Good Governance as a Numbers Game

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Introduction

A key corporate governance concept, object of governance study and area of practice addresses 'boardroom dynamics" – a concern with the processes of interaction which characterise discussion, debate and decisionmaking. The relationship between effective corporate governance and boardroom dynamics is a critical focus[1].

The social psychology and related literature represents a long history of attempts to unravel the character of behaviour within groups but simple and reliable generalisations have yet to emerge. There is ample testament to its significance but is drawn primarily from empirical experience rather than well accepted theory[2].

Attempts to derive "lessons" which might improve board practice rely heavily on learning by doing and development of guidelines through application of simple logic[3]. It is also an area where speculative home spun pop psychology is unhelpfully rife.

This note lays out part of the platform for a more systematic development by considering a crude but essential basic – the impact of numerical board composition on the scope for all and any interaction on a board. The object is not to seek comprehensive understandings of interpersonal dynamics but instead to lay out the universe of interaction possibilities dictated by the arithmetic (for it is no more than that) related to different board sizes.

It's a Numbers Game

A prime determinant of effectiveness is the number of people on a board. That number determines how many interactions are possible in any discussion. That number is also a parameter which shareholders control. Understanding the implications of differing board size is therefore worthwhile.

The term interaction is used broadly. It refers to potential two way conversations in a board meeting, telephone calls, by text message, email communications, discussions outside the boardroom – indeed any communication between board members.

The relationship between numbers on the board and potential for interaction is a square rather than a linear function.

That function is:

$$\text{Potential interactions} = (n^2 - n) / 2$$

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[1] Van Hamel, J. et. Al. Boardroom Dynamics – Lessons in Governance. Corporate Governance Vol. 6, Issue 3 1998.

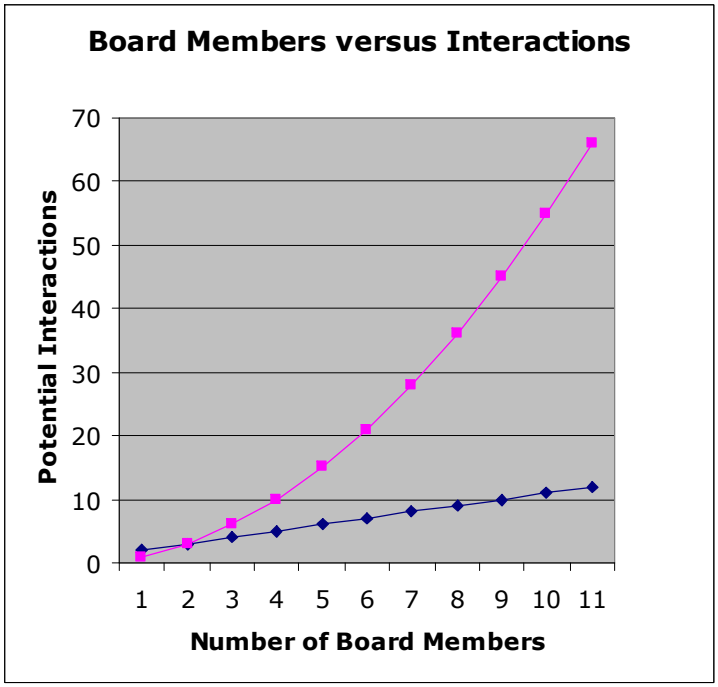
[2] For example, Morton, H. and Solberg, A.G. Gender Related Boardroom Dynamics" Women in Management Review, Vol. 21, Issue 2, 2006.

[3] For example Kivlighan, D.M. (ed.) Group Dynamics: Theory, Research and Practice. A quarterly journal devoted to these areas.

where “n” equals the number of board (committee, sub committee, group) members. The relationship for boards of differing sizes is shown in the following table:

Number of Board members	Potential Interactions
2	1
3	3
4	6
5	10
6	15
7	21
8	28
9	36
10	45
11	55
12	66

The relationship is shown diagrammatically below for potential interactions up to 12 member boards or governing bodies.



At the simplest level it is easy to see why meetings of large boards are frequently “tedious”. With a seven person board an agenda item has to be sufficiently gripping as to overwhelm the boredom which may settle should the full potential of 21 conversations take place. Conversely the apparently remarkable efficiency of the three person sub committee dealing with one topic is readily understood as well when the potential for interaction is understood.

In practice the combination of rules devised to effect efficient conduct of business including the award of certain dictatorial rights to chairs and varying personal styles of individual board members is likely to dictate the extent to which the full potential for interaction is realised. The effectiveness of such

combinations will however, vary through time and with agenda item so much as make generalised prescription difficult and attention to the limit case worthwhile.

More Obvious Implications

Of the many implications of differing board size and therefore interaction potential, two stand out. The first concerns different business models and their governance arrangements. Different business models typically imply different board sizes with consequently differing interaction potential and impacts on effectiveness.

Business Models

A family business might be run under a variant of the sole trader model in which husband and wife are the directors. The potential number of interactions is one. A high level of efficiency is likely, formal rules of "board" conduct are unlikely to be used. Simple but effective governance is common.

As the founders age the succession plan might call for the two sons to join the governance of the family business. Their partners may also have some say in the running of the business. With the effective "board size" now six, interaction possibilities are running at 15. Changed board room practice is likely to be indicated and certainly past practice is likely to be rendered ineffective.

An example from the opposite end of the spectrum might be the large partnership model favoured by law firms which employ significant size and scope as features of their business plan.

Typically, in New Zealand at least, such firms have simply "blown out" the partnership model and sought efficiencies through employment of a non owning management individual or cadre. At least one such firm I am aware of has some 60 partners. The resulting interaction potential is 1,770.

With all partners enjoying equality of rights in ownership and control it is difficult not to see either costly impacts in the form of slow changing policy, untimely adaptation, administrative burden and simple frustration, or alternatively, the use of rules and secondary governing entities (sub committees and the like) which effectively attenuate the primary rights of some partners. The effectiveness of the business might then come into question.

Between these examples several business models and their typical board size suggest a number of intermediate positions. Agricultural co ops (for example, Fonterra or the fertiliser co operatives) which typical have 15 or so board members imply 105 potential interactions. The intense politics of these organisations is legend, their effectiveness less so.

Some new health practices which see the traditional one or two person general practitioner (optometrist, dental practice etc) being replaced by multi partner practices may see governing bodies grow from one or two into boards of a dozen (66 interactions) or more. The new "PHO" entities may also fall into this category.

Optimal Sizing?

A second implication relates to the import of valuable input and alternative perspectives to boards through the addition of members – and its converse, the potential to impoverish effective decisionmaking through an overly narrow board membership.

The non linear nature of the change in interaction with a simple arithmetic change in board numbers is instructive. A desire to improve the breadth of input, and perhaps more significantly, interactive discussion into board decisions may be expeditiously achieved with only a small increase in board size.

The addition of two directors to a three person board adds the potential for seven additional interactions providing the scope for significantly richer discussion with relatively low increase in numbers. A board need not then, seek to "represent" the widest array of viewpoints through addition of sheer numbers alone.

Conversely (and obviously) the loss of a small number of personnel may impoverish discussion apparently out of proportion to the literal number of resignations or retirements.

These effects have implications for "rotation and replacement" policies.

No comment is made here on the desirability of any particular given size of board – this involves trade offs between efficiency of process and desirability of richly contested or discussed decisions. The point is made however, that the trade off, in either direction, is not a linear one and should be made having some regard for the nature of the relationship.

Less Obvious Implications

Beyond the immediately and literally obvious impacts of numbers on potential interactions lie the possibilities of more subtle effects at play.

One such possibility concerns the style of the Chair. If this is sufficiently dictatorial as to prevent input from one or more board members then the potential for interaction declines not just in proportion to having one less "voice" in decisions but instead in proportion to the resulting loss of interactive possibilities. A Chair, or other board member whose stylistic impact is to silence two members of a nine person board effectively reduces the potential interaction by 14 – a reduction of 42%.

Strong supportive leadership which builds confidence in the "shy director" on the other hand, might, in a five person board, improve the potential interactive discussion by a some 40%. The impact of such leadership might then be said to produce results well ahead of what simple numbers would suggest.

Parenthetically, it might be noted that "persistent absence" is not without impact and might reasonably involve suitable sanctions and remedies.

Impacts having an identical origin can also be readily imagined where size and composition of boards is determined in part or in whole by rules which seek to generate "quotas" of particular characteristics or to "represent" particular perspectives. The addition of two "management representatives" or two "workers representatives" to a seven person board for example, would increase the range of possible interactions by some 15.

At a yet more subtle level, it should be no surprise that the atmosphere, tenor and efficiency of process of a meeting changes when "staff" or "officials" are invited into a meeting and granted speaking rights. The impacts of such rules or codes of practice has potential impacts beyond those immediately apparent through considering only the numbers. Neither is it necessary to delve into speculative personality analysis to understand why the meeting dynamics alter.

The possibilities in this area are numerous and complex. A final example of the way rules affecting numbers impact lies in the effect which rules granting a "casting vote" might have. The casting vote becomes almost a "ghost at the table" perhaps increasing the amount of interaction likely to involve the

holder of that vote but complicated by the fact that, corporeally, the holder of that vote must be but one person. That difficult to predict results emerge should come as no surprise and will vary for boards of differing sizes.

Conclusion

The number of potential interactions between board members and the size of the board in question is not a simple linear one. Consequently the potential richness or poverty of discussion and quality of decision is not either.

While the ways in which board members behave and are likely to behave is complicated and difficult to analyse with the certainty required for replicable analysis or prediction, consideration of the network relationships between potential interaction and board size provides a valuable platform upon which more ambitious analyses might be attempted.

If it does nothing else, consideration of the arithmetic of board numbers serves as a sharp reminder about the orders of magnitude of change which might accompany what may otherwise be seen as a casual change in numbers.