing the letter of the section, in particular, with regard to the search of an alternative to credit ratings which is mandatory.²⁸⁹

The context of Section 939A raises the question of whether over-reliance is still a matter of concern for the US regulators and whether an approach to deal with it can be identified at the US level. To answer this question, the analysis has to be necessarily circumscribed to Section 939A of

²⁸⁸ See SEC, 'Security Ratings' (2011) Release No 33-9186, No 34-63874, File No S7-18-08: 'The amendments we are proposing today are substantially similar to those proposed in 2008. Through both the 2008 comment period and the 2009 comment period we received 49 comment letters. As discussed in more details below most of the commentators were opposed to the proposal to amend Form S-3 and other related forms and rules. However, because the Dodd Frank Act now provides that we remove references to credit ratings from our regulations we are re-proposing these amendments to solicit comment on whether the proposed approach is appropriate, what the impact on issuers and other market participants would be and whether there are alternatives that we should consider'.

²⁸⁹ Ibid: 'Similarly the legislative history indicates that Congress, in adopting Section 939A intended to reduce reliance on credit ratings. In today's proposal we seek to reduce our reliance on credit ratings for regulatory purposes'.

the Dodd Frank Act. In fact, this rule deals with the source of over-reliance, that is, the hardwiring of credit ratings into legislation. It is therefore to be collocated within a debate on the use of the credit ratings by the public sector which the FSB has initiated in the wake of the recent crisis. With this in mind, it is to be verified whether this rule has any relation to the phenomenon which may derive from the hardwiring of ratings into legislation, namely over-reliance on external credit ratings, or it is exclusively concerned with the use of credit ratings by the public sector. To this end, it is desirable to clarify the meaning and purpose of Section 939A.

In the ‘Oversight of the Credit Rating Agencies Post Dodd Frank’ 2011 report it is stated as follows:

[...] there was broad agreement that investors, because of the government’s explicit requirement of ratings, had become basically over-reliant on the rating agencies and failed to do their due diligence. And so by having the government require these ratings, investors believed that ratings had a stamp of approval from the Federal Government. In order to help decrease the dependence on a few organisations to have such an outsized influence in our financial system a bipartisan proposal [Section 939A] was added to the Dodd Frank Bill that required regulators to cease their reliance on credit ratings and instead adopt their own standard of credit worthiness.²⁹⁰

This statement is the rationale behind Section 939A of the Dodd Frank Act. By reflecting over it, the definition of over-reliance stemming from the hardwiring, provided in the previous paragraph, can be identified. In other words, the statement refers to the misperception of the role of credit ratings in legislation by investors, which leads them to be negligent in their own credit risk assessment and rely solely on credit ratings. This is over-reliance on credit ratings and the approach to eliminate the related risk results in the bipartisan proposal which has been ultimately set out in Section 939A.

From the regulators’ statement it can be understood that Section 939A deals with over-reliance by tackling the governmental reliance on external credit ratings. It is no longer the case to

²⁹⁰ US House Hearing, ‘Oversight of the Credit Rating Agencies Post-Dodd Frank, Hearing Before the Subcommittee on oversight and Investigations of the Committee on Financial Services’ (2011) US House of Representative one Hundred Twelfth Congress First Session.

select between ‘good’ and ‘bad’ credit rating references as initially suggested by the FSB. The misperception of these references as a stamp of approval and the consequent investors’ negligence stems from the governmental use of credit ratings and that is the primary area of intervention. Section 939A is entitled ‘reliance’ and not ‘over-reliance’ because it deals with the source of the latter. Consequently, over-reliance is still relevant at the US level and its reduction is based on the approach set out in Section 939A. This rule should not be regarded as explicitly referring to over-reliance. It explicitly refers to its source and, thus, it represents the approach which is supposed to reduce the risk of over-reliance in the private sector by eliminating the public sector’s reliance on credit ratings.

From the initial recommendations issued by the FSB with regard to the risk of over-reliance deriving from the embedment of credit ratings in legislation and regulatory frameworks, Section 939A marked a significant change. There was an initial consistency with the FSB advice to select only those credit rating references which could cause uncritical reliance by investors and market participants. Then, the issuance of Section 939A evolved the initial approach into one exclusively based on ending governmental reliance on credit ratings by the public sector and de-emphasising the role of credit ratings in legislation. This approach is also regarded as suitable to tackle the risk of over-reliance in the private sector. Consequently, over-reliance can be implicitly deduced from the approach which explicitly refers to its source, namely: regulatory reliance on credit ratings.

II.7.3 The FSB principles for reducing reliance on credit ratings: searching for over-reliance

Interesting developments can be discussed at the international level as well. To this end, the analysis is concerned with the approach that the FSB issued almost contextually to Section 939A of the Dodd Frank Act. In October 2010, the FSB issued a body of guidelines entitled, ‘Principles for Reducing Reliance on Credit Ratings’.²⁹¹ Before discussing the approach resulting from this set of principles, some preliminary considerations are in order. Firstly, a comparison can be made with

²⁹¹ FSB, ‘Principles for Reducing Reliance on Credit Ratings’ (2010).

Section 939A. The FSB Principles and the US rule were issued quite close together and, thus, some common features can be highlighted. Like Section 939A, the FSB Principles appear to refer exclusively to the regulatory reliance on external credit ratings. In essence, regulatory reliance should be the main problem to be tackled and in relation to which the set of principles has been elaborated. In fact, the set is entitled ‘principles for reducing reliance on credit ratings’ and not ‘principles for reducing over-reliance on credit ratings’. In light of this, it is to be wondered which relevance over-reliance can have within the international body which, at first, introduced this behavioural phenomenon and recommended interventions with regard to the hardwiring of credit ratings in legislation and regulatory frameworks. In other words, the investigation to be conducted is not dissimilar to the one concerning Section 939A.

In the previous paragraph it has been verified that the approach set out in Section 939A implicitly refers to over-reliance to the extent that it is supposed to reduce this by de-emphasising the regulatory reliance on external credit ratings. Now, in the context of the FSB principles for reducing reliance on credit ratings, it is to be assessed whether there is explicit or implicit reference to over-reliance. In this respect, it is desirable to analyse the purpose and contents of the set of principles.

II.7.3.1 Rationale and purpose of the FSB set of principles

In the explanatory notes to the set of principles, the FSB refers to the need to reduce the cliff-edge effects associated to downgrades and the potential for herd-behaviours. As explained above, the hardwiring of credit ratings into legislation and regulatory frameworks increases this possibility. Specifically, according to the language used by the FSB, the hardwiring of credit ratings in legislation is the source of mechanistic and parallel reliance on credit ratings.²⁹² Essentially, it is the source of what has so far been identified as over-reliance or market over-reliance (MOR).²⁹³ It must be noted that the FSB does not detail or provide any definition of mechanistic and parallel reliance.

²⁹² Ibid.

²⁹³ Masciandaro (n 34).

Another definitional gap is therefore to be addressed. To briefly anticipate what this research will remark upon in the next parts, the absence of definitions is a concrete problem with which also the European competent supervisory authorities had to deal with at the end of 2013, while implementing the normative approaches set out in the EU regulation of the CRAs to reduce over-reliance on the credit ratings. Indeed, their problem was concerned with the elaboration of a common definition of ‘mechanistic and parallel’ reliance since the European institutions endorsed the expression from the FSB but did not clarify its meaning.²⁹⁴ At this stage of development of the present research, a general definition can be set out and then re-discussed in connection with the analysis of the status of implementation of the anti-over-reliance strategies in the next parts.

The meaning of this expression can be understood by referring to some of the situations highlighted in the previous paragraphs. As seen, asset managers are required to hold in their portfolio investment grade instruments. In the event of downgrades of these instruments, if they rely exclusively on the rating news and, consequently, a dramatic sale of debt instruments takes place, this can be regarded as a mechanistic reliance on credit ratings. In addition, if other investors and market participants will be doing the same simply because they are biased by the previous investors’ conduct, their behaviour can be regarded as parallel. Both mechanistic and parallel reliance clearly refers to cliff-edge effects and herd behaviours. These phenomena are exacerbated when credit ratings are taken at face value with no complementary, independent analysis. This reasoning goes back again to the phenomenon of over-reliance on external credit ratings, according to which credit ratings become the primary and exclusive benchmarks to assess creditworthiness.

II.7.3.2 The FSB two-pronged approach: contents and reference to over-reliance

To cease or reduce this potential, it is necessary to intervene at the source, that is to say, rating-based regulation. In turn, this implies stopping regulators from including credit ratings in financial regulations. This is the rationale behind FSB Principle I. According to FSB Principle I, standard

²⁹⁴ See Chapter 3, section III.4, para III.4.1.

setters, regulators and policymakers are required to review references to credit ratings in their standards and regulations and, where appropriate, replace them with alternative standards of creditworthiness.²⁹⁵ FSB Principle I is set up as the first level of the approach elaborated by the FSB. Basically, the overall approach is a strategy to be put into practice through two intertwined levels. The first level is incorporated in FSB Principle I and the second in FSB Principle II.²⁹⁶

The second principle requires investors and market participants to undertake their own credit risk assessment and due diligence and not to rely solely or mechanistically on credit ratings.²⁹⁷ The intertwine between the two levels of the FSB approach can be seen in the fact that the second level can be implemented consequently to the development of the first level: once credit rating references are removed and replaced by alternative standards of creditworthiness, investors and market participants will be more independent from credit ratings and will prioritise their own due diligence and credit assessment.²⁹⁸

The contents of the two FSB Principles have a relation with over-reliance on external credit ratings. Over-reliance stemming from the embedment of credit ratings into regulations may discourage market participants from doing their own due diligence and credit risk assessment. In this respect, the first level of the FSB approach intervenes at the source of over-reliance, while the second level deals with those who risk over-relying because of the rating-based regulation. Based on this, it can be claimed that FSB Principle II is the specific provision on over-reliance. Indeed, over-reliance stems from the hardwiring but it is finally materialised through the conduct of investors and market participants. Therefore, another rule encouraging an independent, more autonomous, credit risk analysis must be laid down in addition to the one prescribing the deletion of the credit rating references; and this is FSB Principle II.

²⁹⁵ See FSB Principle I, in the explanatory table it is stressed that it is particularly pressing removing credit rating references where they lead to mechanistic responses by market participants.

²⁹⁶ FSB, 'Thematic Review on FSB Principles for Reducing Reliance on Credit Rating Agency Ratings: Interim Report' (2013).

²⁹⁷ FSB Principle II.

²⁹⁸ FSB (n 296).

Compared to Section 939A, the set of principles introduces an essential element, namely the encouragement to undertake independent credit risk analysis. However, the endorsement of the set of principles by the FSB jurisdictions during the G20 Seoul Summit of 2010 has made FSB Principle II a guideline that the US regulators have to take into consideration while implementing Section 939A of the Dodd Frank Act.²⁹⁹ Based on the contents of the two-pronged approach, the strategy seems to be clear: not only should over-reliance be tackled by eliminating the credit rating references, but also through the establishment of stronger internal risk assessment practices so as to reduce the firms' dependence on external credit ratings. Such an approach requires the users of credit ratings to have the capability to conduct their own credit risk analysis. This, in turn, can only be facilitated by having appropriate internal resources with adequate expertise to assess the credit risk that firms are exposed to, disclosure of information as to the approaches and processes applied to the assessment of credit risk, and a thorough check of the adequacy of firms' internal credit assessment processes by supervisors and regulators.

There is a clear incentive to develop internal credit risk assessment capacity and thus to encourage more use of IRB systems. For these reasons the FSB regards the set of principles as the catalyst of a significant change in existing credit risk measurement practices more based on external credit risk assessment than on internal.³⁰⁰ The two-pronged approach involves all the principal actors and users of external credit ratings in the financial markets, from large, sophisticated, financial institutions, including central banks to smaller, less sophisticated financial firms as well as investment managers who have mandates to invest in highly rated financial products. Specifically, central banks are encouraged to avoid mechanistic use of CRA ratings by performing their own judgement on the financial instruments they accept in market operations, both as collateral and as

²⁹⁹Group of Twenty (G20), 'The G20 Seoul Summit Leaders' Declaration, November 11-12' (2010) <https://www.g20.org/sites/default/files/g20_resources/library/Seoul_Summit_Leaders_Declaration.pdf> accessed 19 July 2013.

³⁰⁰ Ibid.

outright purchases.³⁰¹ Banks must have the capability to conduct their own assessment of the creditworthiness of assets and should satisfy supervisors of that capability.³⁰² Similarly, investment managers and institutional investors are required not to refer to CRA ratings as a substitute for an independent credit judgement.³⁰³ In private sector margin agreements, market participants and central counterparties are cautioned against the ‘use of changes in CRA ratings as automatic triggers for large, discrete, collateral calls in margin agreements on derivatives and securities financing transactions’.³⁰⁴ What is more, the FSB document asks issuers of securities to disclose credit-relevant information in order to help investors make independent investment decisions.³⁰⁵ Finally, the FSB expects standard setters and regulators to coordinate their efforts to reduce reliance and share experiences taking into consideration factors such as characteristics of products, market participants and jurisdictions so as to ensure the implementation of the principles within a reasonable timeframe.

Since the initial FSB recommendations, at the international level an approach to reduce over-reliance seems to have been finally included in the set of principles set out by the FSB. Nonetheless, it may be argued that this conclusion is only based on the interpretation of the content of the two-pronged approach. In fact, like Section 939A, the set of principles refers to the reduction of reliance and does not have any explicit reference to over-reliance. Whereas, in the analysis of Section 939A evidence was found of the relevance of over-reliance through the statements of regulators, in the case of the FSB Principles, the investigation is not concluded. It is necessary to go beyond the interpretation of the two-pronged approach. To give concreteness to the assertion that the FSB Principle II refers to over-reliance and, thus, the phenomenon is addressed, first, through the elimination of the hardwiring and, then, through the consequent encouragement of independent

³⁰¹ FSB Principle III.1.

³⁰² FSB Principle III.2.

³⁰³ FSB Principle III.3.

³⁰⁴ FSB Principle III.4.

³⁰⁵ FSB Principle III.5.

credit risk analysis, it is desirable to look at the implementation of these principles among the FSB jurisdictions.

II.7.4 The European CRA Regulation III: confirming over-reliance

At the beginning of this chapter, it has been explained that the private sector relies on credit ratings because they are valid sources of information which help reduce information asymmetries and lower the cost of transaction.³⁰⁶ The public sector relies on credit ratings as well. As discussed, the legislative requirements to invest in highly rated debt instruments finds its reason in the need to avoid investors and market participants to engage in investments which can be excessively risky.³⁰⁷ Seen from this angle, reliance on external credit ratings has a good connotation. However, cliff-edge effects and herd behaviours associated to rating downgrades give reliance a negative connotation. Both cliff-edge effects and herd behaviours are exacerbated by over-reliance on credit ratings.³⁰⁸ In this context, the hardwiring of credit ratings into legislation is regarded as the incentive to over-rely on credit ratings and the source of related problems. Accordingly, regulators started revisiting their approach to credit ratings. The current debate aims at reducing regulatory reliance to curb the impact of cliff-edge effects and herd behaviours and mitigate the potential of over-reliance. To this end, regulators are required to revisit their credit rating references, delete them and replace them with alternative standards of creditworthiness. As detailed, this is the rationale behind Section 939A of the Dodd Frank Act and Principle I of the FSB guidelines to reduce reliance on credit ratings. As explained in the previous paragraphs, such an approach reflects the evolution of the initial debate on over-reliance finally developed through Section 939A at the US level and the set of FSB principles at the international level. Since in this context over-reliance is no longer explicitly mentioned, an investigation has been conducted on the extent to which over-reliance is relevant within the two approaches. In essence, the argument was discussed that reducing

³⁰⁶ Amtenbrink & De Haan (n 46).

³⁰⁷ Dittrich (n 78).

³⁰⁸ Commission Impact Assessment (n 178), 11.

reliance is a one-size-fits-all approach which includes over-reliance as well. In practice, the review and elimination of the credit rating references is an intervention at the source of over-reliance. After this, the risk of over-reliance will be further reduced by giving investors and market participants the opportunity to perform a credit assessment which does not exclusively rely on external credit ratings. As to the US, this hypothesis found confirmation in the regulatory debate concerning the efforts to implement Section 939A of the Dodd Frank Act. While at the international level, FSB Principle II encourages investors and market participants to undertake their own due diligence and credit assessment once FSB Principle I has been translated into practice. Over-reliance is reflected in the second level of the FSB approach. However, FSB Principle II does not explicitly refer to over-reliance nor is it entitled 'over-reliance'. Consequently, at the international level the assertion still remains abstract. Concreteness is to be found by investigating how the FSB Principles have so far been translated into rules by the FSB jurisdictions.

The FSB has declared that the US and EU are the only systems which seem to have undertaken more efforts in the reduction of regulatory reliance.³⁰⁹ As seen, the US issued Section 939A before the FSB Principles. The implementation of this rule as well as the FSB Principles after their endorsement will be discussed in the next chapter. What is needed in the present context is the identification of a rule which explicitly refers to over-reliance through the translation of the FSB two-pronged approach. The investigation is therefore concerned with the progress made at the EU level to implement the FSB Principles.

By looking at the three pieces of the European legislation of CRAs it can be noticed that the European regulators took into consideration the problem of over-reliance as initially encouraged by the FSB. CRA Regulation I did not include any specific provision on over-reliance, only a reference under Recital No 10 in which it is stated that investors should not excessively rely on credit ratings

³⁰⁹ FSB Interim Report (n 296).

and should instead perform their own credit assessment and due diligence.³¹⁰ However, as it is known, CRA Regulation I was the stepping stone towards the current broader regulation encompassing all the issues which were left out: sovereign rating methodologies, CRAs' civil liability and disclosure requirements with regard to the rating of structured finance products.³¹¹ Over-reliance on external credit ratings was included as well.³¹² It can be observed that the consultations and preparatory works leading to the draft of CRA Regulation III reflect a full endorsement of the Principles that the FSB issued meanwhile. In particular, from the impact assessment study of the third piece of CRA regulation, it can be seen that the aim to pursue a strategy conforming to the set of principles was on focus.³¹³ Finally, the transposition of the FSB two-pronged approach can be noticed in Articles 5(a), 5(b) and 5(c) of CRA Regulation III. Both Articles 5(b) and 5(c) implement FSB Principle I. Article 5(b) of CRA Regulation III requires the European supervisory authorities not to refer to credit ratings in their guidelines, recommendations and draft technical standards where these references carry the potential to trigger sole or mechanistic reliance on credit ratings by authorities and market participants. Furthermore, the rule requests the concerned authorities to review and remove, where appropriate, all such references to credit ratings in their existing guidelines, recommendations, and draft technical standards.³¹⁴ This rule mirrors the contents of FSB Principle I even though, as it will be discussed below, a slight

³¹⁰ Recital No 10 CRA Regulation I: 'The users of credit ratings should not rely blindly on credit ratings but should take utmost care to perform own analysis and conduct appropriate due diligence at all times regarding their reliance on such credit ratings'.

³¹¹ Amtenbrink & De Haan, 'Taming the Beast? New European Regulation on Credit Rating Agencies' (2012) 10 JCGEP 4, 450; Deipenbrock, 'Trying or Failing Better Next Time?-The European Legal Framework for Credit Rating Agencies after Its Second Reform' (2014) 25 EBLR 2, 207.

³¹² Recital No 9 of CRA Regulation III: 'Over-reliance on credit ratings should be reduced and all the automatic effects deriving from credit ratings should be gradually eliminated. Credit Institutions and investment firms should be encouraged to put in place internal procedure in order to make their own credit risk assessment and should encourage investors to perform a due diligence exercise'.

³¹³ Commission Impact Assessment (n 178); see also Commission, 'Statement by Commissioner Michel Barnier following the vote in the European Parliament on New European Rules to Regulate Credit Rating Agencies' (2013) MEMO/13/14.

³¹⁴ Art 5(b) of CRA Regulation III; see also Recital No 3 of CRA Regulation III in which it is remarked the endorsement of the FSB Principles and Recital No 5 in which central banks are encouraged, in line with the FSB Principles, to reach their own credit judgment on the financial instruments they may accept both as collateral and as outright purchases.

difference can be identified in the fact that Article 5(b) does not provide any requirement to complement this elimination with the elaboration of new alternatives or standards of creditworthiness. Article 5(c) tasks the Commission with monitoring whether credit rating references in Union law can trigger undue reliance on credit ratings. As the Article specifies further, the purpose is to delete such references by 2020 once appropriate alternatives are found.³¹⁵ Article 5(c) is in line with the first level of the FSB approach and also seems to resemble the contents of Section 939A of the Dodd Frank Act.

The contents of these rules represent the transposition of the first level of the two-pronged approach into the European legislation of CRAs. On the other hand, the transposition of the second level of the approach can be identified in Article 5(a). This rule is entitled ‘Over-reliance on credit ratings by financial institutions’ and requires financial institutions to make their own credit assessment and not solely and mechanistically rely on credit ratings.³¹⁶ This rule represents the explicit approach on over-reliance which draws on the FSB Principle II. In other words, Article 5(a) of CRA Regulation III gives concreteness to the assertion according to which FSB Principle II, though implicitly, refers to and has to be regarded as the approach set out at the international level to tackle over-reliance through the reduction of regulatory reliance on credit ratings. Furthermore, Article 5(a) and its denomination confirms that the reduction of regulatory reliance on credit ratings is the one-size-fits-all strategy which is also supposed to reduce the potential for over-reliance and the possibility of cliff-edge effects and herd behaviours. To complete the picture, reference can also be made out of the context of the European legislation of CRAs. Directive 2013/14/EU, issued in May 2013, has amended the European directives on the activities and supervision of institutions for occupational retirement provision (IORP Directive), on the regulation of undertakings for collective investment in transferable securities (UCITS Directive) and on alternative investment fund

³¹⁵ Art 5(c) of CRA Regulation III. See also Recital No 6 of CRA Regulation III which anticipates the contents of Art 5(c).

³¹⁶ Art 5(a) of CRA Regulation III.

managers (AIFM Directive).³¹⁷ Amendments were applied with respect to over-reliance on credit ratings and, again, they reflect the FSB Principle II to the extent that in order to improve the quality of investment made by IORPs, UCITS and AIFMs, Directive 2013/14/EU states that it is not desirable to rely solely and mechanically on credit ratings or use them as the only parameter when assessing the risk involved in the investment made by IORPs, UCITS and AIFMs.³¹⁸

All things considered, it can now be said that the regulatory debate on over-reliance initiated by the FSB evolved into approaches elaborated at the national, international and regional level. In this context, both the US and the EU have issued their own rules which address the risk of over-reliance by way of dealing with the regulatory use of credit ratings coupled with the encouragement to investors and market participants to perform more autonomous credit quality analysis.

II.8 CONCLUSION

Over-reliance on external credit ratings is a phenomenon which has the effect of discouraging investors and market participants from doing their own due diligence and credit risk assessment. In this part of the thesis the contours of the phenomenon has been sketched by first trying to identify it within the negative aspects associated to credit ratings. This has entailed a preliminary analysis of reliance on credit ratings. Reliance was construed in accordance with the positive aspects commonly associated with the use of credit ratings, such as reduction of information asymmetries and transaction costs. As explained, these are the reasons why the private sector makes wide use of credit ratings. Within this positive connotation, the meaning of reliance on credit ratings has been specified, namely the trust that investors and market participants put on the value of the services provided by CRAs through their credit ratings. As it has been illustrated, this trust is not only circumscribed to the private sector but involves the public sector as well. Even though there are

³¹⁷ Directive 2013/14/EU of the European Parliament and of the Council of 21 May 2013 amending Directive 2003/41/EC on the activities and supervision of institutions for occupational retirement provision, Directive 2009/65/EC on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) and Directive 2011/61/EU on Alternative Investment Funds Managers in respect of over-reliance on credit ratings (2013) OJEU L 145/1.

³¹⁸ Recital No 2 of Directive 2013/14/EU.

some significant differences among legal systems as to the amount of credit rating references in the regulations and legislative frameworks, it has been shown why the credit ratings are an important part of regulatory strategies. Indeed, these aim to protect investors from undertaking excessive risk. The line of demarcation between investment and speculative grade that credit ratings represent through their alphabetical symbols is therefore an efficient tool that regulators use to cap the amount of risk investors can take. All of these aspects have been incorporated into one word, namely the ‘good’ aspects of credit ratings and, thus in the context of the investigative path towards over-reliance, reliance on credit ratings has been interpreted as the ‘good’ aspect of credit ratings.

This has been the platform to question which negative aspects can derive from the use of credit ratings in the private and public sector in addition to the ‘good’. The shift from the ‘good’ to the ‘bad’ aspects of credit ratings has been the further investigative step which has permitted the identification of over-reliance in the context of the cliff-edge effects and herd behaviours associated to credit ratings, which were particularly acute in the period of the recent financial turmoil. The context of the crisis showed how the investors’ reactions to rating changes caused a rethinking of the role of credit ratings, in particular, in regulations. Regulators started to use words such as hardwiring of credit ratings into legislation and regulatory frameworks as well as over-reliance by investors and market participants. With these preconditions the central topic of this research could start being discussed.

It has been argued that the phenomenon of over-reliance was only introduced by the regulators and policymakers but no definition has ever been provided. In an attempt to close this gap, this part of the thesis has first investigated whether there were traces of over-reliance before the 2007-2009 financial crisis and then assessed whether incentives to over-rely can only derive from the hardwiring of credit ratings into legislation or whether other sectors can be regarded as over-reliance risky. In this respect, the following answers have been provided: over-reliance on external credit ratings was for the first time introduced in the regulatory debate at the national, international and regional levels which followed the recent crisis and global recession; the

hardwiring of credit ratings is not the only area which provides incentives to over-rely, the structured finance sector is critical as well. By distinguishing these two sectors, the analysis closed the definitional gap through two definitions of over-reliance according to whether reference is made to the regulatory or structured finance sector. Within the hardwiring of credit ratings in financial legislation, over-reliance is the misperception of the role of credit ratings in legislation and regulatory frameworks. This misperception results in the investors' and market participants' negligence in conducting their own due diligence and credit risk assessment. In the structured finance sector, over-reliance is the mischaracterisation of the nature and limits of the credit ratings. This depends on the impossibility of conducting one's own due diligence and credit risk assessment due to the lack of necessary information on the products and their ratings.

This thesis is concerned with the approaches elaborated to reduce the risk of over-reliance stemming from the embedment of credit ratings into legislation and regulatory frameworks. As to this, the investigation took chart of the evolution of the debate finalised to the elaboration of a regulatory approach. The investigation led to the conclusion that the approach to tackle over-reliance on external credit ratings is based, first, on the reduction of credit rating references in legislation and, secondly, on the parallel enhancement of investors' and market participants' capabilities to conduct their own due diligence and credit risk assessment. Such a conclusion builds upon the evolutionary stages of the debate on over-reliance at the national, international and regional levels.

In the US, the word 'over-reliance' disappeared in the aftermath of the issue of Section 939A of the Dodd Frank Act which deals with reliance on credit ratings and requires the US agencies to review, remove and substitute with valid alternatives credit rating references in their respective legislation. This has raised the question of whether over-reliance was still relevant in the US debate and whether the spirit and letter of Section 939A could be interpreted as referring to over-reliance through reliance. An analysis of the results of the US debate discussing the implementation of Section 939A confirmed this assertion. Within this debate, Section 939A was

also interpreted as referring to the enhancement of independent credit risk analysis to avoid giving exclusivity to credit ratings. It was noticed that this matches the definition of over-reliance that this work had previously elaborated. Hence, there is an implicit reference to over-reliance under Section 939A. In other words, the risk of over-reliance can be reduced by encouraging more independent credit risk analysis. However, this approach means first to intervene at the source of over-reliance, that is, through the reduction of credit rating references. Similarities with the US results have been found at the international level through the analysis of the FSB principles for reducing reliance on credit ratings. Again, the word ‘over-reliance’ disappeared in the approach elaborated by the body which introduced the phenomenon, but it is referred to in the principle of enhancing investors’ credit risk assessment capabilities, though this is not entitled ‘over-reliance’ nor does it mention over-reliance either. This implicit reference to over-reliance needed explicit confirmation. This has been finally found at the EU level through the title of the rules of CRA Regulation III which respectively deal with reliance and over-reliance.

Therefore, based on the results of the investigation conducted in this first part, over-reliance stemming from the hardwiring of credit ratings in regulations results in a negligent behaviour by investors and market participants who neglect any complementary, independent credit risk assessment. The approaches elaborated at the international, national and regional levels aim at tackling this problem by encouraging independent credit risk analysis by intervening at its source, namely, through the repeal of credit rating references in legislation.

CHAPTER III

REGULATORY APPROACHES AGAINST OVER-RELIANCE: IN SEARCH OF EFFECTIVENESS

III.1 INTRODUCTION

More than five years have passed since the beginning of the regulatory debate on over-reliance and the issuance of the FSB set of principles. Normative approaches have been set out as well, primarily in the US and the EU. As illustrated in the previous chapter, these approaches mandate the competent authorities to start a review of the credit rating references in their legislation, recommendations and guidelines. At this stage, it is desirable to take stock of the current status of enactment of the reforms at the national, international and regional levels. In essence, it is necessary to chart the pace of the implementation of the normative approaches; that is, the substantial progress towards the translation of the rules against over-reliance. In fact, the review of the credit rating references is simply the first step of a broader process which also entails the removal of them and the subsequent enhancement of the investors' and market participants' capabilities to conduct a credit risk analysis independent from the credit ratings. In the middle of these two passages, there is also the crucial aspect relating to the elaboration of suitable alternatives to the external credit ratings.

The purpose of this chapter is to analyse and critically assess the results achieved in the translation of such a strategy. The analysis requires concentration mainly on the US and EU levels because they are the only two legal systems which have set out normative approaches, and where an implementation process can be concretely verified. As to the review of the credit rating references, it must not be forgotten that the US and the EU approaches are different in that while the former pursues an identification of all the credit rating references within the US federal agencies' legislation, the latter aims to identify and select only those credit rating references which carry the

risk of mechanistic and parallel reliance. Consequently, different results are likely to be discussed. In this context, the set of principles elaborated by the FSB will be referred to as the basic two-level strategy upon which the implementation progress can be tested among the FSB jurisdictions, in particular in the US and the EU.

In any case, despite some differences, what the US and the EU have in common in their rules is the search of valid alternatives to the credit ratings. Undeniably, the overall progress of the strategy is conditioned by this aspect. Indeed, the search and set up of appropriate alternatives to the credit ratings is vital for the subsequent removal stage to be applied under both Section 939A and CRA Regulation III. Importantly, where there are significant difficulties in finding valid alternatives to the credit ratings, this may mean that the strategy is slowing down in its progress or, to say the worst, that it is doomed to fail. On the other hand, possible amendments imply identifying which type of alternatives have been incorporated into the changed rules, how they work, how investors and market participants will use them, and whether the credit ratings can still play a role in the legislation. Consequently, it is necessary to have an in-depth investigation into the crucial aspect of the alternatives; while, with regard to the credit ratings, it will be desirable to assess the extent to which the possible amendments mark the end of the ratings' hegemony in legislation and, thus, the final rules may be regarded as effective in tackling the risk of over-reliance.

Such an investigation will be essential to move on to the analysis of the progress in the implementation of the second level of the strategy, relating to the enhancement of the investors' independent credit risk analysis. As discussed, the regulatory strategy is intertwined and the development of one level may influence the development of the other. Consequently, in relation to the second level it is to verify the extent to which investors and market participants are effectively capable of conducting a credit risk analysis not heavily influenced by the credit ratings. This raises the question of whether both sophisticated and less sophisticated investors can be independent from the credit ratings and the degree to which those market participants who cannot afford independent credit risk analysis may still rely on credit ratings or be helped by the possible new alternatives.

Accordingly, the analysis which will be pursued in this chapter is structured as follows. After a preliminary interpretation of the US and EU approaches with a comparison between them, the first level of the strategy, in its review and removal stages, will be the focus. In this regard, by identifying the changes and the final rules elaborated by the US and EU competent authorities, the status of the reforms will be illustrated and critically reviewed in relation to the aim of eliminating or mitigating the risk of over-reliance. After that, the analysis will check the progress made in the translation of the second level of the approach. In more detail, by way of referring to some data provided by the FSB it will be possible to have a grasp of the progress, advantages or shortcomings in the translation of the second level. Taking stock of the implementation of both levels of the strategy will provide us with a clear picture of the workability of the rules, and will permit us to discuss further improvements, if needed. Finally, some preliminary conclusions will be drawn in the light of the results which this investigation will bring forward.

III.2 THE OVER-RELIANCE RULES AND THEIR IMPLEMENTATION

III.2.1 Normative approaches in focus

Reducing the amount of credit rating references in legislation and regulatory frameworks, as well as encouraging investors and market participants to undertake more independent credit risk analysis is the approach to be implemented to eliminate the risk of over-reliance on external credit ratings. This framework has been identified in the FSB set of principles for reducing reliance on credit ratings, in Section 939A of the Dodd Frank Act, and in Article 5(a), 5(b) and 5(c) of the EU CRA Regulation III. The US and EU are the two legal systems which have translated this strategy into a normative framework. In other words, in the wake of the post-crisis regulatory debate on the CRAs and on over-reliance on the credit ratings, only the US and the EU have set out specific rules which require intervention on the legislation incorporating credit rating references, and aim at enhancing market

participants' own credit risk assessment capabilities.³¹⁹ Evidently, the US and the EU are the two areas in which it is possible to analyse the level of the progress made in the translation of the rules concerning over-reliance on external credit ratings. Accordingly, an evaluation of the steps that they have taken so far, permits us to assess whether the strategy to reduce over-reliance is workable. Preliminarily, it is desirable to have an understanding of the US and EU rules by discussing them in comparison.

As already mentioned, when the FSB Principles were issued in 2010, Section 939A of the Dodd Frank Act had already been finalised, while at the EU level consultations on the necessary amendments to be applied to CRA Regulation I were still in place and could not be set out in the new CRA Regulation III before June 2013.³²⁰ Chronologically, the US approach is the first, followed by the FSB guidelines; while the EU rules are the most recent. Nonetheless, with the view to comparing the US and EU rules, the FSB principles can be used as the platform to identify similarities and differences between them. In fact, the FSB framework is a set of soft-law, non-binding principles. Since both the US and EU rules have endorsed these guidelines, the FSB two-pronged approach can be taken as the basis to test the US and EU level of implementation of their respective rules on over-reliance. In practice, through a comparison of the US and EU rules it is possible to verify their full or partial alignment with the FSB general strategy. Furthermore, this will clarify whether the implementation process may be regarded as a coordinated effort between the two FSB jurisdictions or an independent path.

As illustrated in the previous chapter, FSB Principle I requires standard setters and authorities to review references to credit ratings in standards, laws and regulations. Putting this task into the US and EU perspective, Section 939A of the Dodd Frank Act entrusts each US Federal agency with this review, while Article 5(b) of CRA Regulation III gives the same task to the

³¹⁹ FSB Interim Report (n 296).

³²⁰ Commission, 'Overview of Responses to Public Consultation on Credit Rating Agencies' (2010) <http://ec.europa.eu/internal_market/securities/docs/agencies/summary-responses-cra-consultation-20110704_en.pdf> accessed 18 March 2013.

European Supervisory Authorities (ESAs) and the European Systemic Risk Board (ESRB). Both the US and the EU approaches converge as to the assignment to regulators of the task of revisiting credit rating references. Competent authorities will have to review the references to credit ratings in their own regulations, guidance, recommendations and draft technical standards.

Also, FSB Principle I states that standard setters and regulators, wherever possible, should remove credit rating references or replace them with alternative standards of creditworthiness. In this respect, significant differences can be underlined between the US and EU approaches. To begin with the European rules, Article 5(b) of CRA Regulation III specifies that the aim of the review that the European financial authorities have to conduct on their own guidelines, recommendations or technical standards is the identification of those credit rating references which have the potential to trigger sole or mechanistic reliance on external credit ratings by investors and market participants. Similarly, under Article 5(c) the Commission has to identify the same credit rating references by 2020. Altogether, these rules have a clear meaning: the elimination of the credit rating references consequent to the review is subject to a condition, that is, only the references which can trigger sole and mechanistic reliance must be eliminated.³²¹ The elimination is only possible with these specific credit rating references. Indeed, Article 5(b) uses the words, ‘where appropriate’ which has the same meaning as, ‘wherever possible’ used under FSB Principle I. Both expressions indicate that the elimination is a possibility and not a mandatory process once the review of the credit rating references has been completed. Consequently, not only do specific credit rating references have to be identified and selected, but also their elimination is subordinated to the development of appropriate alternatives to the credit ratings. There are therefore two conditions upon which the EU approach is based: 1) the review aims at selecting specific credit rating references; and 2) elimination is subordinated to the elaboration of valid alternatives. This second condition has been

³²¹ See also Recital 6 CRA Regulation III: ‘the Union is working towards reviewing, at a first stage, whether any references to credit ratings in Union law trigger or have the potential to trigger sole or mechanistic reliance on such credit ratings and, at a second stage, all references to credit ratings for regulatory purposes with a view to deleting them by 2020, provided that appropriate alternatives to credit risk assessment are identified and implemented’.

transposed into Article 5(c) as well, under which credit rating references in Union law are to be eliminated, ‘provided that appropriate alternatives to credit risk assessment have been identified and implemented’. This is aligned with paragraph 1 of FSB Principle I which further specifies that credit rating references should be removed or replaced only once possible alternative provisions in laws and regulations have been developed and can be implemented.³²² Hence, standards setters and authorities are encouraged to develop alternative definitions of creditworthiness. Based on this, it can be said that the European approach has fully endorsed and transposed into the CRA Regulation III the FSB two-pronged approach.³²³

As opposed to the EU rules, the US approach has significant differences. The review does not aim to select specific credit rating references. Section 939A is undoubtedly clear on this aspect. Regulators are required to identify which piece of their own legislation contains references to credit ratings. After completing the review, they will have to remove the identified credit rating references and substitute them with alternative standards of creditworthiness. Agencies have to jointly cooperate to develop a common standard of creditworthiness. Significantly, this approach pursues the total elimination of the credit ratings from regulations and legislative frameworks.³²⁴ The elimination of the credit rating references is not subordinated to the elaboration of alternatives to credit ratings. The elimination is not a possibility but the main purpose of the review, so as to replace the credit ratings with new standards of creditworthiness. Undoubtedly, the US approach sounds harsher than the EU approach. In a nutshell, while the US approach is based on review, removal, and replacement of credit ratings with new standards of creditworthiness, the EU approach can be summarised as follows: review, possible alternatives and, thus, possible credit ratings deletion. The EU strategy is built upon the FSB two-pronged approach which still acknowledges the importance of the credit ratings in the financial markets and, for this reason, not all the credit rating

³²² See FSB Principle I para 1.

³²³ Commission Impact Assessment (n 178).

³²⁴ Kevin F Barnard & Alan W Avery, ‘Basel III v Dodd-Frank: What does it Mean for US Banks?’ (2011) Who’s Who Legal Blog <<http://whoswholegal.com/news/features/article/28829/basel-iii-v-dodd-frank-does-mean-us-banks/>> accessed 8 March 2014.

references are to be eliminated.³²⁵ Unlike the EU rules, the US approach cannot be regarded as the full endorsement of the FSB strategy. Section 939A came into force before the issuance of the FSB Principles and, as mentioned above, is the result of a process which began with the assessment of over-reliance and ultimately resulted in a rule which aims at ending the use of credit ratings into regulations. This has been finally underlined by the FSB in the 2013 interim report:

[T]he United States (US) has moved the furthest in removing references to CRA ratings from law or regulation. This initiative has been the consequence of section 939A of the Dodd-Frank Act, which requires federal regulatory agencies to remove from their regulations any references to, or requirements of reliance on, credit ratings in assessments of creditworthiness and to substitute in those regulations other standards of creditworthiness that the agencies determine to be appropriate. Indeed, this legislation goes further and sets a more absolute standard than the Principles, as it requires the complete removal and replacement of CRA ratings as may be determined appropriate.

However, it must be stressed that the US are among the FSB jurisdictions which endorsed the FSB strategy. This must be interpreted as an acknowledgement of the need to take all the necessary regulatory efforts to reduce the risk of over-reliance, not as the intention to elaborate an approach which could entirely reflect the FSB Principles. This could not be possible since the US already had its own legislative approach. The dichotomy between elimination and possible elimination of the credit rating references is the major difference between the US and the EU approaches. It can be seen from this comparison that these approaches are not aligned. Firstly, differences in the time of issuance of the rules lead to the conclusion that the US and EU rules are not the result of a coordinated regulatory dialogue. Secondly, the way regulators have to deal with credit rating references in legislation and regulatory frameworks makes evident that the reduction of over-reliance will be achieved differently. Essentially, if the general principle is that over-reliance has to be reduced by eliminating credit rating references and by enhancing market participants' credit risk analysis capacities, this will be achieved by the US and the EU through different strategies. In the US, the market participants' independent credit risk analysis will be encouraged once all the credit

³²⁵ FSB Interim Report (n 296), 8.

rating references will be eliminated and replaced by alternative standards of creditworthiness; in the EU, and in the other FSB jurisdictions which fully endorsed the FSB principles, the same aim will be pursued after the selection, elimination, and replacement of those credit rating references which may induce mechanistic and parallel reliance.

III.2.2 Implementation process in focus

III.2.2.1 Discussing credit rating alternatives

Over-reliance on external credit ratings is supposed to be reduced through a two-track approach providing for the elimination of credit rating references and contextual improvement of investors' and market participants' independent credit risk analysis. The two levels of the strategy are intertwined so that they are supposed to be implemented in parallel.³²⁶ This means that the degree of development of one level will affect the development of the other. Consequently, to have a better understanding of the workability of this strategy, in particular of the progress made at the US and EU level to implement their respective rules, it is necessary to discuss the two levels separately.

Starting with the first one, its success lies on the elaboration of appropriate, valid alternatives to external credit ratings. In fact, both the FSB principles and the EU rules clarify that the removal is possible only once valid substitutes are found. The same can be said for the US approach under Section 939A of the Dodd Frank Act, though a different language is applied. As mentioned above, the formulation of this provision sounds like an imperative for the US agencies, in the sense that the removal must be the natural consequence of the review. However, even in this case the elaboration of valid standards of creditworthiness to be used in substitution of the NRSRO credit ratings will play a decisive role in the success of the US approach. Therefore, even though the US strategy is based on review, removal and replacement of the credit rating references with alternative standards of creditworthiness, the last passage will be decisive in that without

³²⁶ FSB, 'Thematic Review on FSB Principles for Reducing Reliance on CRA Rating' (12 May 2014) Peer Review Report.

alternatives to credit ratings the implementation process cannot be completed. Importantly, the search for alternatives must be regarded as the milestone for stopping regulatory reliance on credit ratings and, thus, reducing the potential of over-reliance by investors and market participants.

Before assessing the workability of the strategy through an analysis of the status of the reforms at the national, international and regional levels, it must be observed that the search for alternatives to credit ratings is not a new issue within the regulatory debate on CRAs. Even before those corporate scandals such as Enron and WorldCom which put the CRAs under the regulatory spotlight, some academics debated the possibility of substituting credit rating references with market based indicators. In particular, in the context of his regulatory license doctrine, not only did Frank Partnoy argue that credit ratings do not have any informational value, but he also proposed substituting the rating-based legislation with a credit spread-based regulatory regime.³²⁷ In his view, the credit spreads are the valid alternatives to credit ratings in that they are more accurate and give more informational value. Besides, they are determined by the markets and not by private entities. This would contribute to reduce the danger of conflict of interest which is inherent in the CRAs' issuers-pay-model and which is exacerbated by the widespread use of the credit ratings in legislation. Significantly, the author proposes replacing the rating-based regulation with a credit-spread regulation and urges regulators to experiment with the incorporation of credit spreads into some portions of rating-based regulations. Even though Partnoy's proposal did not find any support and the regulators kept their reliance on the credit ratings, his views were farsighted since they anticipated the issues that the post-crisis debate on over-reliance dealt with. In fact, in the aftermath of the 2007-2009 financial crisis, the debate on valid alternatives to credit ratings gained momentum. Further studies discussing the viability of credit default swap spread (CDS) as substitutes for credit ratings and their utility as market-based tools for regulatory and private purposes were brought forward.³²⁸ Other scholars proposed, inter alia, indicators based on non-

³²⁷ Partnoy (n 13).

³²⁸ Horsch (n 36).

market-based measures, for instance, indicators based on accounting data.³²⁹ In this context, a dual rating approach under which regulatory requirements could take into consideration both external credit ratings and internal ratings was also proposed.³³⁰

Finally, another possibility which was brought to attention was concerned with the outsource of credit assessment to non-CRAs. This proposal was based on the case of the US National Association of Insurance Commissioners (NAIC) which, being worried about the reliability of ratings, hired an independent third party to model potential losses on regulated insurance companies' RMBS portfolios. The approach was then extended to regulated entities' CMBS portfolios.³³¹

Nonetheless, all the mentioned proposals remained on paper because none of them were immune from criticism. For instance, it was argued that market based indicators such as CDS and credit spreads would require some judgemental overlay in that they encompass a variety of factors and hence the impact of credit would be difficult to assess when observing price movements.³³² Furthermore, such indicators would tend to be pro-cyclical and the risk would be to substitute credit ratings with credit risk assessment tools which may have the same shortcomings, in particular during economic downturn periods.³³³ Also, the outsource of non-CRA third parties remained circumscribed within the NAIC and did not pave the way for anything new. In this debate, however, it cannot be left unnoticed that the FSB two-pronged approach, as well as the contents of the EU and US rules on reliance and over-reliance, have marked a no turning back point. Finding alternatives to external credit ratings is now required by rules of law and there must be compliance with such a requirement.

III.2.2.2 Implementation progress among the FSB jurisdictions

³²⁹ Deb et al (n 114).

³³⁰ Ibid.

³³¹ NAIC, 'Evaluating the Risk Associated with NAIC Reliance on NRSROs Credit Ratings' (2010)

³³² Ibid.

³³³ FSB Peer Review Report (n 326), 2.

Nonetheless, the debate is still ongoing in search of appropriate replacements to credit ratings to enact the first level of the strategy. In this respect, the FSB underlined that progress has been the greatest in the identification and removal of hard-wired references to CRAs ratings in domestic laws and regulations.³³⁴ In reality, by way of analysing the data provided by the FSB it can be argued that progress is not as great as the FSB claims. Significantly, it is to be clarified what meaning the word ‘progress’ carries in this context. The FSB emphasised that almost all FSB jurisdictions have undertaken a stock-taking review of credit rating references in their legislation. This is in line with the FSB Principle I which encourages a review by standard setters and regulators finalised to remove and replace with valid alternatives those credit rating references which can determine undue reliance. However, a stocktaking exercise should not be regarded as a definitive progress in the implementation of the FSB strategy, rather as the first step. Indeed, as results in the FSB interim report, not all the FSB jurisdictions have yet completed the review. Setting aside the EU Member States which will follow the implementation of the EU action plan embodied in the CRA Regulation III, as well as in the UCITS and AIMFD Directives,³³⁵ other FSB jurisdictions either have not started the review process yet or have concluded that it is not necessary to apply any removal.³³⁶ Consequently, the discussion has to take into consideration only those jurisdictions in which the stocktaking exercise has been completed. In this regard, it can be observed that the majority of the FSB jurisdictions felt it opportune not to remove any credit rating reference at the conclusion of their stocktaking exercise.

For example, taking into account some Latin American countries and their banking regulations, it can be concluded that banking activity in Argentina is not heavily dependent on credit ratings. Recently issued rules avoid credit rating references, while other credit rating references in regulation will not be removed because they are regarded as marginal and with no

³³⁴ Ibid.

³³⁵ EU Directorate General Internal Market and Services, ‘EU Response to the Financial Stability Board (FSB): EU Action Plan to Reduce Reliance on Credit Rating Agency (CRA) Ratings’ (2014) Staff Working Paper.

³³⁶ Ibid.

impact.³³⁷ A similar view has been expressed by the Brazilian authorities, which stressed the marginal role that external credit ratings play in banking regulation. In particular, the authorities underlined that external credit ratings ‘are only supplementary sources of information in the process of internal credit assessment for provisioning purposes’. Given this secondary role, the Brazilian authorities decided not to remove their credit rating references.³³⁸ With regard to Asian countries, the use of external credit ratings as complementary sources of information has also been underlined by the Japanese authorities involved in the review exercise. Significantly, most Japanese banks have internal rating systems and refer to CRA ratings as complementary tools to measure credit risk. Consequently, laws and regulations had very limited references to credit ratings.³³⁹ Likewise in Europe, the Swiss authorities did not apply any removal. Objectively, such a removal could not be envisaged in that most of the sectors which came under the authorities’ scrutiny did not have any reference to the external credit ratings. For instance, no references were found with regard to pension funds, central counterparties (CCPs), insurance and collective investment schemes (CIS). As to the banking sector, some references were found in accordance with the SA of the Basel framework. As to central bank operations, some references were found in internal guidelines for reserve management and collateral policy. However, the Swiss authorities stressed that credit ratings are not the exclusive credit risk assessment tool and hence these references should not be regarded as carrying the risk of mechanistic reliance.³⁴⁰

Absence of exclusivity of the credit ratings has also been underlined by the UK competent institutional authorities. For example, the Bank of England (BoE), in relation to monetary policies and reserve management purposes underlined that the credit ratings are not referred to as exclusive factors but as one factor for determining eligible collateral and investments. Furthermore,

³³⁷ FSB, ‘High Level Summary of National Authorities-Action Plan-Argentina’ (2014).

³³⁸ FSB, ‘Regulatory Response by Brazilian Authorities to Reduce Reliance on Credit Ratings’ (2014).

³³⁹ FSB, ‘Regulatory Response by Japanese Authorities to Reduce Reliance on Credit Ratings’ (2014).

³⁴⁰ Swiss Financial Market Supervisory Authority (FINMA), Action Plan for Reducing Reliance on CRA Ratings Switzerland’ (Bern 2014)

<file:///C:/Users/UTENTE/Downloads/CRA_ActionPlan_Switzerland%20(1).pdf> accessed 15 February 2014>.

counterparty eligibility and limits are determined by referring to a range of information which includes the credit ratings as one minor factor. Equally, for CCPs the credit ratings assigned by the CRAs are regarded as one parameter in collateral eligibility and investment policy; furthermore, the UK Prudential Regulatory Authority (PRA) requires its regulated banks to set up internal methodologies so that they can assess the credit risk of exposures to individual obligors, securities, securitisation positions or credit risk at the portfolio level. Such methodologies do not blindly rely on external credit ratings.³⁴¹ Importantly, all these authorities depicted a very limited use of external credit ratings in financial legislation. Moreover, such a use is deemed not to pose any risk.

Similarly, the harmless nature of credit rating references is the reason why the Australian authorities decided not to remove any credit rating references from their legislation. At the end of their review the authorities felt that their current framework was robust and credit rating references did not pose systemic or market risks. Hence, it was concluded that there was no sound prudential basis for removing references to CRAs' ratings in prudential standards. Furthermore, the Australian authorities underlined that CRA ratings are an integral part of the Basel framework with which the authorities want to remain compliant.³⁴² This is an aspect which has been brought forward by the South African authorities as well. They justified their denial to remove credit rating references on the ground that credit ratings 'form an integral part of the internationally agreed frameworks, standards, and requirements, issued by standard-setting bodies such as the Basel Committee'.³⁴³

These data stimulate further reflection. As seen, the concerned FSB jurisdictions had reasons not to apply any removal. The removal is not compulsory. It is subordinated to the identification of those credit rating references which can induce mechanistic and parallel reliance on credit ratings. However, it can be noticed that the reasons why most of the FSB jurisdictions did not apply any removals are not exclusively justified on the grounds that their credit rating references do not cause

³⁴¹ FSB, 'High Level Summary of National Authorities' Action Plans-United Kingdom' (2014).

³⁴² FSB, 'Regulatory response by Australian Authorities to Reduce Reliance on Credit Ratings' (2014).

³⁴³ FSB, 'Regulatory response by South Africa's Financial Service Board to Reduce Reliance on Credit Ratings' (April 2014).

mechanistic and parallel reliance. Some jurisdictions have also specified either the marginal role of credit ratings in their legislation or the limited number of credit rating references. These credit rating references were considered not to pose any threat and were finally kept. Maintaining the credit ratings means that it is not necessary to move on to the next stages of the approach, in particular, to the search for alternatives. Importantly, these results run counter to the expectations of the FSB which envisaged the optimal progress such as the one in which credit rating references could possibly be removed and substituted by valid alternatives. In fact, the FSB has argued that the choice of some jurisdictions to leave credit rating references in their regulations may result in an underestimation of the danger of over-reliance by market participants in their jurisdiction.³⁴⁴ In this context, only the US and the EU are singled out as the two FSB jurisdictions whose current reforms followed the review and removal strategy in accordance with some specific deadlines. Having provided this picture, the analysis can now be circumscribed to the US and the EU so as to take stock of the evolution of their reforms.

III.3 THE STATUS OF THE US REFORMS UNDER SECTION 939A OF THE DODD FRANK ACT

III.3.1 The early debate on Section 939A

III.3.1.1 Difficulties and expectations

In the US, progress in the implementation of Section 939A of the Dodd Frank Act can be verified by analysing the amendments applied to their own legislation by the following agencies: the Commodity Futures Trading Commission (CFTC), the Office of the Comptroller of the Currency (OCC), the National Credit Union Administration (NCUA), the Federal Housing Finance Agency (FHFA), the Department of Labour (DOL), the Federal Reserve Board (FRB) and the SEC. As mentioned above, one of the most salient aspects of Section 939A is the search for valid

³⁴⁴ FSB, 'Report to G20 Finance Ministers and Central Bank Governor on the Roadmap and Workshop for Reducing Reliance on CRA Ratings' (November 2012).

alternatives, or standards of creditworthiness as a replacement for the external credit ratings. According to a literal interpretation of Section 939A, external credit ratings should disappear from legislation and a new credit risk assessment tool should be inserted in place of them. This was actually the way Section 939A was interpreted by scholars and commentators once it was finalised.³⁴⁵ The search for alternatives to credit ratings was regarded, and still is, as the most challenging feature of the approach, so that more than one doubt has been expressed on the concrete possibility of finding a valid substitute to credit ratings. Coffee, for instance, cast doubts on the US regulators' capacity to provide an adequate definition of creditworthiness,³⁴⁶ while Suttle argued that the search for alternatives sounds like a vicious circle in that, in his view, valid replacements cannot be found because they do not exist. In this respect, it is worth reporting his statement: 'if a valid alternative to credit ratings exists I would be very impressed since I do not have clear idea of what it is.....what was put into (section 939A) is a classic case of saying we aspire to do this but we have no idea of how to go about it'.³⁴⁷ Significantly, Suttle's statement underlines how the success of the approach depends on finding valid alternatives to credit ratings. His declaration is quite conclusive as to the success of the implementation of Section 939A. As already stressed, if valid alternatives to credit ratings are not agreed the approach to reduce over-reliance will be likely to fail.

Nonetheless, Section 939A was initially conceived as a rule which should have paved the way to a new, universally accepted standard of creditworthiness in substitution for the external credit ratings. This can be confirmed by analysing the regulatory debate which followed the

³⁴⁵Mick Grasmick, 'Reaction to Credit Agencies Means more compliance Costs' (2011)

<<http://www.manatt.com/Financial-Services-Law/-Banking-12-08-11.aspx>> accessed 18 May 2013 .

³⁴⁶Coffee Jr (n 174), 236: 'If the current reliance on investment grade credit ratings were ended, the manner by which sensitive financial institutions (most notably, money market funds should be regulated remains unresolved. Are they to be given carte blanche to invest in any form of debt security? If not, can state and federal regulators define creditworthiness in comprehensible and comprehensive terms? Deficient as the CRAs have been, it is not obvious that governmental agencies can do much better, either at promulgating required standards of creditworthiness or in providing their own credit ratings'.

³⁴⁷Matthew Plowright, 'Credit Rating Agencies: Under the Influence' (2011)

<<http://www.emergingmarkets.org/Article/2905663/CREDIT-RATING-AGENCIES-Under-the-influence.html>> accessed 20 June 2013.

issuance of Section 939A. In that context, five key characteristics of a good creditworthiness standard, as an alternative to external credit ratings, were discussed. Firstly, it was emphasised that the standard should have been reliably risk sensitive. This means that it should have effectively measured the credit risk of different types of debt instruments. Hence, it should have been applied in a consistent and transparent way across different types of financial instruments.³⁴⁸ Furthermore, such a standard should have been capable of auto adjusting on a timely basis in accordance with changes in the credit risk profile of instruments and auto adapting to cover new financial market practices.³⁴⁹ Finally, the standard should have been easy to understand and simple to implement so as to avoid excessive regulatory burden for financial institutions, in particular, small banks and firms. Importantly, the debate underlined that external credit ratings have these characteristics.³⁵⁰ Consequently, this raises the question of whether the regulators had in mind a standard which could be a duplication of the credit ratings, but with another name, or something different. It may be submitted that regulators were initially searching for something having the same quality of the credit ratings but not the same shortcomings. Ultimately, this was the solution they hoped to find. However, such a standard appears to be a utopian vision. It is based on an abstract idea of a perfect standard which is highly debatable because of its subjectivity. In other words, who or what can assert with absolute certainty that a potentially new elaborated standard can be better than credit ratings?

As mentioned in the previous paragraph, all the proposals brought forward remained on paper because they were not favourably received and did not have sufficient strength to lead to the substitution of the credit ratings in legislation. Hence, Suttle's statement is emblematic of all the difficulties that the implementation of Section 939A could have encountered.

III.3.1.2 Doubts and reservations

³⁴⁸ House Committee on Financial Services, 'Oversight of the Credit Rating Agencies Post-Dodd-Frank' (27 July 2011) Hearing Before the Subcommittee on Oversight and Investigations of the Committee on Financial Services US House of Representative One Hundred Twelfth Congress First Session, 12.

³⁴⁹ Ibid.

³⁵⁰ Ibid.

In any case, another essential aspect must be taken into consideration. In the event that a new standard of creditworthiness which has the abovementioned requirements is proposed, this could only be regarded as the first step. The success of any hypothetical standard as an alternative to credit ratings also depends on the acceptance by those investors and market participants who have always used credit ratings either because they found them useful or because the legislation requires them to do so. In the context of the approach aiming at replacing credit ratings, their opinion is of paramount importance. Some reflections can be drawn by taking into consideration the views they expressed once Section 939A was finalised into the Dodd Frank Act.

In the aftermath of the entry into force of Section 939A, the OCC, the Board of Governors of the Federal Reserve System (FRB), the Federal Deposit Insurance Corporation (FDIC) and the Office of Thrift Supervision (OTS) issued collectively the Advanced Notice of Proposed Rule Making Regarding Alternatives to the Use of Credit Ratings in the Risk-Based Capital Guidelines of the Federal Bank Agencies (ANPR).³⁵¹ Given the prominent use of external credit ratings in the banking sector, these agencies moved first in the attempt to comply with Section 939A and sought consultation by the users of credit ratings on potential alternatives. In this context, all those which provided comments to the agencies expressed concerns on the requirements of Section 939A of the Dodd Frank Act. In practice, they stressed that the formulation of the rule sounded like a prohibition to refer to external credit ratings not only in legislation but also for the users of credit ratings. For these reasons, almost all the commentators asked for the repeal or amendment of Section 939A.

For example, the American Bankers Association (ABA) emphasised the international use and broad acceptance across the markets of credit ratings. Abandoning completely the use of credit ratings in the capital rules adopted by the US regulators could have significant negative implications for the adoption of the internationally agreed Basel III standards and lead to competitive distortions across the international banking industries. For these reasons, ABA refers to the provisions of

³⁵¹ US Department of Treasury, 'Advanced Notice of Proposed Rulemaking Regarding Alternatives to the Use of Credit Ratings in the Risk-Based Capital Guidelines of the Federal Banking Agencies (ANPR)' (Aug 2010) <<http://www.federalreserve.gov/newsevents/speech/bcreg20100810a1.pdf>> accessed 29 June 2013.

section 939A as ill-advised and overreacting.³⁵² Similarly, the American Securitization Forum (ASF) argued that overreliance can be tackled by improving the regulation of the use of credit ratings and the supervision of CRAs, rather than ‘prohibiting’ the use of the credit ratings. ASF warns that removing credit ratings from the risk-based capital rules could have a significant impact on liquidity in the ABS markets which rely upon the ability of investors to make real-time decisions at the point of initial offering or subsequent secondary market purchase. Hence, eliminating credit ratings from these rules may jeopardise the ability of a large number of banking organisations to participate in the asset backed securities (ABS) markets, substantially reducing market liquidity.³⁵³ The Security Industry and Financial Markets Association (SIFMA) brought to attention the importance of credit ratings in the capital markets’ determination of the creditworthiness of an issuer in measuring regulatory capital since they are transparent, easily comparable and easily available. Accordingly, potential new standards of creditworthiness must be additional or complementary to the credit ratings and should not be conceived as the subterfuge to prohibit credit ratings.³⁵⁴ Scepticism was also expressed individually within the bodies which issued the ANPR. It is worth reporting some significant lines of the testimony released by John Walsh as Acting Comptroller of the Currency:

[...] the prohibition against references to ratings in regulations under section 939A goes further than is reasonably necessary to respond to these issues. Rather than disregard credit ratings, it may be more appropriate to assess their strengths and weaknesses and to supplement ratings with additional analysis in appropriate cases. We suggest that section 939A be amended to direct regulators to require that ratings-based determinations be confirmed by additional risk analysis in circumstances

³⁵² American Bankers Association (ABA), ‘RE: Advanced Notice of Proposed Rulemaking Regarding Alternatives to the Use of Credit Ratings in the Risk-Based Capital Guidelines of the Federal Banking Agencies, 75 Fed. Reg. 52283 (Aug. 25 2010)’ (October 2010) <http://www.aba.com/NR/rdonlyres/DC65CE12-B1C7-11D4-AB4A-00508B95258D/69450/cl_AlternativestoCreditRatings_DFA2010.pdf> accessed 14 July 2013.

³⁵³ American Securitization Forum (ASF), ‘RE: Advanced Notice of Proposed Rulemaking Regarding Alternatives to the Use of Credit Ratings in the Risk-Based Capital Guidelines of the Federal Banking Agencies’ (October 2010),

³⁵⁴ Security Industry and Financial Market Association (SIFMA), ‘Comments on the Advanced Notice of Proposed Rulemaking to Implement the Mandate in Sec 939A of the Dodd Frank Wall Street Reform and Consumer Protection Act’ (Oct 2010), 2 <www.sifma.org/workarea/downloadasset.aspx> accessed 3 August 2013.

where ratings are likely to present an incomplete picture of the risks presented to an institution, or where those risks are heightened due to concentrations in particular asset classes.³⁵⁵

It can be seen from this context that the purpose of the regulators was to consult on the possibility of finding one alternative which could be universally accepted and, hence, replace the credit ratings in legislation. However, this intention raised reservations from the users of credit ratings. Among other things, the choice of one alternative appeared to be flawed to the extent that the risk of over-reliance could shift from the credit ratings to another measure of credit risk. Such a concern was expressed by Moody's during the above-mentioned period of consultations. Moody's warned regulators not to neglect the importance of ratings for financial markets. In particular, concerns were expressed with regard to deregulating in such a way as to diminish the importance of ratings, perhaps through the elaboration of alternative measures that may trigger mechanistic responses as much as downgrades.³⁵⁶ The same concern has been recently expressed by the FSB in its last interim report. The FSB warned about the risk of facilitating undue reliance through a new alternative in the event that an adequate impact assessment is not conducted.³⁵⁷

As it emerged from the initial comments, the spirit and letter of Section 939A did not encounter any favour. This, however, could not invert the course of the reforms to be pursued under Section 939A. On the one hand, the users' concerns are worth being mentioned to verify how much weight they had in the final reforms set out by the US agencies. On the other hand, the users' concerns and reservations highlighted above were raised back in 2010, immediately after the issuance of Section 939A. Now, at the time of writing, almost five years have passed. This can be a

³⁵⁵ Testimony of John Walsh, Acting Comptroller of the Currency, before the Committee on Banking, Housing and Urban Affairs, United States Senate (Sept 20, 2010) Attachment A, 2-3 <www.occ.gov> accessed 20 August 2013.

³⁵⁶ Moody's, 'Advanced Notice of Proposed Rulemaking Docket ID: OTS-2010-0029' ("The Release") (Nov 2010) <http://www.federalreserve.gov/SECRS/2010/October/20101029/R-1391/R-1391_102510_54090_350568812859_1.pdf> accessed 25 August 2013.

³⁵⁷ FSB Interim Report (n 296).

sufficient time to assess the progress and the status of implementation of the rule in question by the US agencies.

III.3.2 The US Federal agencies' reform process

III.3.2.1 CFTC

By making a comparison between the amendments that the US agencies have applied since the issue of Section 939A of the Dodd Frank Act, an evolution in the elaboration of alternatives to external credit ratings can be discussed. Specifically, it will be seen how the solutions brought forward by one agency have influenced the work of the other agencies in terms of development of their own standards of creditworthiness. To have a grasp of this evolution, it is necessary to give a chronological order to the work of the US agencies. To this end, the review that the CFTC³⁵⁸ undertook under the letter of Section 939A is the first to be analysed.³⁵⁹

CFTC regulations apply to future commission merchants (FCMs), derivatives clearing organizations (DCOs) and commodity pool operators (CPOs).³⁶⁰ For the purpose of Section 939A, two groups of CFTC regulations are of relevance: 1) those regulations in which credit ratings are used to limit Commission registrants' investments or deposits of customer funds; and 2) those regulations which require disclosing a credit rating to describe the characteristics of an investment, namely, Regulation 1.49 and Regulation 4.24.³⁶¹ While the former Regulation sets out qualifications with regard to the types of depositories where FCMs and DCOs might place customers' funds, the latter refers to the use of credit ratings in the context of the disclosure of an investment's

³⁵⁸ The Commodity Future Trading Commission (CFTC) is an independent agency of the US government which regulates futures and option markets, see <http://www.cftc.gov/About/MissionResponsibilities/index.htm>.

³⁵⁹ CFTC, 'Investment of Customer Funds and Funds Held in an Account for Foreign Futures and Foreign Options Transaction' (December 2011) Final rule, Federal Register Vol 76 No 243.

³⁶⁰ CFTC, 'Removing any Reference to or Reliance on Credit Ratings in Commission Regulations; Proposing Alternatives to the Use of Credit Ratings' (November 2010) Proposed Rules, Federal Register Vol 75 No 211.

³⁶¹ CFTC, 'Removing any Reference to or Reliance on Credit Ratings in Commission Regulations; Proposing Alternatives to the Use of Credit Ratings' (July 2011) Proposed Rules, Federal Register Vol 75 No 211.

characteristics. Both the regulations in question could be regarded as rating-based regulations. Before the CFTC review, Regulation 1.49 regarded a foreign depository as acceptable where it had in excess of \$1 billion of regulatory capital or issue commercial paper, or a long debt instrument, rated in one of the two highest rating categories by at least one NRSRO.³⁶² Following the letter and spirit of Section 939A of the Dodd Frank Act, the second alternative referring to the credit ratings should have been removed and replaced with another standard for the measurement of creditworthiness. Indeed, the CFTC initially proposed the elimination of such reference and sought consultation on whether it could be sufficient relying exclusively on a minimum capital requirement of \$1 billion in regulatory capital, or whether another standard or measure of solvency and creditworthiness, different than external credit ratings, could be used as an appropriate, additional test of a bank's safety.³⁶³ With regard to Regulation 4.24, the credit rating reference to be removed was identified in the requirement for CPOs to disclose the characteristics of the commodity and other interests that the pool will trade, including, where applicable, their investment rating.³⁶⁴ In this regard, the CFTC proposed to replace the reference to credit ratings with the phrase 'creditworthiness'. In this respect, the new rule reads as follows:

[...] the pool operator must disclose the following: 1) the types of commodity interests and other interests which the pool will trade, including: (i) the approximate percentage of the pool's assets that will be used to trade commodity interests, securities and other types of interests, categorized by type of commodity or market sector, type of security (debt, equity preferred equity), whether traded or listed on a regulated exchange market, maturity ranges and *creditworthiness*, as applicable.³⁶⁵

In the context of the amendments applied to Regulation 1.49 and Regulation 4.24, the CFTC undertook other reviews which ended up with the removal of credit rating references in Regulation 30.7 and Regulation 1.25. The former is concerned with the treatment of foreign futures or foreign options secured amount and was aligned with the reliance on the \$1 billion of regulatory capital

³⁶² 17 CFR 1.49-Denomination of Customer Funds and Location of Depositories (2009).

³⁶³ CFTC (n 361).

³⁶⁴ 17 CFR 4.24(h)(1)(i)- General Disclosure Required (2009).

³⁶⁵ CFTC (n 361).

requirement under Regulation 1.49.³⁶⁶ The latter provides rules for investing customer funds and applies to DCOs and FCMs as well. Basically, this regulation sets out the list of instruments DCOs and FCMs are permitted to invest the customers' money in. Among the listed requirements according to which investment are permissible, there is also the provision of the highest rating assigned by NRSROs to the financial instruments. In addition, the investment must be 'readily marketable' and promptly liquidated.³⁶⁷ In line with previous proposals and in accordance with Section 939A of the Dodd Frank Act, the CFTC proposed to eliminate the requirement relating to the assignment of top credit ratings. These proposals were ultimately incorporated into the final rules.³⁶⁸

In the first place, it can be noticed that the CFTC's only applied a removal of the credit rating reference. As mentioned above, the approach under Section 939A can be defined within the following stages: review, removal and alternatives. However, the CFTC's work can only be assessed within the first two stages, that is, review and removal. It can be defined as a restyling of the two regulations through which credit rating references disappear, but no specific alternatives for them have been set out. Also, the CFTC's approach maintains the possibility of relying on credit ratings. In practice, credit rating references are deleted from the CFTC's regulations but they survive in use. In fact, the CFTC acknowledges that CPOs will not be prohibited from relying on credit ratings. Rather, credit ratings can be used as one of the factors to be taken into consideration in making an investment decision.³⁶⁹

III.3.2.2 OCC

³⁶⁶ CFTC (n 360).

³⁶⁷ 17 CFR 1.25-Investment of Customer Funds (2009).

³⁶⁸ CFTC (n 361); CFTC (n 360).

³⁶⁹ CFTC (n 360): 'The Commission notes that the removal of references to ratings does not prohibit a DCO or FCM from taking into account credit ratings as one of many factors to be considered in making an investment decision. Rather the presence of high ratings is not required and would not provide a safe harbor for investments that do not satisfy the objectives of preserving principal and maintaining liquidity'.

The second review to be analysed in chronological order is the final rule issued by the OCC³⁷⁰ in June 2012 which began to be effective as of January 2013. The amendments applied by the OCC pertain to 12 CFR Parts 1, 5, 16, 28 and 160.³⁷¹ Such rules refer to the requirements that national banks and Federal savings have to follow to determine whether or not a security is investment grade. The investment grade status is the condition upon which the purchase of a security is permissible. Prior to the amendments, securities could be regarded as investment grade where they were rated in one of the top four investment grade rating scales by two or one NRSROs. Should the security be unrated, the investment grade status could be determined by the national bank or Federal savings association by regarding the debt instrument as having the same credit quality of a security rated investment grade by NRSROs.³⁷² In this context the centrality of the role of the credit ratings provided by NRSROs is evident. Not only were the credit ratings the sole determinant of the investment grade status, but they were also the reference parameter to which the national banks or Federal savings could base their investment grade determination.

Such a primacy of the credit ratings is the area of intervention of the OCC to comply with the Dodd Frank Act. Pursuant to the amendments set out in the OCC Final rule, a new definition of investment grade security is provided. Such is the security when its issuer has an adequate capacity to meet financial commitments under the security for the projected life of the asset exposure.³⁷³ The language of the final rule raises first the question of who is entitled to determine whether the issuer has an adequate capacity to meet its financial commitments since the rules no longer rely on NRSRO credit ratings. In this regard, the task is on national banks and Federal savings which are now required to undertake proper due diligence.³⁷⁴ In substance, the definition of investment grade

³⁷⁰ The Office of Comptroller of the Currency (OCC) is an independent bureau of the US Department of Treasury entrusted with the chart, regulation and supervision of national banks and federal savings associations, see <<http://www.occ.gov/about/what-we-do/mission/index-about.html>>.

³⁷¹ OCC, Department of Treasury, 'Alternatives to the Use of External Credit Ratings in the Regulations of the OCC (June 2012) Final Rule, Federal Register Vol 77 No 114.

³⁷² See 12 CFR 1.5 (national banks) and 12 CFR 160.1(b) and 160.40(c) (federal savings associations).

³⁷³ OCC (n 371).

³⁷⁴ Ibid: 'National banks and Federal savings associations with substantial securities portfolio, in particular, must have and maintain robust risk management frameworks to ensure that an investment in a particular

is consequent to an analytical process in which it must be determined: 1) that the risk of default by the obligor is low; and 2) that full and timely repayment of principal and interest is expected. It can be observed that this approach mirrors the FSB framework in its two-pronged approach. In synthesis, the removal of the credit rating reference has the aim to enhance the internal risk assessment capacity and, thus, reduce the potential of over-reliance on external credit ratings. Being the task of determining the investment grade status on the national banks and federal savings, it is to be wondered which factors they can take into consideration for their determination. The OCC specified that a number of factors can be taken into account, including credit ratings provided by NRSROs.³⁷⁵

The OCC's approach marks an evolution vis-à-vis the CFTC's approach. As illustrated, the CFTC's review only led to a restyling of the legislation with no alternatives to credit ratings. Whereas, the OCC substituted the credit rating references with a new definition of investment grade and gave national banks and Federal savings the responsibility to determine such a status. The CFTC approach resulted in the simple deletion of credit rating references without the substitution with any alternative. The OCC based its standard on a new definition of investment grade to be determined by the concerned financial institutions. To this end, reference could be made to a variety of factors other than external credit ratings. However, the OCC did not provide any specific indication on possible factors to be chosen as alternatives to the NRSRO credit ratings. Possible alternatives were generically indicated. These included the firms' own internal systems or analytics provided by third parties when conducting due diligence and determining whether a particular security may be permissible and considered an appropriate investment.³⁷⁶

III.3.2.3 NCUA

security appropriately fits within its goals and that the institution will remain in compliance with all relevant concentration limits'.

³⁷⁵ Ibid.

³⁷⁶ Ibid.

The NCUA approach has provided something more specific.³⁷⁷ Significantly, further evolution in the elaboration of the standard of creditworthiness can be discussed in relation to the NCUA review, which is the third in chronological order. The NCUA conducted its review and found references to NRSRO credit ratings in parts 703, 704, 709 and 742 of the NCUA regulations.³⁷⁸ Part 703 provides an interpretation of those sections of the Federal Credit Union Act specifying those securities, deposits and other obligations in which a Federal credit union (FCU) is permitted or prohibited to invest.³⁷⁹ On the other hand, part 704 provides a list of definitions of terms referring to the investment activities of corporate credit unions,³⁸⁰ while part 709 disciplines the involuntary liquidation of FCUs and the adjudication of creditor claims involving federally insured credit unions (FICUs).³⁸¹ Finally, part 742 provides an exemption from certain regulatory restrictions for credit unions that have showed sustained superior performance.³⁸² All these parts have credit rating references which must be subjected to the removal under Section 939A. For instance, under parts 703 and 704 some securities rated in the highest category by NRSROs meet the requirement of being permissible.³⁸³ Under part 709 a definition of securitisation which includes a reference to NRSROs is provided,³⁸⁴ while pursuant to part 742 a credit union can be exempted from the prohibition of purchasing a commercial mortgage related security provided that, among other requirements, the security is rated in one of the two highest rating categories by at least one NRSRO.³⁸⁵

The NCUA approach is based on the evaluation of the capacity of issuers to repay their debt. Consequently, a distinction is made between an issuer's 'adequate capacity' to meet its financial

³⁷⁷ The National Credit Union Administration (NCUA) is an independent federal agency which regulates, charters and supervises federal credit unions, see <www.ncua.gov/about/Pages/default.aspx>.

³⁷⁸ NCUA, 'Alternatives to the Use of Credit Ratings' (2012) Final Rule, Federal Register Vol 77 No 240.

³⁷⁹ 12 CFR Part 703-Investment and Deposit Activities.

³⁸⁰ 12 CFR Part 704-Corporate Credit Unions.

³⁸¹ 12 CFR Part 709-Involuntary liquidation of federal Credit Unions and Adjudication of Creditor Claims Involving Federally Insured Credit Unions in Liquidation.

³⁸² 12 CFR Part 742-Regulatory Flexibility Program.

³⁸³ See 12 CFR Part 703.2; 12 CFR Part 704.2.

³⁸⁴ See 12 CFR Part 709.10(a)(5).

³⁸⁵ See 12 CFR Part 742.4.

obligations for the projected life of the security even under adverse economic conditions; and an issuer's 'strong capacity' to meet all financial commitments under the security for its projected life even under adverse economic conditions.³⁸⁶ In the first place, it can be noticed that the NCUA replaces references to credit ratings through two standards which are respectively applied to parts 703, 704 and 742 of the NCUA regulations. While the first standard is labelled as 'investment grade', the second is referred to as 'minimum amount of credit risk'.³⁸⁷ The creditworthiness standard which applies to corporate credit union under part 704 and in relation to the exemption provided under part 742, is the minimal amount of credit risk, while investment grade is provided as a creditworthiness standard for the investments permitted under part 703. Having 'adequate capacity' to meet financial commitment is different than having 'strong capacity'. The former implies more risk than the latter which finally implies a minimum amount of credit risk. In other words, both represent the likelihood of repayment but the second one is stronger than the first one. This means that the assessment of the two standards, in particular, the first one, requires more analysis and monitoring than the second one. This task will be on the corporate credit unions.³⁸⁸

In this respect, the evolution of the NCUA approach, compared to the OCC, is marked by the specification of a series of factors which the unions can take into consideration for regarding a security as investment grade or as having a minimum amount of credit risk. The list is wide: credit spreads; securities-related research; internal or external credit risk assessment; default statistics; inclusion on an index; priority and enhancement; price, yield, and/or volume; and asset class-specific factors.³⁸⁹ Even though NRSRO credit ratings are not explicitly mentioned, there is an indirect reference to them as an external credit risk assessment. With the exception of the CFTC, all the approaches illustrated so far are concerned with establishing new definitions of creditworthiness which are based on repayment capacity and risk of default. The elaborated standards permit to take

³⁸⁶ NCUA (n 378).

³⁸⁷ *Ibid.*

³⁸⁸ See NCUA, 'Corporate Credit Union Guidance Letter' (2013) No 2013-01.

³⁸⁹ *Ibid.*

into consideration a variety of factors for the creditworthiness determination. Also, the standards aim at promoting more autonomy in creditworthiness analysis by the involved financial institutions.

III.3.2.4 FHFA

It can be observed that the work undertaken by the OCC and NCUA had become the platform upon which the other agencies have or are currently developing their own standards to comply with Section 939A of the Dodd Frank Act. At the time of writing, the FHFA³⁹⁰ has issued its proposal for removing credit rating references and substitute them with opportune alternative standards of creditworthiness in its regulations.³⁹¹ In this respect the source is the Federal Home Loan Bank Act (Bank Act) which regulates the operation of twelve, wholesale cooperative banks whose members are entitled to purchase the capital stock of a bank and obtain access to secured loans. Under the Bank Act, these banks are government-sponsored enterprises which can borrow funds at spreads over the rates on US Treasury securities of comparable maturity lower than most other entities.³⁹² Some provisions of the Bank Act make reference to external credit ratings to the extent that they prohibit the cooperative banks to invest in securities rated below investment grade by NRSROs at the time the investment is made.³⁹³ Furthermore, other provisions allow the banks to invest in debt instruments issued by state, local, or tribal government units or agencies, having the second highest credit rating from NRSROs.³⁹⁴ These are the references identified through the review conducted by the FHFA.

Under the current proposal brought forward by the agency, these credit rating references could be substituted through a new standard, namely ‘investment quality’. Such a standard would replace references to ‘investment grade’ certified by NRSROs and ‘second highest credit rating

³⁹⁰ Federal Housing Finance Agency (FHFA) is an independent federal agency which oversees government sponsored enterprise such as Fannie Mae and Freddie Mac, as well as 12 Federal Home Loan Banks, see <www.fhfa.gov>.

³⁹¹ FHFA, ‘Removal of References to Credit Ratings in Certain Regulations Governing the Federal Home Loan Banks’ (2013) Proposed Rules, Federal Register Vol 78 No 100.

³⁹² See 12 U.S.C. 1423, 1432(a).

³⁹³ 12 CFR 1267.3(a)(3).

³⁹⁴ 12 CFR 1267.3(a)(4)(iii).

from an NRSRO'. The investment quality status is the result of a determination made by a bank. In essence, under the FHFA's proposal, banks may be required to assess that there is adequate financial support for any debt instrument or obligation so that the repayment of principal and interest is guaranteed and, hence, there is only minimal risk that such payment would not be serviced because of adverse events during the life of the instrument. Like in the NCUA approach, this assessment can be made by taking into consideration a wide variety of factors: internal or external credit risk assessments, including scenario analysis; security or asset-class related research; credit analysis of cash flow and debt service projections; credit spreads; loss distributions, default rates, and other statistics; relevant market data, for example, bid-ask spreads, most recent sales price, and historical price volatility, trading volume, implied market rating, and size, depth and concentration level of the market for the investment; local and regional economic conditions; legal or other contractual implications to credit and repayment risk; underwriting, performance measures and triggers; and other financial instrument covenants and considerations.³⁹⁵ Significantly, the credit ratings are no longer the exclusive benchmarks to be referred to, but they are still a factor to be taken into consideration. The FHFA argues that the proposed standard will enhance the banks' internal credit risk assessment and management practices.³⁹⁶ As mentioned, the final rule has not been set out yet. At this stage, it can be confirmed that the FHFA proposal builds upon the NCUA final rule, in the sense that it tries to encourage more internal analysis by the concerned financial institutions and specifies the same factors which the institutions may take into consideration for their judgement.

III.3.2.5 US Banking Agencies

The establishment of a new definition of creditworthiness based on repayment capacity and risk of default is the paradigm which has been finally applied by the US Banking agencies. This results in

³⁹⁵ FHFA (n 391), 4.

³⁹⁶ Ibid.

the final rule that the OCC and the Board of Governors of the Federal Reserve System (Board) have adopted to revise their risk based and leverage capital requirements for banking organisations. The final rule implements a revised definition of regulatory capital, a new common equity tier 1 minimum capital requirement, a higher minimum tier 1 capital requirement and, for banking minimum organisations subject to the advanced approaches risk-based capital rules, a supplementary leverage ratio that incorporates a broader set of exposures in the denominator.³⁹⁷ In the context of the final rule, changes are also applied to comply with Section 939A of the Dodd Frank Act. In particular, these changes are concerned with some definitions in the advanced approaches rules referring to external credit ratings.

The final rule has elaborated a new standard of creditworthiness based on a definition of investment grade which does not rely exclusively on external credit ratings. To this end, investment grade is a status that the entity to which the banking organisation is exposed through a loan or security is required to have. Under the final rule, such a status belongs to those entities which are deemed to have an adequate capacity to meet financial commitments for the projected life of the asset or exposure. The entities' capacity to meet financial commitments is regarded as adequate if their risk of default is low and the full and timely repayment of principal and interest is expected.³⁹⁸ This standard of creditworthiness has also been applied by the FDIC while revising its risk-based and leverage capital requirement for FDIC supervised institutions. The FDIC has acknowledged that its final rule is identical to the joint final rule issued by the OCC and the Board. Consequently, the FDIC has referred to the investment grade status defined by these agencies to comply with Section 939A.³⁹⁹

³⁹⁷ OCC & Federal Reserve System, 'Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, Capital Adequacy, Transition Provisions, Prompt Corrective Action, Standardized Approach for Risk-weighted Assets, Market Discipline and Disclosure Requirements, Advanced Approaches Risk-Based Capital Rule, and Market Risk Capital Rule' (2013) Final rule, Federal Register Vol 78 No 198.

³⁹⁸ Ibid.

³⁹⁹ Ibid.

III.3.2.6 SEC

Lastly, the SEC is involved in the review process directed through Section 939A. The standards elaborated currently are concerned with some rules incorporated in the Investment Company Act. In chronological order, the first relevant change has been applied to section 6(a)(5) of the Investment Company Act.⁴⁰⁰ Prior to the recent amendments, under this section business and industrial development companies (BIDCOs) could only purchase securities rated investment grade by NRSROs. The investment grade certification provided by NRSROs would allow BIDCOs to benefit from some exceptions set out in other rules of the Investment Company Act.⁴⁰¹ Consequently, the review entails the removal of such reliance. To this end, the standard elaborated is based on the qualification of securities having moderate credit risk and sufficient liquidity. Therefore, BIDCOs can benefit from the exceptions by purchasing securities which the board of directors or members of the BIDCOs determine to be a) subject to no greater than moderate risk and b) sufficiently liquid so that the security can be sold within a reasonably short period of time. This determination is made at the time of purchase and the board of directors or members of the BIDCOs are allowed to refer to credit quality reports prepared by outside sources, including NRSROs which are regarded as credible and reliable for the indicated purpose.⁴⁰² Minimum credit risk and sufficient liquidity is the creditworthiness standard which replaces the investment grade status based exclusively on the credit ratings provided by NRSROs.

This status is then applied by the SEC to rule 10f-3 of the Investment Company Act. Rule 10f-3 has a definition of eligible municipal securities in relation to securities which can be purchased during an affiliated underwriting under certain conditions. Investment grade provided by NRSROs were the certifications that municipal securities had sought to be considered eligible.⁴⁰³ As aforementioned, the SEC applied the same creditworthiness standard to both the rules, based on a

⁴⁰⁰ SEC, 'Purchase of Certain Debt Securities by Business and Industrial Development Companies Relying on an Investment Company Act Exemption' (November 2012) Release No IC-30268; 77 FR 70117.

⁴⁰¹ 15 U.S.C. 80a-6(a)(5)(A)(iv).

⁴⁰² SEC (n 400).

⁴⁰³ 15 U.S.C. 80a-2(a)(3)(A, (B) and (C).

degree of liquidity so that the security can be sold within a reasonably short period of time and subject to a minimal or low amount of credit risk.⁴⁰⁴

Within the review and amendments applied by the SEC, new standards can be illustrated also in relation to rule 5b-3 and the historical Net Capital Rule. Under Rule 5b-3, for certain diversification and broker-dealer counterparty limit purposes under the investment Company Act, funds may refer to the acquisition of a repurchase agreement as an acquisition of securities collateralising the repurchase agreement if the obligation of the seller to repurchase the securities from the fund is fully collateralised. Before the amendments a repurchase agreement was regarded as fully collateralised where, among others, the collateral for the repurchase agreement consisted entirely of cash items, government securities, securities that at the time the repurchase agreement was entered into were rated in the highest rating category by NRSROs or unrated securities whose quality was comparable to securities that are rated in the highest rating category by NRSROs.⁴⁰⁵ This determination was the task of the fund's board of directors or its delegate. In relation to this rule, the standard of creditworthiness alternative to the external credit ratings is again a determination aimed at assessing a sufficient degree of liquidity permitting the debt instrument to be sold at a reasonable time and on the capacity of the issuer to meet its financial obligation on the securities collateralising the repurchase agreement. In this respect, the wording of the SEC refers to an issuer's 'exceptionally strong capacity to meet its financial commitments'. In this context, it is specified that the board can reach the credit quality and liquidity determination through an analysis which can take into consideration third-party assessments, including an NRSRO rating.⁴⁰⁶ In this respect, the final rule did not provide any specific indication as to the factors to be taken into account. The SEC generically underlined that the board can base its analysis on ratings, reports, opinions and so on. However, it stressed that it is the board's duty to determine the basis for using

⁴⁰⁴ SEC, 'Reference to Ratings of Nationally Recognized Statistical Rating Organizations' (2009) Final Rule, Release No 34-60789, IC-28939; File No S7-17-08, S7-19-08.

⁴⁰⁵ 15 U.S.C. 80a-5 (b)(1).

⁴⁰⁶ SEC, 'Removal of Certain References to Credit Ratings Under the Investment Company Act' (2014) Final Rule Release No 33-9506; IC-30847; File No S7-7-11.

third-party assessment. In particular, if these are NRSRO credit ratings they do not have to blindly rely on the use of such ratings without evaluating the quality by themselves of each NRSRO's assessment.⁴⁰⁷

Finally, as to the Net Capital Rule removals relating to those provisions of rule 15c3-1 establishing lower haircuts for higher rated commercial paper, non-convertible debt and preferred stock.⁴⁰⁸ According to the new standard of creditworthiness elaborated as an alternative to external credit ratings, and to allow broker dealers to apply these lower haircuts, the broker dealers are required to elaborate policies and procedures designed to assess the credit risk applicable to the position.⁴⁰⁹ Such an analysis must lead to the determination that the investment has only a 'minimum amount of credit risk'. Minimal credit risk can be determined by broker dealers by using a variety of factors. In this context the SEC listed the factors which can be considered: credit spreads, securities-related research, internal or external credit risk assessments, default statistics, inclusion on an index, priorities and enhancements, price yield and/or volume and asset class-specific factors. It cannot be left unnoticed that external credit ratings, though they are no longer exclusive credit risk assessment tools, did not disappear and can still be referred to.⁴¹⁰

III.3.2.7 DOL

The SEC's standards of creditworthiness are also the paradigm upon which the DOL is currently elaborating its own reforms.⁴¹¹ Reference is to be made to the Employee Retirement Income Security Act (ERISA), which includes provisions of the Internal Revenue Code (the Code), the

⁴⁰⁷ Ibid.

⁴⁰⁸ See Chapter II, Section II.4.4, para II.4.4.1.

⁴⁰⁹ 17 CFR 240.15c3-1

⁴¹⁰ SEC, 'Removal of Certain References to Credit Ratings Under the Securities Exchange Act of 1934' (2014) Final Rule Release No 34-71194; File No S7-15-11.

⁴¹¹ The United States Department of Labour (DOL) is a cabinet-level department of the US federal government whose mission is to foster, promote and develop the welfare of the wage earners, job seekers, and retired of the United States; improve working conditions; advance opportunities for profitable employment; and assure work-related benefits and right, see <<http://www.dol.gov/opa/aboutdol/mission.htm>>.

Federal labour laws and other Federal laws.⁴¹² The prohibited transaction rules of the Code fall under the jurisdiction of the DOL. In this respect, the DOL has set out a number of generic or ‘class’ prohibited transaction exemptions (PTEs), many of which apply to party-in-interest transactions involving securities. The DOL has regarded some of its class exemptions as regulations which fall under the scope of Section 939A.⁴¹³ To this end, the proposed review is addressing PTE 75-1, PTE 80-83, PTE 81-8, PTE 95-60, PTE 97-41 and PTE 2006-16. All the listed regulations are concerned with the purchase or sale of securities by employees or fiduciaries on behalf of employees and provide relief from the restrictions that the ERISA apply to the purchase or sale. Among the conditions to be met to be granted exemptions, the regulations refer to investment grade credit ratings provided by NRSROs.

By way of referring to the standard of creditworthiness elaborated by the SEC in relation to rules 10f-3, 2a-7 and 5b-3 of the Investment Company Act, the DOL is proposing to replace the credit rating references in its PTEs in the same way. Therefore, ‘minimal or low amount of credit risk’ as well as ‘highest or exceptionally strong capacity’ to meet obligations are the parameters the DOL is likely to apply to its regulations. Again, the approach is based on eliminating the primacy of credit ratings in regulations. This does not mean prohibiting credit ratings since the DOL, in the same way as the other agencies, intends to refer to them as one among the factors to be taken into account for the assessment of creditworthiness.⁴¹⁴

III.3.3 The US reforms: A critical review in relation to the risk of over-reliance

III.3.3.1 Evaluating the work of the agencies

⁴¹² Employee Retirement Income Security Act of 1974 Pub L 93-406, 88 Stat 829.

⁴¹³ DOL, ‘Proposed Amendments to Class Prohibited Transaction Exemptions to Remove Credit Ratings Pursuant to the Dodd Frank Wall Street Reform and Consumer Protection Act’ (June 2013) Federal Register Vol 78 No 120.

⁴¹⁴ Ibid: ‘The Department recognizes that, where a fiduciary has neither the expertise nor the time to make an informed determination of credit quality, it may be appropriate as a matter of prudence for such fiduciary to seek out the advice and counsel of third parties. Furthermore, it should be noted that, while credit ratings may no longer serve as a basis, or threshold, of credit quality, section 939A of Dodd-Frank does not prohibit a fiduciary from using credit ratings as an element, or data point, in that analysis’.

Having illustrated the current status of implementation of Section 939A through the works of the concerned agencies, it is now possible to discuss the agencies' work in relation to the purpose of reducing over-reliance on external credit ratings. Before the illustrated amendments, NRSRO credit ratings were the main parameters for measuring creditworthiness. In light of the changes, credit ratings are now among several factors to be taken into consideration. This principle characterises all the proposed and final rules that the US agencies have issued so far. All the agencies' approaches mark the end of the primacy of the external credit ratings in legislation and regulatory frameworks. This aspect stimulates numerous reflections.

In relation to the spirit and letter of Section 939A, the new role of credit ratings, no longer as the exclusive tool but one among several factors to be considered for determining the standard of creditworthiness elaborated by each agency, might mean that Section 939A does not prohibit credit ratings as initially construed. Indeed, by analysing the consultations launched by each agency, it can be observed that this fear has always been present and remarked upon by the users of credit ratings. The agencies themselves had to finally underline that this is not the purpose of the Dodd Frank Act, in particular, Section 939A.⁴¹⁵ Significantly, this opens an interesting scenario on the construction of the rule in question; that is, the review work undertaken by the agencies finally clarified that the credit ratings are not prohibited. Nonetheless, rather than being the authentic interpretation of Section 939A, this may also be discussed from different angles, namely in relation to the impossibility of finding proper, universally accepted, alternatives to credit ratings. In fact, the CFTC, the OCC and the NCUA underlined that they did not receive any indication from the users of credit ratings in this respect. Their main concern was only in relation to the prospect of being prevented from using the credit ratings through the implementation of Section 939A.⁴¹⁶

⁴¹⁵ NCUA (n 378): 'A number of commenters stated that the proposal went beyond the requirements of the Dodd Frank Act.....The NCUA Board notes that nothing in the NPRM prohibited credit unions from using credit ratings as an element of the required credit analysis'.

⁴¹⁶ See CFTC (n 360): 'Only one commenter discussed ratings. BlackRock cautioned that complete removal of ratings criteria as a risk filter may place undue responsibility on an FCM or DCO to complete a thorough risk assessment of an issuer's financial strength'.

Consequently, it may be argued that the agencies' approaches denote two significant aspects. On the one hand, the impossibility of overcoming the difficulties in finding an adequate, unique replacement to credit ratings in accordance with what was the initial meaning and purpose of Section 939A; on the other hand, and consequent to this, there is the compromise with the users of credit ratings. The concerns they expressed turned out to be a strong defence of the credit ratings against a possible prohibition.

Hypothetically, if a universally accepted alternative to the credit ratings had been found and tested, it may be sensible to think that the credit ratings might not have been indicated among other factors to be taken into account for credit quality assessments. However, not only has 'the' alternative ever been found but also the unanimous opposition by the users of the credit ratings played a decisive role in making the proposed and final rules. At this stage, it can be asserted that Section 939A initially pursued the elimination of the credit ratings from legislation and regulatory frameworks. Then, the final result of this strategy through the work of the mandated agencies denotes a diversion from this aim. Rating-based regulation is a word which still fits in the new context. Whereas previously the regulation was 'exclusively' based on the credit ratings, now it is 'also' based on the credit ratings. This is sufficient to say that the credit ratings remained and hence they are still part of the legislation. The proposed or final rules set out by the US agencies reflect a middle-of-the-road solution in an attempt to comply with the letter of Section 939A, satisfy the users of the credit ratings, and find other credit risk assessment tools to be indicated together with the credit ratings with the view to eliminating their exclusivity in legislation, but not their presence.

This can find confirmation through the work that the agencies have completed so far. For example, taking position from the CFTC's and NCUA's explanations of their respective amendments, some interesting elements can be found in support of the assertion that the agencies' work was challenged by the utopian aim to find a unique, accepted alternative to the credit ratings, and by the influence that the users of the credit ratings exercised in favour of them. To begin with the CFTC, this agency explained the removal on the grounds that it noted the poor past performance

of the credit ratings in gauging the safety of certain types of investments. Accordingly, their reference in the Commission's regulations is no longer essential to assess the creditworthiness of some investments. However, the CFTC's final rule also stated that FCM or DCO may refer to external credit ratings as one of many factors to make an investment decision.⁴¹⁷ There is a clear contradiction. If credit ratings are no longer useful or necessary due to their past performance, why would FCM or DCO still be entitled to refer to such useless or unnecessary credit risk assessment tools? This contradiction could have been avoided where an alternative credit risk assessment tool had been discussed, but, as mentioned above the CFTC did not receive any external comment or proposal. The NCUA received some proposals in this respect. In its final rule it specified that one commentator suggested including the credit spreads as an alternative standard for measuring creditworthiness. It is worth reporting the NCUA's view on this proposal:

[T]he NCUA Board does not support this approach because credit spreads are a function of open markets and they reflect investor interest for reasons that include, but are not limited to, credit risk. Market credit spreads for various asset classes experience variability depending on current supply and demand for the product, actual market interest rates, and a variety of other factors. While the NCUA Board declines to establish specific allowable credit spreads, it notes that FCUs and corporates may use credit spread information as a factor in assessing changes in creditworthiness.⁴¹⁸

This statement can be evaluated from two different angles. Firstly, it confirms what has been discussed in the previous paragraph, that is, the fact that none of the alternatives which were proposed before and after the debate on over-reliance encountered any favour. Probably a unique, universally accepted standard of creditworthiness to replace the credit ratings will never be found. This assertion has a probabilistic meaning in that, as it will be discussed below, the Commission is supposed to undertake the same work of the US agencies in relation to the credit rating references in EU law and complete this by 2020. As seen, the work implies finding appropriate alternatives and, hence, there is still room for assessment. However, the work of the US agencies has made it clear

⁴¹⁷ Ibid.

⁴¹⁸ NCUA (n 378), 3.

that the task is highly ambitious and challenging. Secondly, the NCUA statement indicates how the regulators themselves have reservations as to the inclusion of one standard in place of another. It appears that none of the agencies took any responsibility in deciding or proposing a specific creditworthiness standard which should have replaced the credit ratings. This explains why Section 939A set up a plan that is too challenging.

To put it more simply, while a review and removal of credit ratings is possible, it is not possible to get rid of the credit ratings completely. This also justifies the choice of setting out a list of alternatives to be freely selected by the market participants. In substance, the NCUA statement relating to the inclusion of the credit spreads mirrors what all the agencies have pursued or have been aiming to pursue as to the credit ratings in their current or next final rules. As to the credit spreads, the NCUA said that they will not include them as an exclusive standard of creditworthiness but the market participants are free to refer to them if they find them useful for their credit risk assessment analysis. This is not different from the way through which all the agencies finally dealt with the credit ratings: they cannot refer to them as exclusive benchmarks but the ratings can be selected among other tools and used by the market participants. Their primacy in the US legislation has been reduced, but they have not been totally eliminated.

III.3.3.2 Effectiveness as to the risk of over-reliance

Given this overall picture, it is to be wondered which consequences can derive in relation to the purpose of reducing the risk of over-reliance. The agencies' approaches may not serve this purpose adequately. To sum up, credit ratings are indicated among other risk assessment tools which, initially, were discussed as possible replacements to them. Their pros and cons, however, raised doubts as to their suitability to become a valid alternative to credit ratings. In practice, within the debate aiming at searching for alternatives, the credit ratings were able to maintain their position because of the opposition by users to any change which hinted at their abandonment. Hence, the final solution which is reflected in the agencies' approaches can be highlighted as follows: 1) credit

rating references are deleted and this complies with Section 939A; 2) credit ratings may be referred to among other credit risk assessment tools and this eliminates any users' fear of being banned from using credit ratings.

Nonetheless, where regulators indicate credit ratings among several factors to be taken into consideration, it may be natural that users will choose what they have always referred to so far and, thus, they will continue to rely on them. This will not reduce the risk of over-reliance either. The danger of over-reliance may be even stronger in those agencies' approaches, such as CFTC and OCC, in which the principle of using credit ratings among other factors is simply stated without any specification of the alternative factors.

Having said so, the standard of creditworthiness that the agencies elaborated after deleting the credit rating references raise significant doubts as well. Standards like 'adequate', 'strong' or an 'exceptionally strong' capacity to meet commitments could be regarded as the narrative description of the rating scales applied by the CRAs. In more detail, a triple A or A+ indicate such capacities and, thus, they match the investment grade status specified by the rules.⁴¹⁹ Consequently, it may be argued that the standards of creditworthiness elaborated by the agencies are the translation of the meaning of the investment grade rating scales. Therefore, given that the task of determining the investment grade status is on the financial institutions, it appears obvious that the rating symbolism and its meaning may be the first port of call and risks becoming the exclusive one, even though the new rules state that credit ratings should not be given exclusivity. Moreover, the responsibility on the financial institutions to qualify a security as investment grade raises the issue of how to consider this determination. It is acknowledged that credit ratings are forward looking opinions subject to

⁴¹⁹ See S&P, 'Standard and Poor's Ratings Definitions' (2014): 'AAA: An obligation rated 'AAA' has the highest rating assigned by Standard & Poor's. The obligor's capacity to meet its financial commitment on the obligation is extremely strong; AA: An obligation rated 'AA' differs from the highest-rated obligations only to a small degree. The obligor's capacity to meet its financial commitment on the obligation is very strong; A: An obligation rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still strong'.

changes over time.⁴²⁰ Hence, the question is whether the investment grade determination from the part of the financial institutions should be regarded as an opinion like credit ratings or something different. This issue seems not to have been given due consideration within the approaches elaborated by the agencies. In addition, the approaches seem to have missed the essentiality of the monitoring of the investment grade status once the determination is finalised. As illustrated in the first part of this thesis, CRAs provide adequate monitoring services through the outlook and watch-list procedures. In the agencies' approaches there is no indication on the proper actions to be taken in the event that the investment grade status should change. Once again, it is reasonable to think that if the financial institutions referred to NRSRO credit ratings for their creditworthiness determination, possible downgrades applied by the CRAs might have a bias on them and perhaps result in cliff-edge effects and herd behaviours. Given these considerations, the following conclusion on the implementation of Section 939A through the agencies' proposed and final rules can be reached. The agencies' approaches mark the end of the primacy of the credit ratings in the US financial legislation but they have maintained incentives which may, in practice, result in the primacy of credit ratings as credit risk measurement tools. At this stage of implementation of the reforms, it may be argued that the chosen amendments may not be effective in the reduction of the risk of over-reliance. On the contrary, the risk remains alive even if other credit risk assessment tools are indicated along with the credit ratings.

III.4 THE STATUS OF THE EU REFORMS UNDER THE CRA III REGULATION

III.4.1 The work of the ESAs

The EU is regarded by the FSB as the second system in which progress in the implementation of the two-pronged approach can be discussed. As seen, the European regulatory approaches were finally

⁴²⁰ S&P, 'Understanding Ratings', <<http://www.standardandpoors.com/MicrositeHome/en/us/Microsites>> accessed 24 April 2012.

incorporated into three Articles within CRA Regulation III. These rules represent the normative translation of the approach set out at the international level to tackle over-reliance on external credit ratings by way of reducing the amount of credit rating references into legislation and regulatory frameworks and then encouraging more independent credit risk analysis by investors and market participants.⁴²¹ With regard to the review of the credit rating references, Article 5(b) of CRA Regulation III mandates the ESAs to conduct a stocktaking review of the credit rating references in their guidelines and recommendations. The ESAs completed their review by the end of 2013 and hence a critical assessment of the outcomes can be made.⁴²²

The first observations concern the purpose of their review. According to the letter of Article 5(b) the review has to identify those credit rating references which can trigger mechanistic reliance on credit ratings. Significantly, during the consultation period leading to the completion of CRA Regulation III, the European Central Bank (ECB) warned about the degree of subjectivity surrounding the concept of mechanistic reliance.⁴²³ This was due to a lack of definition of mechanistic reliance on external credit ratings. In the previous chapter a definitional gap with regard to the phenomenon of over-reliance was highlighted. Consequently, two different definitions of the phenomenon have been provided according to whether over-reliance stems from the hardwiring of ratings into legislation or from the structured finance sector. It can be said that the lack of a definition is a lacuna which has characterised the regulatory debate on over-reliance so far. Among other things, it has been pointed out that the FSB itself did not provide any definition of mechanistic reliance. This gap has been closed by way of associating mechanistic reliance to cliff-edge effects and herd behaviours.

⁴²¹ Commission Impact Assessment (n 178).

⁴²² EBA, EIOPA and ESMA (ESAs), 'Final Report on Mechanistic References to Credit Ratings in the ESA's Guidelines and Recommendations' (2014) JC 2014-004.

⁴²³ See European Central Bank (ECB) 'Opinion of the European Central Bank on a Proposal for a Regulation Amending Regulation 1060/2009 on Credit Rating Agencies and a Proposal for a Directive Amending Directive 2009/65/EC on the Coordination of Laws, Regulations and Administrative Provisions Relating to Undertakings of Collective Transferable Securities (UCITS) and Directive 2011/61/EU on Alternatives Investment Fund Managers in Respect of the Excessive Reliance on Credit Ratings' (2012) OJEU C/167/02.

In their recent stocktaking review the ESAs underlined that the Commission gave them mandate to identify references which can induce mechanistic reliance on external credit ratings without providing any definition of mechanistic reliance.⁴²⁴ Clearly, the ESAs' review could not take place without a preliminary clarification of what mechanistic reliance is. In fact, unlike the US regulators under the auspices of Section 939A, the ESAs were required to conduct a selective review. Consequently, their preliminary task was to set out a definition of mechanistic reliance so as to be facilitated in the identification of the credit rating references which can carry such a risk. According to the final draft of the consultation paper on the enactment of Article 5(b) of CRA Regulation III issued in 2014, the definition of mechanistic reliance reads as follows: 'it is considered that there is sole or mechanistic reliance on credit ratings (or credit rating outlooks) when an action or omission is the consequence of any type of rule based on credit ratings (or credit rating outlooks) without any discretion'. The ESAs clarified that such a definition can be traced back to the preparatory works which finally led the Commission, the European Parliament and the Council of Europe (hereinafter: the European Institutions) to finalise the last piece of European legislation of CRAs.⁴²⁵ In practice, this definition is the result of the understanding reached by the European Institutions during the negotiation of CRA Regulation III. However, such an understanding has never been translated into a specific definition. The definition of mechanistic reliance provided by the ESAs can be considered the summarisation of the broader definition of over-reliance deriving from regulation that this thesis attempted to sketch in its second chapter. In their definition the ESAs emphasise the negligent conduct of investors and market participants in performing their own due diligence and credit assessment when they give exclusive relevance to credit ratings as credit risk assessment tools. Such a conduct can exacerbate cliff-edge effects and parallel behaviours from the part of other investors and market participants. While the 'action' indicated in the definition refers indeed to these phenomena, the 'omission' is to be referred to the

⁴²⁴ ESAs, 'Joint Consultation Paper on Mechanistic References to Credit Ratings in the ESA's Guidelines and Recommendations' (2013) JC-CP-2013-02.

⁴²⁵ ESAs (n 422).

lack of any credit risk assessment complementary to the analysis provided by the CRAs. This gives the credit ratings the exclusivity and primacy as a means for the assessment of credit risk.

Even though there is not explicit reference to the misperception of credit ratings as an official seal of approval of creditworthiness, the ESAs' definition is, in any case, in relation to a negligent conduct by investors and market participants which connotes the type of over-reliance stemming from the hardwiring of credit ratings into legislation and regulatory frameworks. Finally, the ESAs underline the source of the problems at stake, that is, they are facilitated by regulations based on external credit ratings.⁴²⁶ This definition constitutes the paradigm upon which the ESAs were supposed to perform and complete their review by the end of 2013. In practice, through their definition of mechanistic reliance their work could have easily selected specific credit rating references. This, in turn, could have guaranteed compliance with the letter of Article 5(b) and with the rationale behind FSB Principle I. The following discussion is based on the results of their review and selection.

Being commonly agreed that the banking regulation boasts the most pervasive use of credit ratings, the analysis can start with the review conducted by the EBA as to its guidelines and recommendations. Then, following the order given by the Joint Forum as to the use of credit ratings in LRSPs, the discussion can concentrate on the review conducted by the ESMA in relation to its guidelines on money market funds (MMF) and short term money market funds (SMMF). Finally, the result of the EIOPA's review concludes the discussion on the European progress in the translation of the first level of the approach.

III.4.1.1 The EBA's mandate

III.4.1.1.1 Area of intervention

⁴²⁶ Ibid.

The EBA's review can be assessed in relation to its Revised Guidelines on the Recognition of External Credit Assessment Institutions issued in 2010. The guidelines were intended to provide consistency across jurisdictions on the ECAI recognition for the determination of capital requirements under the SA and in relation to the securitisation ratings-based approach.⁴²⁷ Within these guidelines, those concerning the mapping to external ratings in the SA and the mapping for securitisation exposures came under the EBA spotlight with regard to the risk of mechanistic reliance as it has been defined above. To have a better understanding of this, some preliminary explanations are in order.

As already mentioned, under the Basel II capital adequacy framework, banking institutions are allowed to use the SA and, thus, rely on external credit ratings to calculate capital requirement for credit risk. At the EU level, the Basel II framework and its SA were subsequently transposed into the CRD legislation comprising Directives 2006/48/EC and 2006/49/EC. The SA was maintained in the new Basel III framework as well as in the current CRD IV legislation comprising Regulation EU No 575/2013 (CRR) and Directive 2013/36/EU (CRD).⁴²⁸ Taking position from the first source, that is, the Basel II framework, Annex 2 identifies the mapping process as the correspondence between the credit risk assessment to risk weights determined by an eligible ECAI under the SA, and the credit quality steps (CQS). In greater detail, what this means is that once a rating agency is eligible to be recognised as an ECAI its credit assessments are mapped by supervisors to the CQS defined by the Basel II framework. As is known, the framework also calculates the risk weight to be applied to each exposure. The banking supervisory authorities are responsible for the mapping process and, as specified in Annex 2, they have 'to consider a variety of qualitative and quantitative factors to differentiate between the relative degrees of risk expressed

⁴²⁷ EBA, 'Revised Guidelines on the Recognition of External Credit Assessment Institutions' (2010).

⁴²⁸ 'Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012' (2013) OJEU L 176/1; see also 'Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directive 2006/48/EC and 2006/49/EC' (2013) L 176/338.

by each assessment, including, inter alia, the pool of issuers that each agency covers, the range of ratings that an agency assigns, each rating's meaning, and each agency's definition of default'.⁴²⁹ In relation to Annex 2 of the Basel II framework, Article 82(1) of CRD III specifies that the competent authorities shall determine, in an objective and consistent manner, with which of the CQSs set out in Directive 2006/48/EC the credit assessment provided by ECAI are to be associated.⁴³⁰

The 2010 EBA guidelines were issued in the context of such rules and principles with the view to laying down a common approach to mapping and hence ensuring consistency across the EU to reduce the risk of regulatory arbitrage.⁴³¹ With regard to the use of external credit ratings and their mapping under the SA, the EBA underlined that CQS may change consequently to rating downgrades. In turn, this will determine an increase in the capital requirements. The EBA identifies this situation as an example of mechanistic reliance because institutions cannot rely on risk assessment tools alternative to credit ratings.⁴³² Similar conclusions were drawn in relation to the mapping process for securitisation exposures. Therefore, the EBA was able to identify what can be the source of mechanistic reliance on external credit ratings and should be accordingly repealed under Article 5(b) of CRA Regulation III.⁴³³

III.4.1.1.2 Analysing the EBA's approach

However, what causes debate is not the identified guidelines but how the EBA decided to react. In other words, the EBA's justification for why it feels it is not opportune to apply any amendment. To begin with, there are technical reasons. These can be traced back to forthcoming implementing

⁴²⁹ BCBS, 'International Convergence of Capital Measurement and Capital Standards, A revised Framework' (2006) Annex 2 Standardized Approach-Implementing the Mapping Process; see also BCBS 'The Standardised Approach to Credit Risk' (2001) Supporting Document to the New Basel Capital Accord.

⁴³⁰ See Directive 2010/76/EC of the European Parliament and of the Council of 24 November 2010 amending Directives 2006/48/EC and 2006/49/EC as regards capital requirements for the trading book and for re-securitisations, and the supervisory review of remuneration policies (2010) OJEU L 329/3.

⁴³¹ EBA (n 427).

⁴³² ESAs (n 422).

⁴³³ Ibid.

technical standards (ITS) specifying the mapping of ECAIs to credit quality steps which the EBA have the task to draft under the CRR. The ITS will amend automatically the guidelines. Consequently, any amendment before the issuance of the ITS would not make sense.⁴³⁴ Secondly, the EBA questions its authority to apply the amendments requested by the letter of Article 5(b). Interestingly, the EBA argues that the risk of over-reliance stems primarily from the SA rather than exclusively from its guidelines. Then, this risk continues through the implementing legislation, namely the CRD III and IV. In this context, it is the task of the Basel Committee Task Force on the SA to find appropriate alternatives for the mapping to external credit ratings in the approach and for securitisation exposure. This would allow a change in the implementing legislation and possibly new guidelines in accordance.⁴³⁵

Significantly, policy reasons seem to prevent the EBA from complying with Article 5(b). Furthermore, the EBA underlines that any amendments to its guidelines cannot have any effect on the implementing legislation, namely the CRR. In practice, guidelines and recommendations issued by the ESAs cannot repeal any legislation and, thus, the EBA feels that it is not opportune to take any steps. These are the legal reasons which prevent the EBA from complying with Article 5(b). Based on this, it can be observed that, at least for the EBA, the mandate set out in Article 5(b) has remained on paper or not completely fulfilled. The message from the part of the EBA appears to be clear: the forthcoming ITS will take into consideration the risk of over-reliance. However, what is indicated as essential is the elaboration of alternatives to external credit ratings. In this respect, the problem is not only the objective difficulty in finding accepted alternatives but also the willingness from the part of the Basel arena to discuss the opportunity of finding alternatives as substitutes to the credit ratings.

⁴³⁴ ESAs, 'Consultation Paper on Draft Implementing Technical Standards on the mapping of ECAIs' credit assessments under Article 136(1) and (3) of Regulation (EU) No 575/2013 (Capital Requirement Regulation-CRR)' (2014) JC/CP/2014/01.

⁴³⁵ ESAs (n 422).

Indeed, the new Basel III framework, despite the Committee's intention to pursue strategies to reduce reliance on the external credit ratings, still considers them fundamental. For instance, with regard to the credit rating references under the Basel Committee liquidity standards, the Basel Committee declared that using market based indicators in replacement of the credit ratings will not be possible. The credit ratings are needed and, above all, there are currently no plans to completely remove them.⁴³⁶ As to market risk, the second consultation paper relating to the trading book revised the SA for the calculation of capital charges for interest rate risk and risks relating to securitisation positions held in the trading book. The approach currently relies on assessments based on the credit ratings provided by CRAs.⁴³⁷

Finally, the Basel Committee has recently published a second Consultative Document setting out revised proposals regarding the Basel securitisation framework. In short, these proposals introduce a revised set of approaches for determining regulatory capital requirements relating to securitisation exposures held in the banking book.⁴³⁸ The revised framework, among others,⁴³⁹ aims at reducing mechanistic reliance on external credit ratings in line with the FSB principles and the G20 leaders call on the Committee to tackle the adverse incentives deriving from the use of the credit ratings in the regulatory capital framework.⁴⁴⁰ Under the securitisation framework set out in

⁴³⁶ BCBS, 'Guidance for Supervisors on Market-Based Indicators of Liquidity' (January 2014) <<http://www.bis.org/publ/bcbs273.pdf>> accessed 7 April 2014; BCBS, 'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' (January 2013) <<http://www.bis.org/publ/bcbs238.pdf>> accessed 10 April 2014; BCBS, 'Consultative Document Basel III: The Net stable Funding Ratio' (January 2014) <<http://www.bis.org/publ/bcbs271.pdf>> accessed 15 April 2014.

⁴³⁷ Alternatives are being considered but they are still under review. These include capitalizing interest rate risk based on a measurement of risks arising from variations in the present values of future cash flows of trading book instruments; capitalizing credit spread risk in securitization positions using a method which differentiates risk categories by credit quality without explicit reference to CRA ratings, see BCBS, 'Consultative Document on the Fundamental Review of the Trading Book: A Revised Market Risk Framework' (October 2013) <<http://www.bis.org/publ/bcbs265.pdf>> accessed 15 April 2014; see also FSB (n 326).

⁴³⁸ BCBS, 'Consultative Document, Revisions to the Securitization Framework' (December 2014) <<http://www.bis.org/bcbs/publ/d303.htm>> accessed 24 December 2014; see also, BCBS 'Consultative Document, Revision to the Basel Securitization Framework' (December 2012) <<http://www.bis.org/publ/bcbs236.pdf>> accessed 24 December 2014

⁴³⁹ The other specific objectives within the revising framework are: increasing risk weight for highly rated securitization exposures. Reducing risk weights for low-rated securitization exposures, reducing cliff effects and enhancing the framework's risk sensitivity.

⁴⁴⁰ G20, 'The G-20 Toronto Summit Declaration' (2010).

Basel II, banks should hold regulatory capital against all their securitisation exposures. To determine the regulatory capital requirements for securitisation exposures within the banking book the banks may use either the SA or the IRB approach. The proposed new framework is based on a simplified hierarchy of approaches, at the top of which stands the Internal Rating Based Approach (IRBA), followed by the External Ratings Based Approach (EXRBA), the SA and finally the application of a 1250% risk weight. Importantly, when it is not possible to use the IRBA it is necessary to move down to the next available one.⁴⁴¹ As can be seen, the external credit ratings still retain their relevance, though the IRB is at the top of the hierarchy. In fact, the EXRBA can be used in jurisdictions where the use of external credit ratings is permitted and where tranches have an external credit rating or where credit ratings can be inferred. Then, following the hierarchy, the SA will be referred to when the first two are not available. However, in this respect the framework specifies that the resulting capital requirements under the SA are meant to be broadly aligned with those obtained under the EXRBA and will be slightly higher than those obtained under the IRB approach.⁴⁴²

This is a work which is yet to be finalised by the Basel Committee. As is known, the Basel frameworks are not legally binding, rather they aim to form the basis for national rulemaking. In any case, the work of the committee has its relevance with respect to the implementation of the FSB two-pronged approach and the EU rules addressing over-reliance. In particular, the timing of its work seems to be determinant as to the progress of the FSB's jurisdictions review and reduction of credit rating references in the banking sector. Most of them have declared that they intend to progress in accordance with the FSB set of principles only after (and within eighteen months) the Basel Committee will have completed its work on the above illustrated frameworks. Putting this

⁴⁴¹ IRBA applies to banks which have supervisory approval to use an IRB approach. This would imply that they should have an adequate IRB model and sufficient data to calculate the IRB capital charge for the underlying pool where this had not been securitized, see BCBS (n 438).

⁴⁴² Ibid; see also Merryn Craske & Jeremiah Wagner, 'Cadwalader discusses Revisions to the Securitization Framework: Second Consultative Document Published by the Basel Committee' (March 2014) Columbia Law School's Blog on Corporations and the Capital Markets, <<http://clsbluesky.law.columbia.edu/2014/03/10/cadwalader-discusses-revisions-to-the-securitisation-framework-second-consultative-document-published-by-the-basel-committee/> accessed 18 November 2014>

picture into the EBA perspective, it is clear that its room for manoeuvre seems to be very limited. Its justifications with regard to the opportunity of not applying any changes to its guidelines have a logic in relation to the fact that any change should come first from the source upon which the European legislation on capital requirements is based, that is, the Basel framework. This would permit the EBA to issue new guidelines or implementing technical standards for the finalisation of new bodies of rules that the EU competent institution would elaborate in accordance with the Basel soft-law rules. Ultimately, the EBA risks being stalled as long as signals do not come from the part of the Basel Committee. This will also make Article 5(b) useless in relation to the risk of over-reliance in the banking sector.

III.4.1.2 The ESMA's mandate

III.4.1.2.1 Area of intervention

The ESMA performed its review in relation to the 2010 CESR's guidelines providing a definition of money market funds.⁴⁴³ When they were issued, the guidelines aimed at ensuring investors' protection through a harmonised definition of money market fund. The guidelines drew a line between short-term money market funds (STMMFs) and money market funds (MMFs). While STMMFs are allowed to invest in securities with a residual maturity of less than, or equal to, 397 days and have a portfolio-weighted average maturity that does not exceed 60 days, MMFs are not subjected to the same maturity restriction provided that their portfolio-weighted average maturity does not exceed 6 months. To put it more simply, STMMFs have a very short weighted average maturity and weighted average life vis-à-vis money market funds which have a longer weighted average maturity and weighted average life. Another significant difference upon which the ESMA based the distinction between STMMFs and MMFs is concerned with the possibility for MMFs of holding sovereign issuance, meant as a money market instrument 'issued or guaranteed by a central,

⁴⁴³ ESMA, 'CESR's Guidelines on a Common Definition of European Money Market Funds' (2010) CESR/10-049.

regional, or local authority or central bank of a Member State, the ECB, the EU or the European Investment Bank (EIB)'.⁴⁴⁴ With regard to over-reliance, Boxes 2 and 3 of the ESMA's guidelines, relating respectively to STMMFs and MMFs came under scrutiny.

III.4.1.2.2 Analysing the ESMA's approach

According to ESMA, references to external credit ratings in Boxes 2 and 3 can create undue reliance by asset managers. In point 3 of box 2 it is stated that STMMFs have to invest in debt instruments which are of a high quality. The determination of 'high quality' is the task of the management company and, to this end, the guidelines specify that a wide range of factors can be taken into account, among them: (a) the credit quality of the instrument; (b) the type of asset class represented by the instrument; (c) the operational and counterparty risk when it is a structured finance transaction; and (d) the liquidity profile.⁴⁴⁵ Based on these factors, attention is to be devoted to the credit quality of the debt instrument. In this respect, paragraph 4 of the guideline associates the credit quality requirement to the highest credit rating category awarded by recognised CRAs. Such a requirement operates in the event of credit rating provided by CRAs, otherwise an equivalent quality for an unrated instrument will be determined through the management company's internal rating process.⁴⁴⁶ As to MMF, paragraph 2 of Box 3 states that MMFs may hold sovereign issuance provided that it is of investment grade quality.

Paragraph 4 of Box 2 and paragraph 2 of Box 3 of the ESMA guidelines have been the object of the review. It is worth reporting the text of the proposed changes:

[F]or the purposes of point 3a), [the STTMF must] ensure that the management company performs its own documented assessment of the credit quality of money market instruments that allows it to consider a money market instrument as high quality. Where one or more credit rating agencies registered and supervised by ESMA have provided a rating of the instrument, the management company's internal assessment should have regard to, inter alia, those credit ratings. While there should be no mechanistic reliance on such external ratings, a downgrade below the two

⁴⁴⁴ Ibid.

⁴⁴⁵ ESAs (n 422).

⁴⁴⁶ Ibid.

highest short-term credit ratings by any agency registered and supervised by ESMA that has rated the instrument should lead the manager to undertake a new assessment of the credit quality of the money market instrument to ensure it continues to be of high quality (Paragraph 4 of Box 2).

[a MMF] May, as an exception to the requirement of point 4 of Box 2, hold sovereign issuance of a lower internally-assigned credit quality based on the MMF manager's own documented assessment of credit quality. Where one or more credit rating agencies registered and supervised by ESMA have provided a rating of the instrument, the management company's internal assessment should have regard to, inter alia, those credit ratings. While there should not be mechanistic reliance on such external ratings, a downgrade below investment grade or any other equivalent rating grade by any agency registered and supervised by ESMA that has rated the instrument should lead the manager to undertake a new assessment of the credit quality of the money market instrument to ensure it continues to be of appropriate quality (Paragraph 2 of Box 3).

The changes applied by the ESMA stimulate the following reflections. The paragraphs were re-worded in such a way as not to give exclusivity to the external credit ratings to the detriment of other factors that the management company should consider for the determination of credit quality. Such an amendment would have made sense if there had not been any warnings in the guidelines as to the necessity to avoid giving primacy to external credit ratings for the determination of the credit quality. In reality, these warnings were already present in the explanatory notes included in the 2010 ESMA's guidelines: 'in carrying out its diligence, the management company should not place undue weight on the credit rating of the instrument'.⁴⁴⁷ Also, the explanatory text encouraged to control the credit quality of the money market instruments on regular basis and not only at the time of the purchase. Significantly, in the event of rating downgrades corrective actions should have been taken into consideration by the management company in the best interests of the clients.⁴⁴⁸

These explanatory notes were already mitigating the potential risk of over-reliance which, according to the ESMA's 2014 review, would stem from paragraph 4 of Box 2 and paragraph 2 of Box 3. Based on this, it may be argued that there was no need for intervention on this guideline.

⁴⁴⁷ ESMA (n 443).

⁴⁴⁸ Ibid.

This context raises the question of whether the 2010 CESR's guidelines on European money market funds could really carry the risk of over-reliance as claimed by the ESMA. The answer could be positive in the absence of mitigating warnings, but given that the warnings were already set out in the guidelines, the answer is negative. For these reasons, the applied amendments appear to be superfluous.

Nonetheless, a noteworthy feature of the proposed amendments may be seen in the amendment according to which the credit ratings can still be a point of reference for the determination of credit quality among other factors ('inter alia'). This encourages us to consider external credit ratings as one and not as the exclusive tool for the assessment of creditworthiness. In any case, as some of the US implementing approaches have shown, it would be desirable for ESMA to provide a list of possible alternative factors. In fact, box 2 lists the factors to be considered for the determination of a debt instrument's high quality with the specification that the list is not exhaustive.⁴⁴⁹ Not giving an indication of possible alternatives for the assessment of creditworthiness but simply declaring that credit ratings can still be referred to 'inter alia' risks frustrating the purpose of reducing the primacy of external credit ratings as credit assessment tools. Therefore, such an amendment may appear to incentivise the use of credit ratings rather than reduce it. In other words, it appears that the ESMA's worry is more concerned with showing that the credit ratings will not be lost rather than recalibrating the role of credit ratings as one among several factors to be considered for due diligence and credit risk assessment. In conclusion, it can be observed that while the EBA clarified the reasons why it felt it opportune not to apply any amendments in its guidelines, the ESMA reviewed and applied amendments to its guidelines according to the mandate of Article 5(b). However, its amendments appear, for the reasons explained, to be superfluous.

III.4.2 The EU approach in future perspective

⁴⁴⁹ Ibid.

The EIOPA has concluded its own review with no identification of any recommendations and guidelines which contain credit rating references posing a risk of mechanistic reliance.⁴⁵⁰ This outcome stimulates further reflection in relation to the European approach against over-reliance. Remaining within the context of reducing regulatory reliance, analysis is to be concerned with Article 5(c) of CRA Regulation III. The contents are not dissimilar to those in Article 5(b) involving the ESAs. The only difference lies in the broadest term assigned to the Commission to conduct its review. The Commission will have to review and identify those credit ratings references in EU law which can cause undue reliance and, by January 2020, repeal them, provided that valid alternatives are found. The outcomes of the ESA's review, in particular the ESMA's and EIOPA's review, raise some questions to be applied to the investigation that the Commission is expected to complete by the mentioned date. Accordingly, since it has been seen that the EIOPA did not find any credit rating references in its guidelines, while it has been argued that the ESMA guidelines do not carry, per se, any risk of over-reliance, it is desirable to discuss whether the review of the Commission under Article 5(c) can lead to the same results. In practice, the extent to which credit ratings are embedded into EU law is to be assessed and whether such references confer a primacy status to credit ratings in such a way as to be the exclusive benchmark and, thus, potentially discourage independent due diligence and credit risk assessment. To this end, this analysis will try to formulate a hypothesis on the outcome of the Commission's forthcoming review. This will be based on the picture of the hardwiring of credit ratings into EU law. The context will be circumscribed to the EU financial legislation before the recent financial crisis, and to the consequent reforms which modified the legislation also with regard to over-reliance. This is the only context which permits us to understand the future developments of the current European approach against over-reliance.

⁴⁵⁰ ESAs (n 422): 'EIOPA has not identified any guidelines, in force or currently under development, to be used as an example of mechanistic reliance'.

III.4.2.1 Banking

Starting with the banking sector it must be observed that the CRD, in its early framework, already provided some incentives for more internal risk analysis so as to counterbalance the use of external credit ratings. Firstly, the possibility of using the IRB approach was, per se, an incentive to perform more independent credit risk assessment since, as the Commission, stressed: ‘the CRD requires credit institutions to have their own sound credit granting criteria and credit decision processes in place. Basing rating decisions solely on external credit rating agency ratings does not fulfil this requirement under the EU banking legislation’.⁴⁵¹ Secondly, it is worth noting that Annex VII, part 4, item 18 of the early framework stated that: ‘if a credit institution uses external ratings as primary factors determining an internal rating assignment, the credit institution shall ensure that it considers other relevant information’.⁴⁵² Therefore, external ratings could be used as primary factors for determining an internal rating but not as exclusive benchmarks. They had to be complemented with other information.

Considering that both the early and new CRD frameworks incorporated incentives for autonomous credit risk analysis, references to credit ratings do not seem to pose serious risks as to over-reliance. This may also be a logical conclusion for the Commission when it will review the credit ratings references in the banking sector to meet its deadline of 2020. In essence, due to the previous and current contents of the framework, the Commission may conclude that there are no references which may induce mechanistic and parallel reliance by the market participants.

III.4.2.2 Insurance

The early EU framework on the supervision of insurance and reinsurance undertakings did not contain any provision referring to the credit ratings.⁴⁵³ Recently, this regime has been amended

⁴⁵¹ Commission Impact Assessment (n 178).

⁴⁵² See Directive 2006/48/EC.

⁴⁵³ See provisions on the solvency margin in the EU Solvency framework: Articles 27 to 31 of Directive 2002/83/EC of the European Parliament and of the Council of 5 November 2002 concerning life assurance (2002) OJEC L345/1; Article 1 of Directive 2002/13/EC of the European Parliament and of the Council of 5

through the introduction of Directive 2009/138/EC (the so-called Solvency II framework directive), which introduces risk-oriented solvency requirements for insurance and reinsurance undertakings. Solvency II deals with credit risk, and capital requirements are calculated either through a standard formula or through the undertaking's internal model subject to supervisory approval.⁴⁵⁴ There are no references to external credit ratings in the Solvency II framework. However, on 10 October 2014 the Commission issued a Delegated Act containing implementing rules for Solvency II.⁴⁵⁵ In greater detail, Commission Delegated Regulation 2015/35 refers to the credit ratings provided by ECAI. Article 4 states that insurance and reinsurance undertakings may use external credit ratings for the calculation of the solvency capital requirements in accordance with the standard formula only where they have been issued by an ECAI or endorsed by an ECAI under CRA Regulation I. Nonetheless, Regulation 2015/35 takes into consideration the risk of over-reliance on credit ratings by specifying that they cannot be regarded as exclusive benchmarks for the purposes of calculating capital requirements.⁴⁵⁶ Consequently, the new regulation implementing the Solvency II framework is in line with the FSB principles and, in theory, should not pose any over-reliance threat.

III.4.2.3 Pensions

Similar conclusions apply to the pension sector. In the EU, pension funds are disciplined under the Institution for Occupational Retirement Provision Directive (IORP).⁴⁵⁷ This directive does not contain any reference to credit ratings. Credit rating references might be identified in few Member

March 2002 amending Council Directive 73/239/EEC as regards the solvency margin requirements for non-life insurance undertakings (2002) OJEC L 77/17; and Articles 37 to 39 of Directive 2005/68/EC of the European Parliament and of the Council 16 November 2005 on reinsurance and amending Council Directives 73/239/EEC, 92/49/EEC as well as 98/78/EC and 2002/83/EC (2005) OJEU L323/1.

⁴⁵⁴ See Articles 100 to 127 of Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) (2009) OJEU L 335.

⁴⁵⁵ Commission, 'Commission Delegated Regulation (EU) 2015/35 of 10 October 2014 supplementing directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance' (2014) OJEU L 12/3.

⁴⁵⁶ See Recital 5 Commission Delegated Regulation 2015/35.

⁴⁵⁷ Directive 2003/41/EC of the European Parliament and of the Council of 3 June 2003 on the activities and supervision of institutions for occupational retirement provision, OJ L 235/10, 23.9.2003.

States' laws implementing the IORP directive, but things may change due to the current trends towards the reduction of credit rating references.⁴⁵⁸ In any case, as already stressed by the EIOPA, this a sector in which legislation has never contained any credit rating references. Consequently, the Commission review will be basically in line with this *de facto* outcome.

III.4.2.4 Investment funds

In the EU the area of collective investment schemes covers four types of harmonised investment funds: Undertakings for Collective Investment in Transferable Securities (UCITS); Alternative Investment Fund Managers (AIFM); European Venture Capital Funds (EuVECA); and European Social Entrepreneurship funds (EuSEF). As mentioned in the previous chapter, the UCITS directive 2009/65/EC and AIFM directive 2011/61/EU have been amended by directive 2013/14/EU in relation to the risk of over-reliance.⁴⁵⁹ However, with specific regard to UCITS, it can be noticed that even before the current legislation credit ratings were not the exclusive tools for assessing credit risk. In this respect, reference is to be made to Directive 2007/16/EC implementing Council Directive 85/611/ECC on the coordination of laws, regulations and administrative provisions relating to UCITS as regards the clarification of certain definitions.⁴⁶⁰ For instance, Article 6 listed the criteria to verify the eligibility of non-listed money market instruments issued by 'an establishment which is subject to, and complies with, prudential rules considered by competent authorities to be as stringent as those laid down by community law'. In essence, this provision set out four, non-cumulative, criteria to be met by a money market instrument to be eligible for an investment by a UCITS. The third of these criteria requires the issuer of said instrument to be 'at

⁴⁵⁸ See E Wymeersch & M Kruithof, 'Regulation and Liability of Credit Rating Agencies under Belgian Law' (2006) Universiteit Gent Financial Law Institute WP Series, 14 (footnotes 84-85).

⁴⁵⁹ See Chapter II, section II.7.4.

⁴⁶⁰ Commission Directive 2007/16/EC of 19 March 2007 implementing Council Directive 85/611/EEC on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) as regards the clarification of certain definitions (2007) OJEU L79/11.

least investment grade rating'.⁴⁶¹ It is submitted that such a provision only identified an instrument as being 'eligible' for investment but not 'suitable' and therefore it was not to be regarded as encouraging excessive reliance on the detriment of one's own risk analysis.⁴⁶² Furthermore, Article 10 referred to credit ratings to determine whether transferable securities or money market instruments embedded a derivative component. According to Article 10, one of the non-cumulative criteria to be used to verify whether the host security (money market instrument) embedded a derivative was whether the performance of the money market instrument was sensitive to changes in credit rating of the underlined index or asset.⁴⁶³ Like in Article 6, credit ratings were just one criterion. Asset managers were neither limited nor discouraged from conducting their own risk analysis.

Considering the recent amendments applied to the UCITS and AIFM directives, which include the principle to reduce over-reliance through the encouragement of independent credit risk analysis, the outcomes in this sector are not dissimilar to those relating to the CRD framework. There was already an *ex ante*, and there is an *ex post*, mitigation of the role of the credit ratings so that the Commission will be likely to conclude that there is no danger of mechanistic and parallel reliance deriving from these EU law frameworks.

III.4.2.5 Investment firms

With regard to investment firms, it is worth mentioning the debate as to the credit rating reference incorporated in Article 18 of Directive 2006/73/EC implementing directive 2004/39/EC (MIFID I). Article 18 requires qualifying money market funds (QMMF) to invest in high quality money market instruments 'to achieve their primary investment objective to maintain the net asset value of the undertaking either constant at par (net of earnings) or at the value of the investors' initial capital plus earnings'. Under this rule, high money market instruments are those which receive the highest

⁴⁶¹ Ibid.

⁴⁶² Commission Impact Assessment (n 178).

⁴⁶³ Directive 2007/16/EC.

credit ratings by competent CRAs.⁴⁶⁴ An instrument not rated by any competent CRA shall not be regarded as a high quality one. This reference to credit ratings was controversial. It was argued that the requirement could potentially exclude all UCITS money market funds which did not rely on specific credit ratings in their investment process from the market of managing investment firms' client money.⁴⁶⁵ Specifically, the risk was that a money market fund could be excluded from becoming a QMMF when it did not rely on competent CRAs but conducted its own risk analysis sufficient to demonstrate that the instrument had an acceptable level of risk.⁴⁶⁶ Significantly, the rule appeared to give an undue primacy to the credit ratings. Nonetheless, contrariety was expressed with regard to amend the credit rating reference on the ground that: 'an independent credit rating protects investors by limiting the fund's ability to chase higher yields through riskier securities based on the fund manager's own subjective assessment'.⁴⁶⁷ Hence, the elimination of credit rating reference from Article 18 of the MIFID implementing directive would have hampered the possibility for money market fund investors to rely on a common standard for investment quality. Accordingly, it was suggested eliminating only the requirement to refer to 'competent CRAs', but finally there were not changes. However, it must be noticed that MIFID I will be repealed and recast by directive 2014/65/EU and Regulation 600/2014 (so-called MIFID II), which the Commission issued in July 2014. Both the directive and regulation do not contain references to credit ratings.⁴⁶⁸

⁴⁶⁴ See Commission Directive 2006/73/EC of 10 August 2006 implementing Directive 2004/39/EC of the European Parliament and of the Council as regards organizational requirements and operating conditions for investment firms and defined terms for the purposes of that Directive (2006) OJEU L 241/26.

⁴⁶⁵ European Fund and Asset Management Association (EFAMA), 'Tackling the Problem of Excessive Reliance on Ratings' (2008).

⁴⁶⁶ *Ibid.*

⁴⁶⁷ See Bundesverband Investment und Asset Management e.V. (BVI) 'DG Markt Services Document: Tackling the Problem of Excessive Reliance on Ratings' (2008).

⁴⁶⁸ See Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (recast) (2014) OJEU L 173/349; see also Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012 (2014) OJEU L 173/84.

III.4.2.6 Disclosure requirements for securities

References to credit ratings are also included in the EU rules governing the publishing of a prospectus when securities are offered to the public or admitted to trading on a regulated market. Annex V of Regulation 809/2004 implementing the Prospectus Directive 2003/71/EC lists the information that the prospectus should include with regard to the securities to be offered or admitted to trading.⁴⁶⁹ To this end, Paragraph 7.5 of Annex V requires indicating ‘the credit ratings assigned to an issuer or its debt securities at the request or with the cooperation of the issuer in the rating process’. If the rating provider has previously published an explanation of the meaning of the ratings, this should also be included according to paragraph 7.5.⁴⁷⁰ These rules simply refer to instruments which received their solicited credit ratings. Nonetheless, there are no references imposing the use of external credit ratings as an eligibility condition for the security offering. Credit ratings are just mentioned among the information to be written in the prospectus. Accordingly, it is hard to think that such a reference will be identified as carrying the risk of mechanistic and parallel reliance.

III.4.2.7 European Financial Stability Framework Agreement

References to external credit ratings may also be found in the ‘European Financial Stability Facility (EFSF) framework agreement of 7 June 2010 between the EFSF and the euro-area Member States’.⁴⁷¹ For instance, point 2 of the EFSF is concerned with the conditions to be met to enter into financial assistance facility agreements, to be granted financial assistance, find instruments and issue guarantees. As to the issue of guarantees, point 2, paragraph 3 of the EFSF states that an unconditional and irrevocable guarantee shall be issued by each guarantor in respect of funding instruments issued or entered into under an EFSF programme. Also, guarantees may be requested

⁴⁶⁹ Directive 2003/71/EC on the prospectus to be published when securities are offered to the public or admitted to trading and amending Directive 2001/34/EC (2003) OJEU L 345/64; Regulation (EC) No 809/2004 implementing Directive 2003/71/EC (2004) OJEU L 215/3.

⁴⁷⁰ *Ibid.*

⁴⁷¹ European Financial Stability Facility (EFSF) framework agreement <http://www.efsf.europa.eu/attachments/efsf_framework_agreement_en.pdf> accessed 7 June 2014.

for other purposes which are relating to an issue of Funding Instruments and make possible an investment grade rating for Funding Instruments issued by EFSF.⁴⁷² Point 4, paragraph 3 specifies the entities, credit institutions and financial operators the EFSF may appoint, negotiate and liaise with, for the structuring and negotiation of Funding Instruments on a stand-alone basis or under the EFSF Programme.⁴⁷³ To this end, EFSF is expected to liaise with CRAs by providing them with all the data and documentation needed to obtain requisite ratings. As of 2013, such a framework has been replaced by the European Stability Mechanism (ESM) which ultimately does not contain any reference or provisions placing reliance on external credit ratings.⁴⁷⁴ Once again, this is an area in which the removal and the replacement of the credit rating references with possible alternatives will not take place.

III.4.2.8 State Aid

Credit ratings are also points of reference for the Commission in several contexts. For example, pursuant to the ‘Communication from the Commission on the Revision of the Methods for Setting the Reference and Discount Rates’ and the ‘Commission Notice on the Application of Article 87 and 88 of the EC Treaty to State Aid in the Form of Guarantees’, external credit ratings may be used to establish whether State guarantees or loans constitute State aid.⁴⁷⁵ For this purpose, point 3.3 of the Communication refers to the rating classes provided by S&P, Moody’s and Fitch as the most frequently used by the banking sector. As it is explained clearly, however, ratings do not need to be obtained from those specific rating agencies and thus there is not an exclusive reliance on them.⁴⁷⁶ Importantly, the Communication acknowledges the value of the national rating systems or internal rating systems used by banks to reflect default rates and states that they have equal

⁴⁷² Ibid.

⁴⁷³ Ibid.

⁴⁷⁴ See Treaty establishing the European Stability Mechanism (ESM) signed on 11 July 2011 <http://www.efsf.europa.eu/attachments/esm_treaty_en.pdf> accessed 18 June 2014 .

⁴⁷⁵ OJ C 155 (20 June.2008), 10, 22. As of 1 December 2009, Articles 87 and 88 of the EC Treaty have been translated into Articles 107 and 108 of the Treaty on the Functioning of European Union (TFEU).

⁴⁷⁶ Ibid.

acceptance.⁴⁷⁷ Undoubtedly, there are incentives not to place exclusive reliance on the external credit ratings. Furthermore, the EU Commission may use a bank's credit rating as a measure of creditworthiness to assess whether state guarantees are appropriately priced in accordance with the Communication from the Commission on the Application of State Aid Rules to Measures Taken in Relation to Financial Institutions in the Context of the Current Global Financial Crisis.⁴⁷⁸

References to external credit ratings may also be found in the 'Commission Communication on Recapitalisation of Financial Institutions of 5 December 2008'. Credit ratings are used as tools for the assessment of a bank's risk profile for recapitalisation purposes under State aid rules. Also in these contexts external credit ratings are not the unique indicators the Commission can rely on. Capital adequacy, the size of the recapitalisation, and the current credit default swap (CDS) spreads are, in fact, spelt out as further indicators for the evaluation of a bank's risk profile in addition to credit ratings.⁴⁷⁹ This is an example of a level playing field between the credit ratings and other creditworthiness measurements so that the first are not an exclusive benchmark. Importantly, these provisions were antecedent to the finalisation of the current rules requiring the review to reduce the risk of over-reliance.

Similarly, according to the 'Communication from the Commission on the Treatment of Impaired Assets in the Community Banking Sector of 25 February 2009', banks are required to disclose, if available, the rating assigned to each basket of activities they hold, among others, structured products and securitised position.⁴⁸⁰ Annex III of the Communication, however, encourages an independent analysis for the calculation of expected losses with regard to the impaired assets to be transferred to or guaranteed by a Member State. The results of such an assessment can be compared to the results deriving from the external credit ratings which are,

⁴⁷⁷ Ibid.

⁴⁷⁸ OJ C 270 (25 October 2008), 8.

⁴⁷⁹ OJ C 10, (15 January 2009), 2, 10.

⁴⁸⁰ OJ C 72 (26 March 2009), 1, 22.

therefore, additional, complementary sources of information and not an exclusive determinant of credit quality assessment.⁴⁸¹

III.4.3 The EU approach: a critical review

This investigation into the hardwiring of the credit ratings in the EU legislation and regulatory frameworks highlights a significant difference vis-à-vis the US review and consequent reforms. While in the second chapter the two systems were contrasted in terms of amount of credit rating references in their respective legislations, in this third chapter the analysis of the two systems through the lens of their respective reforms leads to the conclusion that in the EU, as opposed to the US, not only are credit ratings not that largely hardwired into the EU financial legislation, but also the EU legislation has never conferred any exclusive role to external credit ratings as the US regulators did in their legislation. As the above review showed, credit ratings are expressly indicated among other factors to be considered for risk assessment, and not as exclusive credit risk assessment tools. Putting this feature into the perspective of the work that the Commission should complete by 2020, it could be hypothesised that the outcomes may be no different than the EIOPA's ones. The Commission may not be finding credit rating references which can induce mechanistic and parallel reliance on external credit ratings, especially where other factors for credit risk evaluation are mentioned in addition to credit ratings. Consequently, the other phases of the approach, namely deletion upon the condition of finding appropriate alternatives, might not be necessary either.

However, this should not make us think of the EU as a 'protected area' in which there is no risk of over-reliance on external credit ratings. The conducted analysis only leads to the conclusion that the risk appears not to be as high as it could be where credit ratings were given exclusivity as credit risk assessment tools in regulatory frameworks. In fact, the risk may be high in the legislation implementing EU law at the national levels. These may give primacy to credit ratings or not

⁴⁸¹ Ibid.

incentivise investors and market participants to refer to them as sources of information complementary to independent analysis.

III.5 MORE INDEPENDENT CREDIT RISK ANALYSIS: FROM THEORY TO PRACTICE

III.5.1 The status of implementation

Both the US and EU approaches have crystallised the requirement of independent credit risk analysis. Now, the possibilities of putting this principle into practice are to be discussed as well.

The FSB made it clear that the risk of over-reliance on external credit ratings must also be reduced through the enhancement of the market participants' credit assessment capabilities, other than by revisiting the use of credit ratings in regulations. This is the second level of the FSB approach set out in Principle II, according to which banks, market participants and institutional investors have to make their own credit risk assessment instead of basing their investment decisions exclusively on credit ratings. Under the FSB Principle II, it is the task of regulators and policymakers to include this principle in the design of their regulations.⁴⁸² At the EU level, this principle has been widely included in primary and secondary legislation. For instance, it has been crystallised in CRA Regulation III and in the Directives concerning UCITS and AIFM.⁴⁸³ Also, with regard to the banking sector, the CRD IV has incorporated numerous tools and requirements to reduce the risk of over-reliance. For example, competent authorities at the national level are required to encourage institutions to develop internal credit risk assessment capacity by increasing the use of IRB approaches for calculating capital requirements for credit risk. Moreover, competent authorities have to monitor that institutions do not refer exclusively to credit ratings for assessing

⁴⁸² FSB Principle II para 1.

⁴⁸³ See Chapter II, section II.7, para II.7.4.

the creditworthiness of debt instruments and counterparties.⁴⁸⁴ As already mentioned in the previous chapter, the enactment of the second level of the FSB two-pronged approach depends on the development of the credit risk assessment capacity and monitoring by the supervisory competent authorities. With this in mind, the degree of implementation of this principle must now be analysed. By referring to some data produced by the FSB, it can be observed that the progress towards the enhancement of internal credit risk assessment capabilities has been significant with respect to central bank operations. Some central banks have already developed in-house credit risk groups, while others are in the process of developing their own credit risk assessment which should not incorporate external credit ratings.⁴⁸⁵ Also, other central banks declared that they will not take further measures to develop their own credit assessment capabilities because they do not see any mechanistic risk in their use of external credit ratings.⁴⁸⁶

Remaining in the banking sector, the BCBS has constantly issued guidelines and principles encouraging banks to have sound risk management capabilities and to rely on IRB for credit risk management. In this context, the FSB has noticed that some large banks already have in place their own IRB systems or, in some countries, they do not rely on external credit ratings at all.⁴⁸⁷ This is, for example, the case of Brazil. As the BCBS have shown in its Regulatory Consistency Assessment Programme (RCAP) in relation to the implementation of the Basel III framework, the Brazilian regulations do not link to external credit ratings risk weights for claims on sovereigns, public sector entities, banks, securities firms and corporations. Instead, they use fixed risk weights

⁴⁸⁴ Regulation 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (2013) OJEU L 176/1.

⁴⁸⁵ FSB Peer Review Report (n 326), 3.

⁴⁸⁶ *Ibid.*

⁴⁸⁷ *Ibid.*

or alternative simpler methodologies.⁴⁸⁸ Likewise, for securitisation exposures the Brazilian regulations do not rely on external credit ratings.⁴⁸⁹

Other than the banking sector, the development of internal due diligence and credit risk assessment capabilities has also been seen in many larger pension funds and securities firms. In the case of securities firms, internal credit assessment has been adopted for the purpose of prudential requirements or for the purpose of making investment or lending decisions.⁴⁹⁰

III.5.2 The second level of the approach: a critical review

Apparently, this picture seems to be encouraging. In reality, as it can be understood, the development of internal credit risk assessment capabilities and the use of internal tools for credit risk evaluation are only circumscribed to large firms. These can have the means and adequate resources to set up their own credit risk assessment tools and, thus, they can be in line with the purpose of FSB Principle II in the reduction of over-reliance. On the other hand, this may be challenging for small, less sophisticated investors who do not have the economies of scale to undertake their own credit risk assessment. In fact, the FSB in its peer review final report regarded this as the drawback which undermines the pace of the translation of the second level of the approach in parallel with the first one.⁴⁹¹ If not all of the financial firms are able to develop internal credit risk assessment capabilities, and probably keep on relying on the CRAs' services, there will not be any progress in the reduction of the risk of over-reliance. Based on this, the picture has now a different connotation. The reduction of over-reliance through the encouragement of more independent credit risk analysis seems to be the privilege of large, more sophisticated investors vis-à-vis smaller less sophisticated investors. Consequently, while the enactment of the first level of the approach is undermined by the difficulties in finding valid alternatives to credit ratings, the second

⁴⁸⁸ BCBS, 'Regulatory Consistency Assessment Programme (RCAP), Assessment of Basel III Regulations in Brazil' (2013); see also, 'Regulatory Consistency Assessment Programme (RCAP), Analysis of risk-weighted assets for credit risk in the banking book' (2013).

⁴⁸⁹ *Ibid.*

⁴⁹⁰ Organisation for Economic Co-operation and Development (OECD) 'Annual Survey of Large Pension Funds and Public Pension Reserve Funds' (2013).

⁴⁹¹ FSB Peer Review Report (n 326), 5.

level may instead be jeopardised by cost-related problems which less sophisticated investors cannot or are not willing to undertake.

The scale of the problem can be understood by reflecting over this principle and its feasibility. As seen, progress in its implementation can be discussed mainly with regard to large financial institutions as opposed to small, less sophisticated, investors. However, this does not mean that all large, financial institutions are able to perform a credit risk analysis and due diligence through their own internal credit risk assessment tools. While less sophisticated investors may not have the means to set up what the FSB, the US and EU rules require to reduce over-reliance, more sophisticated market participants may not have an interest in deploying a huge amount of resources either.

Consequently, cost-related problems are not exclusively circumscribed to small financial institutions; they may be a general problem. For instance, where financial firms are required to strengthen their internal risk assessment by developing and using internal rating models, it is to be questioned the extent to which the compliance costs for firms with internal risk management are bearable. Such costs would include the possibility of accessing capital market information sources, an adequate framework of technologies to manage internal risks and, when needed, legal advice. According to the FSB, this should be a requirement for all financial firms, such as credit institutions, investment firms, insurance and reinsurance undertakings, asset managers and investment firms. However, taking position from the asset managers, it should not be forgotten that investment mandates are contractual agreements between private parties and, thus, requiring them to perform an independent risk assessment also implies the set up of adequate internal policies to reduce the risk that their assessment may be biased by conflict of interest with their clients.

In any case, the cost issues which have been generally highlighted for financial firms can be similarly applied to the specific FSB principle requiring banks to use internal rating models for the calculation of regulatory capital requirements. Again, the main drawback stems from compliance costs. Even though the costs associated should be evaluated in proportion to each individual firm,

the costs for the relevant financial sector may be considerable. In practice, since the FSB encourages the development of a variety of risk assessment models, this would be inevitably burdensome for the supervisory competent authorities. In this context, it should be questioned whether the regulatory agencies will be able to deploy a large number of supervisors to assess the suitability of a wide variety of risk models adopted or developed by the financial institutions. It must be recalled that when the IRB models were introduced in the Basel II framework, it was submitted that it would not be sensible for supervisors to assess a wide range of different types of credit risk models. This is the reason why banks, to be permitted to use internal models for regulatory purposes, had to adopt the Value-at-risk-style model.⁴⁹² In this respect, as Whelan underlines, where this precedent is followed, it is unlikely that the emancipation from the use of the agencies' credit ratings will result in the variety of expected internal risk assessments;⁴⁹³ not to mention that even assessing the implementation of a common internal risk assessment model is not an easy task for supervisors either.⁴⁹⁴ Furthermore, even though the promotion of IRB approaches encouraged under the FSB set of principles as an alternative to the CRAs ratings is expected to reduce mechanistic reliance on them, the BCBS brought forward numerous issues concerning the reliability, comparability and transparency of IRB capital charges.⁴⁹⁵ This raised significant concerns from the part of the FSB, which finally cautioned against the choice of models which may

⁴⁹² BCBS, 'An Explanatory Note on the Basel II IRB Risk Weight Functions' (2005).

⁴⁹³ Karl Whelan, 'Ratings Agency Reform: Shooting the Messengers?' (2011) European Parliament Directorate General for Internal Policies, IP/A/ECON/NT/2011-03.

⁴⁹⁴ Philippe Hildebrand, 'Is Basel II Enough? The Benefits of a Leverage Ratio' (2008) speech at the Financial Markets Group Lecture, London School of Economics <www.bis.org/review/r081216d.pdf> accessed 15 July 2014: 'the increased reliance on banks' internal models has rendered the job of supervisors extraordinarily difficult. First, supervisors have to examine banks' exposures. Second, they have to evaluate highly complex models. Third, they have to gauge the quality of the data that goes into the computation of these models. To put it diplomatically, this constitutes a formidable task for outsiders with limited resources.'

⁴⁹⁵ BCBS, 'Regulatory Consistency Assessment Programme (RCAP), Second Report on Risk-weighted Assets for Market Risk in the Trading Book (December 2013).

be inadequate.⁴⁹⁶ As already mentioned, the problem in this context is that the risk of mechanistic reliance may simply shift from the credit ratings to another alternative.

Also, it cannot be neglected that the risk of pro-cyclicality of the IRB models vis-à-vis the use of external credit ratings is another issue hotly debated amongst economists.⁴⁹⁷ In short, some empirical studies have shown that pro-cyclicality issues have considerable relevance under the IRB models and how the choice of the rating philosophy can play a role in the increase of capital requirements during a period of economic downturns.⁴⁹⁸ These topics are only touched on the surface in the present research. Arguing which model is the best, less pro-cyclical, and to try to support such an assertion with data is out of the scope of this work. The present discussion had the aim to underline all the current difficulties concerning the implementation of the second level of the approach, and the issues which are at stake with regard to the encouragement of more IRB approach vis-à-vis the external credit ratings.

To summarise the main findings of the present analysis, the enhancement of the second level of the approach seems to be more plausible in the case of larger, sophisticated market participants. Evidently, there is a strict line of demarcation between firms which can afford the development and use of internal credit risk assessment processes and those institutions which cannot, and may consequently rely on the services provided by CRAs. The difference between large and small financial institutions was taken into consideration in the FSB guidelines as well. FSB Principle III.2.b recognises that smaller, less sophisticated banks may not have the resources to conduct internal credit assessment for all their investments. Nonetheless, it is stated that they should not

⁴⁹⁶ FSB Peer Review Report (n 326), 2: 'greater usage of IRB approaches should not, in and of itself, be viewed as an alternative to CRA ratings, particularly where modelling quality and/or capability is inadequate. Other approaches to ending mechanistic reliance on CRA ratings should continue to be explored'.

⁴⁹⁷ Jochen Andritzky et al, 'Policies to Mitigate Procyclicality' (2009) IMF SPN/09/09, 18; Financial Service Authority (FSA) 'Procyclicality of Capital Requirement under Basel II: Aide Memoire' (2004), 10; BCBS, 'The Internal Rating Based Approach' (2001), 108.

⁴⁹⁸ The term rating philosophy describes the choice between a TTC or PIT rating system. See Eva Caterineau-Rabell et al, 'Procyclicality and the New Basel Accord-Bank's Choice of Loan Rating System' (2003) Bank of England WPS, the authors showed that a TTC rating approach caused a small increase in capital requirements for non-defaulted assets during downturns, while PIT approach lead to 40% to 50%.

mechanistically rely on credit ratings and should publicly disclose their credit risk assessment approaches.⁴⁹⁹ In other words, while for large financial institutions the theoretical principle of not relying mechanistically on external credit ratings finds its practical application in the enhancement of IRB models, smaller institutions are simply told what they are not supposed to do, but not how.

Furthermore, these drawbacks were not only acknowledged at the international level. At the EU level, cost-related problems as to the enhancement of internal risk assessment models, as well as the difficulties for small financial institutions to set them up in order to be more independent from external credit ratings were clearly emphasised. In the consultations leading to the finalisation of CRA Regulation III, financial institutions and market participants were asked, for example, to provide their view on whether the use of the SA should be exclusively limited to small, less sophisticated investors due to the heavy costs relating to the set-up of internal models for small institutions.⁵⁰⁰ Also, in the CRA III impact assessment document, cost-related problems were regarded as the main disadvantages of the approach based on encouraging financial institutions to develop and use more IRB vis-à-vis external credit ratings. Finally, the Commission admitted that the approach could be burdensome for supervisors as well: ‘a system of internal ratings can prove beneficial for the macro-financial stability only if internal rating methodologies are carefully and accurately reviewed and approved by a competent authority. The need to validate internal rating methodologies would clearly create an additional burden for CRAs supervisors.’⁵⁰¹ This makes it apparent the extent to which the enactment of the second level of the two-pronged approach can be challenging for supervisors as well since they are supposed to closely check the adequacy of firms’ own credit assessment processes.⁵⁰² These are the main reasons why, at the present stage, the reduction of over-reliance through the enhancement of internal credit risk assessment capabilities is

⁴⁹⁹ FSB Principles for Reducing Reliance on Credit Ratings (2010).

⁵⁰⁰ Commission Financial Services Policy and Financial Markets, ‘Public Consultation on Credit Rating Agencies’ (2010) (Q1-6), 5, 12.

⁵⁰¹ Commission Impact Assessment (n 178), 26.

⁵⁰² See also Ian Macneil, ‘Regulation and Financial Stability of CRAs’, in Thomas Cottier, Rosa M Lastra, Christian Tietje & Lucia Satragno (eds.), *The Rule of Law in Monetary Affairs* (CUP 2014).

not progressing as envisaged. This also explains why only a very small number of financial institutions have so far started improving their own internal risk assessment systems in accordance with the second level of the two-pronged approach.

III.6 CONCLUSION

Progress in the implementation of the two-pronged approach has not taken the pace which the FSB expected since the issue of the principles in 2010. This is due to numerous reasons. Preliminarily, it has been shown that the strategy is not a coordinated approach; and between the two legal systems which have progressed towards a normative approach, namely the US and the EU, only the latter reflects entirely the FSB strategy. The US, as an FSB jurisdiction, only endorsed the strategy in relation to the second level relating to the enhancement of the investors' and market participants' capability of conducting internal due diligence and credit risk assessment. In any case, coordination must be meant as an exchange of views and experiences in the context of an approach which implies redesigning the tie between the public sector and the credit risk assessment tools through the reduction of the credit ratings' supremacy. The picture which has resulted from the review conducted by the FSB on the implementation of the two-pronged approach shows a patchwork of jurisdictions which deal with the implementation of the strategy by themselves and with no connections or exchange of experience with the others. Coordination would be desirable in that as Partnoy notes: 'whenever you are talking about something that have systemic risk concerns you need to have global coordination, and this has not been happening, ideally the Dodd Frank treatment of CRAs would have been coordinated with Basel and the European approach but it was not'.⁵⁰³

The FSB did not expect this lack of coordination and, above all, the fact that most of the FSB jurisdictions decided not to remove the credit ratings references from their legislation. Indeed, these decisions were stigmatised by the FSB as dangerous. Consequently, one of the first results

⁵⁰³ Plowright (n 347).

which the analysis of the progress of the strategy brings to attention is a lack of uniformity in the implementation which diminishes the expectations of the FSB to have global and coordinated efforts towards the reduction of mechanistic and parallel reliance on the credit ratings. In this context, however, only the US and the EU can be discussed in terms of progress in the translation of the strategy in the aftermath of the respective rules that they set out. A significant aspect which emerged from the analysis of the current status of implementation of the respective approaches is that the final rules drafted by the US and EU competent authorities did not find the alternatives which, in line with the initial interpretation of the rules, should have replaced the credit ratings. Specifically, either it is generically stated that the credit ratings should not be the exclusive credit risk assessment tools and others must be taken into consideration, or provisional lists of other credit risk assessment instruments are provided along with the credit ratings. The result is that the primacy of the credit ratings is reduced in legislation, but there can be an incentive in practice to refer exclusively to the credit ratings. The credit ratings are still included in legislation in combination with other credit risk measurement tools. Importantly, their history and consolidated use in the private sector can still play a decisive role and give to them supremacy even if they are referred to in legislation as one factor among others for measuring credit risk. Therefore, the implementation of the approaches has maintained a *de facto* risk of giving preference to credit ratings. This, in turn, can escalate into over-reliance. This mainly characterises the US progress in which maintaining the credit ratings sounds like the compromise between the regulators and the main users of the credit ratings who strongly opposed any removal of the credit ratings in furtherance to the Dodd Frank Act.

As to the EU, it has been seen how in the banking sector the implementation of the strategy contrasts with the Basel framework which still relies on the credit ratings. Furthermore, the utility of the approach has been questioned in relation to the review that the Commission is expected to complete by 2020 under Article 5(c) of CRA Regulation III. As discussed, most of the EU financial legislation either do not incorporate credit rating references or the credit ratings are not indicated as

the exclusive credit risk assessment tools and, thus, the approach would be nothing new, and perhaps not needed to be applied with regard to EU law. These are the limits which have been identified as to the first level of the strategy.

The second level, on the other hand, has had only partial progress to the extent that only institutional, sophisticated investors can afford to deploy resources to develop adequate internal credit risk assessment systems. However, there is not progress with regard to small less sophisticated investors who do not have the economies of scale to conduct independent credit risk assessment. In this case the risk of giving primacy to credit ratings and the possibility of over-relying remains concrete.

All things considered, it may be argued that the global implementation of the two-pronged approach may not further progress; the efforts so far analysed in the US and EU do not effectively mitigate the risk of over-reliance. Ideally, the credit ratings should have been entirely eliminated. However, this was not possible because nothing is as universally accepted as the credit ratings. In substance, while the public sector is open to attempting an elimination or reduction of them, the private sector is not open to being deprived of them.

CHAPTER IV

REVIEWING THE DEBATE ON OVER-RELIANCE AND ITS APPROACHES: IN SEARCH OF DIRECTION

IV.1 INTRODUCTION

The search for a clearer definition of over-reliance was the focal point to sketch the contours of the investigation which has been conducted in the second chapter of this research work. The aim was to provide an understanding of the phenomenon and its features in accordance with the line of demarcation drawn between two types of over-reliance: 1) over-reliance stemming from the hardwiring of credit ratings into legislation and regulatory frameworks; and 2) over-reliance on credit ratings in the structured finance sector. Focussing on the issue of over-reliance deriving from the legislation, the evolution of the regulatory debate at the international, national and regional levels towards the opportune strategies to reduce the risk of undue reliance, has permitted us to move to the second part of the work in which the current status of implementation of the normative approaches has been discussed. ‘In search of effectiveness’ was the watchword which characterised the analysis in the third chapter. Its results are mixed, in the sense that the scenario is one of lights and shadows in that, even if the hegemony of the credit ratings in legislation is terminated, their presence may still be sufficient to keep the risk of over-reliance latent. At the global level, not all the FSB jurisdictions have followed the guidelines incorporated in the set of principles, others have not started yet. Consequently, the picture is of a strategy which slows down in its implementation, while the only two legal systems in which an implementation progress can be identified and discussed were finally unable to eliminate the credit ratings completely.

This is the context which introduces the fourth chapter of this thesis in which, among other things, a reflection on the future of the strategies can be made. Indeed, as emphasised from the very

beginning, the title of this thesis ends up with an interpretative question: ‘*quo vadis?*’⁵⁰⁴ This term should not be exclusively referred to the present chapter. It encapsulates the overall investigation into the phenomenon, its meaning, implications, as well as its regulatory approaches. Now, it will be incorporated into the structure of this part of the research in which a new analysis takes place on the grounds of the shortcomings that the previous chapter has brought to attention, and which undermine the development of the two-pronged approach in accordance with the pace that the regulators and policymakers expected from the very beginning. In essence, the context of the present analysis requires a new investigation into the debate of over-reliance with the view to showing that the approach is not only jeopardised by intrinsic limits but is, *per se*, the result of a debate which appears to be based on abstract, un-evidenced assumptions on the phenomenon of over-reliance. Furthermore, by taking an investigation into the risk of over-reliance deriving from the structured finance sector, it can be observed that the ensuing regulatory approaches make sense in that the debate was based on something concrete which was adequately evidenced. If we apply the evidence question to the type of over-reliance which has been analysed throughout this research, there will be more than a problem in reaching the same conclusion, that is, that the approaches make sense in that they are based on something which is known and has been proved. Obviously, investors and market participants are those who are in the best position to acknowledge that they over-rely or risk over-relying, since the phenomenon has been introduced as a problem of best practice from their part.⁵⁰⁵ Hence, if over-reliance is an investors’ and market participants’ failure, is it realistic to think that they will ever admit such a failure so that the regulatory intervention is justified? In this respect, it will be shown that in both areas of over-reliance they deny being biased by the credit ratings to the extent that they may finally neglect taking their own credit risk assessment and due diligence.

⁵⁰⁴ See Chapter 1, section I.4.

⁵⁰⁵ SIFMA (n 354).

Nonetheless, as to the structured finance sector, it will be highlighted how their denial can be overcome because of the crisis facts which, in turn, have received strong evidence. Consequently, it can be claimed that over-reliance does exist in the structured finance sector, and the elaborated approaches make sense. However, the argument of over-reliance deriving from the embedment of the credit ratings into legislation is not adequately supported. It will therefore be argued that the elaborated approach is founded on something nebulous. This can be identified as the first flaw of the debate, namely not having found any evidence of the phenomenon. This element stimulates a further question. Could the phenomenon of over-reliance, as it was introduced by the post-crisis debate, have been anticipated long before, and how? The debate is based on a problem of best practice by investors and market participants, but it is also essential to see whether the regulators have ever thought or were warned that their reliance on the credit ratings might have had unintended consequences. In fact, where the credit rating references are now deemed to be the source of over-reliance it is to be questioned whether and how this could have been avoided. To this end, it will be shown that even in the last century the regulators were warned as to the over-emphasis that they gave to the credit ratings through their massive inclusion in regulations. Had those who voiced the problem been listened to, over-reliance would probably have been circumscribed to the structured finance sector within the post-crisis regulatory debate on the CRAs. Therefore, a lack of empirical evidence of the phenomenon with regard to the rating-based regulation and a lack of attention to some *ex-ante* warnings resulted in the current debate and its approaches with their own limits.

Quo vadis, then? This is the question around the future of the approach that this chapter will try to answer in the light of the results of the whole discussion. Accordingly, the chapter is structured as follows. The evidence of over-reliance relating to the rating-based regulation will be discussed vis-à-vis the evidence of the phenomenon stemming from the structured finance sector. Secondly, the responsibility of the regulators will be analysed not only from the perspective that they should have avoided relying too much on the credit ratings but also in relation to those who

warned against their risky reliance and were not listened to. Accordingly, a final reflection on possible new ways of development of the current strategy will conclude the chapter.

IV.2 CREDIT RATING REFERENCES AND THE ‘OFFICIAL SEAL OF APPROVAL’: WHAT HAS BEEN MISSED?

IV.2.1 CRAs’ market failures and regulatory interventions

In the context of the regulatory debate which followed the 2007-2009 financial crisis, the operation of the CRAs was subjected to intense scrutiny and, as already mentioned, this resulted in new legislation, particularly in the US and in the EU. At the EU level, the regulation of CRAs was created for the first time in the aftermath of the crisis. Before, the European regulators had stated that regulatory intervention on the industry could have only been considered in the presence of concrete market failures.⁵⁰⁶ Significantly, all the post-crisis legislation can find its justification on the evidence that something did not work properly within the rating industry. Reports, investigations, and the analysis provided by scholars helped give evidence of failures and shape the contents of the rules incorporated in the legislation. These rules are based on the asserted etiological nexus between some events and the conduct of the CRAs. Some examples will clarify this point better.

As is known, the massive downgrades applied to such structured products as RMBSs and CDOs raised suspicions of CRAs’ failures in the evaluation of their creditworthiness. In the years leading up to the financial crisis these products were assigned investment grade ratings by the major CRAs. Then, at the outbreak of the crisis, their value fell dramatically when massive downgrades were applied.⁵⁰⁷ CRAs were accused of being aware of the high risk of default associated to

⁵⁰⁶ Commission, ‘*Internal Market: Commission Welcomes EU’s Regulators Report on Credit Rating Agencies*’ (2007) IP/07/28.

⁵⁰⁷ The downgrades applied by the major CRAs between July and October 2007 as well as placing securities on credit watch shocked the financial markets, helped caused the collapse of the sub-prime secondary market, caused the sell-off of assets which lost their investment grade status and damaged holdings of

mortgaged related securities. Nonetheless, they ignored them so as not to compromise profitable business relationships with the originators of the products, in particular, major investment banks.⁵⁰⁸ This made the CRAs' business model, the issuers-pay-model, at the centre of criticisms due to its inherent risk of making CRAs' interests more aligned with the issuers' interests, rather than with the investors' interests. Consequently, the CRAs were accused of being in conflict of interest with the issuers of the structured products they rated. In other words, the credit ratings were inflated in order to generate more deals and increase market share. The investigations which followed in the wake of the 2007-2009 financial crisis gave sufficient evidence of these facts. In particular, scholars and commentators corroborated the arguments against the CRAs' failures.

For instance, by considering the potential of conflict of interest inherent in the issuers-pay-model and the 'generous' credit ratings assigned to structured products Calomiris drew an important distinction between inflated and low-quality credit ratings. While the first are the purposeful over-ratings on rated debts, the second are ratings based on flawed measures of underlined risk.⁵⁰⁹ To put it more simply, inflated ratings stem from possible conflict of interest between the issuers and the CRAs, while low quality ratings would result from poor credit rating methodologies. Both inflated and low quality credit ratings were then subjected to in-depth analysis in the post-crisis literature. For example, with regard to rating inflation, Frenkel showed how the structured finance sector is

financial firms worldwide, contributing to the financial crisis, see US Senate Permanent Subcommittee on Investigation, Committee on Homeland Security and Governmental Affairs, 'Wall Street and the Financial Crisis: Anatomy of a Financial Collapse' (13 April 2011), 246 < <http://www.ft.com/cms/fc7d55c8-661a-11e0-9d40-00144feab49a.pdf>> accessed 20 June 2014.

⁵⁰⁸ During the peak of the market S&P charged issuers seeking ratings for RMBSs from \$40,000 to \$135,000 and from \$30,000 to \$750,000 to rate tranches of CDOs, while surveillance fees, imposed at the initial rating or annually, varied from \$5,000 to \$50,000, see 'US Structured Rating Fee Schedule Residential Mortgage-Backed Financings and Residential Servicer Evaluations, prepared by S&P, S&P-PSI 0000028-35; and US Structured Ratings Fee Schedule Collateralized Debt Obligations Amended 03/07/2007', prepared by S&P, S&P-PSI 0000036-50. However, revenues increased even more over time. For instance, Moody's tripled its RMBSs and CDOs ratings revenue from over \$61 million to over \$260 million between 2002 to 2006, whereas S&P's revenues for the ratings of the same products was over \$64 million and increased to over \$265 million in 2006. In the same period revenues from S&P structured finance group surged from \$184 million to over \$561 million between 2002 and 2007. Overall revenues from the big CRAs soared from nearly \$3 billion in 2002 to over \$6 billion in 2007, see Partnoy (n 44).

⁵⁰⁹ C W Calomiris, 'The Debasement of Ratings: What's Wrong and How We Can Fix it' (2009) <<http://www.economics21.org/content/2the-debasement-ratingswhats-wrong-and-how-we-can-fix-it>> accessed 28 June 2014 .

more prone to rating inflation as opposed to the corporate bonds sector which has never experienced downgrades of the same scale as in the former. According to the author, an explanation is to be found in the structure of the market in which these two types of securities are issued and traded. The corporate bond market involves thousands of issuers who try to raise debt. However, structured finance markets may be regarded as niche markets due to the small number of specialised firms and large institutional investors acting as issuers. In Frenkel's analysis this difference is crucial to understand and give evidence of the rating inflation that occurred with regard to RMBSs and CDOs in comparison with corporate plain bonds.⁵¹⁰ According to his study, if a market is characterised by a large number of issuers, reputation concerns should work effectively as drivers for CRAs to issue reliable ratings to gain a solid reputation.⁵¹¹ A good reputation is considered rewarding in these markets since credible ratings reduce information asymmetries between investors and issuers, and create a surplus that CRAs can extract. By contrast, markets in which issuers are a small presence are more prone to rating inflation. In essence, in these markets issuers are better informed as to the credibility of the ratings because they boast vital information on the quality of the deal. Therefore, issuers would have more possibility to notice rating inflation and prize it with high fees unlike investors who may have awareness of a possible rating inflation once downgrades are applied. Consequently, CRAs may have incentives to provide generous ratings to create a double reputation, that is, the issuer would recognise that the rating agency released an untruthful credit rating, while investors would believe the opposite in the first place.⁵¹²

Other studies flourished and tried to link rating inflation to the phenomenon of rating shopping which implies the request of non-binding credit ratings from more agencies and the hire of the agency which assigns the most favourable rating.⁵¹³ In this respect, some authors have showed

⁵¹⁰ Sivan Frenkel, 'Repeated Interaction and Rating Inflation: A Model of Double Reputation' (2015) 7 *American Economic Journal: Macroeconomics* 1, 250.

⁵¹¹ *Ibid.*

⁵¹² *Ibid.*

⁵¹³ Vasiliki Skreta & Laura Vedkamp, 'Rating Shopping and Asset Complexity: A Theory of Rating Inflation' (2009) 56 *Journal of Monetary Economics* 5, 678.

that the occurrence of rating shopping can lead to inflation even when the ratings are truthful.⁵¹⁴ In this respect, Bolton, Freixas and Shapiro show how a fair dissemination of information within an oligopolistic credit rating market can be compromised by strategic interactions between a rating agency and its client.⁵¹⁵ According to their model, the debt issuer ‘shops around’ for the most favourable rating and, thus, the CRAs’ compensation is subordinated to the selection and publication of their ratings. In the event that the credit ratings are inflated, investors will ignore the reports issued by that agency in the future.⁵¹⁶ In this respect, their model distinguishes between sophisticated and naive investors. Whereas the first are able to understand the agencies’ incentives for rating inflation but cannot tell, at the time the rating is published, whether or not this is truthful, the second simply take credit ratings at face value since they do not understand or consider the rationale behind the unfair interaction between the agencies and their clients.⁵¹⁷

Furthermore, other studies have argued that the CRAs’ business model is an incentive to mislead the information that they receive and hence rate bad assets as investment grade,⁵¹⁸ while other authors identify in the use of ratings for regulating financial institutions a source of potential rating inflation. According to Opp, Opp and Harris, these regulations have the effect of making investors willing to pay for a label of good rating and, consequently, the value of the information that the credit ratings convey is not a matter of concern for them. As a result, CRAs may be tempted to simply assign a good rating, rather than acquire costly information and conduct an objective credit rating process.⁵¹⁹

Further studies were also conducted in relation to flawed models and methodologies underlining the ratings assigned to structured products. The post crisis literature and investigative reports gave evidence that CRAs tried to cope with the increasing volume of issuances by

⁵¹⁴ Antoine Faure-Grimaud et al, ‘The Ownership of Ratings’ (2009) 19 RAND Journal of Economics 2, 173.

⁵¹⁵ Patrick Bolton et al, ‘The Credit Rating Game’ (2009) 14712 NBER Working Paper Series.

⁵¹⁶ Ibid.

⁵¹⁷ Ibid.

⁵¹⁸ Francesco Sangiorgi et al, ‘Credit Rating Shopping, Selection and the Equilibrium Structure of Rating’ (2009) NBER Working Paper Series.

⁵¹⁹ Christian C Opp et al, ‘Rating Agencies in the Face of Regulation-Rating Inflation and Regulatory Arbitrage’ (2009) JFE 108, 64.

developing new quantitative methods to capture the credit risk of highly sophisticated products. These methods included the elaboration of complex models to evaluate the quality of the underlying assets' cash flow and the risk associated to the security.⁵²⁰ However, the methodologies and models that the CRAs applied were insufficient to track the worsening conditions in the underlying assets backing the RMBSs and CDOs.⁵²¹ As to the methodologies applied to rate structured products, these were flawed because of the limited historical data available in the area of sub-prime mortgages. Such a drawback made it difficult to monitor the response of a pool of assets in relation to possible worsening in the economic scenarios. CRAs were accused of underestimating the correlations in the defaults that might happen in case of serious market downturns.⁵²² Inaccurate ratings relating to RMBS and CDOs were partly the result of erroneous assumptions in CRAs' models on correlative risk.⁵²³

As to the adequacy of the models applied, these proved to be useless because they based their predictions on the behaviour of RMBSs on historical data. These models lacked proper performance data to rate the subprime as well as the other mortgage products which were structured in the years preceding the financial crisis.⁵²⁴ In addition, the models did not take into consideration

⁵²⁰ Lois R Lupica, 'Credit Rating Agencies, Structured Securities and the Way out of Abyss' (2009) RBFL 28, 639.

⁵²¹ Between 2004 and 2006 S&P and Moody's revisited their own rating models but not in such a way as to produce accurate forecasts of the forthcoming delinquencies and defaults, see Senate Permanent Subcommittee on Investigation (n 507), 288.

⁵²² Ibid, 292, correlative risks provide an analysis of the probability of simultaneous defaults of RMBS assets. For example, an estimation can be made with regard to the probability of contemporaneous default of two houses in the same neighbourhood compared to two houses in different states. If the likelihood of default of the neighbourhood houses is concrete they shall have a higher correlation risk than the houses in different states.

⁵²³ Ibid, 293, on March 2006, concerns as to the adequacy of the S&P model's consideration of correlative risk were expressed by a senior managing director at Aladdin Capital Management: 'thanks for a terrific presentation at the UBS conference. I mentioned to you a possible error in the new Evaluator 3.0 assumptions: two companies in the same region belonging to two different local sectors are assumed to be correlated (by 5 %), while if they belong to the same local sector then they are uncorrelated. I think you probably didn't mean that', email from Isaac Efrat (Aladdin Capital Management) to David Teshler (S&P), see also interview of Richard Gugliada, former head of S&P's Global CDO Group. According to Gugliada S&P had set the probability of RMBS correlated defaults at 40 out of 100. He added that the financial crisis showed that 'the RMBS correlative assumptions should have been set closer to 80 or 90 out of 100'.

⁵²⁴ Ibid, 289, email from Belinda Ghetti to David Teshler: 'the assumptions and the historical data used in the models never included the performance of these types of residential mortgage loans...The data was gathered and computed during a time when loans with over 100% LTV or no stated income were rare'.

events such as stagnancy or fall in the housing prices. CRAs did not have relevant data to be used in RMBSs and thus they were unprepared to predict defaults and losses when housing prices dramatically dropped.⁵²⁵ Finally, the fact that the CRAs, in particular Moody's and S&P, did not own adequate loan performance data for their RMBSs' models is also traced back to the companies' reluctance to deploy resources to improve their models.⁵²⁶ All things considered, these models were useless in relation to the degree of sophistication of structured products and inadequate to reflect the credit risk inherent to them.⁵²⁷

These studies were the grounding for regulatory interventions since they gave evidence of numerous CRAs' failures and made it opportune to intervene legislatively. Indeed, the rules which were issued at the US and EU level addressed, inter alia, the risk of rating inflation due to potential conflict of interests and the enhancement of the CRAs' methodologies to rate structured products. Such rules are based on the proven nexus between some crisis events and the CRAs' conducts. In other words, it was given sufficient evidence of CRAs' conflict of interest and inadequate rating methodologies to justify legislative intervention. These events and related rules were then the basis for other bodies of rules concerning the CRAs' civil liability regime and the supervisory framework.⁵²⁸ Importantly, the regulations addressing these failures can be traced back to something which has been sufficiently demonstrated, no matter whether the rules which have been set out are appropriate or effective to solve the concerned problems. On the other hand, by way of applying this discussion to over-reliance, questions are raised as to whether any evidence was found

⁵²⁵ 'It was like observing 100 years of weather in Antarctica to forecast the weather in Hawaii', see Roger Lowenstein, 'Triple A Failure' *The New York Times* (27 April 2008).

⁵²⁶ Moody's did not purchase new loan data for a period between 2002 to 2006, though it tried to continue to improve its RMBS models in other ways: 'I have a wild thoughts also, let's not even considering buying any more data, programs, software or companies until we figure out what we have and what we intend to do with what we have. From what I have heard and read so far we have approaches (MBS, Tranching and Spread) few use or understand (let alone being able to explain it to the outside) and new data that we are unable to use. We want more data when most of the time we rate MBS deals using arbitrary rule of thumb?!?', see US Senate Permanent Subcommittee on Investigations (n 507), 290, email from Brian Clarkson to David Zhai and others.

⁵²⁷ See Harry McVea, 'Credit Rating Agencies, the Subprime Mortgage Debacle and Global Governance: The EU Strikes Back' (2010) ICLQ 59, 701.

⁵²⁸ See Commission, 'Proposal for a Regulation of the European Parliament and of the Council on Amending Regulation (EC) 1060/2009 on credit rating agencies' (Brussels 2010) COM (2010) 289 final.

with regard to the assertion that rating based regulations and structured finance ratings discouraged investors and market participants to undertake their own due diligence and credit risk assessment.

IV.2.2 Evidence of over-reliance in the structured finance sector

IV.2.2.1 Delimiting the scope of the investigation

This research is concerned with over-reliance stemming from the hardwiring of credit ratings into legislation and regulatory frameworks. To discuss the evidence of this phenomenon and find a justification of the approaches which have been critically analysed so far, it is desirable to conduct a broad investigation. This implies discussing the evidence of over-reliance by also considering the other area, namely the structured finance sector, which was deemed to be critical as to the risk of over-reliance. Regulatory intervention was significant in this sector as well. Numerous rules were set out with the view to curbing over-reliance on external credit ratings assigned to complex structured products. The rationale behind such rules should be the evidence that the investors and the market participants over-relied on the structured finance credit ratings at the expense of their own due diligence and credit risk assessment. Hence, the regulatory intervention should be based on specific facts and aim to eliminate or reduce the possibility that this can occur again. Finding evidence of over-reliance in the structured finance sector means verifying the extent to which investors and market participants are negatively influenced by the credit ratings. The same method of investigation can then be applied to over-reliance stemming from the hardwiring of the credit ratings into legislation and regulatory frameworks.

To begin with, it is of relevance to have a preliminary illustration of the reforms which have been finalised so far to deal with the risk of over-reliance deriving from the structured finance sector. As will be shown, the EU boasts the major reforms through CRA Regulation I and III. As discussed in the second chapter of this thesis, in the structured finance sector over-reliance on external credit ratings may be determined by several factors, other than laxness in conducting due

diligence and credit risk assessment. In particular, over-reliance can be the consequence of a lack of an adequate understanding of the nature and limits of the structured credit ratings, so that these are mischaracterised by the market participants. Accordingly, the approaches elaborated on to reduce the risk of over-reliance in such a sector have been based on disclosure of more information with the view to improving and facilitating investors' understanding of the structured products and the credit ratings assigned to them. By looking at the regulatory approaches in more detail, it can first be observed that they represent a collective effort in which the CRAs have taken part as well, by revisiting their structured finance rating methodologies and models. To understand the scale and importance of the reforms to reduce over-reliance in this sector, it is desirable to take stock of their evolution. In essence, from a legislative perspective, the development of these reforms can be analysed from the debate on the opportunity to add a new symbol to the credit ratings assigned to structured products to the current disclosure rules set out, in particular, at the EU level.

IV.2.2.2 The additional symbol to the rating assigned to structured products

At the international levels, the FSB, ESMA and IOSCO proposed to differentiate the credit rating for structured products from the rating of other rated instruments either through a new different rating scale or by attaching an additional symbol to the rating scale.⁵²⁹ The objective was to make investors aware of the characteristics of the products and help them perform more rigorous internal analysis on the instruments instead of relying only on the assessment provided by the CRAs. The proposal was hotly debated. In the USA, for instance, the SEC sought comments on two possible alternatives to tackle over-reliance on structured finance ratings. Firstly, it proposed requiring NRSROs, when rating structured products, to produce a report explaining the rating methodologies used for them, their differences from the methodologies applied to other instruments, and how the

⁵²⁹ See FSB (n 175); ESMA, 'Second Report to the European Commission on the Compliance of Credit Rating Agencies with the IOSCO Code and the Role of Credit Rating Agencies in Structured Finance' (2008) CESR/08-277; IOSCO, 'Code of Conduct Fundamentals for Credit Rating Agencies' (2008) <<http://www.iosco.org/library/pubdocs/pdf/IOSCOPD271.pdf> > accessed 4 July 2014.

risks relating to debt instruments issued by an asset pool, or as part of any securitisation process, differ from the risks inherent to other rated securities. Secondly, NRSROs were required to distinguish the rating of structured products through an appropriate symbol or identifier.⁵³⁰ Ultimately, the SEC opted for the first proposal, if only because of the strong opposition the other alternative received.⁵³¹ On the other side of the Atlantic, the Commission asked for comments as to the possibility of requiring that all published ratings included health warnings informing of the specific risks associated with investments in specific assets; alternatively, as to the possibility of differentiating the structured credit rating by adding an additional symbol or identifier. Both ideas did not encounter any support, in particular the second one.⁵³² Despite strong opposition, the Commission opted for the additional symbol. As opposed to NRSROs, European registered CRAs are required to distinguish the credit rating assigned to structured products through an additional suffix.

Clearly, these are two different ways to solve the same problem, though the criticism was the same. In fact, some argued that the additional symbol could work as a stigma of ‘problem securities’ for structured products after the financial crisis events. For instance, SIFMA warned to distinguish between structured products which performed well and, thus, avoided the massive downgrade during the financial crisis and those which worked differently because they were toxic. As investors lost confidence in the structured finance market after the debacle, adding a modifier to their rating scale might work as a signal of ‘problem securities’ for all types of products indifferently. As a result, investors would shy away from structured products and the asset-backed

⁵³⁰ See SEC ‘Proposed Rules for Nationally Recognized Statistical Rating Organizations’ (2008) 17 CFR Parts 240 and 249b Release No 34-61051 File No S7-28-09, 60 <<http://www.sec.gov/news/press/2008/nrsrofactsheet-120308.htm>> accessed 11 August 2014.

⁵³¹ Ibid, 65, footnotes 116-121: The SEC received a total of 40 responses. Sixteen contributors expressed opposition to both proposals. Six contributors expressed either full or conditional support for both proposals. Eleven contributors were in favour of adopting only the first proposal. Twenty-nine commentators strongly opposed the second proposals.

⁵³² Commission, ‘DG Markt Service Document, Tackling the Problem of Excessive Reliance on Ratings’ (2008), 2 <http://ec.europa.eu/internal_market/consultations/docs/securities_agencies/consultation-overreliance_en.pdf> accessed 28 August 2014.

market would inevitably face liquidity problems.⁵³³ Others highlighted that the additional symbol could be burdensome for regulators and supervisors as they would be forced to adapt their regulatory and supervisory guidance to the new ratings framework.⁵³⁴ The CRAs expressed comments along the same line. Some Japanese CRAs, R&I Japan and JCR Japan Ltd (JCR) invited the Commission to follow the SEC approach and allow the CRAs to choose between the report and the different symbol.⁵³⁵ Fitch and S&P expressed doubts as to the appropriateness of such a solution. They underlined that the additional symbol may simply categorise the securities as structured, without giving any other information.⁵³⁶ Moody's views were not dissimilar. Moody's gave its response to the Commission after launching a consultation with market participants. More than 200 submissions from institutions representing more than 9 trillion in fixed income assets under asset management were received by the agency.⁵³⁷ According to Moody's, three quarters of the respondents opposed any change to the rating scale used for structured products since they would not benefit in terms of more information. A suffix attached to the structured finance rating would be merely a 'cosmetic change'.⁵³⁸ Among other things, Moody's cautioned against introducing a different symbol for structured products because the definition of a 'structured finance product' was not completely clear yet. Basically, given the lack of a widely accepted definition of

⁵³³ See SIFMA Credit Rating Agency Task Force, 'First SIFMA Symbology Letter' (2008) Letter Dated June 10 2008 From Deborah A Cunningham and Boyce I Greer.

⁵³⁴ See Mortgage Bankers Association (MBA) 'RE: Proposed Rules for Nationally Recognized Statistical Rating Organizations Release No. 34-61051 File No S7-28-09' (2008).

⁵³⁵ See Rating and Investment Information, Inc (RTI), 'RE: Comments on European Commission Consultation on a Draft Directive/Regulation with Respect to the Authorisation, Operation and Supervision of Credit Rating Agencies (CRA)' (2008); Japan Credit Rating Agency Ltd (JCR), 'RE: Japan Credit Rating Agency Ltd (JCR) Comment on the Commission's Draft Directive/Regulation on Credit Rating Agencies (CRA)' (2008).

⁵³⁶ Fitch, 'RE: European Commission Draft Directive Regulation with Respect to the Authorization, Operation and Supervision of Credit Rating Agencies' (2008); S&P, 'Proposal for a Regulatory Framework for CRAs and Embedded Ratings Policy Options' (2008).

⁵³⁷ See Moody's, 'Should Moody's Consider Differentiating Structured Finance and Corporate Ratings?' Request for Comments (February 2008).

⁵³⁸ Moody's, 'RE: Consultation on Proposed Regulation/Directive of the European Parliament and of the Council on Credit Rating Agencies (CRAs)' (2008).

the term structured finance, CRAs could have different views on the range of structured products to which apply the new rating symbol and this could generate confusion among investors.⁵³⁹

Finally, the Commission did not give in to the proposal to differentiate the structured finance rating and Article 10, paragraph 3 of CRA Regulation I imposes agencies, when rating structured products, to attach a symbol as a distinguisher of the structured finance rating from the rating used for other instruments. As a result, what distinguishes the ratings assigned to structured products from traditional corporate ratings is a suffix.

There are differences among some EU registered CRAs as to the meaning of the ‘structured finance’ (‘sf’) symbol. Both Fitch and S&P clarify that the symbol only indicates that the security is a structured finance instrument and does not imply any change to the meaning or definition of their credit ratings.⁵⁴⁰ The Canadian agency Dominion Bond Rating Service (DBRS) uses the same specification but adds further details by specifying that the symbol does not change the risk of the particular structured finance instrument.⁵⁴¹ The German agency Kroll Bond Rating Agency (KBRA) simply states that it appends an ‘sf’ indicator to ratings assigned to structured finance obligations and does not provide any other detail.⁵⁴² Moody’s provides more details unlike the other registered competitors. Firstly, it defines the ratings applied to financial institutions, corporate instruments and public sector entities as ‘fundamental ratings’ to distinguish them from structured finance ratings. Secondly, it specifies that structured finance ratings can be recognised and differentiated from fundamental ratings through the symbol sf which accompanies the letter grade. Thirdly, it clarifies the purpose of the sf symbol, that is to say, ‘it should eliminate any presumptions that structured finance ratings and fundamental ratings, at the same letter grade level, will behave the same’. Fourthly, it explains the meaning of the suffix: ‘the (sf) indicator for structured finance security

⁵³⁹ Ibid, 37.

⁵⁴⁰ Fitch, ‘Definition of Ratings and other Forms of Opinion’ (2013); S&P, ‘Standard & Poor’s Ratings Definition’ (2013).

⁵⁴¹ Dominion Bond Rating Service (DBRS), ‘Limitations to Uses of a Rating Policy’ (2013).

⁵⁴² Kroll Bond Rating Agency (KBRA), ‘Rating Scale’ <<https://www.krollbondratings.com/ratings/scales>> accessed 5 September 2014.

ratings indicates that otherwise similarly rated structured finance and fundamental securities may have different risk characteristics'.⁵⁴³ Investors need to know what the suffix represents by all means. To this end, both Fitch and S&P clarify that the meaning of their ratings does not change despite the suffix. What the two agencies want to say is that structured credit ratings remain forward-looking opinions on creditworthiness which do not represent a recommendation to buy nor to sell debt instruments.

The benefit of this reform can be seen from several angles. The choice of the same suffix (sf) gives uniformity and eliminates any possibility that investors can be misled as it might be where CRAs applied different identifiers. In particular, this should eliminate the danger that structured credit ratings are understood by investors as covering market and liquidity risks in addition to credit risk, as happened in the years leading up to the crisis. Even though there are some differences among the agencies, EU registered CRAs took significant efforts to comply with Article 10(3) and there was finally agreement as to the choice of the same modifier and the structured products to be referred to. On the whole, this reform can be regarded as adequate with regard to the aim to give investors awareness that the product they are buying is structured and has a level of sophistication which is higher than traditional ones. Moreover, the utility of this rule can be seen in the fact that it paved the way for introducing additional symbols for other rated instruments. For instance, Moody's, S&P and Fitch attach the suffix 'mmf' to distinguish the rating provided for money market fund instruments.⁵⁴⁴ Consequently, the agencies' objection that the suffix may generate confusion among investors did not catch the point. Instead, the suffix is a valuable tool in that it gives awareness of the type of instrument which has been rated. In other words, it helps identify the rated instruments and not confuse it with others. Finally, the application of the symbol was circumscribed by all CRAs exclusively to the following products: asset-backed securities (ABS), residential mortgage-backed-securities (RMBS), commercial mortgage-backed-securities

⁵⁴³Moody's, 'Rating Symbols & Definitions' (2013); see also Moody's, 'Moody's Structured Finance Rating Scale' (2010).

⁵⁴⁴Fitch (n 540); Moody's (n 543); S&P (n 540).

(CMBS), collateralized debt obligations (CDOs), insurance securitizations and asset-backed commercial paper (ABCP).⁵⁴⁵ This has contributed to make the line between what is and what is not a structured product less blurred.

IV.2.2.3 More disclosure of structured finance credit ratings

Nonetheless, the additional symbol *per se* was regarded as useful but not exhaustive with regard to over-reliance. Within the regulatory dialogue on CRAs which took place in the aftermath of the 2007-2009 financial crisis at the national, regional and international levels there were numerous calls with regard to improving the disclosure on the rating methodologies applied to structured products.⁵⁴⁶ In general, Principle 3.5 of the 2008 revised version of the IOSCO Code of Conduct Fundamentals for Credit Rating Agencies (the IOSCO Code) states that the CRAs ‘should publish sufficient information about their procedure, methodologies and assumptions so that outside parties can understand how a rating was arrived at by the CRA’.⁵⁴⁷ With specific regard to structured products, the 2008 IOSCO Code requires the CRAs to provide investors with sufficient information about its loss and cash flow analysis so that they understand the basis of the CRAs ratings assigned to them and, thus, the risk of over-reliance may be reduced. CRAs should also disclose ‘the degree to which they analyse how sensitive a rating of a structured finance product is to changes in the CRAs underlining assumptions’.⁵⁴⁸

The implementation of these guidelines was particularly strong at the EU level. These principles constituted the benchmark on which the disclosure rules set out in the European CRA regulations were based. Article 8 of CRA Regulation I requires CRAs to disclose to the public the

⁵⁴⁵ See DBRS (n 541).

⁵⁴⁶ European Securities Markets Authority (ESME), ‘Role of Credit Rating Agencies, ESME’s Report to the European Commission’ (2008), 12

<http://ec.europa.eu/internal_market/securities/docs/esme/report_040608_en.pdf> accessed 10 September 2014; FSA, ‘The Turner Review, A Regulatory Response to the Global Banking Crisis’ (London 2009).

⁵⁴⁷ IOSCO Code (n 529).

⁵⁴⁸ Ibid, Art 3.5(a).

methodologies, models and key rating assumptions that they use in their credit rating activities. Then Annex I, point II, Section D, mirrors the IOSCO Principle 3.5(a) which envisages disclosure of loss, cash-flow analysis and changes in the structured credit ratings. When rating structured products, the EU regulation imposes CRAs to accompany the disclosure of methodologies, models and key rating assumptions with guidance which explains assumptions, parameters, limits and uncertainties surrounding the models and rating methodologies used in such credit ratings, including simulation of stress scenarios undertaken by the agencies when establishing the ratings.⁵⁴⁹ These rules were useful as well, since they prompted the agencies to revisit and improve their methodologies with the view to providing the users of credit ratings with adequate understanding and literacy as to the nature of the ratings assigned to structured products. For example, DBRS set out appropriate disclosure policies regarding the risks inherent to structured finance transactions. Rating procedures and methodologies for structured products were enhanced and proper mechanisms to keep them updated were elaborated as well.⁵⁵⁰ Fitch improved the transparency of rating assumptions through the publication of a series of additional ‘*what if*’ scenarios for major asset classes, elaborated appropriate electronic tools enabling better surveillance and cross-transaction comparisons as to structured finance ratings, and enhanced the rating outlooks at the tranche level across structured finance transactions in certain markets.⁵⁵¹ Moody’s undertook several initiatives to enhance analytical methodologies with regard to the rating of structured products and to provide more clarity as to the characteristics of structured finance ratings.⁵⁵² In a similar fashion, S&P adopted measures to improve the methodologies and surveillance processes with regard to structured products.⁵⁵³ In addition to internal measures, all the major CRAs elaborated programs to contribute to the better understanding of their structured finance ratings and

⁵⁴⁹ Ibid.

⁵⁵⁰ See DBRS, ‘Business Code of Conduct for the DBRS Group of Companies’ (2009), 13-14 <http://www.dbrs.com/research/228896/Code_Of_Conduct.pdf> accessed 12 September 2014.

⁵⁵¹ See Fitch, ‘Code of Conduct’ (2009) para 2.3, 11.

⁵⁵² See Moody’s, ‘Report on the Code of Professional Conduct’ (2009), Sec 3.3, 3.6, 3.7, 3.11, 4.4, 14.

⁵⁵³ See S&P, ‘Changes at S&P Since 2007: Actions S&P has taken since 2007 to Strengthen and Enhance the Rating Process’ (2013) <<http://ratings.standardandpoors.com/changes/Changes-at-SP-since.html>> accessed 15 September 2014.

therefore improve market education. Moreover, CRAs' websites can be easily accessed to have information on these specific credit ratings. To this end, explanatory guidance is provided and can be downloaded as well.

At the EU level, however, efforts are still ongoing through the new rules of CRA Regulation III. In this context, it is worth mentioning Article 8(a) which aims at enhancing the investors' independence in their investment decisions by requiring the issuer, the originator, and the sponsor of a structured finance instrument to disclose information on the credit quality and performance of the individual underlying assets of the instrument, the structure of the securitisation transaction, the cash flows and any collateral supporting a securitisation exposure, as well as any information that it is necessary to conduct comprehensive and well informed stress tests on the cash flows and collateral values supporting the underlying exposure.⁵⁵⁴ This is the overview of the reforms to reduce the risk of over-reliance on structured credit ratings. Major efforts have been observed at the EU level, in which the new rules of the CRA Regulation III are still under implementation, while the CRA Regulation I rules have had significant practical results since their incorporation. The picture is one of useful reforms. However, it is to be wondered the extent to which these reforms are backed up with adequate evidence of the investors' over-reliance on credit ratings in the structured finance sector.

IV.2.2.4 In search of evidence

As the reforms have been illustrated above, it is now necessary to find a justification of them through an investigation aimed at giving evidence of the risk of over-reliance on credit ratings in the sector in question and, above all, of the fact that investors and market participants had unduly relied on the structured credit ratings during the pre-crisis period. To this end, it is worth contrasting the results of two studies on the ratings of structured products and the way investors perceived them.

⁵⁵⁴ ESMA, 'Draft Regulatory Technical Standards under the CRA3 Regulation' (June 2014) ESMA/2014/685.

Even though they addressed the same topic, these studies were conducted at different times; before and after the 2007-2009 financial crisis.

It can be observed that, prior to the outbreak of the financial turmoil, external credit ratings were not the exclusive indicators on which investors could base their decisions to purchase structured products.⁵⁵⁵ It is, in fact, pointed out in the pre-crisis survey that investors had a proper use of external credit ratings to complement their own analysis. Specifically, investors relied on the agencies' pre-sale reports in the primary market as valuable sources providing preliminary information with regard to the features, strength, and weakness of the structure. Furthermore, they relied on the models CRAs used to stress-test the assigned ratings with more conservative assumptions. Such models were complementary to the investors' own assessment and were regarded as valuable information to understand whether more credit enhancement was necessary for the structure. Credit ratings, as this survey revealed, were considered not the exclusive but just a second or third independent opinion whose influence was not decisive for the investment decision, given the development or the possibility, for some investors, to exploit in-house credit assessment techniques for all the components of the structure relating to the products they might have purchased.⁵⁵⁶

The pre-crisis survey highlighted the investors' possibility and capability to conduct their own credit risk analysis on structured products. Speaking of over-reliance, the risk might have been on those small investors unable to develop their own credit risk assessment models. Hence, it can be submitted that if investors are able to understand the specificities and risks carried by structured products, they will also have awareness of the fact that these risks are different than those inherent in traditional debt instruments. At least, this is what the survey claimed: 'investors seemed to be fully aware that structure finance poses different and more complex risks than ordinary credit

⁵⁵⁵ BIS, 'The Role of Ratings in Structured Finance: Issues and Implications' (January 2005) Committee on the Global Financial System Publications No 23, 1 <<http://www.bis.org/publ/cgfs23.htm>> accessed 20 September 2014.

⁵⁵⁶ Ibid.

investments’.⁵⁵⁷ In more detail, mark-to-market investors, investing in mezzanine finance, are seen as having the necessary capabilities to do their own due diligence, while those investing in senior tranches may tend to rely more on the credit quality analysis provided by the CRAs.⁵⁵⁸ However, this is not a serious problem, the survey noted. The growing level of sophistication and knowledge by the community as to the nature and risk of financial products limits the investors’ risk of over-reliance on credit ratings. For the majority of investors, the ratings assigned to structured products are accordingly ‘one check in a broader due diligence and risk management process’.⁵⁵⁹ The survey explained the relationship between investors and credit ratings not in terms of over-reliance but as reliance due to the inclusion of credit ratings into investment mandates or internal risk and capital management system, and to the ‘value creation’ by credit ratings in the structuring of opinions and third-party assessment, information provision, deal surveillance and market development in the structured finance context.⁵⁶⁰

Clearly, the pre-crisis survey portrayed a scenario that is not negative; in which investors rely on ratings as complementary sources of information to their own due diligence. Based on the scenario provided by the survey, we should conclude that investors and market participants would not over-rely. They would have a proper understanding of the risks inherent to structured products and the capability to perform their own credit risk analysis. This would be sufficient to reduce the risk of over-reliance or, better said, we should argue that the risk of over-reliance on external credit ratings does not exist in the structured finance sector. However, the 2007-2009 crisis revealed a different picture. As the first survey affirms the market participants’ independence from the structured finance credit ratings, what went wrong during the financial crisis? This is the question that the second survey sought to answer.⁵⁶¹

⁵⁵⁷ Ibid.

⁵⁵⁸ Ibid.

⁵⁵⁹ Ibid.

⁵⁶⁰ Ibid.

⁵⁶¹ BIS CGFS, ‘Rating in Structured Finance: What Went Wrong and What Can be Done to Address Shortcomings?’ (2008) CGFS No 32, 1-27.

IV.2.2.5 Finding the evidence

The ‘value added’ by the CRAs in the rating of structured products emphasised by the pre-crisis survey was challenged by the evidence of inadequate rating methodologies, insufficient historical data for the assessment of the credit risk inherent to the products and conflict of interest issues which led to inflated ratings. As is widely known, these were the CRAs’ shortcomings. In any case, this is the context in which the second, post-crisis survey took place. The nature and limits of structured finance credit ratings and the investors’ and market participants’ approach to them fell under scrutiny as well. Vis-à-vis the first survey, it is desirable to evaluate whether the second one noted a change in the investors’ attitude towards credit ratings. In short, whether they over-relied on them to the extent that they neglected their own independent due diligence and credit risk assessment.

For investment managers, the survey noted that the ratings were only useful in order to narrow the field of choice to meet a given investment objective but not key drivers in choosing an investment in structured products. Likewise for issuers: ratings were an important requirement for marketing structured products to a broader investor base but not decisive for selling them to sophisticated investors such as hedge funds or pension fund managers.⁵⁶² This appears to be in line with the pre-crisis survey which portrayed a scenario in which investors and market participants seemed not to be critically biased by the credit ratings.

An important aspect emerges from the analysis of the two surveys, which is of significant relevance to the topic of this research. Both the surveys brought to attention the fact that investors and market participants did not admit that they over-relied before and after the crisis. They even denied the potential risk of unduly relying on the external credit ratings. This stimulates reflections and numerous questions. Should we conclude that in the structured finance sector over-reliance does not exist and that so far attention has been devoted to a false phenomenon? Furthermore, in

⁵⁶² Ibid.

accordance with the results of the two surveys, should we conclude that there is not sufficient evidence of over-reliance so as to justify all the regulatory interventions which have been elaborated consequently? The answers are negative.

To start with, the two surveys are useful documents which help understanding how the structured finance sector works and, above all, the specificities of the credit ratings assigned to them. In both surveys, the conclusions on the degree of influence of the credit ratings and, thus, on the possibilities of over-relying were based on interviews with the investors who finally declared that they are not negatively biased by the credit ratings. This equals to a denial of over-reliance. In turn, this means that in the eye of the investors and market participants the phenomenon does not exist. In the first place, this would lead to the conclusion that the regulatory reforms aimed at addressing the phenomenon in the structured finance sector do not make sense if those who are regarded as over-reliant deny being as such. In reality, during the years leading up to the crisis investors did over-rely on the ratings assigned to the structured products. Consequently, the risk of over-reliance exists in the structured finance sector and the regulatory approaches are more than justified.

This assertion is backed up by the crisis facts whose evidence and concreteness is stronger than the investors' denial of over-relying. Sufficient evidence was found as to a lax approach on the ratings assigned to structured finance and, hence, as to the fact that the investors did not perform an adequate analysis of the risk characteristics of the products.⁵⁶³ Moreover, as stressed in the second chapter of this thesis there was not only imprudence but also ignorance on the specificities of the structured credit ratings and impossibility of conducting an accurate analysis due to scarce information on the products and their ratings. All this has been sufficiently demonstrated. There is evidence that those who invested in highly rated structured products had less information than those

⁵⁶³ See Richard J Rosen, 'Investors behavior before the 2007-2009 financial crisis' in John R LaBrosse, Rodrigo Olivares-Caminal & Dalvinder Singh (eds), *Managing Risk in the Financial System* (EE 2013), 4, the author underlines that investors may react to a strong track record for a particular type of instrument and its rating by spending less time investigating the details of the investment.

who invested in low-rated securities.⁵⁶⁴ ESMA confirmed this drawback: ‘either the information provided was not sufficient to form an educated opinion and perform a risk assessment of deals, or investors did not do their own homework correctly, or both’.⁵⁶⁵ The same can be argued with specific regard to structured credit ratings: either the information provided by the CRAs was not sufficient to help investors understand the characteristics and limits of the structured finance ratings or they misunderstood the nature of these ratings.

The post-crisis reports, investigations and scholars’ studies on the structured finance sector and relating credit ratings identified the investors’ over-reliance, they brought to attention the risk of over-reliance, and the necessity of regulatory intervention to mitigate its effects. These data contradict any investors’ assertion that they did not over-rely or that the risk does not exist for them. Undoubtedly, an admission of over-reliance by them would help understand better the phenomenon and the suitability of any related approach. However, as the second survey underlined, the possibility of such an admission is somehow unrealistic. Notwithstanding, the crisis facts were stronger than the investors’ and market participants’ denial. Their lack of admission can be contradicted through the evidence of the approach that they finally had towards the structured products and their credit ratings. All things considered, there is sufficient evidence of over-reliance in the structured finance context so that it can be affirmed that the phenomenon exists in this sector and its potential risk must be reduced through the action of the regulators. Such an action is more than necessary where we consider that, despite evidence, investors would not admit the possibility of over-relying on the credit ratings assigned to these complex products. This makes the sector in question very critical and the reforms which have been undertaken until now are consistent with their objectives and fully justified.

⁵⁶⁴ See Manuel Adelino, ‘How Much Do investors Rely on Ratings? The Case of Mortgage Backed Securities’ (2009) Duke University-Fuqua School of Business.

⁵⁶⁵ ESMA (n 529).

IV.2.3 Evidence of over-reliance on credit rating legislative references

IV.2.3.1 Investors' and market participants' view

The same investigative path is now to be conducted in relation to the central topic of this research, namely over-reliance stemming from the hardwiring of the credit ratings into legislation and regulatory frameworks. In this regard, the approaches have already been analysed and constructed in the previous parts. Now, the evidence of the rationale behind them is to be discussed. Specifically, it is necessary to verify whether there is evidence that the hardwiring of the credit ratings has been perceived (or has the potential of being perceived) as an 'official seal of approval' of creditworthiness, so that investors and market participants neglected their own credit risk assessment and due diligence. To this end, the investigation aims to analyse the extent to which those who were required by law to use the credit ratings as main parameters for creditworthiness could be, or are, effectively biased by an investment grade rating requirement.

Significantly, interesting reflections can be made in relation to investment managers. As already explained, investment managers have investment mandates which may limit investments to top rated debt instruments.⁵⁶⁶ In the occurrence of downgrades, the shift from investment to speculative grade may force the investment managers to sell the debt instruments which are below the investment grade threshold. During downturn periods, cliff-edge effects and herd behaviours may also occur and have impacts on the financial stability. These problems are associated with over-reliance on external credit ratings and they are accordingly supposed to be addressed through the guideline provided by FSB Principle III.3. This principle invites investment managers and institutional investors not to rely mechanistically on the credit ratings for assessing the creditworthiness of assets. The principle applies to the full range of investment managers and institutional investors, including money market funds, pension funds, collective investment schemes, insurance companies, and securities firms irrespective of the size and level of

⁵⁶⁶ Chapter 2, section II.3, para II.3.3.

sophistication of investment managers and institutional investors.⁵⁶⁷ This guideline has been transposed into the new EU directives on IORP, UCITS and AIFM; while in the US, in accordance with Section 939A of the Dodd Frank Act, amendments have been applied to rule 2-a7 which required investment managers to hold in their portfolio investment grade rated instruments. Given the context and the normative framework, it is to be assessed which effect credit ratings can have on investment managers. In other words, do they over-rely or perceive the risk of over-relying?

The basis for this discussion is a recent survey on the use of the credit ratings in investment management in the Europe and US. This survey identified four main purposes why investment managers refer to the external credit ratings: 1) to set minimum credit quality guidelines for bond purchasers; 2) to set maximum portfolio proportions by rating classes; 3) to set maximum single security exposures by rating category; and 4) to set retention guidelines for downgraded securities that no longer meet eligibility guidelines.⁵⁶⁸ Significantly and consistently with the analysis done in the second chapter of the thesis the survey noted that, between the EU and the US, the embedment of the credit ratings into investment guidelines is more prevalent in the US than in Europe. However, both areas have in common a major use of the credit ratings in investment mandates for bond purchasers and less for portfolio quality disclosure.⁵⁶⁹ Interestingly, the survey revealed that the investment managers used the external credit ratings because clients asked them, rather than because they were forced by regulation. A component of herd behaviour had a role as well. In fact, almost 20% of the investment managers in Europe and the US declared that they used the credit ratings simply because other managers did it.⁵⁷⁰ Finally, the survey shed light on how investment managers react in case of downgrades. With regard to this aspect, the survey draws mainly on the results of a previous study. In this respect, Haight et al found that 75% of investment managers did

⁵⁶⁷ Chapter 2, section II.7.3, para II.7.3.1.

⁵⁶⁸ Richard Cantor et al, 'The Use of Credit Ratings in Investment Management in the US and Europe' (2007) 17 *The Journal of Fixed Income* 2, 25.

⁵⁶⁹ *Ibid*, 8: The absence of any ratings' guidelines is most prevalent among European fund managers (at 16%). In terms of weighted ranked importance there is little substantive difference between the US and Europe, or between plan sponsors and fund managers, with all parties unanimous in putting minimum rating requirements for bond purchases at the top of their usage list, and portfolio quality disclosures at the bottom.

⁵⁷⁰ *Ibid*, 10.

not have any provision dealing with the rating downgrades. More specifically, it was highlighted that there was not uniformity of results with regard to the reactions to downgrades. While some fund managers declared that they usually conduct an internal review, others did not specify any internal procedure in case of rating downgrades.⁵⁷¹

On the whole, both studies provided relevant data on the use of the credit ratings in the investment strategies of investment funds. Nonetheless, it must be observed that these results were brought forward before the 2007-2009 financial crisis occurred. The massive downgrades of financial products purchased in the years leading up to the turmoil and the consequent huge sell-off forced a re-discussion of many things. The use of the external credit ratings by investment managers and the cliff-edge effects associated to downgrades opened the debate at the national, international and regional levels with the view to finding suitable approaches to deal with these issues. For example, at the EU level, before the endorsement of the FSB Principles, other strategies were discussed to address the risk of over-reliance. While revising the European legislative framework on CRAs, the Commission asked for views as to the possibility of introducing a flexibility clause in investment mandates and policies. The purpose of this clause was to allow investment managers to temporarily deviate from the external credit ratings and to oblige them to set out measures with the view to reducing the part of portfolios that is only based on external credit rating.⁵⁷² The proposal did not encounter any support from the majority of respondents. At that time, the UK FSA, HM Treasury and the Bank of England (the UK Authorities) stressed that certain types of institutional mandates state maximum and minimum exposures to particular credit ratings. According to the UK authorities, this already allowed a degree of flexibility if limits were breached for technical reasons

⁵⁷¹ Timothy G Haight et al, 'An examination of the Characteristics of College Endowment Funds' (2006) 15 *Journal of Investing* 3, 47.

⁵⁷² Commission DGMS, 'Public Consultation on Credit Rating Agencies' (2010) Q 12-13, 32.

such as a downgrade, in that the manager is expected to modify the portfolio and bring it back into line in the event of rating changes.⁵⁷³

Similar views against the idea of introducing a flexibility clause and the obligation to reduce the reliance of portfolios on external ratings were expressed by other public authorities. For instance, the Czech National Bank (CNB),⁵⁷⁴ the Ministry of Finance of the Netherlands and the Netherlands Authority for Financial Markets (Dutch Ministry of Finance),⁵⁷⁵ the Norwegian Ministry of Finance,⁵⁷⁶ the Swedish Ministry of Finance, the Riskbank and the Swedish Financial Supervisory Authority (the Swedish authorities)⁵⁷⁷ warned against the idea of imposing limits or restrictions on investment mandates which are bilateral contracts between managers and investors and are based on the specific risk profile/appetite of the investors.⁵⁷⁸ Therefore, as the UK authorities stated further: ‘due care must be taken in considering any rules in this area, as this could have a significant impact on smaller investors that do not have the resources to perform all their research internally’.⁵⁷⁹ Ultimately, the proposal did not find any development in CRA Regulation III, whose provisions relating to over-reliance simply reproduced the FSB principle of not relying mechanistically on credit ratings for credit risk assessment purposes.

With regard to the investment managers, such a principle means not to be unduly biased by the credit ratings in their investment strategies and to perform a degree of independent credit risk analysis coupled with the one provided by the credit ratings and the other factors. But are investment managers negatively influenced by the credit ratings so that they neglect their

⁵⁷³ See Financial Service Authority (FSA), HM Treasury and Bank of England (BoE), ‘The United Kingdom Authorities Response to the European Commission Internal Market and Services Consultation Document on Credit Rating Agencies’ (2011).

⁵⁷⁴ See Czech National Bank (CNB), ‘EC Public Consultation: Credit Rating Agencies, Opinion of the Czech National Bank’ (2011), 4.

⁵⁷⁵ Dutch Ministry of Finance, Financial Market Policy Directorate, ‘Detailed Response to the EC’ (2011) FM/2010/24057 M, 5.

⁵⁷⁶ See Det Kongelige Finansdepartement, ‘Commission Consultation on Credit Rating Agencies’ (2011) Var Ref 10/4984 JGH.

⁵⁷⁷ See Regeringskansliet Ministry of Finance, Sveriges Riskbank and Vinansinspektionen, ‘Joint Response to the European Commission’s Public Consultation on Credit Rating Agencies’ (2011), 4.

⁵⁷⁸ Responses to the EC public consultation on Credit Rating Agencies can be accessed and viewed at <<https://circabc.europa.eu/faces/jsp/extension/wai/navigation/container.jsp>>.

⁵⁷⁹ FSA, HM Treasury and BoE (n 573), 12.

independent credit risk analysis? The abovementioned surveys helped clarify why credit ratings are used and why they are important for investment managers. Now, it is essential to verify the extent to which a triple A negatively influences them. Specifically, does an investment grade status legislatively required have the effect of diverting investment managers' attention away from their own due diligence and credit analysis? Financial crisis reports claimed that it happened, but unlike the structured finance sector, there is not concrete evidence. This can be concluded by assessing what investment managers said with regard to their relationship with the credit ratings. In this regard, one of the respondents to the Commission consultation on over-reliance, the Association of British Insurers (ABI), underlined that 'the degree to which some institutional investors relied too heavily on ratings is rarely, if ever, objectively evidenced'.⁵⁸⁰ All the other investment managers involved in the consultations echoed this statement. They emphasised that their use of credit ratings is in line with the basic principle that the major CRAs have always stressed in their disclaimers, that is to say, credit ratings must work as inputs for credit quality assessment and not as the exclusive benchmark.⁵⁸¹ They denied any negative influence deriving by investment mandates, credit rating references, or by-law prescriptions.

There was a similar response in the US during the debate on the amendments to be applied to rule 2a-7 under Section 939A. In this respect, it is worth reporting some of the most significant comments as to the perception of 'seal of approval' of credit rating references in legislation:

[...] we are not aware of any evidence to support the contention that the frequent reference to NRSRO ratings in the rules promulgated under the 1933 Act, the 1934 Act, the Investment Company Act or the Advisers Act contributed in any way to investor over-reliance on credit ratings, or that these references are or were taken as

⁵⁸⁰ See Association of British Insurers (ABI), 'The ABI's Response to the Commission Consultation on Policy Options to Address the Problem of Excessive Reliance on Credit Ratings' (2008), 2.

⁵⁸¹ See Association Française de la Gestion Financière (AFG), 'AFG Response To Commission Services Working Document on Credit Rating Agencies' (2008) BG/SJ- n 2451/Div, 5; Bundesverband Investment und Asset Management e.V. (BVI), 'DG Markt Services Document discussing an EU Directive/Regulation on Credit Rating Agencies' (2008), 9.

any sort of ‘seal of approval’ by the Commission as to the quality or accuracy of those ratings for any given security.⁵⁸²

This view has been recently remarked in relation to the consultation launched by the IOSCO on good practices for the reduction of reliance on the external credit ratings in asset management. The IOSCO launched its consultation in accordance with the goal of the FSB set of principles to reduce mechanistic and parallel reliance on the credit ratings. In particular, the consultation is in line with the FSB’s exhortation for standard setters and regulators to take opportune steps to translate the principles into appropriate policy actions. To this end, the IOSCO tried to investigate the extent to which its Member jurisdictions’ regulation refer to the external credit ratings for investment managers and whether there is the potential of over-reliance.⁵⁸³ Among the best practices the IOSCO suggested and sought consultation, it is worth underlining that the first ones are the watchwords which support the final rules at the US and EU level, namely: 1) investment managers have to perform their own credit quality determinations with regard to the financial instruments they want to invest in, and they have to monitor their credit quality throughout the holding period; 2) external credit ratings may be, inter alia, one element that the asset managers’ internal assessment process can refer to, but they must not constitute the exclusive factor underpinning the internal credit risk analysis. Even though there is overall support for proposed best practices aiming at enhancing credit risk assessment capabilities so as to perform independent investment decisions, all the consultants affirmed that they have always put into practice the abovementioned two principles.

⁵⁸² ASF, ‘RE: Release No 33-8940; 34-58071 (File No. S7-18-08); Release No. 34-58070 (File No S7-17-08); Release Nos. IC-28327; IA-2751 (File No. S7-19-08); see also Mayer Brown, ‘RE: Security Ratings; Release No 33-8940, 34-58071; File No S7-18-08 References to Ratings of Nationally Recognized Statistical Rating Organizations; Release No. 34- 58070 (File No. S7-17-08) References to Ratings of Nationally Recognized Statistical Rating Organizations; Release Nos IC-28327, IA-2751; File No S7-19-08’ (September 2008): ‘Many fixed income investors view NRSRO security ratings as important, and some may have relied excessively on them in the bubble preceding the recent credit crisis. That does not mean that investors’ reliance, whether excessive or not, was induced or increased by references to security ratings in the Commission’s forms and rules’.

⁵⁸³ IOSCO, ‘Good Practices on Reducing Reliance on CRAs in Asset Management’ (June 2014) Consultation Report CR04/14.

To this end, it is interesting to analyse what the Asset Management Group (AMG) of the Security Industry and Financial Market Association (SIFMA) pointed out. Firstly, they declared that they do not rely mechanistically on the credit ratings to make their investment decisions. Though the external credit ratings are useful credit risk assessment guidelines, they are not the only variable asset that managers evaluate when dealing with the clients' investment mandates. On the contrary, asset managers also consider a variety of other factors. Clearly, the zeitgeist of the denial of the risk of over-relying can be identified before, after the financial crisis, and during the debate concerning the implementation of the elaborated strategies. However, reference has been made to the SIFMA's comments because there is another significant aspect that they brought to light. SIFMA also stressed that asset managers are not subject to cliff-edge effects and herd behaviours in their use of the credit ratings because they pursue different investment objectives. Furthermore, investors' goals are different and asset managers try to offer products and services matching the objectives of a wide variety of investors. Accordingly, they do not seek the same investment opportunities for all their clients and do not react the same way to market events such as rating downgrades. Based on these arguments, SIFMA regarded as incorrect the assumption that asset managers rely mechanistically on the external credit ratings; and as exaggerated the claim of cliff-edge effects and herd behaviours in the industry.⁵⁸⁴

Reflecting on this position, it can be said that the SIFMA's denial seems to weaken the fundamentals of over-reliance. In particular, the FSB first claimed that cliff-edge effects and herd behaviours are exacerbated by over-reliance on the external credit ratings and that rating-based regulation is the source of this problem. The same arguments were used at the EU level to justify the endorsement of the FSB principles and their transposition into the CRA Regulation III framework. Conversely, not only did SIFMA deny using the credit ratings as exclusive benchmarks for assessing creditworthiness, but that they are also not badly influenced by the rating downgrades. Their denial as to the cliff-edge effects and herd behaviours should be analysed in more detail with

⁵⁸⁴ SIFMA, 'RE: Good Practices on Reducing Reliance on CRAs in Asset Management' (September 2014).

specific reference to the asset management industry, and maybe there might be room to contradict their assertion. However, this denial has marginal importance in relation to how they approach the credit ratings. SIFMA declared that they use the credit ratings as one among other factors. This is sufficient for SIFMA to deny that asset managers are at risk of over-reliance since they have always pursued the approach which is now encouraged and implemented at the normative level.

IV.2.3.2 Rating-based regulation versus the structured finance sector: the missed evidence

Given these results, it is possible to reach a conclusion in comparison with the preceding analysis concerning over-reliance on the structured finance ratings. In the structured finance sector over-reliance was deemed to have happened in the years leading up to the financial crisis due to the high level of sophistication and complexity of these products. Poor disclosure of information on them and, above all, on the specificities of the credit ratings assigned to them caused excessive reliance by investors and market participants. As stressed, the approaches which have been set out in this respect make sense because the risk of over-reliance in the structured finance sector can be regarded as real and critical in accordance with the increasing level of sophistication of the structured products. This argument can be supported despite the investors' denial of over-reliance. Such a denial has been overcome by unquestionable circumstances of over-reliance. Conversely, the same cannot be said in relation to the over-reliance deriving from the embedment of the credit ratings into legislation. There is no empirical evidence to support the assertion that the credit rating references in legislation weakens the due diligence and credit risk analysis that the investors are supposed to perform.⁵⁸⁵ The investors' denial as to their perception of the credit ratings as an official seal of approval of credit quality sounds like a strong negation of the existence of the phenomenon within the area of the rating-based regulation. In fact, their denial cannot be contradicted through opposite,

⁵⁸⁵ See The Independent Trustees of ING Funds Trust and ING Investors Trust, 'RE: References to Ratings of Nationally Recognized Statistical Rating Organizations, Investment Company Act Release No 28237 File No S7-19-08' (September 2008).

specific facts like in the structured finance area. This means that it is also difficult to discuss the potential risk of over-relying if specific facts cannot be identified and there is not helpful admission by those who are indicated as over-reliant either.

Significantly, their denial has a different connotation than the denial discussed in the structured finance sector. The difference can be understood by referring to the elements which characterise the phenomenon in the respective areas and which have been fixed in the second chapter of the thesis. While in relation to the rating-based regulation over-reliance is more a matter of laxness than ignorance, the latter characterises the risk of over-reliance in the structured finance sector. By comparing these two aspects, it can be argued that it is easier to admit ignorance rather than laxness.⁵⁸⁶ Whereas, the former can be a guiltless knowledge gap which can be closed by enhancing the investors' education and by requiring more disclosure to the issuers of the structured products and to the involved CRAs, the latter is something that the users of ratings, in particular, large institutional investors cannot afford to admit. For example, in the case of investment managers, they have responsibility as to the management of investors' portfolios and they will hardly admit any negative influence deriving from a rating-based rule. In short, admitting to perceive credit rating references as a seal of approval would be equal to admit that they feel discouraged from conducting their own due diligence and credit risk assessment. This, in turn, means being lax in their credit risk analysis. As illustrated, none of the above mentioned asset managers even admitted the potential of this risk as they claimed that they use credit ratings properly and not as an exclusive factor for the assessment of creditworthiness. The possibility of admitting laxness cannot exist for them, as well as for the other institutional investors who make

⁵⁸⁶ Fund Democracy Consumer Federation of America, 'RE: References to Ratings of Nationally Recognized Statistical Rating Organizations, Investment Company Act Release No. 28327' (July 2008): 'The Commission appears to believe that the NRSRO rating requirement encourages lax oversight by fund directors. What is illogical about the Commission's position is that at the same time it argues that fund directors may be so derelict in their duties so as to allow a satisfactory NRSRO rating to dilute or supplant their oversight role as to credit risk, it proposes to solve this problem by shifting more responsibility to the same directors as provided by new paragraph (a)(10) of the rule. If directors are so lax, then one could argue persuasively that the NRSRO rating requirement is needed now more than ever because an unsatisfactory rating protects against the overly lax board by preventing the investment from being made'.

large use of the credit ratings. Unlike in the structured finance sector, there should not be, in their view, any gap to be closed.⁵⁸⁷

All things considered, the debate on over-reliance deriving from the rating-based regulations and the consequent normative approaches are based on a nebulous, not evidenced phenomenon. Consequently, it is difficult to regard as sensible an approach which deletes credit rating references and encourages more independent credit risk analysis; especially, when those who should be the beneficiary of such an approach have argued that there is no need to delete the credit rating references because they do not perceive them as seals of approval of creditworthiness from the part of the regulators; and underline that they have always performed independent credit analysis. For these reasons, this principle does not represent anything new to them.

IV.3 ANTICIPATING THE POST-CRISIS DEBATE ON OVER-RELIANCE

IV.3.1 The CRAs' message to the regulators

IV.3.1.1 The regulators' over-emphasis on credit ratings

It may be objected, however, that '*absence of evidence is not evidence of absence*' (Carl Sagan-Astronomer).⁵⁸⁸ In any case, the purpose of this discussion was not to show whether over-reliance deriving from the credit rating references exists or not. Rather, to point out that the approaches elaborated to tackle this risk of over-reliance were not *ex ante* underpinned by sufficient investigation aimed at identifying concretely the danger of the tie between the credit ratings and

⁵⁸⁷ Stephen A Keen, 'RE: File Number S7-19-08' (December 2009): 'I have been in many meetings in which the quality of credit ratings was debated and the extent to which ratings should be relied upon discussed. Never during these meetings did anyone cite an NRSRO designation or the Commission's reliance on NRSRO ratings as a relevant factor. The investment professionals I deal with understand the nature and limitations of credit ratings better than the Commission and its staff, and therefore have no need to rely on the Commission's designation of a rating agency as an NRSRO in forming their own judgment about the quality of its ratings'.

⁵⁸⁸ Carl Sagan, 'The Demon-Haunted World-Science as a Candle in the Dark' (Ballantine Books 25 February 1997), 23.

legislation, as well as specific cases of misperception by investors and market participants. These investigations would have been worthy and crucial, if only because during the consultation periods for finalising the normative approaches both the US and the EU commentators denied any negative influence deriving from the credit rating references. Had these positions been taken into account, the supposed phenomenon might have been evaluated in a different way, and perhaps other strategies might have been elaborated. Undoubtedly, this is something which the regulatory debate at the national, international and regional levels missed once the discussion on over-reliance took place and finally developed into the examined reforms. Furthermore, if the risk of over-reliance is traced back to the credit rating references embedded in legislation, in particular, to the role given to the credit ratings as main parameters for the assessment of credit quality, it is to be questioned the extent to which regulators should bear responsibility for the problem. As detailed in the second chapter, massive references to the credit ratings were particularly acute in the US regulators, while in the EU the use of the credit ratings is mainly within the banking regulation.⁵⁸⁹ In any case, over-reliance should not be measured in relation to the quantity of the credit rating references. Even one reference in which the credit ratings are the exclusive benchmarks for assessing creditworthiness can be potentially dangerous and discourage the market participants from doing their own due diligence and credit risk assessment. As this is the way in which the phenomenon has been introduced at the beginning of the post crisis regulatory debate, it is to be considered whether regulators may have facilitated this risk and if so, how.

To begin with, it must be observed that the debate has always discussed over-reliance as an issue of best practice from the part of the investors and the market participants. The fact that now the debate underlines that the source of the problem lies in the hardwiring of the credit ratings into legislation may be interpreted as an implicit admission of responsibility by regulators in contributing to the risk of the investors' misperception of the ratings as official seals of approval.

⁵⁸⁹ John P Hunt, 'Credit Rating in Insurance Regulation: The Missing Piece of Financial Reform' (2011), 68 WLLR 1667.

However, so far attention has been mainly devoted to the investors' and market participants' approach to the credit rating references, rather than to discuss possible others' responsibilities. With specific regard to the regulators, it is necessary to go beyond the obvious assertion that they should have avoided facilitating the hardwiring of the credit ratings into legislation. Rather, it must be wondered whether regulators have ever considered that they were giving too much weight to the credit ratings in their legislation.

This line of investigation cannot be avoided. It arises from the fact that during the consultations launched within the post-crisis debate on over-reliance, the CRAs stressed that they have always warned against the undue use of the credit ratings in legislation.⁵⁹⁰ This statement is the basis to investigate and analyse why this use was not appropriate, which warnings were given in this regard, and the extent to which regulators listened to or ignored them. To this end, attention must be concentrated on the pre-crisis period. In the first part of the thesis it has been highlighted that over-reliance started being introduced only in the context of the 2007-2009 financial crisis. This conclusion was reached by analysing the debates on the CRAs which took place in the US with regard to the NRSRO status, while in the EU no regulatory attention was given until the crisis. Within the SEC consultations on the NRSRO status, a comment released by Moody's in 1994 is relevant here. Even though the subject was the NRSRO status and its possible implications as a barrier to entry for new CRAs, Moody's took the opportunity to express its view on the use of the credit ratings in the US financial legislation. It made specific reference to some rules and explained why the inclusion of credit ratings was not opportune. Its comments are of interest and worthy of discussion.⁵⁹¹

IV.3.1.2 Misunderstanding the nature of credit ratings

⁵⁹⁰ Commission Public Consultation (n 578).

⁵⁹¹ Moody's, 'RE: Use of Private Sector Ratings in Regulation' (October 1995) File Nos S7-23-94 and S7-24-94.

Firstly, Moody's referred to some of the forms promulgated under the Securities Act of 1933 and 1934. For instance, Form S-3 is available for registration of certain offers and sales of non-convertible 'investment grade securities' (General Instruction I.B.2.) and 'investment grade' asset-backed securities (General Instruction I.B.5.).⁵⁹² Forms F-1, F-2, F-3, F-4 and 20-F all refer to the registration of offers and sales of securities by foreign private issuers. Each form grants some reductions in required disclosure where the registrant is issuing non-convertible, 'investment grade' debt.⁵⁹³ Form F-9 is relating to the registration of 'investment grade' debt or 'investment grade' preferred securities of certain Canadian issuers. For purposes of Form F-9, the term 'investment grade' includes ratings issued by Canadian rating agencies as well as by agencies recognised as NRSROs. In general, the Form permitted a registrant to use standards of disclosure which were set out in Canadian securities regulation.⁵⁹⁴ At that time, Moody's had already suggested to remove the credit rating references and, in some cases, had also proposed some alternatives. To start with, Moody's urged revising the instructions relating to Form S-3 to eliminate the 'investment grade' criterion and substitute this with a float test.⁵⁹⁵ Similarly, for Forms F-1, F-2, F-3, F-4 and 20-F Moody's encouraged eliminating the reference to 'investment grade' debt provided by NRSROs. Likewise, with regard to Form F-9.

According to Moody's the credit rating references incorporated in all these forms had the effect of giving them an undue status, namely as a substitute for disclosure. Specifically, the regulator used external credit ratings as a transactional eligibility criterion. In a nutshell, the inclusion of credit ratings was based on the assumption that if a security has an 'investment grade' rating, this should be regarded as an adequate, exhaustive information about the security.

⁵⁹² 17 CFR 239-13- Form S-3, for registration under the Securities Act of 1933 of Securities of certain issuers offered pursuant to certain types of transactions.

⁵⁹³ See Legal Information institute (LII), Cornell University Law Scholl, <<http://www.law.cornell.edu/cfr/text/17/239.31> accessed 10 October 2014>.

⁵⁹⁴ Ibid.

⁵⁹⁵ According to Moody's Form S-3 should have been made available to all asset-backed securities regardless of credit quality. In addition, with respect to other non-convertible debt and preferred securities, the agency proposed a float test similar to the one used in General Instruction I.B.1. as a substitution for the rating criterion in Instruction I.B.2., see Moody's (n 591), 3.

Significantly, Moody's underlined the incorrectness of such a reasoning and stated the same principle that the current reforms on over-reliance have now crystallised: 'for many types of debt securities, investors must consider important factors beyond merely interest rates and credit ratings'. Hence, already a rating agency had warned not to give the credit ratings any undue or exclusive role.⁵⁹⁶

IV.3.1.3 Credit ratings as an exclusive benchmark for determining safe investments

Secondly, Moody's referred to rule 3a-7 of the Investment Company Act. As already explained, Rule 3a-7 under the Investment Company Act provides a safe harbour for issuers of 'investment grade' asset-backed securities. Also in this context, Moody's had stressed that the availability of the safe harbour depended exclusively on the rating assigned to any issue of asset-backed securities. Also, it pointed out how such exclusiveness ran counter to the purpose of the Investment Company Act. Indeed, the SEC had always acknowledged that the Act did not aim to protect investors from credit risk, but rather to prevent abusive practices such as self-dealing and overreaching by insiders, misevaluation of assets and inadequate asset coverage.⁵⁹⁷ In this regard, Moody's stressed that the credit ratings only referred to the credit dimension of risk and were not concerned with the abusive practice that the Act aimed at addressing. Consequently, the agency brought to attention how the inclusion of the credit ratings in rule 3a-7 could have made them be regarded as measures of overall safety. Accordingly, deletion of the reference was encouraged so as to capture more appropriately the SEC's concerns regarding the abovementioned abusive practices.⁵⁹⁸

Thirdly, Moody's warned against how some other rules of the Investment Company Act used credit ratings as a means to allow otherwise impermissible conducts by dealers and investment companies. To this end, reference was made to rule 10f-3. As already explained, Rule 10f-3 of the

⁵⁹⁶ Ibid, 2, the agency underlined that ratings presuppose adequate information in the public domain, and the use of ratings as a basis for altering or reducing a registrant's disclosure obligations will therefore ultimately undermine both the basis of the ratings business and the SEC's disclosure regime.

⁵⁹⁷ SEC, 'Protecting Investors: A Half Century of Investment Company Regulation' (1992) Division of Investment Management United States Securities and Exchange Commission.

⁵⁹⁸ Moody's (n 591), 5.

Investment Company Act freed certain purchases of securities from the prohibition under Section 10(f). Subsection (c) of Rule 10f-3 extended the exemption to certain municipal securities that were either top rated by NRSROs or if the issuer had not been in continuous existence for at least three years, that were rated in one of the three highest rating categories.⁵⁹⁹ Again, well before that the financial crisis forced revisiting the role of the credit ratings into legislation, Moody's expressed concerns as to the clear implication of the 1994 Release, namely that the rating standard used in Rule 10f-3(c) was mistakenly intended to serve as a measure of overall investment quality. The agency remarked that the ratings did not provide such a measure and should not be given any undue status. Accordingly, it suggested removing the rating standard from subsection (c) of Rule 10f-3 and to eliminate the exemption for securities rated at certain levels.⁶⁰⁰

IV.3.1.4 Risk of mischaracterising the limits of credit ratings

Fourthly, attention was devoted to the Net Capital Rule under the Exchange Act and its use of external credit ratings in connection with the determination of haircuts applied to securities in the calculation of a broker-dealer's required net capital. Under the framework of the Net capital Rule, securities that had received an investment grade rating could receive a more favourable (smaller) haircut.

Even though the use of the credit ratings under the Net Capital Rule addressed some degree of credit risk, Moody's noted that the rule primary focus was price volatility and liquidity concerns. In fact, the haircut system is predicated on the notion that securities held by a broker-dealer can be rapidly liquidated to raise cash. The agency observed that in this context the risk could be the perception that credit ratings issued by NRSROs addressed price volatility and liquidity in addition

⁵⁹⁹ See Chapter 2, section II.4.4, para II.4.4.1.

⁶⁰⁰ Moody's (n 591), 6.

to credit risk. Accordingly, the investment grade rating standard of Rule 15c3-1 should have been deleted and replaced with a standard based on price volatility.⁶⁰¹

IV.3.1.5 Encouraging more autonomous credit risk assessment and due diligence

Interestingly, comments were also made as to rule 2a-7 of the Investment Company Act. The rule referred to the credit ratings to limit investment by money-market funds in commercial papers issued by all but the most creditworthy issuers. As is known, the purpose of the rule was to prevent money market fund shares from ‘breaking the buck’. The rating requirement was regarded as a valuable means to limit investment by money market funds in risky investments.⁶⁰² As mentioned in the previous paragraph, commentators were against any amendment entailing deletion of the credit ratings under Section 939A, on the grounds that credit ratings were not given exclusivity as credit risk assessment tools.

Before the post-crisis reforms, Moody’s expressed a similar view stating that rule 2a-7 referred to credit ratings in a manner consistent with their meaning, that is, as opinions which investors and market participants should not take at face value and not as an exclusive factor for credit risk assessment. Moreover, at that time Moody’s encouraged revisiting the rule in such a way as to give more credit risk assessment and due diligence responsibility to the funds’ board of directors and, thus, reduce any potential risk of excessive reliance on credit ratings.⁶⁰³

IV.3.1.6 A critical review in relation to the post-crisis debate on over-reliance

Given the results of the reforms which have been considered in the previous part at the US level, it can be said that the agency already gave in 1994 those recommendations which were finally transposed into the post-crisis rules implementing Section 939A. This means that its suggestions

⁶⁰¹ Ibid, 7.

⁶⁰² The rule was intended to alleviate concerns arising from the perceived use by investors of money-market funds as a substitute for FDIC-insured bank accounts. The rating requirements of the rule were motivated, in part, by the highly publicized defaults of certain commercial paper issuers, see Chapter 2, section II.4.4, para II.4.4.2.

⁶⁰³ Moody’s (n 591), 5.

should have been taken into consideration at that time. In greater detail therefore, even if these recommendations were not specifically concerned with over-reliance, in any case, they warned against the over-emphasis that the US regulators were giving to the credit ratings. Back in 1994 the CRAs anticipated what the current reforms on over-reliance have finally set out. Consequently, it is not surprising that in the debates concerning the implementation of Section 939A and the finalisation of the European CRA Regulation III, the CRAs were in support of the proposal to revisit, if not delete, the role of the credit ratings in legislation. On the one hand, it cannot be affirmed with absolute certainty that if the regulators had taken into consideration Moody's suggestions nobody would have talked about over-reliance after the recent crisis. Nonetheless, since at that time the SEC was asking whether it was opportune to retain the legislative references to the credit ratings issued by NRSROs, evaluating Moody's suggestions might have stimulated useful reflections on the public sector's approach to the credit ratings and how this might have influenced the market participants in the future.

All things considered, the responsibility of the regulators does not exclusively lie on the embedment of credit ratings in their legislation but mainly in the fact that they were warned over twenty years ago by those that pioneered the use of the credit ratings and hence they are the ultimate experts on them, that is, the CRAs. This lack of consideration and the widespread use of the ratings in financial legislation has been decisive in consolidating the credit ratings as a 'common language' which is by now too eradicated among the market participants to be removed easily. This is also among the reasons why the current approaches to reduce over-reliance do not progress as expected in their implementation. Accordingly, it will not be easy to change a culture which has gone from strength to strength. Regulators could have listened to the message of the CRAs but they ultimately remained silent and opted for relying on the credit ratings. However, considering the fundamentals of the debate on over-reliance and what the agencies had anticipated before, this reliance proved to be undue. Changing the relationship now between the public sector and the credit ratings is not too

late, but surely this is not a quick process and, above all, it will hardly give the effects that the regulators and policymakers envisage on the market participants within a short time.

IV.3.2 The CRAs' message to the users of credit ratings

As to the regulators, the above discussion went beyond the assertion that their responsibility stems mainly from having facilitated the hardwiring of the credit ratings into legislation. As seen, in 1994 they were already warned against a wrong approach to the credit ratings by Moody's, but the recommendations remained on paper. Hence, their responsibility must also be discussed in terms of a lack of consideration of the nature and limits of the credit ratings into legislation. This happened despite the CRAs, at that time, indicated the approach which the regulators have now translated into the current reforms to mitigate the risk of over-reliance. Now, we should reflect on the investors and the market participants. Since it was pointed out that over-reliance is ascribed to their behaviour and that the credit rating references and the structured finance sector may provide incentives to this end, it is to be analysed whether there could be any proper approach to the credit ratings by the market participants against the risk of over-reliance. In other words, the main question is how they could have mitigated the potential risk of over-reliance. Obviously, an answer could be found in the fact that they should have referred to the credit ratings as sources of information complementary to their analysis, instead of referring to them as the sole benchmark for the assessment of the credit risk. In fact, undertaking more autonomous credit risk analysis is the second watchword upon which the regulatory reforms on over-reliance are based. In reality, the gist of the investigation should be concerned with discussing whether such a watchword is new or it is something which has always been highlighted but definitely ignored by the market participants.

To this end, it might be desirable to refer to how the CRAs introduce and explain the credit ratings in their nature and limits. It must be noticed that the major CRAs have always illustrated in their respective disclaimers the meaning of their rating symbols and widely detailed their limits.

Essentially, they have always provided the necessary details so as to inform the users of the credit ratings on the proper approach they should have taken while referring to them. In practice, their disclaimers have never changed before or in the wake of the 2007-2009 financial crisis. In this respect, it can be useful to offer a comparison between the contents of the disclaimers of the three major CRAs before the outbreak of the recent crisis, and then reflect on them:

[E]ach rating or other opinion must be weighed solely as one factor in any investment decision made by or on behalf of any user of the information contained herein, and each such user must accordingly make its own study and evaluation of each security and of each issuer and guarantor of, and each provider of credit support for, each security that it may consider purchasing, holding or selling (Moody's 2007).⁶⁰⁴

[T]he credit ratings and observations contained herein are solely statements of opinion and not statements of fact or recommendations to purchase, hold, or sell any securities or make any other investment decisions. Accordingly, any user of the information contained herein should not rely on any credit rating or other opinion contained herein in making any investment decision (Standard & Poor's 2007).⁶⁰⁵

[C]redit ratings express risk in relative rank order, which is to say they are ordinal measures of credit risk. Thus, they should be seen as broadly consistent indicators of relative vulnerability, rather than predictive indicators of actual, cardinal default rates. Obligations that are highly-rated have lower credit risk than lower-rated obligations, but the individual ratings themselves are not intended to be predictive of a cardinal frequency of default or a percentage expected loss (Fitch 2007).⁶⁰⁶

All these disclaimers make it clear what credit ratings are and how they should be interpreted by the investors and the market participants. Moreover, the limits of the credit ratings are clearly indicated. As already mentioned, these disclaimers were not elaborated in accordance with the post-crisis instances towards considering the credit ratings as one among several factors for independent credit risk analysis. They are all antecedent to the outbreak of the recent financial turmoil. Like for the US regulators, when they were advised by Moody's that they were over-emphasising the role of the credit ratings into their legislation, the same conclusions may apply with regard to the investors and market participants. The CRAs' disclaimers seem not to have been taken into due consideration. In

⁶⁰⁴ Moody's, 'Moody's Ratings Symbols & Definitions' (2003).

⁶⁰⁵ S&P, 'Fund Rating Criteria' (2007).

⁶⁰⁶ Fitch, 'Inside the Ratings: What Credit Ratings Mean' (August 2007).

this regard, it may be argued that the investors' responsibility is not dissimilar to that of the regulators' in relation to what the CRAs have always remarked as to the nature, limits and proper use of the credit ratings. They both misused the credit ratings.

Nonetheless, while this assertion can find adequate back up as to over-reliance stemming from the structured finance sector, it remains a mere assumption in relation to over-reliance deriving from the rating-based regulation. As long as strong evidence is not provided with regard to an effective misperception of credit rating references as official seals of approval, it cannot be affirmed with sufficient certainty that observing the CRAs' disclaimers would have curbed the problem. In any case, if the current debate on over-reliance is now discussing how to make investors more emancipated from the credit ratings by emphasising the limits of the credit ratings and encouraging more independent analysis, this means that the original message by the CRAs has always been the right one but finally never listened to. On the one hand, it cannot be proven that taking them into account would have avoided over-reliance being raised as an issue in the post-crisis debate. On the other hand, it can be said that their observance might have avoided discussing how investors should relate to the credit ratings after the crisis. In other words, it appears not sensible that within the debate on over-reliance on credit ratings one of the 'new' watchwords is to incentivise more knowledge of the limits of the credit ratings so that more independent analysis can be facilitated. CRAs have always drawn a line of demarcation between the 'dos and don'ts' of the credit ratings in their disclaimers. Significantly, they have always provided incentives not to over-rely on their credit ratings. Indeed, by looking at the disclaimers reported above it seems to be unquestionable that their wording reflects the behaviour that the second level of the FSB two-pronged approach, Article 5(b) of the EU CRA Regulation III, the US debate on Section 939A, and the reforms in the structured finance sector have been encouraging. Importantly, if the regulators had taken into consideration Moody's suggestions as to the over-emphasis given to the credit ratings in legislation, and had warned on the proper use of the credit ratings in accordance with the CRAs' disclaimers, the over-reliance debate would probably have been reduced in scope. It might

have been circumscribed to the structured finance sector in which the credit ratings were not taken as opinions. As discussed, this is the area in which the reforms appear to make more sense and be more feasible vis-à-vis the approaches analysed in the context of over-reliance deriving from the credit rating references in legislation.

IV.4 TAKING STOCK OF THE SITUATION

IV.4.1 Still much to be seen

As evidenced above, the strategy set out to tackle the risk of over-reliance deriving from the hardwiring of the credit ratings into legislation and regulatory frameworks is lagging behind schedule in its implementation; and it has been shown why it may have a marginal impact on the behaviour of investors and market participants and, hence, effectively reduce the risk of over-reliance. Also, it has been discussed how the debate on over-reliance on rating-based regulations failed to give concrete evidence of the phenomenon so as to support the regulatory strategies which have been elaborated. In particular, their assertion of the market participants' misperception of the credit rating requirements in legislation as official seals of approval of creditworthiness, and the consequent effect of jeopardising their independent credit risk analysis were contradicted by the investors' and the market participants' denial of being biased in this way. Finally, it has been reflected over the rationale behind the current strategies. Beyond their intrinsic limits such as the difficulties in finding valid, accepted alternatives to the credit ratings and the costs associated to enhance the investors' capabilities of conducting their own credit risk assessment, the approaches to tackle over-reliance do not represent anything new compared to what the CRAs have always indicated. Importantly, the problems brought forward in the post-crisis debate on over-reliance were anticipated long before. In this context, listening to the warnings against the improper use of the credit ratings in regulations, and giving proper consideration to the limits and nature of the credit ratings might have shaped the debate on the phenomenon of over-reliance in a different way.

The investigation this research aimed to conduct into the phenomenon of over-reliance and its regulatory approaches has fulfilled its task. *Quo vadis* now? Given the overall picture, it is to be wondered what future these approaches can have, and whether it is possible to identify improvements to facilitate the implementation process as encouraged by the FSB. Firstly, despite the shortcomings which have been highlighted so far, abandoning the present strategies and elaborating new ones would not sound appropriate. In other words, suggesting that the approach should be scrapped and that the debate should re-start would not be sensible in light of the fact that, as pointed out in the previous parts, the approach of deleting credit rating references and in parallel encouraging more independent analysis has been endorsed at all levels and represents a no turning back point. Significantly, the debate started through the identification of a problem and indicated the opportune strategies to be translated. Accordingly, normative approaches have been elaborated, particularly in the US and the EU, and their implementation processes are still ongoing. Consequently, any suggestion should not be based on searching for alternatives to an endorsed approach which is still under development. In fact, at this stage there is still much to be seen. Only once the Commission have completed its review by 2020, the FSB has produced further results on its long-term monitoring of the FSB principles' translation, and in the US other final rules are completed, and overall results are produced it will be possible to say whether the approaches are workable. At this stage, the research is based on the hypothesis that the risk of over-reliance is not reduced through the examined strategies which so far have failed to completely eliminate the credit ratings and have encouraged an enhancement of credit risk and due diligence capabilities that not all the market participants can afford. However, further results to reflect on are still to be expected. For these reasons, even though the limits that the strategies appear to have, it is too early to think of new ones.

IV.4.2 Developing an assertion into certainty: providing evidence of over-reliance

Among other things, the suggestion of alternative approaches cannot be disjointed from providing stronger evidence that the credit rating references are perceived by investors and market participants as official ‘seals of approval’ of creditworthiness. In this regard, an empirical study on whether and how the rating-based regulation carries the risk of undermining the investors’ autonomy in their investment decisions might be desirable. In effect, the debate missed the opportunity to back up the assertion of the existence of the phenomenon when the investors and market participants unanimously denied the improper use of the credit ratings. Besides, the literature on over-reliance is still at an early stage and this specific study would be, *inter alia*, desirable.

However, it may be argued that now that the implementation of the approaches in the US and the EU have *de facto* eliminated the primacy of the credit ratings in legislation, the utility of such a study may be questionable. This specific study would have been more useful *ex ante*, when the debate on over-reliance had started. In reality, given the fact that all the approaches elaborated at the national, international, and regional levels have maintained the credit ratings, there is still need to ascertain and give evidence of the degree of influence that these may exercise. In essence, verifying whether the credit rating references could be perceived as official seals of approval of creditworthiness could have been desirable in light of the exclusivity given to credit ratings in legislation *vis-à-vis* other credit risk assessment factors; now it may be desirable to assess whether their influence is still strong despite their primacy being reduced in regulations. Specifically, it may be worth investigating the extent to which the credit ratings can retain a significant level of influence on investors and market participants even though other tools for credit risk assessment are proposed as alternatives. In this context, it should be verified whether their primacy remains in practice and the extent to which this may have the effect of discouraging the investors and the market participants to undertake their own, independent, credit risk assessment. Such a study would imply comparing the past situation of the primacy of the credit ratings in legislation with the current one aiming at reducing it and creating a level playing field with the other credit risk assessment tools. This, in turn, would provide more evidence as to the existence of the phenomenon of over-

reliance deriving from the inclusion of the credit ratings into legislation. Indeed, the comparison between the previous and new legislative frameworks could give more light as to the scale of the risk and opportune countermeasures. Undoubtedly, this would be of benefit at the international level for the monitoring work that the FSB has started since the issue of the set of principles. In particular, the FSB could be able to provide competent authorities with further recommendations on the translation of the two-pronged approach.

IV.4.3 Encouraging more dialogue and coordination at all levels

In any case, having explained why it is not opportune to think of changing strategies vis-à-vis the elaborated approaches, it is to be discussed which possible improvements can be identified. To begin with, at the end of its first thematic review in May 2014, the FSB set out some recommendations to quicken the implementation process among its jurisdictions. These recommendations encourage more coordinated efforts among national competent authorities to translate into practice the two-pronged approach. Significantly, the FSB recommended the national authorities which have already implemented the approach or are in the process of completing their review to refine and implement their existing action plans in line with the agreed timelines. It is worth discussing this recommendation. The current picture provided by the FSB in its thematic review has revealed that some FSB jurisdictions, at the end of their review, did prefer to maintain the credit rating references in their regulatory frameworks. This aspect has a significant relevance. By reflecting over this, it can be argued that the process of implementation of the two-pronged approach has already been ended for some FSB jurisdictions. The FSB has expressed concerns about this choice in the sense that maintaining the credit ratings references as an exclusive benchmark for the assessment of creditworthiness would run counter to the aim of reducing the potential cliff-edge effects and herd behaviours and, hence, would facilitate mechanistic and parallel reliance on the credit ratings.

In reality, the FSB did not stress the fact that its future monitoring is likely to be mainly concentrated on those jurisdictions which either still have to complete their credit rating references review or are setting out new rules with the view to reducing the primacy of the credit ratings and looking at other credit risk assessment tools to be used as alternatives. Those jurisdictions which opted for not eliminating or substituting the credit ratings in their frameworks are no longer part of the implementation process of the two-pronged approach. This has several implications. First, the recommendations that the FSB issued within its thematic review to improve the implementation process of the two-pronged approach can have value only for those jurisdictions which intend to reduce the credit rating references. Secondly, it cannot be said that the primacy of the credit ratings has been globally reduced through the proposed two-pronged approach. On the contrary, there will be a contrast between those jurisdictions which will follow the letter and spirit of the two-pronged approach and those which have finally decided to maintain the credit rating references in their legislation. The FSB must start to consider this aspect. In particular, it should evaluate the possibility that those jurisdictions which have not undertaken or completed the review of the credit rating references in their own legislation may finally decide to maintain the credit ratings as well. In that case, it is not appropriate to think of possible strategies to be pursued to avoid this occurrence. Indeed, the implementation of the two-pronged approach is something which the FSB expects its jurisdictions to complete; nonetheless, it is neither binding nor mandatory that the process should be completed with the removal and substitution of the credit ratings. As seen, this has not happened at the US and EU level and, after all, in the FSB set of principles it is remarked that the credit ratings are important tools, though they should not be given primacy for the credit risk analysis. However, the risk is that the overall picture in the future thematic reviews may highlight the divergence between those jurisdictions which still maintain the credit ratings references and those which maintain the credit ratings along with the other credit risk assessment tools.

Probably, a mistake which was made when the implementation of the two-pronged approach was encouraged, was to think of the FSB jurisdictions as a unique, monolithic group in which all

the national authorities would have responded identically in relation to the two-pronged approach. In this context, the only recommendation which seems to be plausible for the FSB is to keep on dialoguing with the FSB jurisdictions, even with those which have concluded their review not in line with the rationale behind the set of principles and decided to maintain the primacy of the credit ratings in their legislative frameworks. The FSB should keep on stressing the importance of reducing regulatory reliance on the credit ratings, in particular, it should promote more exchange of information among national authorities on the risk of giving primacy to the credit ratings. In essence, it should not convince the ‘reluctant’ jurisdictions to abandon the credit ratings but emphasise that it is desirable to create in legislation a level playing field between the credit ratings and other credit risk assessment tools. Consequently, whereas the FSB recommendation to national authorities not to delay their action plans for the translation of the approach is wise, those other jurisdictions which have opted differently cannot be left out of the dialogue. Where the FSB does not monitor properly this aspect and does not encourage more consistency with the current trend towards the reduction of the primacy of the credit ratings in legislation, the implementation process will be useless.

IV.4.4 Ensuring more of a level-playing field among credit risk assessment tools

Having said so, it cannot however be neglected that further recommendations may be now identified and discussed only in relation to those legal systems which have given normative basis to the two-pronged approach and start the implementation of their own rules. In this context, the positive aspects from the results which can be drawn from the third chapter are worth being mentioned; and possible suggestions to improve and consolidate the elaborated strategies are to be identified for the benefit of the current debate.

A positive aspect can be seen in the fact that the credit ratings are no longer referred to as being exclusive, but are among the factors to make reference for credit risk assessment. This puts an

end to the supremacy of the credit ratings which has mainly characterised the US legislation. Furthermore, even if late, these reforms are in line with what the CRAs had always recommended, that is, not giving undue emphasis to the credit ratings in legislation so that they are denaturalised in their role of forward-looking opinions subject to changes. This explains why the reforms were supported by the rating industry and other sectors. Nonetheless, reducing or eliminating the primacy of the credit ratings in legislation implies the parallel reduction of the risk that the credit ratings can be given primacy in practice by the users of the credit ratings. Indeed, it is realistic to reduce over-reliance to the extent that it is unrealistic to think that investors and market participants will stop relying on the credit ratings.⁶⁰⁷ This is even more true as the reforms did not eliminate credit ratings but tried to create a level playing field between the credit ratings and other credit risk assessment tools. As argued in the third chapter, this can increase the risk of giving primacy in practice to the credit ratings vis-à-vis the other alternative tools. Consequently, the risk of over-reliance can still be critical.

In this case, save the freedom of choice between the credit risk assessment tools spelt out in the reforms, it is essential that more literacy is provided with regard to the credit risk assessment tools indicated in addition to the external credit ratings. As seen in the US final rules, these are numerous.⁶⁰⁸ However, either the lists are not definitive or it is simply stated not to give exclusivity to credit ratings and take into consideration other tools. In this case, it is necessary to create uniformity among the final rules in the EU and US in the sense that all the amended rules or guidelines should provide specific indication of the credit risk assessment tools which can be used for credit risk assessment. Simply mentioning that the credit ratings must be used not as the exclusive credit risk assessment instruments but that other risk assessment tools can be used, without specifying them, it will increase again the risk of giving primacy to the credit ratings. As underlined, the risk is that they might appear the first port of call in the event that the other tools are

⁶⁰⁷ Al Franken & Roger F Wicker, 'Re: Comments on Assigned Credit Ratings' (September 2011) File Number 4-629.

⁶⁰⁸ See Chapter III, section III.3.1.

not known or clearly indicated. In the event that an adequate level of specification of the other tools is reached, it is necessary to specify their ‘dos and don’ts’ as the CRA’s rating disclaimers do. Absence of this, carries the risk that the credit ratings can be again the primary choice because their advantages and limits may be known better than the others. Accordingly, authorities should provide more information on the other tools or incentivise the investors and the market participants to acquire more knowledge on them. In practice, other than in theory, this would help create a more solid level playing field between the credit ratings and the other tools.

By creating this level playing field it is then necessary to avoid any of the chosen tools, different than the credit ratings, becoming the primary one. In this case, over-reliance will simply shift from the credit ratings to another instrument and all the discussed problems such as cliff-edge effects and herd behaviours would be discussed in relation to the new one. This risk has been underlined by the FSB in its interim report and thematic review on the degree of implementation of the two-pronged approach.⁶⁰⁹ Therefore, the FSB must keep on reminding competent authorities to encourage market participants to be prudent in the use of any other, alternative, credit risk assessment tools. Like the credit ratings, the other tools must not substitute an independent credit quality analysis.

Finally, whereas it is fair of the FSB to urge the competent authorities to provide incentives to market participants to disclose more on their approaches to credit ratings,⁶¹⁰ such a principle should not be exclusively circumscribed to the credit ratings. The goal is making investors and market participants more autonomous and independent in their investment decisions and, thus, more disclosure on their use of the credit risk assessment tools they decide to rely on should be a universal principle in the sense that this should embrace all the other tools which are now listed with the credit ratings. This would permit having a broader assessment of the market participants’

⁶⁰⁹ FSB (n 296) and (n 326).

⁶¹⁰ *Ibid.*

interaction with tools which should only serve the purpose to aid their investment decisions. Also, it would permit verifying the extent to which they may be influenced by them.

IV.5 CONCLUSION

Chapter four of this thesis has proposed a retrospective analysis of the research topic. It aimed at discussing the solidity of the basis upon which the debate on over-reliance began and elaborated the normative strategies analysed in the third chapter. By preliminarily discussing the etiological nexus between the CRAs' failure in the wake of the recent crisis and the regulatory interventions which followed, an investigation has been conducted in relation to what underpins the legislation concerning over-reliance on the external credit ratings. In other words, the investigation dealt with finding evidence of over-reliance so as to justify what the regulators have so far produced to tackle the phenomenon and reduce its implications. To this end, the investigation has been broad in that it involved the two sectors which have been demarked in the second chapter as over-reliance risky.

In search of evidence of over-reliance, attention has been focussed on the relationship between the private sector and the credit ratings to verify whether they can be influenced by the credit ratings in terms of over-reliance and, thus, take them at face value with no independent analysis. It must be underlined that this analysis is different to the empirical research mentioned in the literature review, which mainly refers to credit ratings' influence from the perspective of the users' reactions to the rating changes. This investigation, instead, attempted to find their reaction to the argument that they over-relied and that they are still at risk of over-reliance. The conclusion of this enquiry, based on the results of some pre-crisis and post-crisis surveys, as well as of some direct comments released by the users of ratings during the regulatory consultations, is that the investors and market participants do not admit to the risk of over-reliance. Consequently, their denial leads to questioning the utility of the approaches which should benefit those who risk over-

relying and have been accused of over-relying in the years leading up to the 2007-2009 financial crisis. As shown, their denial emerges in both the sectors in which over-reliance may arise.

Nonetheless, it has been brought to attention how the denial relating to the structured finance area is different than the denial relating to the hardwiring of ratings into legislation. In essence, it has been argued that the former can be overcome by the strong evidence of their over-reliant conduct before the outbreak of the crisis. In other words, it can be affirmed that valid counterarguments can be opposed to their denial. On the other hand, the latter cannot be contradicted to the same extent. In practice, the question whether there is evidence that investors misperceived the credit rating references as a seal of approval of creditworthiness and were discouraged from undertaking their own due diligence and credit risk assessment is answered negatively. As a result of this comparison, the regulatory approaches regarding over-reliance in the structured finance sector make sense because over-reliance depends on the combination of several factors: a lack of adequate knowledge of the risk characteristics of the structured products; a lack of adequate knowledge of the specificities of the structured finance ratings; a lack of sufficient disclosure by the issuers and by the CRAs of their respective products and credit ratings. Clearly, in this context the CRAs are involved as well, in their degree of disclosing the characteristics of a structured finance rating vis-à-vis the ratings assigned to other securities.

Instead, in the context of the rating-based regulation there is not a direct relationship with the CRAs. The tie is only between the credit rating references and the users of the credit ratings. In fact, the perception of the credit ratings as seals of approval of creditworthiness by the regulators does not depend on how much the investors know about their potential investments, their risk and the characteristics of the assigned credit ratings. Significantly, if they deny that they have ever over-relied, are there any circumstances to be used as a counterargument? The answer was negative and thus the strategies which have been introduced in the second chapter and then critically analysed in the third chapter appear to be based on an issue of mere perception, rather than on the concreteness of a phenomenon. Therefore, the two-pronged approach seems not to make sense *tout court*, beyond

the intrinsic limits which currently slow down the implementation progress. The investors' and market participants' denial could lead to an assertion that there was no need to think of a removal and replacement of the credit ratings since they explained why the possibility of misperception and consequent over-reliance is to be excluded for them. This is one of the things that the debate has not adequately considered from the beginning; that is, finding strong evidence of over-reliance stemming from the rating-based regulation.

In reality, the debate on over-reliance could have been anticipated or, if not, be based on different premises had the regulators listened to the warnings launched by the CRAs in 1994. Already, at that time, their warnings sounded like a denouncement of over-emphasis given by the regulators to the credit ratings. Hence, intrinsic limits in the strategy, lack of sufficient insight into the phenomenon and past responsibilities from the part of the regulators are the real answer to the question why the implementation process of the two-pronged approach does not proceed as initially expected. However, the global two-pronged approach is a no turning back point. It is unrealistic to think or suggest new strategies in substitution of the present one. After five years some results could be seen and evaluated. The picture is of an approach which is still trying to develop. *Quo vadis* then? What should be discussed is a way to make it out of the quicksand which is jeopardising its implementation progress. As discussed, the credit ratings will not be replaced by any universally accepted alternatives, they will be retained in legislation along with other credit risk assessment measurement tools. As explained above, the debate should preserve its rationale by ensuring that the credit ratings' hegemony has not only ceased in legislation but also in practice. More of a level playing field between the credit ratings and the other credit risk assessment tools indicated as alternatives is to be enhanced along with more disclosure on how the market participants use credit risk assessment tools.

CHAPTER V

FINAL CONCLUSIONS

V.1 INTRODUCTION

This research was set out to explore the phenomenon of over-reliance on external credit ratings by investors and market participants. Specifically, the study was concerned with the problem of over-reliance deriving from the hardwiring of credit ratings into legislation and regulatory frameworks. In this context, the study has sought to analyse the current status of implementation of the approaches elaborated at the national, international and regional levels to curb the risk of over-reliance stemming from the concerned sector. Based on the results of such an analysis, the study has also widened the spectrum of reflection by discussing the extent to which the issue of over-reliance, which the post-crisis debate on the CRAs brought to our attention, was evidenced enough to justify the regulatory interventions which have been put in place to tackle it. As part of the fourth chapter, the search for evidence related to the over-reliance stemming from rating-based regulation. This was conducted through a comparison with the other area which this thesis identifies as critical with regard to over-reliance on credit ratings, notably the structured finance sector. Coherently, with the results of this discussion the research opened a final line of discussion in which it was questioned whether the phenomenon of over-reliance could have been anticipated at the time in which the reliance on credit ratings was the ‘good’ aspect and there was significant use of ratings as regulatory tools. Finally, the overall outcomes were concluded with the discussion of possible strategies to enhance the ongoing implementation process of the legislative approaches.

The study was built around a broad question: ‘*quo vadis?*’ This question fits in with all the chapters that comprise this thesis. In relation to the second chapter, ‘*quo vadis?*’ was referred to the need to set the context by identifying the issue of over-reliance and question what it is, where it arises and which strategies the related debate have set out to reduce the problem. New directions

derived from this context and the main question led us to critically analyse the approaches set out and implemented at the US and EU level through the paradigm of the FSB set of principles for reducing reliance on the credit ratings. The final direction is built upon the results of the implementation of the approaches since the start of the debate and their issuance and, thus, '*quo vadis?*' referred to a discussion on the future of the elaborated strategies after their critical review.

The overall results will be revisited in this last part of the thesis in accordance with the following structure. Firstly, the empirical findings of this research will be highlighted in relation to each chapter of the thesis and to all the questions which have been addressed and answered. Secondly, there will be a discussion on the contribution that this work aims to give to the current understanding of the topic, and why it will enhance the theoretical studies on the CRAs. Thirdly, the policy implications deriving from this study, and how these may be beneficial to the current debate on the topic will be highlighted. Fourthly, there will be room for identifying future development of the present topic, as well as new possible areas for further research. Finally, some concluding remarks will bring this work to an end.

V.II WHAT HAS BEEN LEARNED?

The investigation which has been conducted through the present research brought numerous results forward. Based on the fact that the regulatory strategies to address over-reliance are part of the broader reforms of the CRAs, the context was set by providing an illustration of the rating industry and the credit ratings with the view to highlighting the wide use of the rating services by the private and the public sector. To this end, the second chapter sketched the contours of the rating industry world by relying on the strand of legal studies which took stock of the evolution of the rating market from the origin to its current growth. This preliminary context was addressed within the realm of reliance on the credit ratings. In fact, in the first chapter it was underlined that the exploration into the phenomenon of over-reliance on external credit ratings, and consequent

regulatory strategies, would have been conducted by applying a separation between reliance and over-reliance on the credit ratings. Such a paradigm was founded on the interpretation of reliance as the ‘good’ aspects of the credit ratings, while the latter as the negative escalation of the former into the ‘bad’ aspects of credit ratings.⁶¹¹ Consequently, the second chapter made the dichotomy clear between the good and the bad aspects of the credit ratings, and the extent to which the latter can have systemic implications and turn out to be a threat to financial stability at the global level. Specifically, the crisis-related examples which were analysed gave a better understanding as to the unintended consequences associated with the widespread use of credit ratings by the private sector, and how the regulatory use of them may incentivise these through the hardwiring of ratings into legislation and regulatory frameworks.⁶¹² Coherently, the shift from the good to the bad aspects of the credit ratings was the platform upon which the concept of over-reliance could be introduced from the moment the regulators argued that the unintended consequences deriving from the credit ratings are exacerbated by over-reliance on them by the investors and market participants.⁶¹³

Clearly, the paradigm of the good and bad aspects of the credit ratings applied in this chapter was the line of demarcation between reliance and over-reliance. Therefore, the broad research question, ‘*quo vadis?*’ in relation to the second chapter was indicative of the path towards the introduction of over-reliance by way of contrasting the good and the bad aspects of credit ratings. As over-reliance is circumscribed within the bad aspects, the chapter isolated the phenomenon in the regulatory debate at all levels which followed the 2007-2009 financial crisis. ‘*Quo vadis?*’ in this context referred to the direction which the investigation had to take in relation to the phenomenon. In practice, the investigation was concerned with the question of what over-reliance is. This could appear as an obvious start. However, the question was more than necessary due to a lack of definition of over-reliance by the FSB which first introduced the issue. In greater detail therefore, the analysis of the debate which was done in the second chapter revealed a certain

⁶¹¹ Chapter II, section II.2.

⁶¹² Chapter II, section II.6.

⁶¹³ Chapter II, section II.7.

unclearness around the concept of over-reliance, which the FSB simply mentioned in two different areas; notably, the rating-based regulation and the structured finance sector.⁶¹⁴

The different recommendations that the FSB gave on how to tackle the phenomenon in the two sectors made it essential to elaborate two different definitions of over-reliance. Based on this understanding, the second chapter closed the definitional gap by highlighting the nature of over-reliance as a behavioural phenomenon in both sectors. In the first one, over-reliance can be referred to as a misperception of the nature and limits of the credit rating which results in laxness as to due diligence and credit risk assessment while in the second one, as a mischaracterisation due to ignorance and impossibility of understanding the nature and limits of the structured finance ratings. In other words, both have the effect of discouraging the investors from undertaking their own credit risk assessment and due diligence, and result in the exclusiveness given to the credit ratings in this respect. Nonetheless, over-reliance stemming from the rating based regulation implies laxness, while over-reliance in the structured finance sector demonstrates ignorance deriving from a lack of adequate disclosure by the issuers and the CRAs on the products and assigned credit ratings.⁶¹⁵ This also escalates into the practical impossibility of doing a credit risk analysis independent from the credit ratings. These two definitions were elaborated through the interpretation of words such as ‘seal of approval’ with regard to the rating-based regulation, and the problems inherent to the structured finance sector which the post crisis reports brought forward. As a result, there are two types of over-reliance in accordance with the hardwiring of ratings into legislation and the structured finance sector. In these paragraphs, the second chapter provided a clearer understanding of the phenomenon. In particular, the divisional line between the two types of over-reliance permitted narrowing the scope of the investigation to the central topic: over-reliance stemming from the hardwiring of the credit ratings into legislation.

⁶¹⁴ Ibid.

⁶¹⁵ Ibid.

In this context, the broad question *'quo vadis?'* was enriched by a third element. In essence, the availability of a definition pushed the exploratory path towards the regulatory approaches to address this type of over-reliance. The related section was not exclusively concerned with detailing the approaches elaborated in the US, EU and by the FSB. The respective approaches could be understood by first finding confirmation that they were concerned with over-reliance. In this context, what the investigation noticed with regard to the US and FSB debate on over-reliance was a sort of abandonment of the theme of over-reliance through the reference to reliance. The chapter identified this change as an evolution of the debate in line with the entry into force of Section 939A of the Dodd Frank Act in the US, and the issuance of the Principles for Reducing Reliance on Credit Ratings by the FSB. Both the rule and the principles were issued quite close together in 2010, and the salient aspect is that both are the result of the initial debate on over-reliance initiated by the FSB. This raised the question of the relevance of over-reliance. In practice, from the initial problem of over-reliance the debate appeared to have diverted towards tackling reliance. This aspect urged verification of whether over-reliance was part of these approaches relating to reliance on the credit ratings. In particular, it was noticed that at the EU level Article 5(a) of the CRA Regulation III was denominated 'over-reliance' and reflected the contents of the FSB Principle II. Similarly, it was noticed that the FSB Principle I was quite similar to Section 939A of the Dodd Frank Act in that it aims at reducing the regulatory references to credit ratings. Substantially, the puzzle was the following: both the FSB and the US started with over-reliance but they ended up with reliance. While in the US they produced a rule which aims to eliminate the credit rating references from regulations and substitute them with alternative standards of creditworthiness, the FSB produced a set of principles encapsulating a two-pronged approach. Such an approach provides for the reduction of credit rating references and substitution with alternative standards of creditworthiness and contextual enhancement of the investors' and market participants' capability of conducting independent credit risk analysis. This second level was then transposed into the EU Article 5(a) under the denomination of over-reliance.

From this puzzle the relevance of over-reliance was questioned and thus discussed the assertion that there is a micro approach to over-reliance set out in the second level of the FSB approach. To be enacted, this approach needs the implementation of the first level. In other words, to reduce the risk of over-reliance, intervention must be first done at the source, that is, the rating-based regulation, and then on those at risk of over-reliance by requiring them to develop more independent analytical capacity. This assertion was supported by arguing that both Section 939A and the FSB principles use the word reliance as a catch-all phrase which implicitly refers to over-reliance as well. As to the US, this was confirmed by exploring and analysing the policymakers' reports discussing the implementation of Section 939A. Clearly, they referred to over-reliance in the context of Section 939A and to the need to make all the necessary efforts to guarantee more independent analysis by investors once the credit rating references are eliminated from the regulations.⁶¹⁶ As to the FSB, confirmation was found through the EU CRA regulation which explicitly refers to reliance and over-reliance through a body of rules which are the transposition of the FSB two-pronged approach. Therefore, this section of the second chapter showed what the regulatory strategy against over-reliance is at the national, international and regional levels by taking chart of the evolution of the debate since it started.

Overall, the second chapter marked the beginning of the investigation through the translation of the general question '*quo vadis?*' into the specific one 'in search of a meaning'. Such a question relates to the introduction of the phenomenon and it fits into the problems which were highlighted and solved in this chapter, such as the definitional gap, and the relevance of over-reliance through the evolution of the initial debate. Significantly, the context was set, developed towards a specific definition of over-reliance, and finalised into the regulatory approaches through the interpretation of their contents within the debates at all levels.

The knowledge of over-reliance deriving from the regulatory use of the credit ratings and from the structured finance sector, and the regulatory approaches developed to address the former

⁶¹⁶ Chapter 2, section II.8.

permitted this research to move towards the assessment of the effectiveness of the elaborated strategies. This was the aim of the third chapter in which the answer to the question '*quo vadis?*' presumed to investigate the current status of implementation of the US and EU rules. The choice of these two legal systems was mandatory in that they are the only ones which have set out specific rules and undertook a process of implementation. To this end, the analysis referred to the FSB two pronged approach as the general platform upon which the progress made by the two systems could be verified. In this part, it was sufficiently underlined how only the EU could be regarded as the full translation of the FSB approach unlike the US in which Section 939A was issued before the elaboration of the principles. However, the US and the EU strategies have in common the aim to revisit the credit rating references and contextually enhance the investors' capabilities of conducting their own due diligence and credit risk assessment. This is the approach indicated by the FSB as well and, thus, its two levels can be the paradigm upon which discussing the US and EU progress.

Preliminarily, in section 1 of chapter three a comparison was made between the US and EU rules. Their interpretation led to the conclusion that the US approach appears to be harsher than the EU one in pursuing the reduction of over-reliance on external credit ratings. The US approach under Section 939A has the ambitiousness of reviewing all the credit rating references in federal legislation, remove them, and substitute them with an alternative standard of creditworthiness. Conversely, and in line with the FSB approach, the EU rules aim to conduct a more selective review with the view to identifying only those credit rating references which can cause mechanistic and parallel reliance by investors and market participants. In this respect, the ESAs are in charge with this review with regard to their recommendations and guidelines. Besides, the Commission is mandated to undertake a similar review by 2020 with regard to the credit rating references in EU law and substitute them with possible alternatives. Accordingly, it was highlighted that unlike the EU rules, the US approach sounds like a prohibition from referring to credit ratings in regulations. Further implications deriving from this comparison were discussed in relation to the fact that both the legal systems are likely to implement their own strategies in an uncoordinated way. This is due

to the different aims of their respective reviews of the credit rating references, and to the fact that only the EU rules were elaborated in line with the FSB two-pronged approach which recommends a selective review of the credit rating references in legislation and regulatory frameworks. Nonetheless, they are both purported to the reduction of the risk of over-reliance, and taking the two levels of the FSB approach as the reference paradigm their progress could be discussed.⁶¹⁷

With regard to the first level, that is, the review, removal and substitution of the credit rating references with alternatives, section 2 of chapter 3 analysed this as the most challenging feature of the approach. In particular, by analysing the US debate on the implementation of Section 939A it was noticed that the policymakers' initial intention was to find a universally accepted alternative which could replace the credit ratings.⁶¹⁸ This, in any case, found strong opposition by the users of the credit ratings which interpreted the letter and spirit of section 939A as a ban from using the credit ratings.⁶¹⁹ As noticed, these comments were dated back to the start of the implementation of section 939A by the US federal agencies. It was shown through the analysis of the final and proposed rules elaborated by the mandated agencies how the difficulties in finding universally accepted alternatives, coupled with the opposition from the users of the credit ratings, played a decisive role in the formulation of them.⁶²⁰ The outcome of the analysis of the first level of the strategy from the US perspective was that all the concerned agencies maintained the credit ratings as credit risk assessment tools. In substance, credit ratings are simply one among other factors that investors and market participants can take into consideration for their credit risk analysis. This outcome is of significance from different angles. From the perspective of Section 939A and the regulators' initial expectations, it was pointed out that the search for a universally accepted alternative to credit ratings found its major stumbling block in the opposition from the users of the credit ratings, who were afraid of being banned from using the credit ratings. Consequently,

⁶¹⁷ Chapter III, section III.2.

⁶¹⁸ Ibid.

⁶¹⁹ Chapter III, section III.3.

⁶²⁰ Ibid.

maintaining the credit ratings in the final rules is not only an expression of the difficulties in finding something to be accepted as better than the credit ratings, but also it is a compromise with the users of the credit ratings. From the over-reliance perspective, it was argued that the risk is still latent as long as the credit ratings remain. Indeed, they are a common language more used and eradicated than the other alternative tools which have been indicated. The result can be that the ratings can still have exclusiveness in their use and, hence, reliance on the credit ratings can still escalate into over-reliance.

On the other side of the Atlantic, the assessment of the EU progress in the implementation of the CRA Regulation III rules relating to the first level of the approach brought forward the following findings. The analysis was concerned with the review that the ESMA, EBA and EIOPA were mandated to be completed by the end of 2013. Such a review had to select credit rating references in guidelines and recommendations which could induce mechanistic and parallel reliance.⁶²¹ The EBA identified this type of reference in its guidelines relating to the mapping of the credit risk weights. It concluded that it would have not taken any repeal, above all, because its guidelines draw on the Basel framework. Contrary to the global instances as to the reduction of credit rating references, the Basel Committee still makes wide use of them. Consequently, as long as changes do not come from the Basel arena, the EBA does not feel it opportune to intervene on its guidelines.⁶²² The ESMA reviewed its guidelines on money market funds and amended paragraph 4 of Box 2 and paragraph 2 of Box 3 so as to reduce the primacy of the credit ratings. Accordingly, credit ratings can be used as credit risk assessment tools '*inter alia*'.⁶²³ The EIOPA concluded its review by saying that there are not credit rating references in its guidelines carrying the risk of inducing mechanistic and parallel reliance. In relation to the research question which underpins the third chapter ('in search of effectiveness'), the EU assessment revealed three outcomes. The EBA's review remained on paper due to the possible conflict which there could be in relation to the

⁶²¹ Chapter III, section III.4.

⁶²² *Ibid.*

⁶²³ *Ibid.*

maintenance of the credit ratings in the Basel framework. The ESMA's review proved to be superfluous in that the identified guideline had already mitigating factors *ex ante*. The EIOPA's review was inconclusive as to the risk of over-reliance. As a result of this, the effectiveness of the strategy cannot be completely tested at the EU level. Furthermore, the EIOPA review led to formulate the prediction that the Commission review expected by the 2020 may lead to results not different than the EIOPA. This assertion was built up on a review of the credit rating references in the EU financial legislation that section 3 of the third chapter conducted. The review did not aim at identifying credit rating references carrying the risk of mechanistic and parallel reliance but to verify whether the same results as the EIOPA could be envisaged. Indeed, either there are not credit rating references or when credit ratings are referenced, they are not the exclusive credit risk assessment tools.⁶²⁴ Significantly, the risk of over-reliance seems not to be so high at the EU level. The source of over-reliance, namely the EU rating-based regulation, already has its mitigating factor or references are very limited if not absent. Consequently, at this stage, it is not possible to discuss the effectiveness at the EU level to the same extent as in the US.⁶²⁵ These were the results as to the first level of the two-pronged approach.

With regard to the second level relating to the enhancement of the investors' ability to conduct independent credit risk assessment, the discussion was more general in relation to some results brought forward by the FSB in its thematic review of the translation of the two-pronged approach at the global level. Substantially, the important result is that the enactment of the second level risks being the privilege of sophisticated investors. These can afford the development of internal systems for the measurement of the credit risk, as well as the deployment of competent resources to this end. As opposed to them, small, less sophisticated investors who do not have the economies of scale to conduct their own credit risk analysis will definitely have to rely on something. In this section, it was accordingly argued that until now they relied mainly on the credit

⁶²⁴ Ibid.

⁶²⁵ Ibid.

ratings. Consequently, the risk of giving primacy to them can still be relevant even if the ratings are listed in legislation along with other credit risk assessment factors.⁶²⁶

To sum up, the research question on the effectiveness of the approach was answered negatively with regard to both levels. Importantly, it is not the process of implementation in itself which slows down because, as the FSB claimed, some FSB jurisdictions have not started any review yet. The US and EU have shown that it slows down because of other reasons. Finding alternatives remains challenging and it can be concluded that there will never be a unique, universally accepted one able to substitute the credit ratings. This will impinge on the review that the Commission has to complete by 2020 and it is reasonable to claim that its final rules may not be dissimilar to the US final rules in which credit ratings are still referenced. This risks ultimately diminishing the possibility of encouraging more independent credit risk analysis where reliance on the credit ratings is no longer exclusive in regulation but strong enough to risk encouraging their primacy in practice. These are the results of the implementation process after almost five years since the debate on over-reliance started. The process is still ongoing and there will be room for further assessment, above all at the EU level where the Commission has to meet its deadline by 2020.

Nonetheless, these results have pushed this research into a reflection on the debate itself and on the investors' conduct. This had, firstly, the aim to investigate whether there was something which should have been done or taken into consideration while discussing the opportune strategies to tackle over-reliance deriving from the rating-based regulation; secondly, to verify whether the relevance of the phenomenon of over-reliance could have been anticipated before the recent financial turmoil and perhaps monitored properly. These issues were addressed in the fourth chapter. Section 1 of this chapter answered the research question of whether the phenomenon of over-reliance stemming from the embedment of the credit rating references in legislation could be said to be adequately demonstrated to support an ambitious regulatory strategy based on the

⁶²⁶ Chapter III, section III.5.

removal of the rating references and contextual encouragement of independent credit risk analysis. As the discussed reforms are a part of the wider package of legislative interventions on the CRAs, it was preliminarily discussed how the post-crisis reports, investigations and studies by scholars gave sufficient evidence of CRAs' failures, so as to make it necessary to elaborate an adequate legislative framework. This was answered positively in relation to the issue of conflict of interest deriving from the issuers-pay-model, which turned out to be particularly serious in the structured finance sector in the years leading up to the financial crisis.⁶²⁷ This raised the question of whether the same outcome could have been argued as to over-reliance. At this stage, the analysis was more circumscribed to the two types of over-reliance this research identified and defined. After providing an overview of the regulatory reforms at the US and EU level relating to the over-reliance in the structured finance sector, the chapter addressed whether this phenomenon was sufficiently evidenced. Significantly, an answer could be provided by referring to those who are regarded as in danger of over-relying, that is, investors and market participants. Pre-crisis and post-crisis surveys on the nature and limits of ratings assigned to structured finance products revealed that in both periods the investors denied the existence of the problem of over-reliance. In other words, they claimed that they were not negatively influenced by the credit ratings to the detriment of their own due diligence and credit risk assessment. In the first place, this could lead to cast doubt on the existence of the phenomenon and its risk, and deem the rules which have been set out as superfluous.⁶²⁸ However, it was shown how this denial could not be supported compared to the documented evidence of their over-reliant approach to the ratings assigned to complex structured products. Accordingly, the regulatory interventions were fully justified by the existence of over-reliance and its implications.⁶²⁹

The same question and method of investigation based on pre-crisis surveys on asset managers as well as opinions expressed by institutional investors during the preparatory works of

⁶²⁷ Chapter IV, section IV.2.

⁶²⁸ *Ibid*

⁶²⁹ *Ibid*.

the rules were applied with regard to over-reliance deriving from the credit rating references in legislation. The results were different. Again, the investors and market participants denied perceiving the credit rating references as ‘seals of approval’ to the detriment of their own due diligence and credit risk analysis. Counterarguments against this denial could not be found to justify the ambitious regulatory intervention which was set in motion, and which is currently progressing very slowly. Significantly, it was argued that it is in general unrealistic to think that investors will admit to over-reliance. However, while in the structured finance sector this can be validly opposed, the same cannot be argued with regard to the rating based regulation. Accordingly, not only does their denial make this type of over-reliance quite nebulous and substantially not concrete, but it also casts doubt on the sense of the consequent regulatory strategies. The investors’ denial combined with the absence of valid counterarguments to be opposed make the regulatory approaches lack their solid fundamentals. Hence, over-reliance deriving from the hardwiring of ratings into legislation has never been adequately demonstrated. In particular, the approaches appear to be not coherent in light of the investors’ denial that they over-relied and that they are at risk of over-reliance. Accordingly, there is no evidence that investors misperceive the nature and limits of the credit ratings embedded in legislation.⁶³⁰

This outcome pushed the reflection beyond the post-crisis debate in which the issue of over-reliance arose. The analysis the last section of chapter three dealt with aimed to verify whether the phenomenon of over-reliance could have been anticipated or whether the scope of the debate could be reduced where some corrective actions would have been taken *ex ante*. This investigation was originated from the outcomes relating to the analysed status of implementation of the approaches and the discussed lack of sufficient evidence of the phenomenon as to the rating-based regulation. In practice, the question that this context raised was the following: which actions could have been taken in the past to avoid or reduce the possibility that the 2007-2009 financial crisis introduced the problem of over-reliance? This question was vital for the suggestion of possible recommendations

⁶³⁰ Ibid.

for a better development of the ongoing implementation process. In addition, it gave completion to the exploratory aim this research proposed as to the phenomenon of over-reliance.

To answer this question, reference was made to the market participants and the regulators. The first are those who are at risk of over-reliance, while the second are those who can incentivise the phenomenon through a widespread use of the credit ratings in legislation. With regard to the investors and market participants, a proper answer could be found from the perspective of their relationship with the credit ratings. The zeitgeist of more independent analysis which the post-crisis debate constantly repeated was nothing new. In the past, the CRAs have always stressed in their disclaimers which limits the credit ratings have and how the users have to approach them. To this end, section 4.3 of the fourth chapter underlined the contents of these disclaimers in the period antecedent to the crisis and discussed how in the structured finance sector these limits were left on paper by the institutional investors.⁶³¹

Similarly the regulators, in particular the US regulators, were warned by the major CRAs that they were putting too much emphasis on the credit ratings in their regulations. As noticed, this happened in 1994 and the warnings were not simply concerned with the amount of credit ratings in legislation. The word ‘over-emphasis on credit ratings’ that the agencies used meant a use of the credit ratings beyond their limits of simple forward-looking opinions. In this respect, Moody’s highlighted the unintended consequences that could derive from this wrong use of the credit ratings by the regulators. Among these, Moody’s hinted at the possibility of an undue perception of them by the market participants.⁶³² In parallel, this research noticed that the rules that the US federal agencies amended under Section 939A of the Dodd Frank Act were the same identified by Moody’s and, finally, the way these rules were amended reflected the early suggestions given by the agency. Moody’s did not explicitly talk about over-reliance but its warnings anticipated the possibility of the

⁶³¹ See Chapter IV, section IV.3.

⁶³² Ibid.

phenomenon. In any case, these warnings remained on paper and the regulators perseverated with their wrong reliance on the credit ratings.⁶³³

Significantly, these results may be regarded as sufficient to argue that there were the preconditions to anticipate over-reliance *ex ante* and hence monitor the possibility of an escalation of reliance into over-reliance. Accordingly, blind reliance was not only a problem of market participants' best practice but also a problem from the part of the regulators. While investors are not available to admit their over-reliant conduct, the regulators have, perhaps implicitly, admitted their early mistake through the elaboration of an approach which aimed at eliminating the credit rating references and contextually encouraging more independent analysis from the part of the users of the credit ratings.

V.3 THEORETICAL IMPLICATIONS

The exploration into the phenomenon of over-reliance on external credit ratings, and the analysis of the regulatory strategies issued to address, in particular, the problem deriving from the regulatory use of the credit ratings brought to attention the following drawbacks. Firstly, a lack of clear demarcation of the phenomenon with regard to the rating-based regulation and the structured finance sector. Secondly, a very slow progress in the implementation of the two-pronged strategy at the global level. Among the FSB jurisdictions which endorsed the approach, only the US and the EU issued specific rules to be analysed. Slowness in the implementation progress is mainly due to difficulties in finding valid, universally accepted alternatives to the credit ratings, and difficulties in enhancing the market participants' capabilities of conducting a more independent due diligence and credit risk assessment. Thirdly, based on the critical evaluation of the US and EU reforms, it was claimed that the approach of maintaining the credit ratings in legislation and regulatory frameworks, along with other credit risk assessment tools, may not be effective in the reduction of the risk of over-reliance. In fact, the alternative tools are not commonly used as much as the credit ratings are

⁶³³ Ibid.

used in practice. Consequently, even though the new rules indicate other alternative factors, the credit ratings may keep a primary role and this may jeopardise the efforts to reduce over-reliance on them. Fourthly, the phenomenon of over-reliance stemming from credit rating references in legislation was brought to attention by regulators and policymakers without providing strong evidence as to the assertion that investors and market participants are discouraged from undertaking their own due diligence and credit risk assessment because they misperceive the credit rating references as an ‘official seal of approval’ of creditworthiness. As shown in chapter 4, investors and market participants, strongly and unanimously, denied being influenced like that. Fifthly, the phenomenon, as it was introduced in the post-crisis regulatory debate on the CRAs, could have been anticipated a long time before. Early warnings were sent by the major CRAs to the US regulators back in 1994. These were concerned with the unintended consequences which could derive from an improper use of the credit ratings in their regulations. The way the US federal agencies have changed their rules under Section 939A of the Dodd Frank Act, are basically in line with the amendments that the major CRAs suggested in 1994. Consequently, over-reliance is not exclusively a problem of investors’ best practices but, *ex ante*, there could have been more attention to the use of the credit ratings by both the public and private sector. This might have permitted consideration about the possibility of the phenomenon and to perhaps start monitoring the degree of influence that the rating-based regulation could exercise on the market participants.

The overall study conducted through this research and its results contribute to the theoretical literature on the credit ratings in several aspects. To begin with, the regulatory strategies against over-reliance are part of the package that the CRAs’ reforms took place in the wake of the recent financial crisis. These reforms address the operation of the CRAs and deal with issues such as conflict of interest, CRAs’ registration systems, rating methodologies and the agencies’ civil liability. Significantly, these reforms strictly relate to the agencies. In this context, the issue of over-reliance that this research addressed appears to be the odd one out in that it is not directly in connection with the agencies, but is in relation to the use of the credit ratings by the public sector

and how this is perceived by the market participants. In any case, as was stressed throughout the thesis, its inclusion in the CRAs' legislative package makes this topic a segment of the broad reforms of the agencies.⁶³⁴ Accordingly, the scientific contribution that this study aims to give can be discussed vis-à-vis the other CRAs' reforms.

Even before the recent US and EU legislation on the CRAs, these issues were highly debated. For instance, scholars have devoted considerable attention to the conflict of interest inherent to the issuers-pay-model and to the absence of an adequate civil liability framework for the CRAs. Such issues are still under scrutiny in light of the new rules which address them and, consequently, new analysis has been brought forward. As underlined in the first chapter, the topic of this research is new in comparison to the 'old issues' that have raised the scholars' interest. However, after five years since its introduction in the post-crisis regulatory debate and the issue of specific normative approaches, the research on the phenomenon of over-reliance on credit ratings and the regulatory approaches to tackle the problem appears to be at a standstill. The few works produced so far either illustrated the over-reliance in the context of the current reforms or expressed scepticism as to the implementation of the approaches.⁶³⁵ The present research not only gives a more holistic vision of the problem in comparison with these critical articles but also widens the historical and empirical literature upon which it draws. In more detail, the rating-based regulation has so far been studied from a historical perspective to detail the rise and growth of the rating industry. Within this, further studies analysed the rating-based regulation under a competition perspective and how it may have facilitated the dominance of the major CRAs. Also, other studies developed an analysis of the rating-based regulation as a factor facilitating conflict of interest with the issuers. Through the present studies this mosaic is enriched with a new perspective which takes place from the assertion that the regulatory use of the credit ratings may facilitate over-reliance. This assertion came from the side of the policymakers and triggered the regulatory strategies which

⁶³⁴ Chapter I, section I.2.

⁶³⁵ Ibid.

followed. However, the few studies which talked about this only endorsed and illustrated the regulatory strategies. This research widened the spectrum of knowledge on over-reliance. In doing so, it offered a more updated analysis on the progress of the approaches by illustrating them in their current status, and critically reviewing them in their effectiveness as to the risk of over-reliance.

To review its development, the research identified an initial definitional gap by the policymakers which was then, in 2014, confirmed by the ESAs when they had to conduct their review under Article 5(b) of the CRA Regulation III. This definition was elaborated by demarking a line between the rating-based regulation and the structured finance sector as over-reliance risky areas. These definitions have been elaborated through the understanding of the debate launched by the FSB. As such, they may be open to discussion and criticism. In any case, they may be useful in the event of an empirical study assessing concretely the potentiality of the rating references in legislation to be perceived as official seals of approval of creditworthiness. To this end, the definitions provided by the present research, as well as its results, may be the paradigm or the source upon which further aspects can be identified. On the whole, these definitions aim to be the milestones for understanding the phenomenon of over-reliance and the input for further discussions.

Similar conclusions can be drawn in relation to the discussion conducted in the third chapter. The analysis of the status of implementation of the strategies based on removing rating references, finding alternatives and contextually enhancing a more autonomous credit risk analysis, contributes to the existing literature on the CRAs' reforms by providing a concrete picture of what has been done so far; which degree of consistency the final rules have with the initial aim of the debate; and whether these may be considered effective with regard to the mitigation of the risk of over-reliance. In comparison to the early studies which illustrated the rules and offered a preliminary forecast of the pace of their implementation, this part of the thesis gives a more updated picture because it provides an excursus of the progress, from the early draft of the rules until their translation into practice. From a legal perspective this analysis can give impetus to further critical studies since the

implementation process is still ongoing. Hence, the third chapter is to be considered as the first preliminary assessment of the progress after five years since the debate on over-reliance started.

Finally, contributions can also be derived from the fourth chapter. In the light of the CRAs' warnings given in 1994, it was discussed the extent to which the phenomenon could have been anticipated and perhaps monitored over time. Such a discussion can contribute to the existing literature on the tie between the public sector and the credit ratings. In particular, this part gave room to the voice of the agencies. As explained in the first chapter, the agencies' opinions are referred to by the economic literature for analytical and statistical purposes while assessing the adequacy of the rating methodologies and models.⁶³⁶ What this research brought to attention were different opinions. These were comments released by the agencies on pieces of legislation relying on the credit ratings. Such views, coupled with the comments by the users of the credit ratings, may stimulate legal studies to make more references to this kind of opinion when discussing the CRAs' legislative frameworks. In the case of over-reliance, Moody's comments were indeed anticipatory of a regulators' wrong approach to the credit ratings. This wrong approach was ultimately acknowledged by the regulators after the recent crisis. Therefore, what this research has identified by investigating the agencies' opinion can stimulate more consideration for their opinions in the legislative arena.

All things considered, this work achieved its aim to provide an exploratory, holistic vision of the issue of over-reliance so as to give impetus to further studies, and contribute to raise the same level of interest around the topic that 'old' topics on the credit ratings are still stimulating.

V.4 POLICY IMPLICATIONS

This thesis analysed the introduction of the phenomenon of over-reliance within the post-crisis regulatory debate. Furthermore, it analysed the evolution of the normative approaches from the

⁶³⁶ Ibid.

guidelines provided at the international level by the FSB until the current process of implementation of the rules finalised at the US and EU level. This exploratory study has implications which can give a contribution from a policy perspective. As explained in the previous paragraph, this research contributed to make the line of demarcation between the two types of over-reliance less blurred. In practice, the lack of a proper definition and distinction of the two areas was a source of confusion to the extent that the reliance and over-reliance were used as synonyms. Therefore, providing specific definitions based on the interpretation of the policymakers' debate, and then contrasting these definitions on the basis of the suggested regulatory interventions, not only can be the platform for further studies on the phenomenon, but also an adequate reference for the monitoring of the implementation process of the two-pronged approach.

The FSB is in charge of the monitoring tasks. As shown, the FSB developed the initial FSB's general recommendations into the two-pronged approach. This was then fully translated at the EU level and somehow endorsed at the US level, with particular regard to the enhancement of the investors' independence in their credit quality judgement. Nonetheless, the FSB did not develop any definition of over-reliance either. It talked about 'mechanistic and parallel reliance' on the credit ratings which was then transposed into the European Regulation on the CRA. As seen, this lack of definition was a drawback the ESAs had to preliminarily solve to pursue their review mandate under Article 5(b) of the CRA Regulation III.⁶³⁷ Consequently, the specific definition this study proposed can be a source the FSB, and the EU and US policymakers can refer to while monitoring the implementation process which is still ongoing. In greater detail, if further guidance and recommendations are to be provided to guarantee the optimal pace of the implementation process, it is necessary to specify what over-reliance deriving from the embedment of credit ratings into legislation is. This is particularly essential for the FSB since it monitors the implementation of the two-pronged approach among the FSB jurisdictions and sets out its recommendations for the future in accordance with the results of its review. Practical recommendations cannot suffice

⁶³⁷ Chapter III, section III.4.

without the basis provided by a clear understanding of what the phenomenon they are dealing with is. Through the elaborated definition, this research helps to give policymakers a tool which can enhance the common understanding of the phenomenon and pave the way for the coordinated dialogue on over-reliance which is still missing at all levels.

Moreover, this research discussed the reasons why the implementation process does not have the pace envisaged by the FSB. This was done through the analysis of the US and EU final rules. More than the results brought forward by the FSB in its thematic review on the implementation of the two-pronged approach among the FSB jurisdictions, a thorough discussion on the limits of the approaches was taken. This led to the conclusion that the risk of over-reliance is still immanent in the new rules that the regulators have so far developed. This outcome, if acknowledged, may be helpful to regulators and policymakers to develop further strategies to contain the risk within the approaches they have elaborated and are trying to implement. In particular, the discussion the fourth chapter engaged in with regard to the investors' denial as to their misperception of the credit rating references as 'seal of approvals' has the aim to urge the regulators and policymakers to test in a more effective way this type of over-reliance. A constant dialogue with those who are considered at risk of over-reliance is essential to this end.⁶³⁸ Likewise, giving due weight to the necessity of providing strong evidence of the problem they asserted may permit them to look into the future of the approaches they set out, and think of possible improvements.⁶³⁹

Ultimately, this thesis tried to propose a constructive critique of the strategies against over-reliance. Despite some discouraging results, the positive aspect is that the primacy of the credit ratings seem to have changed in legislation, but risk continues in practice because of the major impact the credit ratings can still have vis-à-vis the alternative factors that the new and proposed rules indicate along with them. However, the balance that the rules attempt to create between the

⁶³⁸ Ibid.

⁶³⁹ Ibid.

credit ratings and the other credit risk assessment tools is a sufficient basis to argue that the two-pronged approach cannot be erased but deserves a chance to go on. Among other things, this research pointed out that this approach is a no turning back point and that a new one can hardly be discussed. In line with this, a further contribution this research aimed at giving from a policy perspective was concerned with the tentative suggestions on how to consolidate the reduction of the risk of over-reliance under the present approach. In particular, the suggestion to strengthen the level playing field between the credit ratings and the possible alternatives should make the regulators and policymakers reflect over the possibility of providing more knowledge and assessment of the new ones. The credit ratings are commonly regarded as ‘a common language’ among the market participants. This means that where a level playing field is not provided between the ratings and the other credit risk assessment tools, the former will always be the strongest.⁶⁴⁰ Consequently, this work tried to stimulate the standard setters and regulators to consolidate the basis for a new culture alternative to the credit ratings, and reduce the possibility of maintaining their primacy in practice, and the risk of over-reliance.

Also, it has been demonstrated that the opinions of the CRAs have significant relevance when discussing the use of the credit ratings. The present research wanted to underline that the agencies should not be mainly studied by the theoretical literature. Their expertise and opinions on the reforms can be constructive and constitute a valuable point of reference for regulators as well. All things considered, the results produced through this research are an adequate platform to influence the development of the strategies against over-reliance on the rating-based regulation and to offer the debate additional reasons for reflection.

V.5 PROSPECTS FOR FUTURE RESEARCH

⁶⁴⁰ Ibid.

As discussed in the first chapter, the literature on the phenomenon of over-reliance on external credit ratings is still at an early stage in comparison to other issues on the rating industry which generated a considerable amount of studies. These studies have been further enhanced once new legislative frameworks of the CRAs were set out at the US and EU level after the 2007-2009 financial crisis. Currently, dealing with issues such as the CRAs' conflict of interest, the civil liability regime and the reduction of the oligopolistic structure of the rating market is facilitated by a considerable amount of research which can increase the debate and create room for further work which will inevitably draw on a large platform of sources. The present research could only marginally be developed upon a large amount of studies which have been produced on the phenomenon, in particular, with regard to the type of over-reliance which was analysed.⁶⁴¹ In the first place, this can be regarded as a limitation for the work. As mentioned above, the topic was mainly raised in the context of the post-crisis regulatory debate at the national, international and regional levels. The subsequent regulatory strategies were developed within five years and their implementation process is still ongoing. Over this time, there was not so much interest for this topic. However, the lack of a substantial amount of literature was the reason for this research.⁶⁴² In other words, the absence of specific studies gave the input for the holistic approach which characterised this study towards an analysis which could embrace the phenomenon from its definition until the set up and feasibility of the proposed approaches, and their current degree of implementation. Mainly, these results were achieved by looking into the debate and the formation of the normative approaches. Also, the comments provided by the users of the credit ratings and the agencies were valuable sources.

As discussed above, this study and its results aim to create a platform for raising more interest in the topic so as to bring the level of contributions to an amount as considerable as the 'old' topics. For numerous reasons the present research cannot be regarded as exhaustive. The

⁶⁴¹ Chapter I, section I.3.

⁶⁴² Ibid.

process of implementation of the elaborated approaches is still ongoing at all levels. At the international level, the FSB is constantly monitoring the translation of its principles. As it indicated, further thematic reviews are expected over the next year to have a more definitive picture of the progress. Undoubtedly, this can be the ground for new discussions as to the success or failure of the implementation process of the rules. Likewise in the US, not all the agencies have completed their review under Section 939A of the Dodd Frank Act; while others have elaborated final rules which entered into force at the time of writing or will be effective in the next years. Consequently, there is still room to analyse the effectiveness of the US final rules in relation to the purpose of reducing over-reliance. The time will provide sufficient space to assess whether and how the market participants are using other credit risk assessment tools indicated along the credit ratings. In turn, this will be an adequate test to verify whether the use of the credit ratings is still exclusive in practice and thus, the strategy, as highlighted by this research, has only eliminated their primacy in legislation. Specifically, this will permit scrutinising the degree of independence investors and market participants can have in their credit risk assessment and due diligence. Similarly at the EU level, the Commission has the task to complete its review of the credit rating references in EU law by 2020 and remove them once alternatives are found. Importantly, all these aspects are still to be verified, in particular, whether the Commission will be able to identify possible alternatives to the credit ratings. Given this, the present study provided a picture which is not definitive yet, and hence there is still much to be seen and discussed.

However, broadly speaking, the over-reliance topic can be expanded into new lines of research which involve other rules of the legislative framework of CRAs in the US and EU. In greater detail therefore, prospects for future research may be founded on questioning the extent to which the rules on the other CRAs' issues may run counter to the purpose of reducing over-reliance. For example, the CRAs object that the creation of a civil liability regime can facilitate over-reliance on the credit ratings instead of reducing them. In practice, the possibility of suing the CRAs for gross negligence under Article 35(a) of the European CRA III, and for reckless negligence under

Section 947 of the Dodd Frank Act, would diminish the purpose of encouraging more independent credit risk analysis; the investors would over-rely on the CRAs knowing that the possibility of bringing legal actions against them would hide their own possible negligence in the credit risk analysis.⁶⁴³

Moreover, the over-reliance could be discussed in relation to the supervisory rules under the US and EU frameworks that strengthened the controlling powers of institutional bodies such as the SEC and the ESMA. In this respect, it could be questioned the extent to which these controlling powers on the operation of the agencies may have the effect of creating a new perception of a ‘seal of approval’ on the quality of the credit ratings given by supervisors through their controls.⁶⁴⁴

Finally, it could be questioned how other rules conceived to reduce over-reliance can create the opposite effect. This, for instance, can be the case for some structured finance rules set out in the EU CRA framework, notably Article 8(c) which requires hiring two agencies for the structured finance ratings. This raises the question of how the requirement to hire two CRAs can facilitate the risk of over-reliance to the detriment of independent analysis.⁶⁴⁵

All these issues were simply brought forward but they are not yet thoroughly discussed in relation to the phenomenon of over-reliance. Significantly, these other issues cannot be addressed without a proper basis. This basis is the clarification of what over-reliance is, in which areas it arises, and how the regulatory interventions to address this problem have developed. This is actually what this research proposed to do. Nonetheless, there is still much to be seen and to be researched.

V.6 CONCLUDING REMARKS

The exploratory purpose of this study has been fulfilled through a holistic investigation into the phenomenon of over-reliance from the post-crisis regulatory debate on the CRAs until the issue and

⁶⁴³ See Commission (n 320).

⁶⁴⁴ House of Lords, ‘The Future of EU Financial Regulation and Supervision’ (2009) Volume II: Evidence, 26.

⁶⁴⁵ Amttenbrink & De Haan (n 311).

implementation of specific rules aiming at mitigating its risk. Over-reliance on external credit ratings is to be addressed by first reducing the regulatory reliance on credit ratings and then by enhancing the investors' and market participants' capability to conduct their own due diligence and credit risk assessment. As the research has shown, this strategy is at the core of a phenomenon which was neither adequately defined to have a clear understanding of it nor sufficiently demonstrated in its premises to back up an approach which is progressing very slowly due to several limits. The implementation process is still ongoing and there is still much to be seen.

Studying this topic was of relevance because it is a new subject which is encapsulated in the CRAs' reforms with other issues to which a considerable amount of studies have always been devoted. This topic needs to be developed and further literature must flourish in relation to the elaborated regulatory strategies. This work has the aim to provide inputs to raise interest on a subject which has so far received marginal attention by the literature on the CRAs. The gaps that this research identified and discussed in the related parts, as well as the reflections posed on how the phenomenon was introduced and discussed within the regulatory debate can be the platform upon which a new debate and new studies can be built. Therefore, this research cannot be considered exhaustive to the extent that new review processes and implementations are expected in the next years. Nonetheless, the work provided an understanding of the problems relating to over-reliance which was lacking. '*Quo vadis?*' found adequate answers when it was needed to define over-reliance, analyse the approaches and their feasibility, and suggest possible future improvements. Further results that the ongoing implementation process will bring forward will renew this question. Accordingly, new studies may find adequate groundings in this contribution.

References

ABA, 'RE: Advanced Notice of Proposed Rulemaking Regarding Alternatives to the Use of Credit Ratings in the Risk-Based Capital Guidelines of the Federal Banking Agencies, 75 Fed Reg 52283 (Aug. 25, 2010)' (October 2010) < http://www.aba.com/NR/rdonlyres/DC65CE12-B1C7-11D4-AB4A-00508B95258D/69450/cl_AlternativestoCreditRatings_DFA2010.pdf > accessed 14 July 2013.

ABI, 'The ABI's Response to the Commission Consultation on Policy Options to Address the Problem of Excessive Reliance on Credit Ratings' (2008), 1-2.

Adams C et al, 'International Capital Markets: Developments, Prospects and Key Policy Issues' (1999) Washington DC: International Monetary Fund.

Adelino M, 'How Much do Investors Rely on Ratings? The Case of Mortgage Backed Securities' (2009) Duke University-Fuqua School of Business.

Adelson M H, 'The Role of Credit Ratings in Financial System' (May 2012) Standard & Poor's Publications.

AFG, 'AFG Response to Commission Services Working Document on Credit Rating Agencies' (2008) BG/SJ- n 2451/Div, 1-5.

Akerlof G A, 'The Market for "Lemons": Quality Uncertainty and the Market Mechanism' (1970) 84 QJE 3, 488.

Alessi C, Wolverson R, Sergies M A, 'The Credit Rating Controversy' (October 2013) <<http://www.cfr.org/financial-crises/credit-rating-controversy/p22328#p7>> accessed 28 October 2012.

Alexander K, 'The Risk of Ratings in Bank Capital Regulation' (2014) 25 EBLR 2, 295.

Afonso A et al, 'Credit Ratings and the Euro Area Sovereign Debt Crisis' (2011) University of Freiburg.

-- 'Sovereign Credit Ratings and Financial Markets Linkages. Application to European Data' (2012) ECB WP Series 1347, 6.

Alsakka R, Gwilym O ap & N Vu T, 'Bank and Sovereign Credit Rating during the European Debt Crisis' (2013) Bangor Business School.

Altman E J et al, 'Regulation of Rating Agencies' in Viral V Acharya et al (eds), *Regulating Wall Street, the Dodd Frank Act and the New Financial Architecture* (Wiley, New Jersey 2010), 443.

Ammer J & Clinton N, 'Good News is No News? The Impact of Credit Rating Changes on the Pricing of Asset-backed Securities' (2004) Board of Governors of the Federal Reserve System International Finance Discussion Paper 809.

Antembrink F & De Haan J, 'Regulating Credit Rating Agencies in the European Union: A Critical First Assessment of Regulation 1060/2009 on Credit Rating Agencies' (2009) 46 CMLR 6, 1915.

-- 'Credit Rating Agencies' (2011) 278 DNB WP, 4.

-- 'Taming the Beast? New European Regulation on Credit Rating Agencies' (2012) 10 JCGEP 4, 450.

Andenas M, Chiu I H-Y, *'The Foundation and Future of Financial Regulation: Governance for Responsibility'* (Routledge 2013).

Andritzky J et al, 'Policies to Mitigate Procyclicality' (2009) IMF SPN/09/09, 2-18.

Arzeki R et al, 'Sovereign Rating News and Financial Markets Spill-overs: Evidence from the European Debt Crisis' (2011) IMF WP/11/68.

ASF, 'RE: Advanced Notice of Proposed Rulemaking Regarding Alternatives to the Use of Credit Ratings in the Risk-Based Capital Guidelines of the Federal Banking Agencies' (October 2010).

Barnard K F & Avery A W, 'Basel III v Dodd-Frank: What does it Mean for US Banks?' (2011) <<http://whoswholegal.com/news/features/article/28829/basel-iii-v-dodd-frank-does-mean-us-banks/>> accessed 8 March 2014.

Barnett-Hart A K, 'The Story of the CDO Market Meltdown: An Empirical Analysis' (March 2009) Harvard College Cambridge Massachusetts.

BCBS, 'The Internal Rating Based Approach' (2001), 1-108.

--'The Standardised Approach to Credit Risk' (2001) Supporting Document to the New Basel Capital Accord.

--'An Explanatory Note on the Basel II IRB Risk Weight Functions' (2005).

--'International Convergence of Capital Measurement and Capital Standards, A revised Framework' (2006) Annex 2 Standardized Approach-Implementing the Mapping Process.

--'Consultative Document, Revision to the Basel Securitization Framework' (December 2012).

--'Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools' (January 2013)
<<http://www.bis.org/publ/bcbs238.pdf>> accessed 10 April 2014.

-- 'Regulatory Consistency Assessment Programme (RCAP), Analysis of Risk-weighted Assets for Credit Risk in the Banking Book' (2013).

--'Regulatory Consistency Assessment Programme (RCAP), Assessment of Basel III Regulations in Brazil' (2013).

--'Regulatory Consistency Assessment Programme (RCAP), Second Report on Risk-weighted Assets for Market Risk in the Trading Book' (December 2013).

-- 'Consultative Document on the Fundamental Review of the Trading Book: A Revised Market Risk Framework' (October 2013) <<http://www.bis.org/publ/bcbs265.pdf>> accessed 15 April 2014.

--'Consultative Document, Revisions to the Securitization Framework' (December 2014)
<<http://www.bis.org/bcbs/publ/d303.htm>> accessed 24 December 2014.

--'Consultative Document Basel III: The Net stable Funding Ratio' (January 2014)
<<http://www.bis.org/publ/bcbs271.pdf>> accessed 15 April 2014.

-- 'Guidance for Supervisors on Market-Based Indicators of Liquidity' (January 2014)
<<http://www.bis.org/publ/bcbs273.pdf>> accessed 7 April 2014.

Birdthistle W A, 'Breaking Bucks in Money Market Funds' (2010) 2010 WLR 1155, 1156.

BIS, 'The Role of Ratings in Structured Finance: Issues and Implications' (January 2005)

Committee on the Global Financial System Publications No 23, 1-34,

<<http://www.bis.org/publ/cgfs23.htm>> accessed 20 September 2014.

--'Rating in Structured Finance: What Went Wrong and What Can be Done to Address Shortcomings?' (2008) CGFS No 32, 1-27.

--'Stocktaking on the Use of Credit Ratings' (2009), 3 <<http://www.bis.org/publ/joint22.pdf>>
accessed 15 July 2012.

Bolton P et al, 'The Credit Rating Game' (2009) 14712 NBER Working Paper Series.

Boot A W A & Thakor A, 'Security Design' (1993) 48 JF 4, 1349.

Boot A W A et al, 'Credit Ratings as Coordination Mechanisms' (2006) 19 RFS 1, 81.

Bruner C M & Abdelal R, 'To Judge Leviathan: Sovereign Credit Ratings, National Law and the World Economy' (2005) 25 JPP 2, 191.

Brunnermeier M et al, '*The Fundamental Principles of Financial Regulation*' (2009) Geneva Reports on the World Economy 11, 18.

Calomiris C W, 'The Debasement of Ratings: What's Wrong and How we Can Fix it' (2009) <<http://www0.gsb.columbia.edu/faculty/ccalomiris/RatingAgenciesE21.pdf>> accessed 28 June 2014.

Cantor R et al, 'The Use of Credit Ratings in Investment Management in the US and Europe' (2007) 17 The Journal of Fixed Income 2, 25.

Caterineau-Rabell E et al, 'Procyclicality and the New Basel Accord-Bank's Choice of Loan Rating System' (2003) Bank of England (BoE) WPS.

CEBS, *Guidelines on the Recognition of External Credit Assessment Institutions* (2006).

CFTC, 'Removing any Reference to or Reliance on Credit Ratings in Commission Regulations; Proposing Alternatives to the Use of Credit Ratings'(November 2010) Proposed Rules, Federal Register Vol 75 No 211.

--'Removing any Reference to or Reliance on Credit Ratings in Commission Regulations; Proposing Alternatives to the Use of Credit Ratings' (July 2011).

--'Investment of Customer Funds and Funds Held in an Account for Foreign Futures and Foreign Options Transaction' (December 2011).

Chemmanur T J & Fulghieri P, 'Investment Bank Reputation, Information Production and Financial Intermediation' (1994) 49 JF 1, 57.

Christopher B F et al, 'Credit Rating Announcements and the Eurozone Sovereign Debt Crises' (2013) DIW Berlin Discussion Papers 1933.

Coffee Jr J C, '*Gatekeepers: The Professions and Corporate Governance*' (OUP 2006), 283.

-- 'Ratings reforms: The Good, the Bad and the Ugly' (2011) 1 HBLR, 236-276.

Committee on Governmental Affairs of the United States, 'Rating the Raters: Enron and the Credit Rating Agencies' (2002) Committee on Governmental Affairs, testimony of Chairman John Lieberman <http://hsgac-amend.senate.gov/old_site/032002lieberman.htm> accessed 18 February 2012.

Cornaggia J, Cornaggia K J, 'Does the Bond Market Want Informative Credit Ratings?'(2011) <<http://isites.harvard.edu/fs/docs/icb.topic1060772.files/Cornaggia%20and%20Cornaggia%202011-05-02.pdf>> accessed 5 March 2012.

Coskun D, 'Credit Rating Agencies in a Post-Enron World: Congress Revisits the NRSRO Concept' (2008) 9 JBR 4, 264.

Cousseran P O et al, 'Non-credit Risks in Structured Finance' (2004) Banque de France/Reserve Bank of Australia/European Central Bank/ Bank of Japan.

Coval J et al, 'The Economics of Structured Finance' (2008) Harvard Business School WP 09-060, 28.

Craske M & Wagner J, 'Cadwalader Discusses Revisions to the Securitization Framework: Second Consultative Document Published by the Basel Committee' (March 2014) Columbia Law School's Blog on Corporations and the Capital Markets

<<http://clsbluesky.law.columbia.edu/2014/03/10/cadwalader-discusses-revisions-to-the-securitisation-framework-second-consultative-document-published-by-the-basel-committee/>>
accessed 18 November 2014.

Czech National Bank (CNB), 'EC Public Consultation: Credit Rating Agencies, Opinion of the Czech National Bank' (2011), 4-5.

Darbellay A, '*Regulating Credit Rating Agencies*' (Edward Elgar Publishing 2013), 45.

Darcy D, 'Credit Rating Agency and the Credit Crisis: How the "Issuer Pays" Contributed and What Regulators Might Do About it' (2009) 2009 CBLR 2, 605.

Davis L E & Cull R J, '*International Capital Markets and American Economic Growth, 1820-1914*' (CUP 2002).

DBRS, 'Business Code of Conduct for the DBRS Group of Companies' (2009), 13-14
<http://www.dbrs.com/research/228896/Code_Of_Conduct.pdf> accessed 12 September 2014.

--'Limitations to Uses of a Rating Policy' (2013).

De Larosière Group, 'Report of the High-Level Group on Financial Supervision in the EU, chaired by Jacques de Larosière' (Brussels 2009), para 56, 16.

De Marzo P M, 'The Pooling and Tranching of Securities: A model of Informed Intermediation' (2004) 18 RFS 1.

Deipenbrock G, 'Trying or Failing Better Next Time?-The European Legal Framework for Credit Rating Agencies after its Second Reform' (2014) 25 EBLR 2, 207.

--and Andenas M, 'Editorial Introduction: Regulating Credit Rating Agencies in the EU' (2014) 25 EBLR 2, 205.

Dennis K, 'The Ratings Game: Explaining Rating Agency Failures in the Build-up to the Financial Crisis' (2009) 69 UMLR 4, 1111.

Det Kongelige Finansdepartement, 'Commission Consultation on Credit Rating Agencies' (2011) Var Ref 10/4984 JGH.

Devine E, 'The Collapse of an Empire? Rating Agency Reform in the Wake of the 2007 Financial Crisis' (2011) 16 FJCFL 1, 177-202.

Directive 2002/13/EC of the European Parliament and of the Council of 5 March 2002 amending Council Directive 73/239/EEC as regards the solvency margin requirements for non-life insurance undertakings (2002) OJEC L 77/17.

Directive 2002/83/EC of the European Parliament and of the Council of 5 November 2002 concerning life assurance (2002) OJEC L345/1.

Directive 2003/6/EC of the European Parliament and of the Council of 28 January 2003 on insider dealing and market manipulation (2003) OJEU L 96/16.

Directive 2003/41/EC of the European Parliament and of the Council of 3 June 2003 on the activities and supervision of institutions for occupational retirement provision (2003) OJEU L 235/10.

Directive 2003/71/EC on the prospectus to be published when securities are offered to the public or admitted to trading and amending Directive 2001/34/EC (2003) OJEU L 345/64.

Directive 2003/124/EC of 22 December 2003 implementing Directive 2003/6/EC of the European Parliament and of the Council as regards the definition and public disclosure of inside information and the definition of market manipulation (2003) OJEU L 339/70.

Directive 2003/125/EC of 22 December 2003 implementing Directive 2003/6/EC of the European Parliament and of the Council as regards the fair presentation of investment recommendations and the disclosure of conflict of interest (2003) OJEU L 339/73.

Directive 2004/39/EC of The European Parliament and of the Council of 21/04/04 on markets in financial instruments amending Council Directives 85/611/EEC and 93/6/EEC and Directive 2000/12/EC of the European Parliament and of the Council and repealing Council Directive 93/22/EEC (2004) OJEU L 145/1.

Directive 2004/72/EC of 29 April 2004 implementing Directive 2003/6/EC of the European Parliament and of the Council as regards accepted market practices, the definition of inside information in relation to derivatives on commodities, the drawing up of lists of insiders, the notification of managers' transactions and the notification of suspicious transactions (2003) OJEU L 162/70.

Directive 2005/68/EC of the European Parliament and of the Council 16 November 2005 on reinsurance and amending Council Directives 73/239/EEC, 92/49/EEC as well as 98/78/EC and 2002/83/EC (2005) OJEU L323/1.

Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions (recast) (2006) OJEU 2006 L177/1.

Directive 2006/49/EC of the European Parliament and of the Council of 14 June 2006 on the capital adequacy of investment firms and credit institutions (recast) (2006) OJEU 2006 L 177/201.

Directive 2006/73/EC of 10 August 2006 implementing Directive 2004/39/EC of the European Parliament and of the Council as regards organizational requirements and operating conditions for investment firms and defined terms for the purposes of that Directive (2006) OJEU L 241/26.

Directive 2007/16/EC of 19 March 2007 implementing Council Directive 85/611/EEC on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) as regards the clarification of certain definitions (2007) OJEU L79/11.

Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) (2009) OJEU L 302/32.

Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II) (2009) OJEU L 335.

Directive 2011/61/EU on Alternative Investment Funds Managers in respect of over-reliance on credit ratings (2013) OJEU L 145/1.

Directive 2013/14/EU of the European Parliament and of the Council of 21 May 2013 amending Directive 2003/41/EC on the activities and supervision of institutions for occupational retirement provision, Directive 2009/65/EC on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS) (2013) OJEU L 145/1.

Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directive 2006/48/EC and 2006/49/EC (2013) OJEU L 176/338.

Dittrich F, 'The Credit Rating Industry: Competition and Regulation' (2007) University of Cologne Department of Economics <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=991821> accessed 18 April 2012.

DOL, 'Proposed Amendments to Class Prohibited Transaction Exemptions to Remove Credit Ratings Pursuant to the Dodd Frank Wall Street Reform and Consumer Protection Act' (June 2013) Federal Register, Vol 78 No 120.

Dutch Ministry of Finance, Financial Market Policy Directorate, 'Detailed Response to the EC' (2011) FM/2010/24057 M, 5-6.

EBA, 'Revised Guidelines on the Recognition of External Credit Assessment Institutions' (2010).

ECB, 'Opinion of the European Central Bank on a Proposal for a Regulation Amending Regulation 1060/2009 on Credit Rating Agencies and a Proposal for a Directive Amending Directive 2009/65/EC on the Coordination of Laws, Regulations and Administrative Provisions Relating to Undertakings of Collective Transferable Securities (UCITS) and Directive 2011/61/EU on Alternatives Investment Fund Managers in Respect of the Excessive Reliance on Credit Ratings' (2012) OJEU C/167/02.

--'Collateral Eligibility Requirements: A Comparative Study Across Specific Frameworks' (2013), 4, <<http://www.ecb.europa.eu/pub/pdf/other/collateralframeworksen.pdf>> accessed 24 June 2012.

EFAMA, 'Tackling the Problem of Excessive Reliance on Ratings' (2008).

Egan Jones Rating Co, 'How to Improve the Credit Rating Agency Sector' (June 2008) American Enterprise Institute Presentation, http://www.aei.org/files/2008/06/24/20080624_EganPresentation.pdf accessed 24 April 2012.

Eisenberg M A & McDonnell B H, 'Expectation Damages and the Theory of Over-reliance' (2002) 54 *Hastings Law Journal* 1335.

Elliot L & Inman P, 'Eurozone in New Crisis as Rating Agency Downgrades Nine Countries' *The Guardian* (2012), <<http://www.guardian.co.uk/business/2012/jan/13/eurozone-crisis-france-credit-rating-aaa>> accessed 21 November 2012.

Employee Retirement Income Security Act of 1974 (ERISA) Pub L 93-406, 88 Stat 829.

European Financial Stability Facility (EFSF) framework agreement <http://www.efsf.europa.eu/attachments/efsf_framework_agreement_en.pdf> accessed 7 June 2014.

ESAs, 'Joint Consultation Paper on Mechanistic references to credit ratings in the ESA's guidelines and recommendations' (2013) JC-CP-2013-02.

--'Consultation Paper on Draft Implementing Technical Standards on the mapping of ECAIs' credit assessments under Article 136(1) and (3) of Regulation (EU) No 575/2013 (Capital Requirement Regulation-CRR)' (2014) JC/CP/2014/01.

ESMA, 'Second Report to the European Commission on the Compliance of Credit Rating Agencies with the IOSCO Code and the Role of Credit Rating Agencies in Structured Finance' (2008) CESR/08-277 paras 90-206.

--'Draft Regulatory Technical Standards under the CRA3 Regulation' (June 2014) ESMA/2014/685.

--'The Role of Credit Rating Agencies in Structured Finance-Consultation Paper' (2008).

ESME, 'Role of Credit Rating Agencies, ESME's Report to the European Commission' (2008), 12
<http://ec.europa.eu/internal_market/securities/docs/esme/report_040608_en.pdf> accessed 10
September.

Estrella A et al. 'Credit Ratings and Complementary Sources of Credit Quality Information' (2000)
Basel Committee on Banking Supervision Working Papers No 3.

European Commission, '*Communication from the Commission on Credit Rating Agencies*' (2006)
OJEU C59/2.

-- '*Internal Market: Commission Welcomes EU's Regulators Report on Credit Rating Agencies*'
(2007) IP/07/28.

-- 'Document discussing an EU Directive/Regulation on Credit Rating Agencies' (2008), 1-9.

-- 'DG Markt Service Document, Tackling the Problem of Excessive Reliance on Ratings' (2008), 2.

-- 'Public Consultation Credit Rating Agencies' (2010), Q 12-13, 32.

-- 'Impact Assessment Accompanying Document to the Proposal for a Regulation of the European
Parliament and of the Council Amending Regulation (EC) No 1060/2009 on credit rating agencies',
SEC (2010) 678.

-- 'Overview of Responses to Public Consultation on Credit Rating Agencies' (2010)
<http://ec.europa.eu/internal_market/securities/docs/agencies/summary-responses-cra-consultation-20110704_en.pdf> accessed 18 March 2013.

-- 'Proposal for a Regulation of the European Parliament and of the Council on Amending
Regulation (EC) 1060/2009 on credit rating agencies' (Brussels 2010) COM (2010) 289 final.

-- 'European Economic Forecast' (2011), Staff Working Document, European Commission,
Directorate General Economic and Financial Affairs, 44.

European Financial Stability Facility (EFSF) framework agreement

<http://www.efsf.europa.eu/attachments/efsf_framework_agreement_en.pdf> accessed 7 June 2014.

European Parliament, 'European Parliament resolution of 8 June 2011 on Credit Rating Agencies: Future Perspective (2010/2302 8(INI))' Credit Rating Agencies P7_TA (2011) 0258.

EU Directorate General Internal Market and Services, 'EU Response to the Financial Stability Board (FSB): EU Action Plan to Reduce Reliance on Credit Rating Agency (CRA) Ratings' (2014) Staff Working Paper.

Faure-Grimaud A et al, 'The Ownership of Ratings' (2009) 19 RAND Journal of Economics 2, 173.

FCIC, 'The Financial Crisis Inquiry Report-Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States' (January 2011), 344.

Fender I & Mitchell J, 'Structured Finance: Complexity, Risk and the Use of Ratings' (2005) BIS Quarterly Review, 67.

FSB, 'Report of the FSF on Enhancing Market and Institutional Resilience' (2008) <http://www.fsforum.org/publications/r_0804.pdf> accessed 26 July 2012.

-- 'Principles for Reducing Reliance on Credit Ratings' (2010).

-- 'Report to G20 Finance Ministers and Central Bank Governor on the Roadmap and Workshop for Reducing Reliance on CRA Ratings' (November 2012).

-- 'Thematic Review on FSB Principles for Reducing Reliance on Credit Rating Agency Ratings: Interim Report' (2013).

-- 'High Level Summary of National Authorities' Action Plan-Argentina' (2014).

- ‘High Level Summary of National Authorities’ Action Plans-United Kingdom’ (2014).
- ‘Regulatory response by Australian Authorities to Reduce Reliance on Credit Ratings’ (2014).
- ‘Regulatory Response by Brazilian Authorities to Reduce Reliance on Credit Ratings’ (2014).
- ‘Regulatory Response by Japanese Authorities to Reduce Reliance on Credit Ratings’ (2014).
- ‘Regulatory response by South Africa’s Financial Service Board to Reduce Reliance on Credit Ratings’ (April 2014).
- ‘Thematic Review on FSB Principles for Reducing Reliance on CRA Ratings’ (2014), 2.

FHFA, ‘Removal of References to Credit Ratings in Certain Regulations Governing the Federal Home Loan Banks’ (2013) Proposed Rules, Federal Register Vol 78 No 100.

Fitch, ‘Inside the Ratings: What Credit Ratings Mean’ (August 2007).

- ‘RE: European Commission Draft Directive Regulation with Respect to the Authorization, Operation and Supervision of Credit Rating Agencies’ (2008).
 - ‘Code of Conduct’ (2009) par 2.3, 11-13.
 - ‘Definition of Ratings and other Forms of Opinion’ (2013).
 - ‘Definition of Ratings and Other Forms of Opinions’ (2014),
- <https://www.fitchratings.com/web_content/ratings/fitch_ratings_definitions_and_scales.pdf>.

FINMA, ‘Action Plan for Reducing Reliance on CRA Ratings Switzerland’ (Bern 2014)

<[file:///C:/Users/UTENTE/Downloads/CRA_ActionPlan_Switzerland%20\(1\).pdf](file:///C:/Users/UTENTE/Downloads/CRA_ActionPlan_Switzerland%20(1).pdf)> accessed 15 February 2014>.

Flandreau M, Gaillard N & Packer F, ‘Rating Performance, Regulation and the Great Depression: Lessons from Foreign Government Securities’ (2009) CEPR Discussion Paper 7328.

Foley S, 'Issuer Payment: Model Resistant to Reform' *The Financial Times* (London 2013)
<<http://www.ft.com/intl/cms/s/0/5a9d7522-5e3d-11e2-a771-00144feab49a.html#axzz380j3Z9te>>
accessed 20 April 2012.

Franken A & Wicker R F, 'Re: Comments on Assigned Credit Ratings' (September 2011) File
Number 4-629.

FRBNY, 'Systemic Impact of AIG Bankruptcy' (September 2008) attachment to FRBNY internal
email from Alejandro La Torre to Timothy Geithner.

Frenkel S, 'Repeated Interaction and Rating Inflation: A Model of Double Reputation' (2014)
Hebrew University of Jerusalem.

Friedman J & Kraus V, '*Engineering the Financial Crisis: Systemic Risk and the Failure of
Regulation*' (University of Pennsylvania Press 2011), 103.

FSA 'Procyclicality of Capital Requirement under Basel II: Aide Memoire' (2004), 10.

-- 'The Turner Review, A Regulatory Response to the Global Banking Crisis' (London 2009).

-- HM Treasury and Bank of England (BoE), 'The United Kingdom Authorities Response to the
European Commission Internal Market and Services Consultation Document on Credit Rating
Agencies' (2011).

Fund Democracy Consumer Federation of America, 'RE: References to Ratings of Nationally
Recognized Statistical Rating Organizations, Investment Company Act Release No. 28327' (July
2008).

Geisst C R, 'Credit Rating Agencies' (2009) Encyclopedia of American Business History, 111.

Goh J C & Ederington L H, 'Is a Bond Rating Downgrade Bad News, Good News, or No News for Stockholders?' (1993) 48 JF 5, 2001.

Gonzalez F et al, 'Market Dynamics Associated with Credit Ratings: A literature Review' (2004) ECB Occasional Paper No 16.

Grasmick M, 'Reaction to Credit Agencies Means More Compliance Costs' (2011) <<http://www.manatt.com/Financial-Services-Law/-Banking-12-08-11.aspx>> accessed 18 May 2013.

Grass I, 'The Power to Rate: Eine Untersuchung zur Rolle der Ratingagenturen auf den Internationalen Finanzmarkten' (2003) Research Group on Equity Market Regulation (REGEM) University of Trier Analysis 6.

Griffin J M & Tang D Y, 'Did Credit Rating Agencies Make Unbiased Assumptions on CDO?' 101 AER 3 (2011) 125-130.

Group of Twenty, 'The G-20 Toronto Summit Declaration' (2010).

--'The G20 Seoul Summit Leaders' Declaration, November 11-12' (2010)

<https://www.g20.org/sites/default/files/g20_resources/library/Seoul_Summit_Leaders_Declaration.pdf> accessed 19 July 2013.

Gullappalli D, Anand S, 'Money Fund, Hurt by Debt Tied to Lehman, Breaks the Buck' *The Wall Street Journal* (20 September 2008).

Haar B, 'Civil Liability of Credit Rating Agencies-Regulatory all-or-nothing Approaches Between Immunity and Over-deterrence' (2013) 02 University of Oslo Legal Studies Research Paper Series, 19.

Haight T G et al, 'An Examination of the Characteristics of College Endowment Funds' (2006) 15 JI 3, 47-51.

Hallberg M C, 'Railroads in North America, their Evolution and Family Structure' (2009) <<http://www.personal.psu.edu/faculty/m/c/mch/railroad/>> accessed 7 January 2012.

Hand J R M, Holthausen R & Leftwich R, 'The Effect of Bond Rating Agency Announcements on Bond and Stock Prices' (1992) 57 JF 2, 733.

Hanson S, Anil K, Stein J C, 'A Macro-prudential Approach to Financial Regulation' (2010) 25 JEP 1, 3.

Harold G, '*Bond Ratings as an Investment Guide: An Appraisal of their Effectiveness*' (New York: Ronald Press 1938), 6.

Healy P M & Palepu K, 'The Fall of Enron' (2003) 17 The Journal of Economic Perspective 2, 3.

H R Rep No 994, 98th Cong, 2d Sess 46 (1984) (appending Statement of Charles C. COX, Commissioner, Securities and Exchange Commission, to the Subcommittee on Telecommunications, Consumer Protection, and Finance of the House Committee on Energy and Commerce, March 14, 1984).

Hildebrand P, 'Is Basel II Enough? The Benefits of a Leverage Ratio' (2008), speech at the Financial Markets Group Lecture, London School of Economics, <www.bis.org/review/r081216d.pdf> accessed 15 July 2014.

Hildermann M, 'Opening the Black Box: The Rating Committee Process at Moody's' (July 1999) Moody's Investors Service.

Hill C, 'Regulating the Rating Agencies' (2004) 82 WULR 1, 43.

Horsch A, 'Regulation of Credit Rating Companies: An Economic Point of View' (2014) 25 EBLR 2, 227.

--& Kleinov J, 'Regulation of Credit Rating Companies: An Economic Point of View- Part II' (2014) 25 EBLR 2, 249.

House of Lords, 'The Future of EU Financial Regulation and Supervision' (2009) Volume II: Evidence, 26.

Hull J et al, 'The Relationship Between Credit Default Swap Spreads, Bond Yields, and Credit Rating Announcements' (2004) JBF 28, 2789.

Hunt J P, 'Credit Rating in Insurance Regulation: The Missing Piece of Financial Reform' (2011) 68 WLLR 1667.

-- 'Rating Dependent Regulation of Insurance' (2011) 17 CILJ 101.

Iannotta G & Pennacchi G, 'Bank Regulation, Credit Ratings, and Systemic risk' (2012) WP University of Illinois.

IMF, 'Global Financial Stability Report: Sovereign, Funding and Systemic Liquidity' (2010) Ch 3, 85.

IOSCO, 'Report on the Activities of Credit Rating Agencies' (2003), 1.

-- '*Code of Conduct Fundamentals for Credit Rating Agencies*' (2004) published by the Technical Committee of IOSCO.

-- 'Code of Conduct Fundamentals for Credit Rating Agencies' (2008)

<<http://www.iosco.org/library/pubdocs/pdf/IOSCOPD271.pdf>> accessed 4 July 2014.

-- 'The Role of Credit Rating Agencies in Structured Finance Markets-Final Report' (2008).

-- 'Good Practices on Reducing Reliance on CRAs in Asset Management' (June 2014) Consultation Report CR04/14, 9.

Jamroz M P, 'The Net Capital Rule' (1992) 47 *The Business Lawyer*, 863.

Japan Credit Rating Agency Ltd (JCR), 'RE: Japan Credit Rating Agency Ltd (JCR) Comment on the Commission's Draft Directive/Regulation on Credit Rating Agencies (CRA)' (2008).

Jappelli T & Pagano M, 'Information Sharing in Credit Markets: A Survey' (2000) CSEF WP/36/2000.

Jentzsch N, '*Financial Privacy: An International Comparison of Credit Reporting Systems*' (Springer 2006), 63.

John X, Stanford M H, Xie Y, 'Does it Matter Who Pays for Bond Ratings? Historical Evidence' (2012) 105 *JFE* 3, 607.

Johnson E R, 'Moody's Analyses of Railroad Investments by John Moody' (July 1909) 34 *Annals of the American Academy of Political and Social Science* 1, 210.

Jones S et al, 'Moody's Error Gave Top Ratings to Debt Products' *Financial Times* (London 20 May 2008).

Jordan C, '*International Capital Markets, Law and Institutions*' (OUP 2014).

Karnitschnig M et al, 'U.S. to Take Over AIG in \$85 Billion Bailout; Central Banks Inject Cash as Credit Dries Up' *The Wall Street Journal* (2008).

Katz S, 'The Price Adjustment Process of Bonds to Rating Reclassifications: A Test of Bond Market Efficiency' (1974) 29 *JF* 2, 551.

Keen S A, 'RE: File Number S7-19-08' (December 2009).

Kerwer D, 'Holding Global Regulators Accountable: The Case of Credit Rating Agencies' (2005) 18 *Governance, an International Journal of Policy, Administration, and Institution* 3, 453.

Kisgen D J & Strahan P E, 'Do Regulations Based on Credit Ratings Affect a Firm's Cost of Capital?' (2009) NBER WP Series 14890, 5.

Kliger D & Sarigh O, 'The Information Value of Bond Ratings' (2000) 55 *Journal of Finance* 6, 2879.

Koziol C & Lawrenz J, 'Optimal Design of Rating Triggers Step-up Bonds: Agency Conflict Versus Asymmetric Information' (2009) EFA 2009 Bergen Meetings Paper.

Kroll Bond Rating Agency (KBRA), 'Rating Scale'

<<https://www.krollbondratings.com/ratings/scales>> accessed 5 September 2014.

Kruck A, '*Private Ratings Public Regulations: Credit Rating Agencies and Global Financial Governance*' (Palgrave Macmillan 2011) Ch 3, 80.

Kruger D & Flynn F, 'Ireland Cut to Junk by Moody's as EU Seeks to Contain Crisis' *Bloomberg* (2011) <<http://www.bloomberg.com/news/2011-07-12/ireland-is-third-euro-area-country-cut-to-junk-joining-greece-portugal.html>> accessed 16 November 2012.

Labonte M, 'The Dodd-Frank Wall Street Reform and Consumer Protection Act: Systemic Risk and the Federal Reserve' (2010) Congressional Research Service, 1-26.

Lastra R M, '*Legal Foundations of International Monetary Stability*' (OUP 2009) Part 1, Ch 3.

Leach P T, 'The 1800's: Brothers in Arms' (2005) JC, 3

<http://www.joc.com/sites/default/files/joc_inc/history/p3.html> accessed 10 January 2012.

Leitzel J, 'Reliance and Contract Breach' (1989) 52 *Law and Contemporary Problems* 1, 87.

Levin Jonathan, 'Information and the Market for Lemons' (2001) 32 *RAND Journal of Economics* 4, 657.

Lowe S, 'Argentina See Danger in their Over-reliance on Lionel Messi' *The Guardian* (London 24 June 2014).

Lowenstein R, 'Triple A Failure' *The New York Times* (27 April 2008).

Lupica L R, 'Credit Rating Agencies, Structured Securities and the Way Out of Abyss' (2009) RBFL 28.

Masciandaro D, 'Sovereign Debt: Financial Market Over-reliance on Credit Rating Agencies' (2012) BIS Papers No 72.

Mason J & Rosner J, 'Where did the Risk Go? How Misapplied Bond Ratings Cause Mortgage Backed Securities and Collateralized Debt Obligation Market Disruptions' (2007) Drexel University WP.

Mattarocci G, '*The Independence of Credit Rating Agencies: How Business Models and Regulators Interact*' (AP 2014).

MBA 'RE: Proposed Rules for Nationally Recognized Statistical Rating Organizations Release No 34-61051, File No S7-28-09' (2008).

McBride C, 'Investing in Securities Without Relying on External Credit Ratings' (2013) <<http://www.communitybankingconnections.org/articles/2013/Q2/Investing-in-Securities-Without-Relying-on-External-Credit-Ratings.cfm>> accessed 2 July 2013.

Macneil I, 'Regulation and Financial Stability of CRAs', in Thomas Cottier, Rosa M Lastra, Christian Tietje & Lucia Satragno (eds.), *The Rule of Law in Monetary Affairs* (CUP 2014).

Mc Clintock Ekins E & Calabria M A, 'Regulation, Market Structure and the Role of the Credit Rating Agencies' (2012) 704 Policy Analysis, 6.

McDonald L G & Robinson P, 'A Colossal Failure of Common Sense: The Inside Story of the Collapse of Lehman Brothers' (Crown Business 2009).

Mc Namara S, 'Informational Failures and Structured Finance and Dodd Frank's Improvement to the Regulation of Credit Rating Agencies' (2012) 17 FJCFL3, 667.

McVea H, 'Credit Rating Agencies, the Subprime Mortgage Debacle and Global Governance: The EU Strikes Back' (2010) ICLQ 59, 701.

Meli J & Rappoport P, 'Tranched Credit Relative Value' (2003) JP Morgan Fixed Income Quantitative Strategy.

Mishkin F S, 'Financial Market Reform, Economic Policy Reform: What we Know and What we Need to Know' (1998) Centre for Research on Economic Development and Policy Reform, Stanford University

--'Prudential Supervision: Why is it important and What are the Issues?', in Frederic S. Mishkin (ed.), *Prudential Supervision: What Works and What Doesn't* (2001), 8.

Mitchell J, 'Financial Intermediation Theory and Structured finance' (2005) National Bank of Belgium.

Mollers T J, 'Regulating Credit Rating Agencies: The New US and EU Law. Important Steps or Much Ado About Nothing?' (2009) 4 CMLJ 4, 477.

Moloney N, '*EC Securities Regulation*' (2nd ed OUP 2008) Ch 8.4, 687.

Moody's, 'RE: Use of Private Sector Ratings in Regulation' (October 1995), File Nos. S7-23-94 and S7-24-94.

-- 'Moody's History: A Century of Market Leadership'

<<https://www.moody's.com/Pages/atc001.aspx>> accessed 4 February 2012.

-- 'Understanding Moody's Corporate Bond Ratings and Rating Process' (2002), <<https://www.moody's.com/sites/products/ProductAttachments/eeSpecialComment.pdf>> accessed 20 February 2012.

-- 'Moody's Ratings Symbols & Definitions' (2003).

-- 'Should Moody's Consider Differentiating Structured Finance and Corporate Ratings?', Request for Comments (February 2008).

-- 'RE: Consultation on Proposed Regulation/Directive of the European Parliament and of the Council on Credit Rating Agencies (CRAs)' (2008).

-- 'Report on the Code of Professional Conduct' (2009), Sec 3.3, 3.6, 3.7, 3.11, 4.4, at 14-17.

-- 'Advanced Notice of Proposed Rulemaking Docket ID: OTS-2010-0029' ("The Release") (Nov 2010) <http://www.federalreserve.gov/SECRS/2010/October/20101029/R-1391/R-1391_102510_54090_350568812859_1.pdf> accessed 25 August 2013.

-- 'Moody's Structured Finance Rating Scale' (2010).

-- 'Rating Symbols & Definitions' (2013).

NAIC, 'Evaluating the Risk Associated with NAIC Reliance on NRSROs Credit Ratings' (2010).

NCUA, 'Alternatives to the Use of Credit Ratings' (2012) Final Rule, Federal Register Vol 77 No 240.

--'Corporate Credit Union Guidance Letter' (2013) No 2013-01.

Noll M et al., 'Rating Triggers in Financial Guaranty Industry' (2004) Moody's Investors Service, Global Credit Research.

Norden L & Wagner W, 'Credit Derivatives and Loan Pricing' (2004) 32 JBF 12, 2813.

OECD, 'Annual Survey of Large Pension Funds and Public Pension Reserve Funds' (2013).

OCC, 'Purchase of Investment Securities and Further Defining the Term "Investment Securities" as Used in Section 5136 of the Revised Statutes as Amended by the "Banking Act of 1935" (15 February 1936), Sec II.

--'Alternatives to the Use of External Credit Ratings in the Regulations of the OCC (June 2012) Final Rule, Federal Register Vol 77 No 114.

--& Federal Reserve System, 'Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, Capital Adequacy, Transition Provisions, Prompt Corrective Action, Standardized Approach for Risk-weighted Assets, Market Discipline and Disclosure Requirements, Advanced Approaches Risk-Based Capital Rule, and Market Risk Capital Rule' (2013) Final rule, Federal Register Vol 78 No 198.

Opp C C et al, 'Rating Agencies in the Face of Regulation-Rating Inflation and Regulatory Arbitrage' (2009) JFE 108, 46.

Pan E J, 'Understanding Financial Regulation' (2011) Benjamin N. Cardozo School of Law WP No 239, 13.

Parmeggiani F, 'Rating Triggers, Market Risk and the Need for More Regulation' (2013) 14 EBOLR 3, 425.

Partnoy F, 'The Siskel and Ebert of Financial Markets: Two Thumbs Down for the Credit Rating Agencies' (1999) 77 WLQ, 619.

--'Overdependence on Credit Ratings was a Primary Cause of the Crisis' (2009), Proceedings of the 2008 International Banking Conference: "The First Credit Market Turmoil of the 21st Century", San Diego Legal Studies Paper No 09-015.

--'The Paradox of Credit Ratings', in Richard M Levich, Giovanni Majnoni & Carmen Reinhart (eds.), *The Role of Credit Reporting Systems in the International Economy* (Kluwer Academic Publisher 2002), 65.

Paton G, 'Over-reliance on Technology is Undermining Spelling Skills' *The Telegraph* (London 22 May 2012).

Payne J, 'The Role of Gatekeepers' (2014) University of Oxford Legal Research Paper Series No 22/2014, <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2428121> accessed 30 April 2014, forthcoming in Niamh Moloney, Eilis Ferran and Jennifer Payne (eds), *Oxford Handbook of Financial Regulation* (OUP 2015) .

Pavel T & Encontro M, 'The Enron Scandal' (2012) Chalmers University of Technology.

Perraudin W & Van Landschoot A, 'How Risky are Structured Exposure Compared with Corporate Bonds?' in W. Perraudin (ed), '*Structured Credit Products: Pricing, Rating, Risk Management and Basel II*', (Risk Books 2004).

Persaud A, 'Sending the Herd off the Cliff Edge: the Disturbing Interaction Between Herding and Market Risk Sensitive Risk Management Practices' (2000) <

<http://www.bis.org/publ/bppdf/bispap02l.pdf>> accessed 4 October 2012.

Pinkes K, 'The Function of Ratings in Capital Markets' (1997) Global Credit Research, Moody's Investors Service, New York, 2.

Pinto A, 'Control and Responsibility of Credit Rating Agencies in the United States' (2008) Brooklyn Law School Legal Studies Research Papers 119, 1.

Plowright M, 'Credit Rating Agencies: Under the Influence' (2011)

<<http://www.emergingmarkets.org/Article/2905663/CREDIT-RATING-AGENCIES-Under-the-influence.html>> accessed 20 June 2013.

Pragyan D et al, 'Whiter the Credit Rating Industry?' (2011) 9 Financial Stability Paper, Bank of England, 3.

Rating and Investment Information, Inc (RTI), 'RE: Comments on European Commission Consultation on a Draft Directive/Regulation with Respect to the Authorisation, Operation and Supervision of Credit Rating Agencies (CRA)' (2008).

Regeringskansliet Ministry of Finance, Sveriges Riskbank and Vinansinspektionen, 'Joint Response to the European Commission's Public Consultation on Credit Rating Agencies' (2011), 4.

Regulation (EC) No 2273/2003 of 22 December 2003 implementing Directive 2003/6/EC of the European Parliament and of the Council as regards exemptions for buy-back programmes and stabilisation of financial instruments (2003) OJEU L 336/33.

Regulation (EC) No 809/2004 implementing Directive 2003/71/EC (2004) OJEU L 215/3.

Regulation (EC) No 1060/2009 of the European Parliament and of the Council on Credit Rating Agencies (2009) OJEU L302/52.

Regulation (EU) No 513/2011 of the European Parliament and of the Council of 11 May 2011 amending Regulation (EC) No 1060/2009 on credit rating agencies (2011) OJEU L145/30;

Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012' (2013) OJEU L 176/1.

Regulation (EU) No 462/2013 of the European Parliament and of the Council of 21 May 2013 amending Regulation (EC) No 1060/2009 on Credit Rating Agencies (2013) OJEU L146/1.

Robinson M, 'IOSCO Suggests Ways to Reduce Reliance on Credit Ratings' *Bloomberg* (4 June 2004).

Rosen R J, 'Investors Behavior Before the 2007-2009 Financial Crisis' in John R LaBrosse, Rodrigo Olivares-Caminal & Dalvinder Singh (eds), *'Managing Risk in the Financial System'* (EE 2013), 13.

Sangiorgi F et al, 'Credit Rating Shopping, Selection and the Equilibrium Structure of Rating' (2009) NBER Working Paper Series.

Sarbanes-Oxley Act of 2002, Pub L No 107-204, § 702(b), 116 Stat 745 (2002).

Schroeter U G, 'Credit Ratings and Credit Rating Agencies', in Gerard Caprio, Douglas W Arner (eds.), *'Handbook of Key Global Financial Markets, Institutions and Infrastructure'* (Academic Press 2012) Ch 35, 386.

Schwarcz S L, 'Private Ordering of Public Markets: The Rating Agency Paradox' (2002) 1 UILR 2002, 3.

SEC, 'Notice of Revision Proposed Amendments to Rule 15c3-1 under the Securities Exchange Act of 1934' (1973) Release No 34-10,525, 1973 SEC LEXIS 2309.

--'Protecting Investors: A Half Century of Investment Company Regulation' (1992) Division of Investment Management United States Securities and Exchange Commission.

--'Release No 33-7085, 34-34616, IC-20508', International Series Release No 706, File No S7-23-94 (1994).

--'Concept Release: Rating Agencies and the Use of Credit Ratings under the Federal Securities Laws' (2003), Release Nos. 33-8236; 34-47972; IC-26066; File No S7-12-03, RIN 3235-AH28.

--'Report on the Role and Function of Credit Rating Agencies in the Operation of Financial Markets' (2003), As required by Section 702(b) of the Sarbanes-Oxley Act of 2002.

-- '*Credit Rating Agency Reform Act of 2006*',

<<http://www.sec.gov/divisions/marketreg/ratingagency/cra-reform-act-2006.pdf>> accessed 25 March 2013.

-- 'Proposed Rules for Nationally Recognized Statistical Rating Organizations' (2008) 17 CFR Parts 240 and 249b, Release No 34-61051, File No S7-28-09, 60.

-- 'References to Ratings of Nationally Recognized Statistical Rating Organization' (2008) Release No 34-58070, File No S7-17-08.

-- 'References to Ratings of Nationally Recognized Statistical Rating Organizations; Security Ratings; Proposed Rules' (2008), Part IV.

-- 'Reference to Ratings of Nationally Recognized Statistical Rating Organizations' (2009) Final Rule, Release No 34-60789, IC-28939; File No S7-17-08, S7-19-08.

-- 'Dodd-Frank Wall Street Consumer Protection Act' (2010) Public Law 111-203, Section 939A.

-- 'Security Ratings' (2011) Release No 33-9186, No 34-63874, File No S7-18-08.

-- 'Purchase of Certain Debt Securities by Business and Industrial Development Companies Relying on an Investment Company Act Exemption' (November 2012) Release No IC-30268; 77 FR 70117.

-- 'Removal of Certain References to Credit Ratings Under the Securities Exchange Act of 1934' (2014), Final rule, Release No 34-71194; File No S7-15-11.

-- 'Removal of Certain References to Credit Ratings Under the Investment Company Act' (2014), Final rule, Release No 33-9506; IC-30847; File No S7-7-11.

Sinclair T J, 'Bond Rating Agencies' (2003) 8 *New Political Economy* 1, 147.

-- '*The New Masters of Capital: American Bond Rating Agencies and the Politics of Creditworthiness*' (Ithaca, NY: Cornell University Press 2005).

SIFMA Credit Rating Agency Task Force, 'First SIFMA Symbology Letter' (2008), Letter Dated June 10, 2008 From Deborah A. Cunningham and Boyce I. Greer, Co-Chairs Company, Co-Chairs.

-- 'Comments on the Advanced Notice of Proposed Rulemaking to Implement the Mandate in Sec 939A of the Dodd Frank Wall Street Reform and Consumer Protection Act' (October 2010) 2 <www.sifma.org/workarea/downloadasset.aspx> accessed 3 August 2013.

-- 'RE: Good Practices on Reducing Reliance on CRAs in Asset Management' (September 2014).

Skreta V & Vedkamp L, 'Rating Shopping and Asset Complexity: A Theory of Rating Inflation' (2009) 56 *Journal of Monetary Economics* 56, 678-695.

Standard & Poor's Rating Services, 'Understanding Ratings',

<<http://www.standardandpoors.com/MicrositeHome/en/us/Microsites>> accessed 24 April 2012.

-- 'Proposal for a Regulatory Framework for CRAs and Embedded Ratings Policy Options' (2008).

-- 'Changes at S&P Since 2007: Actions S&P has taken since 2007 to Strengthen and Enhance the Rating Process' (2013), <<http://ratings.standardandpoors.com/changes/Changes-at-SP-since.html>> accessed 15 September 2014.

-- 'Standard & Poor's Ratings Definition' (2013).

-- 'Standard and Poor's Ratings Definitions' (2014).

-- 'General Description of the Credit Rating Process' (2014),

<http://www.standardandpoors.com/spf/upload/Ratings_US/GXJP_EX2-2.May2014_05-19-14.pdf> accessed 20 March 2014.

Steiner M & Heinke V G, 'Event Study Concerning International Bond Price Effects of Credit Rating Actions' (2001) 6 *IJFE* 2, 139.

Stewart R B, 'Regulation, Innovation, and Administrative Law: A Conceptual Framework' (1981) 69 *CLR* 1256, 1265.

Stumpp P, 'The Unintended Consequences of Rating Triggers' (2001) Moody's Investors Service, Special Comment.

Sy A N R, 'The Systemic Regulation of Credit Rating Agencies and Rated Markets' (2009) IMF WP/09/129, 3.

Sylla R, 'An Historical Primer on the Business of Credit Ratings', in Richard Levich, Carmen Reinhart & Giovanni Majnoni (eds), '*Ratings, Rating Agencies and the Global Financial System*' (Boston: Kluwer 2002), 19.

Sylvers E, 'Credit Rating of Parmalat Cut Sharply on Fear of Default' *The New York Times* (11 December 2003).

The Independent Trustees of ING Funds Trust and ING Investors Trust, 'RE: References to Ratings of Nationally Recognized Statistical Rating Organizations, Investment Company Act Release No 28237, File No S7-19-08' (September 2008).

Tichy G, 'Credit Rating Agencies: Part of the Solution or Part of the Problem?' (2011) 46 *Intereconomics* 5, 232.

Touch A, 'Multiple Gatekeepers' (2010) Harvard Law School Discussion Paper No 33 <http://www.law.harvard.edu/programs/olin_center/fellows_papers/pdf/Tuch_33.pdf> accessed 18 May 2012.

'Treaty Establishing the European Stability Mechanism (ESM) signed on 11 July 2011' <http://www.efsf.europa.eu/attachments/esm_treaty_en.pdf> accessed 18 June 2014.

Tremayne A, 'Over-reliance on Job Interview to Fill Vacancy May Violate Collective Agreement' (1999) <<http://www.ehlaw.ca/publications/jan99/jobinter.pdf>> accessed 20 December 2011.

Trueck S & Rachev S T, '*Rating Based Modeling of Credit Risk: Theory and Application of Migration Matrices*' (Academic Press 2009), 17.

US Department of Treasury, 'Advanced Notice of Proposed Rulemaking Regarding Alternatives to the Use of Credit Ratings in the Risk-Based Capital Guidelines of the Federal Banking Agencies (ANPR)' (Aug 2010) <<http://www.federalreserve.gov/newsevents/speech/bcreg20100810a1.pdf>> accessed 29 June 2013.

US House Hearing, 'Oversight of the Credit Rating Agencies Post-Dodd Frank , Hearing Before the Subcommittee on oversight and Investigations of the Committee on Financial Services' (2011), US House of Representative one Hundred Twelfth Congress First Session.

US Senate, 'Testimony of John Walsh, Acting Comptroller of the Currency, before the Committee on Banking', Housing and Urban Affairs (Sept 20, 2010) Attachment A, 2-3.

US Senate Permanent Subcommittee on Investigation, Committee on Homeland Security and Governmental Affairs, 'Wall Street and the Financial Crisis: Anatomy of a Financial Collapse' (April 13, 2011), 246 < <http://www.ft.com/cms/fc7d55c8-661a-11e0-9d40-00144feab49a.pdf>> accessed 20 June 2014.

Utzig S, 'The Financial Crisis and the Regulation of Credit Rating Agencies: a European Banking Perspective' (2010) 188 ADBI Working Paper Series.

Wansley J L et al, 'Institutional Bond Pricing and Information Arrival: The Case of Bond Rating Changes' (1992) 19 JBFA 5, 733.

Warren E, 'AIG Rescue, its Impact on Markets, and the Government's Exit Strategy' (June 2010), Congressional Oversight Panel, June Oversight Report, 255.

Weber R H & Darbellay A, 'The Regulatory Use of Credit Ratings in Bank Capital Requirements Regulations' (2008) 10 JBR 1.

Weinstein M A, 'The Effect of a Rating Change Announcement on Bond Price' (1977) 5 JFE 3, 329.

Whelan K, 'Ratings Agency Reform: Shooting the Messengers?' (2011) European Parliament Directorate General for Internal Policies IP/A/ECON/NT/2011-03.

White L J, 'The Credit Rating Industry: An Industrial Organizational Analysis (2001) <<https://www.bis.org/bcbs/ca/lwhit.pdf>> accessed 10 January 2012.

--'Credit Rating Agencies: An Overview' (2013) Stern School of Business, New York University, <http://webdocs.stern.nyu.edu/old_web/economics/docs/workingpapers/2013/White_CRAsARFE_Jun2013.pdf> accessed 10 January 2012.

White R, '*Railroaded: The Transcontinentals and the Making of Modern America*' (W W Norton & Company 2011).

Wiemann M, 'Rating Triggers in Loan Contracts: How Much Influence Have Credit Rating Agencies on Borrowers in Monetary Terms' (2011) Frankfurt School of Finance and Management

<<http://www.docstoc.com/docs/159670649/Rating-based-performance-pricing-Campus-for-Finance>> accessed 5 September 2012.

Wilson M, 'Moody's Downgrades Portugal Sovereign-Debt Rating', *The Wall Street Journal* (London, 13 July 2010)

<<http://online.wsj.com/article/SB10001424052748704518904575364320526044824.html>>
accessed 4 November 2012.

Wolmar C, *The Great Railroad Revolution: the History of Trains in America* (PublicAffairs New York 2012).

Wymeersch E & Kruithof M, 'Regulation and Liability of Credit Rating Agencies Under Belgian Law' (2006) Universiteit Gent, Financial Law Institute WP Series, 14 footnotes 84-85.