Addressing risk challenges in a changing financial environment: the need for greater accountability in financial regulation and risk management

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ABSTRACT

The need for continuous monitoring and regulation is particularly attributed to, and justified by, the inevitable presence of risks and uncertainty – both in terms of certain externalities and indeterminacies which are capable of being reasonably quantified and those which are not.

Amongst other goals, this paper aims to address complexities and challenges faced by regulators in identifying and assessing risk, problems arising from different perceptions of risk, and solutions aimed at countering problems of risk regulation. It will approach these issues through an assessment of explanations put forward to justify the growing importance of risks, well known risk theories such as cultural theory, risk society theory and governmentality theory. "Socio cultural" explanations which relate to how risk is increasingly becoming embedded in organisations and institutions will also be considered as part of those factors attributable to why the financial environment has become transformed to the state in which it currently exists.

A consideration of regulatory developments which have contributed to a change in the way financial regulation is carried out, as well as developments which have contributed to the de formalisation of rules and a corresponding "loss of certainty", will also constitute focal points of the paper. To what extent are risks capable of being quantified? Who is able to assist with such quantification – and why has it become necessary to introduce other regulatory actors and greater measures aimed at fostering corporate governance and accountability into the regulatory process? These questions constitute some of the issues which this paper aims to address.

Key Words: risk, financial, regulation, audit, governmentality theory, risk society, cultural theory, hedge funds, uncertainty, legal theory, accountability

ADDRESSING RISK CHALLENGES IN A CHANGING FINANCIAL ENVIRONMENT: THE NEED FOR GREATER ACCOUNTABILITY IN FINANCIAL REGULATION AND RISK MANAGEMENT

Marianne Ojo[1]

A. Introduction

As highlighted in the abstract, the need for continuous monitoring and regulation is particularly attributed to, and justified by, the inevitable presence of risks and uncertainty – both in terms of certain externalities and indeterminacies which are capable of being reasonably quantified and those which are not.[2]

The distinction between risk and uncertainty is as follows: Risk is traditionally associated with probability calculation and this suggests that an event can be predicted and controlled.[3] Uncertainty however is not capable of measurement and deals with possibilities incapable of calculation which are based on guesswork and judgement.[4] It is also added that uncertainty has to be defined acknowledging the possibility of unpredictable outcomes rather than adopting an approach which aims to transform uncertainty into certainty.[5]

"Different explanations have been given as to why risk has become central across regulatory and governmental circles and these explanations are partly influenced by different approaches as to what risk is.[6] One view in attempting to account for risk as a strategic organising principle in the public sector, attributes the specific needs of government.[7] Political scientists, however suggest that the adoption of the language and practices of risk reflects a deeper, more complex process, one of "political isomorphism".[8] According to this view, risk becomes accepted and embedded in one organisation or institution such that it acquires recognition within other organisations and institutions.[9] Other explanations, mainly from socio-cultural disciplines suggest that the importance of risk derives from issues related to control, accountability, responsibility and blame in late modern society."[10]

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2 In particular, the need for continuous monitoring and regulation of contracts – during pre and post formation periods of the contract is justified by the existence of uncertainties or information asymmetries – both in respect of information which is currently unknown to parties to the contract but whose dimension may be reasonably estimated by the parties - as well as information which is incapable of being estimated or accounted for. The latter type of information uncertainty provides greater justification for the continuous monitoring of contracts. For further reading on this topic, see M Ojo, "Addressing the Inadequacies of Private Law in the Regulation of Contracts – During and Post Contract Formation Periods."

3 Gray J and Hamilton J, *Implementing Financial Regulation: Theory and Practice* (2006) 20

4 ibid

5 see See Zinn J, 'Recent Developments in Sociology of Risk and Uncertainty' (2005) at page 2

6 Gray J and Hamilton J *Implementing Financial Regulation* (2006) at page 5

7 Ibid p 5

8 ibid

9 Ibid

10 Ibid p 5; also see Bennett T 'Culture and Governmentality' in McCarthy C and Packer J (eds) *Foucault, Cultural Studies and Governmentality* (2003) State University of New York Press at page 47; Dean M, *Governmentality. Power and Rule in Modern Society* (1999) London/Thousand Oaks/New Delhi: Sage 1999 and Douglas M, *Risk and Blame: Essays in Cultural Theory* (1992) Routledge

Two well-known theoretical perspectives addressing these are termed “risk society” theory and “governmentality” theory.[11] The “risk society” approach is one that identifies broad socio-economic and political changes which occurred in late modern societies. Alongside these changes, loss of faith in institutions and authorities and a greater awareness of the limits and uncertainties linked to science and technology are identified.[12] “The term “governmentality” refers to specific types of government that have arisen in modern societies in line with liberalist and neo-liberalist approaches.[13] It focuses on the exploration of how the identification of risks associated with certain behaviour or activities provide a way of exercising control over populations, groups or individuals in neo-liberal societies – in other words, identifying how risk is used as a “tool of governance” to shape behaviours.”[14]

The structure of this paper is as follows: The paper will continue with a section (section B) which introduces the different definitions attributed to risk, problems associated with the definition and assessment of risk, as well as explanations to why risk has become so important. Such explanations to why risk has become so important will incorporate discussions based on the explanation of risk as an organizing principle. It will then consider the second view which will focus on how risk has become embedded in regulation – such process having taken place in two ways, namely, through a “quantitative expansion” and through a “qualitative shift towards the management of institutional risks:”[15] Other explanations which have promulgated a focus on internal controls within financial organisations and institutions, namely such failures such as Barings, will also be considered. This will include a consideration of how internal controls have become transformed to risk management. These “socio cultural” explanations also relate to how risk is increasingly becoming embedded in organisations and institutions. Section C of the paper will then proceed to consider two theories, namely, the “risk society” theory and “governmentality”theory. A consideration of these theories will also pave way for section D of the paper, a section which considers why difficulties in identifying and assessing risk have arisen and the solutions which have been proposed to counter such difficulties. Section E will address how risks of risk management can be avoided. A consideration of attempts by governments, and the EU in particular, to address risk challenges will then follow (under section F) in the final section.

As well as a consideration of regulatory developments which have contributed to a change in the way financial regulation is carried out, the final section of the paper will also illustrate how the financial industry and the approach to financial regulation has been transformed by the rapid growth of the hedge fund industry.

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[11] See Beck U, *Risk Society: Towards a New Modernity* (1992) London: Sage Publications and Foucault M, ‘Governmentality’ in G Burchell et al (eds), *The Foucault Effect* at pages 87-104, also Bratich J, Packer J and McCarthy C *Foucault, Cultural Studies and Governmentality* (2003) State University of New York Press

[12] See Gray J and Hamilton J *Implementing Financial Regulation* (2006) 6; also see Hood C, Rothstein H and Baldwin R *The Government of Risk: Understanding Risk* (2001) Oxford University Press

[13] Gray J and Hamilton J at p 9

[14] ibid

[15] See Rothstein H, Huber M and Gaskell G “A Theory of Risk Colonization: The Spiralling Regulatory Logics of Societal and Institutional Risk” (2006) Economy and Society (35) 1 at page 92

B. Definitions Attributed to Risk

Risks can be defined as " the probabilities of physical harm due to given technological or other processes."[16] Three observations are noteworthy, namely:[17] Firstly that social systems serve as environments in which such physical risks are always created and given effect; secondly, as a result, the degree of physical risks and the quality of social relations are directly related and; thirdly, that primary risk constitutes "social dependency upon institutions and actors" and that accessibility by most people affected by stated risks, to such institutions and actors, may be virtually impossible.

Risk is also considered to be the difference between one's perception and another's perception. According to Douglas[18], results from risk research have revealed that "the public" does not perceive risks in a similar way to experts. The difference between lay and expert opinion has resulted in "a whole new sub-branch of the psychology of risk."[19] In Warner's view, risk can be regarded as "threat or danger whose perception will depend on the prevailing culture in which there are four major groups: hierarchists, egalitarians, fatalists and individualists."[20]

Another definition of risk which is quite general, and which considers it to be the probability of a certain adverse event occurring during a defined time period or resulting from a specific challenge, draws distinctions between different types of risks – according to whether such risks are probabilistic or unpredictable.[21]

B.II Problems Associated with the Definition and Assessment of Risk

According to Baldwin and Cave, the first challenge faced by regulators concerns the identification of risks that should be limited, not only according to a prioritised order, but in such a way which accords with public approval. [22]In their view, problems are evident due to the fact that issues accorded priority by the public may seem irrational to those accorded priority by experts.[23] Within such a context, risk is considered to be multi dimensional and incapable of being reduced to simply a product of probability and consequences.[24] The second regulatory challenge involves the management and regulation of risks in a manner which is effective and acceptable – particularly the stage during which intervention should occur.[25]

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[16] Beck U, *Risk Society: Towards a New Modernity* (1992) London: Sage Publications at page 4
[17] ibid
[18] Douglas M, *Risk and Blame: Essays in Cultural Theory* (1992) Routledge at page 11
[19] ibid
[20] See Warner F, 'Calculated Risks' (1993) Science and Public Affairs at page 45
[21] see Baldwin R and Cave M, *Understanding Regulation: Theory, Strategy and Practice* (1999) Oxford University Press at page 138
[22] ibid at page 142
[23] Reasons for this are attributed to factors which may influence public's perceptions of risks. These include the degree of personal control over the size or probability of the risk, familiarity with the risk, degree of perceived equity in sharing risks and benefits and voluntariness with which the risk is undertaken. Ibid at page 141
[24] ibid. However it is also added that such focus on individuals may downplay the degree to which perceptions are affected by a group, institutional and cultural factors.
[25] ibid at 143

Whilst Michael Power considers the more challenging issue as comprising of the management and limitation of the expansion of secondary risk management,[26]in Juul Andersen's view, the existence of tight coupling makes risk in complex systems very difficult -if not impossible, to manage.[27] This arises from the fact that whilst complexity makes risk unpredictable and it therefore needs to be controlled by de centralized approaches, such tight coupling requires a centrally designed control system in order to react quickly to problems. The fate of Arthur Andersen, it is further argued, could well be regarded as such an unpredictable systems failure in a relatively tightly coupled and complex system.[28]

B.III Explanations to Why Risk has Become so Important

Risk as an Organising Principle

In considering the features that make risk such a vital tool for regulation, Rothstein et al conclude that ….”risk provides an organizing concept for societal decision-making under uncertainty and is a key characteristic of modernity….as regulatory systems attempt to control events that have formerly been beyond control, the process of decision-making transforms those events into risks as a way of rationally managing the limits of regulation.”[29]

As well as a means of describing what constitutes the subjects of regulation and related institutional threats, risk is increasingly being perceived as a procedure for the organisation of regulatory activities.[30]

The utilisation of risk as a strategic organising principle is considered to be related to specific government needs[31] and could also be argued to be linked to governmentality theory through the way in which risk is used as a tool of governance to shape regulatory behaviours.

The embeddedness of risk in regulation

The increasing connection between risk and regulation is apparent.[32] Such fact is collaborated by the transformation of internal controls to risk management.[33] It is maintained that the transformation of risk into internal controls is required for the operation of risk-based regulation, which in turn would facilitate the functioning of the risk management state.[34] According to Rothstein[35] *et al*, the incorporation of risks in regulatory processes has taken place in two ways namely: Through a quantitative process whereby risk analysis and risk

26 Power M, *The Risk Management of Everything: Rethinking the Politics of Uncertainty* 2004 Demos at page 62

27 Andersen TJ *Perspectives on Strategic Risk Management* (2006) Copenhagen Business School Press at page 101

28 ibid at pages 101 and 102; However, though the Andersen culture was dysfunctional, neither the culture nor the structure of Andersen was considered to be significantly different from that of the other big accountancy firms; for more this, see ibid

29 Rothstein H, Huber M and Gaskell G “A Theory of Risk Colonization: The Spiralling Regulatory Logics of Societal and Institutional Risk” (2006) Economy and Society (35) 1 at page 99

30 ibid at page 97

31 see Gray and Hamilton at page 5

32 Power M, *The Risk Management of Everything: Rethinking the Politics of Uncertainty*2004 Demos at pages 50-58

33 Also see ibid at page 24

34 ibid

35 Rothstein H, Huber M and Gaskell G“A Theory of Risk Colonization: The Spiralling Regulatory Logics of Societal and Institutional Risk” (2006) Economy and Society (35) 1 at page 92

management methods are increasingly being utilised in the regulation of “traditional and novel” risks, such risks being referred to as “societal risks”[36].

The second mode of incorporation involves the “qualitative shift towards the management of institutional risks”.[37] There has been an increased focus on the risks of risk management.[38] Such consequence of risk management has been referred to as the “duality of risk”.[39]

However, the ever increasing inter connectedness between risk and regulation does not mean that both perfectly correspond to one another.[40] This has given rise to compliance related issues for organisations.

B.IV Developments in Corporate Governance

In its White Paper on European governance of April 2001,[41] the European Commission defines governance as “rules, processes and behaviour that affect the way in which powers are exercised at [the] European level, particularly as regards openness, participation, accountability, effectiveness and coherence”. In 2006, priorities[42] were arranged by the EU Commission for “Modernizing Company Law and Enhancing Corporate Governance in the EU”.[43] That same year, 8 corporate governance principles were issued by the Basel Committee.[44]

Corporate governance tools are considered to be risk management strategies for the distinctive risk of failure by senior management to prevent the growth and development of risk.[45] Modern risk management strategies have arisen from new institutions involved in the collection and statistical analysis of data required for activities like the census.[46]

In his speech to the Institute of Chartered Secretaries and Administrators (ICSA) EU Corporate Governance Summit, Charles McCreevy, European Commissioner for Internal Market and Services, highlighted the fact that it was apparent that:[47]

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36 ibid

37 ibid; institutional risks are implied to include risks encountered by institutions which are responsible for managing and regulating societal risks and/or legitimacy risks (to their rules and practices) - regardless of whether these institutions are state or non state institutions.

38 ibid; See also Power M, *The Risk Management of Everything: Rethinking the Politics of Uncertainty* 2004 Demos at pages 50-58 in which Power argues that reliance on internal controls may increase risk if it leads to an undermining of the knowledge of risk in other areas; despite the benefits of risk management, concerns are generated due to the fact that secondary risk management has become an accepted “organisational common sense” - reflecting the society’s loss in faith in its professions and public organisations.

39 ibid and also see Ciborra C, ‘Digital Technologies and the Duality of Risk’(2004) CARR Discussion Paper No 27, CARR, LSE London

40 See Hutter B and Power M “Risk Management and Business Regulation” at page 2

41 See European Commission, “ European Governance: A White Paper” COM (2001) 428 final <http://eur-lex.europa.eu/LexUriServ/site/en/com/2001/com2001_0428en01.pdf > (last visited 13 December 2010)

42 Including shareholders’ rights and obligations, internal control, the modernization and simplification of European company law.

43 Mallin C, *Corporate Governance* 2007 Oxford University Press at page 35

44 See Basel Committee on Banking Supervision, “Enhancing Corporate Governance for Banking Organisations” February 2006 Bank for International Settlements Publications <http://www.bis.org/publ/bcbs122.pdf?noframes=1>

45 Power M, *Organized Uncertainty: Designing A World of Risk Management* 2007 Oxford University Press at page 10

46 ibid at page 12

47 See European Commission, Address by Charlie McCreevy at the Institute Chartered Secretaries and Administrators (ICSA) EU Corporate Governance Summit Brussels, 8 October

"poor, indeed, sometimes disastrous, risk management by financial institutions was partly to blame for the current financial turmoil. Risk management should be part of the strategy of the firm, and indeed the culture of the organisation. It is the duty of senior management in financial institutions to address this and it is the role of the board to oversee it. In their respective roles, both senior management and the board need to ensure a *holistic* approach to firm-wide-and group-wide -risk management."

He did not elaborate on how a firm's internal risk management strategy could be best integrated but indicated the area which was likely to serve as an early indicator of faults in a firm's management system, namely, the firm's approach to transparency.[48]

C. Risk Theories

Risk society

The theme of evolutionism is common to various theories of 'simple' modernisation.[49] However, a different perspective is observed by Beck who views risks and unpredictability as the consequences of developments of science and industry.[50] Furthermore, he argues that no one can be brought to book for unpredictable events in the "risk society".[51] Furthermore, the ability of regulators to regulate successfully depends on the level of efficiency and coherence of "institutionally complex regulatory regimes", hence the limited ability of regulators to control societal risks.[52] In Beck's view, modernization must become reflexive and such modernization not only involves structural change, but a dynamic relationship between social structures and social agents.[53] Along with others, Beck argues that risks of late modernity differ in type and magnitude from those which previously existed.[54] Furthermore they maintain that, in the 'risk society' in which we now live, risks are no longer imposed from external sources but are 'manufactured' as "products of mankind's decisions, options, science, politics, industries, markets and capital."[55]

2008<http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/08/518&format=HTML&aged=0&language=EN&guiLanguage=en>

48 ibid

49 See Beck U, *Risk Society: Towards a New Modernity* (1992) London: Sage Publications at page 2. Such theories range from those of Habermas to Max to Parsonian sociology.

50 ibid at page 2

51 ibid; In contrast to societal risks, Rothstein et al maintain that it is much easier to account for institutional risks through the transformation of behaviours and outcomes that could not be recorded previously or were considered to be acceptable. See H Rothstein, M Huber and G Gaskell 'A Theory of Risk Colonization: The Spiralling Regulatory Logics of Societal and Institutional Risk at page 96

52 ibid at page 95

53 ibid

54 See Rothstein H, Huber M and Gaskell G 'A Theory of Risk Colonization: The Spiralling Regulatory Logics of Societal and Institutional Risk at page 94

55 Also see Baldwin R and Cave M, *Understanding Regulation: Theory, Strategy and Practice* (1999) Oxford University Press at page 141

Cultural Theory

Cultural theorists on the other hand, argue that attitudes to risk differ according to cultural preferences.[56] However, it is argued that it is highly unlikely that cultural theory would be able to predict risk perceptions in particular situations.[57] Furthermore, Ottedal et al maintain that cultural theory's explanatory ability to explain how people perceive and act upon the world around them may easily be overestimated.[58] Cultural theory proceeds with the assumption that a culture consists of persons which hold one another mutually to account. [59] There is an attempt by such persons to live at a level of being held accountable, which is identical to a level at which such a person would want to hold others accountable.[60] From this perspective, culture is ladened with political implications of mutual accountability.[61] Rather than the perception that an isolated individual would check every piece of information in such a manner devoid of prejudice or moral commitment, the person is perceived to investigate possible information "through a collectively constructed censor set to a given standard of accountability." Since assimilated knowledge or the rejection of "mere noise" is based on a criterion which considers whether the new conception or fact will consolidate the subject's preferred political scheme, in Douglas' opinion, it would be fruitless to undertake a study of risk perception without a systematic consideration of cultural preferences.[62]

Governmentality Approach to Risk

The "governmentality" theory is related to the work of Foucault.[63] According to his approach, risk is generally considered to be a concept which is socially produced in its entirety.[64] Furthermore, no external environment compels society to respond to risk.[65] A broader view of government, which the notion of governmentality embraces, can be found in Mitchell Dean's definition of government:

> "Government is any more or less calculated and rational activity, undertaken by a multiplicity of authorities and agencies, employing a variety of techniques and forms of knowledge, that seeks to shape conduct by working through our desires, aspirations, interests and beliefs, for definite but shifting ends and with a diverse set of relatively unpredictable consequences, effects and outcomes".[66]

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56 ibid at 142

57 Ottedal S, Moen B, Klempe H and Rundow T 'Explaining Risk Perception: An evaluation of Cultural Theory' < http://www.svt.ntnu.no/psy/Torbjorn.Rundmo/Psychometric_paradigm.pdf>

58 ibid at pages 5 and 6

59 Douglas M, *Risk and Blame: Essays in Cultural Theory* (1994) Routledge at page 31

60 ibid

61 ibid

62 ibid at pages 31 and 32

63 See Foucault M, 'Governmentality' in Burchell G et al (eds), *The Foucault Effect* at pages 87-104, also Bratich J, Packer J and McCarthy C *Foucault, Cultural Studies and Governmentality* (2003) State University of New York Press

64 See Zinn J, 'Recent Developments in Sociology of Risk and Uncertainty' (2005) at page 4

65 ibid

66 See Bennett T'Culture and Governmentality' in McCarthy C and Packer J (eds) *Foucault, Cultural Studies and Governmentality* 2003) State University of New York Press at page 47; Dean M, *Governmentality. Power and Rule in Modern Society* (1999) London/Thousand Oaks/New Delhi: Sage 1999 at page 11

Theory of Risk Colonisation

This theory is founded on the dynamic linkage between societal and institutional risks - thereby paving the way for a new explanatory model of "contemporary regulatory development" which recommends a research schedule for the study of the separate fields of risk and regulation.[67] It is also an attempt to explain what is considered to be some of the "conceptual consequences" of efforts aimed at regulating risk.[68]

Criticism which revolves round Beck's concept of risk is namely, that risk is too restricted in accounting for complexities involving governmental risk strategies and rationalities or socio cultural perceptions and responses to risk.[69] A wider approach which is in line with the concept of reflexive modernization commences with uncertainty instead of risk.[70] The distinction between risk and uncertainty is as follows: Risk is traditionally associated with probability calculation and this suggests that an event can be predicted and controlled.[71] Uncertainty however is not capable of measurement and deals with possibilities incapable of calculation which are based on guesswork and judgment.[72] It is also added that uncertainty has to be defined acknowledging the possibility of unpredictable outcomes rather than adopting an approach which aims to transform uncertainty into certainty.[73]

The functionalist view on risk, that is those works which are frequently related to those of Douglas and Wildavsky, is principally criticised for its oversimplified interpretation of quite complicated and ever changing processes of how risk is approached.[74] The 'socio-cultural' approach and 'risk culture' try to address the functionalist view on risk by targeting more complex and changing processes which involve risk in every day life.[75] One advantage of these approaches is namely, that responses to risk are generated.[76]

D. Quantification of Risks

The focus placed on the quantification of risks in various jurisdictions, varies according to the degree to which the decision making processes are subject to legal challenge and review, and whether there has been a tradition of independent regulatory agencies.[77]

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67 Rothstein et al at page 107
68 ibid at page 108
69 See Zinn J, 'Recent Developments in Sociology of Risk and Uncertainty' (2005) at page 1
70 ibid, also see W Bonss, *Vom Risiko: Unsicherheit und Ungewissheit in der Moderne* (1995) Hamburg: Hamburger Edition
71 Gray J and Hamilton J, *Implementing Financial Regulation: Theory and Practice* (2006) 20
72 ibid
73 see See Zinn J, 'Recent Developments in Sociology of Risk and Uncertainty' (2005) at page 2
74 ibid at page 3
75 ibid
76 ibid
77 Rothstein H, Huber Mand Gaskell G 'A Theory of Risk Colonization: The Spiralling Regulatory Logics of Societal and Institutional Risk at page 101

In order to overcome the myths surrounding the quantification and control of risks, "risks must be made auditable and governable."[78] In the attempt to make risk auditable, the role assumed by risk management has been transformed to that which is synonymous with that of an appropriately managed organisation which is internally and externally in control of the way it "handles" uncertainty.[79]

Since societal risks are difficult to quantify, it could be argued that focus should be placed on preventing, detecting and rectifying the effects of institutional risks. Moreover, societal risks (excluding those risks attributed to "*force majeure*"), it can be argued, are consequential of the systemic effects of institutional risks. Hence the control of the source (that is, institutional risks) would be an effective way of containing the uncontrollable effects of societal risks.[80] Risk management of institutional risks, even though this generates risks (which are the consequence of an omission of other significant risks), can be undertaken using the audit risk model – especially since the assessment of risks, based on differences in perceptions[81], is so subjective.

Successful management of institutional risks is dependent on many factors, namely, accuracy – inaccurate assessments of societal risks may further exacerbate the difficulty in managing institutional risks.[82] Furthermore, methodological challenges and the degree to which other decision shaping factors are aligned the success of risk management, also contribute to the effectiveness of the management of institutional risks.[83] Even where institutional risks which emanate from the government and the judiciary are successfully managed through risk based procedures, there may still be exposure to institutional risks from external sources.[84]

The audit risk model not only requires the auditor to have an understanding of the client's business and industry, systems used in processing transactions, qualifications of personnel engaged in accounting procedures, policies related to preparation of client's financial statements but also requires that auditors have a knowledge of company's internal controls.[85]

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78 See Power M, *The Risk Management of Everything: Rethinking the Politics of Uncertainty*2004 Demos at page 10; also see U Beck, *Risk Society – Towards a New Modernity* (London: Sage, 1992)

79 Power M, *The Risk Management of Everything: Rethinking the Politics of Uncertainty*2004 Demos at page 40

80 Whilst Power has argued that societal and institutional risk management are closely related, Rothstein et al contend that institutional risk management is stimulated by the 'residual failures of societal risk management' and that a focus on institutional risk management could also define the perception and management of societal risks. In other words, they emphasize the importance of concentrating not only on the management of societal risks, but also on the management of institutional risks. See Rothstein H, Huber M and Gaskell G 'A Theory of Risk Colonization: The Spiralling Regulatory Logics of Societal and Institutional Risk at page 103

81 Attitudes to risk vary with individuals and may be different at different levels of an organization. "Risk attitudes or appetites may also vary across different aspects of the same risk, may in reality not correspond to any stated appetite and may change with new or better information." See Power M, *The Risk Management of Everything: Rethinking the Politics of Uncertainty* 2004 Demos at pages 19 and 20. Also see Hutter B, *Risk and Regulation* (2000) Oxford: Oxford University Press

82 Rothstein H, Huber M and Gaskell G 'A Theory of Risk Colonization: The Spiralling Regulatory Logics of Societal and Institutional Risk at page 101

83 ibid

84 ibid at 102

85 'The Audit Risk Model' http://www.pobauditpanel.org/downloads/appendixa.pdf<> at pages 175,176 (last visited 14 Decemebr 2010); also see <http://www.aicpa.org/download/members/div/auditstd/SAS107.PDF> page 5 of 20

Traditional auditing techniques involve auditors performing tests to find out the level of risks which may exist in an entity. These risks consist of three components namely: inherent risks, control risks and detection risks and they all contribute to the audit risk[86]. The audit risk models is denoted by the following equation:

AR = IR * CR*DR (where AR represents audit risk, IR represents inherent risk, CR represents control risk and DR represents detection risk)

Inherent risks[87] are those risks which emanate as a result of the nature of the business entity, control risks[88] are those risks resulting from reliance on the internal controls functioning within the business whilst detection risk is the risk that the auditor would not be able to detect material misstatements during procedures aimed at detecting such.

Inherent and control risks are outside the control of auditors and since these risks are outside auditors' control, the consequence is that the higher the assessed levels of inherent and control risk, the lower the detection risk must be if the desired overall level of audit risk is to be achieved.[89] The level of detection risk can be varied through auditors increasing substantive procedures, that is statistical sampling.[90] Substantive procedures are usually costly and auditors who place reliance on the internal controls in order to support the reduced use of substantive procedures need to show that the assessed level of control risk is low.[91] This is done through the performance of tests of controls. Where internal control weaknesses are discovered, this does not necessarily mean that more tests of control should be performed. Where performance of such tests of control would not be potentially cost-effective, the use of predominantly substantive procedures is recommended straightaway.[92] A preliminary determination of the control risk is required where there is potential for cost effectiveness. If this pre determined risk is high, then a predominantly substantive approach is recommended. If the control risk is low, then test of the internal controls are to be performed to confirm the preliminary assessment of control risk. Following confirmation of a low pre determined level of control risk, a reduced level of substantive procedures can then be carried out.[93]

Materiality is provided for in the audit risk model as auditors are not required to account for every misstatement within a financial statement – only material misstatements need be accounted for.[94] Furthermore, the nature, timing and extent of audit procedures is vital to the model. Auditors are also required to ascertain "fraud risks" which take into consideration qualities of both inherent and control risk.[95]

Whilst according to some, the audit risk model has been relatively successful, its focus on internal use has been said to contribute to the existence of inherent problems in external

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86 This is defined as the probability that an auditor may unknowingly fail to adjust an opinion which is materially misstated in the financial statements; U.S. Gen. Accounting Office, Report on Financial Statement Restatements: Trends, Market Impacts, Regulatory Responses and Remaining Challenges (2002) page p 38

87 Inherent risk can also be defined as the susceptibility of an account balance to material error; ibid p 38

88 Risk that error could occur and not be prevented or detected by internal controls

89 See Cosserat G, 'Audit Strategy' 1 February 1999, <http://www.accaglobal.com/publications/studentaccountant/49870>

90 ibid

91 ibid

92 ibid

93 See Cosserat G, 'Audit Strategy' 1 February 1999, <http://www.accaglobal.com/publications/studentaccountant/49870>

94 Also see 'The Audit Risk Model' <http://www.pobauditpanel.org/downloads/appendixa.pdf > at page 177

95 ibid

procedures.[96] This was soon highlighted in a study on expectations gap, following its introduction.[97]

The audit risk model is prone to a number of limitations in that it does not account for certain risks which the auditor is exposed to. Examples of such risks include loss or injury to their professional practice from litigation, adverse publicity or other events which relate to the audited financial statements.[98] Those risks which are not accounted for within the audit risk model are generally referred to as "engagement risk", "client risk" or "client continuance (or acceptance) risk"[99].

Furthermore, the definition of audit risk does not consider the risk that the auditor may mistakenly deduce that financial statements are materially misstated.[100] Where such situation arises, the auditor simply makes a re consideration or extends audit procedures with requests that specific tasks be performed by management to re evaluate the relevance of the financial statements.[101]

E. Avoiding the Risks of Risk Management

Power argues that to move beyond such "risk management driven privatization of the public sphere", a new idea of risk which incorporates types of leadership at state, regulatory and corporate levels, and which is able to develop a language of risk, understood by the public and which expressly allows for the possibility of failure without this being understood as a way of "passing the buck", will be required.[102]

"Soft management systems" which are able to address uncertainties need to be designed and a balance should be struck between the role of calculative methods and other softer forms such as images and normative.[103]

In Power's view, the problems relating to the use of quantitative techniques for risk, namely, that of 'duality of risk', which embodies Information and Communication Technology (ICT), should not restrict its application where appropriate.[104] He however adds that there is need for a "second order intelligence" in organizations which implement such techniques.[105]

> "Calculative solutions to technical problems work well in situations where there is an available database which is large, clearly defined and complete, and where a high degree of organizational and political consent about the nature of the 'risk object' exists."[106]

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96 Andersen TJ, 'Perspectives on Strategic Risk Management' (2006) Copenhagen Business School Press Denmark at pages 95 and 96

97 ibid

98 See AICPA, 'Audit Risk and Materiality in Conducting an Audit'<http://www.aicpa.org/download/members/div/auditstd/SAS107.PDF> page 2 of 20

99 'The Audit Risk Model' <http://www.pobauditpanel.org/downloads/appendixa.pdf > at page 177

100 See AICPA, 'Audit Risk and Materiality in Conducting an Audit' <http://www.aicpa.org/download/members/div/auditstd/SAS107.PDF> page 2 of 20

101 ibid

102 see Power M, *The Risk Management of Everything: Rethinking the Politics of Uncertainty (*2004) Demos at pages 57 and 58

103 ibid at page 50

104 ibid at page 54

105 ibid

106 ibid

'Intelligent risk management' is considered to be a balance between the role assumed by calculative techniques and models and other forms which are inclusive of narratives and images.[107]

Justifying regulatory decisions

According to Baldwin and Cave, risk regulators encounter problems with the search for legitimation as a result of differences between the lay and experts' perceptions of risk.[108] In order to justify their regulatory decisions, given the differences in perceptions in particular, two responses based on an expertise rationale and on the accountability, due process rationale are advanced.[109] Stephen Breyer's illustration of the expertise approach is provided by Baldwin and Cave who argue that the difficulty with his suggestion stems from the fact that it focuses on legitimation through expertise at the expense of legitimation through focus on democratic policy-making, accountability and due process through participatory means.[110]

In Breyer's view, regulation of significant health risks is affected by three serious problems which result in a "vicious circle".[111] Not only do these problems undermine the trust in regulatory institutions, they also increasingly prevent greater rational regulation.[112] Causes of such problems are attributed to public perceptions, statutory actions and reactions and uncertainties in the technical regulatory process.[113] As a way of resolving these problems, institutional changes which reflect the opinion that a "depoliticised regulatory process might produce better results" would be required.[114] Baldwin and Cave contrast the approach advanced by Breyer to that of Shrader-Frechette. In their view, Shrader-Frechette's approach, as a means of legitimation, is significant.[115] Furthermore, its support for the stance that risk analyses must be carried out within framework of greater "participation and accountability" – which can be contrasted with Breyer's focus on expertise, contribute to its significance.[116]

[107] ibid at page 55. In developing an "intelligent risk management" strategy, three essential criteria are listed, namely that, such strategy:

- Should not permit control systems to dominate the focus of management and bodies which are deemed to be independent by virtue of the exercise of their functions
- Should be characterized by learning and experiment rather than rule based processes and
- That however, a balance should be struck between the need to focus on internal controls and the admission of rules based processes and that managers should have the ability to question the formal risk management system.

[108] see Baldwin R and Cave M, *Understanding Regulation: Theory, Strategy and Practice* (1999) Oxford University Press at page 145

[109] ibid

[110] ibid at 146

[111] ibid; See also Breyer S, *Breaking the Vicious Circle: Towards Effective Risk Regulation* (1993) Cambridge Mass. at page 33

[112] ibid

[113] ibid

[114] also Breyer S, *Breaking the Vicious Circle: Towards Effective Risk Regulation* (1993) Cambridge Mass. At page 56

[115] See Baldwin R and Cave M, *Understanding Regulation: Theory, Strategy and Practice* (1999) Oxford University Press at pages 147 and 148; also see K S Schrader-Frechette *Risk and Rationality* 1991(Berkeley, California)

[116] ibid at 148

F. Regulatory Developments in the European Union

Regulatory failures in EU member states,[117] public's preference for risk aversion and increased EU regulatory powers are developments which are considered to have played a part in determining the current regulatory direction of the EU.[118] Three developments which have controversially resulted in the present systemic approach to risk analysis in the EU include some high profile risk management failures at the national level and apparent lack of interaction between the national and EU level; the governance crisis at the EU level and the growing dependence by the EU on the precautionary principle.[119]

Hedge Funds and their Significance in Risk Regulation

The European Commission's Consultation Document on Hedge Funds[120] should contribute to "a consideration of the appropriateness of existing approaches to regulation and supervision of the hedge funds sector." In terms of assets which are managed by the global fund industry, hedge funds have increased 50 times since 1990.[121] Recently, trading by hedge funds has constituted more than 50% of the daily trading volume in equities markets.[122] The impact of activities of highly leveraged investment vehicles on the stability of the financial system, in addition to perceived lack of transparency of hedge funds, has contributed to concerns over hedge funds.[123] On a global basis, hedge fund related assets attained a maximum level of $2 trillion in 2007.[124]

Three of the questions which constitute the focus of the Consultation Document and which are relevant to the purposes of this paper, along with responses to these questions, will be discussed.[125]
The questions are as follows:[126]

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[117] For example, the UK's BSE crisis and the Belgian dioxin crisis

[118] Van Calster G 'Risk Regulation, EU Law and Emerging Technologies: Smother or Smooth?' <http://www.springerlink.com/content/q14jn1284r4585gg/fulltext.pdf> (last visited 14 December 2010) page 2 of 11

[119] ibid at page 3; A standardized version of the precautionary principle states that "[w]hen an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically." See Ahteensuu M, 'Defending the Precautionary Principle Against Three Criticisms" < http://www.kirj.ee/public/trames/ref-tr-07-4-3.htm>at page 1 of 16 (last visited 15 December 2010); for further definitions also see Morris J, *Rethinking Risk and the Precautionary Principle* 2000 Oxford: Butterworth-Heinemann at page 1

[120] Whose period of consultation was between 18.12.2008 and 31.01.2009

[121] European Commission, "Working Document of the Commission Services (DG Internal Market): Consultation Paper on Hedge Funds" <http://ec.europa.eu/internal_market/consultations/docs/hedgefunds/consultation_paper_en.pdf> at page 2

[122] ibid

[123] ibid

[124] Based on the IMF's estimates, average fund leverage is between 1.4 and 1.7 times capital; ibid

[125] The respondents to these questions consisted of 11 individuals, 80 organisations and 18 public authorities.

[126] See European Commission, "Internal Market and Services DG : DG Market Services Working Document, Feedback Statement , Summary of Responses to Hedge Fund Consultation Paper"<http://ec.europa.eu/internal_market/consultations/docs/hedgefunds/feedback_statement_en.pdf>

Does recent experience require a reassessment of the systemic relevance of hedge funds?[127]

Opinions expressed:	Number of opinions expressed on question n°3	% over the total number of contributions received to the consultation	Public authorities	Citizens	Organisations		
					Total	Industry organisations	Other organisations
Yes, recent experience requires a reassessment of the systemic relevant of hedge funds.	**35**	34%	**8**	**2**	**25**	16	9
▪ *But systemic relevance should also be reassessed for all other leveraged market participants.*	*23*	*22%*	*7*	*1*	*15*	*13*	*2*
No, reassessment is not necessary	**31**	30%	**9**	**0**	**22**	17	5

"Is the 'indirect regulation' of hedge fund leverage through prudential requirements on prime brokers still sufficient to insulate the banking system from the risks of hedge fund failure? Do we need alternative approaches?[128]

Opinions expressed:	Number of opinions expressed on question n°4	% over the total number of contributions received to the consultation	Public authorities	Citizens	Organisations		
					Total	Industry organisations	Other organisations
Yes, indirect regulation insulates the banking system from the risk	**51**	49%	**13**	**0**	**38**	31	7
But, **No** it also can be improved	**46**	44%	**10**	**2**	**34**	20	14
▪ *Prime brokerage regulation needs to be reviewed.*	*28*	27%	*8*	*0*	*20*	*17*	*3*
▪ *Indirect prudential regulation is insufficient to isolate financial system from hedge funds' failure. Additional direct prudential requirement (such as a minimum capital requirement for the asset manager) should apply.*	*26*	25%	*7*	*2*	*17*	*4*	*13*

Up till now, regulatory focus has been directed towards ensuring that bankruptcy relating to hedge funds, does not trigger further systemic crisis in other parts of the financial sector.[129] From the responses obtained, a significant percentage of these were of the opinion that adequate bank capitalization structures were in place to contain consequences of a hedge fund crisis.[130] Furthermore, the results not only revealed that prime brokers were equipped with risk management tools which would shield them from counter party risks, but that respondents

[127] ibid at page 9 of 18
[128] See ibid at page 10 of 18
[129] See http://ec.europa.eu/internal_market/consultations/docs/hedgefunds/feedback_statement_en.pdf
[130] ibid

also considered the prudential requirements to which prime brokers were subject, to be stringent.[131]

In relation to indirect regulation, criticism was directed not only at its inability to account for the fact that different hedge funds may mimic each other's procedures, but that they could also be similarly affected by common market developments.[132]

"Do prudential authorities have the tools to monitor effectively exposures of the core financial system to hedge funds, or the contribution of hedge funds to asset price movements? If not, what types of information about hedge funds do prudential authorities need and how can it be provided"[133]?

Opinions expressed:	Number of opinions expressed on question n°5	total number of contributions received to the consultation	Public authorities	Citizens	Organisations		
					Total	Industry organisations	Other organisations
Yes, supervisors do have enough information to monitor effectively exposures	**19**	18%	**4**	**0**	**15**	13	2
No, supervisors do not have enough information to monitor effectively exposures	**64**	62%	**18**	**3**	**43**	26	17
Additional comment: ▪ *Even with the information, supervisors may not have sufficient tools to adequately monitor the risk*	*11*	*11%*	*5*	*0*	*6*	*4*	*2*

In order to improve transparency during its dealings with authorities, recommendations of a single, global registeration procedure for hedge funds and their managers, were put forward by some respondents.[134] In addition, to the requirement of the submission of periodic regulatory reports on size, investment style, exposures, leverage and performance, some respondents recommended that such process of information collection should involve hedge fund managers, as well as prime brokers, the valuator, the clearing broker or other prominent counter parties – as prudential authorities may not possess adequate facilities to monitor effectively exposures of the financial system to hedge funds or its contribution to asset price movements.[135]

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131 ibid; Many respondents also thought that banks' risk assessment systems were robust enough to address counter party risks – even though such responses were based on preliminary assessments. Due to the fact that credit, counter party and market risks could speedily materialize, some respondents considered further consolidation of prime broker management of hedge fund related risk as essential in limiting the possibilities of a systemic impact being triggered.

132 Ibid; It was proposed that the indirect prudential approach be bolstered by direct surveillance measures which would take into consideration external market effects

133 ibid at page 11 of 18

134 ibid at page 12 of 18

135 ibid

Whilst the value of ethics is lauded on the one hand by Singh, who states that Weber's warning of the prison bars of bureaucratization, the legacy of Foucault, and the works of Koskenniemi require international lawyers to embrace a considered ethical responsibility and disengage themselves from the language of their expertise and the obfuscated drama of governance,[136] the importance of legal certainty is also highlighted by Luhmann whose preference for the systems theory analysis (as a means of addressing a situation where the question of determining the position of law in modern society arises) is illustrated thus:[137]

> Systems theory analysis is the only candidate for the task of assisting where the question of determining the position of law in modern society arises and where it is necessary to account for changes that are beginning to reveal themselves. Such solution capable of being provided by systems theory would not be possible by a return to a natural law of the Aristotelian or post Aristotelian kind (legal rationalism) nor by trying to use various „ethics" approches that lack conceptual clarity, nor by resorting to the economic analysis of law – which provides too little information about the society to which it is supposed to apply.

Such „ethics analyses" or „ethics commissions" as further argued by Luhmann, serve the political preparation of agreed foundations for legal regulation and owe to the law, their confidence that everything could be changed if new information came to hand or the situation were to be assessed differently in the future.

G. Conclusion

In explaining why risk has become so central in governmental and regulatory circles, this paper has attempted to highlight the interconnected nature between risk and regulation and also illustrate how risk can serve as a regulatory tool. Conversely regulation, if properly implemented, should to an extent, be able to address the challenges posed by risk. Through its knowledge generating capacity, regulation could serve as a means of resolving challenges and problems generated by risk.[138] In addition to the recommendations put forward in the concluding section of this paper, a focus on institutional risks as well as hedge funds, the successful management of these – including those risks emanating from risk management, greater transparency measures, should assist regulators in addressing the challenges presented in regulating risk.

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[136] He adds that „At the moment of decision, every legal professional has the capability to embrace an freedom. At this moment of decision, of discretion, the legal professional is able to embrace law as Koskenniemi intended for Kant's 'moral politician'. But, more importantly, the professional is also able to revolt against the linguistic barriers of his technicality: to view a plurality of perspectives." S Singh, „The Potential of International Law: Fragmentation and Ethics" Leiden Journal of International Law, 24 (2011), at page 43; See M Foucault, 'Iran: The Spirit of a World without Spirit', in L. Kritzman (ed.), Michel Foucault: Politics, Philosophy, Culture (1988), at 214 and also M Weber, FromMaxWeber: Essays in Sociology (trans. H. H. Gerth and C.Wright Mills) (1946), 357.

[137] N Luhmann, K Ziegert and F Kastner, *Law as a Social System* (2004) Oxford University Press at page 66

[138] Rothstein H et al : A Theory of Risk Colonization at page 95

Furthermore, developments and the evolution of classical formalism,[139] as well as socio economic and dynamic changes which have taken place in late modern societies, across social, economic and regulatory spheres, such developments having contributed to a corresponding loss of certainty, re-iterate the need greater accountability, as well as actors which are able to assist in the quantification of risks and other indeterminacies, externalities which are capable of being quantified.

[139] For further reading on the developments and evolution of classical formalism, see M Ojo, "Pluralism and Deformalisation as Mechanisms in the Achievement of More Equitable and Just Outcomes – the Move from „Classical Formalism" to Deformalisation."

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http://www.pobauditpanel.org/downloads/appendixa.pdf>

For data and statistics used in the paper:
http://ec.europa.eu/internal_market/consultations/docs/hedgefunds/feedback_statement_en.pdf