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Credit Rating Agencies and the Sovereign Debt Crisis: Performing the Politics of Creditworthiness through Risk and Uncertainty

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As Member States struggle to retain the investment grades necessary to allow them to finance their governmental operations at a reasonable cost, credit rating agencies (CRAs) have been blamed for exacerbating a procyclical bias which only makes this task more difficult. How CRAs contribute to the constitution of the politics of limits underpinning the European sovereign debt crisis is at the core of this article. As a socio-technical device of control, sovereign ratings are an ‘illocutionary’ statement about budgetary health, which promotes an artificial fiscal normality. Subsequently, these austere politics of creditworthiness have ‘perlocutionary’ effects, which seek to censure political discretion through normalizing risk techniques aligned with the self-systemic, and thereby self-regulating, logic of Anglo-American versions of capitalism. The ensuing antagonistic relationship between the programmatic/expertise and operational/politics dimensions of fiscal governance leaves Europe vulnerable to crisis and the renegotiation of how the ‘political’ is established in the economy. New regulatory technical standards (RTS) can exacerbated the performative effects on CRAs, investors and Member States.

Keywords: credit rating agencies; European Union; risk and uncertainty; sovereign debt crisis; financial governance; performativity

Introduction

Already implicated in numerous financial scandals, ranging from the 1998 Asian crisis to the 2003 fraudulent Parmalat debacle to the recent 2007-08 credit crisis, credit rating agencies (CRAs) once again have found themselves in the eye of the financial storm (Gamble, 2009; Mügge, 2011; Partnoy, 2006; Sinclair, 2010). With escalating contagion threatening the very integrity of Economic and Monetary Union (EMU) itself, and the global economic recovery, what actually constitutes as the ‘real’ risk of sovereign debt default has become the focus of much scrutiny. Plagued by the persistent threat of or actual credit rating downgrade by one of the three main agencies – Moody's Investor Services (Moody's), Standard and Poor's (S&P), and Fitch Ratings – the European Union (EU) is taking determined steps to regulate these financial intermediaries blamed for providing much of the firepower for the onslaught. Speculation in the bond markets – often triggered by the coercive tactics of CRAs (Kerwer, 2005: 461) – only escalates the attacks against Member States; thereby further undermining EU efforts in containing the sovereign debt crisis. As panic spreads, and short positions prove profitable, the construction of these ratings is seldom problematized; or until it is too late. Thus, it is compelling to concede that these (rash or late) rating actions simply signal the further authoritative ascendance of this unelected cabal of private agencies and the continued descendence of democratic governments. Of course, this tension is not restricted to Europe alone, as democratic governments around the world must grapple with this problem. Not even the United States is immune from such 'epistocracy' – knowledge-based rule (Estlund, 2008); as its 5 August 2011 downgrade from 'AAA' to 'AA+' by S&P demonstrates. Although the modulating effect of ratings varies according to the political economy, no state is immune.

This 'battle' between the EU and CRAs is the most recent occasion for the more pressing puzzle which is ultimately about the 'politics of limits' – the construction of the parameters defining the budgetary realities facing governments. Democratic sovereign states struggle with private markets in the constitution of authoritative knowledge underpinning creditworthiness, and thus access to the vital debt financing which helps facilitate their programs of national self-determination, such as fiscal stimulus. Insofar as sovereign bond ratings exercise a certain degree of influence over the constitution of creditworthiness to help construct an austere fiscal 'normality', what does this politics of limits mean for EU efforts to manage the debt crisis and instill greater stability in the eurozone? Furthermore, how does the EU regulatory response compromise these attempts? At the core of this article is how we understand the act of (sovereign) rating and its institutional agency

(CRAs) within the context of (European) sovereign debt crisis and the ability of governments to establish the parameters of the political within the economy.

To come to terms with this puzzle, this article problematizes the act of rating sovereign debt to reveal how its authoritative capacity, in large part, stems from how convincingly ratings normalize a fictitious bifurcation between the 'economy' and 'politics' in the constitution of what counts as authoritative knowledge in the market. Political discretion becomes increasingly marginalized and censured as normalizing mathematical/risk models depoliticize the decision-making process (de Goede, 2005; Langley, 2008; Luhmann, 1993). Rather than simply 'informed opinions', it is through their 'performative' effects (Austin, 1962; Callon, 1998; MacKenzie, 2004), as a socio-technical device of 'control' (Deleuze, 1995), that ratings construct an infrastructure of referentiality – via the 'AAA' scale – denoting what 'correct' and 'normal' fiscal conduct should entail. Investment-grades grant access to liquid capital markets so governments must adapt to satisfy their (austere) criteria and align with the norm in order to perform the functions of 'government' and refinance existing debt obligations. A 'social facticity' forms; which is intimately linked to the regenerative hegemony of the discourse of (quantitative) risk and its false dichotomy with (qualitative) uncertainty. Their construction enables this social facticity.

Unfortunately, separated into opposing ontological categories, risk and uncertainty are treated as brute facts; which skews the assessment of uncertain fiscal relations and distorts contingent liabilities. This fallacious analytics of ratings – the constituent components and processes involved in the construction of a credit score – helps elevate quantitative forms of expertise and relegates qualitative ones in the construction of these social facts. It subjects European budgetary politics to an artificial uniformity exogenous of national contexts as it privileges disinflationary logics aligned with self-systemic, and thereby self-regulating, forms of what may be identified as 'neoliberal' capitalism (see Friedman, 1962) as the prescribed normality. An antagonistic relationship develops between the programmatic/expertise and operational/politics dimensions of budgetary governance as heterogeneous (continental) forms of European capitalism are increasingly under attack. Rather than reversing the tide, I posit that a new set of inadequate EU regulatory technical standards (RTS) may serve to promote this dualism, and hence the asymmetry between CRAs and the EU.

But neither risk nor uncertainty is inherently more or less abundant during the sovereign debt crisis. Better considered as modalities of governance, they render the problem of budgetary profligacy intelligible as a particular form of reason, aligned with perceptions of contingency and normality, and interwoven into the political discourse of Member States. Sovereign ratings, therefore, are the internal forms of governmentality involved in the 'reiteration, re-establishment and sedimentation' (Butler, 2010: 149) of this austere politics of limits underpinning European, and most global budgetary relations.

Destabilizing effects result, however, as the degree of exigency involved in fiscal politics does not lend itself to being readily captured as a statistical probability through the calculus of risk (de Goede, 2004; Knight, 1921; O'Malley, 2004). Rather than promoting convergence through compliance, the depoliticization implied in, and following from, sovereign ratings predicated on risk proves unstable as austerity imposes unbearable socio-political costs on the populations of heterogeneous Member States. If excessively pressured, fiscal sovereignty unleashes unsuspecting forces contingent on the 'singular nature of sovereignty' and its vicissitudes (Moody's Investor Services, 2008a: 6). This volatility precipitates fiscal, as well as socio-political, contestation and crisis – visible across Europe – thus opening spaces for the renegotiation of competing visions of budgetary normality (i.e. growth-oriented), and attempts by Member States to reclaim lost fiscal sovereignty.

In developing this position, the article suggests that the RTS threaten to amplify the performativity of ratings. Without a revision in the analytics of ratings, they can reinforce the authority of CRAs at the expense of democratic governments. The hegemony of risk in the constitution of sovereign creditworthiness invalidates how competing notions of budgetary normality are ascertained and articulated, such as by politicians or civil society. To show this, I begin with how sovereign bond ratings are conducted and some of the serious inconsistencies in the analytics of ratings underpinning the politics of creditworthiness. Here the performative force of sovereign ratings is discussed in relation to the modalities of risk and uncertainty. After a reconstruction of the potential breakdown of this performativity, I analyze the RTS to reveal how they can serve to normalize this volatile politics of limits, which privileges the discourse of risk over the government through uncertainty, and thus amplify the self-validating/self-generative effects on CRAs, constitutive effects on investors, and unintended (prohibitive) consequences for national governments. As crisis shocks the EU, the authoritative capacity of ratings to instill the separation between the economy and politics diminishes as fiscal sovereignty reasserts itself.

Unpacking Sovereign Ratings

Broad in product diversification, the extent of the sovereign ratings issued by the 'big three' dwarfs that of their nearest rival. Moody's and S&P, by far, are the most dominant players in the space; Fitch remains a notable, but distant third (White, 2002). Whereas by 2011, Kroll Bond Ratings (2011) rated a mere 59 sovereigns, S&P (2011a) issued 126 sovereign ratings, Moody's (2011b) 112, and Fitch 107. Extrapolated to the broader context, the scale of this dominance becomes even more pronounced. In 2009, the US Securities and Exchange Commission (SEC, 2009) calculated that the big three CRAs were responsible for a staggering 97% of all outstanding ratings across all categories. Given their poor track record, however, the authority and resiliency of Moody's or S&P

to remain at the heart of finance is somewhat of an enigma. What has unnerved governments around the globe – but especially in Europe – is the questionable use of this sustained authority which, in part, CRAs derive from their monopoly over the constitution of a (neoliberal) politics of creditworthiness (European Commission, 2009).

Blamed for escalating market turmoil through their procyclical behavior, credit ratings are increasingly under the scrutiny of regulators worldwide like the Financial Stability Board (FSB, 2010) and the International Monetary Fund (IMF, 2010). Seldom, however, has this litany of alleged abuses translated into a comprehensive and effective regulatory response capable of correcting some of their most dubious elements. Recent legislation in the US (Rating Agency Reform Act of 2006) may have introduced criteria clarifying what designations, such as the 'Nationally Recognized Statistical Rating Organizations' (NRSRO), actually entail but Partnoy (1999: 684) cynically equates such recognition to bestowing CRAs with 'regulatory licenses'. In addition to issuing credit statements, once ratings are incorporated into regulation, this scheme encourages CRAs to sell the 'valuable property rights associated with compliance with that regulation' (*ibid*). Yet if it were only a matter of the 'merit regulation' (Schwarcz, 2002: 21) of 'gatekeepers' (Partnoy, 2006), where 'revenues flowing to rating agencies are rents from a government-generated monopoly' (Sinclair, 2010: 103), then the recourse simply would be to strip CRAs of this legal right/certification (Pollock, 2005). But it is not that simple. Although, in 2009, the SEC began a campaign to remove the NRSRO reference from statutes, I argue that the tenacious (authoritative) capacity of ratings must be carefully considered in relation to how they perform a neoliberal politics of creditworthiness, which reinforces their epistocratic grip over democratic forms of rule.

Contributing to the enduring control which CRAs exercise over the construction of the politics of limits is their purported ability to divorce technoscientific epistemology from its messy politico-economic context. Defendable risk calculus – bolstered by the secretive and obscured nature of the rating process – immunizes the act of rating from political debate. Sovereign ratings serve as 'fugitive social facts' (Holmes and Marcus, 2005: 237). Analogous to Mackenzie's (2005) 'black boxes' – procedures whose overly technical internal structures make them opaque to outsiders – sovereign ratings must be unpacked in order to help elucidate how they shape the politics of creditworthiness. With an affinity for what Maurer (2002: 29) identifies as the 'fetishization of the normal distribution curve', CRAs betray their 'desire to replicate the prescriptive and predictive success of the hard sciences and a belief in the infallibility of rationalist-empirical epistemology' (Jarvis and Griffiths, 2007: 17). Whether predictive positivism of this sort, however, helps us acquire 'objective' knowledge about fiscal behavior is a misplaced enquiry. Given the uncertainty of budgetary politics, this risk-dominant approach searches for certainty equivalence that just does not exist.

Sovereign rating ranges rest on a judgment – codified and commercialized as the 'risk of default' – about 'the capacity and willingness' of governments to raise the necessary resources for the timely servicing of their debt obligations (Moody's Investor Service, 2008a: 4). Probability of payment depends on the tolerability and costs of austerity. Based on a synthesis of quantitative and qualitative factors, ratings communicate how well a government adheres to specific disinflationary logics aligned with Anglo-American versions of capitalism. Binding concessions are thought to prevent governments from compromising stable prices, which helps protect the value of assets, and keeps interest rates low (Roy, Denzau and Willet, 2007). As a form of expertise, therefore, ratings have a 'programmatic' dimension. Closest convergence earns the coveted, but evermore elusive, 'AAA' grade. Thus, the salience of sovereign ratings derives from how persuasively they manage to constitute this neoliberal notion of budgetary rectitude as the hegemonic discourse against which democratic governments are judged and managed.

What frustrates this risk-centered neoliberal program, I argue, is the 'operational' dimension of fiscal relations; especially on the periphery of Europe. Estimated 'political risks', such as a 'government's payment culture' (Standard & Poor's, 2007) or a regime's 'legitimacy' (Moody's Investor Services, 1991: 165), are fluid and fail to repeat themselves at regular intervals. The 'pain' threshold which a constituency can endure fluctuates according to its changing political economy. It escapes prescient quantification as a probability distribution through the utilitarian calculus of risk. Political risks actually resemble political uncertainties. Accordingly, the greater degree of informal judgment which is required in their assessment opens the rating process to contestation about what 'correct' and 'normal' fiscal conduct should entail. Unique political economies are not as amenable to conforming to aggregating (risk) techniques and the uniform self-systemic/self-regulating logics of neoliberal capitalism which they promote. Antagonisms arise with their imposition which, if excessive, provoke a backlash against harsh cuts (e.g. anti-government 'sit-ins' in Madrid or mass strikes in Greece).

Even CRAs themselves experience a difficult time interpreting fiscal contingencies in their forecasts of credit risk. For example, when France lost its 'AAA' rating on 13 January 2012, S&P (2012a) recognized that the government's attempts to deliver 'growth-enhancing structural measures' could 'run counter to powerful national interest groups'. Unions and other civil society organizations have been protesting against painful budget cuts across the continent. These political disruptions – galvanized by deeper austerity – threaten to dissuade governments from implementing the structural reforms seen to raise output. At the same time, however, S&P (2012a) also admits that a 'reform process based on a pillar of fiscal austerity alone risks becoming self-defeating'. Lacking knowledge of the necessary balance between stimulus and austerity – given the numerous outstanding uncertainties which inhibit their predictive capabilities – CRAs still prescribe an approach to fiscal management which privileges the mentality of financial markets rather than that of electorates.

Sensitivity to context-specific political developments is necessary for an accurate notion of the resiliency of a nation to political shocks. Variegated notions of budgetary normality and differentiated ratings, however, are not accommodated by the aggregating techniques of risk which dominate the rating process. Such an analysis would preclude the ‘narrow rating range’ for which Moody’s strives; even though the company admits that ‘the unusual characteristics of sovereign credit may not be fully captured by this approach’ (Moody’s Investor Services, 2008a: 1). Yet, as the next sections demonstrate, through risk there is a concerted effort to mask the informal judgment necessary to assess sovereign creditworthiness. Unfortunately, I argue that this recursive search for certainty equivalence in the budgetary relations of (European) governments leaves CRAs susceptible to misrepresenting fiscal politics while distorting their own contingent liabilities involved in the construction of these sovereign credit scores.

For this purpose, recent research from the fields of the ‘social studies of finance’ (Callon, 1998; Knorr Cetina and Preda, 2005; Langley, 2008; MacKenzie, 2006) and the ‘analytics of government’ (Aitken, 2007; Dean, 1999; O’Malley, 2004) provide the necessary analytical tools, which conventional international political economy (IPE) lacks, to appreciate how the infrastructure of referentiality underpinning the politics of creditworthiness is (discursively) constituted. Meaning and materiality must be studied together. Ratings act as a socio-technical device of control through which (European) sovereign debt is made into a ‘problem of government’ (Rose, 1999). In short, how ratings represent ‘correct’ and ‘normal’ budgetary conduct, as a social fact and goal for which to strive, is central to their legitimation and the performativity of this EU space; as well as the subjectivities within it.

Two analytical tools are deployed to help us come to terms with this capacity. First, 'deconstruction' exposes how, framed as binary opposites, the dialectical relationship between risk and uncertainty is distorted; thereby embedding risk as the dominant modality informing this performativity. Second, 'reconstruction' shows how this dubious fiscal normality – upon which the politics of limits surrounding sovereign debt are based – is fraught with perils and vulnerable to crisis. Without a 'felicitous set of circumstances' (Butler, 2010: 151) anchored in the realities of national budgetary sovereignty, the predication on the hegemonic discourse of risk fails to prevent crisis as its prescribed austerity conflicts with indigenous forms of capitalism to unleash forces of instability.

Judging Sovereigns

CRAs claim not to design ratings as a probabilistically quantifiable frequency denoting the credit event of default or expected loss, but rather as ordinal rankings of credit risk. Nevertheless, attempts to frame key (qualitative) political determinants, such as the stability and legitimacy of political institutions or the transparency of policy decisions, in absolute risk terms are quite apparent. This makes them more tractable to the rational choice scenarios and stress tests implicit in CRA propriety models. The purpose is to translate more uncertain (political) events into statistical regularities; which enhances the epistocratic leverage of CRAs over the politics of limits. Yet, whereas the higher incidence of bankruptcies in the private sector may make risk probabilities more convincing for corporates, sovereigns rarely default. Ecuador was negligent in November 2008 and more notable was Argentina in November 2001. Greece's March 2012 managed default, however, was the largest sovereign debt restructuring in history – wiping about US$ 130 billion from an outstanding balance of US$ 430 billion (*The Economist*, 17 March 2012) – and the first developed country to default in more than 60 years. Future (disorderly) defaults remain a serious threat. Nevertheless, sovereign bonds are treated identically to corporate debt – structured finance is a separate category – and lack any specific provisions in the CRA regulation. It is the discretionary conduct of rating committees that compensates for this lack of representative data samples and similar quantitative inconsistencies in the construction of ratings. Unfortunately, as I argue, this judgment is muted through the 'objectifying cloak of economic and financial analysis' (Sinclair, 2005: 34).

For example, S&P's (2011b) Rating Analysis Methodology Profile (RAMP) employs a one (the best) to six (the worst) scale that seeks the quantitative capture of the five analytical (sovereign) categories it monitors: (1) political score – political risks and institutional effectiveness; (2) economic score – economic structure and growth prospects; (3) fiscal score – fiscal flexibility and debt burden; (4) external score – external liquidity and international investment position; and (5) monetary score – monetary flexibility. Available for public consumption, these criteria are incorporated into various risk scenarios to calculate the economic resiliency and financial robustness of a government. Not surprisingly, the closer the alignment with policies of austerity, the higher the awarded score. But whereas the assessment of individual categories, and in particular those economic in nature, may be calculated quantitatively, much more perplexing is how they all factor into an aggregate grade.

S&P admits that these 'analytical variables are interrelated and the weights are not fixed, either across sovereigns or across time' (Standard & Poor's, 2008: 2). If so, then this scoring slope (RAMP) that produces the comparative fiscal normality against which peers are assessed is artificially static, and therefore erroneous outside of the strict confines of its underlying assumptions; which attempt to 'freeze' fluid fiscal relations via *ceteris paribus* clauses. Disaggregating governments into so many components, judging these individually before reassembling them also cannot adequately account for their interdependencies and interplay in shaping the debt-bearing capacity of an entire nation.

Although these categories are transparent, the CRA analytical process, whereby the quantitative (risk) and qualitative (uncertainty) are synthesized to render a rating, is secretive and, as I contend, distorted. Neither the RAMP scores nor their assumptions are ever revealed. Doing so would force CRAs to justify their discretionary conduct, or government through uncertainty, as they try to explain the 'special' status of sovereigns (Moody's Investor Service, 2008a: 5). Irrespective of the preponderance of quantitative analysis, it fails to account for the 'constantly mutating formation' of 'contingent social arrangements' (Barry and Slater, 2005: 14). Open to contestation, the ensuing debates would challenge the virtual monopoly of CRAs over the constitution of authoritative knowledge underpinning the problem of sovereign creditworthiness. Of course, S&P is not unique in this respect.

Before analyzing debt dynamics, Moody's first focuses on the 'resiliency' of a country and its shock-absorbing capacity. Substantial degrees of uncertainty-centered management are also evident in the 'steps' that it takes in the determination of a sovereign bond rating. In the first instance, 'economic resiliency' is based on the 'quality of a country's institutional framework and governance' – including nebulous and contingent factors like the 'predictability of government action' and 'the degree of consensus on the key goals of political action' (Moody's Investor Services, 2008a: 2). 'Tolerability' of adjustment costs (Factor 3) only compounds devising a standardized norm against which 'government financial robustness' can be measured (Moody's Investor Services, 2008a). Nevertheless, comparable metrics are at the core of the rating process.

> Both Moody's and the Commission acknowledge that sovereigns are unique given their: exorbitant privilege of taxation, a very high probability of survival (countries rarely disappear), a lack of superior judiciary authority to make debt resolution predictable and a limited sample skewed towards very high ratings for which there is almost no experience of default. (Moody's Investor Services, 2008a: 5)

As a result:

> it is difficult to deconstruct what is 'pure' probability of default and what is pure 'loss severity' at times of default. In fact, this is almost impossible for countries that are high in the rating spectrum (unless there is a clearly discernible, yet unlikely, default scenario). (Moody's Investor Services, 2008a: 5)

To produce this narrow rating range, and thus the permissible threshold against which Member States are synchronically standardized – in comparison to any other political economy – qualitative (informal) judgment is paramount. Where uncertainty prevails, Moody's concedes that it will 'normally assign a rating based on its *perception* of the most likely outcome' rather than 'assign a rating based simply on a probability weighting of the outcomes' (Moody's Investor Services, 2002: 5, added italics). But lacking a systematic 'formula for combining these scores to arrive at a ratings decision' (Standard & Poor's, 1992: 15), it is primarily through the 'continuous effort to make the analysis more quantitative' (Moody's Investor Services, 2008a: 6) that ratings command and sustain their authority. Hegemonic risk calculus serves as their legitimizing force.

If sovereign ratings, to a large degree, are subjective estimations susceptible to serious inconsistencies and bias (Johnson *et al,* 1990), we must determine what justifies the scope and salience of these 'informed opinions'; especially given their significance but dismal record of failure. As the next section deconstructs, the deliberate discounting of uncertainty-based practices, in favor of a defendable calculus of risk, prejudices how the problem of sovereign creditworthiness is constituted to privilege quantitative means, which helps normalize an adherence to epistocratic dictates – often irrespective of their accuracy – and exacerbates the asymmetry between CRAs and governments. Amplified by a fallacious quantitative/qualitative distortion in the analytics of ratings, this obscures how contingent liabilities factor into the production of CRA judgments; which would otherwise detract from their clout. Individual rating agencies, however, have their own institutional protocols, corporate identities and analysts that influence the various stages of rating design. Without any serious consideration of their discursive constitution, and compounded by an unhindered deference to exogenous quantitative analysis, this often amounts to the misrepresentation of uncertainties as risks. Unless the EU targets how uncertainty is deployed – rather than focusing primarily on risk-based practices – then it seems incapable of improving the quality of sovereign ratings.

Uncertainty of Rating Sovereign Debt

To appreciate how ratings shape the politics of creditworthiness and the danger of EU policy undermining its own ambitions, we must first understand the way that CRAs operationalize risk and uncertainty. In large part, their authoritative capacity is commensurate with how well ratings eliminate the perception of imperfect information and forecast the chance of convergence around a devised notion of fiscal normality. Orthodoxy dictates that the more supposed uncertainty that CRAs replace with risk, as they attempt to aggregate contingent fiscal relations into a calculable measure of variance around an expected value – represented as 'AAA' – the more consequential ratings become. Expertise mediates this representational process which, in the ratings space, I argue is consistently aligned with a utilitarian calculus of risk that inculcates disinflationary neoliberal logics. Technical expertise, as Sinclair (1994: 454) reminds us, gives the impression that Moody's or S&P 'disavow any ideological content to their rating judgments'. Devoid of 'interfering variables', such as human discretion, what is a social fact appears to be transformed into objective knowledge as the calculation of an indeterminate fiscal future is purported to become tractable to defendable risk management (O'Malley, 2004: 16).

Adhering to a predictive positivism, the discussion turns to calculating the ontological coordinates of something called 'risk' – in juxtaposition to an 'uncertainty' – whereby a fictitious dichotomy between the quantitative (risk) and qualitative (uncertainty) is promoted. Here the former is perceived as a tangible phenomenon tractable to rational choice modeling and equilibrating outcomes but uncertainty cannot be assigned a definite numerical probability (Hardy, 1923; Short, 1992). Conceptualized by popular accounts as a by-product of modernity, uncertainty is often thought of as an 'incalculable risk' to be feared, as espoused by the 'risk society' thesis (Beck, 1992; Beck, Giddens and Lash, 1994), or celebrated (Bernstein, 1998). Technological advancements (e.g. statistical actuarialism) and enhanced information supposedly enable experts, such as auditors or rating agencies, to patrol the margins of indeterminacy between risk and uncertainty. With the right 'tools', they claim to translate more contingent events into statistical probabilities; which help predict a Pareto-optimal equilibrium (Reddy, 1996). As Hacking (1990) reminds us, knowledge as statistics translates economic relations into a manipulable field for management. CRAs attempt to extend this approach to fiscal relations.

A strict binary opposition, however, between risk and uncertainty should be avoided. Rather than one of mutual exclusion or innate abundance/scarcity, their relationship, as O'Malley (2000) contends, is contestable and heteromorphic. As constructs, they change depending on how they are deployed. Accordingly, this discussion is about how CRAs govern 'through' risk and uncertainty rather than 'things' labeled as such. Searching for some exogenous fiscal realities to unearth, or the management 'of' risk and uncertainty, only subjects us to a false dualism.

Determining the actual displacement of one thing called 'uncertainty' by the other named 'risk', in a painstaking attempt to identify their supposed ontological properties, saddles us with the burden of trying to calculate the exact frequencies of fluid fiscal relations at any one point in time. But risk is in a permanent state of virtuality (Van Loon, 2002: 2). Once it happens, and a static figure is available, it is now a full-blown crisis and no longer a probability. Not only are attempts to capture it as a fixed event elusive and blind to the dialectical relationship between risk and uncertainty but they distract from the more interesting governmental puzzle; namely how the modalities of risk and uncertainty help to discursively construct and legitimatize Member State debt as a ‘knowable, calculable and administrable object’ of government (Miller and Rose, 1990: 5). Here credit ratings are regarded an internal form of governmentality underpinning budgetary relations as opposed to brute facts.

Sinclair (2005: 65-66) attributes the leverage that CRAs exert over global capital markets to the historical institutionalization of norms and rules surrounding creditworthiness, or the ‘embedded knowledge network’. As significant, however, as their historical presence has been to contributing to the power of Moody’s or S&P, it does not fully explain how they have managed to sustain this authority in the face of a consistent stream of failures and lackluster performance. Neither is their monopolistic position in itself satisfactory as poor ratings can be ignored. Arguably, their authoritative capacity is constituted through the performative effects of ratings, which create the conditions and subjectivities that serve to validate this epistemic/discursive framework, and thus their utility and leverage. Performativity combines this relationship between action and authority. Hegemonic risk discourse is at the centre of this depoliticization process (Dean, 1999; Power, 2004). Through the (disproportionate) operationalization and commercialization of risk practices, CRAs reinforce the authoritative capacity of sovereign ratings to act on market participants and governments in the constitution of a neoliberal politics of creditworthiness.

Performativity of Ratings

In his widely acclaimed contribution to the performativity literature, *The Laws of Markets,* Callon (1998: 23) argues that economic theories and methods ‘do not merely record a reality independent of themselves; they contribute powerfully to shaping, simply be measuring it, the reality that they measure’. Given their procedural dimension, as a discursive practice, sovereign ratings have 'illocutionary' performative effects (Austin, 1962; Callon, 2010). Through their description of budgetary positions, such as 'junk' (below 'BBB-'), these utterances communicate a range of judgments about proper fiscal conduct, which inform the constitution of a politics of limits or the fiscal constraints facing governments. Formulated through a readily identifiable scale, ratings are how this (neoliberal) normative statement about creditworthiness gets translated into practice. Adopted and applied by market participants, ratings help constitute a social facticity which may otherwise not exist.

But ratings are not simply a linguistic process. These austere politics of creditworthiness have 'perlocutionary' performative effects on the broader EU assemblage since they depend on the reality produced by said ratings in order to dictate successfully how fiscal sovereignty should be exercised. The effective control of ratings to provoke the prescribed disinflationary management of Member State finances is intimately linked to the naturalization of the neoliberal logics implied in and promoted by said ratings. Performativity in action, or what Callon (2007: 330) refers to as 'performation', 'encompasses [the] expression, self-fulfilling prophesies, prescription, and performance' of varying degrees of budgetary prudence or profligacy, which endow the problem of Member State debt with social facticity and create the conditions where it is enacted and reproduced. Action and authority combine to 'govern-at-a-distance' (Miller and Rose, 1990); with effects on three subjectivities implicated in the debt crisis: governments, CRAs, and investors. As a socio-technical device of control, ratings connect notions of proper fiscal conduct (i.e. neoliberal orthodoxy) to economic behavior (of states and market participants).

Through this performation, control as calculation is revealed and institutionalized (Deleuze, 1995). Sovereign ratings have a 'programmatic' effect of *modulating* budgetary conduct. Whereas discipline entails both individualization and normalization, regimes of control regulate deviance rather than fundamentally reform the actor. As long as either Italy or Portugal behaves in a manner conducive to achieving a higher investment grade, then whether they have truly embraced the neoliberal mentality is secondary. Outcomes matter for CRAs. That is unless, as I contend, the performation generates tensions/shocks – illustrated by the social costs of the debt crisis – that focus on its politics. An antagonistic relationship between the programmatic/expertise and operational/politics dimensions of fiscal governance develops; which pits the two competing logics of legitimacy (in the eyes of financial markets) and accountability (to citizens) against each other. If, according to CRAs, 'political imperatives only compromise economic fundamentals, impeding the efficient operation of the market mechanism' (Hay, 2007: 56), then political discretion, or the 'operational' dimension of budgetary management, is a liability to be mitigated. Otherwise, deviance from the prescribed fiscal normality brings about public consequences.

To dampen the potential adverse effects that democratic politics may have on creditworthiness, and on the predictive power of ratings themselves, a bifurcation between politics and economics is promoted. Technocratic governments are seen by CRAs as typically superior in implementing the structural reforms necessary to manage the crisis. Subsequently, their 'political risk' scores are better; though not disseminated. Through this depoliticization of the budgetary process, self-generative effects are visible for rating agencies. Ratings function as self-validating feedback loops (Callon, 2007; Hacking, 1999). They '"perform" the market by helping to create and sustain the entities [they] postulate' (Guala, 2007: 135). Better political risk scores are indicative of, relatively, more stable and prudent (technocratic) governments. So significant are these political measures that a score of '6' precludes a sovereign from obtaining a higher rating than 'BB+', irrespective of its net asset position (Standard and Poor's, 2011b: 9). This helps validate the CRA opinion that political discretion should be minimized; lest it jeopardize creditworthiness. For example, S&P (2012a) commends the Italian government of Mario Monti for having, in its words:

> stepped up initiatives to modernize [Italy's] economy and secure the sustainability of

> public finances over the long term. We consider that the domestic political management of the crisis has improved markedly in Italy. Therefore, we have not changed our political risk score for Italy because we are of the opinion that the weakening policy environment at the European level is to a sufficient degree offset by Italy's stronger domestic capacity to formulate and implement crisis-mitigating economic policies.

As governments initially change to conform to the austere prescriptions implicit in ratings and investors react based on these accounts, ratings – however accurate – are legitimized. In short, ratings yield self-generating effects for CRAs.

Procyclicality only reinforces these self-validating effects as downgrades and 'negative outlooks' create the deteriorating conditions for further ratings cuts. As fiscal positions continue to worsen, recessionary pressures grow, which, if persistent, serve to validate the smoothing rule's prescription of additional downgrades implicit in the 'through-the-cycle' (TTC) rating methodology. During economic contractions, such as the current crisis, the probability of a downgrade grows substantially; whereas in an upswing, the probability of upgrades increases (Lowe, 2002). Most downgrades, however, occur once a crisis has already begun. The TTC approach suffers from a lag as it 'waits to detect whether the degradation is more permanent than temporary and larger than one notch' which tends to 'accentuate the already negative movement in credit quality' (IMF, 2010; xiii). Evidence (Haldane *et al*, 2000) confirms this procyclical time lag. Only in less than 25% of cases have Moody's and S&P cut a sovereign rating before the onset of a correction.

Applied to the present crisis, Gärtner, Griesbach and Jung (2011) calculate that the periphery misfits (Portugal, Ireland, Greece and Spain) have been excessively downgraded. For example, the difference between Ireland's 'systematic' rating, as a function of economic and structural variables alone, and its actual credit score reveals a substantial increase in the 'arbitrary component' of the grade – 'defined as what is left unexplained by observed previous procedures of rating agencies'

(Gärtner *et al*, 2011: 3). Especially pronounced after 2009/2010, not only does this discretionary element exacerbate the situation facing these Member States by raising risk premia (i.e. yield spreads), but the 'arbitrary rating downgrades trigger processes of self-fulfilling prophecy' that only fuel the sovereign debt crisis (Gärtner *et al*, 2011: 2). Procyclicality exhibits is own (amplifying) feedback effects which strengthen the position of CRAs. As governments go into damage control mode, the threat of systemic disruption looms.

Another ominous prospect stems from the constitutive effects of risk-centered ratings for investors. Arguably, a primary appeal of ratings is as an inexpensive form of outsourced due diligence. Given the uncertainty in calculating the risk of sovereign default, bond fund managers and banks attempt to minimize such costs while searching for potential arbitrage opportunities (Beunza *et al*, 2006; Partnoy, 2006: 78). In addition to hedge-based and other investment strategies, ratings enable investors to capitalize on the variance in creditworthiness between Member States. Synchronically connected, heterogeneous economies become comparable as ratings help determine who is eligible to access liquid capital markets and at what cost. In short, the institutionalization of ratings helps constitute 'speculators' as it equips them with an arsenal of tools with which to exploit the relative vulnerability of national governments. Because portfolio/asset managers are often required to buy investment grade securities, investors are modulated to accept the authority of ratings as they complement their business ambitions. Jumping into the fray are hedge funds. With the massive offloading of downgraded European debt, they are taking advantage of discounts of up to 50% (Habbard, 2012). Whether the accuracy of these ratings, such as 'junk', is precise is really of secondary significance as profits are made from arbitrage and movements in comparable prices.

Effects are especially pronounced with a transition to 'speculative' grade issues (Cantor and Packer 1995: 37). When Moody's (2011c) downgraded Portugal to 'Ba2' from 'Baa1' (negative outlook) on 05 July 2011, and into junk territory – citing a growing risk of a second bailout – it sent the markets tumbling. Although not completely unexpected, the euro depreciated, the UK FSTE 100 index fell below the psychological 6000 mark (5988), and fears of contagion spread as Portugal's 10-year bonds surged above 13% to a euro-era record against German Bunds. As market sentiment quickly deteriorated, the procyclicality of the negative forecast was confirmed first by Fitch ('BB+' on 24 November 2011) and then by S&P ('BB' on 13 January 2012). Without any serious evaluation of the finance ministry's accusation that 'serious inconsistencies' existed in S&P's rating methodology, the 'BB' utterance was sufficient enough for a similar sell-off. With subsequent rebalancing, the benchmark 10-year bond yield shot up to another record of above 17% (*Financial Times*, 30 January 2012). Lacking time and a reliable approach to assess these judgments, market participants incorporate and act on these credit scores to create the conditions which help validate the assumptions implicit in the rating. With each subsequent downgrade, debt burdens grow and the capability of Member States to stimulate economic growth is hindered. Over time, this normalizes an increasing adherence to ratings.

Ratings, *per se*, are not problematic. If fact, their marginal utility is debatable as sophisticated market participants (e.g. PIMCO, Paulson & Co.) perform their own comprehensive analyzes (Partnoy, 2002; Schwarcz, 2002). Failure to conduct proper internal risk assessments often precipitates a crisis. Outsourced due diligence may represent value of simplicity but accuracy suffers. Readily adopted scores generated by opaque proprietary models is one thing. Even more precarious, however, is the embeddedness of ratings in regulatory and contractual architecture. Not only does it intensify their spill-over effects (ECB, 2011; IMF, 2010) but it acts to normalize them.

External ratings – primarily through their 'certification' role[1] – diminish the sense of urgency for investors to replicate such tests. As a socio-technical device of control, the performative effect of ratings – through their reiteration of fiscal rectitude an exogenous/tangible risk – is to impede the endogenous responsibility of market participants to manage through their own uncertainty. Readily accepted, external ratings inhibit the internalization of self-regulation or regulation based on one's own circumstances. Given the rapid sell-offs and spikes in risk premia witnessed immediately after a rating action, such as in Portuguese case, rarely do the vast majority of market participants seriously study the validity of these judgments before making that transaction. Even if rating actions confirm what has already been priced into the market, previous ratings and outlooks typically factor into those expectations (Sinclair, 2005). Now as the discretionary conduct of both politicians and investors becomes marginalized, the authority of self-systemic market logics (read risk discourse) in the constitution of the politics of limits is further cemented.

Performativity Breakdown and Crisis

As revealing as the deconstruction of the analytics of ratings is to helping us better understand their authoritative capacity, it is not the entire story. The practical adoption of sovereign ratings, and thus an adherence to their neoliberal program can, in fact, serve to hinder convergence towards their prescribed fiscal normality. Reconstruction shows that, in the European context, ratings may actually precipitate the 'converse' of what they describe to alter national political economies 'in such a way that [their] empirical accuracy...is undermined'; or what MacKenzie (2006: 19) labels as 'counterperformativity'. In this instance, however, it is not the empirical validity of the model itself (read sovereign ratings) that is the focus. Their fallacious analytics of ratings have already been dissected above to show how they distort fiscal relations and mask contingent liabilities by misrepresenting uncertainties as risks. Of significance here is how sovereign ratings *can jeopardize their own programmatic ambitions* by creating the very conditions which refute their disinflationary rationalities and further impair their calculative capability. Excessive austerity and a crippling adherence to neoliberal precepts can go too far and impose that 'intolerable economic sacrifice on populations' (Moody's Investor Service, 2008a: 6); which triggers violent resistance and national efforts to reclaim fiscal sovereignty. Instead of appeasing financial markets, at this juncture, governments move to protect their people. There are three elements to this performativity breakdown.

First, in compliance with the prescriptive normativity of ratings, governments implement the harsh austerity measures thought to improve their credit scores. With the EU projecting an increase in eurozone debt from 66.3% of GDP in 2007 to 92.7% in 2013, public expenditure on social programs have either been slashed, passed on to subnational governments through growing fiscal decentralization or both (European Commission, 2012: 18). For example, the overhaul of health care systems across the periphery of Europe has resulted in deep expenditure cuts – 25% (US$ 12 billion) in Greece alone (European Observatory on Health Systems and Policies, 2012: 13). Falling tax revenues only compound the problem as Member States fall back into recession.

Second, and following from the above, socio-political contestation abounds regarding the adverse effects of such a policy direction on economic growth and the provision of public goods. Rather than improving the crisis, adherence to this disinflationary fiscal rectitude may only be intensifying the downturn. Constrained budgetary stimulus produces procyclical effects, which further dampen economic growth. Coupled with climbing unemployment – EMU rate in August 2012 was 11.4% compared to 10.2% the previous year – and plummeting welfare levels, austerity fatigue is setting in across Europe. Already, attempts to realign with an austere budgetary normality have triggered violent backlash and civil unrest; whereby the politics of resistance seeks to reclaim lost fiscal sovereignty. Soaring youth (under 25) unemployment is only fueling this volatile discontent.

Accordingly, Callon (2010: 164) is correct to assert that the success of illocutionary performativity is temporary because its capacity 'to make inactive and invisible [its] overflowing and misfires' for an extended period of time is dubious. There is a critical breaking point; after which the performativity of ratings fails to engender successfully a disinflationary program as governments begin to take measured steps to repoliticize the discourse and enact policies to protect their citizens. When excessively pressured, governments have a variety of available options at their disposable to correct this asymmetry; including curtailing certain market activities, such as the partial ban on short-selling by France, Italy, Spain and Belgium demonstrated. Socialist party election victories in France and Greece may be indicative of this movement. Of course, the definition of 'intolerable' and whether these popular movements can sufficiently mobilize and organize to bring about such change is still being determined. What is clearer, however, is that the antagonism between the programmatic/expertise and operational/politics dimensions of fiscal governance is growing; without any sign of abating.

Finally, given this intensifying tension, there is now even more political upheaval for rating agencies to assess and to factor into their calculation of the credit scores of Member States. Not only are these volatile dynamics less tractable to risk calculus but they demand a higher degree of informal judgment (read government through uncertainty) to help come to terms with their possible, but contingent, effects on sovereign creditworthiness. This makes ratings more susceptible to the bias and temperaments of rating committees, and thus inconsistencies (Johnson *et al*, 1990). In short, reconstruction shows that sovereign ratings have the potential to disrupt the very continuity upon which they depend and to undermine their own empirical validity. Budgetary politics is replete with numerous exigencies which, when excessively aggravated by a compliance to ratings, can randomly sabotage the programmatic ambitions of its surveillance to refute ratings; namely counterperformativity.

Now whether these operational dynamics, in fact, are derived from some actual domains, which are either converging or diverging to become distinct *liberal* or *co-ordinated* market economies, only bogs us down with more questions about the ontological essence of social relations or globalization. This is not to claim that notable differences do not exist between what has become identified as 'varieties of capitalism' (Hall and Soskice, 2001; Schmidt, 2002). Although any strict typology omits the contingency (institutional, cultural, etc…) and hybridization implicit in how the economy is organized and governed, a juxtaposition between Anglo-American and continental European rationalities and forms of capitalism illuminates the precarious relationship between the austere programmatic dimensions of ratings and the operational side of European social models. Substantial overlap does exist but those are empirical questions that are beyond the scope of this article.

Given their disinflationary logics, neoliberal programs (i.e. austerity, privatization) often conflict with the capacity of Members States to privilege greater degrees of social democracy and solidarity through schemes such as protected public pensions or greater collective bargaining (Schmidt, 2002). From this perspective, Hay's (2007: 257) observation that 'powerful neoliberalizing tendencies…threaten the incremental dilution' of continental forms of social democracy is compelling as it applies to sovereign ratings as a depoliticizing socio-technical device; which help promote a fictitious separation between the economy and politics. But this performativity is challenged by unique national contingencies that resist its imposition. General strikes, mass protests, or falling governments (e.g. Netherlands, France) across Europe may be the initial signs of counterperformativity. Rather than performing their depiction of correct fiscal conduct into existence, ratings, and the excessive austerity they promote, can risk undermining it. Procyclicality can exacerbate this movement.

In order to remedy some of the most dubious elements of ratings, which can trigger these disruptive effects, and prevent this antagonism from boiling over, the EU has devised a new set of regulatory technical standards. The objective is to monitor CRA compliance with the CRA framework; thereby helping improve the predictive power of credit rating methodologies. It is assumed that this will somehow curb the escalating tension between the agencies and Member States and redress the growing asymmetry. But, by problematizing the RTS, the following sections reveal how the EU regulatory response may amplify the performative effects of ratings to (inadvertently) sabotage its own ambitions to manage effectively the sovereign debt crisis.

Monitoring Rating Compliance

At first glance, it appears that the EU is undertaking what are credible policy initiatives to correct some of the failures in financial supervision exposed by both the credit and sovereign debt crises. Upon the recommendations of the European Securities Markets Experts Group (ESME, 2008), chaired by Jacques de Larosière, the CRA framework focuses on three main areas: registration, conduct of business and supervision. Centralized oversight of ratings agencies at the EU level – the European Securities and Markets Authority (ESMA) is entrusted with launching investigations, conducting inspections, proposing fines and prohibiting operations – and a more rigorous methodology are thought to increase transparency and competition in the ratings space. Key stipulations include prohibiting CRAs from providing advisory services or from rating financial instruments without the sufficient quality information upon which to ground their opinions. Quality is of the utmost importance so the disclosure of models, methodologies and key assumptions used in ratings is also mandated. Unfortunately, devoid of the appropriate supervisory methods to ascertain how uncertainty is deployed in the construction of ratings, I posit that the EU's capacity to monitor and manage CRAs is greatly circumscribed.

Admitting that the existing rules – Regulation (EC) No 1060/2009 (CRA Regulation v1) and its amendment (EU) No 513/2011 (CRA Regulation v2) – are inadequate, the Commission (2011) proposed a new draft Directive and Regulation (v3) in late 2011. At the top of the agenda is improving the quality of sovereign debt ratings by making them more transparent and timely.

Transparency is also deemed essential in helping reduce investors' overreliance on external ratings as well as in eliminating conflicts of interest and promoting accountability/liability among CRAs for their products. To verify compliance, ESMA drafted a set of regulatory technical standards. Article 8(3) is the most significant, yet most ambiguous and contested section of the new regulatory framework. Touted as a unique 'European touch', it stipulates that 'a credit rating agency should use rating methodologies that are rigorous, systematic, continuous and subject to validation based on historical experience, including back-testing' (CRA Regulation v1). Undoubtedly, ESMA is serious about its supervisory role and ensuring that it has bite as well as bark. Upon closer examination, however, this article contends that, without correcting the fallacious analytics of ratings skewed towards risk, the RTS help enhance the legitimacy of what is a form of outsourced due diligence; thereby exacerbating the depoliticizing effects of ratings.

Good governance is dependent on an appropriate set of preventative and corrective practices that can help achieve the programmatic ambitions of an organization without inhibiting its ability to adapt to the uncertainty of changing circumstances (Power, 2007). To apprehend and address the rapidly shifting parameters of global finance and safeguard financial stability, 'it is necessary to identify, at an early stage, trends, potential risks and vulnerabilities stemming from the micro-prudential level, across borders and across sectors' (European Commission: DG EcFin, 2009: 19). For this purpose, ESMA has labored to tweak the August 2010 technical standards deployed to assess CRA compliance with Article 8(3) (CESR Ref. 10-945, CESR Guidance) developed by its predecessor, the Committee of European Securities Regulators (CESR). A draft Consultation Paper (ESMA, 2011a/303) was released on 19 September 2011, and the formal framework was submitted for endorsement at the beginning of 2012. It is already clear that substantive similarities exist which can threaten its mandate. Principal logics and methods embodied in the antecedent CESR Guidance are transposed to the new RTS, which can reinforce the hegemony of risk discourse in the constitution of a neoliberal politics of limits.

Risk played the dominant role in the CESR Guidance. Assessments relied heavily on probabilistic factors, such as probability of default, loss curves, and expected recovery rates (CESR, 2010: 4). As noted above, even though CRAs claim that ratings are ordinal rankings, the EU also recognized how extensively statistical probabilities are applied in CRA propriety models. Rather than readdressing the problems of such an application to political/fiscal phenomena, both CESR (2010: 6) and ESMA (2011b/462, Art.4 (2a)) instruct CRAs simply to submit 'the scope of qualitative judgment' in these contestable areas. What this actually entails is quite ambiguous. In determining the appropriate level of assessment, ESMA (2011b: 22) 'shall consider whether a credit rating methodology has a demonstrable history of consistency and accuracy in predicting creditworthiness'. ESMA is adamant about preventing interference with the analytical substance of CRA methodologies. This produces a twofold conundrum. On the one hand, ESMA wishes to fulfill its mandate without advocating strategic policy decisions. On the other hand, to correct the egregious elements of sovereign ratings, reduce their overreliance and improve their quality, it simply cannot support the status quo in regards to their constitution. Doing so may only accelerate the shift away from human competencies and the critical judgment of democratic rule towards the quantitative techniques of epistocracy. The RTS may act as a catalyst for this performation.

Rigorous

To begin with, the 'rigorousness' of rating methodologies is evaluated. Accuracy relies on uncompromising high standards. Robust precision is desirable. But deciphering whether Moody's or S&P demonstrates having 'incorporated *all factors* relevant in determining creditworthiness...which shall be supported by statistical, historical experience or evidence' (ESMA, 2011b/462, Art.4 (1b), added italics) or proving that any ‘assumptions and criteria are reliable, relevant’ and of ‘sufficient quality’ is mindboggling. How is statistical evidence or proof of reliability possible when calculating the ‘tolerability of debt’ encompasses such nebulous notions as the consensus surrounding political succession (Standard & Poor’s, 2008: 3) or a regime’s ‘legitimacy’ (Moody’s Investor Services, 1991: 165)? If Moody’s (2008a: 6) itself admits that there are ‘no quantitative-based approaches that satisfactorily replace analysts’ disciplined judgment on these questions’ then how feasible is it for the EU to determine and assess the requisite degree of discretionary conduct involved in rating a sovereign? Not surprisingly, how the quantitative and qualitative parameters are accommodated and synthesized is never revealed by CRAs.

Demanding a high level of description of qualitative inputs – including the ‘scope of qualitative judgment’ – presupposes some kind of standardized metric/benchmark, according to which subjective decisions about unique national fiscal positions can be made. Should such a formula readily be available or a qualified/competent appraiser exist then what precludes the EU itself from proposing a single method for calculating the risk of default? One definition would relieve the terrible burden of having to discriminate how discretionary judgment is applied by a host of agencies; each with their own proprietary models, corporate culture and institutional identity. As I argue, qualitative elements elude being captured through quantitative techniques. It is difficult to imagine how such opaque procedures can establish methodological rigorousness to yield anything but ambiguous and superficial conclusions.

This can contribute to the self-generative effects for CRAs. Insofar as these obscure methods of assessments fail to target adequately the contingent liabilities implicit in the construction of ratings, they enable rating agencies to continue their operations without any substantial interference. Business is as usual if CRAs are only compelled to demonstrate what is essentially already available for public consumption. Unless ESMA defines what these ‘relevant’ or ‘suitable’ qualitative variables are and how they should be synthesized then it will be left to the discretion of the rating agencies themselves to decide what satisfies these requirements. Cooptation of the supervisory analysis through the reinforcement of risk discourse in the definition of the problem of sovereign debt is possible as vague criteria and nondescript labels are open for interpretation. ESMA's adherence to non-interference simply makes it more vulnerable. Of course, as argued above, self-validating practices for CRAs often invalidate competing notions of what is credible and correct fiscal policy. These unintended consequences can undermine regulatory control by cementing the asymmetric authority of CRAs relative to the EU in the constitution of the politics of limits.

Systematic and Continuous

Evidence of the 'systematic' and 'continuous' application of rating methodologies may be slightly more tangible. Consistency can be monitored; if the focus is on risk methods. Informal judgment, or government through uncertainty, eludes systematic capture. Thus, it is difficult to grasp exactly what of (political) significance in the construction of sovereign ratings will be studied and how. Irrespective of its acknowledged 'special' status by rating agencies, ESMA treats sovereign debt identically to corporate debt. No specific provisions for sovereigns are included in the regulation to make contingent liabilities much more explicit. 'Key credit rating assumptions and criteria' may be identified. But verifying whether they are 'applied systematically' to fluctuating fiscal politics or the 'objective reason' for any divergence is highly problematic (ESMA, 2011b/462, Art.5 (1)).

Here again there is a deliberate attempt to deploy 'pre-defined methodologies' to rating the fluid and contingent character of fiscal relations (CESR Guidance, 4B.42). Rather than tailoring context-specific approaches (i.e. differentiated ratings), this sanctions the transposition, and thus enhances the ubiquity, of risk vectors. Transitional matrices are a tool for computing the probability of rating migrations. Plagued by a procyclical bias and seldom problematized, yet readily applied from one context to another, these techniques may be repeatable but sovereigns are unique. Management through uncertainty cannot be systematically orchestrated because it fails to reproduce itself at regular intervals. Again, risk dominates the regulatory approach.

Continuity and consistency are fundamental to the sedimentation of ratings. Risk's probabilistic (predictive) potential, arguably, promises some semblance of relative stability in an otherwise constantly changing world of finance. For investors, this provides a platform for their calculations. Asymmetric information and discrepancies in calculating capacities help foster a dependence on external ratings (Sinclair, 2005). If they are allowed to think that EU sanctioned methods, in fact, permit the synchronic comparison of credit ratings across different asset classes and time (ESMA, 2011b/462, Art.6 (1c)), investors may be less inclined to be diligent because continuity gives the impression of propriety. Time and repetition help normalize adherence to risk techniques. Subscription to these socio-technical devices subjects investors to (exogenous) constitutive forces. The effect is to inhibit regulation based on one's own circumstances or through informal judgment.

Here CRAs 'design and impose modalities of encountering, and consequently sociotechnical algorithms of pricing, that produce asymmetries and guarantee the domination of certain agencies over others' (Callon, 2007: 348). External ratings no longer compel (passive) managers to use as much of their own 'self-conscious critical faculties' in the assessment of creditworthiness (Holmes and Marcus, 2005: 237). Continuously skewed towards risk, and continuously blessed by the EU, their reiteration and citation impedes the endogenous responsibility of managing through one's own uncertainty and diligently conducting one's own research. Although reducing this overreliance on external forms of assessment is a priority for the EU (European Commission, 2010), the RTS may only heighten this dependence as they repeatedly work to entrench the validity and utility of risk techniques for investors. Constitutive effects are visible as investors relinquish a substantial degree of their judgment, liability and decision-making capacity to CRAs. As the surprisingly sustained popularity of ratings shows, this helps normalize them into adherence. Here ESMA's administrative apparatus legitimizes an infrastructure of referentiality which reinforces the authority of Moody's or S&P as principal knowledge entrepreneurs in the politics of limits. Subsequently, as ratings remain one of the primary channels for communicating creditworthiness and translating it into market activity, their continuousness can also amplify the self-generative effects for CRAs.

Validation Based on Historical Experience

Ostensibly, the most arduous, if not the most perilous, responsibility for ESMA involves subjecting rating agencies to validation based on actual performance. Is there a comprehensive and integrated framework that can validate 'reliable inputs, including appropriate size of data sample' (ESMA, 2011b/462, Art.7 (3c)), which 'allows for a *truly representative* sample...to control the accuracy' of ratings (CESR Guidance 4D.65-70, added italics)? For this purpose, ESMA concedes that the infrequency of sovereign defaults is highly problematic. Yet it offers no viable alternative apart from mimicking methods that attempt to transform (singular) fiscal uncertainties into (aggregate) pools of risk. Amounting to the misrepresentation of uncertainties as risk, the RTS can reaffirm the hegemony of the discourse of risk in assessing fiscal relations. At stake is the stability the EU and financial markets as significant information is distorted or withheld.

Sovereigns rarely default. Prior to the Greek managed default, Ecuador (November 2008) was negligent on an interest payment of US$ 30.6 million owing on US$ 510 million of global bonds maturing in 2012, which it considered as 'illegitimate'. Its second default in a decade, Ecuador eventually was downgraded to 'Ca' by Moody's, who confirmed that 'the government's decision to default was based on ideological and political grounds and not related to liquidity and solvency issues' (Moody's Investor Service, 2008b). Of course, no accurate measurements exist to forecast such factors. Distressed exchanges also occurred with Belize (2006) and Uruguay (2003). One of the most notable was Argentina's November 2001 announcement that it would fail to pay the coupon on its bonds. Eventually, US$ 82 billion of debt was restructured in 2005.

Now ESMA must devise some elaborate benchmark analysis capable of compensating for this limited population sample while simultaneously accounting for the extreme (political) heterogeneity present in available cases. Correlations between fluctuating political economies – especially as diverse as the emerging markets and EMU – are prone to failure. The diverse and factional socio-political elements, which factor into calculating the propensity towards fiscal failure, make arriving at an accurate comparison virtually impossible and improbable. Technical proxies, such as liquidity conditions, may be comparable for some purposes but when applied to sovereigns they distort fluid socio-political forces. Absolute default probabilities may not be what CRAs claim to measure but Moody's (2002) admits that 'there is an expectation that ratings will, on average, relate to subsequent default frequency'. Forward-looking evaluations are performed and supplemented with hypothetical stress tests. Probability distributions are integral to this comparison of peers (IMF, 2010). But lacking the appropriate sample size to conduct the assessments, these projections are at best incomplete, at worst fictitious.

Back-testing divorces ratings from the messy world of fiscal politics; which is exactly the accusation leveled against CRAs by the EU. Virtual free reign in determining what constitutes as a relevant approximation can reinforce the self-generative effects for rating agencies as it elevates the status of their risk-based methods. As opposed to penetrating the hermetic enclosures of CRAs to enhance transparency and reveal ratings errors, this RTS approach is an implicit admission that risk-based techniques alone are insufficient to assess the danger of sovereign default. Nevertheless, it still proposes risk calculus as a solution. A minimal burden of proof coupled with verification techniques that seem daunting to apply may serve to immunize rating agencies from serious scrutiny.

In short, by relying on risk-based verification practices, EU policy neither prevents nor corrects the tremendous imbalances evident in the ratings space. Its incapability to ameliorate these inadequacies is not simply a procedural matter. More significantly, it stems from the regenerative performativity of ratings aligned with a ubiquitous and hegemonic discourse of risk. Performative effects on CRAs, investors and the EU can be exacerbated as the criteria used to evaluate sovereign ratings methodology helps render fiscal politics, and its susceptibility to governmental intervention, thinkable in terms of risk. Quantitative calculations impose an artificial uniformity on fiscal politics by judging democratic governments against an exogenous (neoliberal) model of appropriate budgetary conduct. As alternatives to risk calculus are invalidated so are competing visions of fiscal normality unaligned with Anglo-American forms of capitalism. But the legitimacy of this invalidation rests on the misrepresentation of uncertainty as risk in the constitution of creditworthiness. Arguably inadequate in redressing this approach, the RTS, in fact, may serve to embed its dominance. Yet such performativity cannot control the heterogeneous operational dimensions of budgetary governance for long. As national fiscal sovereignty is pushed to reassert itself, such as across the periphery of Europe, we could be witnessing the potential disruption of this programmatic ambition.

Conclusion

Debates about the definition of what normality 'is' often neglect what normality 'does'. In other words, what are the performative effects of conceptualizing fiscal normality as a risk? Through a variety of significations, sovereign ratings help inscribe a meaning of what constitutes as appropriate budgetary conduct into the European political economy. Progressively acting to eliminate the alterity that exists between Member States – by inducing a fictitious bifurcation between the economy and politics through their performative effects – ratings are an internal form of governmentality aligned with self-systemic, disinflationary logics of neoliberalism. For this purpose, the (depoliticizing) inertia of risk management is tremendous. A false dichotomy between (qualitative) uncertainty and (quantitative) risk is promoted to help constitute this austere politics of limits underpinning the European sovereign debt crisis. Insofar as these stabilizations are produced, their performation leaves them vulnerable to breakdown. Once crisis erupts and fiscal sovereignty is excessively threatened, as may happen across the periphery, the terms of the political within the economy are revisited as forms of social democracy are protected.

Through a diagnosis of this relationship between the programmatic and operational dimensions of fiscal governance, two observations are notable. First, by deconstructing how CRAs appropriate the constructs of risk and uncertainty in the design of sovereign bond ratings, we begin to appreciate how, in spite of the transformative illocutionary potential of ratings, the fictitious quantitative/qualitative binary opposition between risk and uncertainty contributes to their misrepresentation. This distortion permits contingent liabilities to be masked which, in turn, helps validate a prescriptive (artificial) fiscal normality. Together these instill a false degree of verisimilitude about the nature of fiscal relations and how amenable they are to intervention as they institutionalize a form of dysfunctional information exchange.

Second, reconstruction shows how, based on this (dubious) knowledge, the performation of the politics of limits surrounding sovereign debt is fraught with perils and vulnerable to breakdown. Contestation abounds as the programmatic ambitions and effects of fiscal surveillance clash with national political agendas and aspirations. The inherent heterogeneity of European budgetary relations challenges excessive austerity and crippling adherence to neoliberal precepts. With the ensuing backlash that we are witnessing, the persistent failure of ratings to fundamentally transform national political economies can swell to disturb the performation of the politics of limits. In crisis, the parameters of the permissible become malleable; to what extent remains to be seen.

Sovereign ratings help engender self-generative effects for CRAs, constitutive effects for investors, and unintended consequences for Member States. Problematizing the EU regulatory response demonstrates how these effects can be exacerbated. Although this matrix may normalize a stabilization, it is fragile and susceptible to disruption. Misfires occur because 'perlocution implies...the possibility of having an effect, but without any strong notion of probability or any possible version of necessity' (Butler, 2010: 151). Government through uncertainty is equipped to deal with budgetary exigencies whereas risk only contributes to and exacerbates them by imposing an artificial uniformity on European fiscal landscapes. Of course, this is not claim that probabilistically quantifiable techniques are without merit. But to recognize the authoritative capacity of ratings is to understand how their construction facilitates their performativity. No matter how much authority ratings may command, ultimately, fiscal temperaments are fluid and too idiosyncratic to be captured in a probability distribution.

Therefore, the last thing that the EU needs to do is (inadvertently) sabotage its own ambitions and amplify the discourse of risk. Unfortunately, the four measures of the RTS are deficient in both their preventative and corrective capacities. Not only can rating quality suffer but mimicking methods that attempt to transform (singular) uncertainties into (aggregate) pools of risk can only make the EU complicit in their misrepresentation. Already in an asymmetric position relative to Moody's or S&P, by adopting a predominantly risk-centered approach to the verification of sovereign ratings, the EU falls prey to conducting business on their terms. To varying degrees, this can help strengthen the self-generative effects for CRAs, heighten the dependence on external ratings for investors, and undermine the EU's authority to manage effectively the sovereign debt crisis as it exposes Europe to the threat of further financial and fiscal failures.

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Notes:

1. Ratings are signals which inform market actors of the suitability standards of an issuer. Investment policies and mandates of portfolio and asset managers demand that they only invest in investment grade bonds. Ratings also certify which securities can serve as part of regulatory capital requirements.

References

Aitken, R. (2007) *Performing Capital: Toward A Cultural Economy of Popular and Global Finance*, New York: Palgrave.

Austin, J. L. (1962) *How to do Things with Words*, Cambridge, MA: Harvard University Press.

Barry, A. and Slater, D. (2005) 'Introduction', in A. Barry and D. Slater (eds) *The Technology Economy*, 1-27, New York: Routledge.

Beck, U. (1992) *Risk Society*, London: Polity Press.

Beck, U., Anthony G., and Lash, S. (1994) *Reflexive Modernization*, Cambridge: Polity Press.

Beunza, D., Hardie, I., and MacKenzie, D. (2006) 'A Price is a Social Thing: Towards a Material Sociology of Arbitrage', *Organization Studies*, 27(4): 745-69.

Bernstein, P. (1998) *Against the Gods: The Remarkable Story of Risk*, New York: Wiley.

Butler, J. (2010) 'Performative Agency', *Journal of Cultural Economy* 3(2): 147-161.

Callon, M. (1998) 'Introduction: The Embeddedness of Economic Markets in Economics', in M. Callon (ed) *The Laws of Markets*, 1-59, Oxford: Blackwell Publishing.

Callon, M. (2007) ‘Performative Economics’, in D. MacKenzie, F. Muniesa, and L. Siu (eds) *Do Economists Make Markets? On the Performativity of Economics,* 311-57, Princeton: Princeton University Press.

Callon, M. (2010) ‘Performativity, Misfires and Politics’, *Journal of Cultural Economy,* 3(2): 163-69.

Cantor, R. and Packer, F. (1995) ‘Current Issues in Economics and Finance’, *Federal Reserve Bank of New York Quarterly Review* 1(3): 1-6.

Committee of European Securities Regulators (2010) ‘CESR’s Guidance on Common Standards for Assessment of Compliance with Credit Rating Methodologies with the Requirements Set Out in Article 8.3’, Paris, 30 August.

Dean, M. (1999) *Governmentality: Power and Rule in Modern Society,* New York: Sage.

de Goede, M. (2004) ‘Repoliticizing Financial Risk’, *Economy and Society* 33(2): 197-217.

de Goede, M. (2005) *Virtue, Fortune, and Faith: A Genealogy of Finance,* Minneapolis: University of Minnesota Press.

Deleuze, G. (1995) ‘Control and Becoming’, in Gilles Deleuze, ed., *Negotiations,* 169-176, New York: Columbia University Press.

Estlund, D. (2008) *Democratic Authority: A Philosophical Framework,* Princeton, NJ: Princeton University Press.

European Observatory on Health Systems and Policies (2012) ‘Health Systems and the Financial Crisis’, *Eurohealth* 18(1): 1-44.

European Central Bank (2011) ‘European Commission’s Public Consultation on Credit Rating Agencies – Eurosystem Reply’, Frankfurt, February.

European Commission: DG EcFin (2012) *Report on Public Finances in EMU 2012,* Brussels, April.

European Commission: DG EcFin (2009) *Economic Crisis in Europe: Causes, Consequences and Responses*, Brussels, July.

European Commission: DG MARKT (2010) *Public Consultation on Credit Rating Agencies,* Brussels, 5 November, IP/10/1471.

European Commission (2011) ‘Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EC) No 1060/2009 on credit rating agencies’, Brussels, 11 November.

European Parliament and the Council (2009) ‘CRA Regulation (EC) No 1060/2009’, Luxembourg: Office for Official Publications of the European Communities, 16 September.

European Parliament and the Council (2011) ‘Regulation (EU) No 510/2011’, Luxembourg: Office for Official Publications of the European Communities, 31 May.

European Securities and Markets Authority (2011a) ‘Consultation Paper Regulatory Technical Standards on the Assessment of Compliance of Credit Rating Methodologies with the Requirements Set Out in Article 8(3) of Regulation (EC) No 1060/2009', 2011/303, Paris: ESMA, 19 September.

European Securities and Markets Authority (2011b) 'Final Report Draft RTS on the Assessment of Compliance of Credit Rating Methodologies with CRA Regulation, 2011/462', Paris: ESMA, 22 December.

European Securities Markets Experts Group (2008) *Role of Credit Rating Agencies,* Brussels, 6 June.

Financial Stability Board (2010) *Principles for Reducing Reliance on CRA Ratings,* FSB, Basel.

Friedman, M. (1962) *Capitalism and Freedom,* Chicago: University Of Chicago Press.

Gamble, A. (2009) *The Spectre at the Feast,* Houndmills: Palgrave.

Gärtner, M., Griesbach, B. and Jung, F. (2011) 'PIGS or Lambs? The European Sovereign Debt Crisis and the Role of Rating Agencies', University of St. Gallen, Discussion Paper no. 2011-06, March.

Guala, F. (2007) 'How to Do Things with Experimental Economics", in D. MacKenzie, F. Muniesa, and L. Siu (eds) *Do Economists Make Markets? On the Performativity of Economics*, 128-62, Princeton: Princeton University Press.

Habbard, P. (2012) 'The Return of the Bond Vigilantes', Trade Union Advisory Committee of OECD, Working Paper, March.

Hacking, I. (1990) *The Taming of Chance,* New York: Cambridge University Press.

Hacking, I. (1999) *The Social Construction of What?* Cambridge, MA: Harvard University Press.

Haldane, A., Hoggarth, G. and Saporta, V. (2000) 'Assessing Financial System Stability, Efficiency and Structure at the Bank of England', *BIS Papers*, No 1, Basel, March.

Hall, P. A. and Soskice, D. (eds) (2001) *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage,* Oxford: Oxford University Press.

Hardy, C. (1923) *Risk and Risk-Bearing,* Chicago, IL: University of Chicago Press.

Hay, C. (2007) 'The Genealogy of Neoliberalism', in R., Ravi K., A. T. Denzau, and T. D. Willet (eds) *Neoliberalism: National and Regional Experiments with Global Ideas*, 50-71, New York: Routledge.

Holmes, D. R. and G. E. Marcus (2005) 'Cultures of Expertise and the Management of Globalization', in A. Ong and S. J. Collier (eds) G*lobal Assemblages: Technology, Politics, and Ethics as Anthropological Problems,* 235-252, Malden, MA: Blackwell Publishing.

International Monetary Fund (2010) 'Global Financial Stability Report: Sovereigns, Funding, and Systemic Liquidity', Washington: IMF, October.

Jarvis, D.S.L. and Griffiths, M. (2007) 'Learning to Fly: The Evolution of Political Risk Analysis', *Global Society,* 21(1): 5-21.

Johnson, R. A., Srinivasan, V. and Bolster, P.J. (1990) 'Sovereign Debt Ratings: A Judgmental Model

Based on the Analytic Hierarchy Process', *Journal of International Business Studies* 21: 95-117.

Kerwer, D. (2005) 'Holding Global Regulators Accountable: The Case of Credit Rating Agencies', *Governance*, 18(3): 453-75.

Knight, F. (1921/1964) *Risk, Uncertainty and Profit,* New York: A.M. Kelley.

Knorr Cetina, K. and Preda, A. (eds) (2005) *The Sociology of Financial Markets*, Oxford: Oxford University Press.

Kroll Bond Ratings (2011) 'About Kroll Ratings', available at http://srs.krollbondratings.com/Out/about/index.aspx, (21 May, 2011).

Langley, P. (2008) *The Everyday Life of Global Finance: Saving and Borrowing in Anglo-America*, Oxford: Oxford University Press.

Lowe, P. (2002) 'Credit Risk Measurement and Procyclicality', Bank for International Settlements, working paper, No. 116, September.

Luhmann, N. (1993) *Risk: A Sociological Theory*, Berlin: de Gruyter.

MacKenzie, D. (2004) 'The Big, Bad Wolf and the Rational Market: Portfolio Insurance, the 1987 Crash and the Performativity of Economics', *Economy and Society*, 33(3): 303-34.

MacKenzie, D. (2005) 'Opening the Black Boxes of Global Finance', *Review of International Political Economy* 12(4): 555-76.

MacKenzie, D. (2006) *An Engine, Not a Camera*, Cambridge, MT: The MIT Press.

Maurer, B. (2002) 'Repressed Futures: Financial Derivatives' Theological Unconscious', *Economy and Society* 31(1): 15-3.

Miller, P. and Rose, N. (1990) 'Governing Economic Life', *Economy and Society* 19(1): 1-31.

Moody's Investor Services (1991) *Global Credit Analysis,* London: IFR.

Moody's Investor Services (2002) 'Rating Policy: Understanding Moody's Corporate Bond Ratings and Rating Process', New York: Moody's Investor Services.

Moody's Investor Services (2008a) *Moody's Rating Methodology: Sovereign Bond Rating*, New York: Moody's Investor Services.

Moody's Investor Services (2008b) 'Moody's Downgrades Ecuador's Ratings as Government Defaults', New York: Moody's Investor Services.

Moody's Investor Services (2011a) 'Moody's Downgrades Greece to Ca from Caa1, Developing Outlook', New York: Moody's Investor Services.

Moody's Investor Services (2011b) 'Sovereign Ratings List', available from: http://v2.moodys.com/moodys/cust/content/loadcontent.aspx?source=StaticContent/BusinessLines/Sovereign-SubSovereign/ RatingsListGBR.htm&Param=ALL (07 June 2011).

Moody’s Investor Services (2011c) ‘Rating Action: Moody's downgrades Portugal to Ba2 with a negative outlook from Baa1’, New York: Moody’s Investor Services.]

Mügge, D. (2011) ‘Limits of Legitimacy and the Primacy of Politics in Financial Governance’, *Review of International Political Economy,* 18 (1): 52 -74.

O’Malley, P. (2000) ‘Uncertain Subjects: Risk, Liberalism and Contract’, *Economy and Society* 29(4): 460-84.

O’Malley, P. (2004) *Risk, Uncertainty and Government,* Portland: The Glasshouse Press.

Partnoy, F. (1999) ‘The Siskel and Ebert of Financial Markets? Two Thumbs Down for the Credit Rating Agencies’, *Washington University Law Quarterly* 77(3): 619-712.

Partnoy, F. (2002) ‘The Paradox of Credit Ratings’ in R. Levich, G. Majnoni, and C. Reinhart (eds) *Ratings, Rating Agencies and the Global Financial System,* New York: Kluwer Academic Publishers.

Partnoy, F. (2006) ‘How and Why Credit Rating Agencies Are Not Like Other Gatekeepers’, in Y. Fuchita and R. E. Litan (eds) *Financial Gatekeepers: Can They Protect Investors*, 59-99, Washington, DC: Brookings Institute.

Pollock, A. J. (2005) ‘End the Government-Sponsored Cartel in Credit Ratings’, *American Enterprise Institute for Public Policy Research,* January.

Power, M. (2004) *The Risk Management of Everything,* London: Demos.

Power, M. (2007) *Organized Uncertainty: Designing a World of Risk Management,* New York: Oxford University Press.

Reddy, S. (1996) ‘Claims to Expert Knowledge and the Subversion of Democracy: The Triumph of Risk over Uncertainty’, *Economy and Society* 25(2): 222-54.

Rose, N. (1999) *Powers of Freedom,* New York: Cambridge University Press.

Roy, R. K., Denzau, A.T and Willet, T.D. (eds) (2007) *Neoliberalism: National and Regional Experiments with Global Ideas*, New York: Routledge.

Schmidt, V. (2002) *The Futures of European Capitalism,* Oxford: Oxford University Press.

Schwarcz, S. L. (2002) ‘Private Ordering of Public Markets: The Rating Agency Paradox’, *University of Illinois Law Review,* 2002(1).

Short, J. (1992) ‘Defining, Explaining, and Managing Risk’, in J. Short and L. Clarke (eds) *Organizations, Uncertainties, and Risk*, 3-23, Bolder: Westview Press.

Sinclair, T. J. (1994) ‘Between State and Market: Hegemony and Institutions of Collective Action Under Conditions of International Capital Mobility’, *Policy Sciences,* 27 (4): 447-66.

Sinclair, T. J. (2005) *The New Masters of Capital: American Bond Rating Agencies and the Politics of*

Creditworthiness, Ithaca: Cornell University Press.

Sinclair, T. J. (2010) 'Round up the Usual Suspects; Blame and the Subprime Crisis', *New Political Economy* 15(1): 91-107.

Standard & Poor's (1992) *S&P Corporate Finance Criteria,* New York: Standard & Poor's.

Standard & Poor's (2007) *Principles of Corporate and Government Ratings*, New York: Standard & Poor's.

Standard & Poor's (2008) *Sovereign Credit Ratings: A Primer*, New York: Standard & Poor's.

Standard & Poor's (2011a) 'About Standard & Poor's', available from: http://www.standardandpoors. com/ about-sp/main/en/us, (08 April 2011).

Standard & Poor's (2011b) *Sovereign Government Rating Methodology and Assumptions*, New York: Standard & Poor's.

Standard & Poor's (2012a) 'Credit FAQ: Factors Behind Our Rating Actions On Eurozone Sovereign Governments', New York: Standard & Poor's.

The Economist (2012) 'The Wait Is Over: The Biggest Sovereign Default in History, and the Most Anticipated', March 17.

The Financial Times (2012) 'Portugal Yields Jump on Default Fears', January 30.

United States Securities and Exchange Commission (2009) 'Annual Report on Nationally Recognized Statistical Rating Organizations', Washington.

Van Loon, J. (2002) *Risk and Technological Culture: Towards a Sociology of Virulence,* New York: Routledge.

White, L. (2002) '*The Credit Rating Industry: An Industrial Organization Analysis'* in R. Levich, G. Majnoni, and C. Reinhart (eds) *Ratings, Rating Agencies and the Global Financial System*, New York: Kluwer Academic Publishers.