The science of governance: A blind spot of risk managers and corporate governance reform?

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Abstract This paper identifies the science of governance as a crucial blind spot for risk managers, company directors, regulators and law makers. There is little evidence that law-makers, corporate governance reformers or risk managers apply the science of governance identified 60 years ago. As a result, there are no accepted criteria for identifying or measuring good or higher standards of corporate governance or identifying its relevance for managing risk. This paper identifies why the current top-down approach to governance and risk management is incompatible with the bottom-up approach found in biota to manage risk so as to sustain life in highly complex uncertain environments. A bottom-up approach allows investors and stakeholders to become co-regulators of the risks to which they are exposed. As the mission of regulators is to protect citizens, citizen involvement as co-regulators richly increases the ability of risk managers, directors, firms and their regulators to minimise the risk exposure of firms, their stakeholders and/or the financial system. The paper identifies the need for risk managers, company directors, regulators and law makers to acquire knowledge of how to apply the science of governance to manage risk on the most efficient and effective sustainable basis.

Keywords: *communication, control, co-regulation, governance, regulation, regulators, requisite variety, risk management, self-governance*

Elements of governance science are introduced to indicate why current corporate governance reforms are heading in the wrong direction for enhancing risk management, operational efficiency, organisational effectiveness, transparency and accountability. Failure to recognise the natural laws of governance identified by Weiner some 60 years ago[1] represents a blind spot in the theory and practice of risk managers, corporate governance advisers, company directors, regulators and law makers. To describe the science of governance, Wiener coined the word 'cybernetics', which he defined as 'the science of control and communication in the animal and the machine'. (The word 'cybernetics' was coined from the Greek word *kybernetes* meaning 'steersman'; the Latin corruption of *kybernetes* is *gubernator*, from which the term 'governor' originated to describe mechanical control mechanisms.)

The most compelling evidence of the failure of current corporate governance reform is provided by the market. The number of US publicly traded companies (PTCs) has declined to avoid needing to comply with Sarbanes-Oxley legislation. Many US companies have delisted as this can be done without shareholder approval or expense.[2] A number of foreign corporations have given up their US listing to avoid compliance costs.[3] But most tellingly before the market turmoil that began in 2008, there was an increase in private equity investors acquiring PTCs as this permits them to extract greater value from them as private entities.[4]

Evidence of corporate governance failure is also provided by the increasing size and complexity of the law and the budgets of regulators. The need for corporate governance codes is evidence of the inadequacy of both the law and of regulators.

Successful reform would reduce rather than increase the cost of business. The compliance cost of Sarbanes-Oxley (SOX) legislation has been significant.[5–7] Romano has described SOX as 'quack' corporate governance,[8] with Clarke noting the lack of evidence that the current 'crisis-driven reforms' provide positive results.[9] This is to be expected as the current top-down reforms are inconsistent with the bottom-up approach used by biota to sustain their existence in highly complex uncertain environments.

The inability of either SOX or the Australian Securities Exchange (ASX) Corporate Governance Code[10] to prevent or detect fraud and make directors accountable was revealed in 2004 by the foreign exchange losses suffered by the National Australia Bank,[11] despite its having complied with SOX and having been judged as having the 'highest standard' of corporate governance in Australia.[12]

Another sign of failure is that law makers, regulators, stock exchanges and practitioners have no agreed definition of what is 'good' or a 'higher standard' of corporate governance. Such words are commonly quoted by law makers, regulators, commentators and practitioners seeking consulting business. Of course, a cynic might comment that without knowing where you want to be, any road will take you there.

A fundamental problem is that corporate governance tends not to be described in terms of measurable outcomes, but rather principles, practices and/or processes that are not subjected to measurement.[10,13] As often noted, it is difficult to manage what is not measured.

As there is no agreed definition of good governance, rating agencies use corporate governance codes as a benchmark of 'good' or 'best' governance. This creates market forces to lock in current codes and practices. It also creates a circular self-reinforcing but also self-deluding process for defining 'good' governance that becomes part of what Rose describes as the 'corporate governance industry'.[14]

The UK combined code and the ASX Corporate Governance Code, like SOX, force auditors into the conflicted position of judging the accounts of the people who engage and pay them.[15] Thus, directors — who are supposed to avoid conflicts — are conflicted by paying those who judge them. Another reason why corporate governance reform has failed is because all PTCs governed by a single board possess a fundamentally conflicted unethical structure.[16]

The fundamentally conflicted governance architecture of US and UK corporations is consistent with research by Bhagat and Black that so-called 'independent' directors do not add value.[17] According to Clarke, 'the whole purpose of having independent directors is surprisingly under-theorized, leading to inconsistent rules'.[9] He goes on to say that 'important elements of the concept of and rationale for independent directors remain curiously obscure and unexamined'. This has led Rodrigues to refer to the 'fetishization' of independence.[18]

Worse still, corporate governance reform has fossilised. It has become a dead-end street because corporate laws, regulations, listing rules and guidelines are based on practices rather than outcomes. An outcome-based approach would de-fossilise reform by allowing different practices to be developed. Companies could then compete in developing the best practices to achieve the desired outcomes in the most efficient manner. In addition, flexibility would be introduced so one practice would not need to be adopted by all companies.

The outcomes sought would be to protect and further the interest of shareholders and other stakeholders as indicated in the appendix to this paper. These outcomes should be the objective of regulations and the mission of regulators and stock exchange listing rules. In Australia, however, the law and the regulators have failed to stop major corporate frauds and collapses. The ASX Corporate Governance Code was introduced to pre-empt the introduction of additional laws. This initiative has still increased complexity and compliance costs with problems still arising, as shown by the National Australia Bank.

This leads to the idea that good corporate governance should be defined as reducing the need for laws, regulations, regulators, listing rules and corporate governance codes, while improving the protection of stakeholders and furthering their interests. In other words, 'good' governance is achieved by furthering self-governance, and 'best' governance is self-governance. This definition is consistent with the science of governance[19] grounded in the laws of nature that regulate biota.

Adopting the strategies found in biota to manage risk would also change the role of government from direct intrusive regulation to much more subtle and effective indirect regulation by requiring organisations to adopt self-governing constitutions.[20] Changing the role of government in this way was previously proposed by the US Vice President.[21] This in turn would introduce fundamental changes in the role, duties and effectiveness of corporate risk managers as explained below.

The constitution of organisations represents their DNA. No biota can survive unless self-regulating provisions are embedded in their DNA. Likewise, no government should provide a licence for an organisation to exist unless its constitution includes provisions that facilitate self-governance.

Stock exchanges already specify some elements of corporate constitutions as a listing condition. They could and should do much more. In this way they could eliminate the need for corporate governance codes, simplify corporate law and reduce the size and cost of regulators while providing superior benefits for shareholders and stakeholders. For example, stock exchanges could require corporate constitutions to adopt the investor protection provisions found in shareholder agreements with venture capitalists and include such conditions as used by bankers in loan agreements to reduce and/or manage their risk.

The lack of investor protection or the ability of shareholders to further their own interests has been created by corporate constitutions, providing directors with what Monks and Sykes refer to as 'inappropriate powers'.[22] Turnbull identifies the excess powers obtained by directors that introduce conflicts of interest.[23] Many conflicts arise because powers to manage the business are combined with governance powers such as director nomination, election/appointment, remuneration and auditing their accounts as well as managing the process of how the directors are held accountable to shareholders.

Power tends to corrupt and absolute power tends to corrupt absolutely.[24] Directors of companies governed by a unitary board possess absolute power as to how they manage their own conflicts of interest. Regulators and stock exchanges are irresponsible in allowing corruption to be perpetuated in this way. As stated by Monks and Sykes, the removal of 'inappropriate powers' for directors 'is thus the litmus test for any worthwhile reform of shareholder capitalism'.[22]

The solution is to require that power be appropriately shared with those that the law, regulations, regulators, listing rules and codes are created to protect. In this way regulation can be 'privatised' and distributed to create a bottom-up, custom-designed, outcome-based approach to replace and/or complement the current ineffective, intrusive and costly, one-size-fits-all, top-down approach. However, current reform initiatives are moving in the opposite direction.

The current centralised top-down strategy to regulation employed by governments and by a single board of directors to control a large corporation can neither be efficient or effective. This is because the science of governance states that it is impossible to directly magnify regulation/control.[25] Regulation and control can only be magnified indirectly through 'supplementation', in the same way that it is impossible to directly magnify the signals of radio or television transmissions. Their very weak signals require supplementation with the energy provided by the power mains.

In social organisations, this means that, to achieve efficient and effective regulation or control, the energy of co-regulators is required to amplify the richness of communications and control to the regulator and/or the board of directors. It is in this way that organisations can obtain operating advantages. In particular, firms can obtain competitive advantages by amending their constitutions to introduce a network of independently constituted in-house co-regulators composed of their shareholders and stakeholders.

The impossibility of amplifying control means that chief executives require co-regulators to improve the efficiency and effectiveness in the way they control large complex firms. Thus, it is very much in the interests of directors and shareholders that large firms introduce bottom-up co-regulators. Co-regulation within firms is required not only to achieve the outcomes sought by corporate regulators on behalf of stakeholders, but by all the other regulators concerned with such matters as health, occupational safety, gender equality, equal opportunity, consumer protection, trade practices, and other social and environmental concerns.

Co-regulators are also required for CEOs so that they can quickly, accurately and effectively identify and correct inefficiencies and ineffectiveness in achieving desired business outcomes. The natural laws of requisite variety state that the accuracy of communications and control can be improved as much as desired by introducing a requisite variety of independent channels of communication[26] and control.[25] A corollary of these laws is that command and control hierarchies lack sufficient variety to reliably communicate or control complexity, let alone achieve regulation in a responsive, reliable and sensitive, tailor-made manner.

The introduction of multiple communication and control channels in firms creates ‘network governance’.[27] Firms in rapidly changing complex industries like information technology and biotechnology are forced by competitive pressures to adopt network governance, as described by Jones *et al*.[28] The competitive advantage of network governance in more stable industries has been proved by the nested networks of stakeholder-controlled network firms located in Spain.[29] It is through firms providing stakeholders with a constitutionally-based right to voice their interests that requisite variety in communications can be achieved to reliably control complexity and further the interests of all parties.

This is analogous to how the complexity of the human brain is enriched in babies to enhance their intelligence. To simplify the complexity of DNA, it does not contain sufficient data to specify how to create all the complex connections for building a brain. Supplementary data are provided from the sensory stimulation obtained from the baby’s environment. Network governance likewise supplements the brain of a firm (the board of directors) by introducing distributed intelligence with feedback and feed-forward information from the business environment.

Network governance is a precondition for facilitating self-governance as it introduces a division of power to protect and further the interest of minorities against the interest of dominant shareholders, directors and/or management. One fundamental requirement to facilitate self-governance is for corporate constitutions to separate management powers that generate value from governance powers that can entrench and enrich directors and their associates.[16]

Another fundamental requirement for facilitating self-governance is for corporate constitutions to give voice to the various stakeholder constituencies of a firm, either directly or indirectly, through establishing bylaws. No business can exist without its employees, suppliers, customers, agents, dealers and distributors, so it is very much in the interest of shareholders for the firm to engage formally and bond with its strategic stakeholders. Some suggestions on how this could be achieved by amending corporate constitutions are described by Turnbull.[30]

Research has revealed that stakeholders typically contribute more product innovations than the internal research and development departments of firms.[31] Stakeholders also provide a source of competitive intelligence. The cost of stakeholder engagement can be less than employing market research, human relations and other consultants, but with added advantages.

Crucially for company directors, stakeholders can provide information independently of management on the strengths, weaknesses, opportunities and threats of their executives and the business. It is very much in the interest of shareholders that their directors have a credible process for carrying out their most fundamental role to direct and monitor management with at least some information that is independent of management.

It is irresponsible and naïve for directors to rely only on information provided by management. It is naïve because it is not in the interest of management to report problems and deficiencies for which they might be held accountable. If directors do not obtain the other side of the story reported by management then they are being irresponsible not only to themselves but to the company, its shareholders and its stakeholders. It is simply not good enough for the fortunes of shareholders and superannuants to be invested in companies where their directors do not have systemic processes for discovering when their trust in management might be misplaced. Nor is it acceptable for the unsecured creditors, especially employees who can have significant unsecured entitlements.

A corporate constitution is like the elephant in the room that nobody notices. Every company has one but they are rarely seen. They are commonly accepted as 'given', rather than a variable that needs to be designed to support and further the mission of the organisation. As a result, there are almost no courses to educate business people or their advisers on how to design corporate constitutions. Yet such education could provide competitive advantages for businesses with less risk and reduced director liability for mistakes, deficiencies and/or losses. While political scientists' research and teach how to construct constitutions for countries, there is a global knowledge gap on how to design constitutions of firms or other types of organisations so as to sustain and further their operations.

Likewise, there is a global knowledge gap among social scientists, lawyers, accountants and economists regarding the existence of the science of governance. As a result, law makers and regulators do not have the intellectual tools to design efficient and effective regulation. While the science of communication and control was only identified in the middle of the last century, it is not 'rocket science' — although the guidance/steering/governance systems of spacecraft depend upon it. Sufficient knowledge is provided by Turnbull, who describes how the laws of natural science can be applied to social organisations.[29] Education would still be required on how to apply natural laws to designing social institutions.

However, until lawmakers and regulators apply natural laws to regulatory reform, reform will continue to head in the wrong direction. The time for an education in governance science to be a perquisite for all regulators and other advisers to law makers is overdue (the education of UK Financial Reporting Council staff began in September 2007 with a seminar based on Turnbull's 'theory and practice of government deregulation'[32]). This knowledge is also required in the private sector for improving the competitiveness of firms and initiating reform from the bottom up, as this author has put into practice.[30,32]

References

1 Wiener, N. (1948) 'Cybernetics', John Wiley and Sons, New York.
2 SmartPros (2005) 'Firms go dark as compliance costs rise', available at: http://accounting.smartpros.com/x47244.xml (accessed 29th July, 2008).
3 Li, X. (2007) 'The Sarbanes-Oxley Act and cross-listed foreign private issuers', available at: http://ssrn.com/abstract=952433 (accessed 29th July, 2008).
4 Jensen, M. C. (2007) 'The economic case for private equity', Negotiations, Organizations and Markets Research Papers, Harvard NOM Research Paper No. 07-02, available at: http://papers.ssrn.com/abstract_id=963530 (accessed 29th July, 2008).
5 Linck, J. S., Netter, J. M. and Yang, T. (2006) 'Effects and unintended consequences of the Sarbanes-Oxley Act on corporate boards', American Finance Association, Boston Meetings Paper, available at: http://ssrn.com/abstract=902665 (accessed 29th July, 2008).
6 Ribstein, L. E. (2005) 'Sarbanes-Oxley after three years', University of Illinois Law & Economics Research Paper No. LE05-016, available at: http://ssrn.com/abstract=746884 (accessed 29th July, 2008).
7 Sneller, L. and Langendijk, H. P. A. J. (2007) 'Sarbanes-Oxley Section 404 costs of compliance: A case study', *Corporate Governance: An International Review*, Vol. 15, No. 2, pp. 101–111, available at: http://ssrn.com/abstract=972509 (accessed 29th July, 2008).
8 Romano, R. (2004) 'The Sarbanes-Oxley Act and the making of quack corporate governance', ECGI — Finance Working Paper 52/2004, available at: http://papers.ssrn.com/abstract_id=596101 (accessed 29th July, 2008).
9 Clarke, D. C. (2006) 'Setting the Record Straight: Three Concepts of the Independent Director', GWU Legal Studies Research Paper No. 199, George Washington University Law School, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=892037 (accessed 29th July, 2008).
10 Australian Securities Exchange (2007) 'Corporate Governance Principles' (2nd edn), Australian Securities Exchange, Sydney, available at: http://asx.ice4.interactiveinvestor. com.au/ASX0701/Corporate%20Governance%20 Principles/EN/body.aspx?z=1&p=-1&v=1&uid= (accessed 29th July, 2008).
11 Turnbull, S. (2007) 'Men behaving badly in banking: The irrelevance of best practices in corporate governance', in Tarantino, A. (ed.) 'The Compliance Handbook: Technology, Finance, Environmental and International Guidance plus Best Practices', Wiley & Sons, available at: http://papers.ssrn.com/abstract_id=966431 (accessed 29th July, 2008).

12 Psaros, J. and Seamer, M. (2002) 'Howarth 2002 Corporate Governance Report', available at: http://www.ecgi.org/codes/documents/horwath_cg_02.pdf (accessed 29th July, 2008).
13 Financial Reporting Council (2006) 'Combined Code of Corporate Governance', available at: http://www.frc.org.uk/documents/pagemanager/frc/Combined%20code%202006%20OCTOBER.pdf (accessed 29th July, 2008).
14 Rose, P. (2006) 'The corporate governance industry', Northwestern Public Law Research Paper No. 902900, available at: http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=902900 (accessed 29th July, 2008).
15 Turnbull, S. (2005) 'How US and UK auditing practices became muddled to muddle corporate governance principles', *The ICFAI Journal of Audit Practice*, Vol. 2, No. 3, pp. 49–68, available at: http://ssrn.com/abstract=608241 (accessed 29th July, 2008).
16 Turnbull, S. (2008) 'Mitigating the exposure of corporate boards to risk and unethical conflicts', paper presented at Corporate Boards: Managers of Risk, Sources of Risk conference, Chicago, IL, 17th April, to be published in 'Risk Management and Corporate Governance', Loyola University Monograph Series, Wiley-Blackwell.
17 Bhagat, S. and Black, B. (2002) 'The non-correlation between board independence and long-term performance', *Journal of Corporation Law,* Vol. 27, pp. 231–273, available at: http://papers.ssrn.com/abstract_id=133808 (accessed 29th July, 2008).
18 Rodrigues, U. (2007) 'The fetishization of independence', UGA Legal Studies Research Paper No. 07-007, available at: http://papers.ssrn.com/abstract_id=968513 (accessed 29th July, 2008).
19 Turnbull, S. (2002) 'The science of corporate governance', *Corporate Governance: An International Review*, Vol. 10, No. 4, pp. 256–272, available at: http://ssrn.com/abstract_id=316939 (accessed 29th July, 2008).
20 Turnbull, S. (2007) 'Streamlining prudential regulation with self-enforcing co-regulation', Submission to Australian Treasury Inquiry into 'Rethinking Regulation Project', 14th February, available at: http://papers.ssrn.com/abstract_id=979531 (accessed 29th July, 2008).
21 Gore, A. (1996) 'The technological challenge: What is the role of science in American society', paper presented to The American Association for the Advancement of Science, Baltimore, MD, 12th February, available at: http://clinton3.nara.gov/WH/EOP/OSTP/html/vp-aaas.html (accessed 29th July, 2008).
22 Monks, R. A. G. and Sykes, A. (2002) 'Capitalism without owners will fail: A policymaker's guide to reform', Centre for the Study of Financial Innovation, New York, available at: http://www.law.harvard.edu/programs/olin_center/corporate_governance/papers/L&F.f0504.Monks_9.21.05.pdf (accessed 29th July, 2008).
23 Turnbull, S. (2000) 'Why unitary boards are not best practice: A case for compound boards', paper presented to the First European Conference on Corporate Governance, Belgian Directors' Institute, Brussels, 16th November, available at: http://papers.ssrn.com/abstract_id=253803 (accessed 29th July, 2008).
24 Lord Acton (1887) 'Letter to Bishop Mandell Creighton', in Himmelfarb, G. (ed.) (1972) 'Essays on Freedom and Power', pp. 335–336, available at: http://www.bartleby.com/73/1443.htm (accessed 29th July, 2008).
25 Ashby, W. R. (1968) 'An Introduction to Cybernetics', University Paperback, London, available at: http://

pespmc1.vub.ac.be/ASHBBOOK.html (accessed 29th July, 2008).

26 Shannon, C. E. and Weaver, W. (1949) 'The Mathematical Theory of Communications', The University of Illinois Press, Urbana, IL, pp. 1-94.

27 Turnbull, S. (2002) 'A New Way to Govern: Organisations and Society after Enron', New Economics Foundation, London, available at: http://ssrn.com/abstract_id = 319867 (accessed 29th July, 2008).

28 Jones, C., Hesterly, W. S. and Borgatti, S. P. (1997) 'A general theory of network governance: Exchange conditions and social mechanisms', *Academy of Management Review*, Vol. 22, No. 4, pp. 911–945, available at: http://www.analytictech.com/borgatti/oppamr6z.htm (accessed 29th July, 2008).

29 Turnbull, S. (2000) 'The governance of firms controlled by more than one board: Theory development and examples', PhD thesis, Macquarie University, Sydney, Graduate School of Management, available at: http://ssrn.com/abstract = 858244 (accessed 29th July, 2008).

30 Turnbull, S. (2000) 'Corporate charters with competitive advantages', *St. Johns Law Review*, Vol. 74, No. 44, pp. 101–159.

31 Von Hippel, E. (1986) 'Lead users: A source of novel product concepts', *Management Science*, Vol. 32, No. 7, pp. 791-805.

32 Turnbull, S. (2007) 'The theory and practice of government deregulation', paper presented at the 2nd Cambridge University Conference on Regulation, Inspection & Improvement, Centre for Business Research, Judge Business School, 12th September, available at: http://papers.ssrn.com/abstract_id = 1008453 (accessed 29th July, 2008).

APPENDIX: OUTCOME-BASED CORPORATE GOVERNANCE DISCLOSURE

This is a summary of Shann Turnbull's submission to the Australian Treasury Inquiry into the 'Rethinking Regulation' project (see http://papers.ssrn.com/abstract_id=979531).

1. How does the board avoid or manage the conflicts of interest of self-nomination?
2. How does the board avoid or manage the conflict of interest in determining its own remuneration?
3. How does the board avoid perceptions of conflicts of self-interest in the methods adopted to achieve outcomes (1) and (2)?
4. How does the board avoid controlling the process of being held accountable for not achieving points (1), (2) and (3) and their performance in general?
5. How do directors evaluate the strengths, weaknesses, opportunities and threats of the management team and also of the company on a continuous, systematic, comprehensive and reliable basis without relying only on the information provided by management?
6. How do directors determine on a continuous, systematic, comprehensive and reliable basis when their trust in management might be misplaced?
7. How do directors avoid or manage the conflict of auditors serving two masters — shareholders and directors (including those classed as 'independent') — to negate the purpose of the law appointing external auditors to express judgment independently of the directors as to if the accounts are true and fair when directors engage and pay the auditors for their judgment?
8. How can non-executive directors hire, direct, control, retain, remunerate and/or dismiss executive directors independently of any power, status and influence, remuneration or other benefits that executive directors may bestow on the non-executive directors?
9. How can directors protect the interest of monetary investors in one or more ways, such as:
   - dominant shareholders seeking power and influence rather than profit;
   - dominant shareholders (obtaining other unfair advantages);
   - dominant executives (seeking power and influence rather than profit);
   - dominant executive directors (over-paying themselves);
   - dominant other directors (leading the company astray);
   - protecting the company from unfair related-party transactions;
   - protecting the rights of employees (could be conflict with shareholder interests);
   - protecting the rights of other stakeholders (which could be conflict with shareholders);
   - protecting the company from breaching the law or regulations.
10. By what means can each director individually obtain the will and power to act independently to further the best interests of the company?