

The Regulatory Use of Credit Ratings in Germany and the US: A Resource Dependence View on the Transfer of (Quasi-)Regulatory Authority

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Abstract

In the decades before the global financial crisis public regulators in the US but also in Continental Europe increasingly used private credit ratings as risk measures in financial regulation, thus granting credit rating agencies (CRAs) (quasi-)regulatory authority in financial market governance. The article draws on resource dependence theory – supplemented by insights from principal-agent theory and the varieties of capitalism approach – to explain common trends as well as differences in the regulatory use of credit ratings in the US and Germany before the global financial crisis. I argue that, through the regulatory use of credit ratings, state actors delegated (quasi-)regulatory authority to private expert agents, i.e. CRAs, because public regulators lacked essential analytical resources to cope with financial market uncertainty. Varying degrees of US and German regulators' dependence on CRAs' analytical resources led to variations in the regulatory use of CRAs' ratings. The extent of public dependence on private expertise was, in turn, conditioned by different macroinstitutional settings, i.e. Anglo-Saxon and "Rhenish" varieties of capitalism. The plausibility of these theoretical propositions, which could be useful for the analysis of privatization processes far beyond the specific case of CRAs, is probed, firstly, in an intertemporal and interregional analysis of the inclusion of credit ratings into financial regulation and, secondly, by re-tracing German and US negotiating positions in the Basel II process.

Zusammenfassung

In den Jahrzehnten vor der Weltfinanzkrise haben staatliche Regulierungsbehörden in den USA aber auch in Kontinentaleuropa zunehmend private Kreditratings für regulatorische Zwecke genutzt. Dadurch wurde privaten Kreditratingagenturen (quasi-)regulatorische Autorität im Bereich der Finanzmarkt-governance übertragen. Der Artikel erklärt gemeinsame Trends und länderspezifische Unterschiede in der regulatorischen Nutzung von Kreditratings in den USA und in Deutschland vor der Weltfinanzkrise. Un-

ter Rückgriff auf insbesondere die Ressourcendependenztheorie sowie die Prinzipal-Agenten-Theorie und den *Varieties of Capitalism*-Ansatz argumentiere ich, dass staatliche Akteure durch die regulatorische Nutzung von Kreditratings (quasi-)regulatorische Autorität an private Expertenagenten übertragen haben, weil es den öffentlichen Regulierungsakteuren an essentiellen analytischen Ressourcen zum Umgang mit Unsicherheit auf den Finanzmärkten mangelte. Unterschiedliche Grade der Abhängigkeit US-amerikanischer und deutscher Regulierungsbehörden von den analytischen Ressourcen der Ratingagenturen führten zu einer unterschiedlich stark ausgeprägten Nutzung von Kreditratings in der Finanzmarktregulierung. Das Ausmaß der Abhängigkeit von privater Expertise lässt sich wiederum als Folge von unterschiedlichen makroinstitutionellen Kontexten – angelsächsischen bzw. rheinischen Spielarten des Kapitalismus – verstehen. Die Plausibilität dieser (potentiell auch für andere Fälle der Privatisierung von *Governance* fruchtbaren) theoretischen Argumentation wird durch eine intertemporale und interregionale Analyse der Ratingnutzung und eine Rekonstruktion der deutschen und US-amerikanischen Verhandlungspositionen im Basel II-Prozess unterstrichen.

1 Introduction

In the wake of the global financial and the European debt crisis, the recognition that credit rating agencies (CRAs) play a critical role in guiding the allocation of capital in financial markets has moved beyond academic circles to enter broader public debates about the state-of-affairs and the future shape of the global and European financial systems (see Langohr/Langohr 2008). Despite the growing interest in CRAs' power, authority and lack of accountability (see Bolton et al. 2012; Bruner/Abdelal 2005; Gärtner et al. 2011; Gras 2003; Kerwer 2005; Levich et al. 2002; Nölke 2004; Rona-Tas/Hiß 2011; Sinclair 2001, 2005; Strulik 2007) as well as in the regulation of CRAs (Andrieu 2010; Ditttrich 2007; Hiß/Nagel 2012; Pagliari 2012), little attention has been paid to how and why *states* have bolstered CRAs' influence and authority through the public regulatory use of private credit ratings (but see Hiß/Nagel 2012: 49-50, 72-73; Partnoy 2006, 2009; White 2010).

Credit ratings have been used by public regulatory bodies, *inter alia*, to increase the risk sensitivity of investment restrictions for certain financial institutions (e.g. banks, pension

funds), to define differential disclosure requirements for issuers of rated bonds with reference to the rating obtained from CRAs, and to adjust capital reserve requirements for banks and institutional broker-dealers to their credit risk exposure (Kerwer 2002: 304; Sinclair 2005: 42-4). Ratings-dependent regulation further boosted CRAs' power in financial market governance by creating additional demand for credit ratings (Partnoy 2006), authorizing CRAs' role as *de facto* gate keepers to financial markets and, most specifically, publicly enforcing CRAs' private standard of credit-worthiness. In the absence of regulatory recognition, CRAs' standard of credit-worthiness was "merely" based on CRAs' reputation as experts and their ensuing legitimacy in the eyes of other financial market actors (Nölke 2004: 163-4; see Nölke/Perry 2007). The regulatory use of credit ratings for public purposes did not only reinforce the expert authority and the perceived reliability and legitimacy of CRAs; it also made it mandatory for financial market actors to observe CRAs' standard of credit-worthiness (Kerwer 2002: 303-4; Sinclair 2005: 46; see Brunsson/Jacobsson 2002: 134). Thus, by relying on credit ratings, public regulators delegated governance tasks – i.e. risk measurement for the purpose of flexible risk-sensitive regulation – and (quasi-)regulatory authority to private expert agents, namely CRAs.¹ Once their ratings were used in financial regulation, CRAs were turned into publicly authorized agents of the principal "public regulator" and, through their credit-risk assessment activities, performed a governance task on behalf of public regulators (see Hawkins et al. 2006; White 2010) – without facing adequate public oversight and control.

While in the two decades before the global financial crisis the regulatory use of credit ratings spread from the US across OECD countries and finally also reached reluctant Germany, there continued to be remarkable differences between US and Continental European regulatory systems concerning the quantitative and qualitative extent to which financial market regulators and super-

¹ This did not happen incidentally; public actors were well aware of the transfer of authority being implied in the use of credit ratings in regulation as the dictum of former US Senator Joe Lieberman that CRAs' power was "government-conferred power" (Lieberman 2002) betrays.

visors came to rely on CRAs' credit risk assessments (Richter 2008; Rosenbaum 2009: 22-3). In this article I draw on resource dependence theory (RDT) – supplemented by insights from principal-agent theory (PAT) and the varieties of capitalism (VoC) approach – to explain both common trends and marked differences in the regulatory use of credit ratings in the US and Germany before the global financial crisis. I argue that, through the regulatory use of credit ratings, state actors delegated (quasi-) regulatory authority to private expert agents, i.e. CRAs, because public regulators lacked essential analytical resources to cope with financial market uncertainty. *The higher the degree of public regulators' dependence on CRAs' analytical resources, the higher would be the degree of public regulators' use of CRAs' ratings in regulation.* Thus regulatory differences between Germany and the US can be explained with different levels of US and German regulators' dependence on CRAs' analytical resources. The different extents of public dependence on private expertise were, in turn, conditioned by different macro-institutional settings, i.e. varieties of capitalism. *An Anglo-Saxon variety of capitalism (liberal market economy) creates pressures for a considerably higher degree of regulatory reliance on CRAs (private expert agents) than a "Rhenish" variety of capitalism (coordinated market economy).*

This article makes several contributions to the literature. First of all, it provides the first systematic and theory-guided comparative analysis of the regulatory use of credit ratings in Germany and the US, thus *explaining* an important, but still under-researched and, in particular, under-theorized facet of CRAs' power. Secondly, my analysis of CRAs points to, and explains, both (limited) convergence and continued differences in US and German financial market governance. Thirdly, the proposed theoretical framework, which centrally builds on resource dependence theory (RDT), enhances the analytical rigor of extant accounts of expertise-based delegation and states' capacity gaps in financial market governance (see section 2). The empirical analysis demonstrates the usefulness of RDT for explaining varying levels of delegation to private experts. In fact, the macroinstitutionally embedded resource-dependence perspective of this arti-

cle should be helpful for capturing transatlantic commonalities and differences in the delegation of political authority to private actors far beyond the case of CRAs. Finally, the analysis underlines in one more issue-area the usefulness of the varieties of capitalism approach when it comes to capturing transatlantic differences in financial market governance (see Nölke/Perry 2007).

The remainder of this article is structured as follows: Section 2 introduces the theoretical framework for analysis in more detail and derives a specific testable hypothesis. Section 3 provides a comparative overview of the use of credit ratings by US and German regulatory bodies. In section 4 I show that both intertemporal and cross-country (US and German) patterns in the regulatory use of credit ratings correspond to the expectations of the proposed theoretical framework. Section 5 draws on this framework to account for US and German positions in the negotiations that led to the inclusion of provisions for ratings-dependent banking regulation into the 2004 Basel II Accord. The conclusion (section 6) sums up the main findings, discusses the broader relevance and limitations of these findings and briefly reflects on some regulatory changes after the global financial crisis.

2 Explaining the Transfer of (Quasi-)Regulatory Authority: Resource Dependence and Macroeconomic Context

2.1 A Resource-Dependence View on Delegation to Expert Agents

In general terms, a lack of policy-relevant information and expertise on the part of state actors has commonly been considered a key rationale for the delegation of governance tasks and political authority to specialized – national, international or transnational – expert agents (Hawkins et al. 2006: 13-15; Pollack 2003: 23, 28-9; Thatcher/Stone Sweet 2002). However, scholars in the tradition of principal-agent theory (PAT) have so far failed to explicate and operationalize the resource dependence argument which implicitly underlies the notion of delegation to a specialized

agent due to states' limitations in expertise and informational resources. In the following, I seek to show that resource dependence theory (RDT) advances our understanding of delegation to private actors in that it provides a clear-cut, empirically testable hypothesis specifying *why, under what conditions and to what extent* public regulators will delegate (quasi-)regulatory authority to private expert agents such as CRAs. Taking recourse to RDT ameliorates (self-declared) shortcomings of PA approaches that are deficient in terms of causal-theoretical saturation (Hawkins et al. 2006: 9-10; Thatcher/Stone Sweet 2002: 3).² Moreover, it puts wide-spread, but often under-theorized *ad hoc* arguments about missing state capacities for effective financial market governance (Eichengreen 1997; Major 2009; Speyer 2006; Strange 1988; Tsingou 2008; see Mayntz 2010 for a recent more nuanced view) on a theoretical footing that allows for systematic comparative analysis over time and across countries. My resource dependence argument thus enhances existing underspecified explanations for delegation and theorizes claims about (varyingly large) capacity gaps of states.

RDT, which emerged as a major approach of interorganizational analysis in the late 1970s but was (re-)discovered by political scientists only quite recently (see Brühl 2003; Kruck 2011; Liese 2009; Nölke 2004; Rittberger et al. 2010: 332-9; Rittberger/Kruck 2010; Steffek 2013), is based on a view of organizations as rational self-interested actors that are oriented toward the effective and efficient attainment of specific organizational goals (Pfeffer/Salancik 1978: 23; Scott 1981: 57). The underlying rationale for establishing relationships with other organizations is an organization's lack of self-sufficiency, i.e. its need for access to specific external resources which are crucial to

² Even proponents of PAT have admitted that "as causal theory – that is, as an integrated body of concepts, operationalisable variables, and testable propositions – it remains incomplete" (Thatcher and Stone Sweet 2002: 3) and that "the propositions about why principals delegate (...) build on existing theories" (Hawkins et al. 2006: 9-10). PAT mostly implicitly relies on a number of causal assumptions taken from other theories. The proposed theoretical framework, which is based on RDT, explicates the theoretical assumptions underlying the argument of expertise-based delegation and provides a strong, falsifiable causal hypothesis (see below).

achieve its particular objectives. This may include material resources, e.g. funds, technical material, and personnel, as well as immaterial resources, e.g. information, expertise, and legitimacy. Thus, organizations which, for the accomplishment of their organizational goals, depend on (access to) scarce resources controlled by another organization in their task environment will be prone to establish relationships with this external organization (Oliver 1990: 241-2, 249-50; Pfeffer 1981: 98; Pfeffer/Salancik 1978: 2, 43-4). The likelihood for the establishment of interorganizational relationships therefore varies with the degree of resource dependence. However, dependence on resources presumably controlled by an organization will only continue to shape actors' behavior, when these organizations show their ability to perform the provision of crucial resources to the organization. In the longer run, organizations which have an important and critical function but fail at it will not make other organizations rely on them as potential resource providers (Pfeffer 1981: 98, 101).

In order to determine the resource dependence of an organization, it is first of all necessary to identify its objectives, since its objectives determine the resources required for goal accomplishment. Apart from that, RDT refers to two dimensions: essentiality and substitutability of external resources (Pfeffer/Salancik 1978: 46-51). *Essentiality* describes the extent to which an organization requires resources controlled by an external organization to attain its goals. The essentiality of a resource is contingent on the relative magnitude of resource needs, i.e. the gap between required and existing (internal) resources, and the criticality of the resource, i.e. the (in-)ability of the organization to continue functioning in the absence of the resource. *Substitutability* denotes the extent to which resources provided by an external organization can be replaced from other sources. Both essentiality and substitutability of the resources determine the focal organization's dependence on any other organization. A high degree of resource dependence exists when the resources demanded by an organization are characterized by high essentiality and low substitutability.

RDT predicts that organizations will seek to establish relationships with other organizations if, for the attainment of their goals,

they are dependent on essential resources which those organizations control and which are hard to obtain elsewhere. The higher the essentiality of the resource and the lower its substitutability, the more likely it becomes that an organization will seek to establish relationships with other organizations. If the focal organization, due to formal-hierarchical or de facto power, is in the position to establish resource-providing interorganizational relationships without the relevant external organizations active consent, a high degree of resource dependence of the focal organization is not only a necessary, but also a sufficient condition for the actual establishment of the interorganizational relationship.

National and international regulatory bodies can be regarded as organized entities with the objective of achieving specific governance goals, namely ensuring the provision of the public goods of financial market stability and efficiency. As private business enterprises, CRAs are first and foremost oriented toward making profits. However, the assumption of CRAs, other market participants and regulators (still) is that CRAs' economic goals and incentives will also make them act in ways conducive to the achievement of the public goal of financial market stability (Gras 2003: 30). RDT has already been applied to analyze dependencies that exist both between CRAs and investors, and CRAs and the companies whose debts are rated: Investors depend on analytical resources of CRAs for their investment decisions; rated companies depend on the legitimacy of these agencies for their access to capital (Nölke/Perry 2007: 130; see Nölke 2004). CRAs' analytical resources are crucial in contemporary global finance. Their legitimacy is derived from the expert character of these analytical resources as perceived by market participants. The overwhelming quantity of information available to financial market actors creates a demand for the analytical output of CRAs (Nölke/Perry 2007: 129; see also Hiß/Nagel 2012: 68-70).

These insights can be transferred to the relationship between regulators and CRAs, resulting in a rather straightforward theoretical argument: Public regulators are organizations which for the attainment of their main organizational goals, i.e. financial market stability and efficiency, are dependent on resources controlled by external organizations. As they lack essential analytical

resources for measuring credit risks themselves, public regulators delegate governance tasks and (quasi-)regulatory authority to specialized risk-measuring agents, i.e. CRAs.

From the rationalist point of view of RDT, delegation of governance tasks and (quasi-)regulatory authority to specialized agents, such as private CRAs, involves both costs and benefits for public regulators (see Pfeffer/Salancik 1978: 183). Public regulators will only delegate if the perceived benefits, in terms of organizational goal attainment, from making use of CRAs' analytical resources through the reliance on credit ratings in financial regulation are larger than expected costs. More specifically, public regulators weigh costs such as their loss of some control over the regulated entities³, fears of CRAs' agency slack (slippage or shirking) as well as costs for selection, screening and oversight mechanisms for CRAs against presumed gains in terms of effectiveness and efficiency of regulation. Such gains may arise from the fact that the regulatory use of credit ratings makes financial regulation more flexible, sensitive and adaptive to (changing) financial market risk since credit ratings constitute rather fine-grained and adaptive risk assessments that vary over time (Kerwer 2005: 464). Apart from that, using CRAs' rating in risk-sensitive regulation may be more cost-efficient for regulators than building up adequate risk-measuring capacities themselves.

³ The Basel II provisions may serve as an example illustrating how public regulators' reliance on CRAs involves a loss of control for regulators. Under Basel I, public regulators set a uniform 8% minimum capital requirement for claims on corporate firms which were not risk-weighted. This was a rather crude measure of credit risk; nonetheless *all* the parameters that finally determined the capital requirement were set by public regulators. Under the Basel II Standardized Approach, the asset base on the basis of which the 8% capital requirement was calculated was risk-weighted according to CRAs' ratings of the debtors. Thus, a crucial measure for credit risk, i.e. the risk weighted asset base of a bank, was no longer determined by public regulators but by CRAs through their ratings. Regulators had given up control over some regulatory parameters to a private agent.

2.2 Varieties of Capitalism as Macroinstitutional Contexts of Resource Dependence

Organizational resource dependencies as well as organizations' way of dealing with these dependencies are not exogenously given, nor do they vary randomly. Rather, they are systematically shaped by structural macroinstitutional contexts. RDT, which takes an open systems perspective on organizations, is situated in the broader category of environmental approaches in organization theory. Environmental approaches claim that in order to explain the behavior of an organization we must take into account the context of that behavior, i.e. "the ecology of the organization" (Pfeffer/Salancik 1978: 1); this is because the best way to organize both internally and in relation to other organizations is contingent upon the nature of the macrostructural environment of the organizations and the resource demands it poses (Blau 1987: 83-4; Cook 1994: 364; Hamilton/Woolsey Biggart 1994: 150-1). Macroinstitutional contexts shape the means-end calculations of organizational actors, their dependence on resources controlled by other organizations and, consequently, their activities, their organizational forms as well as their relations among one another (Hamilton/Woolsey Biggart 1994: 157; Scott 1981: 114). In now classical studies, proponents of environmental approaches in organization theory have highlighted uncertainty and rates of change (e.g. in market conditions or technologies) in the macroinstitutional environment as crucial context variables (see Galbraith 1973, 1977; Lawrence/Lorsch 1967; Scott 1981: 114-15), emphasizing that organizations will seek to establish stable resource flows which contribute to reducing the uncertainty of their environment.

Applying these arguments to the regulatory use of credit ratings, I claim that macroinstitutional socioeconomic conditions characterized by high levels of uncertainty and rapid rates of change set incentives for the delegation of (quasi-)regulatory authority to CRAs by accentuating public regulators' dependence on CRAs' analytical resources. This rather general argument about the varying significance of CRAs in different macroinstitutional settings can be specified and operationalized with refer-

ence to the varieties of capitalism approach (VoC) (Nölke/Perry 2007; see Hall/Soskice 2001a). From that perspective, different varieties of capitalism constitute different (national or regional) macroinstitutional contexts conditioning the essentiality and substitutability of CRAs' analytical resources.

The VoC approach provides a framework for capturing institutional similarities and differences among economies and for studying how "behavior [of business and political actors] is affected by the institutions of the political economy" (Hall/Soskice 2001b: 4-5; see Coates 2005; Dyson/Padgett 2005; Lütz 2004). Differences in the macroinstitutional framework of the political economy set incentives and constraints for the behavior of individual and corporate actors in a capitalist system and thus generate systematic differences in business actors' and politicians' strategies across different varieties of capitalism. It has become common to broadly distinguish between the "Rhenish" variety of capitalism, which has also been termed "coordinated market economy" (CME) and is, in somewhat simplifying terms, characterized by a long-term investment horizon, and the Anglo-Saxon variety of capitalism, which is sometimes referred to as "liberal market economy" (LME) and features a short-term investment horizon (Hall/Soskice 2001b: 8; Nölke/Perry 2007: 127).

CRAs are a characteristic component of the Anglo-Saxon (LME) variety of capitalism. Due to the different intensities of financial disintermediation and the varying complexity and uncertainty of financial markets, the activities of CRAs fit better with, and are more important in LMEs than CMEs (Nölke/Perry 2007: 126-7, 129). CRAs are more important in LMEs since the number and diversity of actors in financial markets and the scope of financial products are larger than in a CME system of intermediated finance where long-term financing through banks is prevalent, the range of financial products is more limited and overall financial market volatility is less pronounced. CRAs are empowered by deregulated, liberalized, and disintermediated financial markets, because the latter are more complex and pose higher uncertainty to both private investors and public regulators due to their larger volatility and because borrowers depend more heavily on an external certification of their credit-worthiness in

order to get access to capital markets than in a system of intermediated financing.

While the argument about the greater importance of CRAs in LMEs for investors (dependent on information on the credit-worthiness of borrowers) and borrowers (dependent on CRAs' seal of approval for access to capital markets) is pretty straightforward, the linkage of LMEs to a greater dependence of *public regulators* on CRAs' analytical resources is somewhat more subtle: In a macroinstitutional environment marked by a higher degree of market uncertainty due to a short-term investment horizon of many investors, greater volatility of the financial system, and a lack of control of credit-worthiness through long-term bank-borrower relationships, public regulators will depend more heavily on the analytical resources of CRAs. Making use of CRAs' analytical resources then constitutes an attractive regulatory option to cope with systemic uncertainty *without* much direct public interference with market processes. As uncertainty tends to be higher in more complex and volatile LME (rather than CME) financial markets, the context conditions of Anglo-Saxon LMEs would make CRAs' analytical resources appear particularly essential for LME regulators pursuing the goals of financial market stability and efficiency through flexible risk-sensitive regulation.

Thus, we can finally hypothesize that *the higher the (degree of) public regulators' dependence on CRAs' analytical resources, the greater the (degree of) public regulators' use of CRAs' ratings and the concomitant delegation of (quasi-) regulatory authority will be*. The dependence of public regulators on CRAs, i.e. the essentiality and the substitutability of CRAs' analytical resources will in turn be conditioned by the prevailing macroinstitutional socioeconomic context, *with an Anglo-Saxon variety of capitalism (LME) being linked to a considerably higher degree of dependence on CRAs' analytical resources than a "Rhenish" variety of capitalism (CME)*.

3 The Regulatory Use of Credit Ratings: The US and Germany in Comparison

3.1 *The Use of Credit Ratings in the US Regulatory System*

“Ratings-dependent regulation” (Gonzalez et al. 2004: 8) has traditionally been particularly salient in the United States. Credit ratings have been used for a broad range of regulatory purposes by various US public authorities – e.g. the Securities and Exchange Commission (SEC), the Office of the Comptroller of the Currency (OCC), the Federal Reserve, the Federal Deposit Insurance Corporation (FDIC), the Office of Thrift Supervision (OTS), the Department of Labor, etc. In the early 2000s, the public regulatory and supervisory bodies of nearly all US financial market actors relied – in some way or another – on the credit risk assessments of CRAs in their regulations (Gras 2003: 14). Ratings-based regulations in the US affected not only banks, but also insurers, pension funds, mutual funds, broker-dealers and other market actors (Gonzalez et al. 2004: 9).

Four main types of ratings-dependent regulatory requirements can be distinguished. First, ratings served US regulators to impose risk-sensitive *investment restrictions* on certain financial institutions (e.g. pension funds). In this case, a certain minimum credit rating (usually “investment grade”) constituted a regulatory threshold for the investment in and/or the trading of securities. Second, US regulators defined *differential disclosure requirements* for issuers of rated bonds with reference to the rating obtained from CRAs. Credit ratings thus served as criteria for disclosure requirements: the lower the rating, the stricter the requirements. Third, credit ratings were used in defining the *conditions for the issuance of certain financial titles* (e.g. mortgage backed securities). Credit ratings served as criteria for the regulatory administrative requirements that had to be fulfilled before these titles could be issued. Finally, US regulators used CRAs’ ratings to adjust *capital reserve requirements* for banks and institutional broker-dealers to their credit risk exposure. Financial institutions got a discount on their capital reserve requirements if their transaction partners or securities they held had a high credit

rating (Estrella et al. 2000: 44; Kerwer 2005: 463; Sinclair 2005: 42-4; Schwarcz 2001). Overall, from the 1930s to the late 2000s, the use of ratings for regulatory purposes manifested itself in a large number of US laws and rules issued by several regulatory authorities. In the year 2004, at least eight federal statutes and around 50 federal regulations, along with over 100 US state laws and regulations, referenced CRAs' ratings as a benchmark in financial regulation (Rosenbaum 2004: 10).

The requirements US regulators imposed on CRAs to qualify as external credit assessment institutions whose ratings may be used in financial regulation increased slowly but progressively over the decades (Cantor/Packer 1994; Sinclair 2005: 45). The 2006 Credit Rating Agencies Reform Act finally introduced a formalized registration procedure for "nationally recognized statistical rating organizations" (NRSROs) under the auspices of the SEC. The SEC decides upon granting NRSRO status on the basis of a given set of criteria aiming at ensuring the factual and interpretive reliability of rating methods, the adequacy of personnel capacities, and the integrity of the rating process (including avoidance of conflicts of interest).

3.2 The Use of Credit Ratings in the German Regulatory System

In the 1990s and early 2000s, the regulatory use of credit ratings spread to other developed economies (i.e. EU member states, Switzerland, Australia, Canada and New Zealand) and emerging Latin American and Asian markets to a point that in the mid-2000s all developed states, including laggard Germany, came to use credit ratings for regulatory purposes (see Sinclair 2005: 46ff). Within the European Union, the regulatory use of credit ratings started as early as in 1993 with the Capital Adequacy Directive (CAD). From 1993 to 2006, all the European members of the Basel Committee on Banking Supervision (BCBS) – with the exception of Germany which then exercised an option to waive the ratings-based regulation ("market risk amendment") part of the 1993 CAD – used credit ratings in their prudential supervision of banks. Credit ratings served to determine what was a

qualifying debt security or other interest-rate-related instrument for the calculation of the capital requirement for specific interest rate risks (Estrella et al. 2000: 41; Gonzalez et al. 2004: 9; King/Sinclair 2003: 348; Nicholls 2005: 15-16).

The exceptional position of ratings-skeptic Germany ended with the revised Basel Capital Accord (Basel II), which was developed by the BCBS and adopted in 2004. Basel II provided for the use of credit ratings from approved “external credit assessment institutions” (ECAIs) in the calculation of banks’ net capital reserve requirements (BCBS 2006: paras. 50f; 90ff). At the EU level, the transposition of the non-binding Basel II standards into binding EU law occurred with the Banking Directive (2006/48/EC) and the new Capital Adequacy Directive (2006/49/EC) in June 2006. The EU Directives were then transposed into national regulatory systems. In Germany, Basel II was transposed into national law by means of changes to the Banking Act and additional regulations, in particular the 2006 Solvency Regulation on the implementation of the “first pillar” of Basel II, which defined minimum capital reserve requirements (Macht 2007: 68-96; Speyer 2006: 113). The basic idea of the Basel II provisions was to make capital reserve requirements contingent upon the quality of credits banks give. The quality of these credits were to be measured either by internal or by external rating procedures recognized by public banking supervisors. The main objective was to make banking regulation and supervision more responsive to the risks of financial markets and thus keep regulation in tune with markets (Kerwer 2006: 93). The use of ratings for the calculation of credit (default) risks was supposed to serve the purpose of flexible regulation.

Overall, the role of CRAs in the final Basel II Accord was less pronounced than originally proposed by some of the BCBS members, first of all the US regulatory authorities (see BCBS 2001: para. 69 in contrast to BCBS 2006: para. 50). Thus, the final Basel II Accord – and, consequently, the legally binding EU directives – provided for external measurement of credit risk by recognized CRAs as only one of two broad methodologies for banks’ credit risk assessment, termed the “standardized approach” (Macht 2007: 71-5). According to the standardized ap-

proach, banks could use the credit assessments of external rating agencies when determining the credit risk weights that were used for the calculation of capital requirements as long as the CRAs were recognized by the national banking supervisors. The national supervisory authorities assigned (“mapped”) the ratings of the recognized CRAs in a routinized procedure to the risk weight categories fixed in the Basel II provisions on the standardized approach (BCBS 2006: paras. 91-108). However, banks that preferred to use internal rating procedures rather than external credit ratings could do so under the “internal ratings-based approach” if their application was approved by their national regulatory agency (Nölke/Perry 2007: 130). Germany strongly insisted on including this internal alternative to external ratings into the Basel II Accord.

According to the Basel II Accord, external credit assessment institutions (ECAIs) had to fulfill certain minimum requirements in terms of “objectivity”, “independence”, “international access/transparency”, “disclosure”, “resources” and “credibility” (BCBS 2006: paras. 91ff). These recommendations for the recognition of eligible external rating agencies were implemented in the EU Banking Directive (Arts. 81ff). In addition, the (then) Committee of European Banking Supervisors (CEBS) published Guidelines on the Recognition of External Credit Assessment Institutions in order to achieve some consistency in EU member states’ interpretation of the Banking Directive in this regard. Thus, while CRAs were granted recognition as ECAIs by the competent national supervisory authorities, European-level guidelines ensured somewhat harmonized recognition criteria and procedures (BCBS 2006: para. 91; CEBS 2006).

4 Accounting for Common Trends and Differences in the US and German Use of Credit Ratings

4.1 Intertemporal Perspective: Explaining a Common Trend

An intertemporal analysis suggests that varieties of capitalism, resource dependencies of public regulators and the regulatory use

of credit ratings indeed co-varied over time. The breakdown of the Bretton Woods system of fixed exchange rates (1973) and the ensuing deregulation and globalization of financial markets have led to an exponential growth of the volume of transnational flows of capital and to a global integration of money, currency and capital markets. Thus, the global financial architecture clearly moved from embedded liberalism towards disembedded liberalism in the decades before the global financial crisis. To be sure, the global transformation from embedded to disembedded liberalism has not resulted in a global convergence of national economic governance; i.e. there are still quite different national approaches to specific economic policies. The pressures of globalization have played out differently in different macroinstitutional contexts. Despite this important qualification, finance marks a sphere of the economy where a certainly incomplete, but nonetheless significant adaptation of national macroinstitutional contexts has taken place. Macroinstitutional arrangements in CMEs have come under increasing pressure, to the extent that there has been a tendency in Continental European economies to move at least closer to the Anglo-Saxon finance model. Deep “infrastructural” changes could be observed in the financial systems of numerous CMEs: The relationship between banks and industry has changed profoundly under the conditions of globalization. Tendencies of securitization, i.e. the practice of pooling various assets in ever more complex financial instruments, and disintermediation in the credit business have gained momentum also in CMEs (Hall/Soskice 2001b: 60–3; Beyer 2009; Nölke/Perry 2007; Lütz 2000).

There is ample evidence that around the world, the degree of uncertainty posed by financial markets has increased tremendously in terms of a larger number and a broader scope of financial market actors, a growing average complexity of the prevalent financial products, and an increasing volatility of financial markets (Filc 2008: 5-8; Gras 2003: 11-14; Speyer 2006: 103). As a result, the essentiality of CRAs’ analytical resources, i.e. their uncertainty coping capabilities increased around the world. Since the 1970s, the *number of financial market actors* offering and seeking capital has risen significantly; in addition to that, the

scope of financial market actors has become much broader, too, with large institutional investors (i.e. transnationally operating insurance companies, pension and investment funds, state-owned investment funds, hedge funds, etc.) becoming crucial capital market actors. In addition to the increasing number of diverse market actors, the creation of *new complex financial instruments* due to financial innovation and modern communication technology, which makes it possible to instantaneously manage large volumes of short-term financial products, has led to a growing complexity and uncertainty in global financial markets. There has been a proliferation of (frequently) opaque securities (e.g. derivatives such as futures, forwards, options, swaps, CDOs etc.) which account for both the growth of the financial sector in most countries and an increase in financial market uncertainty. This development was in no way limited to the US and the UK though it played out at a slower pace and with weaker intensity in Continental European economies such as Germany. In the 1990s and 2000s, the EU Commission and the Council strongly propagated to open up the European financial sector for global competition (Hishow 2007). This has also affected the business of Continental European banks which for a long time had been considered rather “conservative” in their investment strategies. Financial market deregulation has enabled (and intensified global competition has “forced”) banks to create and trade in ever more complex financial products whose construction is hard to comprehend even for the originators of the products. The increase in transnational flows of capital and the rise of short-term investments by a variety of market actors have led to *higher average market volatility*. The shift to floating exchange rates and the deregulation of financial markets have entailed a loss of institutional precautions limiting the volatility of financial markets. The volatility of prices and interest rates on global financial markets has grown significantly. This has contributed to systemic uncertainty and favoured the occurrence of financial crises (Filc 2008).

Thus, changes in the global and national/regional macroinstitutional context which amounted to a transformation from embedded to disembedded liberalism and a move closer to the Anglo-Saxon model of finance even in CMEs such as Germany have

avored the rise of market actor constellations, financial products, and process features of financial markets that increase systemic uncertainty. Even in the absence of major crises, the complexity, the lack of transparency, and the degree of volatility of financial systems have become hard to handle for supervisory authorities around the world. Financial markets, not only in the US and the UK, but also in Germany, have become increasingly uncertain territory for all those who depend on a stable environment and reliable expectations for the attainment of their (business or regulatory) goals. This suggests that CRA's uncertainty coping capabilities have become ever more significant for both investors and regulators around the world. Public regulators were increasingly overwhelmed by the sheer quantity of information on the credit risk of diverse financial market actors, by the complexity of the information to be processed, and by the speed of financial market changes. By the 1990s and early 2000s, these developments made fixed bureaucratic rules neglecting temporal variation in credit risk appear increasingly inadequate while private actors' analytical resources were widely considered crucial for systemic risk assessment (Tsingou 2008).

Thus, the essentiality of CRAs' external private expertise for designing and implementing risk-sensitive financial market regulation increased significantly over time, both in the US and Germany. At the same time, the substitutability, i.e. the number of accessible and functionally adequate sources for analytical resources, appeared limited (Estrella et al. 2000: 55-8; Kerwer 2005: 469). One option for public regulators was to rely on investors' or banks' publicly approved internal procedures of (self-)assessment of the risk implied in the investments they make or the credits they issue. However, this always implied strong incentives for underestimating risk, created a potential for moral hazard and required a considerable amount of trust on the part of public regulators into the reliability and integrity of financial institutions' self-assessment of risk exposure. Thus, reliance on independent external risk assessment was an attractive option for public regulators. While, in particular within the EU, there was a limited number of alternative sources of credit risk information apart from CRAs (see Estrella et al. 2000: 57), the analyt-

ical resources these institutions offered tended to become less adequate for public regulators' goal attainment the more the entities whose risk exposure they were to measure were operating transnationally. This is because at least some of these other credit risk assessment institutions operated only within national jurisdictional boundaries. Thus, public regulators who did not want to rely on internal ratings-based procedures faced only a limited range of alternatives to CRAs, and the usefulness of these other sources decreased with the increasing transnationalization of financial markets. Thus, in the two to three decades before the global financial crisis, the substitutability of CRAs' analytical resources did (at the very least) not increase. In fact, there are good reasons to argue that it decreased, both in the US and in Continental Europe. In combination with the earlier finding that the essentiality of CRAs' analytical resources increased considerably, this means that dependence on CRAs' analytical resources increased in the decades before the global financial crisis – not only in the US but also in Continental Europe. We should thus expect to be able to observe an expansion and an increase in the use of ratings in regulation over time.

Indeed, the actual intertemporal development of the use of CRAs' ratings by national and international public regulators corresponds to this expectation. As outlined above, the use of ratings in financial regulation was initially limited to the US. However, from the early 1990s, the use of credit ratings for regulatory purposes expanded beyond the US to other developed economies and emerging markets. But not only the geographical reach but also the number and scope of regulations that referenced CRAs increased significantly as evidenced e.g. by a boom of ratings-dependent regulation in the US in the (late) 1980s and 1990s (Cantor/Packer 1994; Rosenbaum 2004).

4.2 Interregional Perspective: Explaining Cross-Country Variation

An interregional analysis indicates that varieties of capitalism, resource dependencies and the regulatory use of credit ratings indeed co-vary across countries. Whereas the US clearly belongs

to the category of Anglo-Saxon LMEs, all Continental European states still share a great amount of the features of CMEs (Botzem 2008: 48; see Hall/Soskice 2001b). In the previous section, I have pointed out that in the sphere of financial relations significant changes in CMEs have taken place moving them closer to the Anglo-Saxon model of finance. Nonetheless, there is broad consensus that there are still differences in the corporate financing modes and the banking industry structures between the US and Continental Europe which are pronounced enough to warrant the categorization of Continental European countries as CMEs (Busch 2009; Lütz 2004; Lütz/Eberle 2007).

A number of indicators suggest a higher degree of public regulators' dependence on CRAs' analytical resources in the US compared to Germany (see Dieter 2008: 14; Hishow 2007: 1-3; Gras 2003: 11-14; Rosenbaum 2004: 20). *Firstly*, the total number and the diversity (i.e. the qualitative scope) of borrowers that are covered by financial market regulatory requirements within the US regulatory system are larger than in Continental European regulatory systems. There is a much broader range of different types of institutional investors engaged in US financial markets, since the financial system is far more disintermediated. This implies a more complex range of regulated entities with broader variation in their risk profiles. The still considerable overall importance of bank lending limits the number and scope of financial market actors in Continental Europe. *Secondly*, the average complexity of the prevalent financial products in the US financial markets is still higher than in the Continental European markets. The US is not only the place where most of the recent financial innovations have been designed; trade in derivatives is larger in volume and more diverse in terms of different types of derivatives than in Continental Europe. The more complex and the less transparent the products, the more important CRAs' analytical resources become. *Thirdly*, the relative volatility of US financial markets is larger than the one of Continental European markets, i.e. prices and interest rates fluctuate more extensively in US markets. This increases systemic uncertainty and favors regulation that is risk-sensitive and adjusts to credit risk exposure over time. After all, the essentiality of CRAs' analytical resources is

high for US public regulators, whereas it is more moderate (though not negligible) for German public regulators.

Moreover, clear differences in substitutability can be identified. The number of alternative sources of credit risk information in Germany is limited, and some of these alternative sources are plagued with shortcomings (see above); but the substitutability of CRA' uncertainty coping capabilities is clearly higher than in the US (Estrella 2000: 55-8). While, at least until the global financial crisis, German supervisors largely considered banks' internal risk assessment procedures as a reliable, trustworthy and beneficial option, in the US even a substantial proportion of American banks were not keen at all on being "allowed" to conduct their own credit risk assessments (see Becker 2007: 85-6, 90). On the contrary, they advocated the use of credit ratings in regulation.

Correspondingly, in 2006 (before the onset of the global financial crisis) the use of credit ratings in regulation could be termed extensive in the US since 1) a large absolute number of US financial market regulations issued by a variety of public regulators referenced NRSROs' ratings; 2) the scope of the use of credit ratings for regulatory purposes was broad, comprising a large number of distinct regulatory purposes in banking regulation, securities regulation, insurance regulation, and further specific issue areas of financial regulation; 3) there were several US rules which strictly *mandated* credit ratings in a way that addressees could only fulfill the regulatory duties imposed by the regulation through a certain (good) rating. By contrast, public regulators in Continental Europe and especially in Germany made only modest use of CRAs' ratings. For sure, there was regulation referring to CRAs' ratings: most importantly, the 2006 BD and CAD implementing the Basel II provisions. However, both the absolute number and the scope of regulations referencing credit ratings were limited in the German regulatory system. Banks were given the possibility to use an internal ratings-based procedure or even renounce any rating. Under the standardized approach of Basel II, unrated credit claims received a risk weight of 100%: Thus, German banks were still able to fulfil regulatory requirements without being compelled to make use of ratings.

In sum, US regulators, under the macroinstitutional conditions of an Anglo-Saxon LME, displayed a high degree of dependence on CRAs' analytical resources. The use of credit ratings in US financial market regulation was extensive. German regulators, under the macroinstitutional conditions of a CME, faced a more moderate degree of dependence on CRAs' analytical resources. Correspondingly, the use of credit ratings in German financial market regulation was far less extensive. Thus, the variables highlighted by the proposed theoretical framework co-vary not only over time but also across countries.

5 Explaining German and US Positions on External Ratings in Basel II

In a final analytical step, I re-trace the national positions of the US and German negotiators in the Basel II process (1998-2004) with a view to examine in how far they correspond to the causal argument of the theoretical framework. First of all, there was a consensus among German and US negotiations on some perceived necessities and the general regulatory approach to be taken in banking supervision. Negotiators from both sides saw a need for closer alignment of regulatory frameworks with market practice in order to promote banking market stability and efficiency. For that purpose, more flexibility and risk-sensitivity in regulation and thus more sophisticated rules were deemed necessary. The preference for flexible regulation that should be in tune with markets and make use of disciplining market forces was by no means a singular US position but was – in varying intensities – common to all BCBS members, including Germany. There was also agreement that non-state actors, i.e. banks and/or CRAs, should not only have a consultative role in the drafting of the accord, but would first of all be significantly involved in its application and enforcement (Speyer 2006: 111-12; Tsingou 2008: 60). Among both US and European BCBS members, readiness to rely on private-sector know-how and the recognition of market-based standards based on private expertise involving a transfer of (quasi-)regulatory authority to private sources had increased and

a general inclination to make use of private actors' capacities in banking supervision in order to mitigate systemic risk was shared (Tsingou 2008: 64). Nonetheless, the degree to which German and US regulators were willing to rely on *CRA*s as a specific type of private actor taking on (quasi-)regulatory tasks clearly diverged.

The most critical issue that was contested between German and US negotiators referred to the *use of internal rating procedures* (done by banks themselves) or *external rating procedures* (done by approved *CRA*s) for the measurement of banks' exposure to credit risk (Becker 2007: 86-7; Nölke/Perry 2007: 131; Sinclair 2005: 46). US regulatory agencies pushed for "considering greater use of external ratings for determining capital requirements for a broad range of exposure" (US Department of the Treasury 2005, quoted in Becker 2007: 86). German representatives were unfamiliar with the use of credit ratings in regulation, but had considerable trust in the capacity and reliability of banks' conducting their own internal risk assessments. Moreover, they feared that accepting external ratings as the only major procedure for credit risk assessment would entail a competitive advantage for US banks and firms. They therefore pushed for the introduction of an alternative internal ratings-based approach. German negotiators made a strong case that at least sophisticated credit institutions with extensive analytical capacities should be allowed "to assess all (...) risk parameters themselves. The risk evaluation system developed by the bank must be approved by the BaFin" (German Ministry of Finance, quoted in Becker 2007: 87).

One reason for insisting on the possibility of internal ratings-based procedures was the belief of German regulators in the adequacy of banks' own analytical resources, i.e. banks' capabilities of coping with financial market uncertainty. In contrast to that, US authorities later justified their delayed implementation of the Basel II provisions with US banks' inability to quickly install the new more complex requirements and procedures of Basel II. Interestingly, some US banking associations themselves favored the use of external ratings rather than pleading for being allowed to use their own internal ratings in the calculation of capital re-

quirements: “ICBA [Independent Community Bankers of America] also agrees with the concept of using external credit ratings to enhance the risk sensitivity of the Basel risk-based capital rules” (ICBA, quoted in Becker 2007: 90). Thus, while the essentiality of private analytical resources was acknowledged by both US and German regulators, the substitutability of CRAs’ resources varied. There was a stronger belief on the part of German regulators that, apart from CRAs, banks would be another reliable source of uncertainty coping capabilities needed for the attainment of financial market stability and efficiency. Thus, CRAs’ analytical resources were more easily substitutable for German regulators; only with less sophisticated smaller banks CRAs’ uncertainty coping capabilities should be difficult to substitute. This fits squarely into Germany’s negotiating position to include internal ratings-based procedures as an alternative to CRAs’ external ratings.

6 Conclusion

This article has sought a theory-based explanation for the use of credit ratings in financial market regulation before the global financial crisis. For that purpose, a macroinstitutionally embedded resource dependence perspective on the delegation of (quasi-)regulatory authority to CRAs has been proposed: Public regulators delegated (quasi-)regulatory authority to CRAs because they sought to make use of CRAs’ analytical resources which were both essential for public regulatory actors and hard to obtain from alternative sources. The dependence of public regulators on CRAs’ analytical resources was in turn conditioned by the prevailing macroinstitutional socioeconomic context, i.e. different varieties of capitalism. The empirical analysis in sections 4 and 5 underlines the plausibility of the proposed theoretical framework. The core hypothesis that the higher the degree of public regulators’ dependence on CRAs’ analytical resources, the higher the degree of public regulators’ use of CRAs’ ratings in financial regulation will be, has been corroborated. There has also been empirical evidence that public regulators’ dependence on

CRAs' analytical resources is contingent on macroinstitutional socioeconomic contexts. Dependence on CRAs' analytical resources and, consequently, the use of ratings in financial market regulation were found to be more pronounced in an Anglo-Saxon variety of capitalism (LME) than in a Rhenish one (CME).

In this article, the macroinstitutionally embedded resource dependence view on the delegation of authority from public actors to private expert agents was introduced to explain the *specific* case of regulatory reliance on CRAs; nonetheless, the gist of this theoretical framework should be useful for analyzing a broad range of situations where political authority has (to varying extents) been delegated to private expert actors. Thus, the proposed framework has the potential to enhance our understanding of privatization processes more generally.

Nonetheless, there remain open questions which call for further research. While the main theoretical arguments of this article are supported by a double plausibility probe (relying on broader covariation analysis and the more specific Basel II case study), further studies – potentially including other private actors in various issue-areas of governance – could more extensively assess the explanatory merits and shortcomings of this theoretical framework relative to alternative, e.g. historical-institutionalist, constructivist or liberal IPE approaches (see Kruck 2013a). In a competitive test design, hypotheses from different theoretical perspectives could be taken into consideration. A research design which also tests such alternative approaches could contribute to further specify the (relative) explanatory value of the proposed theoretical framework and advance our understanding of the transformation of financial governance.

Moreover, further research should systematically compare the relationship between public regulators and CRAs to other delegatory relationships. As pointed out earlier in this article, CRAs have their own sources of genuinely private authority. The social fact that CRAs are private authorities – not only by the grace of the state but also in their own right – differentiates them from subordinate regulatory agencies which are created and funded by a public principal and whose political authority is *solely* delegated authority. This difference raises a range of conceptual, theo-

retical and policy-related issues which would certainly merit closer comparative consideration.

Moreover, while delegatory relationships always imply a hierarchy between principals and agents, in the empirical world there seem to be different degrees of hierarchy between principals and agents. Relationships between public principals and private agents can be more or less hierarchical (in a “master-servant” way) on the one hand or rather horizontal (in a “supporter/empowerer-helpful ally” way) on the other (Abbott et al. 2012). The regulatory endorsement of private CRAs by public actors seems to constitute a more horizontal type of PA relationship than it is frequently assumed when the principal-agent framework is applied to phenomena of inter- and transnational politics. Also from this perspective, further application of PAT to additional cases in which public tasks have been delegated to private actors seems worthwhile (see Kruck 2013b).

Finally, the focus of this article has been on the regulatory empowerment of CRAs *before* the global financial crisis. However, it should also be fruitful to draw on the theoretical framework to explore attempts at (re-)regulating CRAs and cutting back regulatory overreliance on CRAs *after* the global financial and *during* the European debt crises (see Hunt 2009; Möllers 2009; Pagliari 2012). Regulatory initiatives for stronger oversight and control of CRAs have been taken and legally adopted in both the US and the EU. Moreover, US and European regulatory authorities have issued financial rules implying some reduction of regulatory reliance on CRAs. A thorough analysis of these complex (ongoing) regulatory developments in Germany and the US is clearly beyond the confines of this article. Nonetheless, the proposed theoretical framework promises to also illuminate the US and Continental European politics of post-crisis (re-)regulation, i.e. both the possibilities and difficulties for a changing regulatory approach to CRAs (see Kruck 2011: 158-65; Kruck 2013a). Both PAT’s toolkit for analyzing regulatory re-contracting and RDT’s insights that, firstly, regulators’ resource requirements are contingent on their (changing) regulatory objectives and, secondly, the ongoing performance in the provision of needed resources is

an important determinant of (public-private) interorganizational relationships should be helpful in this regard.

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