

Abstract

During the last three decades before the 2007-2010 global financial crisis, credit ratings have been increasingly used by national and international public bodies for regulatory purposes. The recent crises not only demonstrated rating agencies' deep implication on financial product line but also their wide influence on worldwide audience who base their investment or regulatory decisions on credit ratings. This dissertation describes the ascent of ratings-dependent regulation under the transformation of global macro-institutional contexts. When credit ratings are used in financial regulation, transnationally operating credit rating agencies set a private standard of creditworthiness which is made binding by public authority. This public enforcement of private standard constitutes the principal-agent delegation of regulatory authority and governance competence from public financial regulators to private information intermediaries. After conceptualising the regulatory use of credit ratings in a theoretical approach, this dissertation discuss the accountability lap of this private-public principal-agent relationship and the consequence of regulatory overreliance on private rating agencies. Lastly, this dissertation tries to propose some substitutes and legal solutions to diminish this asymmetric private-public interdependence.

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Chapter 1. Introduction: Private Information Intermediaries for Public Financial Regulation

The essential function of financial products is cross-time and/or cross-space value exchange. Financial products are investors' claims to issuers' future income. Due to market uncertainty, issuers are unable to make binding promises for long-distance investors about their cash flow at a particular future moment. In fact, in a financial world full of risks, many issuers even could not survive through its systematic turbulence to the day of securities' maturity, not to mention fully performing their payment obligations. In order to objectively calculate the true value of securities, most investors can only count on either derivative instruments to hedge their uncertainty risks or the analysis of information flows to evaluate the risk-weighted present discounted value of their investment instruments. Considering the fact that the performance of derivative instruments is even more heavily dependent on the indication of information, it thus seems plausible to conclude that it is information which reflect the intrinsic value and thus determine the price of various financial products. However, information may be discriminatively accessible to different investors and divergently interpreted by various methodologies. Under the hypothesis of informationally efficient market, the capital may not be channelled from the excess to the needed as allocative efficiency enhancement, but instead be transferred from the well-informed to the less knowledgeable as exploitative wealth redistribution. While accurate and adequate information constitutes the very basis of optimal capital allocation in financial markets, it should not be surprising that the supervision of information production is consistently the most important element of financial regulatory regimes.

In the post-Bretton Woods era, public actors (states and intergovernmental organisations) have increasingly come to rely on private (business and civil society) actors' governance contributions especially in economic issue, which has emerged towards a partnering of state and non-state actors in the provision of governance competence and a reallocation of political authority from public to private actors at the global level.¹ It reflected that not just the world

¹ Andreas Kruck, *Private Ratings, Public Regulations: Credit Rating Agencies and Global Financial Governance* (Palgrave Macmillan, Basingstoke 2011) 1.

economy has its cyclicity, so does its regulatory regime. Just like the way that the end of the classical gold standard system prevailing under the Pax Britannica (1870 and 1913) implies the start of the last stringent regulatory circle led by centralised national bureaucracy, the collapse of Bretton Woods Economic Regime indicated the subsequent worldwide market-led deregulation in financial systems. The transformation of regulatory paradigms inevitably imposes certain causal effects on the market. In this deregulation circle, with technological and institutional modernization, the liberalised global financial market becomes globally interactive and have been significantly deepened and widened. Let alone the ideological triumph of economic liberalism, this deregulation trend indeed satisfies the changing desirability of modern financial markets and thus improves their allocative efficiency.²

However, the 'depth' and 'width' may respectively have positive correlation with the complexity and infectiousness. When every market participants have interweaved with each other in such complicated financial innovations without fully recognising their potential risks, they become extremely vulnerable by putting themselves in an ever less-informed positions than before. The contagious nature of globalised financial activities multiplied the consequence of this information asymmetry. While market participants become symbiotic through their increasing interconnectivity, the domino effect would exponentially strengthen the pro-cyclicity of global financial markets. Consequently, with the spiral ascent of the market depth and width, the ever increasing complication and infectiousness of the globally interconnected financial market aggravate both the probability and destructiveness of its systematic turbulence. Largely for this reason, simplifying or deleveraging the existing global financial system and building firewalls between its every functional subsystems become the main directions of the post-crisis regulatory reformation, which, at least in some aspects, symbolises the end of this laissez-faire regulatory circle.

Facing financial innovations with such wide and deep implications, the traditional information processing conducted by individual investors appears undesirable, or at least economically

² Nobuhiro Inatomi, *Political Economy of International Capital Market: Bretton Woods Economic Regime and 'Global Capitalism'*, International Forum on the Political Economy of Globalization Founding Conference (SOAS, London 2005), 16-18.

inefficient, for risk management. Partly for these reasons, when there is lack of public authority to fill this information gap, financial participants who lack of either capability or willingness for information processing turn to the service provided by credit information intermediaries such as Credit Rating Agencies (CRAs). Credit rating agencies like Moody's Investors Service, Standard & Poor's or Fitch Ratings are private firms that estimate and rate the creditworthiness of borrowers and financial instruments. They collect dispersed information on the financial situation of borrowers and the default risk of certain financial products, condense it into a single measure of relative credit risk – a credit rating in the form of a letter grade, and then sell these condensed credit risk assessment to financial markets.

As profit-seeking activities in financial markets are largely driven by information, every market participants have incentives to pursue the information asymmetry or at least to relieve the information disadvantage. Based on CRAs' rating, even some unsophisticated investors, who were traditionally aloof from complex financial activities, start their trying on innovative but extremely intricate products, which further strengthens the depth and width of markets. Therefore, markets' demand for information seems endless, by which CRAs' business has been experiencing a soaring in both volume and profitability. This accumulative behavioural reliance on CRAs gradually evolves into the so-called path dependence, which means market participants become used to making reference to the CRAs' rating for either their counterparties or securities they hold. For example, even without regulatory requirements, many U.S. money market fund' internal guidelines make substantial reference to the rating of CRAs and confine themselves to securities bearing a senior rating such as 'AAA'. There are two obvious advantages of this reliance on credit rating: the scale effect of mass production may enjoy substantial cost reduction; and CRAs' professionalization of information processing may significantly improve the risk management of market participants. However, the reality is that neither of these have been achieved.

This reliance on CRAs has been further strengthened through the mandatory requirements imposed by public regulators for regulatory convenience. Under most countries' existing financial regulatory regimes, the mandatory capital requirements for financial institutions

especially for systematically important banks are largely determined by the credit ratings of their assets portfolios. With the worldwide implementation of Basel regulatory capital frameworks, CRAs had been internationally deployed as the private gate-keeper for global financial governance. Benefiting from this transition, the business and role of CRAs have been further expanded, and “CRA’s relatively standardised, harmonised, easy to understand, independent (third party) assessment of credit quality” evolved into the ‘important private makers of global public policy and were widely seen as key drivers of global governance within the then pre-crisis international regulatory settlement’³ The public regulation’s substantial reference to credit ratings substantively endow CRAs a quasi-public role, which is sometimes criticised as the outsourcing of statutory power. One frequently-cited example is that, in U.S., certain investment of financial institutions can only be legal when their investment bears a specific rating from one of the nine Nationally Recognized Statistical Rating Organisations (NRSROs). While credit ratings have been widely relied not just by private actors for investment decisions but also by public regulators in risk-sensitive financial regulation, CRAs obtain their quasi-regulatory authority in financial systems.

Considering the above-mentioned double overreliance on CRAs, it should be not surprising that the inaccurate rating of those irresponsible CRAs could cause serious capital misallocation, such as the bubbles of the securitisation and ensuing re-securitisation of subprime mortgages. To some extent, the burst of these bubbles, which triggered the last global financial crisis, should have never existed if the benchmark signal provided by CRAs is reliable. While CRAs play a systematically important role in relieving the widening gap of information asymmetry by producing benchmark signals for fixed-income securities and their derivative markets, any of their potential underperformance would easily improve the probability of the systematic turbulence of financial markets. Due to the high infectiousness of modern financial markets, the unprecedented large-scale default of those complex financial products bearing high credit ratings had induced substantive claims to the issuers of derivative instruments, which have been widely used by securities originators and/or investors as issuance or hedging methods. As the

³ Harry McVea, 'Credit Rating Agencies, The Subprime Mortgage Debacle and Global Governance: The EU Strikes Back ' [2010] *International and Comparative Law Quarterly*, vol 59, pp 701-730

last defender of market force, the unpredictable financial difficulty of insurance companies like AIG suddenly caused the liquidity crisis of financial markets, which further deepened and widened the destructiveness of the 2008 global financial crisis.

The malfunction of those information intermediaries attract sharp criticism from both market participants and their regulators. The latter considers the existing private rating mechanism as a primary cause of the last financial crisis and criticise them for providing inaccurate and sometimes misleading market signals. However, the opinion from the former is worth more attention. Many market participants complain that CRAs' ratings have very limited informational value and are more like 'regulatory licenses' issued by their quasi-public authority delegated from statutory regulators.⁴ While market participants are already under CRAs' misguidance which seduces them to risky assets bearing plausible high ratings, the existing financial regulatory regime pours oil on the flame.

The global financial crisis has demonstrated the significance of CRAs in the failure of pre-crisis regulatory structure, which highlighted the necessity for relevant post-crisis regulatory reforms. Rating requirements embedded in regulatory rules like Basel Accords not just provide CRAs with huge profits but also make the implementation of public regulatory regimes over-reliant on private rating markets. It might also be considered as the nonfeasance of their statutory duty. As regulators acquiesce in the fait accompli that CRAs actually become their 'eyes' or informal representatives to monitor the signal of financial markets, their access to financial information markets have been challenged. Consequently, without the accurate assessment from CRAs, regulators would not timely sense the healthiness of financial sectors and the appropriateness of their asset portfolios.

Furthermore, the profitability and the corresponding liability between credit rating users and producers are asymmetric. While market participants suffer significant business losses, CRAs still enjoy an extremely profitable business without much worry about the demand for their rating services. Furthermore, due to the legal protection such as the constitutional right of free

⁴ Frank Partnoy, 'The Siskel and Ebert of Financial Markets?: Two Thumbs Down for the Credit Rating Agencies' [1999] *Washington University Law Quarterly*, vol 77, 619-715.

expression and the liability exemption in a series of public legislation, their irresponsible ratings did not cause much legal liability. On the other hand, ironically, while financial institutions bear significant compensation and penalty from both the private litigation and public prosecution for their ill-considered decisions based on CRAs' irresponsible ratings, the real initiators of evilness seems successfully escape the due liability for their contribution to the crisis. Indeed, CRAs suffer significant reputational loss just like other financial institutions. However, those credit information intermediaries should put much higher reputational or other capital at stake, since the real value of their rating services are based on their higher credibility than others. It is unreasonable that financial markets operate on the credit risk evaluation conducted by discredited agents who irresponsibly wield the quasi-statutory duty without being subject to adequate legal liability.

Because the healthy function of existing financial regulatory regimes heavily relies on the reliable and responsible rating signal, it is worth reviewing the whole credit rating industry and the regulatory regimes based on it. While CRAs make huge profits from rendering the global financial market more vulnerable than ever before, the systematic stability and allocative efficiency of financial markets, which is largely considered as the public goods, is at the mercy of those private profit-maximising rating agencies. One primary direction of post-crisis regulatory reform is to decrease the correlation between each domino blocks and limit the leverage level in the global financial system. Pursuant to this regulatory direction, CRAs should be insulated from the influence of other interest-involved parties, and their neutral nature must be strengthened rather than under the hiring or direction of either regulators or securities issuers.

The goal of this dissertation is to try to identify the underlying rationales and causes of this 'asymmetric interdependence' between private rating markets and public financial regulations, and then explore the feasible solutions which would systematically rebalance the asymmetric interrelationship. The first two chapters review the historical development of the credit rating market and its interaction with macro-institutional environments as well as the correlation with transformation of regulatory model. For explicating the causes and conditions for the concomitant delegation of regulatory authority and governance tasks from states to non-state

actors, the Chapter 4 seeks to address the theoretical rationale of why public financial regulators have relied on private information intermediaries like CRAs for providing governance competence in key domains which would substantially affect the goal attainment of public policy. Chapter 5 examines the asymmetry of liability and profitability under this principal-agent public-private delegation process, and explores the source and consequence of this asymmetric interdependence. This chapter will raise up possible reform directions to counterbalance CRAs' unchecked power and to enhance their liability and accountability. In order to pragmatically implement these ideals about regulatory reform, Chapter 6 seeks to thoroughly discuss legal loopholes and their corresponding solutions from the perspective of both private and public law as well as administrative and legislative measures. Finally, considering the fact that those regulatory approaches may be still incapable to solve the fundamental deficiencies embedded in the CRAs' business model, this dissertation proposes several possible substitutes to credit ratings.

Chapter 2. The Retreat of State Power: Privatisation and Decentralisation

The Transformation of Macro-institutional Environment

With the ever deepening globalisation process and the ensuing 'rise of trans-sovereign problems', financial global governance is no longer the exclusive domain of public power such as national governments and intergovernmental organisations. Meanwhile, the governance capacities of private actors has been strengthened, which point to the emergence of public-private governance modes. Accompanying the 'retreat of state power', those non-state institutions have been involved in the provision of global public goods and the collective governance of trans-sovereign issues, which transcend the sovereign boundary and thus cannot be solved by individual state actions alone.⁵

⁵ Susan Strange, *The Retreat of the State: The Diffusion of Power in the World Economy* (Cambridge University Press, Cambridge 1996)

State power's increasing reliance on the governance capacity of non-state actors implies the 'decentralisation' and 'privatisation' of global governance structure from state to non-state actors. The integration between private and public governance capacity highlights the limits of top-down public law approaches and the ineffectiveness of centralised command and control bureaucracy in the age of globalisation. However, despite the proliferation of governance modes involving non-state actors, the conditions which allow the emergence of meaningful private governance modes seem to be rather restrictive.⁶ In fact, non-state governance institutions frequently operate in the 'shadow of hierarchy'. States may tacitly use, explicitly recognise and on occasion formally co-opt the governance capacities of non-state actors contributing to several aspects of governance: 1. collection, processing and provision of policy-relevant information; 2. setting 'soft' law such as self-regulating rules and professional standards which are aimed at guiding the behaviour of social actors; 3. Ensuring the implementation of rules and correcting individual or organisational behaviours through monitoring and compliance mechanisms; 4. adjusting and completing rules according to changing circumstances.⁷

Although alternative non-state governance approaches challenge the traditional conception of global governance mechanisms, delegating statutory duty for providing public goods from centralised public bureaucracy to private governance capacity does not necessarily impair the supremacy of state power.⁸ In fact, the effective functioning of this private governance mechanism is contingent upon public recognition, support or even enforcement. Thus, despite the increasing importance of non-state actors, the state is not fading away. While the state is no longer the exclusive political authority in global governance, the state transforms itself from the monopolist to the manager of political authority in global financial governance. Thus, the relationship of state and non-state actors in the provision of governance competence can thus

⁶ Jean-Christophe Graz and Nölke Andreas, 'Introduction: Beyond the Fragmented Debate on Transnational Private Governance' in Jean-Christophe Graz and Nölke Andreas (eds), *Transnational Private Governance and its Limits* (Routledge, London 2008), 23.

⁷ Bridget M. Hutter, 'The Role of Non-State Actors in Regulation', in Gunnar Folke Schuppert (ed.), *Global Governance and the Role of Non-State Actors* (Baden-Baden, Nomos 2006), 63–5.

⁸ *ibid.*

be described as a form of regulatory partnering which involves states overseeing or sharing statutory responsibility with non-state actors.⁹

The 'privatisation' by involving non-state actors into the provision of public goods and the 'decentralization' by outsourcing governance task and statutory responsibility from centralised public bureaucracy to private actors have been particularly evident in the global governance of financial, more precisely banking and securities, markets. Financial market liberalisation, the cross-border integration of financial markets, and technological advancement have significantly accelerated the process of financial innovations, which substantially altered the operation of financial markets and thus fundamentally changed global financial governance architecture. In this new structure, public law approaches and bureaucratic command and control strategies seem incapable to oversee, let alone guide, the huge quantities of highly complex financial activities transcending national regulatory boundaries; in other words, state power has faced ever more significant constraints to govern globalised financial markets. Therefore, during the past three decades, states increasingly delegate regulatory duties traditionally undertaken by public agencies to private actors, and seek to harness their corporate regulatory capacity with public recognition and enforcement mechanism.¹⁰

Meanwhile, for both economic (e.g. the fear of suppressing economic competitiveness) and political (the controversy for overly involving state power in market economy) considerations, most states have been unwilling to substantially reverse the patterns of liberalisation and integration of financial markets. Proponents of liberalism economy assert that an efficient allocation of resources achieved by liberalized financial markets will eventually entail long-term market stability.¹¹ However, contrary to those overly optimistic assumptions, the liberalised and globalised financial markets failed to achieve a level of market efficiency and stability which would relieve public authorities. As a compromise, public regulatory bodies

⁹ Volker Rittberger, 'Inclusive Global Institutions for a Global Political Economy', in Volker Rittberger and Martin Nettesheim (eds.), *Authority in the Global Political Economy* (Palgrave Macmillan, Basingstoke 2008) 11–54.

¹⁰ Eleni Tsingou, 'Transnational Private Governance and the Basel Process: Banking Regulation, Private Interests and Basel II', in Andreas Nölke and Jean-Christophe Graz (eds) *Transnational Private Governance and its Limits* (Routledge, London 2008), 58-60.

¹¹ Kruck (n 1) 5.

started relying on private force and their know-how, using market-based regulatory methods for the provision of the global public good ---- financial market stability and capital allocative efficiency. While this approach avoids direct public interference in market economy, private actors involved start playing a crucial and publicly sanctioned role in governing global financial markets.¹²

Macro-institutional Implication on the Organisational Behaviour

In order to explain the micro behaviour of an organisation, we must take into account the macro context of that organisation first. The ecology of an organisation consists of both other organisations and its structural environment.¹³ This chapter focuses on the macro-institutional socioeconomic environment of public regulators, while the next chapter will discuss the inter-organisational relationship between public authorities and private agencies.

Structural environment profoundly shapes the means–end calculations of organisational actors and, consequently, the activities, problems, forms and outputs of organisations, and their relations with one another. Therefore, the changing macro-institutional contexts of the global financial systems would affect the behaviour of public regulators around the world. Based on this perspective, variations in types of capitalism across countries and their transformation over time can explain varying degrees of public reliance on transnationally operating private information intermediaries for regulatory purposes across countries and over time.¹⁴

At the beginning, it is important to understand the difference between embedded and disembedded liberalism. Generally, the economic order is a function of the society. Pursuant to this conception, embedded orders are economic systems which have been politically and socially shaped. In contrast, disembedded orders refer to economic systems which are decoupled from political and social influence and left on their own as separate systems in

¹² Tsingou (n 10) 58.

¹³ Kruck (n 1) 109.

¹⁴ *ibid.* 108-110

society.¹⁵ Considering financial governance, embedded systems prefer to enhance the market mechanism by introducing market-driven competition for the coordination of economic activities. The last embedded liberalism was reflected in Bretton Woods economic institution during 1944 and 1971. The collapse of Bretton Woods institution fundamentally drove the worldwide emergence of a disembedded liberal financial order that was devoid of largely global capital controls. Since then, neoliberalism, the ideological foundation of a disembedded liberal economic order, achieved hegemonic status in the global financial system.¹⁶ In this disembedded order, leading financial powers (mainly Anglo-Saxon states especially the UK and US), the financial industry and relevant international institutions worked together to contribute to open and integrated capital markets, deregulation over capital movement, and complex financial innovation such as financial disintermediation instruments.

The Anglo-Saxon variety of disembedded financial markets links large firms' financial access to their performance in securities markets, since receivers and suppliers of capital increasingly come to an transaction without the intermediation of banks via capital markets. Without the risk isolation and credit management of traditional banking, borrowers depend more heavily on a seal of approval for direct access to capital markets. Without long-term bank–borrower relationships, distant investors rely on CRAs' external certification of borrowers' creditworthiness. In this way, the width of a disembedded financial market and the depth of its financial product chain become larger than financial systems where prevalent long-term financial intermediation through traditional banking makes volatility at the market level is less pronounced.¹⁷

Meanwhile, not just the changing macro-institutional conditions of financial markets facilitate the development of credit rating markets, transnationally operating CRAs in turn have further facilitated tendencies towards the Anglo-Saxon variety of capitalism. Through increasingly prevalent rating-based financial disintermediation, CRAs have provided friendly access to

¹⁵ Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Beacon Press, Boston 1944) 71.

¹⁶ Kruck (n 1) 112-126.

¹⁷ Andreas Nölke and Perry James, *the Transnational Politics of Corporate Governance Regulation* (Routledge London 2007), 121–36.

capital markets to securities issuers who comply with CRAs' rating standards which typically favour Anglo-Saxon corporate governance. Also, CRAs facilitate the deterritorialisation of capital by providing analytical services for mobile trans-border investors, and thus spread preconditions worldwide for the operation of transnational financial capitalism.¹⁸

From the above, we may conclude the transformation of the global macro-institutional environment (both in material and ideology) across countries and overtime in types of capitalism (such as the proliferation of Anglo-Saxon liberal market economy) is highly relevant to the different degrees of significance of CRAs in financial markets. And, the following summarises several rationales about why the public reliance on private ratings in financial regulation is systematically higher in an Anglo-Saxon financial system which is characterised as disembedded liberalism.

Firstly, the highly complex and transnationally integrated disembedded financial markets would cause higher systematic volatility. Facing with increasing uncertainty in financial systems, both private investors and public regulators need expertise to timely adjust their risk assessments and thus co-align themselves with the rapidly changing market circumstances. However, public regulators usually lack adequate institutional mechanism or/and facilities to consistently process large amounts of dispersed information. Therefore, to ensure a satisfactory performance of risk-sensitive regulation, regulators require alternative information solutions. CRAs take over this crucial task as external risk evaluators which deploy their expert capacities to condense the overwhelming amount of information available to financial market actors into one seemingly straightforward and comparable measure of credit risk. In this way, profit-maximising CRAs provide essential market signals to public regulators pursuing market stability and efficiency.

Then, direct public interference through bureaucratic command and control regulation becomes more or less politically banned in disembedded liberalism. Deregulation and hands-off economic policies are the norm that international financial organisations, private markets

¹⁸ *ibid.*

participants and academics from Chicago school teach 'responsible' policymakers and supervisory bodies to follow. Therefore, for regulators who strive for effective supervision but are unwilling to directly wield their visible hands to intervene market mechanism, they turn to indirect financial governance through using market-driven information intermediaries in public regulation and expect that their reliable information flows would help them monitor systemic uncertainty. In this way, public authorities shun direct intervention but still do not wholly abandon the steering and oversight of financial markets.¹⁹

Finally, the globalisation of financial markets challenge the cooperation of national supervisory agencies. Because states fear sovereignty losses in their policy freedom, effective international supervisory mechanisms is difficult to be established. Without adequate international political integration, their competencies remain largely limited to national territories. Consequently, the more transnational financial integration progresses, the more ineffective national supervision appear. Meanwhile, transnationally operating CRAs are able to assess credit risk across borders and do not face comparable sovereignty obstacles and territorial restrictions on their quasi-regulatory competencies. Therefore, it should be not surprising that many both national and international bodies increasingly involve these private information intermediaries into their policy structure of financial governance.

Chapter 3. The Ascent of Credit Rating Agencies: From Information Intermediaries to Regulatory Licensors

Behavioural Dependence on Credit Rating Agencies

Historically, information asymmetry between buyers and sellers significantly facilitate the development of information intermediaries, particularly in markets where sellers have superior information but cannot cost-effectively convey this information to buyers. If buyers are bounded rational, prices in a market with information asymmetry can only reflect the average

¹⁹ Kruck (n 1) 116.

quality of products, and sellers with superior products will bear the cost of this information asymmetry, namely adverse selection cost. Consequently, sellers in such markets have incentives to disclose the superior nature of their products so that they can receive the highest price. As sellers in financial markets cannot make such disclosures with high credibility, they have incentives to hire third-party information intermediaries to play this role. Information intermediaries function best when they have reputational capital at stake and will suffer a loss, in the form of either litigation or declining reputation, in the event their assessments are biased, negligent, or false. This expected loss must exceed the expected gain from false certification. And the cost of informational intermediation should be related to the informational asymmetry between buyer and seller.²⁰

CRAs coordinate capital allocation as information intermediators in financial markets.²¹ For investors, due to their specialisation and economies of scale and scope, credit ratings are a feasible means to reduce transaction costs for the collection and processing of dispersed and technically complex information on the financial situation of borrowers and the default risk of financial products. CRAs can also improve the efficiency of the whole market by avoiding the duplication of information-generation efforts. What's more, since CRAs condense massive information into the standardised single measure, they simplify the comparison of different issuers and financial products. Therefore, CRAs not only make the investors issuers easier to monitor their transactions, but also facilitate the access of borrowers to capital markets by widening the investor pool and reducing adverse selection problems resulting from information asymmetries between investors and issuers.²²

The huge dimensions and global reach of the last crisis would not have been possible without CRAs' malfunction, since CRAs have successfully established their widely-recognised global private criteria of credit risk which are used by worldwide investors as benchmarks in financial markets. If the reputation for high quality, excellent expertise and objectivity is crucial for their

²⁰ Frank Partnoy and Aline Darbellay, 'Credit Rating Agencies and Regulatory Reform', *Legal Studies Research Paper Series*, No. 12-083 (University of San Diego, April 2012) 5-8.

²¹ Nölke (n 17) 129.

²² Fernando Gonzalez, et al., 'Market Dynamics Associated with Credit Ratings: A Literature Review', *ECB Occasional Paper No. 16* (European Central Bank, Frankfurt 2004) 7.

private standards, pursuing their own business interests could benefit other market participants because reliable standards are public goods. In the form of standardised credit ratings, they increase market transparency and thus allocative efficiency through using their privileged access to internal information to expose the financial situation of issuers. If CRAs perform their oversight capability diligently, credit rating can be an effective surveillance mechanism which consistently safeguards investors' interests, optimises the capital allocation in financial markets and eventually prevents systematic crisis. In this way, diligent CRAs constitute an early warning system with market control and protection mechanisms, which are usually conceived as public functions maintained by public regulators.²³

Standardisation constitutes a strong characteristic of modern global order, since standards promote homogeneity between geographically and ideologically distinct parties. Standards could be useful and voluntarily complied with as long as they render the highly complex and opaque world more ordered.²⁴ From this perspective, it is reasonable to assume that, even without public endorsement, CRAs' standard of creditworthiness may still reach high levels of compliance, since they relieve the informational burden of decision makers. Without public interference, the acceptance of CRAs' standard of creditworthiness depends on their expert reputation and the ensuing legitimacy as 'those who know best' in the eyes of financial market actors.²⁵ Relying on CRAs' standards of creditworthiness, investors calculate returns and risks of investment without thoroughly investigating the credit risks implied in those complex structured financial products. Just like if sausage has been classified as conforming to certain safety standards, we may prefer to eat it without willingness to know anything about its exact content and how it has been made.²⁶ The actual procedure for making credit ratings ought not

²³ Dieter Kerwer, 'Standardising as Governance: The Case of Credit Rating Agencies', in Adrienne Héritier (ed.) *Common Goods: Reinventing European and International Governance* (Rowman and Littlefield, Lanham 2002) 293–316.

²⁴ Nils Brunsson, 'Organizations, Markets and Standardization', in Nils Brunsson and Bengt Jacobsson (eds.) *A World of Standard*, (Oxford University Press, Oxford 2002) 21–39.

²⁵ Bengt Jacobsson, 'Standardization and Expert Knowledge', in Nils Brunsson and Bengt Jacobsson (eds.) *A World of Standard*, (Oxford University Press, Oxford 2002) 40–49.

²⁶ Nils Brunsson and Jacobsson Bengt, 'The Pros and Cons of Standardization – An Epilogue', in Nils Brunsson and Bengt Jacobsson (eds.) *A World of Standard*, (Oxford University Press, Oxford 2002) 169–73.

to be looked at too closely: like a sausage factory, the output is good, but the process is unpalatable.²⁷

Although private standardisation does not rely on formal authority or mandatory requirements, actors will sometimes have no choice but to follow certain established standards, since other market players might demand that certain standards must be observed before they agree to enter into a transaction. Even the last crisis reveal the massive capital misallocation caused by abysmal CRAs, market participants have continued to rely on credit ratings because of financial culture and deep-rooted business practice. One reasonable speculation is that even if all explicit references to ratings were removed from public regulation, some residual implicit overreliance would remain. Furthermore, because the integration of global financial markets has usually been accompanied with the assimilation of market practices, the worldwide predominance of Anglo-Saxon capitalism facilitates the proliferation of ratings-dependent financial culture in many embedded financial systems. This diffusion process has expanded the use of ratings and enhanced the position of CRAs in the global financial governance. Thus, CRAs not only tremendously profited from but also greatly facilitated the integration and deregulation of global financial markets.²⁸

Through their influence on the investment decisions of private actors, CRAs also constrain the possible choices of national socioeconomic policies. Since states have attributed increasing importance to the inflow of private capital rather than relying on the conditional loans of international organisations such as World Bank and IMF, states face strong pressures to adjust their monetary, fiscal and socioeconomic policies to CRAs preference. Because transnational investors usually appreciate a politically neutral and 'investor-friendly' socioeconomic policy, CRAs would reward a higher rate to states which put a premium on macroeconomic growth and fiscal austerity. While many states are under the pressure from transnational investors to provide a credit rating, the demand for sovereign ratings experienced significant growth, by

²⁷ Fred Shapiro, 'Quote ... Misquote' *New York Times* (21 July 2008)

<http://www.nytimes.com/2008/07/21/magazine/27wwwl-guestsafire-t.html?_r=0>.

²⁸ Nils Brunsson, 'Standardization and Uniformity', in Nils Brunsson and Bengt Jacobsson (eds.) *A World of Standard*, (Oxford University Press, Oxford 2002) 138–50.

which CRAs obtained much visible profits as well as invisible influence. Furthermore, CRAs may have substantial ‘infrastructural’ impact on corporate governance structures by favouring short-term, shareholder-oriented business policies, which have been prevalent in Anglo-Saxon liberal market economies. As a result of the Basel Accords who heavily rely on private credit ratings, the financing model of small and medium-sized enterprises in many non Anglo-Saxon economies become financially difficult, since highly-indebted companies might face increased credit costs due to their ‘problematic’ risk profile under Basel Accords. In these ways, CRAs greatly promote the worldwide proliferation of Anglo-Saxon liberalism.²⁹

Indeed, the reputation and legitimacy of CRAs have significantly suffered from their failure to adequately rate the ‘toxic’ structured finance products which directly triggered the US subprime crisis and the global financial crisis. For failing to develop appropriate models to identify risks, CRAs have been blamed for downgrading mortgage backed securities far too late. When the oppressed potential energy of distorted capital allocation has been eventually released, the lagging downgrading becomes the potent catalyst of liquidity crisis in global financial systems. However, in the 2010 Euro crisis, the massive capital flee triggered by sovereign rating downgrades of European states demonstrated that the damaged reputation of CRAs still have great influence in global financial markets. It shows that, probably for behaviour reliance and/or cultural reasons, investors continue to rely extensively on discredited CRAs for screening non-transparent capital markets without knowing the exact content of the standards of their credit ratings.³⁰

From the above, we can observe that, as the existing global financial system deeply depend on transnationally operated credit rating agencies, their standard of creditworthiness gradually evolve into the authoritative benchmark for other market actors. While this dependence keeps one-sided or asymmetric, CRAs can wield considerable authority over other financial market actors.³¹ By assigning and constantly adjusting their credit ratings, CRAs not only define a

²⁹ Nölke (n 17) 123

³⁰ Dieter Kerwer ‘Governing Financial Markets by International Standards’, in Mathias Koenig- Archibugi and Michael Zürn (eds.) *New Modes of Governance in the Global System: Exploring Publicness, Delegation and Inclusiveness* (Palgrave Macmillan, Basingstoke 2006) 77–100.

³¹ Kerwer (n 23)

standard of creditworthiness, but also monitor and promote the compliance with their standards.

Then, because the lower default risk CRAs think, the higher ratings and thus lower interest rates issuers bear, through their ratings, CRAs actually determine the cost of borrowing capital by either private investors or sovereign states around the world. Consequently, while CRAs are equipped with monitoring and punishment instruments for enforcing their authority, financial market actors have strong incentives to adjust their behaviour to CRAs' criteria, even they know CRAs' rating criteria is problematic. Furthermore, inaccurate ratings not only steeply increase interest rates and thus prevent actors from getting access to private capital they actually deserve, but also may have a negative impact on beyond borrower–lender relationships since ratings on bonds frequently affect stock market and client and/or supplier relationships. In this way, borrowers have no choice but to comply with the standards of creditworthiness, since CRAs' seal of approval is vital for borrowers' financing conditions and their access to capital markets.³²

In sum, CRAs can exercise their authority in several ways. Firstly, they shape the behaviour of financial market actors by limiting the range of alternative choices. CRAs replace investors as de facto decision makers by exclude investors from lower-rated investee, who are usually conceived as risky in separate consideration but might still be attractive for investment portfolio. Secondly, CRAs exercise a veto power over certain options of rated-entities by threatening to downgrade rating. The most intriguing example of behavioural reliance is the extensive use of ratings in private contracting. Under such contractual clauses, rating downgrade not only drives up their capital costs in the future but also give counterparties the right to require additional collateral and accelerate the repayment of an outstanding loan if the rating falls below a certain level, which can cause a company to default under the terms of its debt covenants. Thirdly, as ratings upgrades and downgrades are not confidential but rather available to the public, the implication of published credit rating is wider than the confidential assessment of traditional banks. Under the influence with such depth and width, even states have to adjust their behaviour

³² Michael R King and Timothy J. Sinclair 'Grasping at Straws: A Ratings Downgrade for the Emerging International Financial Architecture' (University of Warwick, Coventry 2001) *Center for the Study of Globalisation and Regionalisation (CSGR) Working Paper No. 82/01*, 4–5

to suit the preferences of CRAs, since a downgrade can induce fiscal stress which lower the supply of public goods.³³

Buy-side firms substantially use credit ratings for corporate governance issues, such as risk management and trading operations. Buy-side firms may use credit ratings to comply with internal by-law restrictions or investment policies that require certain minimum credit ratings. Meanwhile, sell-side firms obtain credit ratings for issuing their own long-and short-term debts or assisting clients' offerings. What's more, broker-dealers also use credit ratings (if available) to determine acceptable counterparties and collateral levels for outstanding credit exposures in OTC derivatives markets. This widespread use of "ratings triggers" in private financial contracts enhance the systematic importance of CRAs in the marketplace. When ratings have been downgraded, these contractual provisions can trigger the termination of credit availability or acceleration of credit obligations, which could lead to an escalating liquidity crisis for issuers subject to ratings triggers.³⁴

The Formation of Ratings-Dependent Public Regulation

With the worldwide proliferation of Anglo-Saxon capitalism since 1980s onwards, not just CRAs' business activities but also the regulatory use of credit ratings has spread geographically. In this diffusion process, the quasi-regulatory function of CRAs become a particular characteristic of prevailing disembedded global financial markets.³⁵ Credit ratings have been widely used by public authorities to increase the risk sensitivity of financial regulation, such as investment restrictions for certain financial institutions, differential disclosure requirements for issuers or financial products with different ratings, and adjusting capital reserve requirements for financial institutions to their credit risk exposure. This public use of credit ratings represents a state-bolstered institutional mechanism involving non-state information intermediaries in

³³ *ibid.*

³⁴ Amadou N.R. 'The Systemic Regulation of Credit Rating Agencies and Rated Markets' [June 2009] *IMF Working Paper* 8-9.

³⁵ Tsingou (n 10) 59.

governance processes, which substantially constitutes a principal-agent delegation relationship.³⁶

Before the 2007-2010 global financial crisis, national and international financial regulators around the world – such as the US Securities and Exchange Commission, the Basel Committee on Banking Supervision and EU legislators – came to use ratings by private risk measurement agencies for regulatory purposes on an increasing scale and scope. Since 1970s, public regulators effectively link credit ratings to regulatory compliance and thus empower CRAs great authority. Some rules required that certain investors could only purchase financial instruments with investment-grade ratings. Other rules reduced capital requirements for institutions that invest highly-rated securities. Without high ratings, securities issuers could not access certain capital markets because they do not have a “license” from the approved CRAs to comply with ratings-dependent regulations, even though their ratings have been proved inaccurate.³⁷ Too often, rating changes lagged the revelation of public information regarding rated issuers and instruments

The main function of Basel Accords is to define internationally harmonised minimum capital reserve requirements which oblige banks keep adequate capital in reserve as a safety measure in the case of credit default. Notwithstanding spectacular failures in recent crises, minimum capital requirements has remained uncontested. Even in the case of some large- scale credit defaults, banks should still have enough capital ‘put aside’ to avoid a breakdown which infects other financial institutions. While internationally harmonised capital reserve requirements seek to establish an ‘international level playing field’ for banks, it raise the crucial question about how to calculate the minimum amount of capital reserve. Unlike the original Basel Accord of 1988, the Basel II and III Accords proposed that such requirements should be flexible and risk-sensitive. The amount of capital that banks needed to put aside against the risk of credit default should no longer be calculated according to fixed formulae irrespective of the creditworthiness

³⁶ Dieter Kerwer ‘Holding Global Regulators Accountable: The Case of Credit Rating Agencies’ [2005] *Governance* 18: 3, 453–75.

³⁷ *ibid*

of their borrowers.³⁸ Basel Accords II and III explicitly encourage banks to use credit ratings from approved 'external credit assessment institutions' in calculating their required capital reserve. Basel Accords' main elements have been put into force within the EU by a series of legally binding EU Capital Requirements Directives since 2006, whose primary purpose is to link capital reserve requirements for banks to the default risk of the credits banks issue.³⁹

Ratings-dependent regulation bolsters the role of CRAs and drive private credit ratings increasingly go beyond their original purpose. This regulatory reliance implies that the growing profit from selling ratings may not greatly come from their intrinsic informational value, which is the main reason for behavioural reliance from market participants, but depend on their nature as regulatory license, which has few informational value except access to capital markets. What makes them even more important is that some governmental rescue efforts have to rely on those private regulatory licenses to achieve better policy results. For example, the Federal Reserve's 1 trillion U.S. dollar Term Auction Lending Facility (TALF) plan only loaned money to investors who purchase securities rated investment grade by two or more eligible CRAs. Meanwhile, when government in March 2009 tried to implement a rescue package for AIG, they privately the biggest three CRAs to be sure the plan would be attractive enough to avoid a downgrade because a downgrade would have killed AIG. In this way, not just private investors but also public regulators have been in a ratings trap.⁴⁰

While profit-maximising CRAs fulfil supervisory public functions, they actually hold a quasi-public responsibility which turns these private agencies into de facto regulators with coercive power. The mandatory use of private credit ratings in public financial regulation reinforces the effect of behavioural reliance in capital allocation. It enhances CRAs' expert authority and the legitimacy of quasi-regulatory function, which further facilitate the dissemination of, and compliance with, CRAs' standard of creditworthiness. Consequently, CRAs' standards for

³⁸ Bernhard Speyer, 'Governing Global Financial Markets – Basel I and II: The Role of Non- state Actors' in Gunnar Folke Schuppert (ed.) *Global Governance and the Role of Non- state Actors* (Nomos, Baden-Baden: 2006) 101–16.

³⁹ King (n 32) 1-9. Also see Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (CRD IV)

⁴⁰ Partnoy (n 20) 8-10.

creditworthiness becomes mandatory requirements mainly because regulators use them for public purposes other than market actors believe it is reasonable to follow.⁴¹ In this way, public regulation artificially increases the market demand and profits for CRAs' rating services.

While credit ratings are potently backed by public regulatory regimes, CRAs emerge as publicly-sanctioned gatekeepers which judges the prudent economic and financial behaviour of capital borrowers and then determine their access to capital markets and costs of borrowing.⁴² Because the competence to establish, and promote compliance, with such private standards of creditworthiness is for the sake of global public goods such as systematic stability and allocative efficiency of financial markets, delegating regulatory authority and governance tasks from statutory state actors to private profit-maximising agencies can be considered as a partial but effective privatisation of public financial regulation.⁴³

The quasi-regulatory function have underpinned the position of CRAs in the global financial architecture, but it raises crucial questions about their reliability, legitimacy and accountability. Notwithstanding the heightened public attention to CRAs, the rationale of how power and accountability are distributed within the inter-organisational relationship between public regulators and private CRAs is largely unknown by people who are actually or potentially affected by CRAs' credit rating. To answer these questions, their modes of business operation, relationship with public regulatory actors, and sources of unchecked power need to be thoroughly investigated. The next chapter seeks to **discuss the theoretical rationales of why** national and international authorities came to use credit ratings made by private profit-maximising agencies as risk measures in public financial regulation.

⁴¹ Amadou (n 34) 2-15.

⁴² Kerwer (n 30) 90-92.

⁴³ Sinclair, Timothy L. 'Global Monitor: Credit Rating Agencies' [2003] *New Political Economy* 8: 1, 147-61.

Privatisation Based on Principal-agent Theory

The principal–agent delegation is the conditional grant of authority from a principal to an agent that empowers the latter to act on behalf of the former. This grant of authority is limited in time and/or scope and thus is revocable by the principal. Typically, a principal determine the general direction of policy and delegates its elaboration and implementation authority to an agent. Since financial regulators themselves would be either unwilling or unable to collect and process the necessary information to assess the credit risks of regulated entities, public regulators have implicitly delegate this task to private CRAs through referring to credit ratings in mandatory regulatory requirements which are legally-binding for regulated financial institutions. This delegation process allows public regulators to effectively implement flexible and risk-sensitive financial regulation.

After credit ratings has been formally endowed by public national and international regulators, it constitute a markets-driven governance model which heavily relies on CRAs' performance and forms a principal–agent delegation of governance tasks and regulatory authority from public to private actors. Through defining and monitoring a global standard of creditworthiness, private CRAs do not just sell 'informed opinions' to investors about relative credit risk, but rather exercise quasi-regulatory authority on behalf of the regulators in a way like issuing 'regulatory license'.⁴⁴ While CRAs measure credit risks according to their own standard of creditworthiness, they promote the adoption of, and compliance with, their standards of creditworthiness. After their standards have been made legally binding by regulators, CRAs' risk measurement and certification of creditworthiness become not merely information intermediation but also perform crucial governance activities of risk-sensitive financial regulation.

⁴⁴ Partnoy (n 4)

The basic approach of principal–agent theory is functionalist, which explains institutional choices in terms of the functions a given institution is expected to perform. Simply speaking, principals expect to benefit from delegating competence and responsibility to expert agencies. In the following, several rationales relevant to this principal–agent delegation are summarised. Firstly, principals themselves may be the agent of other principals. Compared with those regulators who rely on their own information gathering, regulators who make controversial decisions based on reputable third-parties expertise diligent may relieve their ‘fiduciary’ liability to the public for their possible underperformance.

Second, impartial expert agents can help solve problems of incomplete contracting. Instead of writing an all-inclusive contract anticipating all conceivable circumstances contingencies, the contracting parties agree on a framework agreement containing general principles and procedural provisions to govern circumstances where the contract did not explicitly spell out. Particularly when future uncertainty is great (such as financial markets) or the precise obligations of the contract is hard to anticipate, contracting parties may delegate to agents elaboration, interpretation, amendment and arbitration rights. Furthermore, principals may outsourcing agenda-setting tasks to third-party agent to ‘avoid endless cycling among alternative policy proposals’ when all principals would retain agenda control by themselves.⁴⁵ Because it is sometimes very difficult to achieve a detailed agreement between national regulators about the appropriate level of mandatory capital requirements, using CRAs to enrich the content of Basel Accords would relieve the sovereignty concern of national authorities and make them focusing on the overall direction of regulatory policy rather than struggling with trivial details.

Third, principals may delegate regulatory authority to agencies whose interests largely coincide with their policy directions. Principals might deliberately allocate certain level of decision-making rights, and policy implementation competences to agents whose interests can be aligned with theirs, so as to bias future policymaking and implementation outcomes in particular

⁴⁵ Mark A. Pollack, *The Engines of European Integration: Delegation, Agency, and Agenda Setting in the European Union* (Oxford University Press, Oxford 2003), 20-5.

directions favourable to the preferences of principals.⁴⁶ As CRAs' primary goal is profit-maximising and regulators' goals are systematic stability and allocative efficiency, one priority of this public-private delegation is to align CRAs' private interest with the public interests pursued by regulators.

Fourth, principals can delegate monitoring of compliance with required obligations, and even authority of sanctioning for obligations breaching, to agents. Because a rating downgrade can act as a clear signal for individual investors to take action and probably trigger a debt restructuring, CRAs can reduce transaction costs by relieving information asymmetry and helping overcome collective action problems between diverse principals. Furthermore, impartial expert agencies like CRAs can also be delegated to monitor principals' compliance with agreements, which mitigates concerns about noncompliance by would-be partners and encourages mutually beneficial cooperation among principals.⁴⁷

The fifth reason for delegation is that, while principals sometimes have difficulties in credibly promising to apply policies consistently to influential constituents, agents may resolve 'credible commitment' problems. By delegating either regulatory or judiciary authority to impartial agents, principals can ensure the legitimacy and credibility of their policy commitments by restraining themselves in areas where they have strong political incentives to renege their prior commitments. The fear of state intervention drives up the market demand for credible commitments, which leads politicians to deliberately insulate their competence from political pressure by granting independent agents like CRAs great discretion to enforce their statutory duties. This privatisation of regulatory competences from public authorities to private CRAs may relieve the risk of influential constituents capturing politicians and/or regulators and reduce the transaction cost of policy making.⁴⁸ Also, the political authority may 'choose an independent delegate whose policy preferences systematically differ from the preferences of

⁴⁶ Ibid.

⁴⁷ Ibid.

⁴⁸ Ibid, 24-31

delegating principals, since ‘an agent bound to follow the directions of the delegating politicians could not possibly enhance the credibility of their commitment’.

Furthermore, as principals may not have all the policy-relevant information and expertise that are necessary to perform a statutory governance task, they involve private agencies in regulating specific economic issues where they are ill-informed. In this way, CRAs reduce the informational workloads of regulators. The degree of agencies’ discretion seems positively related to the complexity and inherent uncertainty of their ‘fiduciary’ duty. For economic activities such as mandatory capital requirements with great technical uncertainty and complex quantification methods, CRAs are delegated great discretion because prescriptive-based regulation is easily becoming too detailed and too complex to be undertaken effectively by legislative principals or multilateral negotiations.⁴⁹

Lastly, when the task keeps recurring, even principals or regulators with adequate expertise to process policy-relevant information may outsource their regulatory functions to private agents specialising in credit information intermediation simply because they lack time and staff to promulgate and monitor.⁵⁰ However, outsourcing governance tasks to transnational private expert agencies further isolates financial regulation from public scrutiny – as long as no major financial crises occur.

Cost-benefit Analysis of Privatising Financial Regulation to CRAs

Delegation to specialised agents due to informational rationales seems a promising approach to explain the regulatory use of private credit ratings. As CRAs hold professional expertise and informational advantages, relatively ill-informed public principals can use those private agents to enhance the effectiveness and efficiency of their regulatory regimes. However, Principals always incur some costs in contracting with or supervising agents, since agents may engage in undesired action (agency slack) or principals themselves have to expend resources to contract with or monitor and control those agents. Furthermore, it is virtually impossible to devise

⁴⁹ Ibid, 23-29

⁵⁰ Ibid, 29-31

contract rules that will completely preclude the possibility of agency slack without foregoing significant gains from delegation.

Delegation is costly also because regulators relinquish part of their control over the regulated entities to credit rating agencies lose over the regulated entities.⁵¹ Should the principal want to overcome the information asymmetry inherent in principal–agent relationship, it would have to acquire specialised knowledge which enables it to adequately monitor and assess the adequacy of the agent’s behaviour. This in turn would create enormous costs and thus reduce the net gains from delegation.

Furthermore, many public regulators refrained from building administrative procedures and oversight mechanisms because they expect more cost-effective market forces will do it for them.⁵² In this way, they save on tremendous costs arising from establishing and maintaining public control mechanisms but increase their vulnerability to agency slack. Despite recognising the agency risks and costs, the public use of private credit ratings expanded in global financial regulatory systems until the US subprime and global financial crisis (2007–10).

The Basel provisions may illustrate how regulators-CRAs delegation involves some loss of control for regulators. Under Basel I, public regulators set a uniform 8 percent minimum capital requirement for banks without much risk adjustment. Although its measure methods of credit risk was rather crude (such as the distinction between OECD and non-OECD borrowers), all the parameters that finally determined the capital requirement were set by public regulators themselves. Pursuant to the later Basel II and III standardised approach, the calculation of 8 percent capital requirement is risk-sensitive which is according to the credit ratings of the debtors.⁵³ This implies that a crucial parameter for credit risk, which is the calculative basis of a bank’s risk-weighted asset, is no longer determined by public regulators but by private CRAs.

⁵¹ Kerwer (n 36) 463.

⁵² Kerwer (n 30) 92–3.

⁵³ Basel Committee on Banking Supervision, *International Convergence of Capital Measurement and Capital Standards a Revised Framework Comprehensive Version* (June 2006)

In other words, regulators have relinquished some control over regulatory parameters to private agents.

Thus, rational regulators trade control for overall quality of regulation. When the public use of credit ratings in financial regulation entails agency costs, ideally, it may make regulation more risk-sensitive and flexible to rapidly-changing financial markets. Given the dynamics of modern finance, their fine-grained risk estimate which varies over time seems more attractive than using a rather crude and fixed administrative methods. Furthermore, using private agents may be more cost-efficient than building up risk-measuring capacities by public bureaucrats.⁵⁴

In sum, delegation of governance tasks and regulatory authority to CRAs constitutes a principal-agent relationship based on a cost-benefit analysis. Rational public regulators will only delegate if the perceived benefits, in terms of organisational goal attainment, from relying on CRAs' analytical resources are larger than expected agency losses.

Decentralisation Based on Resources Dependence Theory

The behaviour of organisations is also constrained by the structural characteristics of their organisational task environment. This part adopts a micro-environmental approach to elaborate on the public use of private CRAs in financial regulation based on the theoretical analysis of mutual resource dependence between public regulators and private CRAs. From this perspective, organisations with bounded and intentional rationality would consciously seek to establish inter-organisational relationships for access to external inputs which are crucial for the organisational success. This would not be a problem if organisations had the complete control of all necessary components for their organisational objectives. However, organisations are usually not self-contained or self-sufficient. Instead, they depend to some varying degree on getting access to desired scarce resources controlled by external parties in their task environment. In this way, organisations' limitation and tendency to possess all necessary

⁵⁴ Kerwer (n 36) 464

resources would evolve into a certain level of resource dependency which creates the motivation for establishing CRAs-based regulation.

Theoretical Review

Market-oriented economy is based on the voluntary resource exchange between multiple actors for their respective goal attainment. When an organisation trades for needed resources with external parties who require some compensation for rewards, this interaction establishes the de facto resource interdependence based on mutual benefit. This resource interdependence is the main driver of the development of inter-organisational relationships, although this kind of interactive relationship can only be established when it makes all involved organisations better off. In the long term, if there is no ‘visible hand’ to intervene the operation of the market’ invisible hand, this interdependence on resources controlled by each other would not continue to shape the recipient’s behaviour if the resource provider cannot prove themselves capable to reliably provide critical resources needed by the other.⁵⁵

However, this cooperative inter-organisational relationship based on mutual benefit and consent does not necessarily imply the equality or symmetry of resources exchange. In fact, it varies from relative exploitation (which still benefits the exploited party in terms of absolute resource gains) to symmetrical reciprocity. While interdependence exists whenever one actor does not entirely control all conditions necessary for its objective achievement, the nature (e.g., exploitation and reciprocity) of inter-organisational relationships is related to the degree of resource interdependence between organisations.⁵⁶ Pursuant to the liberal institutionalism of international relations theory, interdependence is power relation. If a resource interdependence relationship is asymmetric, one player involved would be in a more powerful position than the other.⁵⁷ It means that when one organisation is more relied on the access to critical resources controlled by the other organisation(s), its bargaining power would be substantially challenged. In extreme cases, if one is overly relied on the other, even the mutual consent would become

⁵⁵ Kruck (n 1) 87-90.

⁵⁶ Ibid 90-104.

⁵⁷ Robert O. Keohane and Joseph S. Nye, Jr., *Power and Interdependence: World Politics in Transition* (3rd edition, Little-Brown, Boston 1989)

void in reality, since the corresponding resource controller can effectively force their resource recipients into an asymmetric interdependence relationship which obviously favour the related gains of resource controllers.

In order to restrain the exploitative nature of asymmetric resource interdependence, following are three circumstances where the probability of an equally cooperative and productive inter-organisational relationships can be effectively improved. Firstly and ideally, organisations involved are equally relied on each other and with similar capability. Another non-exploitative situation is so-called 'symbiotic' resource interdependence, in which organisations involved pursue divergent, or same but non-conflicting, goals. The 'symbiotic' relationship means that, organisations involved can complement with each other to enhance synergistic effect and simultaneously achieve their objectives without obstruct the goal attainment of the other. The last way to control asymmetric dependence is more straightforward, which is to get possession of the desired resource. While one is not always in a position to achieve direct control over dependence through acquisition and ownership, certain organisations such as public regulatory agencies can use their rule making authority and enforcement power to regulate the possession, allocation and use of resources. Although the latter one is more indirect, with appropriate use, it would be no less effective than direct control.⁵⁸

The Application of Theory

There are several reasons which can explain why non-state regulatory sources act as a supplement or even alternative to absent state resources. Firstly, the privately-owned capacity to collect, process and provide policy-relevant information can be a scarce and crucial resource that is purposefully sought after by public regulators for performing their statutory duties. Thus, public regulators delegate governance tasks and regulatory authority to profit-maximising private information intermediaries which are equipped with high levels of policy-relevant expertise and professional experience with regard to both financial products and business actors they seek to regulate. Since market-led private standards might allocate adequate regulatory

⁵⁸ Kruck (n 1) 91-100.

capacities in a regulatory form which are more flexible and sensitive to the complex financial issues and rapidly-changing circumstances than the administrative directives, regulation is probably better adapted to the market needs if maintained by private standardisers like CRAs.⁵⁹

The other reason for this public-private delegation is that, because the sale and profit of rating services is heavily dependent on the reputation of CRAs, CRAs have willingness to produce accurate information to both private investors and public regulators to maintain their creditworthiness. As Private CRAs are foremost oriented toward making profits which can be clearly quantified and thus can be objectively observed, they are much easier to be incentivised to better use its analytical resources than public regulators whose performance is not easily be quantified and usually have to be evaluated by some vague qualitative methods. Ideally, with appropriate direction, CRAs' economic goals and incentives can be directed to be consistent with the goal attainment of public regulators and thus make them act in ways conducive to public goods (financial market stability and efficiency). Pursuant to the mainstream economic theory especially Chicago school, this self-driven private approach based on market mechanism would be much more cost-effective and efficient than the control and command strategies of centralised public bureaucracy.

Therefore, we can conclude public regulators and private CRAs are in a resource dependence and exchange relationship, in which public regulators obtain the analytical competence of private CRAs through recognising that CRAs have quasi-public authority like de facto publicly-sanctioned private regulators. In order to determine an organisation's dependence on resources of any other organisation, there are two dimensions which have to be taken into account: essentiality and substitutability. Essentiality refers to how important the resources are to the organisation. Substitutability denotes the extent to which resources provided by an external organisation can be replaced from other sources, which is contingent upon the capability of other external organisations to provide the same resources. Both essentiality and substitutability of the resources determine the focal organisation's dependence on any other organisation. 'If an organisation cannot achieve its goals without the resources controlled by an external actor,

⁵⁹ Brunsson (n 29) 169-73

and if it is not able to obtain them elsewhere, it would be highly dependent on the resources of external organisations'. In academic terms, the degree of dependence is positively related to the essentiality and negatively related to the substitutability of focal resources.⁶⁰

In order to evaluate the substitutability of CRAs, one obvious evidence is the lack of intra-industry competition of the credit rating market, since the range of alternatives is limited to a rather small number of CRAs. For example, in U.S., only nine CRAs are eligible to be approved as Nationally Recognized Statistical Rating Organisations (NRSROs), which is the prerequisite for private ratings being public used. Another evidence of low substitutability of CRAs is the limited inter-industry competition. While CRAs use their knowledge resources to collect dispersed information and condense it into the standardised risk indicator, they satisfy the increasing demand of complex financial markets for user-friendly and simplified information. As there are few non-CRAs can provide such credit information intermediation, CRAs cannot be easily replaced by either other kind of information intermediaries or public regulators themselves.

Pursuant to the analysis about the macro-institutional environment of global financial regulation in Chapter 2, the essentiality of analytical resources controlled by private CRAs will vary due to the uncertainty and complexity of the major issues which public actors have to deal with. The complexity and speed of financial innovation have put those private profit-maximising entities in a privileged position as knowledge holders, with public authorities lagging behind in terms of expertise and thus their response speed to market changes. If regulators cannot timely keep up with the development of modern financial products which have already been widely used by a variety of market participants, they cannot effectively perform their statutory duties without CRAs' analytical resources. There are three indicators which can demonstrate the consequence of the high degree essentiality of CRAs for public financial regulation. The first indicator is the absolute number of regulations that reference credit ratings. The second is how many distinct regulatory purposes or subsystems for which credit ratings are used within a given

⁶⁰ Kruck (n 1) 152-63.

regulatory system. The last indicator is the compulsory character of the use of credit ratings.⁶¹

In other words, can the addressees of financial regulation fulfil the imposed regulatory duties without referring to CRAs' risk assessment so that obtaining a good credit rating would only be a bonus rather than a must for meet regulatory requirements just like 'regulatory license'? Combining with the analysis regarding the ascent of CRAs in Chapter 2, CRAs seems meet these indicators.

Therefore, involving private standard experts such as CRAs in the financial governance system becomes increasingly attractive and acceptable for public regulators. Public regulators make standardised information produced by CRAs legally binding, by which CRAs gradually take over the publicly-sanctioned role as the crucial information intermediaries of financial markets.⁶² By devolving state activities onto private institutions, formal political system not just save the administrative cost but also distance itself from the increasing uncertainty of globalised markets, which is at the price of partly privatising their regulatory authority and decentralising regulatory resources to private governance competence. Generally, the public reliance on private credit ratings in financial regulation should be considered as a high dependence situation. Pursuant to the theoretical analysis above, without appropriate guidance and constraint from rule making authority and statutory power of public regulators, this one-sided high dependence from public regulators on private CRAs would constitute asymmetric resource interdependence which tends to bias the related gains of those private information intermediaries.

Bonded Rationality of Decentralising Regulatory Resources to Private CRAs

It is noteworthy that the above-mentioned correlation alone cannot prove the causal link between the resource interdependence and the actual establishment of the inter-organisational relationship between public regulators and private CRAs. Public regulators indeed lack essential analytical resources for measuring credit risk and implementing risk-sensitive

⁶¹ Ibid.

⁶² Tsingou (n 10) 64

regulation. However, it may be not the direct cause of the public reliance on specialised information intermediaries, because this public–private governance institution does not necessarily involve an interactive ‘gravitational force’. Instead, it is essentially a consequence of top-down decisions made by public regulators. The supposed causal mechanism behind the combination of public and private regulatory resources is ‘cost–benefit analysis’: public regulators delegate governance tasks and regulatory authority if the (perceived) benefits of making use of CRAs’ knowledge resources through delegation are greater than the perceived agency losses. Both principal–agent and resource dependence theories are based on rationalist assumption, which conceive organisations as rational, selfish and goal-oriented actors who perfectly know how to orient themselves toward the effective and efficient attainment of specific organisational goals. However, in reality, in contrast to perfect ‘classical’ rationality, rationality is bounded and so does their capability.

Public regulators usually make delegation decisions under conditions of imperfect information and cognitive biases. This mean they are actually unable to objectively calculate and weigh the costs and benefits of all possible alternative courses of action without any subjective bias. Due to limited cognitive capacities and considerable time and financial costs of collecting and processing information, actors may deliberately choose from a limited set of behavioural options rather than taking into account all imaginable behavioural options and their consequences. In other words, regulators may accept their bounded rationality and try to do the best they can given the limitations under which they work.⁶³

Furthermore, with uncertainty increasing in modern financial markets, public regulators rely more heavily on ‘rules of thumb’ to roughly guess the cost and benefit without fully recognising the consequence of their decisions. However, relying on rule of thumb would make regulators more prone to looking for what peers in regulatory regimes in other countries do. This implies that there is considerable space for imitation and diffusion of the policy practice of ratings-dependent regulation once it is adopted by a critical mass of states.⁶⁴

⁶³ Kruck (n 1) 104-6

⁶⁴ Kruck (n 1) 90, 106.

Chapter 5. Asymmetric Interdependence between Private Rating Agencies and Public Financial Regulation

The Deficiencies of Business Models

The Incompetence of Rating Structured Instruments

CRAAs play a more important role in structured products (SPs) than traditional credit instruments. Resulting from the complexity and opaqueness inherent to SPs, investors themselves face relatively high costs in obtaining relevant and timely information about underlying assets and assessing their structure and risk profiles. The lack of transparency at the origination stage further increase investors' reliance on CRAAs. During the ascent of the disembedded global financial system, complex financial instruments have grown significantly and generated a significant source of CRAAs' revenues. For example, in 2006, 44 percent of Moody's revenue came from rating structured finance products, surpassing the 32 percent of revenue from corporate bonds.⁶⁵

As CRAAs increasingly focused on more complex, higher-margin deals, it inevitably introduce incentives for leading rating agencies to compromise their standards in order to pursue higher fees from increasingly complex but higher-margin deals.⁶⁶ Furthermore, since CRAAs rate the increasing number of borrowers and their ever-growing complex instruments without allocating adequate resources to update rating methodologies or recruit additional expertise necessary to keep pace with financial innovation, the resources expended per rating necessarily declined.⁶⁷ Finally, the cost of providing a rating became disconnected from the information gap between investors and issuers, and CRAAs businesses became progressively more profitable, even as the informational value of their ratings consistently declined. Attracted by staggering profits, the

⁶⁵ Partnoy (n 20) p 8

⁶⁶ Ibid, 6.

⁶⁷ Claire A Hill, "Why Did Rating Agencies Do Such a Bad Job Rating Subprime Securities?" [2010] *University of Pittsburgh Law Review*, 71, 1-24

reputational constraint alone, which is traditionally conceived as the main counterbalance to unreliable CRAs, seems unable to deter incompetent CRAs from rating complex financial instruments. One widely-recognised cause of the last crisis is attributed to information asymmetry associated with excessively complex financial contracts. With respect to these new instruments, CRAs didn't fulfil their duty as gate keepers to relieve such information asymmetry but become more like "gate openers".⁶⁸

When assets were inefficiently allocated or not in ways investors desired, bundling them into securities could diminish the large yield discontinuity between investment grade and below-investment grade assets. The rationale of securitisation is that portfolios of subprime assets may outperform highly-rated assets on a risk-adjusted basis. Relying on CRAs' assumptions about historical default, recovery, and correlation, extant assets have been repackaged into new highly rated securities and resold in ways that seems carry attractive yields relative to comparable assets. However, due to CRAs' dominant market position, those assets-backed securities (ABS) are intentionally designed to satisfy CRAs' criteria for high credit ratings. While this artificial rating enhancement may open the gate to capital markets for borrowers, it may induce new embedded risks traditionally not associated with highly rated bonds.⁶⁹

Then, with CRAs' assistance, financial institutions began resecuritising those already rather complex ABS into new structured investment vehicle (SIVs) and stratify their capital structures in ways that would create large amount of investment-grade tranches backed by few lower-rated tranches. In this way, market participants sell those structures slice by slice at a total value more than the market price of underlying ABS. This securitisation process has been called "the engine that powered the supply chain" for nonprime mortgages. It drove financial intermediaries to originate new and increasingly risky mortgages, which may be securitised more than once and significantly increase their exposure to synthetic risks which are typically not associated with highly rated securities. The rapid increase of those presumably safe assets

⁶⁸ Mark Froeba, 'Credibility of Credit Ratings, the Investment Decisions Made Based on those Ratings, and the Financial Crisis.' [2 June 2010] *Testimony before the Financial Crisis Inquiry Commission (FCIC), Hearings & Testimony*.

⁶⁹ Frank Partnoy, "How and Why Credit Rating Agencies Are Not Like Other Gatekeepers," *Legal Studies Research Paper Series No 07-46* (University of San Diego, May 2006) 65.

not just spreads default risk across the financial system but also injects new systemic risks into it. The second-level securitisation further worsen this situation, which adds an additional layer of leverage on this risk and thus exacerbate the susceptibility to losses when massive defaults occur in the underlying mortgages.⁷⁰

Since ABS markets is already a deep global financial market with wide implication, there should be no strong economic motivation for resecuritising those first-level securities into advanced CDOs. The increasing demand of second-level securitisation driven by worldwide securities originators and investors implies the possibility that, first-level securities are actually mispriced by ratings-based market mechanism because of failing to thoroughly recognise the underlying major risks. Due to both confidence on CRAs' expert reputation and overreliance on their 'regulatory license', financial institutions, which seek higher ratings for better evaluation of and broader market access to their securities, either cannot effectively challenge the rating results from CRAs, or intentionally ignore the fact that CRAs may misperceive the risks associated with the high-rated tranches, and accept the concept, which have already been proven obviously wrong in the last global financial crisis, that such super-senior CDO tranches posed virtually no risk. Through the effect amplification of market mechanism, the inaccurate benchmark provided by CRAs causes the widespread mispricing of first-level securitisation, which then induce significant systematic risk and serious capital misallocation of financial markets.⁷¹

Overall, the proliferation of second-level securitisation is consistent with substantial overdependence on credit ratings. If ratings accurately capture the risk portfolio including default probability, recovery, and correlation, or if investors have only relied on ratings to the extent they are accurate, there would have little incentive for second-level securitisation. Without mandatory requirements for credit ratings, investors would more likely look through (or simply avoid) the complex structured transactions to better discover their market prices. When the regulatory reliance on ratings could be effectively eliminated, the behavioural

⁷⁰ Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States (January 2011) 128-30.

⁷¹ Partnoy (n 69) 6.

reliance on private ratings would not be easily established, and investors would not be attracted by the unrealistic high yields of structured products with higher-than-justified ratings.

Conflict of interests

While ratings would affect the borrowing cost of regulated entities, there is always pressure for issuers to get better ratings. Before the emergence of rating-dependent regulatory regimes, the market mechanism worked well because CRAs need to preserve their reputation for accurate assessors of credit risk to satisfy the informational need of investors. However, during the last worldwide deregulatory circle in financial industries, CRAs stopped selling ratings to investors and began charging the companies that issue the debt they rate. SEC's substantive reference to CRAs since the mid-1970s for regulatory purposes not only increase the profitability and demand of rating services but also become the significant driving force for the shift from an investor-pay to issuer-pay model. The issuer-pay model introduced significant conflicts of interest, because rating securities of issuers which contribute large amounts of revenues would seriously challenge the neutrality of CRAs as third-party information intermediaries. A common phenomenon probably resulting from those conflicting interests would be that ratings substantially lagged the revelation of public information about rated issuers and instruments, and CRAs repeatedly were forced to revise ratings substantially downward.⁷²

If a rating agency refuse to inflate its ratings to a particular transaction, the issuer could easily take their business to another one and obtain the desired rating. Under competitive pressures, rating agencies "that are compensated by subscribers appear less likely to be susceptible to "rating shopping" or reducing quality for initial ratings to induce revenues."⁷³ Due to the lack of counterbalance and mandatory character of rating-based regulation, CRAs faced little risk of loss from inaccurate ratings, while the potential gains from inaccurate ratings increased. CRAs sometimes claim that their clients are securities issuers rather than rating users. However, considering the fact that the borrowers' cost of higher capital charges will likely be passed on

⁷² Amadou (n 34) 22.

⁷³ Securities Exchange Commission, "Summary report of issues identified in the commission staff's examinations of select credit rating agencies," (July 2008) 12.

to end users at least in part, the real consumer of credit ratings should be investors and regulators who use those ratings to make investment decisions and set capital standards for regulated institutions. Indeed, even in issuers-pay model, market forces led by investors can still penalise discredited CRAs and award reputable ones which produce high quality ratings with the lowest credit enhancement effect. However, without effective constraints either from market mechanism or legal liability, deteriorated reputation alone would not discipline CRAs by imposing significant long-term economic consequences. In sum, leading rating agencies faced a dilemma to maintain both market share and rating quality, which is equivalent to how to balance the interests of investors and issuers..⁷⁴

Furthermore, for maximising profits in this increasingly complex financial environment, CRAs began providing 'regulatory licenses' for structured financial transactions. Unlike the rating of traditional fixed-income instruments, structured financial products are deliberately designed to achieve a particular rating to obtain the access to capital markets. This is because targeted investors may be subject to either regulatory requirements or rating-based constraints in their investment mandates. During the deal origination stage, CRAs not only provide assessments of the underlying collateral asset pools but also provide implicit structuring advice to ensure those transaction can achieve particular ratings. Consequently, ratings of structured products have a decidedly ex-ante character, which contrasts with traditional bond ratings where pre-rating discussions between issuers and agencies are rather limited. While CRAs are involved in the designing process of structured products, it worsen the already controversial conflict of interests..⁷⁵

Model deficiencies

The linchpin of synthetic assets was credit ratings. If CRAs had used reasonable and accurate models and assumptions, then transactions they rated might not be problematic. However, without effective constraint, CRAs faced strong financial incentives to abuse its market position to inflate their ratings for greater market share and rating fees. The simplest way to obtain

⁷⁴ Amadou (n 34) 6.

⁷⁵ Ibid. 15

sufficiently attractive but unwarranted ratings is to use outdated and inapplicable models and assumptions that did not reflect the actual risk and expected yields of underlying assets. Overly optimistic assumptions that senior tranches of structure products have virtually no risk, appeared to be so correct that banks' exposure to these tranches remained apparently hidden from senior managers, investors, and regulators. They typically do not examine the underlying assets of a synthetic structured products in details. Instead, they relied on parameters set by CRAs to replace their independent judgment.⁷⁶

CRAs created models for structured products based on their statistical distribution expectation, which is relevant to expected default rate, recovery rate upon default, portfolios of assets, asset price correlations and the correlation of expected defaults. Pursuant to CRAs' 'recipe' about structured products, second-level securitisation originators seek and bundle relevant ABS (and sometimes derivatives) into advanced CDOs which would generate targeted rating results in the most cost-effective way. As the restrictions on these first-level securities are subject to credit ratings, the second-level securitisation methodology are actually dependent on their previous ratings for first-level securitisation. Meanwhile, due to CRAs' dominant position in financial markets, credit ratings for structured products would in turn influence the price discovery for underlying collateral. This retroaction further bolsters CRAs' rating results.⁷⁷

In this case, when first-level securities' collateral falls in price but ratings on first-level securities do not timely response, the historical ratings methodology would make second-level securitisations unreasonably attractive. Similarly, if underlying ABS falls in price but CRAs' rating model for CDOs still base on the previous historical assumptions, they could create a highly rated, high-yielding set of second-level securities. These model deficiencies embedded in rating-dependence markets multiply the leverage of financial markets and significantly

⁷⁶ Joseph R. Mason and Joshua Rosner, "Where did the risk go? How misapplied bond ratings cause mortgage backed securities and collateralized debt obligation market disruptions," [2007] *SSRN working paper*, available at <<http://ssrn.com/abstract=1027475>> last accessed September 2, 2014.

⁷⁷ *Ibid.* 34-48.

amplify the systematic consequence of potential mistakes at any above-mentioned stage. It undoubtedly impairs the stability and allocative efficiency of financial systems.⁷⁸

From the empirical evidence of the last crisis, CRAs' models usually do not accurately capture the major risk, especially significantly underestimated the asset correlations underlying ABS and CDOs. By February 2008, Moody's had downgraded at least one tranche of 94.2 percent of subprime residential mortgage-backed deals it had rated in 2006. One possible cause is that, while historical data can provide the reliable basis for analysing the correlations in performance of relevant assets, such historical information is not available for new types of credits. Thus, CRAs can only speculate their own estimations about expected statistical distribution. CRAs also complain that, while their analysis largely depend on the quality of information provided to them, they are unable to conduct formal audits of rated companies or search for fraud. This is another probable cause of their malfunction.⁷⁹

Pro-cyclicality

CRAs argue that, ratings should "look through the cycle" and only change when issuer has experienced enduring changes in fundamental creditworthiness. Even though an issuer experiences a change in its financial performance due to the adjustment of macro-institutional environments, its ratings should be maintained if its previous financial condition would likely be restored during the next phase of the cycle. Credit ratings should be, in theory, more stable than "point-in-time" market prices which may capture transitory market expectations and volatile risk.⁸⁰

However, the last financial crisis shows that, in reality, ratings often fuel investments in "good times" and accelerate market losses in "bad times", which facilitates systemic turbulence of financial markets. The maintenance of investment-grade ratings before the crisis and the

⁷⁸ Ibid.

⁷⁹ Frank Partnoy, 'Overdependence on Credit Ratings was a Primary Cause of the Crisis' *Legal Studies Research Paper Series Research Paper No. 09-015* (University of San Diego, July 2009) 9. Also see Securities Exchange Commission (n 73) 14.

⁸⁰ Amadou (n 34) 27-9.

subsequent sharp downgrades during the crisis impart a pro-cyclical element, exacerbating herding behaviour and contributing to massive turnaround in capital flows. Unanticipated abrupt downgrades of securities are therefore negative shocks to financial markets and can affect one issuer, a whole sector, or the entire financial system. Generally speaking, 1. rating actions may be statistically correlated with the credit cycle; 2. rating actions may cause or amplify the credit cycle; or 3. rating actions may initiate or increase the poor condition of individual companies.⁸¹ This pro-cyclicality induces significant challenge to the public authorities, who seek to smooth the functioning and maintain the stability of financial markets.

The Rebalance of Asymmetric Interdependence

In order to relieve the negative consequence of CRAs' deficient business models, rating users should first of all recognise the uncertainty around ratings, and differentiate products according to their qualitative nature of risk characteristics. Investment and risk management frameworks must not inappropriately rely on CRAs' ex-ante untestable quantitative speculation without adequate historical data. And for regulators, they should review their rating-based rules, which create perverse incentives for investors and induce uncritical reliance on ratings as a substitute for independent evaluation. Then regulators should also relieve the oligopolistic feature of credit rating industries, at least to the extent which is artificially imposed by their mandatory rating-based requirements, by rationalising its competition mechanism. Meanwhile, CRAs themselves should be encouraged to assess the credibility of received information; ensure transparency of rating methodologies; and address their independence through decreasing potential conflicts of interest, including reforming their remuneration models.

Competition

Some say the problem is due to insufficient industry competition and the corresponding solution should be increasing the number of CRAs. The credit rating industry is often characterised by incomplete, or at least ineffective, competition and an oligopolistic market. The biggest three

⁸¹ Richard Cantor and Mann C. "Are Corporate Bond Ratings Pro-cyclical? An Update" *Moody's Investor Services, Moody's Global Credit Policy, Special Comment* (May 2009).

CRAs (Moody's, S&P's and Fitch) exercise considerable influence on the global flow of capital without serious competitors. Rating-based regulations, which usually operate with an approval system for recognised CRAs, created a substantial entering barrier to the rating industry and thus reduce its market competition.⁸² Although it seems reasonable to enhance competition by opening the CRA designation process to facilitate the development of smaller and new rating agencies as the competitor with the big three, merely approving more CRAs may fail to change the fundamental feature of the rating business, which is the provision of "regulatory licenses". Moreover, if CRAs compete on lowering their standards to attract more business instead of competing on quality ratings, enhanced competition among CRAs may lead to the problem of "race to the bottom". So long as credit ratings are mandatorily required in public regulation, increasing the number of CRAs may actually result in an ill-conceived competition which inflates ratings. Issuers can easily hire the CRA which is the most malleable with the investment-grade rating.⁸³ Therefore, enhanced competition in the rating industry can only be restored after eliminating the regulatory use of credit ratings. Furthermore, it is also possible that credit rating industry is a naturally oligopolistic market. If public force uses its administrative power to drive up the number of CRAs, it may not challenge the dominant position of the biggest CRAs except interrupting the normal function of markets' invisible hand.

Conflict of interests

Under Basel regulatory systems, credit ratings will effectively affect the financing cost of regulated entities. As the importance of credit ratings increases, the pressure to get better ratings will also increase. From this perspective, when CRAs provide issuers both rating service and corresponding advice about how to achieve that specific rating, this dual-role would constitute the conflict of interests and should be separated. One frequently cited solution is to transfer the business model from 'issuers pays' to 'investor pays' and make CRAs directly accountable to the end-users of credit ratings. More importantly, it should be no longer legitimate that CRAs

⁸² SEC. "Report on the Role and Function of Credit Rating Agencies in the Operation of the Securities Markets: As Required by Section 702(b) of the Sarbanes-Oxley Act of 2002." (January 2003). Available at <<http://www.sec.gov/news/studies/credratingreport0103.pdf>> last accessed 02 September 2014.

⁸³ John C Coffee, "What Went Wrong? An Initial Inquiry into the Causes of the 2008 Financial Crisis," [2009] *Journal of Corporate Law Studies*, 9, 1-22.

provide advisory service to issuers. Instead, they can only provide such service to investors and regulators about how to use those ratings.

A shift to an investor-pay business model may not be a viable solution given the public good nature of ratings, since free rider dilemma would depress the incentives of dispersed rating users to collectively pay for credit ratings. Forcing CRAs to rely exclusively on investors to generate rating fees would result in a lack of financial resources and therefore a decreasing production of financial information. Furthermore, as pressure from clients are double-direction, subscriber-paid credit ratings are not exempt from conflicts of interest. Market forces may press CRAs to issue credit ratings which are inappropriately stringent so as to improve the expected returns of ratings end-users. Meanwhile, financial institutions which are limited to highly-rated instruments might pressure CRAs to guarantee that a particular security receives an investment-grade rating.⁸⁴

Some suggests the establishment of centralised clearing platforms for ratings, creating a platform that would take payments from issuers and assign securities to one or more CRAs. This clearing platform may not necessarily compromise the accuracy of their ratings since the operator of that platform may find way to ensure the rating quality. However, this interference would impair the competition mechanism of market force and drive up the cost of ratings due to the lack of effective market mechanism to screen out the inefficient CRA. In contrast, the more practical and necessary solution is to withdraw the rating-based regulation. It would remove many distorted incentives that led financial institutions and rating agencies to create an unreasonably prosperous SPs market based on inaccurate ratings.⁸⁵

Transparency

As many financial transactions are embedded with ‘rating trigger’, which will automatically oblige counterparties to provide additional collateral or repay outstanding loans when the rating falls below a certain level, the chain reaction of widespread ratings downgrades can lead to a

⁸⁴ Joseph (n 74) 17-19.

⁸⁵ Amadou (n 34) 22.

sudden dry up of market liquidity. Regulators need to measure the systemic exposure to downgrade risk during boom cycles, one approach is to conduct stress test of the consequences of sudden ratings downgrades for systemically important institutions. Enhanced transparency in credit rating markets can help measure and thus reduce such systematic impact, since adequate and accurate information about the balance sheet and off-balance sheet positions of financial institutions is the basis of conducting scenario analysis.⁸⁶

Substitutes

To relieve overreliance on ratings, credible alternatives must be developed. One feasible instruments Credit Default Swaps (CDS), which was created by financial institutions to obtain synthetic exposure to the performance of a pool of assets without actually buying such assets. CDS markets have been criticised as gambling because it is based on side bets derived from the value of underlying assets. However, this criticism ignores the benefits associated with price discovery. CDS markets are like other speculative markets which are useful for markets prediction. Just as the condition of banks can be assessed based on stock returns, debenture risk premiums, and uninsured deposit spreads, so too can CDS spreads be used to assess the health of capital's borrowers. A method to smooth the drastic price fluctuation of this 'gambling casino' is to adopt lagged data, such as 30-day or 90-day rolling averages. The advantage would be to remove the volatility arising out of a day-to-day basis measure.⁸⁷

Even though market-based measures like CDS have been criticised in various ways, the evidence from the last crisis suggests that CDS spreads reflect underlying credit risks more quickly and accurately than credit ratings. By early 2008, CDS spreads reflected a significantly increasing likelihood of default by major investment banks. Meanwhile, credit ratings did not capture this informational change of rated financial institutions, even though their increased riskiness have already been widely-recognised. CDS spreads, as the prediction of market participants, reflected both systemic risk and individual institutional risk. These risk discovery

⁸⁶ Ibid. 29

⁸⁷ Frank Partnoy, Mark J. Flannery Joel F. Houston [2010] "Credit Default Swap Spreads as Viable Substitutes for Credit Ratings," *University of Pennsylvania Law Review*, 2085-2102.

functions can be reinforced by the fact that standardised CDS contracts are based on five year agreements. If the market reflects an assessment that the average default probability over a five-year period has slightly risen, one might reasonably expect a relatively small change in CDS spreads, which usually cannot be reflected in credit ratings.⁸⁸ Furthermore, CDS spreads effectively incorporate available information in a quantitative way, which makes them easily observable and particularly useful for regulatory and risk management purposes.

Chapter 6: The Unchecked Power of Credit Rating Agencies

The Absence of Legal Liability

Paradoxically, even as credit ratings became less accurate compared with market-based substitutes, CRAs still maintain their systematically important position in the existing global financial governance architecture, and remain overwhelming power substantially unchecked. This lack of accountability constitute the ‘accountability gap’ between the quasi-regulatory power and the lack of effective oversight.⁸⁹

CRAs assess the creditworthiness of issuers on an ongoing basis, and the relative likelihood that debt will be repaid both in time and to full extent. CRAs typically insist that ratings are merely opinions about comparative credit risk rather than investment recommendations which address the suitability of a particular financial product/investment for a particular investor. Characterising their ratings as purely “opinions”, CRAs seek to deny potential legal liability. In the U.S. legal context particularly, constitutional right to free speech in the First Amendment allows CRAs to be protected from civil and criminal liability caused by expressing their opinions.⁹⁰ Meanwhile, in order to justify their rating determinations are opinions, CRAs simultaneously seek to objectify their views as ‘facts’, masking the inherent tentativeness of the rating process.⁹¹ Also, CRAs sometimes produce ratings on their own initiatives without

⁸⁸ Ibid.

⁸⁹ Kerwer(n 36) 455.

⁹⁰ Frank Partnoy (n 69) 60-91.

⁹¹ Senate Committee on Governmental Affairs report, “Financial Oversight of Enron: The SEC and Private-Sector Watchdogs” (2002) 107-75.

the request from issuers, using only publicly available data on borrowers or financial products.

Through this unpaid unsolicited rating, CRAs seek to claim themselves as financial press, which is with more public character and subject to less regulation, rather than financial institutions, which provide paid service to specific clients and usually subject to strict regulation.

Except the liability exemption from constitutional right to free expression, CRAs have also successfully protected their franchises from top-down public legislation, which exempt them from several liabilities, and a handful of down-top judicial decisions, which generally hold them merely liable for recklessness not negligence. This liability standard constitutes a very high hurdle for plaintiffs.⁹² With rare exceptions, rating agencies historically have not suffered damages from litigation even when they were negligent or reckless in issuing overly optimistic ratings. However, recently, courts have expressed skepticism about this asymmetric legal liability between rating users and rating producers and start reviewing their free speech claims. Moreover, public legislation such as the US Dodd-Frank Act marks a turning point by removing the special treatment for CRAs.

In sum, the lack of accountability has impeded the ability and willingness of CRAs to effectively function as information intermediaries because they actually do not credibly pledge reputational and economic capital whenever they fail to perform their core function expected by rating users. When CRAs are insulated from necessary liability and with a profitable, powerful franchise, their roles as gatekeeping are seriously challenged and raise a crucial question about how to rebalance this asymmetric liability and profitability.⁹³

Closing the Legal Loopholes of Financial Systems

The Facilitation of Private Rights of Action

In substance, the business of CRAs are actually subsidised by legislation in the form of rating-based financial regulation. From the perspective of regulatory legitimacy, such regulatory

⁹² Kerwer(n 36) 469.

⁹³ Partnoy (n 69) 96-7.

reliance should be removed. Partly for the implicit subsidy from rating-based regulation, CRAs' profit margins have exceeded 50 percent, whereas more traditional publishing companies' profit margins have been less than 10 percent. As CRAs enjoy much higher profitability than traditional publishers, it would be more reasonable if they correspondingly bear more liability. Meanwhile, considering that most financial market gatekeepers have been subject to serious litigation threats, it is rather specious that ratings are merely "opinions" and thus entitled to the same freedom of speech or journalistic privilege as publishers. While litigation against CRAs is often effectively deterred by statutory provisions and judicial precedents that limited their legal liability, CRAs have only been sued relatively infrequently, and rarely have been held liable.⁹⁴

"It is difficult not to wonder whether lack of accountability – the agencies' practical immunity to lawsuits and nonexistent regulatory oversight – is a major problem".⁹⁵ If with appropriate adjustments, private litigation could become a viable tool for ensuring CRAs' accountability. Under the threat of liability, as rational economic actors, gatekeepers would be less likely to engage in negligent, reckless, or fraudulent behaviour, since they have to factor in the expected costs of litigation, including defending lawsuits as well as any damage awards or settlements. Therefore, Legal professionals in public sectors should seek to enhance the viability of private rights of action against CRAs rather than further exempt their liability in securities law.⁹⁶ Particularly in circumstances where CRAs have highly initial and ongoing involvement in complex second-level securitisation transactions and capture significantly higher payments than traditional information intermediation, judges should distinguish judicial precedents and make it clear that CRAs are subject to civil liability and not fully exempted by First Amendment privileges.

Recently, the Federal Court of Australia confirmed, as a matter of Australian common law, CRAs owe duty of care to investors in rated financial products. As such, the rating agency must exercise reasonable care and skill in the issue of the credit rating. The essential basis on which

⁹⁴ Partnoy (n 20) 5.

⁹⁵ Senate Committee on Governmental Affairs report (n 91) 90.

⁹⁶ Partnoy (n 69) 61.

the Federal Court reached that conclusion was that the rating agency knew that potential investors would rely on its opinion regarding the financial creditworthiness of a structured credit product when making investment decisions. Considering the absence of a contractual relationship, the Federal Court asserts that when S&P issued an AAA rating to an ascertainable class of investors, a contractual nexus was not required for liability to ensue. And probably due to above-mentioned rationales for overreliance on CRAs, the Federal Court found that investors/rating users were actually unable to replicate or “second guess” S&P’s rating about complex structured products. The Bathurst case is noteworthy because it is the only common law case in which a ratings agency has been found substantially liable to compensate investors for losses suffered as a result of ratings which were found to have under-estimated the default risk of products which performed poorly during the financial crisis. The decision will be of wider significance in other common or civil law jurisdictions.⁹⁷

Statutory legislation should also indicate that CRAs are subject to private rights of action under the statutory provisions of securities laws (in contrast to pure private law). That legislation should provide a description of the pleading standard for cases against CRAs, such as indicating what situation would be sufficient for a plaintiff to plead that CRAs fail to conduct a reasonable investigation of the rated security or to obtain reasonable verification from other independent sources other than issuers. After June 2013, the European Regulation on Credit Rating Agencies has introduced a statutory cause of action. When the investor who has acted reasonably in relying on the rating suffers loss as a result of investing in rated products, they are provided with a claim if a rating agency has, intentionally or with gross negligence, committed a breach of the regulatory requirements contained in the Regulation.,⁹⁸

One positive side-effect of imposing accountability on CRAs through enhancing private rights of action is that it would obviate the workload of regulators to provide parameters about when CRAs have satisfied their responsibilities as information intermediaries. In other words, ex ante oversight does not need to be as specific or draconian if regulators and investors can rely on ex

⁹⁷ ABN AMRO Bank NV v Bathurst Regional Council [2014] FCAFC 65

⁹⁸ Regulation (EU) No 462/2013 of the European Parliament and of the Council of 21 May 2013

post adjudication of CRAs' misbehaviours. Public regulators, judges and private litigants could develop a common law understanding in this issue, and thus substantially increase litigation exposure for CRAs. However, if CRAs owed a legally enforceable duty to anyone who decided to take action based on a rating which they had issued, it may encourage greater reliance on ratings by "turn[ing] predictions about the future into guarantees".⁹⁹

The Enhancement of Public Methods

Free-standing Regulatory Agency

Public legislators may create a free-standing entity specifically dedicating to the regulation of CRAs, with a structure and mission similar to the regulatory agency of other financial information intermediaries, such as Public Company Accounting Oversight Board. Ideally, this rating agency overseer would have two overriding characteristics: independence and specialised expertise. To satisfy these elements, independent, consistent and sufficient funding is necessary. For situations where regulatory agencies already have the needed resources but simply lack of adequate authority and legal instruments to regulate CRAs effectively, the greater administrative jurisdiction should be delegated by legislative agencies to regulatory agencies. However, the increasing fragmentation of financial regulation would add more layers to the already complex regulatory web in modern financial systems.¹⁰⁰

Disclosure Obligations

Effective oversight of CRAs must include market oversight, which requires that investors have access to adequate data regarding ratings. Statutory authority should require significantly more extensive disclosure of CRAs, such as record of rating history, including initial rating, upgrades, downgrades, placements on watch for upgrade or downgrade, and withdrawals.

⁹⁹ ABN AMRO Bank NV v Bathurst Regional Council [2014] FCAFC 65

¹⁰⁰ Partnoy (n 20) 7.

Flawed methodologies were considered a core reason CRAs gave overly optimistic ratings to complex structured finance instruments. Allowing investors the opportunity to analyse rating agencies' methodologies could serve as a vital market-based quality check. An oversight board should sanction CRAs whose ratings consistently failed to meet an acceptable level of accuracy, and bar them from issuing ratings on new types of securities with little historical data. Certain rating methodologies might be so systemically important to the global market that disclosure requirements are necessary, even though CRAs may contend that, their methodologies are proprietary and requiring detailed disclosure of their business operation would promote free-riding, remove incentives for innovation, and induce the homogenisation of rating models.¹⁰¹

An alternative is to oblige CRAs to disclose their rating fee schedules and compensation structure. It reduces agency costs and enables investors to determine whether the incentives of the rating agency are sufficiently well aligned with their investment interests.¹⁰² Moreover, such disclosure could reveal potential conflicts of interest arising from a rating agency's revenues heavily relying on a particular issuer contribution. Some also suggested that issuers could pay a small percentage of any fees upfront, with the remaining fee being "earned out" in the following years until the maturity of rated instruments. To motivate CRAs to consistently update their outstanding ratings, fees should depend on certain contingencies or milestones, and related to the accuracy of their ratings, which are assessed by comparison with other market-based measures of credit risk such as CDS. Over time, such performance-based compensation may discipline CRAs to strive for greater accuracy. However, these fee structures could create perverse incentives if CRAs became reluctant to downgrade borrowers or credit instruments for fear of causing further deteriorations that would lead to further downgrades.¹⁰³

Rating Report

¹⁰¹ Gregory W Smith, "Approaches to Improving Credit Rating Agency Regulation", *Testimony before the Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises of the House Committee on Financial Services* (19 May 2009).

¹⁰² SEC (n 73) 10-15.

¹⁰³ Jeffrey Manns, "Rating Risk after the Subprime Mortgage Crisis: A User Fee Approach for Rating Agency Accountability" [2009] *North Carolina Law Review*, 87, 1011-1089.

There should be some mandatory requirements about rating reports rather than just the financial results of ratings. Firstly, rating symbols should differ with the nature of ratings. A detailed report should be attached to the rating result and describe the unique rating methodologies. Then, it should indicate how the security's risk characteristics differ from others, especially the difference between traditional credit instruments and structured products. It is worth considering to apply special symbol system to structured products only, since different symbols could help rating users differentiate risk characteristics of innovative instruments, which are potentially more volatile but inadequately investigated, from those of traditional securities. On the other hand, if CRAs were required to apply different symbols to different categories of securities, rating users might be more confused rather than informed.¹⁰⁴ What's more, CRAs may contend that mandating different nomenclature for different types of credit instruments would violate their First Amendment privileges.¹⁰⁵

Inside Information

In U.S., for years rating agencies enjoyed an exemption from public regulation, thereby allowing them to receive selective disclosure of material inside information from issuers that is not shared with the public market. Therefore, CRAs often had unfair access to privileged information denied to investors and regulators. The agencies contend that the exemption is needed in order to fully evaluate credit risk. However, there is no evidence that CRAs reflect inside information in their ratings.¹⁰⁶

Conflicts of Interest

CRAs should be obliged to optimise its business model and enhance its disclosure of conflicts of interest. An alternative to a blanket prohibition of the issuer-pay business model would be to require increased disclosure of business relationships and to prohibit CRAs from engaging in ancillary business activities (such as consulting services) except issuing ratings, just like the

¹⁰⁴ Claire A Hill. 2004. "Regulating the Rating Agencies," *Washington University Law Quarterly*, 82, 43-94.

¹⁰⁵ SEC (n 73) 10-15.

¹⁰⁶ Partnoy (n 20) 12.

restrictions imposed on auditors.¹⁰⁷ Regulators could be more involved in the corporate governance of CRAs, because the government has so many stakes in those institutions because of regulatory reliance on credit ratings. When rating agencies played a quasi-governmental role, their powers arguably require stronger checks and balances.

Capping the Value-added of Resecuritisation

Regulators should consider the feasibility of using administrative power to constrain the quantitative divergence between the total sale value of all the slices of structure products and the total market value of assets-backed securities underlying such structured products. It is probably not the best solution for overreliance on CRAs because it impairs the allocative efficiency of financial wizardry, but it may promote the systematic stability, which is particularly attractive during turbulent times.

To respond to above-mentioned regulatory reforms, some critics argue that too much oversight would raise regulatory barriers to entry and thus undermine competition in the rating industry. The oversight regime induces difficulty for new and small competitors of the big three CRAs to comply with all regulatory requirements, which may further expand the quasi-public oversight of existing CRAs to a greater extent. In principle, regulatory reform should not make incumbents even more systematically important and powerful. Another critics is that, regulators are not necessarily more capable to detect rating inaccuracies than market participants, even though they had failed to discipline those rating agencies.¹⁰⁸

Chapter 7. Outlook and Conclusion

Public financial regulators are conceived as rational organisations aiming at producing public goods, which are systematic stability and allocative efficiency of financial market. However,

¹⁰⁷ Ibid. 11.

¹⁰⁸ John Patrick Hunt. "Credit Rating Agencies and the "Worldwide Credit Crisis": The Limits of Reputation, the Insufficiency of Reform, and a Proposal for Improvement" [2009] *Columbia Business Law Review*, 109-209.

they lack and thus pursue essential analytical resources for achieving these organisational goals, especially in situations of higher uncertainty and complexity of organisational task achievement, which are conditioned by different macro-institutional socioeconomic contexts. In order to utilise analytical resources which are essential for goal attainment and difficult to be replaced by other substitute, public regulators seek to establish relationships with transnationally operating CRAs. The relationship initiated by public regulators can be conceived as a principal-agent relationship with a specialised agent. In this principal-agent relationship, regulators exchange their dominant regulatory authority with private CRAs for their independent analytical resources. Through delegating governance tasks and regulatory authority to CRAs, they not only improve regulatory effectiveness and efficiency but also enhance the political neutrality and creditworthiness of financial regulatory policies.

Delegation of regulatory authority necessarily involves some agency costs. In this case, financial regulators may lose certain degree of control over regulated entities and may have to allocate extra resources for control mechanisms to avoid agency slack. Ideally, rational public regulators will delegate regulatory authority to CRAs only if the perceived benefits, in terms of organisational goal attainment, are larger than expected (agency) costs. Generally, the degree of regulatory dependence on independent analytical resources largely determine the degree of regulatory use of credit ratings. Meanwhile, the regulatory dependence on CRAs' analytical resources is codetermined by the essentiality and the substitutability of private credit ratings, which are conditioned by the macro institutional socioeconomic contexts. From this perspective, disembedded liberalism, which is led by major Anglo-Saxon nations and prevailing in the current global economic architecture, drives global financial governance to a higher degree of dependence on private CRAs.

CRAs were largely exempt from liability and oversight until recently. Meanwhile, resulting from regulatory regimes which make substantial reference to and delegate mandatory characters to credit ratings, CRAs have obtained great authority with systematic influence in global financial markets. Considering CRAs' prominent role in the emergence of the recent global financial crisis, regulatory reference on credit ratings must be eliminated as it is the fundamental

cause of overreliance on CRAs. Also, legislative authority should impose new liability and oversight regime on CRAs, since more vigorous oversight measures and effective accountability can improve their performance. However, behavioural overreliance on CRAs will not necessarily disappear even when references to ratings are removed from public regulation, market participants may keep using credit rating for decision makings since it has deeply been anchored in the financial markets.

The central task of this regulatory reform is how to develop a healthy and competitive financial information market, which would consistently provide reliable information intermediation services between the capital borrowers and lenders. The priority of financial regulation is not necessarily eliminating all the turbulence of financial systems but to unclog the blocked information channel between different either vertical or horizontal subsystems in order to stop the accumulation of oppressed energy. Once the suppressed potential energy has been eventually released, it would constitute a destructive power and subsequently cause the unexpected systematic chaos at the global level. One solution is to find the appropriate substitutes for ratings. When previous rating users become more comfortable with alternative sources of credit information, competitive pressure would spurs CRAs to improve their performance and accountability. In sum, the goals behind the above-mentioned measures is to rebalance the asymmetric principal-agent relationship between, profitable private information intermediaries who lack of adequate accountability and liability, and public financial regulators which desire independent analytical resources but cannot afford the failure of their organisational goals --- systemic stability and allocative efficiency of financial markets.

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